

FARM AND DAIRY

&
RURAL HOME



DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE



Toronto, Ont., November 29, 1917




THE HERD AND BUILDINGS ON A NEW YORK STATE DAIRY FARM.

ISSUED EACH WEEK

Address all Correspondence to
The Rural Publishing Co., Limited, Peterboro, Ont.

ONE DOLLAR A YEAR

A Very Merry Christmas



The business of being a man has its advantages these days as well as its responsibilities—especially if someone thinks enough about him, his needs and his wishes, to choose for his Christmas gift

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281

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SYDNEY BASIC SLAG

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We do not expect to be able to secure transportation after the end of December. If, therefore, you have been thinking of arranging for supplies of our fertilizer for Spring use it is essential that you do so right away. If we are not represented in your district we will supply your requirements in ton lots and upwards at \$22 per ton, freight paid to your nearest station. Or better still, why not take a car of 20 tons and distribute same among your neighbors. You will be reasonably remunerated for your trouble. If this proposition appeals to you write us immediately and our man will give you a call. There is no time to be lost.

TO THOSE ATTENDING THE WINTER FAIR,
GUELPH, NOV. 30th to DEC. 9th.

Our representative, Mr. A. L. SMITH, will be there to meet you. Call at our stand and make arrangements for your Spring requirements. It will be your last opportunity this season.

The Cross Fertilizer Co., Limited
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Current Comments on the Farming Business

The Crops of America

OFFICIAL crop reporters, it now seems, were unduly optimistic all through the season of 1917 when estimating the extent and value of America's crops. Bumper yields were generally predicted for both the United States and Canada and the immediate result of these predictions was that consumers began to demand lower prices when the first of the new crops came on the market. Official crop reporters could not foresee that drouth was going to reduce the wheat crop over a large part of America, that early frosts were going to play havoc with the corn crop and that thousands of acres of potatoes would be frozen in the ground. Judging from reports from other than official circles, it now seems that the net result of this season's work, taking America as a whole, will be a shortage in farm products, almost as great as last year in many lines, and if supply and demand continue to rule the market, farm produce prices will be firm and high.

And what are the prospects for next year? Indications at present are that there will be a reduced acreage and only a wonderful growing season all over America, with abundant crops everywhere, can bring the total crop up to the standard of this year. America (for Canada and the United States are a unit in the production of food for the Allies), has the acres and the equipment to produce great crops in 1918, but labor is sadly lacking. The military draft in both Canada and the United States is aggravating a labor situation that was already intolerable. If next year's crops are to be safeguarded, we would suggest that the Departments of Agriculture take action to acquaint the military tribunals with the labor situation as it exists in rural districts, that they may govern themselves accordingly. The farmers of Canada have done much during the past year to increase production and that against difficulties and discouragements that might well have disheartened them. They are willing to do more, but one thing they cannot do and that is fight in the trenches and produce grain at one and the same time, though judging from the "exemptions refused," that is evidently what some tribunals expect of them.

When Renting a Farm

THE Country Gentleman asks, "What banker would allow a patron the use of \$15,000 to \$50,000 of capital without some kind of paper to bind and make responsible the user of the capital? What merchant would lease his business to another person without some kind of paper that would make the lessee responsible?" Then our contemporary adds this comment:

"Yet it is common in the farming business for the owner of a farm to place in the hands of a man, oftentimes nearly a stranger, for his keeping and management, property, both real and personal, to the value of \$15,000 to \$50,000, without even a scrap of paper to bind the lessee to the responsibility which he assumes. Aside from the fact that a written contract makes the tenant more responsible than an oral contract, it places on record all the understandings and agreements entered into at the time the farm was rented."

"The Country Gentleman" speaks for conditions to the south of the line, but we know of many Canadian landlords and tenants who are guilty of similar carelessness. We have known of many cases where the owners of farms and tenants who work their farms, were without any written agreement whatever. Such an understanding, or rather lack of understanding, is always accompanied by disagreements between the two contracting parties, disappointments for both, and sometimes the result is a feud that does not die out for many years. Written agreements are an necessary in the renting of a farm as in the consummation of a million dollar partnership, and both tenant and landlord should insist on a black and white statement of their various responsibilities.

Activities of the Food Controller

FOOD CONTROLLER HANNAH has been granted new and wider powers. He may now prohibit manufacturers, wholesale dealers, commission merchants, brokers, retailers and so forth, from dealing in any or all food commodities, except under license from his office. He may prescribe the manner in which food products may be designated, marked, branded or graded, and the maximum amount of any food or food product that may from time to time be bought or sold. Also he has the power to prescribe maximum profits and maximum prices on any food product. It seems that as yet Food Controller Hanna has not been given the right to establish minimum prices. This may be significant in view of the demand, now wide-spread, for a minimum price on live hogs.

A recent order emanating from the Food Controller prohibits the export from Canada to all destinations abroad other than the United Kingdom or British possessions, of foodstuffs, feeding stuffs, fats, oils, soap, fertilizers, etc., except under license approved by the Governor-in-Council "to countries in alliance with the British Empire and having armies in the European field." Certain small exceptions are made in the case of shipments to United States. The question has already been asked as to how these regulations will affect the export of live hogs and wheat to the United States and hence the beneficial effect which the guaranteed prices on these products to the south of the border would have on our own market.

The Food Controller is also taking measures to limit the profits on the sale of fruit and vegetables to not more than twelve and one-half per cent.



FARM AND DAIRY & 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. XXXVI

TORONTO, ONT., NOVEMBER 29, 1917

No. 48

What is Wanted---Food or Fighters? Cooperation Needed Between Food Controller's Department and Exemption Tribunals

FARMERS throughout Canada are being appealed to by the Food Controller to put forth every effort toward the utmost production of food stuffs on every farm. This appeal is made necessary by the world-wide food shortage. Should Canadian farmers fall down on production, state officials from the Food Controller's Department, famine conditions among the Allies in Europe will result, and compulsory rationing at home will be made necessary.

It is pretty generally admitted by those who are in a position to know conditions that mistakes have been made, even under the voluntary enlistment plan, in taking men away from Canadian farms who are needed there. Many men who are now overseas could have better served their Empire by keeping their farms running to the limit of their productive capacity. It was, in part, to prevent further mistakes of a similar character being made that a selective system of compulsory service was instituted. By this system it was hoped that the men needed in Canada would be left and that the hundred thousand men needed for overseas service would be taken from such branches of industry as could best spare them.

Farmers Not Being Exempted.

In spite of the great need for agricultural production, many military tribunals are refusing to grant exemption to bona fide farmers. Should these farmers not be exempted on appeal, the production of food stuffs in Canada will surely suffer. This situation arises from a lack of appreciation on the part of some tribunal members of the need of food production, and it is a serious one. It is to correct the errors made by such tribunals that the privilege of appeal has been provided. And in considering the cases which may come up for appeal, as well as those coming before the original tribunals, the closest cooperation between the Food Controller's Department and the Military Service Board will be necessary if Canada is to do her best.

In order that the attitude of the Dominion Government and of the Food Controller might be ascertained, the Editor-in-Chief of Farm and Dairy visited Ottawa last week with the object of interviewing Premier Borden and Hon. Mr. Hanna, Food Controller. Unfortunately, Premier Borden, Hon. Mr. Hanna, and Hon. Mr. Crerar, Minister of Agriculture, were out of the city, as was also Hon. Mr. Doherty, Minister of Justice, who has charge of the administration of the Military Service Act. In their absence, one of the chief executive officers of the Food Controller's staff, and Mr. E. L. Newcombe, Deputy Minister of Justice, who is the chairman of the Military Service Council, were interviewed. It was evident that the protests of farmers over the actions of certain of the military tribunals had been making their effect felt at Ottawa.

The representative of Hon. Mr. Hanna did not desire to be quoted by name, but gave the assurance that the Food Controller's Department is alive to the situation. "It is impossible for us," he said, "to do much at this time, as the Act is being administered by another department, over which we have no control, and with which we have no connection. We expect, however, that farmers who feel that their exemptions should be allowed, and who have been refused exemption, will make appeals, and that these appeals will be given every consideration by the Appeal Tribunals. Our department is impressing on the Government the seriousness of the food situation and the necessity of food production being maintained to the limit."

Should Appeal Cases.

Mr. Newcombe, as chairman of the Military Service Council, is probably in closer touch with the administration of the Military Service Act than any other Government official. "I am not surprised," he said, "that there have been numerous complaints over the decisions of certain of the

tribunals. When the Act was drafted, we realized that the decisions of many of the tribunals could not be uniform in every case, inasmuch as we have 1,350 tribunals. Some of these men were certain to lay more importance on certain points of evidence than others, and thus there would be diversity in the decisions of the tribunals. It was for this purpose that we arranged for Appeal Tribunals and for a third appeal where such action seems necessary. We expect farmers, who feel that they should have been granted exemption, to press their claims before the appeal tribunals, where the judges will be men of experience who should be capable of giving them justice. The chances are that if they appeal twice, and their appeals are disallowed in both cases, that there is good reason that their exemptions should not be granted.

Mr. Newcombe was asked what the attitude of the tribunals would likely be in cases where a couple of men might be employed on a farm of 100 to 150 acres, and where the first tribunals insisted on one of these men being sent to the front. He was asked if arrangements could not be made for these young men, where they so desired, to be allowed to work on other farms in the district which were greatly undermanned. He replied that he believed these men would be justified, when making their application for appeal, in pointing out to the appeal tribunals that it is more important that they should be allowed to work on these undermanned farms than it is that they should go to the front. As the proceedings before the tribunals are very informal in character, he felt certain that they would be given every opportunity to lay facts of this nature before the appeal tribunals.

If Over 100,000 Are Raised?

It was pointed out to Mr. Newcombe that the Government desired to raise only 100,000 men, and that it had been estimated that a considerably larger number than 100,000 would be raised by this first draft. In the event of this being proved to be the case, he was asked if farmers' sons might not be left until the last and not included in the first draft. His reply was that this point had not been considered, and was not likely to be considered until it has been found just how many have been raised by the draft. If over 100,000 are raised, then the Government will decide upon some method of dealing with the situation, and this point would then be taken into consideration. In the meantime, however, he did not think there was much possibility of over 100,000 men being raised.

Mr. Newcombe emphasized the point that he thought that the men on the appeal tribunals, who would for the most part be judges, and therefore

(Continued on page 6.)

Farmers May Appeal

A Statement by Sir Robert Borden

THE purpose of the Military Service Act is to provide the needed reinforcements by means of a selective draft; and it was the intention of Parliament that those who could serve their country more usefully and effectively by continuing in essential work in which they were engaged should continue therein and should be exempt from military service.

From reports received by the Prime Minister it appears that in some instances tribunals have refused exemption where the circumstances distinctly required that it should be granted; as, for example, cases where exemption has been refused to men long engaged in agricultural production without whose labor such production could not be continued.

REMEDY OF APPEAL.

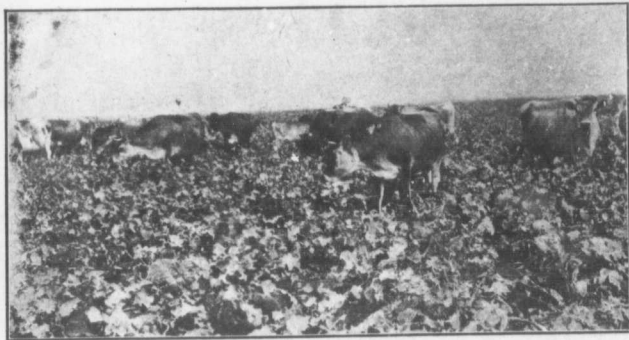
(a) In these cases the remedy is by appeal, the procedure for which is of the simplest character. A letter to the registrar of the province is sufficient, and the appellant need not engage the services of a lawyer. The registrar may be addressed as follows:

In Ontario, the registrar under the Military Service Act, Toronto.

In Quebec, the registrar under the Military Service Act, Montreal, Que. (as the case may be), and so on for the various provinces.

The person applying for exemption need not attend before the court of appeal. A statement of his case in writing will be sufficient. Attendance, however, is most desirable, wherever possible or convenient.

(b) It appears that in many cases persons having legitimate claims to exemption have been appealed when exemption is denied. The appeal should be made within three days, but the time for appeal can be extended on application to the appeal tribunal or upon application to the Minister of Justice. There should, however, be no unnecessary delay in taking out the appeal in any case where it has not already been done.



Jerseys on Rape Pasture at the Medicine Hat Experimental Station in Alberta.

High Grain Prices Increase the Value of Manure

How to Handle Manure for Best Results

MANURE is worth more now than ever before. Anything that assists in producing larger yields of grain, has greatly increased in its value with the increase in the price of the various farm products. No thrifty farmer will waste a forkful of manure this year. He will get it all back on the land as quickly as possible and make it assist him in producing larger crops from the amount of land he is able to look after.

The value of manure from different animals varies with its composition. Sheep manure is richest in plant-food elements; hog manure ranks second; horse manure third; and cow manure, fourth. A ton of barnyard manure contains on the average, 10 pounds of nitrogen, 2 pounds of phosphorus, and 8 pounds of potassium, having a plant-food value at present prices of about \$3 per ton.

The agricultural value of manure is usually greater than the plant-food value. For example the application of 12½ tons of manure per year for 15 years at the West Virginia Experiment Station gave increased crop yields valued at \$40 per acre per year or \$3.12 per ton for the manure used. During the period of ten years, the Ohio Experiment Station has obtained an increase of crops valued at \$4.69 per ton for the manure used. The application was made at the rate of eight tons of manure per acre, during a five-year rotation of corn, wheat, oats, clover and timothy. Two applications of four tons each were made, one for corn and one for clover. Manure used in connection with continuous grain cropping did not maintain the yields, but when used in connection with crop rotation the yields of all crops were increased.

This high value of manure in the farm practice should make everyone more anxious to conserve such a valuable fertilizer. The best way to make use of manure is to get it on the land as quickly as possible after it has been made. It is not always possible to haul the manure direct to the fields. Unreasonable weather, a rush season on the farm, or deep snow in the fields may make it inadvisable to spread the manure direct from the stable. If it is not possible to haul the manure out every day some precautions should be taken to conserve its value. Manure is wasted by seepage of liquid manure in the stables, by leeching in the open yard and by heating in loosely formed piles about the barnyard and in the fields.

The waste of liquid manure may be largely prevented by the use of sufficient bedding. In

the case of stabled cattle, some farmers conserve the liquid by manure cisterns. Conserving through bedding and hauling direct to the field is the best plan for the average farmer.

Manure left in the open yard through the summer may lose half its plant-food value due to fermentation and leeching. Rotted manure which has been carefully saved will be richer in plant-food elements, ton for ton than fresh manure. It requires 1½ to 3 tons of fresh manure to make a ton of rotted manure which means that the organic matter is greatly reduced and the total quantity of plant-food elements is also decreased by fermentation and exposure. Except in special cases and for certain crops or gardening conditions, there is no advantage in rotting the manure, better apply it fresh from the stable before any loss occurs.

Manure losses may be reduced to a minimum first, by hauling it directly to the field with a tight-bottom manure spreader and spreading it thinly and evenly as a surface dressing on grass, clover, alfalfa or small grain fields, or on land which is to be plowed for corn, cotton, or other fertilized crops; second, by keeping the manure compact and moist in stables, sheds, or pits until ready to haul; third, by having tight floors in the stable or feeding pens; fourth, by using plenty of bedding to absorb the liquid manure, or by saving the liquid manure in cisterns built for the purpose; fifth, by the use of preservatives, such as ground limestone, land plaster, ground phosphate rock, and acid phosphate. These materials not only absorb the liquid manure and take up ammonia, thus acting as a manure preservative but at the same time they reinforce the manure with phosphorus and lime, the very elements required to balance manure and make it a complete fertilizer.

The question is often asked as to whether manure should be spread on the land before plowing or afterwards. There is one danger in plowing under a heavy coat of manure, in that the manure tends to break the

capillary connection of the soil with the sub-soil. During a dry spell the moisture in the sub-soil cannot be drawn up because of the broken connection and the surface soil burns out. Manure spread on plowed land and worked into the soil by cultivation, gives the best results. Where manure is plowed under, it is better to plow rather shallow, since deeply-buried manure will not decay so rapidly and the seed bed will be too open. A surface dressing of manure has both a plant-food value and a mulching value. It will conserve soil moisture in the summer and in winter will protect the crops which it covers.

For the most efficient handling of manure during labor scarcity the use of a manure spreader is necessary. The manure spreader not only saves labor, but it spreads the manure more evenly than can be done by hand, and usually it is the man with a manure spreader who covers most of his land with manure. In getting such a spreader the man who has a fairly large farm should purchase a three or four-horse machine, rather than a smaller one. Efforts should be made to cut down the man's labor in comparison to that done by the horses whenever an opportunity affords.

Some farmers who use a manure spreader, place it under a shelter and run the litter carrier from the stable out to where the manure spreader stands. The manure is therefore dumped directly from the litter carrier into the spreader and as soon as the latter is filled the team is hitched on and the manure is drawn to the field. This makes but one handling of the manure. Where such a system can be carried out, it is an ideal one. But no matter which system may be carried on, everything possible should be done to conserve the fertilizing value of the manure and to use it so as to get the greatest possible results in the way of increased production.

Getting Ready for Winter

Prepare for Greater Efficiency Next Year

AFTER the "freeze-up" puts an end to plowing, there is usually a period before winter really sets in, during which many improvements might be made about the farm. Farmers should look back over the year's operations and see where they might have saved time, for time is money these days. It is the farmer who is able to make the most efficient use of the labor at his disposal who is able to invest in Victory Bonds.

But let us make this more personal. The man who needs to work for efficiency in farming is you! There is too great a tendency to pass over efficiency hints as applying to Jim Jones down the road, who is noted for his shiftlessness. It is not only the "ahlfitties" farmer who can make use of timely reminders. The best farmer in the country may often see where he can still further improve his methods by "looking around."



Hauling Manure Direct From the Stable to the Fields.

This is the ideal system for the conservation of the fertilizing value of the manure. The illustration is from a photo, snapped by an editor of Farm and Dairy, on the farm of Gilbert McMillan, Huntington Co., Que.

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Perhaps you have two small fields under cultivation that might as well be one. If so, remove the fence dividing them this fall and get some firewood from it against the cold winter nights. You will not only get the use of the little strip of land which has so far borne no crop, but you will save much time on the longer furrow made possible. The time wasted in turning about on each side of that fence could well be turned to account in plowing a few extra furrows or in feeding an extra brood sow. It is the man with the big field and the 16-foot harrow that is able to grow grain cheaply.

Before housing the implements for winter, all polished parts should be coated thickly with mineral lubricant to prevent rusting. It is not only the machinery that stands out under the pine tree or in the fence corner that rusts. Machinery even under cover may often rust enough in a single winter to greatly impair the efficiency of the machine the next summer. Wooden parts of the machinery will last longer if kept clean. These things should be looked to when the machines are being put away.

This is the time when the barns and other buildings should be fixed up. All broken lights in the windows of the cow barn or horse stable should be replaced before the cold winter winds get a chance to give your animals colds. Sweep the cobwebs out of the cattle barn and give it a coat of whitewash. If your horse stable is dark, cut a window in it and get a sash with glass in before stormy weather comes.

Plan to do as much work as possible during the winter season which might otherwise be pushed aside until next summer. Winter is the time when all implements should be gone over and repaired. This will do away with tinkering in the rush season next year. By starting in early there will be plenty of time to order repairs necessary, and also time to do a thorough job. Plan to clean your seed grain early. Oil and repair harness and grind all edged tools, including mower, sickles. Sharp edges can be kept on by coating the sickles with oil after grinding. What about a gasoline engine? Would it help you in your work? In making plans for more efficient farming, everything that will cut down labor, without adding too greatly to the cost, should be considered. And the time for beginning improvements is right after plowing is stopped by the frost.—S. R. N. H.

Protect Fruit Trees from Mice

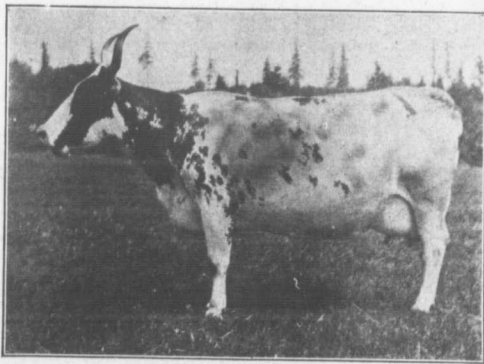
Methods Used at the Experimental Farms

THE annual loss of fruit trees in Canada from mice is very great. Some years they are much more destructive than in others, while in a certain year they may be very destructive in one part of Canada and do little or no damage in another. The scarcity or abundance of food, the number of mice which are in the vicinity when winter sets in, and the character of the winter, all have an influence on the amount of injury which is done. Where the orchard is in soil of where there is rubbish about in which mice can harbor, the injury to trees, if unprotected, is liable to be much greater than where the orchard has been under clean cultivation or even where a cover crop is sown the previous summer.

It frequently happens that orchards which have escaped much injury from mice for several years from the time of planting, will be badly injured, if not ruined, just when the first crop is expected. There is nothing more discouraging to a farmer or

fruit grower than to have an orchard destroyed in this way after he has sared for it for a number of years, and there must be many instances in Canada where farmers, after a loss of this kind, do not re-plant.

Although it is not every year that mice are troublesome, trees should be protected from them every year until about six inches in diameter, and even a tree of this size will sometimes be partly girdled. If the protection is neglected for one year, that may be the year when mice are abundant and much injury will be done. The mice usually are looking for, or feeding on, seeds close to the ground under the snow and when they come to a tree they are likely to begin to gnaw the bark if it is unprotected, and before they have finished the tree may be completely girdled to a height of 12 to 18 inches above the ground, which usually causes its death, although it may remain alive for most of the summer following.



Springhill Miss Wallace, a Coming Ayrshire Producer.

The illustration does not do her justice, as Springhill Miss Wallace is one of promising cows in the herd of Shannon Bros., Cloverdale, B.C. She was sired by Lesnescock Burward Lely, and is out of Auchincbrain White Rose, a cow sold at the Hunter sale for \$700.

Methods of Protection.

The cheapest and surest method of protecting trees from mice is to wrap ordinary white building paper around the trunk of the tree. The paper is cut into strips which are the length of the breadth of the roll of paper, the width of the strips depending on the size of the tree. The strips should be just wide enough to lap over, as one thickness of paper is all that is necessary. The paper is wrapped tightly around the tree and tied in two places with twine. A little earth is heaped up about the base after the paper is tied, to cover any opening through which the mice might reach the trunk. Several thousand young trees are wrapped each year at the Experimental Farm in this way, and there have been practically no cases where the mice have gnawed through the paper to get at the tree. Tar paper is also effective, but trees have been injured by using it and it is well to avoid this as building paper will do as well. A small mound of earth from eight to ten inches in height about the base of the tree will often prevent mice from injuring the trees and even snow tramped about the tree has proved quite effective, but one cannot always depend upon it. Fine wire mesh wrapped around the tree or lapped so that it will expand with the growth of the tree, while more expensive at first, is very durable and will protect the tree well.

Mice may be poisoned by making a mixture of one part by weight of arsenic with three parts of corn meal and putting it in runways made by nailing two pieces of board each five or six feet in length and six inches wide to make an in-

verted trough, and putting about a table-spoonful of the poison on a shingle near the middle of the runs, renewing the poison from time to time. Poisoning would, however, be found a rather tedious method for a large orchard.

The Business Basis of Dairying

It is Good Cows and Good Crops

By E. L. McCaskey.

AS a writer for the agricultural press, I am sometimes criticised by the neighbors who read my letters in Farm and Dairy of telling all about them, but never anything about myself. Perhaps they are right. At any rate there is not a neighbor up and down the concession for several miles who has not figured at some time or other in the letters that I once sent so regularly to Farm and Dairy. The criticism will not apply this time. I am about to impart the greatest secret I have learned in my 20 or more years of dairy farming. It deals with the business basis of dairying. It is the secret of my success in making a very comfortable living and a competence with 100 acres of only fair land.

For a half dozen or more years, I conducted this farm of mine very much as other farms were conducted in the locality. I grew wheat, grain and hay largely for sale. I hadn't much use for clover in those days. It didn't sell well on the market and we had so little live stock that there was always a large surplus of hay for sale. Timothy was what the livery stables wanted, so that was what we grew. We kept a half dozen cows to eat up unmarketable roughage and give us some winter work. There was not much income from the cows, but such as it was, it was all profit. Then I began to get more interested in cows. My interest dates from the time that I joined one of the first cow-testing associations formed in Canada. I have told before of the results obtained by cow testing in my herd and I will not enlarge on them here. Sufficient is it to say that two of the cows produced as much milk as the other four and the two were only fair cows.

Improve the Cows But Not the Income.

When I began to improve, I purchased a pure-bred sire. I began to feed a little better. We actually bought a little meal for the cows that freshened in the fall. The size of the herd was increased and then things did not go so well. Previously the cows had been eating merely the surplus of the farm crops that could not have been sold on the market. Now, they began to draw on the money crops. We began to feed more of the timothy hay and more of the coarse grains at home. The feed bills, too, were larger and a little figuring showed me that the decreased receipts from the sale of cash crops and the increased feed bills, just about counterbalanced the increased checks from the creamery. We were no further ahead. We were handling more money but no more money stayed with us. The only return that we were getting for extra labor was that the fertility of the soil was improving.

In the meantime, as the dairy herd increased and my interest in dairying along with it, I began to take more notice of what the cows liked and what they did best on. I found that there was always more milk when by chance we happened to have some good clover hay, than when we were feeding timothy. I also noticed that when feeding timothy more grain was needed to keep up the milk flow than when feeding clover. The

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What is Wanted--Food or Fighters?

(Continued from Page 3.)

experienced in weighing evidence, would be capable of dealing satisfactorily with appeals made to them by farmers. Our editor pointed out that there was not necessarily the case as some judges know very little about farm conditions, how serious is the food shortage, or how many men are required to work a farm satisfactorily. An instance was quoted of a judge who had called a young farmer down because, while applying for exemption, he had said that he had been improving his farm. The judge took the ground that he should be ashamed of himself for having done so as his only object was to make money out of the country. It was suggested by our editors that the Government might send further instructions to the Appeal Tribunals urging upon them the importance of disturbing agriculture as little as possible. Mr. Newcombe did not say whether or not this action would be taken, but he was on the point. We feel that farmers will be justified in urging upon the Government the importance of notifying the Appeal Tribunals to this effect.

Hog Production Campaign Suffers.

The action of some of the Military tribunals in indiscriminately removing the young men of military age from the farms, thereby aggravating the farm labor shortage, is militating in many districts against the production campaigns. In those districts where the tribunals have been exceptionally severe in their decisions the men who are anxious to organize farmers for greater hog production find themselves unable to accomplish much.

"I had another eight-acre field that I intended to plow this fall," said a farmer at a "hog raising" meeting held in Middleville, Lanark County, recently, "but the exemption claim which I sent in for my boy, the only man on the farm with me, was disallowed. I will therefore leave this field unexplored. Had my boy been left with me, I could have raised enough feed on this field to have enabled me to assist with this campaign." This seems to be the general feeling of farmers in similar circumstances. For several years they have been struggling along with the few laborers they could get hold of in an endeavor to respond to the appeals of the Government for greater production. Now their only help in many cases is being taken away as they are asked at the same time to produce more hogs.

The meeting at Middleville had an attendance of about 75, representing the best farmers in the township. The selling of the meeting can be best shown by the following resolution which was passed at that time: "We, the assembled farmers of Lanark Township would agree with the proposition laid before us by Mr. T. A. Poole for increased hog production. If we had any reasonable assurance that our help would be left with us, and that we could obtain feed at a reasonable price. Unless such assurance is granted, however, we cannot promise to do anything more than we are doing at the present time."

A similar meeting of farmers was held recently a few miles north of Toronto, which was addressed by Mr. Wade of the Ontario Department of Agriculture. Mr. Wade spoke earnestly in behalf of a greater production of hogs but his remarks were coldly received by the meeting. There were some three hundred farmers present, and the meeting passed a resolution protesting against the action of certain tribunals in ruthlessly depleting agriculture of its labor and at

the same time clamoring for increased production. At their request, Mr. E. H. Stonehouse, informed Sir Robert Borden and later before him the necessity for feeding the interests of agriculture at this time of food scarcity.

The Situation at Perth.

The action of certain exemption tribunals in the Perth District which have refused exemption to farmers, thereby depleting the land of its sorely needed labor, called forth a vigorous protest from the farmers of the district. Five hundred farmers recently paraded under the auspices of the Perth Farmers' Club, and at a mass meeting voted their disapproval of the findings of the local tribunals. Mr. T. A. Poole, a well known dairy farmer of the district, who acted as Chairman, stated that the farming community is not getting a square deal. "The help problem of the farms," said Mr. Poole, "has been serious for some time. The present action of the tribunals is making this worse." The following petition was wired to the Hon. T. A. Crerar, Minister of Agriculture, "We,

There are indications that if the decisions of the original tribunals are upheld in these appeals that considerable land in this district will go out of cultivation next year. "I have another twenty-acre field that I would have plowed this fall," said a farmer of Drummond Township, "but on being informed that my only boy had been refused exemption, I hung up my plow. I can't run the farm alone."

Exemptions That Were Disallowed.

A number of examples of the injudicious decisions of the tribunals in the Perth district were enquired into by the Farm and Dairy representative. A few of these will show that the farmers of this district have a real grievance and that, should the decisions of these tribunals stand, food production must suffer.

William R. Macdonald, a farmer of Scotch line in Burgess Township, has two farms. The home farm contains one hundred acres, besides which he owns a rough farm of a couple of hundred acres used for wood and pasturage. The only other man on the farm is his father, an old man of seventy, who is living with him. Mr. Macdonald's claim for exemption was disallowed.

On the same line Richard Allan

times been short of efficient help. There has never been surplus of young men beyond the number absolutely necessary to work the land.

"Owing to the heavy draught of men already taken by voluntary enlistment, the past two years have been years of strenuous for farmers, whose farms have in many instances deteriorated and become less productive for want of efficient help. And this at a time when the national interest calls for greater efficiency and greater productiveness.

"The Military Service Act, as it is at present being administered by the Local Tribunals, threatens to so deplete the district of men skilled in the arts of agriculture that more depreciation and less production will inevitably follow, and in not a few cases farmers will altogether cease to produce those necessary food materials that they have heretofore done, to the detriment of the national interest.

"We, therefore, ask that some steps may be taken to so modify the action of the Local Tribunals, either by special instructions to Courts of Appeal or to the Local Tribunals, in some other manner that a sufficient number of young men may be exempted from Military Service to work the farms, or that such other action as may seem most meet may be taken."

Outstanding Cases.

A couple of the cases which have come under the notice of Farm and Dairy from the Peterboro district are those of Robert Fowler and Stanley Northey, both of Smith Township. There are many cases in this district where decisions have been made by the tribunals which will certainly work against the greatest production. Two cases only, however, were looked into by Farm and Dairy.

Robert Fowler, outside of his brother, a boy of fourteen, is the only help on a farm of 200 acres of good fertile land. His father is 65 years of age and unable to do hard work. This farm is nearly all under cultivation and a large stock is kept. They grow considerable wheat and hogs. Robert had his claim for exemption disallowed.

Stanley Northey is one of two brothers who leased a two-hundred acre farm. They have had this farm for two years and there is still one year to run in the lease. Despite the fact that his brother will be unable to carry on alone, Stanley will come in the first draft.

Other Notable Instances.

Another instance of an injudicious decision by a tribunal, which has come under the observation of Farm and Dairy, is that of Bradford White, of Ingersoll, a prominent Ayrshire breeder. Mr. Harris has a stock of 90 head of cattle, many of them pure bred Ayrshires. Outside of his only son, taken from going to school, Mr. Harris has only one boy at home his son of twenty-three. Their appeal for the exemption of this son has been disallowed. Mr. Harris has appealed the case, but if his appeal is rejected he states that he will be compelled to sell out a large part of his stock.

A case which has been receiving some attention from the press is that of a man in the Bradford who is taken from a 25-acre farm, leaving a widowed mother alone on the place. It is to be hoped that those interested in such cases will appeal as is recommended by Sir Robert Borden, and that the men before whom such appeals may be tried will be educated to the need for greater food production which now exists.

BE SURE

You read the announcement on page 11 of this issue. It saves you money--nuff sed.

The Coloring of Oleo

THE Food Controller has now given us additional evidence that oleomargarine is to sold on its merits in Canada. One of his latest regulations reads as follows:

"No substance intended for the coloring of oleomargarine shall be imported into Canada in packages containing oleomargarine and no manufacturer, wholesale dealer or retail dealer in oleomargarine shall deal in, sell or give away any substance intended for coloring oleomargarine."

Other recent regulations provide for the issuing of licenses for importation or manufacture through the Veterinary Director-General; licenses will be issued for manufacture only when the premises of the applicant are thoroughly sanitary and comply with the sanitary regulations of the Veterinary Director-General; all materials entering into the composition of oleomargarine are subject to inspection and all packages must be properly labeled "Oleomargarine."

the United Farmers of the County of Lanark surrounding the Town of Perth, wish to protest against the manner in which the local tribunals are interpreting the Military Service Act.

"In your recent speech in the Chateau Laurier, Ottawa, before the Live Stock Breeders' Conference, you declared that men necessary for production would in no case be taken from the farms. Before the tribunals in Perth during the first four days sitting, approximately 100 applications for exemption were considered. Twenty applicants have had their claim disallowed unconditionally, 80 have been granted from two to eight months. About seventy-five per cent. of the applicants are farmers or farmers' sons working on farms. In view of the acute shortage of farm labor with which the farmers of this district have to contend, this matter is of serious moment to them, and we would ask you to use your utmost endeavor to have more specific and definite instructions in regard to the drafting of farm labor forwarded to this and other tribunals, and we would further ask that applicants who have been refused exemption at this tribunal be granted further hearing at another tribunal."

An editor of Farm and Dairy went to Perth last week to investigate the situation. He found that the farmers of Perth were not protesting against the Military Service Act. They were, however, protesting vigorously against the decisions of some of the local tribunals. Many of the farmers of this district, who have been refused exemption, will appeal their cases.

owns one hundred and twenty acres. He is the only man on the farm. His brother, who owns seventy-five acres adjoining, and he work together Richard Allan, likewise has his claim for exemption disallowed.

James McLaren, a young farmer of Drummond Township, bought a 200-acre farm two years ago. Mr. McLaren has been milking ten cows on his farm. His exemption claim was disallowed, a few months only being granted to him to settle up his estate. He is the only man on this farm of two hundred acres.

Another outstanding case is that of James McNaughton of the Perth District. He, also, is the only man on his farm of one hundred and fifty acres. This is a first class farm, and should his appeal be disallowed as was his claim for exemption, food production must suffer.

Peterboro Farmers Protest.

The farmers in the district surrounding Peterboro also are protesting against the decisions of some of the local tribunals. The following is a digest of a petition which has been circulated throughout a couple of the townships and is being sent to Sir Robert Borden:

"In the past three years many men of military age have already enlisted in His Majesty's Overseas Forces, so that few available men are left."

"Owing to the near proximity of the district to flourishing towns and cities, there has for many years been a constant flow of the young men of the farming community from the farms to the cities and towns, the effect of which has been that for the last ten years the district has even in normal

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In Union There is Strength

Mr. Halbert's Activities

MR. R. H. HALBERT, President of the United Farmers of Ontario, and Mr. Baker, vice-president of the United Farmers of Alberta, recently attended a series of meetings in Washington county.

Recently Mr. Halbert organized a new club at Shiloh. Between 20 and 25 men turned out in spite of the very dark and misty night. The club was organized with 15 members and took two shares of stock in the United Farmers' Cooperative Company. The previous night, at Eramosa, Mr. Halbert disposed of four shares of stock.

Grange Meeting at Middlemarch

THE Grange is still alive and a vital influence in Elgin Co., Ont. Just recently a splendid meeting of the Elgin Grange was held in the Grange Hall at Middlemarch. Of the twelve officers of the county organization only one was absent. Among the granges represented were those at Dufferin, Forest Road, Town Line, Yarmouth and Apply Grove.

The meeting was a typical grange meeting. It was not all business. Rather did it cater to the social instincts of the people whom it serves. The Worthy Master, W. A. Wardell, occupied the chair. Addresses were given by various Grangers and by the district representative, Mr. Buchanan. The musical programme delighted everyone.

The greatest interest centred in the exhibit of beets from the ladies' competition. Last spring each lady was given a spoonful of beet seed. The products of the summer's work were exhibited and Mrs. McNeven reported three one-half bushels in her crop. One beet weighed over twelve pounds, while 24 inches in circumference was a common measurement. Mrs. Dolman of Forest Road secured the award for the best table beet. The beets were donated to the Young Women's Christian Association of St. Thomas.

Directors of The United Farmers Co-operative Co., Ltd. Meet

A MEETING of the Directors of The United Farmers Co-operative Co., Ltd., was held on Friday, November 23rd, when arrangements were made for the annual meeting of the company.

The financial statement for the year's business was presented. It was most satisfactory in character showing total sales for ten months of \$318,197.00, an increase over last year which comprised twelve months, of over \$400,000. The profits on the year's business were sufficiently large to enable the Directors to declare a dividend of 7%, which leaves a surplus of about \$800 to be devoted to reserve account.

The annual meeting of the company will be held on Friday, December 21st and a very interesting programme has been prepared for it.

During the past few weeks 180 shares of stock, amounting to \$4,500, have been sold.

The new prospectus of the company is about completed and will be ready for distribution at an early date. The possibility of opening a retail store in Toronto to sell goods direct to the consumer from the farmer was considered. The following committee was appointed to look into the matter: Messrs. Lick, Blatchford and Morrison.

The Directors present were Messrs. Tucker, Halbert, VanAllen, Good,

Lick, McCrae, Powers, Schurr and Messrs. Morrison and Blatchford as officers of the company.

The annual meeting of The United Farmers of Ontario will be held on December 19th and 20th.

J. A. Maharg of Moose Jaw, was re-elected president of the Saskatchewan Cooperative Elevator Co., and Geo. Langley was re-elected vice-president. A presentation was made to the Hon. Chas. A. Dunning, provincial treasurer of Saskatchewan, who retired two years ago as general manager of the Cooperative Co.

Letters to the Editor

A Good Word for Buyers

EDITOR, Farm and Dairy.—I doubt if the farmers thoroughly understand the advantage to be gained in placing at their disposal the services of experts to help them in picking out sheep and cattle at the Union Stock Yards to take back to country points for breeding purposes. I would like to take this opportunity of bringing it to their attention and also of expressing my appreciation of the help obtained from their representatives, Messrs. Wilson and Irvine. Female stock for breeding purposes is shipped in car load lots to country points, free of charge. A number of farmers club together and either have the representatives pick out a carload for them or else send one of their members to the stock yards where all assistance possible will be extended in making the purchases.

Few farmers have ever visited the stock yards and few are still knowing their way around the yards or acquainted with the commission men and thus feel their inability to go to the yards and pick out breeding stock to good advantage. With representatives on the spot, who are on the watch for good breeding stock, they can take a farmer as soon as he comes into the yards where he can inspect these cattle. If satisfactory, they can immediately put him in touch with the commission men handling these cattle and give expert advice in picking them out.

I have just purchased a carload of breeding cows and can speak from experience of the value of this service and can also speak of the courtesy and purchasing judgment of Messrs. Wilson and Irvine.—G. F. Marsh, Grey Co., Ont.

Our Friends, the Investors

EDITOR, Farm and Dairy.—President S. R. Parsons, of the Canadian Manufacturers' Association, writing to The Globe, says: "There is only one way of paying off the accumulated debts incurred by this war, that is to make goods and sell them. To do this we have got to organize the nation in a big effort of industrial production."

It would be interesting to know by what means it is considered the organization can best be brought about so that industrial production will flourish. Mr. Parsons belongs to that school of thought that believes in a tariff as high as Haman's gallows. He and Mr. Cookshank, of Brantford, were of the party that said not long ago, when harvest help was being sought by the war production committee, "Farmers must not expect men to work for \$2.50 per day when they can get \$1.50 in the city. Let them pay. They will well afford it. They are

running \$1,000 automobiles, with gasoline at 20 cents per gallon.' These are the same gentlemen that believe in special privileges and adequate tariff protection to manufacturers, that they may live in luxury while the great bulk of the people are in want. He believes in a protected market for manufacturers and in the Government setting an arbitrary price on the farmer's products. He believes in the free admission and manufacture of oleomargarine, but he does not believe in applying the same principle to the manufacturing interests.

In this same article in The Globe he dwells on the courage, intelligence, honesty and efficiency of our whole industrial outfit, and by way of embellishment he includes the farmer whom he abused and discredited less than three months ago. Farmers are beginning to fully understand this rant. The day of reckoning is at hand. Farmers have learned that they are masters of their own fate; that they control the supply pipe to all other industries. Men must be fed, and if a fair reward for their endeavor is not going to be allowed to come to them without the assistance of those men of other industries, who advocate the arbitrary setting of prices on farm products, while the freedom of market conditions aided by a protective tariff is allowed to manufacturers, then there is only one solution, increasing high cost of living through diminishing production.—J. J. Morrison, Secretary, United Farmers of Ontario.

Against Nationalization of Railways

EDITOR, Farm and Dairy.—Dear Sir: The last year or more many comments have been made in farm papers and at farmers' meetings regarding the nationalization of railways. It is somewhat natural to expect that from these sources we are liable to hear only one side of the question. On my way home from the United Farmers' Convention held in Toronto last winter I called on one G.T.R. official, who is in a good position to understand the financial condition of the G.T.R., and he expressed the opinion that if the nationalization of railways should become established, the people in Ontario would have to pay more than they are doing now. The reason for this is as follows: In the case of factories located at or near the C.P.R., the G.T.R., in order to secure the trade, pays the cartage rates on the manufacturers' merchandise, and the goods are loaded and shipped via the G.T.R. At the point of destination very often the consignments has to be switched on to a C.P.R. siding, and the G.T.R. have to pay the switching charges. The cartage rates are three cents per 100 lbs., or 118 per 60,000 lbs. car. Switching charges are one cent per 100 lbs., with a minimum charge of \$3 and a maximum charge of \$10.

The railway company, in assuming those cartage rates or paying them, calls this act "absorptions." The absorptions at West Toronto in connection with the G.T.R. amount to between five or five thousand dollars a month. The absorptions at London and Hamilton are not as heavy. In this kind of competition the G.T.R. try to realize, on the average, a gross profit of \$5 per carload. On that amount, from a fair and business viewpoint, can be admitted as very small.

In reading an article in your supplement issue of June 28th, Mr. H. J. Pettipiece gives the following rates on the cost of shipping dressed meats from Chicago to Portland and from Forest to Toronto. I was not aware that Forest could supply one carload, or at most 10 carloads, daily for shipment to Toronto, Montreal or Port-

land. I am informed that a manifest train (a train carrying perishable freight, meats, etc., containing from 10 to 50 cars) leaves Toronto daily at 8 p.m. and reaches Montreal at 7 a.m. the next morning, making an available time as swift as passenger trains. Can the abattoirs at Toronto or Forest supply 50 cars daily? It is apparent to people who give this matter some thought that the cost of hauling 50 carloads is not much greater than hauling 10 carloads. As an illustration it works out this way: The one car or charge of switching one car on to a siding is \$3, whereas the cost of switching eight cars would amount to only \$1 per car, which means a saving of \$16 in favor of big business as against small business. In hauling freight and shunting into the sidings at every station for a car or half car load, the loss of time entailed makes the cost of hauling 100 lbs. much greater in comparison to long hauls and a full train load, so that the freight rate has to be in actual proportion to the action of the market which naturally does not favor small business.

It is big business that gets the best rates every time. If we farmers organized a big man, a did-it-all business in buying supplies and selling produce, we would reap a greater benefit.

It seems to me that some of the men connected with the farmers' movement are much more inclined to find fault with the way the other men manage their business.—Yours in fair play, J. Eldridge, Bruce Co., Ont.

Farming Not Get-Rich-Quick Scheme

EDITOR, Farm and Dairy: Under "Letters to the Editor," in your issue of August 30th, I for one take exception to "A Consumer's view." Consumer has been reading the papers recently, and has seen prices mount high to him, but since the government has set the price on wheat, perhaps he will change his views.

I am not farming on a scale so that I can give an answer to the production mentioned in his article. What alone is my hobby. In normal times it costs 65 cents a bushel to produce wheat. I doubt if 77 cents will produce wheat in the present war times, when labor, tools, threshing and machinery are so high.

"A Consumer" should bear in mind that wheat, from which the staff of life is manufactured, must pass through many hands before it is made into bread. And every one that handles it does so for what there is in it.

Had "Consumer" been a constant reader of the papers, he would have noticed that in 1915 wheat, No. 1 Northern at that, sold here at 68 cents a bushel. Where did the farmer make any more that year? There were thousands of farmers who sold at that price, for many western wheat farmers must sell in the fall as soon as threshing is completed.

The farmer is the hardest worked man in this country, and earns every cent he makes. His work is continuous winter and summer, every day, early and late, with less pleasure and comfort than his city cousin. My advice to "Consumer" is to get away and get into the bonanza business while the getting is good. There is no better teacher than experience, although the tuition fees are high.

Regarding "Consumer's" scale of wages does not apply to this section of the country. For eight months a man gets from \$50 to \$60 a month and board. During harvest and threshing he gets \$1 to \$1.50 a day and board. No matter what wages some farmers offered this year they could not get help. And for one would not want some of your city help, at any price. —"Producer."

The Agricultural Value of Ground Limestone

Profits Derived From Its Application to Sour Soils

THE favorable influence of available lime on soil fertility is a well-established fact, and one that is now widely recognized by farmers. This recognition is the result of practical experience in many parts of the world and is fully supported by scientific testimony. Many soils are naturally well supplied with lime—present as carbonate of lime—and such soils, naturally treated in respect to manuring, cultivation, drainage and rotation of crops, are among the most productive known to agriculture. On the other hand, there are other soils deficient in lime, owing to the poverty in lime of the rocks from which they were originally derived or to depletion through long-continued cropping and drainage. It is these latter soils that profitably respond to liming or applications of ground limestone.

Soils in need of liming are usually acid or sour and will turn blue litmus paper red (methods of testing soils are given in Bulletin No. 80, "Lime in Agriculture," Experimental Farm Series). Soils broadcast with a sufficiency of available lime turn red litmus paper blue and usually give a more or less strong effervescence on the addition of a few drops of any strong acid. Soils of all types may be benefited by liming—heavy clays, silty and slaty soils, mucks and light loams, and especially poorly drained soils.

Though quicklime or slaked lime are forms particularly valuable for heavy clays, chiefly from their beneficial effect on the texture of such soils, improving their drainage and rendering them mellow and more easily worked, ground or crushed limestone has proven a most suitable and profitable form of lime for application to soils of many types, and is to be generally recommended. Excessive applications can do no harm, as may be the case with quicklime. Dressings may be from two to five tons per acre, broadcast on the prepared soil and harrowed in.

Experiments conducted by the Division of Chemistry of the Experimental Farms in Eastern Canada during the past five years have shown that at many points an application of ground limestone has been followed by increased yields, and particularly has been valuable for the clover crops—the establishment of which may be considered as the basis of profitable farming. The following two instances illustrate the benefits that may be derived from ground limestone applied to soils deficient in lime:

At Kentville, N.S., on a sandy loam soil, a plot was treated to 215 pounds of fish scrap, 233 pounds of acid phosphate and 190 pounds of muriate of potash per acre in preparation for an oat crop in the year 1914 and yielded 57.3 bushels of grain. Another plot, similarly fertilized, received ground limestone at the rate of 2,000 pounds per acre, and yielded 66.2 bushels of grain per acre—an increase of 8.9 bushels of grain due to the liming. In the second year (1915) of the rotation the fertilized but unlimed plot produced 2 tons, 700 pounds of clover and timothy hay per acre, while the fertilized and limed plot yielded 3 tons, 760 pounds of hay per acre—an increase of 1 ton, 194 pounds due to the liming. In the fall of 1915 the stubble growth of clover aftermath on the limed plot made it stand out in striking contrast to the others in the series.

At Cap Rouge, P.Q., on a sandy soil, areas in barley, oats, wheat and peas were treated in 1915 to an application of two tons of ground limestone per acre. The following results were ob-

tained, the product being expressed in pounds of grain harvested per acre: Barley: average of 3 varieties, lime 3,900, unlimed 945. Oats: average of 5 varieties, lime 10,140, unlimed 8,940. Wheat: average of 4 varieties, lime 4,200, unlimed 3,315. Peas: average of 4 varieties, lime 7,080, unlimed 3,485.

The Business Basis of Dairying

(Continued from page 5.)

fact that we could not sell clover hay to advantage was not worrying us now, as we had little hay to sell in any case. We began to put in more clover and less timothy in our mixtures and we did not allow the meadows to remain so long in hay. (I say "we" now, because with the increase in the dairy business the farm had become a family affair.) The growing of clover reduced feed bills and was our second real step in advance, the first being the improvement in our cows. All along we had been

off a few bunches of hogs each year and a few hundred bushels of fall wheat. We believe that we have struck the right road to success and have stayed right on it ever since. We are still working for better and better crops. They are a prime factor in our success. That back of good cows lies a well planned rotation of crops. The kind of crops that give maximum returns per acre and at the same time reduce feed bills. We are following a four-year rotation of corn, mixed oats and barley, clover hay and pasture. Besides that we have a big field of alfalfa. We believe that a man may farm his land well, but if he feeds his well grown crops to poor cows he will fail. We are equally certain that a man may have excellent cows, but if he is a poor farmer he will fail. It is the man who gives intelligent attention to his cows and his crops who has success.

I expect my neighbors to put their O.K. on this contribution. Many of them have followed along the same lines and have done well. This is the cream of my farming experience.

SMALL THINGS AND BIGGER ONES

By W. S. Fielding

WE are advised to despise not the day of small things. It is well to have the support of our banks and other financial organizations in the Victory Loan campaign. There to make the transaction a real Victory Loan—the cordial support of the mass of the people is necessary. Don't think that because you have no large sum to invest you should do nothing. The small subscriptions of the many will amount to more than the large subscriptions of the few. If each one will do what he or she can the sum that will be raised from people of very moderate means will be surprising. Every small investment is of value in itself, and it has the higher value of helping to renew assurance to the Mother Country, the Allies, and the world that the people of Canada are steadfast in their purpose to put forth every possible effort toward the winning of the war. The small bonds of \$50 and \$100 are designed to afford an opportunity to the masses of the people to utilize their modest savings in support of the good cause. The terms of issue make them the interest yield about 5% per cent., which at a liberal rate for such a high class security. Have a share in this great work of financing Canada's part in the war. Buy a Victory Loan bond—a large one if you have the means, a small one if your resources will not allow the larger investment.

growing turnips and mangels for silage, but their area was limited by lack of labor.

A Silo at Last.
We will never forget the first year we fed ensilage. When we started in dairying there were no silos in our district, and they were scarce in Ontario. The farm papers, however, were all talking about them and we built a home-made silo according to specifications given in one of the papers. We planted five acres in corn, the greatest area of corn that had ever been grown in the district. Due to good luck rather than good management we planted suitable varieties, we had good silage and the cows never milked so well. Since then the only improvement we have made in our farming business, is that by the use of lots of lime, we have gotten a good stand of alfalfa on a 10-acre field.

This is the whole story. We have improved our cows, increased their number and therefore greatly increased our income. By changing our crops so as to grow lots of clover and alfalfa hay and corn ensilage, we have been able to grow a great portion of our feed on the farm and feed bills have been reduced to a minimum. Aside from the dairy income we turn

More Potatoes Should be Grown
Andrew Elliott, Waterloo Co., Ont.

IN lime past has been done and much is now being done to improve seed grains and to help various live stock industries, but little indeed has been done to place the production of potatoes, one of the most important of crops, on an improved footing. True, we have bulletins of great value issued from time to time, but they seem to have little effect and we find the majority of farmers growing potatoes as their fathers did before them. Potato growing is a science and special education is needed to meet the changing conditions of production and marketing.

More potatoes should be grown in Ontario. There is a waiting market for the potato grower who will take up the growing of sweet potatoes for the south, Virginia and the Carolinas and the seed from Newbern, N. C. England, the states west of the Mississippi from Minnesota and Wisconsin; Ontario, and especially northern Ontario, is in line to meet the demand of the states in the middle south. For market demands a medium sized, smooth potato is required. It is a serious mistake to grow many varieties. Cans of mixed varieties are

never wanted and have to be sold at a reduced price. Irish Cobbler for early marketing and Green Mountains for the late demand are among the best.

I believe that seed potatoes should be thoroughly mature before being dug. Some experts tell us differently, but their claims are contrary to all teaching. We know that grains must be mature to furnish the most desirable seed. Corn taken from the stalk when beginning to dent gives a high germinating test in the test box, but it is much behind in field conditions when compared with ripen on the stalk. I for one have still to be shown why seed potatoes should not be mature.

The Best Potato Soil.

A rather sandy soil is preferable for growing potatoes and it must be rich in available plant food. The application of barnyard manure is sometimes necessary. Perhaps there is no better foundation for a crop of potatoes than a year old clover sod. If a crop of second crop plowed under, conditions are almost ideal. Some years ago I spent several seasons in England in a potato district advocating clover in rotation to precede potatoes, a thing then practically unknown. My endeavor apparently fell on deaf ears and unbelieving minds. Four years ago on returning to the same part I found all the big potato growers were following a three year rotation—clover, first crop cut for hay and second crop turned under, then potatoes followed by seedling clover.

Potato Diseases.

Such diseases as early and late blight and such pests as Colorado potato beetle can be controlled by spraying. For the blight spraying is a preventative and is of no use after a disease has once become established. It has also been shown that thorough spraying, say six times in a season beginning early, will materially increase the yield and almost entirely prevent rot. Ordinary scab can be prevented by treating the seed with formalin, but as yet no cure has been found for powdery scab except changing the ground for a period of years and destroying all diseased tubers. Black leg, a disease little known as yet in Ontario, will probably become common through the use of seed from infested countries. The only cure for it is to pull up and destroy all infested plants.

The Corner Stone of Breeding

AT an experiment station sixty ewes were divided into two equal lots. One lot was bred to an average good grade ram. The other lot was bred to a pure bred ram of the mutton type. The lambs were sold at three months of age. The lambs from the pure bred ram averaged eight pounds more in weight and brought \$4 a hundred more than the lambs sired by the grade ram from equally as good ewes. The thirty-seven head from the pure bred sire sold for exactly \$118.40 more than was realized from an equal number of lambs of the same age sired by the grade ram. The pure bred ram cost \$45 and the grade cost \$15.

There is a moral, of course, but it is not new. Sometimes the price of a pure bred sire seems high, but time and successful experience always shows the pure bred ram, boar or bull to be the best paying investment the live stock grower can make. Within reason it is pretty hard to pay too much for a good sire.

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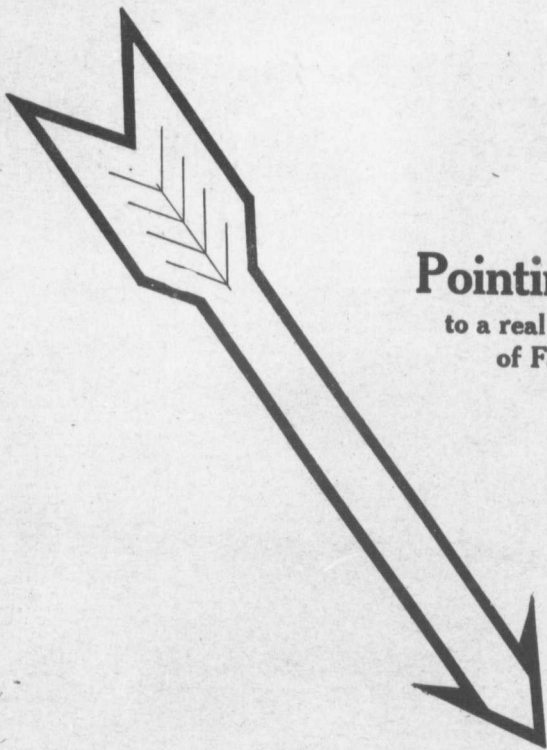
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SEALED TENDERS addressed to the Postmaster General, will be received at Ottawa until Noon, on Friday, the 21st December, 1917, for the conveyance of the Mackay's mails on a proposed Contract for four years as required each year between Peterboro Post Office and Railway Depots from the Postmaster General's pleasure.

Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Office of Peterboro.

G. C. ANDERSON, Superintendent.

Post Office Department, Ottawa, 7th November, 1917.



Poultry Pointers

By F. C. Efford.

FREED and eggs will probably be higher this winter than they have ever been known. More than ever then it will be necessary to make every pound of feed fed in eggs or flesh. To do this it will require vigorous culling of the flock, good housing and care, and business methods in buying the feed and selling the product.

Get rid of non-producers. Keep for laying only those that will likely lay fertile eggs or produce good strong-germed eggs for hatching in the spring. This means that, in the American or heavier breeds, hens over two years old will be sold or cull, and only the one-year-olds kept and none of the late pullets. Even the well-matured pullets should be carefully selected, keeping out any that may lack vigor or constitution.

In a test covering three years at several branch Experimental Farms during the months of November, December and January, early pullets produced eggs at a cost per dozen, for feed, of 18.3 cents; late pullets, 56 and old hens, \$5.73.

There are a lot of pullets that fall too late hatched to keep for laying, at the present price of feed. Any pullet that is not nearing maturity by November will not pay to hold. Feed such with the cockerles and market. It does not pay to feed a pullet till February before she lays.

Don't keep old hens. A two-year-old Leachor hen is worth keeping but a two-year-old Rock hen is usually a loss. If all these old hens were not sold in the spring or during the summer, set rid of them now.

The late moulter is best. In selecting the one-year-old hens to keep for breeding, pick out the ones that moult late in the year. Those that are in full new feather in November are not the layers.

Even at the present cost of feed it does not pay to sell this birds. Three and a half pounds of ground grain will produce one pound of flesh. Don't sell all at the same time, sell these birds as ready first, spread the sale over several months, keeping, if convenient, some of the cockerles till after Christmas.

Wheat fit for milling purposes should not be used for poultry food. Oats, buckwheat, barley, corn, screenings, buckwheat screenings, etc., can be used. Feed a mixture of grains in litter morning and night. In the mash, dry or moist, use bran, shorts, ground oats, etc. Give mixes to drink and table scraps, and if there is no milk use beef scraps. Give grit and shell, green feed, and keep birds and houses free from vermin.

Why Hens Eat Eggs

By A. P. Marshall.

MANY farmers are troubled with their hens getting the habit of eating eggs. Generally, back of this there is some reason, as a hen properly fed at all times will seldom acquire this habit.

Hens should have a good variety of food or they often attack their own eggs in hope of finding the lacking material. If their feed has grit and oyster shells, they often lay soft-shelled eggs, and in many instances this is how they get a hole in their eggs. It is very easy to pick a hole in those

eggs. Often the lack of the oyster shells, the lime material, is the only cause for this habit. The hens must first have enough of good varied food for body maintenance before they can lay eggs properly and unless they get this there will be trouble one way or another.

Prevention and Cure.

Curing an egg-eating hen is quite a difficult problem and the hatchet in many cases is the surest cure. However, many raise valuable pure-bred birds and it may be worth while to try some experiments. The best way in the first place is a preventive by giving a good variety of food, oyster shells, grit, charcoal, meat scraps, green stuff and a little salt in the mash, about as much as we use in our own food. Especially should there always be a lookout that oyster shells are always in good supply.

Another method for curing egg-eating hens is to take an egg, make a little hole in one end large enough to empty its contents. Then fill this egg-shell with meal and red pepper. Place it in a conspicuous place where you know the egg-eating hen frequents. It is a wise plan to have several of these eggs fixed up if you have more than one hen with this habit, and it will be generally found after they get some of the contents of these eggs that they will have a taste in their mouth that they do not want repeated and often gives a cure, especially if at the same time a good variety of food is supplied.

Blackhead in Turkeys

THE one disease which causes more loss in turkeys than all others combined is blackhead. This disease is infectious. While other fowl may be subject to the disease losses among them are small compared with the losses among turkeys. As far as can be learned the chief source of infection is from the droppings of the diseased birds, particularly in the neighborhood of their feeding area.

Symptoms.

The early symptoms presented by affected birds are - not particularly characteristic. They will usually separate from the remainder of the flock and lag behind because of physical exhaustion. The droppings are more fluid than normal, for the disease is allied to white diarrhoea and droppings are usually streaked with yellow. The symptom from which the disease gets its name is the dark color of the head of affected birds. This dark coloration may disappear and reappear while the bird is at rest, but excitement usually causes a bright red coloration.

The surest way of telling the disease is by making a post-mortem examination on one of the diseased birds. The liver will be found to be covered with circular spots about the size of a five or 10 cent piece, which are yellow or whitish yellow in color. At the point between the spot and the liver tissue a bright red ring may be observed.

Prevention.

There has not yet been found any system of treatment for blackhead which will give good results. The best method is to try to prevent the disease. Any birds which are affected should be immediately separated from the rest of the flock. If it is known that birds have this, the sick ones should have their necks wrung (for the disease may be spread by the blood), and be either burned or buried as early. The feeding ground should be treated with lime, and if the turkeys roost in trees it is well to spray the ground underneath with a lime sulphur wash such as is used for spraying root trees. It is consid-

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erred, and young turkeys to floor at a horse Wheeze, Roar, have Thick Wind or Choke-down, can be cured with

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ered, an advantage to quarter the young turkeys on a clean sanded board floor at night and prevent their traveling through the grass in the morning while it is wet.

Some people claim to be able to ward off the disease until the turkeys can be got ready for market by using a teaspoonful of muriatic acid to a quart of drinking water. This acidulated water should be placed in porcelain or glass vessels and turkeys prevented from getting water from other sources so they will have to drink it. They should be kept under white clothing the treatment. The best thing to do, however, in case of an attack, is to immediately separate all turkeys which show any symptoms of the disease from the rest of the flock and to keep the flock in as sanitary a place as possible.

Winter Feed

A MIXTURE of three parts bran, two of corn meal, two of wheat middlings, two of beef meal and one of alfalfa by measure, mixed dry, can be fed in a hopper and kept before the birds all the time. Equal parts of oats, wheat and cracked corn should be fed in the litter. In cold weather feed the corn in the evening. In addition to this the birds should have some green food as mangels, carrots or cabbage. Grit, oyster shells and charcoal should be kept before the birds all the time.—E. J. Peterson.

Field Notes

ONE of the sights most noticeable while travelling through the country at this season of the year is the number of farmers to be seen plowing with two-horse teams and single-furrow plows.

We believe that there are places where nothing else is satisfactory, yet there are other places where it is a serious waste of valuable time with nothing gained. On land which has been but recently broken, where stones, roots and stumps are frequent, also in very wet land, rough land, or very small fields, the larger outfit is not satisfactory. But in many districts of Old Ontario there are no stones or any other obstruction and the fields are level and sufficiently large to admit of the satisfactory use of a four-horse power outfit. In such places as this it seems quite out of place in this time of man shortage to see an able-bodied man or even a boy wasting his time following a two-horse team.

The farmer who can most profitably employ himself is the one which is most likely to succeed in the race of economic production. In no way can a man better conserve human labor than by handling a four-horse team.

"Safety First" with the Bull.

"SAFETY first," the admonition which greets us upon street railway cars and R. R. stations, is a motto which might well apply to the handling of the dairy bull. While visiting one of our prominent livestock breeders recently we saw a practical means of carrying out this advice.

The bull was in a box stall with the manger at the front end and the exit at the rear. The rear door was in a slide and was hung on a rope which passed up into the loft and then came across and down in the alley in front of the manger. On this end was a heavy weight which almost balanced the weight of the door. When the herdsman wished to take out the bull he enticed him to the manger, caught him, then pulled down the weight, thus opening the door at the rear. When he was brought in the herdsman simply led him in at the door,

climbed over the manger, raised the weight, thus lowering the door and at no time during the whole operation was he at the animal's mercy.

Such precautions, commonly practical, would go a long way to prevent the regular list of accidents which we notice and which are usually attributed to animals as "quiet as a lamb."—Mac.

SHEEP AND SWINE

Wintering the Brood Sow

DURING the winter considerable care will be needed to keep the brood sow in good condition on account of the absence of pasture. Pasture not only supplies the green food which is craved by the hog's cabin but also the bulk of which is needed in the ration, but it also furnishes exercise to keep the sow in condition. To offset the lack of green feed, nothing surpasses roots. These may be sliced or pulped and mixed with the grain, or may be given whole as a noon feed. Care must be used, however, in feeding roots as they are

laxative in effect and should not be fed excessively.

One of the greatest feeds to supply bulk in the ration is clover hay. Sheat oats and corn fodder are also valuable feeds for swine. It is well to keep charcoal, ashes, lime and salt always available for the pigs.

The greatest difficulty will be finding sufficient exercise for the sows during the winter. Where only a few sows are kept, it is usually possible to give them the run of the barnyard, where they will take exercise rooting in the manure, or working in scattered straw or chaff for what grain may be found. If a dry, well-bedded sleeping place free from draughts is provided, the conditions are about right.

Where the barnyard is not available for the sows, they will do well outside in board cabins for nests. The cabins need not be warily constructed, but must be well bedded and not more than three to five sows kept in each. If the cabins are placed about 50 feet from the feeding trough, the pigs will get some exercise in going to and from their meals. So housed and fed, roots, clover hay and a suitable meal composed of bran, shorts

and a small proportion of oats or barley, should bring good results.

In preparing a building for brood sows it should be remembered that what the pig requires in a house is an abundance of fresh air, plenty of sunlight, protection from winds and a well littered, dry nest. Dampness or draughts in the sleeping quarters are the most serious faults in a cabin for pigs. If the brood sow gets plenty of fresh air and exercise with succulent food, she should winter well.

Self-Feeder Wins Again

IN a hog-feeding experiment just concluded at the Nebraska University Farm, the self-feeder again found its way to the top of the list as a profit-maker. Corn and tankage in self-feeders, supplemented by alfalfa pasture, made the largest profit per head, \$6.31. Hokey feed, tankage, and alfalfa pasture made the lowest cost of gains, \$13.15 a hundred. Hogs that were fed semi-solid buttermilk with alfalfa pasture made the greatest daily gain, 2.14 pounds. These figures were calculated with feeds at current prices: corn, \$2 per bushel; semi-solid buttermilk, 3½



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There is Good News for You on Page 11 of This Issue.

cents per pound; tankage, \$30 per ton; homlay, \$70 per ton; and pasture, ½ cent per head per day.

Experimental work carried on at the Central Experimental Farm, Ottawa, with self-feeders, show that hogs fed in this way consume more grain per pound gain than when fed by hand. Results for this year's experiments are not yet quite complete, but when labor is taken into account, it is believed by the men in charge that for economy of gains, hogs fed by the self-feeder will at least be equal to those fed the other way. If you have a trough and can throw in skim milk and hogs have access to this in addition to the feeds provided by the self-feeder, hogs will make more economical gains than by any other method of feeding.

At Ottawa the hogs have a free choice of foods. Corn, shorts, oats and tankage are all supplied in different compartments. A plentiful supply of water was always on hand. The hogs seem to prefer the corn, but wheat by-product and tankage were also relished. Ground oats are not popular with the hogs. Where pasture can be given to the hogs, the self-feeder cuts down considerably on the cost of producing pork.

One point which might be noted in connection with the Nebraska experiment is that even the most economical gains were made at a cost of \$13.15 per hundred pounds of pork. And pork in Nebraska is probably made at a lower cost than it can be in Canada.

Preparedness With Sheep

THE year's profit from sheep is largely governed by the methods adopted in wintering the animals. With sheep as with other meat animals the margin of profit may be quite large where economy is used in the feeding and housing methods. On the other hand, if they are fed on expensive feeds, any meat animal will quickly "eat its head off." In making preparations for the wintering of sheep the farmer should not only plan his rations so that the sheep may be kept in good condition at a low cost, but he must also take certain precautions that his system of wintering may keep the sheep in the best health. Otherwise, the wool and lamb crops will suffer.

One of the most important of the fall operations with sheep is to see that they are not infested with ticks. Sheep free from ticks will winter on much less feed than the infested ones. Lousy sheep not only consume more feed and remain thin and weak but they produce less wool and that of a lower grade. The high prices which are being paid for wool of a high grade certainly warrant that some attention be paid to keeping the fleeces in the best possible condition. Before the sheep are placed in the barn it is well to take half a day fixing up. See that the hay racks do not allow chaff to be introduced into the fleeces, and clean out cowbats and dust. The time spent in putting the sheep barn in good clean condition will be well repaid in the price received for the wool.

Finishing Lambs.

Don't sell last spring's lambs in a light, unfinished state. Finish them for Christmas or Easter, and by thus marketing home-grown feeds, make \$1 to \$1.50 per lamb, over selling early in the unfinished state. Winter finish or fattening rations:—Roots (turnips preferable if there are any where) 4 to 5 pounds; or ensilage and roots, equal parts, 4 to 5 pounds; hay (clover and fine grass) 1½ to 3 pounds; grain mixture as follows:—

1. Oats, 3 parts; bran, 1 part; corn, 1 part.
2. Oats, 4 parts; bran, 2 parts; oil-cake, ½ part.

Start with ¼ pound per lamb per day, finishing with 1 pound per day. Elevator screenings, as sold from government elevators, containing a mix-

tum of blackseeds (mustards, etc.) are economical in the grain ration. Various grades of these screenings such as scalplings, buckwheat screenings, etc., may also be the cheapest grain for cattle and swine.

Good, Better and Best.

THE man who makes a clean cut success of his business life is the man who knows what is the most important thing to do now. Many things are calling to be done every minute. Most of these things are desirable to do. But all of them cannot be done. Some must be refused altogether, and some must be put aside for the time. One thing only is most important now. And that is the thing to do.

The man who lacks this good judgment lets himself be everlastingly chased and worried by the crying undone things. Some of the things that cry loudest to be done are those that least need to be done. But they get done ahead of more worthy things. If only we knew how to say "No" to the Good in order to say "Yes" to the Better and the Best, we would make our lives much more worth while.

The average ambitious farmer has a continuous sense of being rushed. He hurries past the quiet things that wait on things that cry. Things outside the house cry loudest to him. He dodges in and out of his house. He subtracts from time spent with his family to add to the time spent with his cows and corn. This method makes good cows and corn. But it doesn't improve the family much. It is choosing the Good instead of the Best.

The farmer who takes time to come to the table three times a day with clean face and hands, cleaned finger nails and combed hair and dressed in a clean house coat, is doing the Best without drawing much from the Good and the Better. The chances are he will make more money, will have better looking stock, and that he will live longer than though he lacked these graces. Moreover, his wife will live longer and better while she lives; his children will stand a better chance to grow up respectable, and his own standing in the community will rise.

The man who does these little acts of devotion to his home will by and by do more. He will devote some of his evening hours and his seventh days of rest to his people and to the place where they live. And growing wise, he will farm with the idea that the house and not the barn is the administration building, that the wife, not the Farm, is the big "hance" that the family life as you go along, not the life of leisure after you retire rich, is the measure of success.

"The Farm," says Dean Hunt, of the California College of Agriculture, "is not a place to retire to after a successful business life, but rather a place to retire from after raising a successful family." The family is the Best on a farm. And it is a quick maturing crop, too. Many a man has busied himself about with his important hogs and corn while his foolish little folks bothered about with their unimportant play, always getting in the way and vexing their elders and better, till all of a sudden the father woke to see that the children were grown and gone. Too late he learned that the years he might have saved churning with his children he wasted churning with his hogs.

In that most popular of all sacred stories, the Prodigal Son, the big boy finds himself at the end or his downward career, landed in the hog lot. But in him was left enough of the higher desire to wish for something better. He came to himself in time to come back home while there was a home to come to. Many a farmer has failed to wake up till it was too late. There was nothing left but an empty house to come to.—Farm, Stock and Home.

AN APPEAL TO The Organized Farmers of Canada

For years, you the organized farmers of Canada, have been fighting for great national reforms. As yet you have obtained but few of them. Nor does the Union Government and its candidates offer to grant you any of them. Everything must be postponed until after the war. In the meantime the interests which grow rich at the expense of the common people are to be allowed to retain their special privileges undisturbed. Do you approve of such a policy?

FARMERS BE CONSISTENT.

No more patriotic action can be taken, in this time of the country's need, than to increase production and reduce the high cost of living by **lifting the burdens off the common people.** Should we fail to do this we will be unable to support the boys at the front as we must if this war is to be speedily won. In the Farmers' National platform, adopted last November by the Canadian Council of Agriculture, and later by the various provincial farmers' organizations, including the United Farmers of Ontario, these points were considered and certain definite reforms were demanded. The Liberal Party, if elected to power, has pledged itself to give you these reforms. Note once more the requests which you have made and which Sir Wilfrid Laurier, if elected to power, has promised to grant.

What the Organized Farmers Asked For

1. "That agricultural implements, farm machinery, vehicles, fertilizers, coal, lumber, cement, illuminating fuel and lubricating oils be placed on the free list."

2. "Be it resolved that as a means of bringing about much-needed reforms and at the same time reducing the high cost of living, now proving such a burden on the people of Canada we urge that our tariff laws should be amended as follows:

"That the Customs tax on all the necessities of life be materially reduced."

3. "By reducing the customs duty on goods imported from Great Britain to one-half the rates charged under the general tariff, and that further gradual, uniform reductions be made in the remaining tariff on British imports that will ensure complete free trade between Great Britain and Canada in five years."

CONSCRIPTION.

4. At the last annual convention of the United Farmers of Ontario the following resolution was passed:

"Since human life is more valuable than gold, this convention most solemnly protests against any proposal looking to the conscription of men for battle while leaving exempt from the same measure of enforced service. It is a manifest and glaring injustice that Canadian mothers should be compelled to surrender boys around whom their dearest hopes in life are centred, while plutocrats, fattening on special privileges and war business, are left in undisturbed possession of their riches."

**WHO SHALL
RULE?
THE PEOPLE
OR
The PROFITEER**

What the Liberal Party Pledges Itself to Give

1. "In mitigation of disadvantages to agricultural production, I would immediately remove the duties on agricultural implements and other essentials as demanded by the farmers" from Sir Wilfrid Laurier's manifesto.

2. No measure to reduce the cost of living can be effective unless and until the tariff is reformed and its pressure removed from these commodities in which there are "excessive profits," "hoardings," and "combinations for the increase of prices." "A general well-considered reform of the tariff, for the purpose of helping the Canadian producer and relieving the Canadian consumer would be an object of my administration." From Sir Wilfrid Laurier's manifesto.

3. "Since the commencement of the war the Government placed an increase of 7½ per cent. in our tariff on all commodities coming into Canada from outside Great Britain, and an increase of 5 per cent. on the goods coming from Great Britain. I would immediately remove those two disabilities as respects commodities from all countries other than those with which we are at war. The increase duty on imports from Great Britain was an unfriendly, unnecessary action on the part of Canada towards the mother country at a time when British trade was staggering under the disadvantages incidental to the war. It continues to bear unfairly and unduly on existing trade, and should be speedily removed." From Sir Wilfrid Laurier's manifesto.

CONSCRIPTION.

4. "A fundamental objection to the Government's policy of conscription is that it conscripts human life only, and that it does not attempt to conscript wealth, resources, or the services of any persons other than those who come within the age limit prescribed by the provisions until the people have an opportunity to pronounce upon it by way of a referendum. I pledge myself to forthwith submit the Act to the people, and with my followers to carry out the wishes of the majority of the nation as thus expressed." From Sir Wilfrid Laurier's manifesto.

THE UNION GOVERNMENT AND INCREASED PRODUCTION

Since the outbreak of the war the Conservative Government, and now the Union Government, has been calling upon the farmers of Canada to increase the production of food products. At the same time it has made it difficult for them to do so by increasing the tariff 7-12 per cent. on all the articles farmers must buy to enable them to increase production such as seeds, fertilizers, agricultural implements, feeds, farm machinery, and hundreds of other articles. This is unfair, unjust and unwise. On this point Sir Wilfrid Laurier says:

"Believing that increased food production is one of Canada's best contributions towards winning the war, I would propose, if entrusted with the administration of the country, to immediately relieve agriculture from its disabilities in this regard. Under existing conditions, these increases in the tariff are a hindrance rather than a help to increased production in Canada, while it is certain that in the final resort the consumer has to pay these extra taxes."

FARMERS! BE CONSISTENT. STAND BY YOUR OWN PLATFORM. SUPPORT THE MEN WHO PLEDGE THEMSELVES TO WORK FOR THOSE REFORMS FOR WHICH YOU HAVE ASKED. VOTE FOR LAURIER—LIBERAL CANDIDATES.

Vote for Your Interests and Against the Trusts and Pork Barons

This advertisement is inserted by the Central Liberal Information Bureau, Ottawa, Ontario.

Farm and Dairy

AND

Rural Home

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



SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.20 a year. For all countries, except Canada and Great Britain, add 50c for postage.
ADVERTISING RATES, 12 cents a line flat, \$1.65 an inch an insertion. One page 48 inches, one column 12 inches. Copy received up to Saturday preceding the following week's issue.

Peterboro Office—7, McCall Street.
Toronto Office—7, 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 in arrears, and sample copies, varies from 20,000 to 22,000 copies. No subscriptions are accepted at less than the full subscription rate.

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

OUR GUARANTEE.

We guarantee that every advertiser in this issue is available. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid-in-advance subscribers, we will make good the amount of your loss from date such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of this contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy."

Requests shall not ply their trade at the expense of our subscribers, who are our friends, though the majority of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

The Rural Publishing Company, Ltd.

PETERBORO AND TORONTO

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

A Career of Service

LAST week a little pamphlet of thirty-two pages, inside a modest brown paper cover, was slipped on to the editorial desk. Its title read: "Dr. Jas. Mills, M.A., LL.D.," and underneath these words: "A career of eminent service in education and agriculture." Inside we found a well-deserved tribute to one of Canada's great men and one whose greatest works were designed to aid in the development of the industry of agriculture. Canadian agriculture of to-day does not stand in relief against a background of centuries of evolution and progress. Our agriculture is as new as our country, and many of the foremost men in our agricultural history are still with us. Of these none are held in greater esteem than Dr. Jas. Mills. The story of his career, as told by Mr. Ingram, may well be an inspiration to every country boy who feels that he has been handicapped and hampered by circumstances.

Dr. Mills was born near Bond Head in the county of Simcoe, Ont. When still a child his father moved east and bought a bush farm in the county of Durham, where the family remained for twelve years, when they returned to Simcoe. The doctor was the eldest of ten children, and having to work hard on the farm he got little schooling till he was 20 years of age, when he lost his right arm in a threshing machine. His right arm gone he had to decide for the future. He determined that he would have an education, so he entered the local public school and got his first lesson in English grammar at 21 years of age. Handicapped by the lack of an early education, and with health oftentimes undermined by

next few years of his life is one of a struggle which was finally clothed with success only because of the doctor's invincible determination. He graduated from Victoria College, Cobourg, in 1868. From then on his career may be divided as follows: One year in the county academy in Stanstead Village, Que.; three and one-half years as teacher in the Cobourg Collegiate Institute; six and one-half years as head master of the Brantford High School and Collegiate Institute; twenty-five years as president of the Ontario Agricultural College, and ten years a member of the Board of Railway Commissioners for Canada, till ruled out by the 75-year age limit.

It was as President of the Ontario Agricultural College that Dr. Mills did his greatest work. He found the college a small and unimportant institution. He made it one of the greatest of its kind in the world. Nearly everything worth while that has been undertaken by the Dominion or the different provinces, in the way of agricultural education or experimentation, was first done at Guelph during the regime of Dr. Mills. Further, it appears that the principal, president or dean of nearly every agricultural college in the Dominion is one of President Mills' pupils, and through them the influence of his great personality is still working for the advancement of Canadian agriculture.

Dr. Mills himself is still with us, a hale and hearty old man. Because he is still with us, Farm and Dairy is all the more pleased to add this expression of our appreciation of his work to that of Mr. Ingram.

The Hog Production Campaign

MEETINGS are now being held throughout rural Ontario in the interest of greater pork production. Similar meetings, we presume, are now in progress in the other Canadian provinces. Prospects are, that the whole pork-producing business, and more particularly the marketing end, will get the greatest overhauling in the history of the trade in Canada. Questions will be asked, many of them embarrassing to those who desire the immediate success of the campaign, and these questions must be answered satisfactorily before there will be any nation-wide response to the appeals of the Food Controller.

Nor does this mean that farmers are unwilling to produce. Farm and Dairy speaks for the farmers of Canada in stating that no class of the community are willing to make greater sacrifices on behalf of national security than the farmers. Eighty per cent. dividends are not to be thought of, in the producing end of the pork business. Farmers are willing to work without even a five per cent. dividend on their capital investment, and the majority of them are doing it. They would like some assurance, however, that the market will return to them the cost of production, including interest and labor charges. This, the general situation, would seem to guarantee. The hog shortage is world-wide and just in proportion as the hog population of Europe decreases, will their demand for our products increase. On this side of the water, the profits of packers are being controlled. The buying of meat will be done through one commission representing the Allies. And, more important still, the United States Food Administration has practically promised a market value of \$15.50 a hundred weight.

Thousands of farmers will be willing to accept these conditions as satisfactory assurance of the future of the pork market; these are the farmers who can afford to undertake the risk involved. Another equally great army of farmers, however, are working under heavy indebtedness and they cannot afford to take a greater risk than is normal in their business. To reach this class, and they are no less loyal than the others, a guaranteed minimum price will alone be generally effective.

The Victory Loan

"I DON'T see just why it should be necessary to make so much noise in order to induce people to buy Victory Bonds," a Toronto business man remarked to one of the editors of Farm and Dairy a couple of days ago. "To me it seems that self-interest alone, would be sufficient to insure the complete success of the issue. Personally, I do not know of a better investment. It combines the best of security with a good interest rate."

We quite agree with our friend; the conditions of the Victory Loan should appeal to every man with \$50 or more drawing three per cent. interest in the savings bank. But people have to be educated to an appreciation of the value of even such good things as Victory Bonds; for instance, how many people really understand the food value of dairy products? One is as self-evident as the other, but both have to be understood to be appreciated.

But we don't like to talk of Victory Bonds as an investment, even though the prospects of over five and one-half per cent. do give us a comfortable feeling when we are buying them. It is our patriotic duty to make the issue a success, as on its success depends Canada's ability to stay in the war with credit to herself, and to tender to Britain a certain measure of much needed financial aid.

A special appeal is being made to Canadian farmers. Our investment in bonds as individuals will not be large, perhaps one hundred dollars, perhaps one thousand dollars, and, in exceptional cases, five thousand dollars. But be our bond purchases big or little, if we all do our part the aggregate will be large. Farm and Dairy wants to see this loan greatly over-subscribed. We know that the farmers of Canada will do their part in piling up the total.

United States Hog Prices

THE Food Administration of the United States is aiming at an increased hog production for 1918 of 33 per cent., as compared with the production of this year. A nation-wide advertising campaign will be conducted. As in Canada every farmer will be urged to keep an additional sow and raise a couple more litters than he usually does. The Food Controller realizes that the farmers have little cause for confidence in the stability of the market. Accordingly the administration has announced that, "the prices so far as we can effect them will not go below \$15.50 per cwt. for the average of the packer's droves on the Chicago market, until further notice."

This does not mean that the United States administration is fixing the price of hogs at \$15.50. Congress alone has the power to fix prices. The administration, however, has the power to buy hogs, and it is anticipated that if the market drops below \$15.50, the food administration will buy up a sufficient number of hogs to re-establish prices. The administration is working on the basis of thirteen bushels of corn as equivalent to one hundred pounds of pork. Were the price of corn to advance unduly, hog (refers in the corn belt might lose a little by continuing to feed hogs, but they have the administration's guarantee that their losses would be slight in any case.

With this guarantee behind them the United States farmer has more cause for confidence in the future of the hog market than has the Canadian farmer. True, as long as the United States market is left open to our hogs, as at present, our prices will be on a parity with theirs, as the hogs exported for sale at Buffalo and Chicago would fix the price on all hogs slaughtered in Canada. We would feel more independent, however, did the stability of our market rest on some action of our own administration. Actual price fixing may not be necessary or desirable.

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FARM

An International Live Stock Show for Canada

The Ambitious Project of the Hamilton Board of Trade

CANADA has many excellent fall fairs and a few good winter fairs. As yet Canada lacks a real international live stock, dairy and poultry show.

Hamilton is one of the largest cities in Canada. Hamilton does not boast of even a small fall fair, much less an agricultural exhibition of any kind, proportionate to the importance of the city. But Hamilton is ambitious. The city on the Bay would fain make itself the home of an international live stock, dairy and poultry show, which as yet we lack in Canada.

The Board of Trade of that city is fathering the idea. They have been working on it for two years now and plans have been advanced to the stage where the Board of Trade is willing to take the public into its confidence. Last week, in order to get the feeling of Ontario Live Stock Breeders, without whose cooperation the project would be foredoomed to failure, the Board of Trade held a banquet in the Royal Connaught Hotel to which they invited representative breeders and exhibitors. Between 100 and 200 breeders responded, representing all lines of the breeders' industry. The dairy interests were strongly represented and there were a goodly number of horsemen, beef cattle men, swine and sheep breeders and poultry men around the board. All were given an opportunity to express themselves, and the general feeling seemed to be that there was an opening for a real, big, international winter fair in Canada, and that if Hamilton would provide the accommodation the city could count on the support of the exhibitors and breeders of the land.

Mr. Martin, of the Board of Trade, who presided, was careful to emphasize that in launching the new project they were not guilty of any feeling of enmity toward the neighboring city of Guelph. What they were thinking of was something bigger than the in-

stitution at Guelph, something which Guelph could not handle because of lack of accommodation. Plans have been advanced to such a stage that a site has been selected with excellent railroad and radial facilities and preliminary plans have been drafted for the construction of a judging amphitheatre and ample accommodation for exhibitors. He was careful, too, to emphasize that an immediate realization of their plans is not expected. There will not be an international live stock show at Hamilton either next year or the year after. The first fair, in all probability, will not be held until after the war in any case. In fact, the banquet last week was almost in the nature of a "feeler." Initial steps were taken by the appointment of a committee of representative live stock men to work in cooperation with the Hamilton Board of Trade. This committee will perfect arrangements to bring the question of such a fair at Hamilton before the annual meetings of the Live Stock Associations in February.

Addresses and Opinions.

J. A. Ruddle, Dominion Dairy Commission, made the announcement that the total value of the industry this year will be \$200,000,000 and expressed his opinion that such a show was proposed for Hamilton would be of great value to the industry. He and Prof. H. H. Dean who followed him, emphasized the superior nutritive value of dairy products. "I know of no one thing that will reach the people like a good exhibition," said Prof. Dean, in reference to the advisability of establishing an international live stock show.

Mr. John Gardhouse was at a disadvantage in that he is a director of both the Canadian National and Guelph fairs. He admitted, however, that they did not have the accommodation at Guelph for a great big international show that would accommodate all corners from Canada and across the line. He was favorable to the Hamilton project. Mr. J. E. Brethour, of Barford, assured the Board of Trade that if some good city was prepared to give the accommodation the breeders would back it to the limit but he warned the Board that they had a big contract on their hands with J. D. Bryan, of Ridgeway, promised the cooperation of the sheep men.

H. F. Bailey, Deputy Minister of Agriculture, believes there is room for a big international live stock show in Canada and he has added that Hamilton had many things to recommend it as the site for such a show. J. E. Martin, "The Poultry King," put the Guelph show in "Category E," and strongly endorsed an international live stock show in Hamilton. Mr. D. O. Bull promised that the Brampton Jerseys would be on hand when the fair was opened. Mr. John McKee, of Norwich, was certain that the Ayrshires would be there also. Finally Mr. H. M. Robinson, of Toronto, moved that this meeting approve of the holding of a national or international live stock dairy and poultry show and that a committee be appointed to work in cooperation with the Board of Trade to bring about the formation of such an organization." The motion was seconded by D. O. Bull, carried unanimously and the following committee appointed—John Guardhouse, John McKee, J. E. Brethour, D. C. Platt, Harry Pettit, John Martin, L. H. Lipsitt, J. D. Bryan, D. O. Bull, H. M. Robinson, H. D. Smith, and F. B. Wood.

The committee met for a few minutes after the general meeting had adjourned and further action will be deferred until the live stock associations of Canada have had an opportunity to discuss the project when they assemble in Toronto, February next.

When The Factory Closes

In a few weeks scores of the Cheese and Butter Factories over Ontario and Quebec will be closing for the season. At that time hundreds of the patron or customer. The following list of firms are in a position to handle large quantities. We suggest that you patronize them.

CREAM WANTED

We are in the market for Cream, both for churning and table use. Our guarantee assures you of:—

- HIGHEST PRICES,
- ACCURATE RECORDS,
- PROMPT RETURNS
- AND SATISFACTION.

ALL EXPRESS CHARGES ARE PAID AND CANS SUPPLIED.

Toronto Creamery Co., Ltd.
9 Church St., Toronto

MR. MILK PRODUCER—

If "Fies is Figs," it don't necessarily follow that cows are just cows. A cow is the product of a "calf," plus feed and attention. A calf which gets its nourishment from sucking its comrade's ear will bring poverty not pride to its owner. The milk-fed calf is the kind from which 10,000 lbs. of milk and many other blessings will flow later in the year. "Ship the cream and feed the Let us look after the cream end of it for you. We pay highest prices for good cream because we have a market for high-grade butter and cream. Write us.

VALLEY CREAMERY OF OTTAWA, LTD., 319 Sparks St., Ottawa, Ont.

CREAM WANTED

We want your cream for Buttermaking purposes. We buy by percentage of butter fat, and give a test of each individual shipment. Supply cans for shipping, and pay express from your nearest shipping station within 200 miles of Toronto or Prescott.

Our Prescott Branch will take care of all Eastern shipments. For further information write either Toronto or Prescott.

THE **T. EATON CO.** LIMITED
TORONTO CANADA

EASTERN ONTARIO DAIRYMEN'S ASSOCIATION

District Meetings for 1917

Speakers: MR. G. G. PUBLLOW, Chief Dairy Inspector for Eastern Ontario; MR. E. S. ARCHIBALD, Dominion Animal Husbandman, Central Experimental Farms, Ottawa; ALSO LOCAL DAIRY INSPECTORS AND DISTRICT REPRESENTATIVES.

County.	Place of Meetings.	Date.
Ontario	Dunfermline	Nov. 29
Peterborough	Westwood	Dec. 1
Northumberland	Campbellford	Nov. 22
North Hastings	Queensborough	Nov. 22
South Hastings	Belleville	Nov. 24
Prince Edward	Pictou	Nov. 27
Lennox and Addington	Geddes	Nov. 27
Frontenac	Simsbury	Nov. 29
Leeds	Elgin	Nov. 30
Lennox	Almonte	Dec. 4
Renfrew	Arnprior	Dec. 5
Russell	Russell	Dec. 6
Carleton	Richmond	Dec. 7
Greenville	Kemptville	Dec. 8
Prescott	Yanketick Hill	Dec. 11
Glennora	Millville	Dec. 11
Stormont	Moultonite	Dec. 11
Dundas	Williamsburg	Dec. 14

T. A. THOMPSON, SECY., ALMONTE, ONT.

EASTERN ONTARIO DAIRYMEN'S ASSOCIATION

AD TALK

MR. BREEDER:

- WHAT IS YOUR HERD WORTH?
- WHAT PROFIT DOES IT BRING YOU EVERY YEAR?
- ARE YOU A BUSINESS MAN?
- DO YOU ADVERTISE?

You are asking me you read this: "What might that fellow be driving at?" And we'll answer you frankly—we're driving at you.

We want you to advertise, because we know in our own minds that you never will realize the greatest possible financial success from your breeding operations until you do. We believe you are a business man. It's pretty sure evidence when you chose registered live stock to do business with. As a business man we want you to realize the value of advertising. You cannot help doing it, you look about you and see the conspicuous success being attained by some of your fellow-breeders because of advertising.

Perhaps you tell yourself you don't know how to advertise. Don't, know how much to spend. The rule is simple: if you would succeed. When you advertise, do it aggressively. That doesn't necessarily mean to spread printers' ink all over the paper. It means to get the truth, make people see it, and keep right on doing the same thing. Choose the best medium you know—choose the paper which is most likely to bring results, the liveliest and most up-to-date, the paper that has given the best results with scores of live stock breeders—"THE FARM AND DAIRY," and stick to that paper. "Put all your eggs in one basket and everlastingly watch that basket." That's the only sure way that we know of to advertise successfully.

Advertise every week in "FARM AND DAIRY." Spend a percentage of your sales, say even 10 per cent. at first. You won't have to spend as much after a time, for the sales will be larger and there'll be other sales made through these that come from advertising. The fall is the best time to start your advertising. Begin December 6th—in our Christmas and Breeders' issue. We'll be glad to send you all information or give any assistance.

G. G. McKILLIGAN,
Live Stock Representative,
FARM AND DAIRY, PETERBORO.

OUR FARM HOMES



FOR love thy life, nor hate; but what thou iwest, live well; how long or short permit to heaven.—Milton

The Heart of the Desert

By Honore Willis

Copyright by Frederick A. Stokes Company

CHAPTER I.

The Valley of the Pecos.

RHODA hobbled through the sand to the nearest rock. On this she sank with a groan, clasped her slender foot with both hands and looked after her helplessly.

She felt very small, very much alone. The infinite wastes of yellow desert danced in heat waves against the bronze-blue sky. The girl saw no sign of living thing save a buzzard that swept lazily across the zenith. She turned dizzily from contemplating the vast emptiness about her to a close scrutiny of her injured foot. She drew off her thin satin house slipper painfully and dropped it unheeded into a bunch of yucca that crowded against the rock. Her silk stocking followed. Then she sat in helpless misery, eying her blue-veined foot.

In spite of her evident invalidism, one could but wonder why she made so little effort to help herself. She sat drooping on the rock, gazing from her foot to the far lavender line of the mesa. A tiny, impotent atom of life, she sat as if the eternal why which the desert hurls at one overwhelmed her, deprived her of hope, almost of sensation. There was something of nobility in the steadiness with which she gazed at the melting distances, something of pathos in her evident resignation to her own helplessness and weakness.

The girl was quite unconscious of the fact that a young man was tramping up the desert behind her. He, however, had spied the white gown long before Rhoda had sunk to the rock and had laid his course directly for her. He was a tall fellow, standing well over six feet and he swung through the heavy sand with an easy stride that covered distance with astonishing rapidity. As he drew near enough to perceive Rhoda's yellow head bent above her injured foot, he quickened his pace, swung round the yucca thicket and pulled off his soft felt hat.

"Good-morning!" he said. "What's the matter?"

Rhoda started, hastily covered her foot, and looked up at the tall khaki-clad figure. She never had seen the young man before, but the desert is not formal.

"A thing like a little crayfish bit my foot," she answered; "and you don't know how it hurts!"

"Ah, but I do!" exclaimed the young man. "A scorpion sting! Let me see it."

Rhoda flushed.

"Oh, never mind that!" she said. "But if you will go to the Newman ranch-house for me and ask them to send the buckboard I'll be very grateful. I—I feel dizzy, you know."

"Ge whits!" exclaimed the young man. "There's no time for me to run about the desert if you have a scorpion sting in your foot!"

"Is a scorpion sting dangerous?" asked Rhoda. Then she added, languidly, "Not that I mind if it is."

The young man gave her a curious glance. Then he pulled a small case from his pocket, knelt in the sand and



National Service Girls Doing Work Far Removed from School Studies.

The girls who went out from our various educational centers the past summer in connection with National Service, did all kinds of work on the farms. The illustration herewith shows one of them scuffling and two using the hoe.

lifted Rhoda's foot in one slender, strong, brown hand. The instep already was badly swollen.

"Hold tight a minute!" said the young man.

And before Rhoda could protest he had punctured the red center of the swelling with a little scalpel, had held the cut open and had filled it with a white powder that bit. Then he pulled a clean handkerchief from his pocket and tore it in two. With one half he bound the ankle above the cut tightly. With the other he bandaged the cut itself.

"Are you a doctor?" asked Rhoda faintly.

"Far from it," replied the young man with a chuckle, tightening the upper bandage until Rhoda's foot was numb. "But I always carry this little outfit with me; rattlers and scorpions are so thick over on the ditch. Somebody's apt to be hurt anytime. I'm Charley Cartwell, Jack Newman's engineer."

"Oh!" said Rhoda understandingly. "I'm so dizzy I can't see you very well. This is very good of you. Perhaps now you'll go on and get the buckboard. Tell them it's for Rhoda,

Rhoda Tuttle. I just went out for a walk and then—"

Her voice trailed into nothingness and she could only steady her swaying body with both hands against the rock.

"Hi!" granted young Cartwell. "I chug go on to the house and leave you here in the boiling sun!"

"Would you mind hurrying?" asked Rhoda.

"Not at all," returned Cartwell. He plucked the stocking and slipper from the yucca and dropped them into his pocket. Then he stopped and lifted Rhoda across his broad chest. This roused her.

"Why, you can't do this!" she cried, struggling to free herself.

Cartwell merely tightened his hold and swung out at a pace that was half run, half walk.

"Close your eyes so the sun won't hurt them," he said peremptorily.

Dizzily and confusedly, Rhoda dropped her head back on the broad shoulder and closed her eyes, with a feeling of security that later on was to appall her. Long after she was to recall the confidence of this moment with unbelief and horror. Nor did she dream how many weary days and hours she was one day to pass with this same brazen sky over her, this same broad shoulder under her head.

Cartwell looked down at the dejected face lying against his breast, at the soft yellow hair massed against his sleeve. Into his black eyes came a look that was passionately tender,

didn't I warn her! Put her on the couch here in the hall, Kut-le. John, tell Li Chung to bring the hot-water bottles. Here, Rhoda dear, drink this!"

For half an hour the three, with Li Chung hovering in the background, worked over the girl. Then as they saw her stupor change to a natural sleep, Katherine gave a sigh that was almost a sob.

"She's all right!" she said. "O Kut-le, if you hadn't come at that moment!"

Cartwell shook his head. "It might have gone hard with her, she's so delicate. Gee, I'm glad I ran out of tobacco this morning and thought a two-mile tramp across the desert for it worth while!"

The three were on the porch now. The young man in flannels, who had said little but had obeyed orders explicitly eyed Cartwell curiously.

"You're Newman's engineer, aren't you?" he asked. "My name's DeWitt. You've put us all under great obligations, this morning."

Cartwell took the extended hand.

"Well, you know," he said carefully, "a scorpion sting may or may not be serious. People die of them. Mrs. Jack here makes no more of them than of a mosquito bite, while Jack goes about like a drunken sailor with one for a day, then forgets it. Miss Tuttle will be all right when she wakes up. I'm off till dinner time, Mrs. Jack. Jack will think I've reverted!"

DeWitt stood for a moment watching the tall, lithe brute move through the peach-trees. He was torn by a strange feeling, half of aversion, half of charm for the dark young stranger. Then:

"Hold on Cartwell," he cried. "I'll drive you back in the buckboard."

Katherine Newman, looking after the two, raised her eyebrows, shook her head, then smiled and went back to Rhoda.

It was mid-afternoon when Rhoda woke. Katherine was sitting near by with her sewing.

"Well!" said Rhoda wonderingly. "I'm all right, after all!"

Katherine jumped up and took Rhoda's thin little hand joyfully.

"And you are!" she

cried. "Thanks to Kut-le!"

"Thanks to whom?" asked Rhoda. "It was a tall young man. He said his name was Charley Cartwell."

"Yup!" answered Katherine. "Charley Cartwell. His other name is Kut-le. He'll be in dinner with Jack, to-night. Isn't he good-looking, though?"

(Continued on page 24.)

THE FIRST INSTALMENT

THE first instalment of "The Heart of the Desert" is in this issue and we feel sure that many of our readers have been looking forward to its appearance. Just a few days ago we received a letter from a new subscriber requesting us to start their subscription with the first instalment of "The Heart of the Desert." This is but an indication that many others have also been watching for it. In a recent issue we allowed our readers to take a "weeny peck" at the plot running through this mysterious tale of the desert, so we will not divulge any more secrets. We will allow each reader to seek for himself. We trust that "The Heart of the Desert" will be read with avidity by every reader of Farm and Dairy.

THE UPWARD LOOK

Our Responsibility

IF we sin we are Thine, knowing Thy power; but we will not sin, knowing we are counted Thine. For to know Thee is perfect righteousness: yea to know Thy power is the root of Immortality.—Wisdom of Solomon, 15: 3, 8.

The first time that a certain little girl realized not only that she had a funny bone, but also the result of knocking it, she rushed to her mother in fear and pain and anger, too; anger because in some way she held her mother responsible. In telling her story she said it was years before she lost the surprised and aggrieved feeling she had.

To us it seems very strange that the child should ever think her mother accountable. Yet in far more surprising ways do God's children often hold Him accountable for their failures and troubles and trials.

God has ordained many fixed laws, and sad and terrible are the consequences if they are not obeyed.

This is true not only in the physical realm of our being, but also in the mental and the spiritual.

If we are careless or ill-treat or defile our bodies, terrible results and diseases follow. If we are careless or neglectful in using and training our mental powers, we blunt the keenness of our intellects.

More important, and saddest of all, are the spiritual results of slighting or neglecting or trifling with God's laws in our spiritual lives. In each of these we are free to enter and continue which way we choose, though God by sure signs shows us which we ought to select and keep. Whichever course we choose, we may know that we have God's infinite power always at our disposal to prevent or change. Thus we ourselves are free agents, and are responsible for our actions and far more accountable, because we have access to this infinite power.—I. H. N.

Should be Put on Rations

"Alcombe," Peterboro Co., Ont.

THE office of Food Controller, as I understand it, includes three main aims: (1) increase of production; (2) decrease in consumption of exportable foodstuffs; (3) suppression of food profiteering.

I would first consider increase in production. The first step in this direction is, of course, the setting on foot of a vigorous production campaign by means of literature, special appeals to farmers, producers, etc.—and this work seems to have been very thoroughly done. But this is only the preliminary matter, so to speak. The real work of speeding up production consists first in making it possible for people to produce more largely. The overworked, harassed farmer might well have many things made easier for him. I will only mention one thing—the matter of freight charges. The railway companies are for the most part rich, and a reduction in freight charges could surely be made without defrauding the companies of reasonable profits. Then, too, it is certainly part of the Food Controller's office to insist that the producer gets a fair profit for his produce. A man cannot be expected to produce and to go on producing who he receives in return barely enough to cover his working expenses. The late milk investigation shows how easily our food supply may be imperilled by poor profits to the producer.

Under the heading of increase in production should be included suppres-

sion of waste. The saying that "money saved is money made" is true of food also. Food saved is as good as food produced, and statistics show an immense improvement in our big cities in this respect. Still, enough has not been done, for whereas one person may conscientiously strain every nerve to save every crumb from waste, another may be making only a halfhearted effort or no effort at all. In justice to all, severe penalties should be inflicted for waste of food, as is done in the Old Country.

The second duty of the Food Controller is to see that there is a decrease in consumption of exportable foodstuffs. Here, again, voluntary effort, though good, is not enough. It stands to reason that one man's strict economy may be another man's wild extravagance. It all depends on the previous standard of living. We should be put on rations as regards our staple foods, the foods that we are asked to export to the Allies in as large quantities as possible. Only thus can we do our full share in helping to feed the Allies and defeat the Hun. The details of the rationing would have to be settled with the help of food experts, for it is easily understood that all could not be rationed alike. A man must be fed according to his work.

The third aim of the Food Controller should be to suppress food profiteering, and this should be one of his most urgent duties. I read somewhere the other day that it was certainly not the Controller's duty to keep down prices, in fact quite otherwise, for if food were allowed to be cheap, people would eat too much of it. I entirely disagree with this statement. It is most certainly his duty to keep prices down within the limits of a reasonable profit to producers and retailers. As to the danger of people consuming too much food, putting the nation on rations easily disposes of that difficulty. The duty of keeping prices as low as possible for consumers involves another duty—that of eliminating middlemen wherever possible. Unnecessary middlemen are the bane of peace times as well as of war times, and now is the government's opportunity to rid the country of a real nuisance.

With regard to profiteering, the Food Controller would likely have his hands full if rationing came into force. There would certainly be a greater demand at once for the non-staple foods, and here would come in the profiteering on the part of producers and manufacturers, unless sternly suppressed. The case for the suppression of profiteering and elimination of middlemen is as strong in the matter of non-staple as it is for staple foods, for it is only right that everyone should have a fair chance of supplementing a reduced diet.

I have briefly outlined what seems to me the chief duties and aims of the Food Controller's office. I may add that the man in office probably wishes he were anywhere else than where he is, for his work may be compared with that of woman's in the famous couplet:

Man's work is from sun to sun,
Hanna's work is never done.

PLUM CONSERVE.

Six quarts plums, 2 pounds seeded raisins, 3 oranges, 1 pound blanched almonds, ½ pound walnut meats, 6 pounds sugar. Cook plums without water till soft (a double boiler may be used). Pass through sieve and add raisins, oranges and almonds (Cut oranges in quarters and slice very thin.) Cook till it jellies and then add nuts, well broken up or put through the meat chopper, just before taking conserve from the stove.

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Progress of the Women's Institutes Throughout 1917

Inspirational and Instructive Addresses and Discussions on Patriotic Work—Rural School Improvement—Medical School Inspection—Communicable Diseases, etc.

"HOLDING the line at home unitedly and individually to assist in bringing the present world-struggle to a successful conclusion," was the key-note of the Sixteenth Annual Convention of the Central Ontario Women's Institute held in Toronto last week. Every session was splendidly attended by women eager to help and be helped. We could not fail to realize while attending the daily sessions, that the delegates present were women who can successfully and intelligently grapple with the vital problems affecting "the home, the school and the state." It was clearly demonstrated that while patriotic work receives first attention in the Institutes at the present time, other lines of endeavor are not being neglected. Three days were devoted

to the report of the Resolutions Committee which was brought in by Dr. Mary McKenzie Smith of Gravenhurst and was unanimously adopted. The list of resolutions was a lengthy one and the gist of them were as follows:

1. That the convention put on record our confidence in Mr. Hanna, our Food Controller, and pledge the support of the institutes in his undertakings.
2. Advocated education regarding the dangers of venereal diseases and the passing of legislation which would make it compulsory for infected persons to undergo treatment until cured. Also a request that the Government place venereal diseases on the list of communicable diseases under the Public Health Act.
3. A decision was expressed by the Convention to petition the Government to prohibit the use of cane sugar for the manufacture of candy and the sale of ice-cream as a luxury.
4. That the Women's Institute interest itself in the matter of supervised playgrounds and under-occupied houses as a common recreation cause, and petition for permission to use the fair grounds for this purpose.
5. That women's labor be extended as far as may be needed and that they receive equal pay for equal work.
6. In view of the fact that prices of all staple and necessary foods are increasing to an alarming extent, request the Government to take action in order that none of our children be unfed, underfed or ill-fed.
7. The good work of the Women's College, Hospital and Dispensary, Toronto, was appreciated and members urged to support this patriotic institution.
8. That the Women's Institute branch be given necessary funds to extend work of Medical School Inspection.

deal of interest, was given by Hon. W. J. Hanna. He outlined briefly, just what his department has been doing. The first proposition which presented itself when Hon. W. J. Hanna assumed the duty of Food Controller was the fixing of prices. He explained that it had been impossible to fix the price of flour, till they had in conjunction with the United States, fixed the price of wheat. "For the comfort of those who think that everything at home is all wrong and everything outside all right," said the speaker, "I may say that the United States feels that if they can sell bread over there at the prices now being paid in Canada, they will be doing great things.

The high prices being paid for milk were due to reckless bargaining by agents of the allied countries with

asked to sign them, opposition was not great.

The greater part of one of the morning sessions was devoted to an address and discussion of a subject which hitherto has not been dealt with by the Institute. This was the subject of "Communicable Diseases." Major J. G. Fitzgerald of the University of Toronto, was the speaker and spoke to us briefly on the great menace to our country of venereal diseases. "It has been practically impossible until within the last five years," said the speaker, "to make it generally known how widespread these diseases are. It has also been impossible to arouse public opinion to the point where any effective measures might be taken to eliminate them. It is the belief of those who have studied this problem that the most important single factor in solving the problem is education."

Major Fitzgerald believes there are four methods of attack in combating this disease. One is to lay more stress on social activities of a high standard; second, the education of both civilians and soldiers in regard to these diseases; third, preventive measures and fourth, medical care. Dr. Helen MacMurchy also made some forceful remarks supporting Major Fitzgerald's contentions. Dr. Margaret Patterson expressed the hope that all delegates would get in touch with the Provincial Department of Health and secure literature on this subject which would prove helpful.

Mr. H. H. Burgess, Public School Inspector for Grey county, addressed the delegates on "What the Institutes can do to help in the public schools. One evil which he spoke of as "the curse of the rural school" was irregular attendance. Boys on the farm were often kept out of school for the most trifling causes, with the result that girls predominate in the higher classes and in the high schools, girls become better equipped for life's work than do the boys and, finally, these girls will not marry these under-educated boys from their own locality, and the home life of the country suffers accordingly.

Unsanitary conditions of rural schools and outbuildings was also dwelt upon. Mr. Burgess is of opinion that the Women's Institute could do much to remedy these evils. He urged the women to attend the annual school meetings. Mrs. Buchanan of Ravenna, and others took part in the discussion and urged the women to take advantage of their opportunity and put a woman on the school board.

In calling upon Mr. Geo. A. Putnam, Superintendent of Women's Institutes, for his report, Mrs. W. R. Browne of Cherry Valley, who was presiding, spoke of him as "the only man in the province who can manage 30,000 women." On account of every session being so fully taken up, Mr. Putnam's report was "botted down" to the smallest possible degree. Notwithstanding this fact, his report contained inspiring material for continued effort in the good work which the branches are doing. Up to last year a total of \$500,000 in money and goods has been raised by the Institutes since they were begun. Mr. Putnam anticipated that by the end of the present year this sum would be increased to \$750,000. He also pointed out that other lines of endeavor have not been neglected.

Sir William Hearst, Premier of Ontario, who presided at one of the sessions, dwelt on several phases of the

(Continued on page 25.)

The Resolutions

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Thanks were expressed for the use of the Technical School and for the services of such speakers as Sir William Hearst, Hon. W. J. Hanna, Dr. G. C. Creelman, Mrs. Muldrew of the Food Controller's Office, and others who so ably assisted in making the convention a success. Resolutions of sympathy were passed for Dr. Hutson, of Parkhill, in the death of his daughter, Miss Maude Hutson, Mrs. Torrington in the loss of her husband and Dr. G. C. Creelman in the loss of his sister.

to the Convention this year instead of the customary two. In this way more time could be devoted to various lines of work. Taking everything as a whole this convention was one of the best ever held. As Miss Ethel Chapman, who addressed us at one of the sessions said: "I think you will all agree with me that never before has so little time been taken up with superfluities and so many subjects discussed in the time allotted."

The address of welcome which was to have been delivered by Mrs. F. H. Torrington, was read by Mrs. Rhys D. Fairbairn, owing to the absence of Mrs. Torrington through bereavement. In this address, high appreciation was shown of the way in which the Institutes have kept up their work along with their war efforts. "You are bringing the women of the country districts together in a great sisterhood," said the speaker, "and are broadening their outlook and enriching their lives and so making your influence felt in the home which is the very heart of the nation." The address also referred to the power in the hands of the women who have been emancipated. They were urged to think nationally, and with aimlessness of purpose to put aside all party and personal prejudice in the one great object of the hour—to win the war.

Women can render in connection with the Victory War Loan was also dwelt upon.

An address which created a great

milk condenseries, and also the ever-increasing demand for this commodity overseas. Sugar scarcity is due to 100,000 tons being taken from the quantity allotted Canada and the United States to supply the shortage in Great Britain. The subsidizing of large quantities of sugar coming from Java to Great Britain had caused this shortage. Not until December or early January when the new crop comes in, will this scarcity be overcome.

Beef, fish and bacon were also discussed. Mr. Hanna appealed to his audience to assist in hog production, by feeding hogs themselves if necessary. In the discussion which followed this address one delegate asked Mr. Hanna "How in the name of common sense are we going to produce more hogs if our boys are going to be drafted from the farms." Mr. Hanna replied that no one would be taken from the farms unless absolutely needed.

Mrs. Geo. Brodie of Newmarket, led a discussion on the success of the pledge cards. In her opening remarks she emphatically stated that she was going to feed hogs this summer. "How much worse is it for a woman to feed pigs than chickens," she said. "Our boys don't need chickens and they don't need pork." With regard to the pledge cards, Mrs. Brodie and others who took part in the discussion were agreed that when the scheme was understood that those

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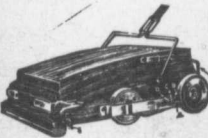
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ACCORDING to our opinion it is sometimes since we have had such attractive styles of winter coats as we have shown this year. Those of us who invested in a new coat this season, however, may not feel at all out-of-date when we bring it out this year, as in many respects the style features of last year and in this coat, are similar. Broad hems and large collars seem to be the most noticeable features in connection with the coats this season, the collars being considerably larger than last year, and we thought them large here. The coats are longer this year than last, they being full-length. And just here let us make a suggestion. The skirts are still being worn short and let none of us make the mistake of having our coats longer than our skirts, as it makes a most unattractive combination. A short skirt, say seven or eight inches from the floor, with a coat of the same length, however, is very smart.

The use of the full-length coat brings a tendency to the one-piece dress and it is quite a fad this season to endeavor to have the two match, or at any rate harmonize.

2211—Dress for Misses' and Small Women.—This is a very popular style of costume. It borders on the loose-fitting effect, but is not very pronounced. The style of belt is one that is proving quite popular on both coats and dresses this year. Note also the neat sleeves trimmed with buttons, also the nicely-shaped collar. Three sizes; 16, 18 and 20 years.

1974—Child's Outdoor Set.—This outfit reminds us that we may look for Jack Frost, before many more weeks have elapsed. Does it not look cozy and good the thing for the snug boy or girl to do when playing out in the snow? In fact such an outfit could be worn on many occasions. Four sizes; 3, 4 and 5 years.

2212—Lady's Costume.—This is certainly a costume which shows good style and should prove a favorite with many of our home dressmakers. The trimming of buttons is quite effective on the coat-like waist. As will be noted in the main view picture, separate and may easily be utilized as a separate item. The costume calls for two patterns, 10 cents for each.

2283—Girl's Dress.—The majority of little girls are rather particular what they wear and mother has oftentimes to be quite as particular in selecting a style of frock for her little daughter as if it were for herself. This style is rather unusual one and may come in useful as a suggestion for some home dressmakers. Four sizes; 8, 10, 12 and 14 years.

2277—Girl's Dress.—Another neat little frock is here shown which has several features to commend it. It is simple of construction and the combination of materials presents a chic appearance. Four sizes; 4, 6, 8 and 10 years.

2046—Lady's House Dress.—This house dress with the square front and collar coming down to meet the bodice to many who favor the square to the "V"-shaped neck finish. This is a very practical style of house dress and easily constructed. The large pockets will not come amiss either. Seven sizes; 24 to 46 inches bust measure.

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1024—Muff of genuine Grey Canadian Wolf to match above—ladies' sizes, large and comfortable.

1025—Muff of genuine Grey Canadian Wolf to match above—ladies' sizes, large and comfortable. Price \$17.50 delivered to you.

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This Loan is authorized under Act of the Parliament of Canada, and both principal and interest are a charge upon the Consolidated Revenue Fund.

The amount of this issue is \$150,000,000, exclusive of the amount (if any) paid for by the surrender of bonds of previous issues. The Minister of Finance, however, reserves the right to allot the whole or any part of the amount subscribed in excess of \$150,000,000.

The Proceeds of this Loan will be used for War purposes only, and will be spent wholly in Canada.

Principal and Interest payable in Gold Denominations; \$50, \$100, \$500 and \$1,000

Subscriptions must be in sums of \$50 or multiples thereof.

Principal payable without charge at the Office of the Minister of Finance and Receiver General at Ottawa, or at the Office of the Assistant Receiver General at Halifax, St. John, Charlottetown, Montreal, Toronto, Winnipeg, Regina, Calgary and Victoria.

Interest payable, without charge, half-yearly, June 1st and December 1st, at any branch in Canada of any Chartered Bank.

Bearer or Registered Bonds

Bonds may be registered as to principal or as to principal and interest.

Scrip certificates, non-negotiable, or payable to bearer, in accordance with the choice of the applicant for registered or bearer bonds, will be issued after allotment in exchange for provisional receipts. When these scrip certificates have been paid in full, and payment endorsed thereon by the bank receiving the money, they may be exchanged for bonds, when prepared, with coupons attached, payable to bearer, or registered as to principal, or for fully registered bonds when prepared, without coupons, in accordance with the application.

Delivery of interim certificates and of definitive bonds will be made through the Chartered Banks.

Bearer bonds with coupons will be issued in denominations of \$50, \$100, \$500, and \$1,000, and may be registered as to principal only. Fully registered bonds, the interest on which is paid direct to the owner by Government cheque, will be issued in denominations of \$1,000, \$5,000 or any authorized multiple of \$5,000.

Subject to the payment of 25 cents for each new bond issued, holders of fully registered bonds without coupons, will have the right to convert into bonds of the denomination of \$1,000 with coupons, and holders of bonds with coupons will have the right to convert into fully registered bonds of authorized denominations without coupons, at any time, on application to the Minister of Finance.

Surrender of Bonds

Holders of Dominion of Canada Debenture Stock, due October 1st, 1910, and of bonds of the three preceding Dominion of Canada War Loan Issues, have the privilege of surrendering their bonds in part payment for subscriptions to bonds of this issue; under the following conditions:—

Debenture Stock, due October 1st, 1910, at Par and Accrued Interest.

War Loan Bonds, due December 1st, 1925, at 97½ and Accrued Interest.

(The above will be accepted in part payment for bonds of any of the three maturities of this issue.)

War Loan Bonds, due October 1st, 1931, at 97½ and Accrued Interest.

War Loan Bonds, due March 1st, 1937, at 99 and Accrued Interest.

(These will be accepted in part payment for bonds of the 1937 maturity ONLY of this issue.)

Bonds of the various maturities of this issue will, in the event of future issues of like maturity, or longer, made by the Government, other than issues made abroad, be accepted at par and accrued interest, as the equivalent of cash for the purpose of subscription to such issues.

Issue Price Par

Free from taxes—including any income tax—imposed in pursuance of legislation enacted by the Parliament of Canada.

Payment to be made as follows:

10% on December 1st, 1917 20% on March 1st, 1918

10% on January 2nd, 1918 20% on April 1st, 1918

20% on February 1st, 1918 20% on May 1st, 1918

A full half year's interest will be paid on 1st June, 1918.

The Bonds therefore give a net interest yield to the investor of about:

5.61% on the 20 year Bonds

5.68% on the 10 year Bonds

5.81% on the 5 year Bonds

All payments are to be made to a Chartered Bank for the credit of the Minister of Finance. Failure to pay any instalment when due will render previous payments liable to forfeiture, and the allotment to cancellation. Subscriptions accompanied by a deposit of 10% of the amount subscribed, must be forwarded through the medium of a Chartered Bank. Any branch in Canada of any Chartered Bank will forward subscriptions and issue provisional receipts.

In case of partial allotments the surplus deposit will be applied toward payment of the amount due on the January instalment.

Subscriptions may be paid in full on January 2nd, 1918, or on any instalment due date thereafter under discount at the rate of 5¼% per annum. Under this provision payments of the balance of subscriptions may be made as follows:

If paid on January 2nd, 1918, at the rate of 89.10795 per \$100.

If paid on February 1st, 1918, at the rate of 79.46959 per \$100.

If paid on March 1st, 1918, at the rate of 69.72274 per \$100.

If paid on April 1st, 1918, at the rate of 39.00959 per \$100.

Forms of application may be obtained from any branch in Canada of any Chartered Bank, or from any Victory Loan Committee, or member thereof.

The books of the Loan will be kept at the Department of Finance, Ottawa.

Application will be made in due course for the listing of this issue on the Montréal and Toronto Stock Exchanges.

Subscription Lists will close on or before December 1st, 1917.

DEPARTMENT OF FINANCE,
OTTAWA, November 12th, 1917.

stitute work, such as the use of the ballot, the stamping out of venereal diseases, and the work with the feeble-minded. He dwelt particularly on the Victory Loan. He pointed out that it was a particularly good investment for the farmer's wife and daughter, both financially and from a patriotic standpoint. Dr. G. Freeman, Commissioner of Agriculture, also presided at one of the sessions. His remarks were on cooperation between the Department of Agriculture and the farmers, and he expressed the hope that there might be established among the farmers of Ontario an organization, non-religious and non-political, which shall have cooperation as its chief work.

Medical inspection of schools was given a prominent place at the sessions. Dr. Mary McKenzie-Smith enumerated a number of her experiences in this splendid work throughout the past year. She paid a high tribute to Mr. Putnam, as she claimed it was only through his instrumentality that this work had been possible of accomplishment. Dr. Mary McKenzie-Smith has her whole heart in this work and told us many pathetic instances which had come to her attention. One in particular was cited from her experiences in the Rainy River district. Women drove her from place to place in order that she might examine the children, and on one occasion another woman and herself drove from early evening until two o'clock in the morning over terrible roads, before they reached their destination. At seven o'clock the next morning, a woman drove in in an ox cart with six children. Five of them were absolute idiots. They were helpless and had to be lifted in and out of the cart, fed like mere infants, in fact could not do anything for themselves. The father of this family would not be anything to help his wife, so he came to Dr. McKenzie-Smith herself, bringing along her one boy who was a fairly bright little fellow, to help her with the other children. This poor woman was anxious that something be done for her children, but Dr. McKenzie-Smith said they were so defective it would be impossible to teach them anything as to teach a chicken. Many cases were cited where untold benefit has been derived by the children through medical inspection at the schools.

Mrs. Mackie, of Little Current, Manitowish Island, told of their success the past year with medical school inspection. At the Women's Convention in Toronto last year Mrs. Mackie heard Dr. McKenzie-Smith tell of school clinics. She thought the idea was a good one, but not very feasible. They decided, however, to give it a trial and had Dr. McKenzie-Smith come and address them on the subject. She also examined a number of the children and then suffering from enlarged tonsils and adenoids. A few of the ambitious women of Little Current decided to go ahead and have a clinic, and it was exceedingly successful. We will endeavor to give more details regarding this in a later issue of Farm and Dairy.

Dr. Sears, who is especially interested in this work, said: "I consider the best evidence of the necessity for such inspection is the results which have been obtained. Since May of this year 102 cases have been inspected and 71% have suffered from defective teeth. In speaking of defective teeth, Dr. Mary McKenzie-Smith also said that if she had million dollars it would go to the care of children's teeth. She has found less than two per cent. of the children whom she has examined to be free of it. In a few years, with teeth which have been properly looked after.

Dr. J. B. Dandeno, Inspector of Elementary Agriculture, also gave us a practical address on "The Needs of the Country Boys and Girls." At the outset he enumerated several points necessary in order to fill the needs of the boys and girls in the country schools.

In the first place it was necessary to have the proper kind of teacher, one with a rural viewpoint. Second, we must have schools suitable for the boys and girls to live in. Third, we must have trustees who know something about school business, medical inspection, etc. Fourth, the women must take a more active part in things pertaining to school life, and this includes the Women's Institute. He strongly advocated that teachers in rural schools have an agricultural education, and that agriculture be taught to a large extent. The point on which Dr. Dandeno laid special emphasis was "the abominable outdoor closet." "Our country boys and girls," he said, "deserve just as much as those who live in the city and why shouldn't they have some of the conveniences enjoyed in the city? Women, it is up to you to visit the school, and if you can improve this one feature, you will be doing untold good."

"The Girls in the Institute" was the subject which Miss E. M. Chapman addressed the delegates. She took up in a very sympathetic and practical way the problem of the girl in the country and what the Institute can do to make her life more worth while. Miss Chapman also spoke of the growing necessity which has arisen out of so many of our boys going to fight for our freedom, for the girls on our farms to have training which will enable them to support themselves. She also pointed out the necessity of a girl having money of her own on the farm.

There are many girls on the farms who have worked hard to help their fathers and mothers to make the farm a success and yet they haven't enough money of their own to buy a war bond. The need of fine women to assure the health of the next generation, especially since so many of our boys will be coming home disabled and probably with mental faculties dulled, was touched upon, and physical culture and athletics suggested in connection with the Institute.

Mrs. Wilson, of Parkhill, told us something of the success which has been attained by their community canning centre. It is located in the armories and women are there daily helping to can fruits, vegetables, etc. At present they are canning chicken for the boys overseas and have already canned 800 quarts. The chickens are sent in from the whole county of Middlesex. Mrs. Wilson strongly advised many other institutes taking up this work, not only from a patriotic standpoint, but for the purpose of doing their own individual canning. "If you wish to do this," she said, "you will never do it at home." Fruit and vegetables can also be secured more cheaply if purchased cooperatively.

A number of the speakers addressed were given, including one by Mrs. Muldrew on the work of the Institutes in Alberta; Mrs. Stobart, who described some of her experiences in Serbia; Captain Charles W. Bishop, who is engaged in Y.M.C.A. work, and others, but our space will not permit more of these. Very encouraging reports from several branches were given and we purpose having more to say of these in later issues.

Sensible.
Jones was observed to be paying no attention to his instructor, who was telling a large class in agriculture how to grow plants from frosts, so the instructor said sharply:

"Jones, tell the class which is the best way to keep March frosts from the plants."

"Plant them in April, sir," was the ready reply.—Bessemer Monthly.

MONEY TALKS.

It has a message for you on page 11 of this issue.

What Have Learned About Dairy Farming

L. Hamar Parr, Hastings Co., Ont.

THE following are a few of the essentials to be observed if dairy farming is to be carried on in a successful manner:

(1) The possession of a clean, good herd. I have found, is one of the most important points in the production of milk. It is not within the reach of every man's pocket to possess a pure bred herd, as most farmers would like, but provided good judgment and discretion are used, a grade herd can in a few years be considerably improved by the use of a pure-bred sire that has a long line of breeding for milk production, and by raising calves only from those cows with good records, both for quantity and quality.

(2) A well cultivated farm to produce those crops so necessary for the dairy stock, as roughage, roots and grain. To a certain extent, of course, these can be replaced by purchased feeds, but everyone acquainted with stock at all will be glad to know that those crops grown on the farm have a value beyond what they contain in the way of protein, fats and carbohydrates.

(3) Good stabling. To stable a herd of cows well, requires in a successful manner, adequate stabling is absolutely necessary. By this I do not mean an expensive structure, with all the latest improvements, as can be seen on some up-to-date dairy farms:

Sons on Farms to be Exempt

JUST as we go to press an important statement has been made by General Newburn, Minister of Militia in the Union Government. Speaking at Dundas, Ont., General Newburn said: "It was impossible in the operation of the Military Service Act to say all farmers' sons would be exempt, and I don't think that is the way to do it. That the farmer must understand that if he has three or four boys, and they are not all raising farm produce, they should not all be exempt. Farmers' sons who have been in the city for three or four years, or more, working in the city, and never intending to go back to the farm, should not be exempt, but if they are farmers' sons who are presently engaged in the production of foodstuffs, they will be exempt from military service, and if I continue to be Minister of Militia, I will give you my word that if any farmers' sons who are honestly engaged in farm work and in the production of foodstuffs, if they are not exempted by the Tribunal, and are called up for military service, I will have them honorably discharged from the Canadian Expeditionary Force, provided they go back to the farm, because it is very important at the present time that we should increase our production of foodstuffs."

but nevertheless it must have a superabundance of those things which nature provides for us, viz.: sunshine and fresh air. No matter how healthy cattle may be when taken to the stable in the fall, if the two aforementioned necessities are not well provided for, the stock will gradually commence to lose vitality, and then it will be a case of "too late" to do anything. The weaker ones will become a prey to that disease which every dairy farmer dreads, viz., tuberculosis.

The natural power of the animal's body to check development and destroy germs which enter the system is aided only by good sanitation. In the blood of the animal there are white corpuscles, which do duty as scavengers of the body. When an injurious organism enters the body, such as the tubercle bacilli, these cells get hold of it and try to digest it; this, of course, can only take place when the vitality of the white cells is high; hence the need of a good fresh supply of oxygen in the system to maintain this vigor. This of course can only be obtained by the first class system of ventilation, such as "The King" or "the Rutherford," or a modification of them.

The whole interior of the stable should be constructed in such a manner and of such material to allow of thorough cleaning and disinfection. The feeding of the cow, I have learned, is one of the most important itself, and to make a successful feeder

one must consider each cow individually and can only be accomplished by daily recording each cow's milk individually for butter fat. In this way the careful and observant feeder can see at a glance which cows are paying the most attention to the production of the boarders and, moreover, is able to feed each cow according to her production and, by keeping an eye on the record and the feed consumed on each cow to what extent she will respond and pay for more liberal feeding.

AD TALK

BREEDERS WHO STAY AT THE TOP.
WHILE looking through some Farm and Dairy issues of several years back I became interested in studying the live stock ads. In the course of my perusal I became aware of a few very interesting notices.

Many of the names which I noticed were well known to me, being among our foremost breeders and largest advertisers to-day. Others were breeders who had been familiar to me for years ago, but who have held dispersion sales since they have discontinued their operations.

This last class of ads. were largely made up of sale notices and other large space ads.

Another noticeable feature were the small notices, printed from the columns of many of our smaller present day breeders.

As I turned the pages and studied the question the following conclusions forced themselves upon my mind. That the live

stock men of Canada form a never ending procession. They rise gradually—a few weeks with phenomenal rapidity—from small beginnings until they reach the top of the ladder. Then in many cases they turn their backs on the business, leaving the field to others.

A crucial question of even greater vital importance is the fact that the rapidly rising breeders are getting their beginnings to the fullest measure of success, and to depend to a large extent upon the courts of the live stock and veterinary breeders started out upon their career as breeders. These courts, however, seemed to lack the assurance of the breeders whose names were attached, and it was very noticeable that these ads. were of that sort are not representative of to-day's breeders, but of the breeders and advertisers. They are still third rate breeders doing practically no advertising and selling their stock for low prices.

Another attractive ad. and an occasion I change in the wording of an ad. are an excellent means of making a good impression on prospective buyers. To obtain the desired results there is nothing we could advise in preference to Farm and Dairy's breeders' contract plan. By this means a breeder can have his ad. appear in whatever form he desires according to his immediate offerings.

The new intelligent advertisers in Farm and Dairy for the past few years are breeders who stand at the top to-day.

With this view would this be well to have your herd represented in Farm and Dairy. Start with our Christmas and Breeders' Number. Farm and Dairy and run with us regularly. We shall be glad to give you assistance possible with your advertising.

C. G. McKILICAN,
Live Stock Representative, Farm and Dairy, Peterboro.

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.

The Price of Cheese

EDITOR, Farm and Dairy.—In looking over your issue of November 8, I see an article referring to a resolution passed at the November 22 meeting of the Brockville Cheese Board, urging the Government and the Imperial Cheese Commission to increase the price of cheese at least four cents a pound. Last spring we farmers were told that it was the British Government that fixed the price of cheese, also that the lack of shipping space had a great deal to do with the price.

Now that the shipping season is about done and the farmers' cows are going dry, we are told that the difficulty of financing the cheese market was responsible for the price set and not the British Government. It also states that sales were made at 2 1/4¢ a pound, since we have been in the dairy business and if this state of affairs exists next spring, it will see about all the milk going to the condensery, and that means cutting out the hog business. I think it about time the farmers began to sit up and take notice, for it is hard to tell what the next holdup will be. For my part I don't propose to take \$37 a ton for milk when I can get \$60 as some of the farmers are now doing in this country.

—D. F. Armstrong, Leeds Co., Ont.

Note.—Our correspondent is right in stating that the Brockville Cheese Board demanded an advance of four cents a pound on the price of cheese. Our latest information is that this advance has been refused as the Canadian Government has nothing to do with the setting of the price of cheese. Early last spring the British authorities fixed the maximum price that British dealers should charge their customers for cheese and that British importers could pay for cheese. Automatically this fixed the price of cheese in Canada. Financing difficulties, on which is based the necessity for the Victory Loan, has not so much to do with the price of cheese as the possibility of paying for cheese in cash.—Editors.

Care of Cream Cans

L. A. Gibson, Dairy Commissioner for Manitoba.

I AM not thinking of holes in the vessels which I find that there is a big need to leak in cream cans. The cream can is one of the worst slammed about, rammed about and jammed about pieces of furniture known to our twentieth century civilization. And the bulk of the bad usage is quite unnecessary.

The war is creating a special reason why cream cans should be treated with greater respect. There is a present shortage of tin plates, from which cream cans are made, and in the United States, as well as in Canada, efforts are being made to impress can handlers with the importance of caring for these vessels. One United States publication just to hand says, "It may soon be impossible to secure more milk, cream or ice cream cans until after the war." If a real famine in milk and cream cans were to occur, the loss to the farmers would be much greater than usual because of

the higher prices which are now obtainable for milk and cream.

Here Are Some "Cans."

You can avoid using milk or cream cans for wrong purposes. Sometimes people put gasoline in them and ruin them almost immediately.

You can refrain from battering the cans needlessly.

You can return other people's cans, if you happen to get them by mistake.

The owner needs the cans. You can see that your cans do not lie about the railway station. Even though you may not be going to use it.

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Essay on Horses

By Wait Mason.

THE horse has many pleasing points; he has a lot of useful joints; and he can lope and walk and run, and eat up fodder by the ton. He is a beast of sterling worth—and yet he's falling off the earth.

We used to think him mighty fleet, but now the auto has him beat. We used to think him very strong; but tractors show where we were wrong.

If you have worked upon a farm, you know where horses lose their charm. I used to work a big hay team, long years ago, and that's no dream. All winter they would loaf and eat, and eat and loaf, and then repeat. And when the winter time was sated, and it was time to plow the land, and I would harness Dick and Ned, my good old father always said: "Be careful, now, don't work too hard. Those horses have a lot of lard; for months they've loafed around the barn, and haven't labored worth a darn, and they're soft as castor oil, so work them gently for a week or two for milk."

That's when we needed speed and haste, the precious time must go to waste. I had to nurse those plows along, for fear their muscles would go wrong; and when a furling they would go, they had to stop a while to blow. And how they used to drizzle sweat! I seem to see them raining yet. And when I took them to the barn, and they'd try to drink their feet heads off, and then the colic they would have, and called for acetone and salve.

And when at last their thews grew strong, so they could labor all day long, the flies got busy on their frames; life was a torture then, by James! Worn out by bites of flies and bugs, they kicked their hind legs o'er the tugs, and reared and pawed and ripped and fussed, and, in the equine language, cursed. Thus, through the long, long summer day, they footed the golden hours away.

What wonder that the thrifty man desires a snarer, wiser plan? We take our well tried tractor now, when we go to the fields to plow, or rake the hay, or reap the grain, and find that tractor safe and sane. It isn't soft from over-feed; it isn't crazy like a steed; it has no colic, bots or worms; I praise it in my warmest terms.

side. Use a little sal soda occasionally in washing the tins out, if necessary.

You can see that a tin does not stand in a damp place or with moisture inside. Especially at the end of the season, when the cans are being put away, dry each carefully and store under cover in a dry atmosphere.

Value of Whey Separator

EDITOR, Farm and Dairy.—In a copy of the Pacific Dairy Review which happened to come under my notice, I read an article by P. S. Lucas of the Oregon Agricultural College, taking up the value of the whey separator in cheese factories. It seems to me that this is a particularly opportune time for owners of cheese factories to consider the installation of an equipment to look after the fats which are normally lost in the whey. In several districts throughout Ontario cheese factories are finding it difficult to compete with other dairy industries at the present fixed price of cheese. If the whey separator allows the factory to make more profit than it does at present, I think it would be well worth looking into.

Mr. Lucas states that in cheese

making there is always a loss of butter fat in the whey, varying from .19 of one per cent, to .34 of one per cent, the latter by the way being the average for New York State, which would probably approximate conditions in Ontario. The object of the whey separator is to recover this fat and place it in saleable form. Mr. Lucas has worked out the cost of installing a plant and the cost of installing the interest on investment, depreciation and labor, he estimates the profit to be obtained in a year. I will here quote from Mr. Lucas' article:

There are several methods for the installation of whey separators, a common one being the elevation of the milk on one being the overhead storage vat by means of a steam-siphon or whey pump, the whey being run from the vat into the separator by gravity. An estimate on the cost of equipment for

per cent, fat, which is a reasonable estimate, that amount of whey would contain 3,187 1/2 pounds of butterfat. At 35 cents per pound, this would amount to \$1,115.62. Shipping rate figured at the express rate of 27 cents for the 80-mile radius would total \$21.60, making in round figures \$1,094 received for the whey fat, it being assumed that 50 per cent. cream is skimmed. \$10 should be deducted from this amount to provide cans for containing this amount of whey, lowering the profit to \$1,084. Subtracting the yearly running expense of \$410 from the income from whey fat, leaves a clear profit to the factory of \$674 yearly. These are conservative figures. In the case of the cooperative factory this amount of money is turned back to the farmer pro rata in proportion to the amount of butterfat delivered at the factory.—J. R. S. Peterboro Co.

The Dairy Meeting at Guelph

THE annual cheese and creamery meeting of The Western Ontario Dairyman's Association will be held at the Dairy School, Ontario Agricultural College, Guelph, on Tuesday, December 4, at 1:30 p.m. Subjects of importance to the dairy industry will be discussed, well-known dairymen leading the discussion on each subject. Some of the subjects to be discussed are as follows: Exhibitions, buying stations, rennet substitutes, pasteurizing cream, importance of collecting rennets, grading butter, and regulation in connection with butter substitutes.

Every person interested in dairying will be made welcome.

Cold Weather Starting Troubles

EVERY motorist who has not the good fortune or the convenience of a heated garage experiences quite often a trouble of this kind and delay in starting his cold motor.

Quite often a trouble is experienced even on cars equipped with starters, and with cars not equipped with starters, even more trouble and a great deal of crankings, necessary before the motor works of its own accord, often resulting in an immeasurable amount of swearing, hurt feelings and sprained wrists.

Every one of the motorists who has encountered the trials that a cold motor brings will welcome a new Priming Plug which has a side valve, and is so made that it gets the gasoline down into the cylinder, right where it is needed to catch the spark and set the motor humming.

In these days of exceedingly high gasoline prices the Priming Plug makes it possible for a driver to stop his motor when he stops his car, instead of keeping it running to keep it warm, while he is waiting to drive to another destination.

Practically every car, (the possible exception being those that are equipped with powerful starting systems) should have a priming plug on each of their cylinders.

The Champion people who make the new plug, place a lifetime guarantee behind their Priming Plugs.

Motorists will appreciate having these facts with reference to a real winter driving necessity.

DO YOUR BIT.

A little bit goes a long way—and provides for a great deal. Page 11 tells the story.

THE SALE OF BROOKSIDE HERD.

A PARTICULARLY good opportunity is offered dairy breeders of Ontario to secure many choice Holsteins at the sale of W. L. Lambkin at Gorrie, on Friday, December 14th. Mr. Lambkin's herd is an exceptional one in that practically every animal has been developed from two choice females secured some 20 years ago, and through the selection of Mr. Lambkin says:

"I have decided to sell 35 head of Registered Holstein-Friesian Heifers by Public Auction, on December 14th at 1 P.M. Some 20 years ago I bought my first pure-bred Holstein bull. I found that his heifers were such an improvement on bloods as quickly as possible. Realizing what it meant to start right, I decided on getting the best, regardless of cost. After looking over a number of the best herds in Canada, I picked on two heifers, bred by Matt Richardson & Son.

Both these heifers were sired by that famous old bull Johanna Rue 4th Ld, who was perhaps the best bull that ever came to Canada. His daughters in R. of C. test have a higher per cent. fat test than the average for the other R. of C. cows. He has 25 tested daughters and 14 progeny on sons. He has secured and kept 87 1-2 per cent. blood of the famous Colinhia Johanna Ld., Field's \$10,000 bull. The one heifer was out of Johanna Emily, a 27.80 lb. butter cow. She is dam of two big record daughters, and sister of the cow that won first place over all breeds at Pan-American six months dairy test. The other heifer is out of a good daughter of Inka Mercedes DeKol, who at a three-year-old stood third in entire stable over all sires and breeds at Pan-American six months dairy test. At 11 years old she made over 20 lbs. butter in seven days.

To cross with these cows I purchased Highland Yeoman Kornydkes, bred by W. A. Carr, Tully, N.Y. His three nearest dams average 26 lbs. butter each in seven days. He being a grandson of the noted DeKol 2nd Butter Boy 3rd and of Jessie Veeman A., who is said to be the most perfect type of Holstein cow in America. He was succeeded by Evergreen's Teak's Staple, whose two nearest dams average over 101 lbs. milk each in one day. His dam being but three-year-old. His sire's dam held the Canadian yearly milk record for four years. He in turn was succeeded by my present herd sire, Riverside Kornydke Wayne 2nd, whose four nearest dams, barring his dam who has only a record as a two-year-old, average over 29 lbs. butter in seven days each. His dam is sister to Lemina Johanna Wayne, 23.23 lbs. butter, and to Lady Asenite, Toitilla, of Riverside, 30.49 lbs. butter. He is for sale to avoid inbreeding.

Catalogues can be secured by looking up the announcement elsewhere in Farm and Dairy.

For MILK, BUTTER, CHEESE, VEAL

Holstein cows stand supreme. If you try just one animal you will very soon want more. Write the HOLSTEIN FRESIAN ASSOCIATION.

W. A. CLEMONS, Sec., St. George Ontario

LLENROCK NOTES.

Among the numerous herds which are rapidly springing into prominence none are being built upon a more solid foundation than the Llenrock herd owned by W. C. Houck & Sons, of Black Creek, Ont. The senior sire of this herd is Rag Apple Pontiac Kornydko DeKol, 17322. The records of his four nearest dams with good sires: 30.60 lbs. butter in seven days. His sire is Sir Kornydke Van Hengerveld and his dam Dutchland Rag Apple Kornydke. He has 27½ per cent. the same blood as Pontiac Asenite Kornydke and King of the Pontiacs, while the maternal grand dam had won records in 1901-1902.

Not only is his breeding of the best but he is an excellent individual and his stock, with his own, are quite a number in the herd at present, show a quality and uniformity of type that is hard to equal.

Besides this fine animal they have Rudolph King Rag Apple, born December 12, 1916, sired by Rag Apple Kornydko 8th, the first bull to sell for \$25,000 and the only bull to have a five-month's son to sell for \$53,200, and a seven-month's son sold for \$20,000, a total for all three of \$78,200. This young bull's dam is Orchard Grove Auburn Segia, who has 31.50 lbs. milk in four days and 67.60 lbs. milk at four years old; 32.31 lbs. butter and 658.89 lbs. milk at three years, and 25.29 lbs. butter and 541.19 lbs. milk at two years old.

Among their females they have the 30-lb. cow, whose record with three-quarter udder, Johanna Rue Lorraine, and Dairy. This cow has a record of 715 lbs. milk in 7 days and 104.7 lbs. in one day. Another cow worthy of note is Toitilla Pontiac Tot, who has a seven-day record of 24 lbs. and a two-year-old record of 15.325.

There are several other cows in this herd with very good records and as a system of testing is being carried on there should be new worth hearing from this herd in years to come.

SOME ST. GEORGE HOLSTEIN BREEDERS.

KITCHEN BROS., who live just within the limits of St. George, have done quite large herds. While they have little testing they have a lot of good stock. Their senior sire is DeKol Meethilde Prince, son of Prince Aggie the 19.52 lbs. butter and 435 lbs. milk in 7 days. The junior sire is Pius Evergreen whose sire is Pius Inka Sylvia, and whose dam is Evergreen March. This bull's seven nearest dams average 109 lbs. in one day.

Another good breeder who is making a good start in the black and whites is Wellington Sager. At present most of his cows are quite young, but they are good individuals and have some creditable records. Mr. Sager's herd sire is a young bull, Ten Keyes No. 22964, who is a brother to Lady Keyes Mercena, 18.98 lbs. butter and 248.7 lbs. milk at two years, and whose sire is full brother to Princess Lahn Keyes, 27.05 lbs. butter and 656 lbs. milk in seven days. His dam is Ardeha DeKol Tensen, butter 25.28, milk 510.8 mature; also champion two-year-old in 8 months, butter 19.01, milk 204.3, R. of P. at two years old, 147.04 lbs. milk and 66 lbs. butter.

35 Head Auction Sale 35 Head

Pure Bred Holsteins

BROOKSIDE FARM, at GORRIE, ONT.

Friday, December 14th, 1917, at 1 P.M.

Here is an opportunity to buy a sire good enough to head almost any herd or to lay a foundation for a first-class herd of pure-bred milkers. Start right and you are always right.

I am offering a son of a 10,000-lb. milk daughter of the famous old sire JOHANNNA RUE 4th's LAD, who carried 87½ per cent. blood of COOLANTHA JOHANNNA LAD, Field's great \$10,000 bull. Also several of her daughters and granddaughters.

My herd combines the blood of the Johannas, Kornydkes, Veemans, Waynes, etc. Write for a Catalogue. Lunch free. Trains met on day of sale at GOWANSTOWN, G. T. R., and FORDWICH, C. P. R.

W. L. LAMBKIN, R. R. No. 2, GORRIE, ONT.

DO YOU WANT REGISTERED HOLSTEINS

Write to-day to
J. Alex. Wallace, Secretary,
Norfolk Holstein Friesian Breeders' Club, Simcoe, Ont.
100 HEAD—Cows, Heifers, Heifer Calves, Bulls, Bull Calves.
Tell us the class you want—we have them all—100% values.

SALE CATALOGUES.

\$2.00 per page for 500 copies. Single typewritten PFDIGREES, 3 copies, \$1.00; 10 or more, 75c. each.
Get your order in early.
THE CANADIAN HOLSTEIN SALES COMPANY,
Simcoe, Ontario. Bell Phone 130.

CHOICE DAIRY FARM, 2 miles from Brockville, half mile from school, approximately 65 acres, all cleared and in good condition, well fenced; modern dairy barn accommodates 30 head, running water, silo, dairy house and equipment. Stone residence has modern conveniences, electric lights, steam heating, water supply, bathroom, hardwood floors, etc. Owing to death of his wife, owner wishes to sell. Apply Room 7, Citizen Building, Ottawa.

Four Choice Registered HOLSTEIN COWS

Due to freshen before January 1st, 1918. All in the pink of condition with good teats, and bred to a son of MAY EXCHO VERIBELLE, 29 lbs. butter 7 days—she the dam of MAY EXCHO SYLVIA, 40 lbs. butter 7 days. Price \$650 f.o.b. Delta Station.

Also the bull—15 months old—KORNDYKE IMEOL PHILEP, sired by a son of MILLERED DEKOL, 101 lbs. milk per day; 2 nearest dams average over 30 lbs. Dam a granddaughter of PONTIAC KORNDYKE, with a 19-lb. 3-year-old record.

Will price for quick sale delivered in Ontario or Quebec for \$160.

W. C. STEVENS
Phlipsville Ontario

BREEDERS

Registered High Class 60 Head

SALES OF HOLSTEINS

asked, Dec. 12, 1917

This is a rare opportunity for dairy men to secure some of the best producing blood of the breed. Most of the females are fresh or springers, well grown and developed, with records, or from record dams. We are offering some males fit for service, from dams up to 33 lbs. butter and over 100 lbs. milk a day.

Auctioneers,
MOORE & DEAN.

Our Motto is: QUALITY & SATISFACTION

M. L. HALEY, Springford, Manager.

For Catalogues write
W. E. THOMSON,
Woodstock, Ont.

NEW WESTMINSTER B. C. DISTRICT.
CHILLIWACK, Nov. 29.—We are having lovely, mild, clear weather for this time of year; only slight white frost at night and bright, frosty days. Farmers are taking up their potatoes and turning ready for the next season's crop—**N. E. C.**

WESTMINSTER DISTRICT, B. C.
MATSQUI, Nov. 14.—Weather is very mild with less than the usual amount of rain. There has been very little if any frost yet. Potatoes and roots are about all harvested. The crop is very poor to heavy. Some late blight in potatoes. Most of the crop is sold and shipped at prices from \$15 per ton, the spring contract price to \$20 at point of shipping, sacks furnished by producer. A recent letter in the local press from the Advisory Board of food controllers, advises farmers not to look for a stronger potato market and that evaporators are to buy. Price of milk for November has been 85 cents per lb. fat.—**I. F. P.**

Ayrshire Cows and Heifers
 Mature Class.

GURTA 2nd of Allandale, 25405; 10,236 lbs. milk, 344 lbs. fat, 3.25 per cent. fat. Arthur S. Dennis, Stewiacke, N. S.
 Clarice of Ravensdale, 22271; 9,726 lbs. milk, 352 lbs. fat, 3.60 per cent. fat. Gilbert McMillan, Huntington, Que.
 Adalia 413, 22377; 9,724 lbs. milk, 386 lbs. fat, 3.97 per cent. fat. MacViney Bros., Belmont, Ont.
 New Blossom, 23591; 9,724 lbs. milk, 367 lbs. fat, 3.77 per cent. fat. Robt. H. Little, Campbellford.
 Burnside Violet 4th, 26576; 9,457 lbs. milk, 349 lbs. fat, 3.69 per cent. fat. Western Fuel Company, Nanaimo, B. C.
Four-Year-Old Class.
 Valley Style, 24654; 9,025 lbs. milk, 369 lbs. fat, 4.00 per cent. fat. John McKee, Norwich.

Three-Year-Old Class.
 Helen Jean, 48303; 9,701 lbs. milk, 445 lbs. fat, 4.58 per cent. fat. Geo. A. Annear, Montague, P. E. I.
Two-Year-Old Class.
 Wakosah Violet, 41965; 8,358 lbs. milk, 383 lbs. fat, 4.52 per cent. fat. Western Fuel Company, Nanaimo, B. C.
 Anna of Darroob, 44859; 8,308 lbs. milk, 385 lbs. fat, 4.57 per cent. fat. Angus Armour, Dorchester Station.
 Wakosah Violet 2nd 43535; 7,909 lbs. milk, 319 lbs. fat, 3.93 per cent. fat. Western Fuel Company, Nanaimo, B. C.
 Lady Gertrude of Spruce Knob, 44832; 9,168 lbs. milk, 335 lbs. fat, 4.87 per cent. fat. A. S. Dennis, Stewiacke, N. S.
 Lady Augusta, 41977; 8,987 lbs. milk, 374 lbs. fat, 3.93 per cent. fat. Rev. E. Walker, Rolle Bay East, P. E. I.

Brookside Jessie, 45372, 6,197 lbs. milk, 283 lbs. fat, 4.69 per cent. fat. John McKee.
 Brookside Lady, 47313; 6,878 lbs. milk, 323 lbs. fat, 4.11 per cent. fat. John McKee.
 Allancroft Mina, 43099; 6,841 lbs. milk, 302 lbs. fat, 4.11 per cent. fat. Sir H. Montagu Allen, Beaconsfield, Que.
 Walsingham, 41967; 6,679 lbs. milk, 274 lbs. fat, 4.10 per cent. fat. Western Fuel Company, Nanaimo, B. C.
 Walsingham, 43556; 6,485 lbs. milk, 289 lbs. fat, 4.45 per cent. fat. Western Fuel Company.
W. F. STEPHEN, Sec.

SPECIALS FROM CANADIAN AYRSHIRE BREEDERS' ASSOCIATION.

*\$50 for an Ayrshire cow, \$50 for a two year old heifer, and \$50 for a two year old bull, to be given as Champion prizes in the Dairy Test at the Ontario Provincial Winter Fair, providing that the highest score at this Fair be made by a registered Ayrshire in their respective classes; and in the event of an Ayrshire in either of the above classes making the highest score over all other breeds in the test, that the prize be increased to \$100. All Ayrshires competing to be recorded in the Canadian Ayrshires Herd Book.

RIVERSIDE NOTES.

FARM AND DAIRY'S live stock representative had the pleasure a few days ago of spending a few hours at Riverside Stock Farm, Caledonia, enjoying the hospitality of the proprietor, Mr. J. W. Richardson, and his family. Mr. Richardson was busy at his fall plowing, but took time to show us over his land.
 His former herd sire, King Johann Pontiac Korydyk, has had excellent results. This bull's dam and ten granddaughters have averaged 34.14 lbs. in 7 days, and he has now 24 daughters in Canadian H. M. Among these are 17.69-lb. one-year-olds, 23-lb. two-year-olds, and 23-lb. three-year-olds. These have the remarkable fat average of about 4 per cent.

In the herd at present are a choice lot of young bull calves, the present sire, Francy Bonanza Hartog, whose two grandsons have 29-pound and 24-pound records and whose sister has a 24.15-pound two-year-old record.
 Among the females the following are more exceptional notes:—Janina Joanna Wayne, 25.32 lbs. in seven days, 116 lbs. in 30 days, 100 lbs. milk in one day. Daisy Dekol of Riverside, 37.56. Angie Tootle of Riverside, 49 lbs. in 7 days, 119.21 in 30 days and Tootilla De-rol of Riverside, 23.48 in 7 days, 111.78 in 30 days. This latter cow is a dam of Tootilla of Riverside. Mr. O'Belloy's Canadian champion H. P. cow.

B. C. AYRSHIRE SALE.

SHANNON BROS., of Cloverdale, B. C., have recently sold their old herd bull, Levensock Comet, and two of their females, Grandview Grace and Grandview Polly, to the University of British Columbia. The females are to be delivered early this month and the bull about the new year.
 Levensock Comet, who will stand at the head of the new University herd, was bred by A. Montgomery and brought to Canada by Robert Hunter and Sons. His grand dam gave 11,000 lbs. of four per cent. milk. His dam, unfortunately, took target as a two-year-old and never got a chance to make a record, but Mr. Montgomery contemplates for one of the most promising animals in his herd. An illustration of Comet appeared in the Special Western Number of Farm and Dairy.

Grandview Grace has a two-year-old record of Performance production of 822 lbs. of milk and 83 lbs. of fat. Grandview Polly is a son of Victor Hugo and out of Grandview Edith, a good daughter of Spruce Knob. This is good foundation stock for the University Ayrshire herd.

SHORTHORN SPECIAL.

A sale of \$25 is offered by the Dominion Shorthorn Breeder Association for the best animal of the GUELPH WINTER FAIR, either pure-bred, grade or cross-bred, sired by a Shorthorn bull recorded in the National Records.

Prepare for the Dairy Standards Act

Now is the time get your Ayrshire bull or the cows and heifers for your foundation Ayrshire herd at the

Fifth Consignment Sale of 50 Head 50 Head Pure Bred Ayrshire Cattle

From the Herds of Southern Counties Ayrshire Breeders' Club to be held at

The Dr. Rudd Sales Stables, Woodstock December 19th, at 1 p.m.

This is the district from which the great producing Ayrshires are coming. Our offering consists of a richly bred lot of cows, fresh in milk, or due to freshen shortly after the sale, together with heifers of all ages with breeding that spells production. A few choice young bulls are also included. The famous MOUNTAIN LASS (Grand Champion at London last September), LADY JANE, (the R.O.P. mature class champion), SCOTCH THISTLE (3-yr-old Ayrshire champion), LENORE 2nd (the 2-yr-old ex-champion for butter-fat), were all purchased by their present owners from members of our club. Come and secure some of the good ones for yourself. The club constitution absolutely prohibits all "by-bidding" or "bidding-in".

TERMS:—Cash or credit up to 6 months on bankable paper, with interest at 6 per cent.

Send to Secretary for Catalogue.
W. W. BALLANTYNE, President, **JOHN MCKEE**, Sec.-Treas., Stratford, Ont. **Norwich, Ont.**
T. MERRITT MOORE, Auctioneer.
 Mention FARM AND DAIRY.



First Consignment Sale

OF THE Niagara Peninsula Holstein Breeders Club Fair Grounds, Welland, Ont.

Tuesday, Dec. 11, 1917, at 1 o'clock 50 PURE BRED HOLSTEINS 50

Included in this sale are well bred young cows with records; some fresh by day of sale, others soon due. A few wonderful bred young bulls. All animals six months old and over will be sold guaranteed to stand the tuberculin test.

- LIST OF CONSIGNORS:**
 C. Hagar, Port Robinson. W. C. Houck, Black Creek.
 C. Robbins, Wellandport. Oliver, Coburn, Elma Centre, N. Y.
 C. P. Claus, St. Catharines. Dr. Miller, St. Catharines.
 J. W. Moots, Camboro. J. A. Dyer, St. Catharines.
 F. M. Moots, Dunnville. Paul Merritt, Beausville.
 F. Hamilton, Stamford. W. Stringer, Dunnville.

Send for Catalogue Immediately

W. L. HOUCK, Sec'y, Black Creek

TANGLEWYLD AYRSHIRES
 The Leading R. O. P. Herd
 Large Cows, Large Teats, Large Records, High Testers. Choice Young Bulls and Bull Calves and a few Cows for sale.
WOODSIDE HARB, R. E. N. S., NORFOLK, ONT.

AYRSHIRE CATTLE
 are heavy milk producers, rich in butter fat and very prolific. Write for booklet.
W. F. STEPHEN, Secretary Canadian Ayrshire Breeders' Association
 Box 508, Huntington, Quebec.

The Old Original Summer Hill Farm
 Where you find the pure bred Oxford. We have for sale 150 head of registered ewes, 75 head of yearling lambs, 50 ram lambs and 50 ewe lambs, some choice show rams and ewes, all first class individuals and guaranteed pure bred.
PETER ARKELL & CO., Box 454 TEESWATER, ONT

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 Bred ready for service. Get particulars of these if you need a sire.
H. T. BROWNLEE, Peach Blow Farm, HEMMINGFORD, GUS.



Registered Holsteins

By Public Auction at

40 HEAD Brantford, Wed., Dec. 19

at 1 o'clock at the Old Commercial Stables

The Brant District Holstein Breeders are holding the high standard for square dealing and quality animals in their particularly fine offering of the "Black and White" for the above date. They are of the finest breeding, and all but two or three will be females and mostly coming fresh. Among the choice material is ELVA BEATRICE DEKOL, a cow with 24.0 lbs. butter, 108 lbs. in 30 days, on a 4% basis. Another is a 25.5 lb. heifer—a granddaughter of OOLANTHA JOHANNA LAD.

Get a catalogue and look up the others in our offerings. The sires are record bookers.

J. W. RICHARDSON, COL. ALMAS,
President, Auctioneer.

N. P. SAGER, Sec.,
St. George, Ont.



DEC. 19

HOLSTEINS

We have the only two sons in Canada, of the 46-lb. King Ormsby Jane King—only mating son of the world's most famous cow. One of them for sale, also a 30-lb. calf, whose dam and two great-grand-dams average 34.4 lbs. butter in 7 days. Also 11 bull calves of lesser note, and females of all ages. R. M. HOLTBV, R. R. No. 4, PORT PERRY, ONT.

THE O'REILLEY STOCK FARM

offers a 13 months' old calf out of an 18-lb. 3-year-old. He is sired by a son of Canada's only 29,000-lb. cow, Rawwood.

Also a few females due to freshen this winter. Write out your wants in the Holstein line. You will find our prices are right.

JOSEPH O'REILLEY R. R. 9, PETERBORO, ONT

VILLA VIEW OFFERS AT BARGAIN PRICES

Two bulls ready for service; one from a 20-lb. cow (record made at 10 years); price \$125. The other is from a 22-lb. cow, which has milked for four years without being dry, and calved each year; price \$160. Both sired by the \$2,000 bull. ARBOGAST BROTHERS, Sebringville, Ontario.

WHO WILL SUPPLY ME?

With a Reg. HOLSTEIN BULL of good size, conformation and breeding, at least 12 months old? As any cows are dark in color he must be at least half white, also in the habit of throwing heifer calves. Write, stating price and description.

H. B. MCGREGOR Box 2517 Reston, Man.

100 lbs. Milk

in one day
on both sides

WE OFFER BULL CALVES, sired by a son of a hundred pound cow, and whose dams are sired by a son of a hundred pound cow—also cows and heifers bred to a hundred pound sire.

JAS. A. CASKEY R. R. 2, MADOC, ONT.

Dutchland Colantha Sir Mona

is the sire of
Lakewick Dutchland Hengerveld, the bull that won senior champion and grand champion at both Toronto and London, 1916 and 1917, and Lakewick Dutchland Artis, the highest producing senior 3-year-old in Canada—34.6 lbs. butter in 7 days with an average test of 4.88 per cent. Also the sire of Lakewick Daisy's Sir Mona, a beautiful going bull almost fit for service, and for sale cheap, whose dam, grand-dam and great-grand-dam averaged over 25 lbs. butter in 7 days.

MAJOR E. F. OSLER, Prop., Bronte, Ont. T. A. DAWSON, Mgr.

"SOMETHING CHOICE"

King Hengerveld, of Oak Park, born March 8, 1917, half black and white, a good individual and well grown. His dam and sire are tuberculin tested. His sire—Lakewick Dutchland Hengerveld 2nd, Grand Champion at the Canadian National Exhibition and London, 1916. His sister is the Canadian Champion as a senior 3-year-old with 34.6 lbs. butter in 7 days. His dam has just completed a record of 467 lbs. milk with 37.4 lbs. butter on grass with an average test of 4.63 per cent. fat.

Dam—Canary Colantha Queen, a yearly cow with great capacity and a record of 516 lbs. milk with 28.15 lbs. butter and an average test of 4.85 per cent. fat. The average test for the two nearest dams of this bull is 4.77 per cent. fat. Write at once as he is bargain. Correspondence solicited.

W. G. BAILEY OAK PARK STOCK FARM R. R. No. 4, PARIS, ONT.

MARKET REVIEW AND FORECAST

TORONTO, Monday, November 26.—The census and statistics office estimates that the area sown to fall wheat for the season of 1918 is 711,112 acres, or four per cent. less than the area sown for 1917. In Ontario the hard and dry condition of the soil made it difficult to sow fall wheat. In Alberta the area has slightly increased. The condition of fall wheat for all of Canada is placed at 80 per cent. of the standard as compared with 74 per cent. last year. The report here places the area in root and fodder crops in 1917 at 5,241,500 acres, as compared with 4,655,000 acres in 1916. All crops, excepting sugar beets, shared in the increase. The total yield of potatoes is placed at 71,392,000 bushels as compared with 63,297,000 bushels last year. The yield per acre, however, is less than it was last year.

In produce markets wheat has been quiet; oats have advanced sharply, as well as mill feeds; the hay market is stronger; potatoes stronger; eggs and poultry steady; creamery butter tending to weakness; live stock strong.

WHEAT.
The market is quiet, as little Ontario wheat is being offered. This situation will continue as long as weather is unfavorable for outside work. In the present cold snap continues much wheat will be available at country points. In case of cheese the fixing of a price on wheat has cut profits in buying down

THE SALE PROGRAMME.

OXFORD COUNTY.

Oxford District Holstein Breeders' Club consignment sale of Holsteins, on December 12th, 1917, at Woodstock, Ont.

The 5th consignment sale of the Southern Counties Ayrshire Breeders' Club will be held at Woodstock, Ont., on Monday, December 19th, 1917. Mr. John McKee, North York, Ont., is secretary of the Club.

WELLAND COUNTY.

On December 11th, 1917, the Niagara Peninsula Holstein Friesian Club will hold its consignment sale of 60 head of pure bred Friesians at Welland, Ont. Mc W. L. Hock, Black Creek, Ont. is the Secretary.

BRANT COUNTY.

The Brant District Holstein Breeders' Club consignment sale of registered Holsteins will be held this year on December 19th, at Brantford, Ont. N. P. Sager, of St. George, is the secretary.

HURON COUNTY.

W. L. Lambdin & Son, of R. R. No. 2, Gorrie, Ont., will dispose of their 35 head of registered Holsteins by public auction on Friday, December 14th.

ELGIN COUNTY.

Elgin County Holstein Breeders' Club will hold their annual consignment sale of pure bred Holsteins at St. Thomas, Ont., on Tuesday, December 19th, 1917. E. C. Gilbert, R. R. No. 7, St. Thomas, Ont., is Secretary.

to such an extent that many old-time dealers consider it hardly worth while to engage in purchasing operations at all. Northern is quoted in *Star* Port No. 1, \$2.33; No. 2, \$2.25; No. 3, \$2.17; No. 4, \$2.10; Ontario wheat, No. 2, \$2.22 in store Montreal.

COARSE GRAINS.

Oats are the strong feature of the coarse grain market, having advanced over 10 cents in a few weeks. Recent military movements have tended to strengthen the corn market, and January deliveries are now quoted in Chicago at around \$1.20. Ontario C.W. No. 2, 75c; No. 3, 71c; extra No. 1, feed, 72c; No. 1, feed, 69c; Ontario No. 2, 71c to 72c; No. 3, 70c to 71c; barley, \$1.22 to \$1.23; peas, \$2.70 to \$2.80; buckwheat, \$1.45 to \$1.50; rye, \$1.75. Montreal shorts, \$40 to \$41; middlings, \$48 to \$50; and mouline, \$55 to \$56.

MILL FEEDS.
Demand has been active and business is restricted only by the supplies available. Shorts, \$44; bran, \$37; middlings, \$41 to \$45. Montreal quotes bran, \$40 to \$41; middlings, \$48 to \$50; and mouline, \$55 to \$56.

United States buyers are now operat-

ing in the Lake Erie counties and the hay market has a decidedly stronger tone. The limiting factor is the lack of cars. On the Toronto market, hays are quoted \$12 to \$13 for No. 1, on track and \$11 to \$12 for No. 2. Montreal quotes No. 2 hay at \$12.50.

POTATOES AND BEANS.

Receipts of potatoes at Toronto are fairly heavy, but there is no inclination to lower prices. They are at \$2.10 a bag. Higher prices than this have been realized on the Hamilton \$2 a bag delivered at the car. On the Montreal market Grey Mountains sell at \$2.20 to \$2.35 a bag, but Ontario potatoes are fairly plentiful at \$1.85 to \$1.90 in car lots on track.

Dealers state that Canadian beans are of inferior quality, many having been frosted. Prices are quoted, \$1.75 to \$1.85, and for hand picked \$6.75 to \$7.

EGGS AND POULTRY.

Receipts of fresh gathering eggs are light, and a large proportion of them are stale held stock. The small proportion of specials are eagerly sought after and bring fancy prices. Storage stocks are heavy, and dealers without export connections are finding difficulty in unloading. Most of the exports at present are of stock previously sold on the market. The price at country points is around 50c a dozen. Montreal quotes fresh eggs

Dressed poultry is now more in evidence, although live birds still constitute the larger bulk of receipts. The average quality is poor, much of it is little better than skin and bone.

Live weight. Dressed. Chickens, spring, 17c to 19c 20c to 22c Hens, under 4 lbs. 15c to 17c 16c to 18c Hens, over 4 lbs. 16c to 17c 20c to 22c Rosters 15c to 16c 18c to 20c Duckling 16c to 18c 20c to 22c Turkeys 20c to 25c 27c to 28c Geese 15c to 16c 18c to 20c

DAIRY PRODUCE.

The butter market here is inclined to be easier, although there has been no change in prices. The butter at which margarine will be available is said to be having a beneficial effect on the market. Offerings are coming freely, too, from Northwestern Canada. Creamery solids are quoted 45c to 47c at country points, prima 45c to 46c, extra 46c to 48c. Montreal quotes choice creamery 45c to 45 1/2c and second 45 1/2c to 46c. The cheese season is about over. Most of the factories are closed and others are making only every other week. A commission is paying for No. 1 cheese, 3 1/2c; No. 2, 2 1/2c, and No. 3, 2 1/4c.

LIVE STOCK.

About eight thousand cattle were on the market last week. The quality of the offerings showed no improvement over those of the past few weeks.

Rough cattle continue to form the greater part of the offerings, although there were some very good butchers' numbers in the runs this week. Good stuff sold well at strong prices, but the medium and common kinds were not easily cashed, by prices being barely steady. There was a keen demand for anything of good quality, and top heifers were paid for choice cows and bulls. Canners and cutters were off from 10 to 15 cents on the previous week's figures. The selling range was \$4.75 to \$5.25.

The highest price for a load of heavy steers was \$11.25 per cwt., and few other loads brought \$11. Good to choice fillers sold from \$7.50 to \$8.50. Medium butchers' brought from \$5.75 to \$6.25 and common stuff around \$4.50. There were heavy fat cows on the lot this week that sold as high as \$9.60 per cwt.

Choice export steers \$11.60 to \$12.25
Butchers' choice handy 10.25 to 11.00
do good 7.50 to 8.75
do medium 6.50 to 7.50
do common 5.50 to 6.00
Butchers' bulls, choice 9.25 to 9.50
do, good 7.50 to 9.25
do, medium 6.25 to 8.00
do, choice cows 7.25 to 8.00
do, medium 6.00 to 7.00
Feeders 8.00 to 9.25
Stockers, good 7.25 to 8.00
do, medium 6.00 to 7.00
Canners 4.75 to 5.10
Milkers, good to choice 6.00 to 8.00
do, cows and medium 5.00 to 5.50
Calves, veal, choice 15.00 to 16.00
do, medium 6.00 to 7.00
do, common 4.00 to 7.00
do, heavy fat cows 4.50 to 7.50
Spring lambs, per cwt. 4.50 to 4.80
Sheep, wags, light 4.50 to 4.80
do, heavy and bucks 4.00 to 5.00
do, bulls 4.00 to 5.00
Hogs, fed and watered 13.00 to 14.00
do, off cars 10.00 to 12.00
do, f.o.b. 17.00 to 17.25
Less 1c to 1 1/2c on light or thin hogs; less \$1 to \$1.50 on some lots on export; less 6c to 8c on hewers.

Ontario Provincial

Held in
GUELPH

November 30th to
December 6, 1917

WINTER FAIR

PROGRAM OF JUDGING

- MONDAY FORENOON—DECEMBER 3rd.**
 9.00 Judging Competition (Dairy Cattle).
 10.15 Judging Shires.
 10.45 Judging Competition (Beef Cattle).
MONDAY AFTERNOON—DECEMBER 3rd.
 1.30 Judging Shorthorns.
 5.00 Judging Ponies.
MONDAY EVENING—DECEMBER 3rd.
 7.30 Judging Heavy Draughts (2-Year-Olds).
 7.45 Musical Ride (64th Battery).
 8.10 Judging Thoroughbreds.
 9.45 Saddle Class.
TUESDAY FORENOON—DECEMBER 4th.
 9.00 Judging Competition (Horses).
 10.30 Judging Bulls (Dairy Breeds).
 11.05 Judging Shorthorn Cows (Dairy Classes).
 11.25 Judging Baby Beef.
 11.35 County Specials.
TUESDAY AFTERNOON—DECEMBER 4th.
 1.30 Judging Aberdeen-Angus.
 3.10 Judging Percherons.
TUESDAY EVENING—DECEMBER 4th.
 7.30 Judging Heavy Draught (3-Year-Olds).
 7.45 Judging Standard-Breds.
 10.05 Judging Standard-Breds (Specials).
WEDNESDAY FORENOON—DECEMBER 5th.
 9.00 Judging Herefords.
 11.05 Judging Clydesdales (Foals).
 11.45 Judging Clydesdales (Yearlings).
WEDNESDAY AFTERNOON—DECEMBER 5th.
 1.30 Judging Clydesdales (Yearlings).
 2.30 Judging Clydesdales (2-Year-Olds).
 4.25 Judging Clydesdales (3-Year-Old Mares).
 5.05 Judging Heavy Draught (Aged).
 5.35 Judging Heavy Draught (Teams).
WEDNESDAY EVENING—DECEMBER 5th.
 7.30 Musical Ride (64th Battery).
 7.55 Judging Hackneys.
 10.30 Judging Hackney Specials.
THURSDAY FORENOON—DECEMBER 6th.
 9.00 Judging Beef Cattle (Grader).
 10.35 Grand Champion (Beef).
 10.50 Judging Angus Specials.
 11.05 Judging Hereford Specials.
 11.15 Prince of Wales Prize (3 Best Beef Animals).
 11.40 Judging Clydesdales (3-Year-Old Stallions).
THURSDAY AFTERNOON—DECEMBER 6th.
 1.30 Judging Clydesdales (Aged Stallions).
 3.10 Judging Clydesdales (Aged Mares).
 4.10 Judging Clydesdales (Mare and Progeny).
 4.40 Judging Clydesdales (got of Sire).
 5.15 Champion Clydesdales.
 5.55 Grand Champion Clydesdales.
THURSDAY EVENING—DECEMBER 6th.
 7.45 Presentation of Trophies in Arena.
 8.00 Grand Parade of Prize Winners.
 9.30 Musical Ride (64th Battery).

W. W. BALLANTYNE, President,
STRATFORD, ONT.

PROGRAM OF EVENTS (Not in the Arena)

- THURSDAY, NOV. 29TH—**
 3.00 P.M. Commencement of Dairy Test.
 12.00 (Midnight) Poultry Exhibits in Place.
FRIDAY, NOV. 30TH—
 9.00 A.M. Egg Laying Contest Begins.
 9.00 A.M. Judging Poultry.
SATURDAY, DEC. 1ST—
 9.00 A.M. Judging Poultry.
 10.00 A.M. Judging Seeds.
 12.00 (Midnight) Live Stock Exhibits in Place.
SUNDAY, DEC. 2ND—
 4.00 P.M. Conclusion of Dairy Test.
MONDAY, DEC. 3RD—
 11.00 A.M. Judging Sheep.
 2.00 P.M. Motion Pictures.
 4.00 P.M. Judging Swine (Bacon and Butcher).
 4.00 P.M. Dressed Poultry and Eggs in Place.
 4.30 P.M. Judging Competition (Swine).
 8.30 P.M. Motion Pictures.
TUESDAY, DEC. 4TH—
 8.00 A.M. Kill, Dress and Butcher Hogs.
 9.00 A.M. Judging Pure Breds.
 10.30 A.M. Judging Poultry.
 11.00 A.M. Motion Pictures (Sheep).
 2.00 P.M. Judging Competition (Poultry).
 4.00 P.M. Motion Pictures.
 8.30 P.M. Motion Pictures.
WEDNESDAY, DEC. 5TH—
 9.00 A.M. Judging Swine Carcasses.
 10.00 A.M. Sale of Seeds.
 11.00 A.M. Motion Pictures.
 1.30 P.M. Sale of Seeds (continued).
 3.00 P.M. Carcass Room Open to Public.
 4.00 P.M. Motion Pictures.
 8.00 P.M. Conclusion of Egg Laying Contest.
THURSDAY, DEC. 6TH—
 11.00 A.M. Motion Pictures.
 1.30 P.M. Sale of Dressed Poultry.
 2.30 P.M. Sale of Carcasses.
 4.00 P.M. Motion Pictures.
 8.30 P.M. Motion Pictures

ARRANGEMENTS FOR SHIPMENTS OF LIVE STOCK FORWARD- ED TO EXHIBITIONS.

GOING JOURNEY. Livestock forwarded to fairs and exhibitions will be carried to the station of the delivering line at point of exhibition at full tariff rates.

RETURN JOURNEY. On return journey, when such stock is accompanied by the original paid expense bill, or freight receipt, showing that the property had travelled over same railway to point of exhibition, and a certificate, in duplicate, from the secretary of the Exhibition, or his deputy, to the effect that the stock has not changed ownership, it will be returned free to the original shipping station.

LIABILITY FOR EXHIBITS RETURNED. When shippers elect to accept free transportation for return carriage to original shipping point, as provided for under the conditions of section (b), such shipments will be transported entirely at the risk of the owner as to loss or damage, and bills of lading must be so endorsed.

ATTENDANTS IN CHARGE OF LIVE STOCK. When ordinary stock cars, or short horse cars, are used, one attendant in charge of each carload will be passed free on same train with stock to and from exhibitions. When long palace horse cars are used, two attendants in charge of stock will be passed free on same train to and from exhibitions. One attendant in charge of each L. C. L. shipment of live stock will be charged one-half the regular first-class fare, both ways, when travelling on same train with stock.

RAILWAY TICKETS, GENERAL PUBLIC:

- (a) **TERRITORY**—From stations in Ontario, Kingston, Harrow-smith, Sharbot Lake, Renfrew and west, but not west of Antrim.
 (b) **FARE**—One-way ordinary first-class fare and one-third for the round trip.
 (c) **GOING DATES**—November 30 to December 6, inclusive.
 (d) **RETURN LIMIT**—December 5, 1917.

RAILWAY TICKETS, JUDGES AND EXHIBITORS.—From all stations in Eastern Canadian Passenger Association territory on surrender of standard form of Judges' and Exhibitors' certificate signed by Mr. R. W. Wade, Secretary, round trip tickets to be sold to Guelph at one-way ordinary first-class fare and one-third for the round trip, good going November 27 to December 6, inclusive; return limit December 10, 1917.

R. W. WADE, Secretary,
PARLIAMENT BLDG., TORONTO

Bacon Is A Military Necessity

Bacon is the most compact form in which meat and fats can be supplied to the armies.

It takes up the minimum of space in freight cars, ships, transport wagons and in supply depots at the front. It is easily handled, and it keeps.

Bacon, on account of its large percentage of fat, is the great outdoor food. Men who work and travel hard, sleep in the open air, and are exposed to the wet and cold, require a large amount of fatty foods, because such food best

supply the nutriment, the energy and the heat-producing quantities necessary. Bacon fortifies the body against exposure, repairs the wear and tear of hard work and is easily digested. It is also easily and quickly cooked.

The Allied Armies require enormous supplies of bacon, the British Army ration allowing $\frac{1}{4}$ pound per man per day. With the United States raising great armies, the demand for bacon will be still further increased. Where is the supply to come from?

32,425,000 Hogs Short

There is a shortage of 32,425,000 hogs in Europe. The hog population in the United States is 10% below normal. The number of hogs slaughtered in Canada in September, 1917, shows a decrease of nearly 27% compared with September, 1916. The statistics from Denmark state that the total production of exports of pork products is

anticipated in order to insure an adequate supply of meats and fats for the Danish population.

The situation is serious. The armies must be assured adequate supplies of bacon. A great increase in the production of hogs in the United States and Canada is a military necessity.

Save the Young Sows

Young sows which are slaughtered now only produce about 150 pounds of meat per sow, whereas each of these sows, through her progeny, could produce at a moderate estimate 1,500 lbs. of meat within a twelve-month period.

The United States has committed itself to greatly increase its hog production. Canada will do her share. Every pound of pork that can be raised is urgently needed.

The Dominion Government and the Provincial Governments are co-operating to encourage greatly increased production in hogs and to safeguard the growers.

Already steps have been taken to control the spread in price between that received by the producer and that paid by the consumer. The grower is assured his fair share of the price paid by the consumer.

The Flour Mills are under a form of license and allowed a profit of 25 cents per barrel on the

flour only—the bran and shorts will be sold at cost, and are to be free from adulteration.

The huge United States corn crop is under effective American control to prevent speculation and to insure none of it going to Germany. There will be an abundance of feed from this source as the 1917 crop is 600,000,000 bushels greater than last year's.

The buying of the meat for the Allies will all be done by the one Commission representing the Allies which will be an influence in stabilizing the market and preventing wide fluctuations in price.

The great shortage of hogs in Europe and the vast demands of the Allied armies for pork products indicate a bright future for the swine industry in Canada.

There is individual responsibility, and every man who can raise hogs should seriously consider the possibility of raising one or two extra litters in 1918.

Dominion of Canada Department of Agriculture

LIVE STOCK BRANCH
OTTAWA