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Toronto, Ont., October 25, 1917

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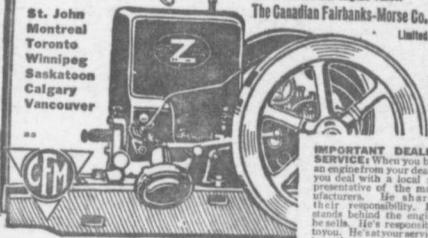
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Current Comments on the Farming Business

The World's Food Situation

THE world's food situation is a serious one. It is hard for us to realize, with good crops in Canada, that despite the best efforts that can be exerted by the people of America to conserve needed food supplies, many thousands of people must go hungry, and that only what we are willing and able to save may keep them from actual starvation. A recent bulletin from the Dominion Food Controller's office sums up the situation as follows:

"There is a great shortage of food in Europe and without importations from America Europe would soon be at the point of starvation. Speaking in the British House of Lords in July of this year, Lord Rhondou, the British Food Controller, said: 'Four-fifths of our wheat supplies come from overseas; without their supplies we should starve.' The Nations months will require no less than 577,000,000 bushels of wheat, even with the exercise of most rigorous economy in its consumption. Canada and the United States have a wheat deficit of 400,000,000 bushels in the amount required from North America for the Allies and for European neutrals."

A deficit of 400,000,000 bushels! Perhaps it can be made up in part from Australia, but it is doubtful if shipping can be spared to carry grain from that distant continent. Argentina, which usually has a large surplus for export, has just experienced an almost complete crop failure. India has a surplus of wheat but it, too, is far away. Apparently the only solution is to be found in America. We must conserve food to the utmost in both Canada and the United States. We must conserve food to the spare and prepare for a greater crop next year.

Farm Labor and Military Service

FROM the foregoing it is evident that the need of the Entente Allies is for food quite as much as for munitions and men. The food situation, if our Food Controllers are well informed, is more serious than the military situation. Any diminution of the producing power of agriculture is equivalent to a weakening of our lines of defence. Military tribunals should bear this in mind in considering appeals for ex-ere over manned and young men could be spared. When such is the any other class. It is well to bear in mind, however, that the cities that agriculture has few men to spare. Heavy drafts on our rural population can view as little less than a method of insuring world famine. city opinion to the contrary notwithstanding, the inexperienced man of the town cannot replace the farm trained boy in the army of production.

In this connection it is interesting to note that at a meeting of the Executive Council of the Dairy Producers' Association of Quebec, recently, it was decided to ask for exemption for all makers of butter and cheese. Dairy inspectors will be instructed to appear before the exemption boards and point out that butter and cheese makers are of more use at home than at the front. This action of the Dairy Producers' Association will be looked upon in some quarters as an appeal for favoritism. As a matter of fact, attention to their requests will be patriotism of a very practical kind. Butter and cheesemakers are almost as scarce as farm laborers, and both are needed where they are. Only on one condition would it be wise to draft men extensively from the farms—the positive assurance that the war will be over before labor is needed to put another crop in the ground.

The Price of Potatoes

THE Ottawa Citizen is of the opinion that the Food Controller has made a sorry mistake of the potato situation. In a recent issue The Citizen says: "No doubt much credit would have been made if prices of potatoes, over which developments since show it has had absolutely no control, had dropped to \$1.25 a bag, as predicted and promissive prices or lower than as they think fit, by the simple formula of refusing to harvest any more crops than barely sufficient to supply the market. If the case of potatoes is typical of the manipulation which consumers are to expect, it surely is time the food controller was given powers, if he already does not possess them, to put a stop to the business of rigging prices."

Why this expression of indignation? Simply because producers have not been willing to adopt a price that would not net them about one-half the cost of production, and secondly, because the Food Controller, while hasty in naming a price of \$1.25, was a big enough man to later recognize his mistake and admit it. During the past three or four weeks the Food and Vegetable Committee of the Food Controller's office have investigated cost of production in all the leading potato growing districts of Canada. These costs have averaged well over \$1.25 a bushel, and to the cost of production must be added legitimate profits for the grower and handling charges for middlemen. Present indications are that if the growers market their potatoes wisely and not gut the market with heavy shipments after harvest, fair prices will be received for the potato crop of this year. Already, too, there has been considerable enquiry from the United States which will tend to firm the market. If we do get fair prices for our potatoes, however, it will be in spite of a large section of the city press which would like to see a maximum fixed at \$1.25 a bag.



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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., OCTOBER 25, 1917

No. 41

Shall the Beginner Start With Pure Breds?

Capital is Required to Make a Success With Them—By "Oxford"

THE young man making a start in stock raising is often faced with the problem, "Shall I begin with pure bred, or with grades?" As a general rule, even though he may be handicapped financially, there is an appeal to him in raising pure bred stock. He sees in them a chance for double profits, both the profit which comes from the meat or milk value of the animal, and the profit which comes from the extra selling price of pure bred stock for breeding purposes. In many cases he reasons that the same equipment and the same labor will do for one as the other, and that his only outlay in order to reap these extra profits is that which he must first expend in getting the foundation stock.

This is the first fallacy in his reasoning. Pure bred stock require more attention than grade stock. If the pure bred are valuable (and low grade pure bred are a mighty poor investment) their care becomes exceedingly important. The high producers have been bred under artificial conditions and seem to be more susceptible to diseases than the ordinary scrub which roams the fields in summer and the farmyard in winter. If anything happens a valuable animal, the loss with a given investment is much greater in proportion to the total than would be the case should a scrub animal or even a good grade animal die. This loss is especially discouraging to a young man who is trying to get into the business and whose capital has been so limited that he has only been able to purchase a few high grade animals. Unless he can give his animals special attention, the financial risks are great.

Not only must the farmer who keeps pure bred stock be able to make them produce, but he must also have the qualifications of a breeder. Of course his chances for large profits as well as large losses are increased, but with this small capital he cannot afford to be a gambler. If animals are valuable a good number should be kept to keep down overhead costs. For instance, the feed, labor, barn room, interest and depreciation on a \$500 bull will usually amount to about \$200 a year. If he is used to head a herd of 10 cows, there will be \$20 to charge up against each cow. If 40 cows, however, are included in the herd, his services will cost but \$5 each. Thus it is only with large numbers of pure bred that one can afford the high quality male breeders or the advertising necessary to make business profitable. But with a given capital more grades could be kept and so pay for his services.

Pure Bred Cattle Demand Care.

The manager of a pure bred herd must not only be an expert in breeding for breed conformation, but he must be able to get utility into his herd. Pure bred require more expensive feeds and

more expensive management if they are to return maximum results. Not only is it more necessary that the young stock be kept in perfect condition for growth if they are to be sold for good prices as breeders, but in their production of milk, for instance, a larger flow must be given—before they begin to pay profits than would be the case with grades, for while the depreciation and interest on a \$100 cow is about \$16, that on a \$300 cow is reckoned at \$57. It has been found from experiments with a large number of cows that about 10 per cent. has to be charged for depreciation on good grades and a slightly higher percentage as the value of the animal increases.

Another popular fallacy among beginners in live stock breeding and one which is fostered by many writers, is that in buying foundation stock, if the capital is limited, it is better to buy cheap pure bred than good grades. The reason given is that grading up work may be done with the pure

breeds as easily as with the grades. When finally high producers have been attained, these animals will have their pedigrees, while grades, no matter how good producers they were, would never be eligible for registration.

The worst feature of this is that in expending a given amount of money for an animal, you will usually get a much poorer type of pure bred than may be obtained in a grade. For instance, good grade milkers may be obtained for \$125 or \$150, while the pure bred that would be obtained for the same price would usually be little more than a scrub and a poor type to act as the foundation for a herd. It has been the experience of many breeders who have tried out this practice that if a poor class of pure bred are used as foundation stock, it takes many, many years of careful breeding to get any results worth while in the breeding world. The poor blood is continually cropping out in succeeding generations. The advice of one breeder who followed this practice is this: "Buy good grades to carry on with, and then purchase one good pure bred and build up your herd from her progeny."

Of course if one has the capital necessary to go into pure bred breeding, all well and good. There are two sources of incomes to be derived from breeding pure bred dairy cattle, the income from milk and that from the offspring which may be sold for breeding purposes. It must be remembered that the real value of pure bred is that they are on the average better producers than grades. The value of the pedigree is to show that they are from a strain of animal whose production is good. If they do not produce more than grades, their value to anyone is not high. But while a good pure bred herd will cost more originally and will be more expensive to maintain, they are usually (in the hands of a successful breeder) much more profitable than are grades. While I do not wish to discourage pure bred breeding, even among beginners, I would like to leave with them this message: If short of capital, don't go after pure bred "at all costs."



The Most Wonderful Plants

ALFAFA, clover, beans, peas and the rest of this family are the most wonderful plants. They produce the most nutritious food, and at the same time add more nitrogen, the most important plant food, to the soil than they remove. These plants come nearer to giving something for nothing than any other plants. There is nothing mysterious about these plants. They have formed a partnership with some bacteria that live on their roots. These bacteria in return for being given a home (nodules) on the plant roots and for food from the plant take nitrogen from the air and leave it in the soil for the plant's use. There is eleven million dollars' worth of this nitrogen over each acre, so the bacteria have an almost endless supply to draw on. The way to tap this great wealth is to grow these plants that have these wonderful bacteria on their roots. These plants do not do well without the bacteria. When alfalfa, clover, peas, beans or any of the other of these legume plants are sown on a piece of land for the first time it is usually necessary to sow the bacteria as well as the plant seed. In these days, when plant food is so important, the greatest possible use should be made of the legumes, the greatest food producers for man and beast.

Cover the Out-Door Silo

Now is the Time for Building

THE autumn days are well suited to getting the farm buildings in shape for winter. And the man who has built a silo should now give some attention to its covering, if he has not already roofed it. If a silo be built inside a barn, there is usually no need for roofing it. In south-western Ontario a number of silo owners claim to get satisfactory results from outdoor

(Continued on page 8.)

Practical Poultry Methods at Macdonald College

Some Observations Made During a Short Visit with Professor M. A. Jull

THE Poultry Department at Macdonald Agricultural College, Ste. Anne de Bell-vue, Que., is run on a practical, businesslike basis. I can remember when the most of us did not expect a college professor, even an agricultural college professor, to be a practical man. He was supposed to live in the realm of theory and our attitude toward him was almost patronizing when he, the professor, attempted to give us practical instruction and information. This attitude toward our leaders in agricultural learning has changed, however. The change has been brought about by the leaders themselves, because for the most part, while there are still exceptions, our agricultural colleges are manned by men of the practical type who have a lively appreciation of the problems of the producer. Of such calibre is M. A. Jull, Professor of Poultry Husbandry at Macdonald College. The poultry plant of which he is manager is designed on sane lines, is run in a manner that ensures results, and a visit with Prof. Jull is sure to be fruitful to all who, like myself, have a dollar and cents interest in the poultry business. It is now some time since I dropped in at the Macdonald College poultry department, but perhaps this belated account of my observations may be of interest.

We first visited the incubation and brooding quarters which are situated in an ell connected with the main buildings. I found that Prof. Jull is still using several incubators of 144 and 240-egg capacities, instead of the mammoth incubators which have been advertised so extensively in the last three or four years. Altogether the incubators have a capacity of 3,500 eggs. The brooder house adjacent to the incubating room. It is built on the conventional lines with several small inside runs connected with small outside runs and each equipped with hovers heated by a steam coil. I noticed that baled shavings were used exclusively for litter in these brooding chambers. "We have been using shavings now for four years," said Prof. Jull, "and the college repair shop keeps us supplied. The shavings are cheap, they are absolutely dustless and more sanitary than other kinds of litter."

From Brooders to Colony Houses.

Absence of dust and sanitation are very important points in the litter for baby chicks and it is baby chicks only that are housed in this rather expensively constructed brooder house. Once the chicks have gotten successfully through the first and most difficult three weeks of their lives, they are transferred to colony houses on

range, heated with coal burning brooders. All of these brooders, with the single exception of the Candee, have been giving the best of satisfaction and the Candee itself would be all right were it not for the difficulty of keeping the fire going continually. This difficulty was overcome during the latter part of the brooding season. An oil burning colony brooder stove is also being used with good results, but Prof. Jull pronounced it as



The Laying House Considered Ideal at Macdonald College.

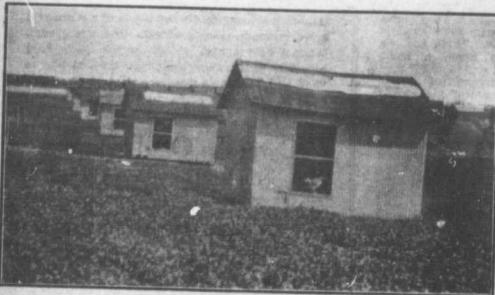
The illustration gives a clear idea of the type of house that Prof. Jull is advocating as a model among the farmer-poultrymen of Quebec. It is 20 feet square, six feet in front, eight to the ridge, and five at the rear. It is single-boarded and battened on three sides and double-boarded to the north.

too expensive to operate as compared with the coal burning type.

The chicken ranges are divided into three fields, with chicken tight fencing around them. These chicken runs are seeded to alfalfa, which has now been down four years, and planted to orchard. In the first of these runs are the colony houses, equipped with brooder stoves. Here the chickens are kept until they are well feathered and in no further need of artificial heat. When nicely feathered out the cockerels are separated from the pullets and they are moved to separate runs, where the pullets are kept in colony houses until transferred to laying quarters in the fall.

Marketing the Broilers.

Cockerels of some of the heavier breeds are carried on to the roasting stage. The Leghorns, however, are sold as broilers when 10 to 12 weeks old and weighing from three-quarters of a pound to two and one-quarter pounds each. "We usually give the broilers two weeks special crate feeding," remarked Prof. Jull. "The wet mash consists of equal parts



Where the Growing Chicks are Housed at Macdonald College.

Chickens develop best on free range. At Macdonald College small portable houses of the type illustrated are drawn out onto the ranges in summer. Each house, eight by twelve feet, accommodates 200 chicks.

—Photos by an Editor of Farm and Dairy.

testing is all right," was the answer, "and we have even taken them off of range to dress for market. A limited amount of range has the advantage of keeping the birds more contented under special feeding."

"And how about the feeding of the young chicks?"

"The first feed consists of bread and hard-boiled eggs. In a few days cracked grain is given and the bread and eggs substituted by a mash, consisting of 35 lbs. bran, 20 lbs. corn meal, 20 lbs. oatmeal or ground oats, 10 lbs. middlings, 10 lbs. beef scrap and five pounds scrap bones. This mash is fed dry in the hopper, and it is fed twice a day, in the middle of the forenoon and in the middle of the afternoon. The grain is fed night and morning. As you have noticed, the chickens are by this time on free range and collect their own green feed."

Handling Layers.

The layers are handled in such a manner as to ensure a good winter and summer egg yield, and at the same time maintain the vigor of the flock. Winter eggs are, of course, the main consideration.

Last winter egg production ran well over 50 per cent on the average, and in June, at the time of our visit, was up to 65 per cent. Every farmer who has attempted to make poultry an important sideline, will immediately class this egg yield as good. One bunch of Leghorns did especially well. There were 54 in the flock and in the six months, from Nov. 1st, 1916, to May 1st, 1917, they made a profit over cost of feed of \$2 a bird.

The open front house is preferred here as at practically every commercial egg plant in Canada. Warmth is not regarded as an essential to profitable egg production. Absolute dryness and good ventilation are more important. Part of the hens are housed in colony houses with dimensions of 8 x 12 feet. These colony houses are scattered around on free range in summer. They have gable roofs and a straw loft, added in winter, absorbs all moisture and keeps the houses dry. One of these houses is sufficient for 25 laying hens and in summer they are used for brooding 200 chickens. Most of the layers are kept in larger stationary houses during the winter months, in flocks of 40 to 100.

Macdonald College has a stationary laying house of their own designing, which they are attempting to popularize through the Province of Quebec. In some respects it resembles the O. A. C. model poultry house, but in others it is radically different. The illustration herewith shows the general lines of its construction. It is 20 feet square, six feet in front, eight feet to the ridge and five feet behind. It faces south and is double boarded to the north. The other walls are single boarded and battened. There are two windows in front and one at the end. The open space in front between the two windows, about three by six feet, may be covered with a screen but lately the screen has not been used as much as it was at first, and the inside is therefore dryer because of the greater ventilation. The

(Continued on page 9.)

"How about fattening them in a loose pen?" I asked.

"Loose per fat-

Cost of Milking by Machinery

Some United States Conclusions

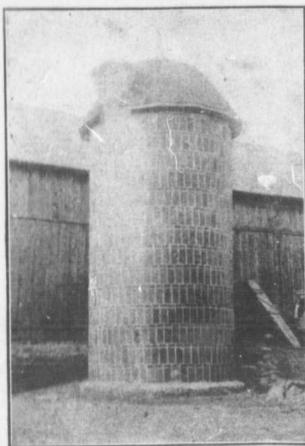
FARM management experts of the United States Department of Agriculture have been studying the question of machine milking, and recently published their findings. Their conclusion is that milking by machinery, compared with hand milking, is less expensive in herds of more than 15 cows, and more so in smaller herds. According to the figures submitted, it costs \$11.77 per cow per year to milk by machinery where 15 or less cows are milked, which cost gradually declines until when 50 or more cows are milked the cost per cow per year is \$7.34.

One of the important conditions affecting the economy of milking large herds with machines was found to be the elimination of unnecessary labor. Herds that normally required three men for milking by hand, only two of whom were needed to feed and care for the animals, required only two men to milk by machine. The available labor and the labor requirements are therefore better balanced in the latter case, since the same two men may milk and otherwise care for the herd, the labor of the third milker required under the hand system being dispensed with.

The studies were made in typical intensive dairy regions, and among mixed dairying and farming enterprises.

It was found that in herds of 15 cows or less the average time required to milk a cow by hand was a fraction over 7 minutes, and by machine a fraction under 5 minutes. In herds of over 50 cows, however, the time required to milk by hand was a fraction under 7 minutes, and by machine, 4.15 minutes. In milking by hand, the average cost per cow in herds of 15 cows or less was \$10.91 a year, as against \$10.45 in herds of 50 or more. When machines were used the cost was \$11.77 a year in the smaller herds and \$7.34 in herds of 50 or more.

The value of the labor replaced by the milking machines was found to vary from \$2.63 per cow in herds of 15 cows or less to \$8.33 per cow in herds



What Are Its Contents Worth?

This hollow tile silo is 12x32 and holds over 70 tons of ensilage. Illustration from a photograph on the farm of F. Greer, Wellington Co., Ont.

of more than 50 cows. The addition to the time available for field work due to use of the machines was found to vary from 1.5 to 5.1 hours, according to the size of the herds.

Attention is called to the fact that milking machines must be operated by competent operators and that stripping by hand after the machine is essential if satisfactory results are to be obtained. The majority of the farmers visited during the studies believe that the milking machine has no effect one way or the other on the general welfare of the herd.

Studies of the comparative efficiency of various combinations of milking units and operators indi-

cate that the greatest speed is made when one man operates and strips after two units, each of which milks two cows.

Root Seed Growing in Canada

Results Secured at the Central Experimental Farm

AMONG the problems that the great war has created for Canada, the problem of growing root seed, i.e., seed of swede and fall turnips, mangels, and field carrots, may seem rather insignificant to the average Canadian citizen. Yet, that problem is to-day one of the most vital to the Canadian farmer, notably the dairy farmer, inasmuch as it is directly connected with the providing of that indispensable stock food that is generally referred to as "roots." In 1915, Canada imported a total of 1,927,313 pounds of turnip seed, and 1,056,060 pounds of mangel and beet seed. In 1916, the import of turnip seed dwindled to 150,855 pounds, and the import of mangel and beet seed to 636,797 pounds; and for 1917, the figures stand at 291,379 pounds for turnip seed and 891,677 pounds for mangel and beet seed. This means that Canada imported a total of these most important farm seeds, in the years of 1916 and 1917, which falls short of the import of 1915 alone of, roughly, one million pounds. It should be added that practically every pound of field root seed used in this country is of European origin.

That Canada was running a great risk of having her supply of root seed from Europe shut off, partly or wholly, as a result of the war, was regretfully predicted in an Experimental Farms bulletin entitled "Growing Field Root, Vegetable and Flower Seeds in Canada," issued early in 1915. The bulletin went further and predicted "that many districts of Canada where root seed growing is unknown at present, will prove themselves not only able to produce seed of good quality, but also to be especially well adapted to seed raising."

To what extent this prediction was justified



Corn is Not Yet a Popular Crop in Manitoba, But This Corn Field Near Portage la Prairie Indicates That There are Possibilities for Corn Growing on the Prairies.

—Photo by courtesy of Manitoba Dept. of Agriculture and Colonization.



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CANADIAN NORTHERN RAILWAY

Root Seed Growing in Canada

(Continued from page 5.)

will be shown by the data following, showing what results in root seed raising were obtained in the year of 1915. In that year the Central Experimental Farm at Ottawa raised, from a field of about one and one-half acres, a first class mangel seed crop at the rate of about 1,150 pounds of seed to the acre. Mangel seed was produced at the Experimental Farm at Asseviz, B.C., at the rate of 2,100 pounds per acre, at the Experimental Station at Lennoxville, Que., at the rate of 1,150 pounds per acre and at the Experimental Station at Kentville, N.S., at the rate of 2,100 pounds per acre. The same year the Experimental Station at Lennoxville, Que., raised mangel seed at the rate of close to 1,250 pounds to the acre.

But what about the profit? Does it pay the grower to raise that kind of crop? As an answer, it may be stated that there was no record to be made, not a net profit of about \$30 per acre from the mangel seed crop at the Central Experimental Farm, Ottawa, in 1915. And this in spite of the fact that the men handling the crop were quite unfamiliar with the same. The above figures indicate, most decidedly, that there are, in Canada, great opportunities for developing a new field in agricultural activity promising substantial rewards, from a profit standpoint to those who take up root seed growing conscientiously and in a business-like manner.

May it also be added that the raising, in Canada, of the seed needed in the country will directly help to increase the average yield of the root crops of the Dominion. This will, however, be discussed in a special article.

SHEEP AND SWINE

Fall Work with Sheep

ONE of the first things to do in the fall is to choose the ewes that are going to be kept for breeding purposes. There are usually a number of ewes whose usefulness is past, which might be marketed at the same time as the lambs. Ewes of the mutton breeds do not ordinarily breed well nor keep in good condition after five years of age, and breeders find it a good plan to fatten and dispose their ewes before their teeth are in such condition that fattening is out of the question. Ewes, however, that have given the most milk and raised the best lambs during the summer, are likely to be thin at this time and should not be judged altogether by appearances. Non-breeding ewes, poor milkers, light shearers and mothers of inferior lambs should be marked as defects are found, and disposed of in the fall before they "eat their heads off."

The most successful breeders make it a practice to dip their sheep twice a year, once in the spring shortly after shearing, and again in the fall before the sheep go into their winter quarters. Sheep infested with ticks will require much more feed to keep in shape and will neither be as healthy, nor will their fleeces present the same yield as those free from parasitic yolk. They should be dipped on the morning of a warm, calm day, so that they will have time to dry before night. It is very easy to give sheep a cold at this time if they are not dipped in good weather.

The sheep should be given plenty wet the top of the farm in the fall. They will find much good food in stubble fields and along fence rows in plowed fields that would otherwise be wasted. Clover and grass pastures

will well be left until the stubble and fall's have been run over. Green ryegrass in the late fall gives considerable succulence and furnishes exercise for the flock. And in fattening lambs, it has been found by experiments at the O.A.C. that one of the most economical foods for sheep. The farmer should be careful that his ewes do not go down in weight during the fall. In open, wet seasons there is a danger of waiting too long before starting to feed on green grain. A rank growth of soft grass may 'loose' to good feed, but the real test is the condition of the ewes.

Sheep Entering United States

EDITOR, Farm and Dairy.—I beg to inform you that the United States Bureau of Animal Industry has issued the following new regulation governing the importation of sheep from Canada.

"All sheep imported into the United States from Canada for breeding, grazing or feeding must be inspected at the port of entry by an inspector of the Bureau of Animal Industry. They must also have been inspected by a veterinarian in the employ of and receiving a salary from the Canadian Government and be accompanied by a certificate signed by him stating that he has inspected the sheep and found them free from disease, and that no contagious disease affecting sheep has existed in the district in which the animals have been kept for 30 days preceding the date of importation. The owner or importer shall present an affidavit that said certificate refers to the sheep. In question. Any such sheep which are accompanied by such certificate shall be subjected to a quarantine of 15 days."

It will be seen that the necessity for dipping Canadian sheep for export no longer exists. They will be admitted to the United States when accompanied by the proper health certificate, and sheep men throughout Canada, who have been engaged in the export trade, will welcome this change as removing an impediment to their business. It is also a tribute to the healthfulness of Canadian sheep and their freedom from sheep scab.—F. Torrance, Veterinary Director General.

Care of the Fall Litter

THE most important factor in giving the little pig a good start in life, is the care which is given the sow both before and after farrowing. As a rule a brood sow in good condition, should have no feed the first 24 hours after farrowing, but should be given a liberal drink of warm water. For three or four days, she should be fed lightly and should not be put back on her full feed for a week or 10 days. If the sow is not properly fed the little pig will show it. With a large litter she should be fed liberally to stimulate the milk flow. On the other hand, when a sow is over fed, scouring is generally produced in the pigs. If this happens, cut down her feed immediately and give her 15 to 20 crabs of sulphate of iron (coopers) in her slop morning and evening. She should eat plenty of exercise, but should not be allowed to take the little pigs out during a cold rainy day.

It is of great importance to keep the little pigs warm in weight as rapidly as possible. When the pigs have reached the age of about three weeks, they should be given some nourishment other than their mother's milk. Otherwise there will be too great a strain on the dam and the little pigs themselves will not be kept growing as they should. It is well to arrange a pen adjoining that of the dam and separated from it by a part-



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tion with room at the bottom to allow the little pigs to run in. In this pen, low shoe troughs may be placed which will contain their skim milk or mash.

The best feed for the little pigs is skim milk or butter milk with some shorts mixed in, in the proportion of about three parts skim milk to one of shorts. This may also be used for the weaning ration and until the pigs are large enough to be fed whatever is given the rest of the hogs. Breeders differ widely as to the age for weaning. There should be no hurry about it. Eight weeks should be young enough if skim milk is available, but if it cannot be obtained it is better to let them nurse the sow until 10 weeks old. The weaning should be complete. Pigs should be placed apart from the sows in quarters secure enough to prevent communication. To check the sow's milk at this time, it is well to keep her in a pen for a few days, feeding her nothing but dry corn with plenty of clean water to drink. In a few days she will be ready to turn out with the other sows.

Orchard and Garden

Order Nursery Stock Now

NOW is the time to order stock for next spring's delivery. The nurserymen show few favorites. Their method is, first come, first served. The earlier you get your order in the greater chance you will have of getting good stock, and of having it arrive at the proper time next spring.

Before communicating with a nurseryman have your mind made up as to exactly what you want. Know what varieties you are going to plant, what age stock you prefer, and the grade. The varieties, of course, will depend on the choice of the grower, and to some extent on the district. The grade should be always No. 1, except in rare cases where one may get an exceptionally good lot of No. 2 stock. Remember that the initial cost is immaterial when you consider that the trees will likely remain in the ground 50 or more years.

When it comes to choosing the proper age of stock to plant there is a wide variation in the opinions of good fruit growers. The majority of stock planted is two-year-old, but some good fruit growers favor three-year and some one-year stock. The reasons given, of course, are very different, but each grower is usually convinced that his way is best.

The reasons advanced in favor of one-year-old stock are mainly those relating to the heading of trees. The nurseryman heads trees to suit the average planter. The intelligent planter, however, may want low-headed trees, because of the lesser number of windfalls and the greater ease of harvesting the fruit. At present, the man who wants a low-headed tree must purchase one-year-old stock, so that he can head the trees himself, or if he wants to plant two-year-old stock, he must go to the nurseryman a year before he wants the trees and have them headed low especially for him. Against the one-year-old stock, the chief fault is that apparently it would require one to two years longer to bring these trees into bearing than if two or three-year-old stock were used.

The popularity of the two-year-old stock probably follows from its being already headed for the average buyer, and its being a convenient also to handle. It is an average tree for an average man.

A question which often arises during the purchase of nursery stock is

whether it is wise to purchase trees from nurseries in the Middle Central States. So far as acclimatization is concerned, there seems to be no objection to this practice. The trees are young and have not yet become acclimatized to any district. Again, the stock upon which the trees are grown is in many cases the same as is used by our Canadian nurseries. The chief objections are freight and their drying out in transit during long trips and while being fumigated at the port of entry. Of course, if they are well packed they should travel all right. However, other things being equal, we should always put Canada first!

Potatoes for Next Year

By John Kyle.

BY all odds the best land for potatoes is the land that has produced a stand of clover. Here is a plan that has given good results invariably, provided the drainage is satisfactory and the cultivation what it should be.

As soon as the hay has been removed all available manure should be spread on the hay stubble as a top-dressing. The farmer who knows his business keeps his dairy herd under cover for the night and throughout the summer he regularly draws the manure to the field. When the hauling is done directly from the stable to the field the results are all the more satisfactory. When there is any liquid from the yard it should be conveyed to the field by barrel and stoneboat and placed on all the knolls of the field or liberally spread on the poorer portions of the field. Only those who have tried this method of top-dressing are aware of the change wrought in the texture of the soil.

Speaking of the use of the liquid manure, the farmer must pay attention to this practice or he will be a heavy loser. Here is one method that has given fine results. A large strong barrel is secured and well fastened to the stoneboat. Next, a large dipper with a long handle is provided. The barrel is fitted with a large plug and beneath the plug a perforated board the plug is removed from the barrel, about two feet long is secured. When the liquid, instead of pouring out in a narrow stream is well distributed over the length of the barrel. A very little ingenuity will enable the farmer to make an equipment that will insure a generous application of this rich fertilizer. Unless the liquid is well spread there is danger of its burning the grass and of its defeating the end designed.

It is all the better if the barnyard is fitted out with a cistern into which the liquid manure runs. But when this provision has not been made it is well to deepen the outlet where the liquid runs considerably and to be on the job with harrow and stoneboat as soon as the depression is full. Every rain spells opportunity for the farmer in this regard.

The mauling of the sod in the field is designed to increase the after-growth of the grass and root system. Following this simple method will insure a growth that is surprising. This growth may be pastured in the early autumn. In any case, the field should be carefully plowed with chain and skimmer till not a green blade is left in sight. Frost and winter will do the rest. When the time arrives for potato planting next year the whole field will have a deep, rich, mellow soil, rich in all the qualities that make for a fine potato yield.

Dr. Farewell, of Oshawa, states that skim milk is worth twice as much for feeding to poultry as for feeding to hogs.



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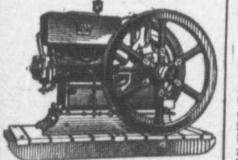
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Fattening Lambs

WE have a bunch of lambs to fatten here in the 12.25, barley 1.20, and oats to me. Will it pay to sell oats and buy barley? Would it be better to carry the lambs along on roughage and a little oats till mid-November or the first of January when we will get new corn at about 12.25—S. R. Ontario Co., Ont.

Under the conditions with regard to prices mentioned in this case there is not enough difference between the feeding value of barley and oats to make it profitable to sell oats and buy barley and, furthermore, oats are to be preferred for lamb feeding, for when fed as whole oats they make one of the most palatable feeds there is. A good mixture would be 100 pounds cracked corn or gluten feed, 100 pounds bran and 200 pounds whole oats. Start the lambs with a good roughage ration and with from 1/4 to 1/2 pound of this meal mixture per head per day in two feeds. Gradually increase the grain ration till at the end of eight or ten weeks they are getting about 1 1/2 pounds per day, and continue at this rate till the end of the feeding period. Oats and bran would be very well for a start if you have expectations of getting corn cheaper later on.—G. W. M.

Wintering Work Horses

WE will have six horses to winter. We can use one lean on the farm. In other years the extra two horses have come through the winter, but will not be needed this year. How can I winter them most cheaply? Mr. Grisdale at the Winter Fair once said something about wintering horses on straw and turnips. Was not interested at the time, but would like some information now.—Subscriber, Glenora, Ont.

It has been found that idle horses can be wintered on one pound of mixed rough hay, one pound of oat straw, and one pound of roots (swedes, carrots, or mangels) per day for every 100 pounds live weight. It must be remembered though that when feeding in this way the horses must be idle, or practically so, and they must be brought down to this ration gradually and returned to full ration in the same manner.—G. W. M.

Corn Ensilage for Hogs

SOME years ago I feed in Farm and Dairy of an Oxford county dairyman who has a cement feeding floor to his market hogs a little grain mixed with the ensilage. We have a lot of good ensilage this year and grain is very high in price. As the Oxford man's scheme qualifies? What amount of grain should I mix with the ensilage and how much would I feed to a bunch of 14 hogs? We have a little skim milk.—T.H.B., Waterloo Co., Ont.

The proposition of feeding corn ensilage to market hogs does not appeal very strongly to the practical feeder. Ensilage is a bulky feed and the fattening hog could not consume enough of it to really derive much value therefrom. As a food for carrying over brood sows it is more to be recommended, though here again it would have to be fed in limited quantities. As a means of getting dry grain before fattening hogs so that they cannot devour it too quickly, this method could probably be highly recommended and you could depend upon it that the valuable part of the ensilage used would not be wasted. The amount of ensilage to be fed would have to be judged by the amount which the hogs would consume. Start the hogs on about two pounds grain a day, preferably unground, and gradually increase to 3 1/2 to 4 pounds per day, according to what they need, aiming to keep them rustling pretty well. Feed what skim milk you have separ-

ately and keep water before the hogs as well.—G. W. M.

Screenings

In a recent Experimental Farm note, elevator screenings are recommended for feeding hogs and poultry. The screenings were priced at \$30 to \$35. I immediately secured one of the big milling firms in Toronto and found that the best price I could get on screenings from them, was \$48 to \$52 a ton, depending on the quality. Would it be possible to feed these screenings profitably at this price? Better still I would like to know where I can get screenings at the price mentioned by the Ottawa office. Will you find out for me?—J.E.T., York Co., Ont.

Elevator screenings are obtainable from the Government Elevators at Fort William, Ont., but the output is practically controlled by the Live Stock Branch, Department of Agriculture, Ottawa. Intending purchasers should apply to that office, from which their application will be forwarded to the Elevators and the shipment, if it is possible to make one, will be made direct to the purchaser, and he in turn will remit direct to the Elevator. This is done simply to control the distribution. Negotiations being carried on at the present time may change these arrangements, but notice of same will be published in the Agricultural Press. The practicability of feeding wheat screenings at the price mentioned, \$48 to \$52 a ton, would depend to a certain extent on the quality of the screenings, but it is likely the margin of profit would be very small.—G. W. M.

Cover the Out-door Silo

(Continued from page 2.)

silos which are not rooted. In any cold climate, however, a roof is a desirable adjunct to a silo.

It is not pleasant work getting ensilage out of an unroofed silo after a winter storm. Nor is it a particularly pleasant job digging out ensilage from such silo during rain. The great advantage of a roof, however, is that it helps preserve both the silo and silopile and assists in retarding freezing. It is, of course, not enough to put on a roof to keep out frost. The chute must also be tight, or the top doors must be replaced as the silos become emptied if the heat generated by the ensilage is to be kept inside. If a silo is kept moderately tight, there will usually be sufficient heat generated by the silage to prevent its freezing.

A silo roof is not cheap—it costs around \$25 to \$50, but it is a financially sound investment. Professor A. Lettich, B.S.A., of the Ontario Agricultural College, Guelph, Ont., points out that in the case of stave silos a roof preserves the silo itself as well as the silage. He estimates that the amount of silage saved from snow and additional freezing would be worth more than \$5 a year to say nothing of the extra comfort and convenience in taking the silage out.

Conserve the Milk Cans

ONE of the effects of the war has been the shipment of tin plate from England to America. Such metal is used largely in manufacturing munitions, and it is impossible to have tin plate shipped to Canada except under special license from the British government. Milk can manufacturers are therefore unable to obtain the large sheets of tin necessary in the making of cans. This may result in a serious situation in dairying. It therefore behooves all dairymen to take the best possible care of the milk cans already at their disposal, and to make these last if possible until the war conditions no longer necessitate the embargo which now exists.

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Eggs at \$1 a Dozen

By A. P. Marshall.

APPARENTLY so comparatively few chickens have been raised this year as well as the fact that so many have very much depleted their flocks on account of the high cost of feed that it hardly seems to be an idle dream that eggs will reach the high figure that many predict. The poultryman needs advance in prices in accordance with the advance in other products and will just as soon as the surplus declines get any price that reason can ask under the conditions existing at the time. There is absolutely no question that the supply of eggs will be very far short of the needs this coming winter.

Who is going to take care of that heavy demand inevitable of being satisfactorily filled? The mere fact of having hens will not get any advantage of the great need to the producer unless these hens are producing at a profitable rate. If the birds are not given attention during the present period of rest and chance most surely will they only set their heads off during the winter months trying to keep themselves warm.

All spring and summer when everything that tends to prompt the hens to their best efforts and results come just as sure as water runs down stream the flow of eggs makes the season seem very profitable and enthusiasm is strong for caring for them in return, but as soon as they begin to drop off in their laying then it is an entirely different story. It would be far better and cheaper in the long run to kill them then to neglect at this most important time. Chance is made then that must answer them for a whole season. Those who give the birds the best attention at this time are the ones who will supply the dollar eggs.

Did you ever take a plant in after it had been left out for a few fall nights so that the cold had given it a good chill? The plant will surely turn yellow and drop its leaves while the same plant taken in before these cold nights begin will go on as if no change had been made. It is much the same with the chicks and older birds. They should be in comfortable quarters now and not where they will likely remain for the winter. Keep growing continually they will come to the best maturity and when the time comes start shelling out the eggs that will bring of necessity the high price while the neglected stock will be sitting everywhere in sight and waiting for the balmy days of spring before they begin to pay for their keep.

All the leaks in the houses, the broken windows and such like things should be fixed up without delay. Roosts should be in the best repair and sufficient room should be provided so that there will be no crowding. Everything should be clean and quarters thoroughly disinfected for the birds spend more and more of their time inside. Suitable vessels should be arranged so that all will get their proper supply of feed and water and every provision made for the constant supplying of all they need to turn the surplus they get into the dollar eggs that will be in such great demand.

Practical Poultry Methods at Macdonald College

(Continued from page 4.)

roosts are at the back and the nests at one end. A big food hopper at the opposite end holds three to four bushels of dry mash. It seemed to us that this house would have an advantage over one with an open front extending its full length, in that draughts could not penetrate to any depth into the house.

In feeding the winter layers, which numbered 800 last winter and usually run about 1,000, whole grain, equal parts wheat and corn, is fed in the litter in the morning and buried deeply. Enough grain is given to keep the hens busy until noon and during the morning the hopper is closed. The dry mash in the hopper consists of one part bran, one part corn meal, one of crushed oats or oatmeal feed, the latter preferred, one of middlings, one

half of beef scrap and one-quarter part charcoal. Sprouted oats and mangels are fed for green feed, the former being more palatable. A wet mash composed of the same ingredients as the dry mash, is fed three times a week. "Just a little to keep the birds in good condition," explained Prof. Jull. About one-quarter ounce of green bone per bird is fed daily. Skim milk would be preferred for drinking, along with water, but unfortunately it is not available for the laying stock.

The foregoing is the standard ration for layers at Macdonald College. This coming winter the ration is to be varied because of the alteration in feed prices, due to present unsettled conditions. The feeding schedule will be as follows:

Scratch feed—Two parts oats and one part wheat, fed morning and evening, scattered in the litter.

The mash ration is made up as follows: Ground screenings, 132 parts; bran, 66; crushed oats, 66; beef scraps,

66; middlings, 33; cornmeal, 33; charcoal, 4; making a total of 400 parts.

The screenings are the buckwheat screenings, purchased from the West. This ration will be fed dry in self-feeding hoppers, which will be kept closed during the mornings, also it will be fed as a wet mash, giving only a very small quantity once per day. "We have adopted the above scratch and mash rations with a view of economy," states Prof. Jull, "at the same time realizing that the fowls must be given good feed and a variety if they are expected to lay well."

The Macdonald College poultry plant is fortunately located for the disposal of its eggs. All are taken by a private trade, including of course the college dormitories. "We have 50 families on our private list alone," Prof. Jull told me.

And a good market for the product is one of the most important points in profitable poultry keeping.—F. E. E.

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PETERBORO AND TORONTO

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

The New Minister of Agriculture

THE appointment of Mr. T. A. Crerar, of Winnipeg, the president of the United Grain Growers, Limited, as Dominion Minister of Agriculture, is an indication of the commanding position to which the organized farmers of Canada have attained. This is the first occasion in the history of Canada upon which the Dominion Government has recognized the organized farmers by selecting one of their members to fill a cabinet position. Generally, in the past, the ministers of agriculture have been men who, while anxious to render good service, and who in several cases have done so, have been men who have not been agriculturists, or who, while doing something about agriculture and possessing farms of their own, have had larger interests elsewhere. In Mr. Crerar, the government has selected a man whom the farmers themselves have raised to the most important position in the farmers' movement in Canada, viz., the head of the greatest farmers' company in Canada, and probably in the world.

In some respects, Hon. Mr. Crerar may seem to occupy a somewhat peculiar position. For some years there has been a growing feeling among many farmers that the Dominion Government has used the Department of Agriculture as a means of blinding farmers, to some extent at least, to what was being accomplished by other lines of Government legislation. Both Liberal and Conservative governments hitherto have shown a tendency to hand out a few hundred thousand dollars through the Department of Agriculture in grants for agricultural purposes and then to call attention to their action as evidence of their interest in farmers and their desire to promote

their welfare. At the same time, however, it has happened not infrequently that the Government has increased materially the tariff on articles purchased by farmers or heavily bonused other industries and in this way have taken millions of dollars out of the farming classes. The organized farmers of Canada have called attention to this condition on numerous occasions. Added interest is lent to the situation by the fact that the organized farmers of Canada have adopted a national platform which calls for important reforms that there is no indication that the new Union Government proposes to grant. The question has been asked, therefore, why Hon. Mr. Crerar accepted office under these conditions.

While we are not authorized to speak for Hon. Mr. Crerar, we understand that his position has been made clear to his friends and that it meets with the approval of leaders in the farmers' movement in western Canada. Believing that it is the chief duty of Canada to win the war, that it would be disastrous to the best interests of the country to hold a bitter political campaign at this time that would centre largely around racial and patriotic issues, that it is essential that profiteering of all kinds shall cease, and that partisanship shall be eliminated in governmental affairs, Hon. Mr. Crerar accepted office in the hope that he might be instrumental with others in achieving these results. He has made it clear to his friends that he has not changed his views on public matters and that as opportunity presents he intends to press them earnestly. In the meantime we understand that he would like to see elected to parliament as many farmers or other candidates as possible who will support the farmers' platform, be they Liberal or Conservative, in order that his position in the cabinet and in the house may be strengthened when the urgent reforms on behalf of farmers. This point should not be overlooked by the organized farmers in the approaching general election.

As an administrator, all who know Hon. Mr. Crerar are satisfied that he will prove a success in the important position he holds. His years of experience as president and manager of the great farmers' company with which he is identified have prepared him admirably for the new duties he has assumed. He understands farmers, he is desirous of promoting the cause of agriculture, he is fearless in urging what he believes to be right and possesses qualities of leadership that equip him to wisely administer the important department of which he has been made the head. Because he is a farmer and represents the farmers, farmers appreciate the distinction involved in his appointment and desire for him the fullest possible measure of success.

Back Up Mr. Hanna

CANADA'S Food Controller occupies a most difficult position. He is under fire from two sides. On one side, farmers are beginning to look upon his activities with considerable misgivings because of the fact that one of his main duties appears to be, if the city press is to be believed, the setting of prices on the products that farmers produce, while he lacks the power to set prices on the articles farmers purchase, and which enter into their cost of production. On the other side, many women's organizations in the cities, labor unions, and other bodies of city consumers, with the support of at least an influential portion of the city press, are clamoring that Hon. Mr. Hanna shall set on farm products prices that would be disastrous to farmers and which in turn would react on the city consumers, because any prices that would not leave the farmer a reasonable profit would discourage production and thereby inevitably injure consumers.

Very few people seem to have any intelligent

conception of how involved and intricate are the processes of production. Each line of industry reacts in many ways on other lines of industry. People who do not appreciate this fact think it is easy for the food controller to set a maximum price that shall be paid for a certain farm product, and thereby keep down the cost of living for them. It is by this class of people that the clamor is being raised for such action on the part of the food controller. Hon. Mr. Hanna appreciates the difficulties and probably disastrous results that would attend such action on his part. For this reason he is adverse to the setting of prices. Because of the stand he has taken he is already being condemned by a considerable section of the city press, and demands are being made for his removal from office.

On one point, Hon. Mr. Hanna apparently has firmly made up his mind. That is, that if prices have to be set they will be prices that will assure farmers, after thorough investigation, a fair return on their labor and investment. The prices so set are likely to be higher than many city consumers will approve. This means that if Hon. Mr. Hanna is to be able to maintain his stand, farmers must give him their hearty support. Some time since it was announced that the price of potatoes was to be fixed at \$1.25 per bag. Figures were submitted to the food controller which showed that farmers could not produce potatoes profitably when they were sold at such a price. For this reason the price was not set at \$1.25, and many city people have been disappointed in consequence. The stand that has been taken by Hon. Mr. Hanna is a wise one and one that it is to be hoped he will be able to maintain. In every way within their power, farmers should manifest their approval of his position.

The Next War Loan

SIK THOMAS WHITE announces that the next Dominion War Loan will be issued in November, in accordance with the policy of asking Canadians to finance their part of the war, this loan will be a domestic one, and Canadians are urged to purchase as extensively as they can. The war bonds are drafted in such small amounts that even the working man may invest his small savings in them, and it will be profitable for him to do this; the rate of interest will be between five and six per cent annually, and the bonds have the additional advantage of not being subject to taxation.

This raising of Canadian money to meet our war expenses is a commendable policy. Whether or not the domestic loan is the best method of doing so, is open to question. All money so raised will have to be repaid after the war; borrowing is always an easy method of piling up future trouble. At present Canada is meeting only 10 per cent of its war expenditures out of current revenue. Compare this with Great Britain, which is paying 50 per cent of its war debts by current taxation, and the United States, which also plans to pay a large part of her war expenses as she goes along. Our government has been altogether too lenient with men of wealth, and war profits have gone to swell private fortunes instead of to pay the expenses of the war. In flesh and blood we are paying our war bills as we go. Should dollars and cents be held more sacred?

The more I study the world, the more am I convinced of the inability of brute force to create anything durable.—Napoleon at St. Helena.

I confess without shame that I am tired and sick of war. Its glory is all moonshine. It is only those who have neither heard a shot nor heard the shriek and groans of the wounded who cry aloud for more blood, more vengeance, more desolation. War is hell.—General Sherman.

Milk Committee Favors Admitting Margarine as War Measure

After Long Discussion They Recommend the Lifting of Ban Temporarily

YOUR Committee would recommend that the manufacture and importation of Margarine be permitted under government supervision during the period of abnormal conditions as a war measure only; such was the closing sentence of a resolution sent in to Food Controller Hanna from the Milk Committee after a thorough discussion of the pros. and cons. of "Oleo."

The committee was pretty well divided as to whether any time limitations should be placed on the period during which the embargo on margarine is to be lifted. But by the efforts of Mr. E. H. Stonehouse, President of the Toronto Milk Producers, who represented the producers, and Mr. John Bingham, of the Ottawa Dairy, who represented the dairy dealers, the resolution was passed unanimously recommending the measure for war purposes only.

Need of Action Realized.

The need of better substitutes at reasonable prices for the poorer class of consumer seemed to be pretty well recognized by all the members of the committee. With the dairy interests generally have regarded Margarine competition with misgivings the seri-

have the word "Margarine" branded in letters which high on the top, bottom and side of each package. In the United States the word "oleomargarin" must be stamped on, but no regulations are made respecting the size of letters or position. The attempt to control oleo, by taxing in the U. S. has just encouraged fraud. And the 4c a pound tax on uncolored and 10c a pound on colored oleo, has just added to the burden of the consumer. A comparison of wholesale prices in Chicago was submitted by the Swift Canadian Co. as follows:

1st Grade	29½¢	46¢
2nd Grade	28½¢	45¢
3rd Grade	26½¢	44¢
4th Grade	25½¢	43¢
5th Grade	23½¢	

And if the 10c tax were not imposed oleo, would be sold that much cheaper.

The Vibel Question.

The debate began when Mr. Stonehouse stated that dairymen only regarded the letting down of bars to oleo, favorably as a war measure. Mr. Tustin pointed out that manufacturers would not build factories un-

MARGARINE FOR WAR TIME ONLY

BE it resolved, that the following resolution be given to W. J. Hanna, K.C., Food Controller, as the unanimous opinion of your Milk Committee.

Whereas, Canada normally produces sufficient butter for her requirements, but the present price of butter, due to the large export trade, is making it difficult for many people to obtain the necessary amount of fats required for their diet, and in order that we may increase the greatly needed supplies of butter to Great Britain and her Allies, and for home consumption:

With this knowledge, and in accord with the patriotic spirit which dominates the country at the present time, your Committee would recommend that the manufacture and importation of margarine be permitted under Government supervision during the period of abnormal conditions as a War Measure only.

P. E. TUSTIN, Chairman.

ousness of the present situation, stated Mr. Stonehouse, had led dairymen to modify their opinions regarding this competition, and to sacrifice their interests to the good of the country during war time.

The situation as outlined by the chairman, Mr. P. E. Tustin, chief food inspector for Winnipeg, is this: Margarine is eaten in every country in the world except Canada and New Zealand. The present high prices of butter make it practically impossible for the poorer classes of people to get the fats necessary to their health. This is especially true with children, who, according to the chairman, are subject to many diseases if deprived of fats in their diet. Mr. Tustin further stated that "margarine competition has been greatly exaggerated. The danger to the dairy interests is a bogey, I think," was his comment. "It hasn't hurt the dairymen of the United States, nor brought down the price of butter." Mr. Tustin further cited the cases of Denmark and Holland, two of the greatest dairying countries, and also the two countries leading all others in the production of margarine.

The great trouble with oleo. in the States, said Mr. Tustin, is due to their complicated act respecting it. In England all margarine manufactured must

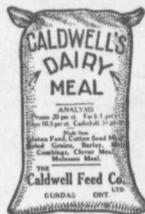
der such conditions. He was warmly supported by Mr. Wilmour of St. John, N.B., who didn't want any time restrictions to lifting the ban. He harped strongly on the "fairness" of all governments, and wanted to leave it to them to replace the embargo if they saw fit. Mr. Stonehouse, however, on behalf of the farmers wasn't taking chances, and stated that if a time limit were not set there would be a storm of protest. He was seconded in this by Mr. Bingham, who pointed out that if the farmers' interests were not safeguarded so that they made a profit from dairying that they would stop producing. This would of course defeat the whole purpose of the move, which has for its object the freeing of butter for export by the introduction of "margarine." This argument led up to the resolution which is of such interest to the farmers of Canada.

Commissioner Wilson Opposes Oleo. W. A. Wilson, Dairy Commissioner for Saskatchewan, was not present at the meeting of the milk committee, of which board he is a member, when the resolution was passed admitting margarine. Mr. Wilson was not notified of the meeting in time to allow

(Continued on p. 1143.)

CALDWELLS

CALDWELL'S Dairy Meal



supplies the demands for a highly protein, scientifically mixed, milk producing ration for dairy cows.

It is prepared from re-cleaned materials and contains no oat hulls, or other low grade ingredients. Caldwell's Dairy Meal is a pure, easily digested, fully balanced meal. Its only purpose is to increase the milk flow and keep the cows in perfect health. Give it a trial.

Order a Quantity from your feedman or from us direct.

The Caldwell Feed & Cereal Co., Limited

DUNDAS, ONT.

Makers also of Molasses Dairy Meal, Substitute, Cream Calf Meal, Hog Feeds, Molasses Horse Feed and Poultry Feed of all kinds.

STANDARD FEEDS



This Engine Will Cost You Nothing

You need an engine—get a Gilson on our new easy payment plan, and it will pay for itself. You have the work for it to do this fall and winter, help is scarce and high priced—save yourself a lot of worry and enjoy that "feeling of security," which is such a definite part of the staunch, reliable Gilson Engine.

Gilson Engines have long enjoyed an indisputable reputation for dependability, power, simplicity and economy. This year finds us with an even more attractive proposition for the discriminating buyer. Prices of everything you have been buying have been soaring, but by careful management we are able to furnish Gilson Engines at remarkably low prices. Write to-day for catalogue, price, and easy payment plan, stating what size you are interested in.

GILSON MFG. CO., LIMITED, 257 York St., Guelph, Ont.

CUT YOUR OWN HAIR 50¢ CASH GIVEN FOR THIS AD.



The Duplex Automatic Hair Cutter has four times the cutting power of any hair cutting machine ever placed on the market. It is four times the size, and will do the work four times as well and four times as fast as any other machine. We have been so busy filling wholesale orders that we haven't been able to offer this wonderful tool direct to the public before. We now have a large supply on hand, and for a very short time we offer the Duplex direct by mail at wholesale price. Some people will wait until it is too late, and they will have to pay the full price. Get yours now at the wholesale price of \$1.00.

THE SLANTING TEETH PREVENT PULLING

This special patented comb with the slanting teeth and the handle to fit the hand is the only one of its kind. It costs four times as much to produce as the ordinary comb, but it is worth it. It directs the hairs on to the cutting blades at exactly the Duplex. It won't let you. The Duplex is made of the very best quality steel and silver plate. The blades are double edged, oil-treated and double tested. You can comb your hair any style you wish and the Duplex will cut it smoothly and evenly. It cuts while you comb. Cuts the front hair long and the back short without adjusting. It will last a life time. Figure out how much you can save. We allow you 50¢ cash for this ad. Cut it out and send it to us with only \$1.00 and we will send you the Duplex complete attached to the comb. Five minutes after you receive the Duplex you can have your hair cut better than it was ever cut before. Remember, none genuine without the slanting teeth.

Agents Wanted. DUPLIX MANUFACTURING CO., DEPT. F., BARRIE, ONT.



STRENGTH and wisdom only flower when we toil for all our kind.
—Lowell.

Four Thousand Bushels of Corn

(Continued from last week.)

IN some communities the idea of a preacher working in a cornfield might seem strange. In Duke-ton, however, the people enjoyed the easy way in which their young preacher mixed with them. He was always ready to take a hand at the cream separator or with the pitchfork—a fact that did as much as anything else to bring him into the close touch with his people that is the first requisite of success in a country church.

"I wish you had asked Professor Eckhardt whether that forty of mine needs anything," the preacher said to Jimmie one day.

"I did, when I telephoned to him yesterday. He says that the only thing it is likely to need is phosphorus, and that the best way to get that for use this year is to buy bone meal."

"It comes handy to have a professor for a friend, doesn't it, Jimmie?"

"I told the professor he would deserve the credit if either of us won a prize. I wish we had some one like that in our county."

"Just what is he doing over there in DeKalb County, anyway?"

"I don't know a great deal about it; he has an automobile, and roams all over the county, showing the farmers how to farm scientifically. He has demonstration fields, too, where he shows just what can be done by using scientific methods of farming. The bankers and business men and farmers' clubs have raised money to pay him a salary for three years. They hope to have the production of the county almost doubled by that time."

"There is a whole lot more to modern farming than most people realize, isn't there? If I hadn't picked out my calling already, I'd want to be a scientific farmer, and the best one in the county."

"I don't know. There are so many opportunities in the city—so many big rewards to work for, so many problems to solve."

"Yet the biggest problem of all is the problem of raising enough crops to feed the next generation, and that problem must be solved on the farm."

"Just then Mary came to the door. 'You're wanted at the telephone, Jimmie!'" she called.

When Jimmie came out a moment later, he said, "It's that potassium chloride of mine I'm not quite ready to spread it, but I'll have Jake haul it up and out it into the barn."

But when he mentioned the matter to Jake, that faithful hired man rebelled for the first time against Jimmie's orders.

"I never could hold up my head among the boys again," he said, "if I was caught hauling home that German stuff. Let Bill haul it. He isn't very powerful with a wheelbarrow."

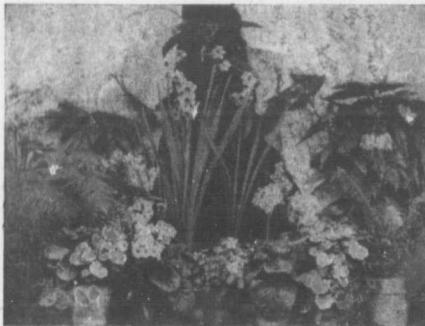
"I'll haul it home myself," Jimmie answered. "A fellow's got a right to buy what he wants to with his money, hasn't he?"

"Mebby so, but if I was you I'd wait until after dark to go after it."

Before Jimmie got out of town with his first load of the potassium chloride he almost wished he had taken Jake's advice.

"The stuff tastes like barrel salt," the station agent announced, when Jimmie drove up to the freight house. "I don't see what there is about the stuff to make that old peat forty of yours grow a bumper corn crop," the elevator man added.

By the time Jimmie had got the first load into the wagon, a crowd had collected; and as he drove away, the by-



Plants in the Window do Much to Make a Room "Homesy."
Note that the flowers in the garden have disappeared, as you can still brighten up our homes with plants and flowering bulbs. Primulas, callas, begonias and winter flowering bulbs are shown in this window.

standers buried jokes and gibes at him.

"I don't know that I blame Jake!" Jimmie exclaimed to the preacher, that afternoon. "I have a good mind to back out and let Bill haul the rest of it."

He stuck to it, however, and by noon the next day he had all the potassium chloride stored in the barn. That night the preacher called him up and told him that he had drawn his savings out of the bank and ordered enough bone meal for the upland forty.

"It seems to me that you and the preacher are risking a lot of money on the word of a professor," Aunt Jane said.

"We are. Farming is all a game of chance with the preacher, anyway, and since this is my last year on the farm, I'm willing to take big chances, too."

"Father asked all sorts of questions about that peat forty in his letter today," said Mary. "He is anxious to know who was foolish enough to pay eighty dollars for the rent of it. From

the way mother wrote, though, I guess they are both glad to think that they will see the Yosemite, after all."

The weather continued remarkably good up to planting time, and before the end of the first week in May, the peat forty, the preachers forty, and all the other corn ground on the McKeene place, had been plowed and disked and harrowed until the soil was in the best of condition. Jimmie had spread his potassium chloride with an old suds-gate seeder. He was glad that the peat forty lay well back from the road, for he was getting tired of the jokes about his "German salt."

The preacher fared worse when it came to spreading his bone meal, for his forty lay along the main road. But he went at it manfully, and managed to keep his temper in spite of the bantering from the passers-by who stopped to see what he was doing.

At last the oak leaves were as big as squirrels ears and the wild plum trees were in blossom. Those signs together with a warm soil and the date on the calendar, indicated that it was time to plant corn. Planting corn is nice work, especially for a farmer who takes pride in driving straight and so carefully that the rows check up straight crosswise. Jimmie spent considerable time in adjusting the tongue and the shoes before the planter would "drop with the button." Finally, after digging up kernels in three or four rows, and finding that they lined up perfectly, he was satisfied to go ahead.

a bushel of corn simply because there was no seed planted on them."

An hour's tinkering failed to improve the working of the old planter. Jimmie at last gave it up in despair, went back to the house and called up the local implement dealer.

"I'm coming right down after a planter, Mr. Jackson," he said. "Can you have one ready for me?"

"I sold my last planter half an hour ago," came the reply.



Red Cross Enthusiasts.

The young ladies in the illustration filled an important place at the Tractor Demonstration at North Toronto a few weeks ago. They were busily engaged selling tags for the Thornhill Road Club Society and during a resting period this picture was snapped by an editor of Farm and Dairy.

"But I must have one right away! Can't you wire to the nearest general agency and get me one on the afternoon freight?"

At the time that Jimmie had convinced the implement dealer of the imperative need for a new one, and had got his promise that the planter would be delivered that night if possible, his good nature was almost exhausted.

"Jackson would have had a fit if I had sent to a mail-order house for a planter, but he hates like everything to accommodate me a little himself," he complained to Jake.

"He's mighty jolly, though. He knows more good stories than anyone else in town."

"Anyone could be a good story teller if he didn't do anything else but practice."

(Continued next week.)

"THE HEART OF THE DESERT."

TO our Folks:

Do you ever get a bit tired of the "humdrumness" of life? Do you sometimes wish you could do everything for awhile and speed away to see new countries, hear new voices and live new experiences?

Then come with us to New Mexico. Enjoy with us the glory of the sunrise over the limitless desert, climb with us the precarious mountain path and peer with us into the yawning canyons, as we follow with our hearts in our mouths the thrilling adventures of our hero and heroine in our new serial, "The Heart of the Desert."

Aye, we promise you thrills aplenty. We promise you a ripping good love story with a modicum of Indians, cowboys, horses and guns thrown in, as would be expected in any self-respecting Western story. Watch for the first chapter. After that we won't have to tell you to watch for the others.

THE UPWARD LOOK

God's Ever-Seeing Eye

THOU God seest me.—Gen. 16:13. I wonder how many a little child has received a one-sided conception of God and of His word from this verse? Were you not, as far back as you can remember, almost frightened into being good and abstaining from wrong by the thought of God's eye being upon you, at the moment of yielding to temptation? But there is also the beautiful thought of encouragement, which is not nearly enough dwelt upon; that He also sees every good action, every noble deed, and is ever made glad by them.

Lately I had the privilege of seeing a judge judging fowl at one of the fall fairs. To my surprise not only did he judge from external appearances, but far more than I imagined, from hidden signs. With skilful fingers he raised wings or separated feathers, from which by certain tokens he awarded points.

Our God's eye is the only one that sees within the heart of hearts and soul of souls. He alone knows the evil as well as the good intentions. God knows, as no one else in all the world, how hard and bitter the struggle was not to yield. His eye is the only one that can see and His heart the only one that realizes the greatness of self-conquest and self-mastery.

So we must think not only of the eye of grief and disappointment with which God sees our failures, but also of the eye of understanding, as He alone realizes the strength of the temptation. And too, we must always remember He gladly sees every deed done in His name.—H. N.

Practise Real Economy

Mrs. Gilbert Smith, Oxford Co., Ont.

HOW can the women on the farm do their bit? Well there are many ways of doing things that will help in the great struggle. We know that the Mother country is in need of all the flour, bacon, and beef that this country can spare, and in towns and cities housewives are pledging themselves to serve beef or bacon but one meal every day, except Tuesdays and Fridays, when they do not serve it at all and to serve a certain amount of brown bread, or some substitute for white bread at each meal.

Why cannot we women on the farm do likewise, even if we cannot get fresh fish, etc., to take the place of bacon and beef. There are many different ways of making appetizing dishes from canned and salted fish, cheese, macaroni, beans, milk, and eggs, which are very nourishing, and on the farm are easily obtained. Then we have fowl which can be cooked in so many different ways. It should be an easy matter to get up a good nourishing meal and yet economize in things that are needed overseas. All of us farm women, no doubt, have a garden this year with plenty of vegetables and fruits, which should be utilized in some way. There are different methods of canning and some of the late vegetables such as corn, could be dried, which would save the empty seedless for something else. Cabbages, beets and carrots may be stored in cellar or pitted. Many farm women do their own bread baking and could easily bake a few brown loaves, or some graham ones, or biscuits to take the place of white bread.

In this country we have always had plenty of everything, and many of us do not know what real economy

means. Some housewives do not use dripping from beef or bacon, which if rendered and clarified makes as good a shortening for pies and biscuits and frying potatoes as pure lard. While we economize in food we must also economize in clothing, so why not take our last season's suit to the cleaners and have it cleaned and pressed, or even dyed if it needs it and make it do another season even if it is not the latest style. I think the most of us have some garments in the closet which could be made over in place of getting more. For those of us who have children, we can save much clothing by making over what the grown-ups have discarded. By using the best parts we can make garments for the wee folk that will wear a long time. Some times even a small patch or two on some garment would make it last considerably longer.

On Active Service

"Father's Helper," Lanark Co., Ont.

HOUSEKEEPING and cooking are two necessary tasks of the farm woman; but even these very important tasks may be simplified so that the woman will have time to do her bit outside doors as well as indoors. Plain living and high thinking are needed more than ever in times like these. Now, if ever, is the time to return to the simple life.

Last winter my sister and I decided the place for us to do our bit was right here on the farm, aiding in the production campaign. Help was very scarce, so we decided to go to work at once and help with the farm-yard chores. So we fed and watered horses, cattle, sheep, pigs and hens, did the milking and even helped to clean the horse stables and cow houses. This was heavy work, but it developed our muscles and prepared us for the spring work.

When spring arrived we harrowed, picked stones, helped to clean grain, fed calves, etc. We also helped to plant potatoes and vegetables and attended to the weeding and weeding.

In the summer we drove the horses on the hay-fork and horse rake, helped with the very important work of cutting with the mower and binder and drawing in the grain. This fall we will help to take in the potatoes, beans, roots, vegetables and apples.

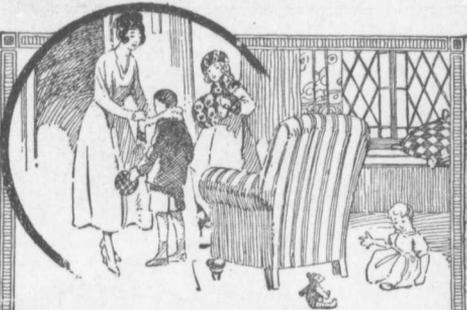
This work has made us healthier and stronger and given us the assurance that we have been doing a little at least to help win the war.

Are We Doing Our Share?

CANADA and the United States probably will be able to provide for the allies' requirements of cereals other than wheat, during the next 12 months.

The allied people themselves have been economizing with wheat and wheat flour. As Lord Northcliffe said in Montreal, "There is no such thing as white bread in the Old Country from the King's table downward." Other cereals are being used, but they cannot be used alone for bread. The allies must add the grain to wheat flour to make the war bread now in universal use in European countries. Except in Italy, where the people normally consume much corn, there are few corn mills in Europe. Corn, not being a durable commodity, cannot be shipped across the ocean in great quantities.

The allies must have a wheat flour basis for their war loaf. Unless the people of Canada and the United States are willing to substitute other cereals for part of the wheat flour which they normally consume, they will be denying even war bread to



That bug-a-boo about warm-air heating

TO the man who has studied heating systems the "Hecla" warm-air furnace appeals strongly. Not only does it supply ample warmth, but it also provides adequate ventilation. It refreshes all the air in the house and keeps in constant circulation. It prevents the atmosphere from becoming dried out and unhealthy by supplying it with the proper balance of moisture.

The "Hecla is Clean and Gas-Free

You do hear, of course, that warm-air furnaces have disadvantages. From time to time it is urged that they are dirty, that they smell of gas.

But those complaints never come from a "Hecla" heated home. That bug-a-boo about warm-air heating was killed by the "Hecla" Patented Fused Joint.

Even after life-long exposure to heat this joint can never spread. It is sealed tight, leak-proof. We guarantee it for the life of the furnace. It keeps

smoke, gasses and fine ash dust shut in the smoke-chamber till they reach the smoke flue. Thus, the "Hecla" is a clean, gas-free heating system.

Investigate the "Hecla" Without Obligation to You

You will surely investigate the "Hecla" thoroughly before your final choice is made.

Bear this in mind. If you send a rough sketch-plan of your home, we furnish expert directions for adequate heating by a "Hecla" furnace. If these directions are followed, we guarantee the warmth provided will be ample for your home.

In Spring and Fall you will benefit by the "Hecla's" flexibility. Its patented steel-ribbed fire-pot enables you to drive out the chill quickly with only a small fire. In the depth of winter—and there are thousands of "Hecla" owners who will agree with us—the wider heat-radiating surface of this steel-ribbed pot saves one ton of coal in seven.

HECLA Mellow Air Furnace

Valuable Information Will be Found in these FREE Booklets

If you wish to study further the many big features the "Hecla" has to offer, write for our free booklet, "Comfort and Health." It is clearly illustrated and describes each feature fully. With it we are sending from a limited edition a copy of the instructive booklet, "A Pure Air Heating Plan." These free booklets should be in your possession. Send for them to-day.

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I am interested in the warm air principle of heating-ventilation. Please send me your booklet, "Comfort and Health," and "A Pure Air Heating Plan." This of course, does not obligate me in any way.

Name.....
Address.....

CLARE BROS. & Co., Limited
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Running Water for Country Homes



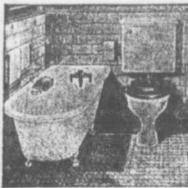
THIS electrically driven pump and storage tank will supply every building on your property with running water at good pressure.

Empire Systems are neat, compact

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many thousands of people. Substitution of at least one pound of other cereals for one pound of wheat flour weekly, per person would save a very large quantity of wheat for export. It would still be far short of meeting the normal consumption requirements of the allies, but it would save the situation.

AMUSEMENTS

Conducted by MARION DALLAS

Around the Family Fireside

WITH the advent of the long autumn and winter evenings comes the golden opportunity of re-uniting and re-linking the family chain which has been more or less broken during the busy hours of summer's outdoor life. A great man uttered a great truth when he said: "Our homes ought to be the most charming places on earth." By careful thought and industry a family can do much, without great expense, to render the belongings of the home bright and attractive. Likewise the associations of the farm home, instead of being dull and monotonous, may be rendered, with equal thought, bright and lively. Certainly one of the most simple means of making "home" charming and surrounding it with delightful association is to cultivate the art of simple family amusement.

Word Building Game.

The teachers call "Word Building" busy work. It is a quiet game and well adapted to the family circle. Each person has a paper and pencil and at the top of each sheet of paper is written a word or motto, from which the letters for the "word building" are to be obtained. No letter is to be used twice, unless it is so used in the motto. The game is to see who shall make the longest list of words from the motto. Suppose the motto should be "Memories of Home"—begin and write all the words beginning with M, such as mother, etc. Then words with "e" and so on until you will have hundreds of words. This form of recreation might be invaluable as an aid to spelling.

Outlines.

This is a good family game. Each player puts five dots anywhere on a piece of paper. All the slips are then put into the middle of the table, the players shut their eyes and draw one out. The players must sketch some figure, view or object, which touches these five points. This is good drawing practice as well as being a game.

Game of Uncompleted Questions.

This is another game for the home circle. Some one begins a piece of prose or poetry and recites a few lines, some one else takes it up and continues until he forgets or misquotes, then another, and so on. If familiar selections like "Gray's Elegy" or "The Charge of the Light Brigade" are used it will surprise many of the children to find how much of these poems mother and father remember from their school days. One or two new poems might be memorized during the winter evenings, in this way. For instance, "The Rhymes of a Red Cross Man" by Robert Service, would give a real grasp of the war, as well as be entertaining.

Interesting Puzzles.

(1) The Nine Digits.

Place the nine digits (that is, the numbers under 10) in three rows, in such a way that adding those together either up or down, across or from corner to corner, they shall always make fifteen.

(2) The Apple Woman.

An old woman selling apples had some at one cent each, some at two

cents and a few at a nickel a piece. A wag came along and asked her a dollar and said, I want a dollar's worth of your apples. Ten times as many one cent ones as two cent ones, and the balance in nickel apples. The old woman took the money as though she thought and quickly filled his order. How did she do it?

(3) Who am I?

I am the longest, yet I am the shortest thing in the world. I am the swiftest and yet the slowest. I am the least valued yet the more regretted. I am as old as creation and still am born anew every second. Without me nothing can be done. I devour everything, however small. I give life and spirits to every object, however great?

(4) Magical Addition.

Take the figures one to nine and add them together so that they make 100?

Rising With Arms Crossed.

Small boy's "stunt." Cross your arms on your body, lie down on your back and then get up again without using either elbows or hands in doing so.

Yours For the Picking.

Another "stunt." Get some member of the family to stand with his back against the wall and his heels also

If I Were Food Controller

MANLY and varied are the expressions of opinion and criticisms regarding the way in which the food question in Canada is being handled by our Food Controller. Could we not have an interesting discussion among our farmers at this question of food control, for, after all, is not the woman in the home, to a large extent, the food controller? The heading under which this question could be discussed might be "If I Were Food Controller." As food controller would it be your aim to secure for each man, woman and child in Canada a sufficient supply of nourishing food with a minimum of waste, in order that the surplus for export be as large as possible? Or would you prefer to allow the law of supply and demand to rule the food question? There are two suggestions but it will be left to contributors to deal with the subject in their own way.

We will be glad to have a number of Our Women Folk take part in this discussion and for the best contribution received, we will extend the subscription of the writer for one year. For all other contributions published, subscriptions will be extended for six months. Let us hear from you not later than Nov. 10th.

touching it. On the floor in front of him, place a five cent piece about a foot away from his toes. Then tell him to stoop and pick up the nickel without moving his heels away from the wall. If he can pick it up, he earns the nickel.

Tongue Twisters. (Say these quickly).

Hobbs meets Snobs and Nobbs.
Hobbs meets Snobs and Nobbs.
Hobbs nob with Snobs and nob Nobbs Job. "This," says Nobbs "is the worst for Hobbs, for he loses his job," and poor Snobs nods.

The sea ceaseth and it sufficeth us.
Betty bit a bit of butter, bitter bit, but a better bit of butter Betty bit.
Robert Rowley rolled a round roll, round a round roll, Robert Rowley rolled around. Where rolled the round roll, Robert Rowley rolled around.

NOTE.—The answers to the puzzles will appear in next week's issue.

COOK'S CORNER

Tasty War Time Substitutes

At a demonstration on war breads, which was held in Peterboro recently, the demonstrator told us that the term "war breads" means any kind of mixture by which we can save wheat flour and does not necessarily mean bread alone. In plain cakes such as gingers, biscuits, muffins, etc., we can substitute a little of other kinds of flour. The kinds of substitutes which may be used are rye flour or rye meal, corn meal, rolled oats or oat meal, soy bean flour, whole wheat, etc. It is a good plan to use the kind which is easiest to get in one's neighborhood.

"The simplest way for anyone who has been making their own bread," said the demonstrator, "is to make bread in the ordinary way, substituting one-quarter of the white flour with some other kind. Breads in which substitute flours are used usually require a little slower fire and longer baking period. If desirous of making bread, buns or rolls quickly, say in about two hours, it is necessary to use Fleischman's yeast, which acts more quickly than other kinds. Put yeast to soak in a little warm water before adding to bread mixture. By adding sugar to yeast it will also help to hasten it. Some people have trouble with bread souring and the cause of sour bread is from over-ripening. Watching bread carefully in order that it may not over-ripen is therefore an important point."

Several recipes for making war breads and cakes are given. Rolled oats bread was one of the first. It was also pointed out that rolled oats is one of the cheapest foods we can use nowadays. The recipe given was the same as the one which appeared in our issue of Sept. 20, with the addition that for a two-hour bread is desired, one yeast instead of one-half, should be used.

A rye bread recipe was given as follows: One cup scalded milk; one cup boiling water; two tablespoons shortening; one-third cup brown sugar; one and one-half teaspoons salt; one-quarter yeast cake dissolved in one-quarter cup lukewarm water; three cups white flour; rye flour or meal to make stiff dough. An entire wheat bread recipe was given, which was the same as we published in our Sept. 20th issue. Water may be substituted for the milk in this recipe and corn syrup instead of molasses. In fact the demonstrator favors corn syrup for almost all war breads and cakes.

A corn meal cake was made during the demonstration, the recipe of which follows: One cup corn meal; one cup white flour; three level teaspoons baking powder; one teaspoon salt; one-quarter cup corn syrup; two-thirds cup sweet milk; one egg; one tablespoon melted butter. Bake in fairly hot oven.

Rye gams were also made from the following recipe: One and one-half cups rye flour or meal; one and one-half cups white flour; four teaspoons baking powder; one teaspoon salt; syrup; one and one-quarter cups sweet milk (part water may be used); three tablespoons melted butter and one egg. This is a good recipe also for bread gams. Bake about 15 minutes in hot oven.

Boston brown bread, which is more along the cake species than bread, was another recipe given: One cup rye meal; one cup corn meal; one cup Graham flour; three-quarters of a tablespoon soda; one teaspoon salt; three-quarters cup of dark molasses; two cups sour milk; one and three-quarters cups sweet milk or water. This is steamed for three and a half hours. A one-pound baking powder

can make an attractively shaped loaf and should not be filled more than two-thirds full.

The demonstrator advised all present to write the Ontario Department of Agriculture for Bulletin 254 on "War Breads," which gives many other ways of making breads and plain cakes.

Becoming Colors

HOW many of us are satisfied in our own mind as to what colors we can wear most becomingly? Sometimes we hear someone say, "Oh, I never wear green," or "I look simply dreadful in gray," or some such expression. In some cases they may be right, but we sometimes imagine we cannot wear certain colors, whereas if we would really try them out, we might be surprised to find that they could be worn becomingly. Here is an idea for trying out the colors which suit us best.

Buy an assortment of tissue paper in various colors and shades, such as the department and stationery stores sell. The sheets are of good size and well adapted to this purpose. Stand in a strong light before a good mirror and lay one sheet at a time over the bare shoulders, crushing to make it fit closely around the neck. Take plenty of time and after the colors have been tested separately, try them in combinations. We will discover that some colors do not suit us at all but that others harmonize quite well with our complexion, the color of our eyes, and hair.

When planning a new dress, and desire something especially becoming, it pays to take some trouble to search for material that will best match the colors which suit us best. Tissue paper samples might be taken along when in search of material or if sending letters of enquiry to dry goods dealers, samples of the tissue paper could be enclosed and if possible, we will likely receive samples that closely match the colors we desire.

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Milk Committee Favors Admitting Margarine as War Measure

(Continued from page 11.) him to get to Ottawa on the opening day, and had he been present at the discussion there would have been at least one dissenting voice to the resolution. Mr. Wilson believes that the committee has taken the wrong course in their efforts for obtaining more food stuffs. "The whole problem of the Department of Agriculture now is greater production," says Mr. Wilson, and he questioned, during a short talk to the committee upon his arrival, the advisability of endeavoring to increase the production of butter by

Who's Who on the Milk Committee

THE Milk committee, who passed recently a resolution favoring the margarine of the embargo on oleomargarine, is made up of men from the various provinces of Canada who were appointed some weeks ago by Mr. Hanna, Food Controller, to advise him on matters relating to dairying in general. The personnel of the committee is as follows: Mr. B. Tustin, chairman, Chief Food Inspector for Winnipeg, Man. Mr. Wigmore, a Contractor, City Commissioner for St. John, N. B. Dr. Beucher, Medical Health Officer, Montreal. E. H. Stonehouse, farmer, President of the Toronto Milk Producers' Association. W. R. Hamilton, alderman from Vancouver. John Bingham, President of the Ottawa Dairy.

Dr. Mckay, M.H.O. Halifax—absent at the passing of the resolution.

W. A. Wilson, Dairy Commissioner for Saskatchewan, who was not notified of the meeting in time to enable him to be present at the passing of the resolution.

One of the most noticeable features of the committee at the time the resolution was being "railroaded" through was the lack of representation from the dairy interests. Mr. Stonehouse worked hard for the dairymen, but no evidence was presented from dairy representatives mainly for the reason that the dairy interests didn't know very well what was going on. One remarkable feature is that the two big kicks put in against the admission of oleo were made after the resolution had been passed.

The scheme seems to be that the committee when adjourning some weeks ago decided to feel their way with regard to public sentiment and oleo, and apparently they were convinced that oleo was what we need in Canada. In that case representations from the dairymen affected would probably have been in vain anyway for "convince a man against his will," etc. But we think the dairymen might have had a chance to air their opinions before the passing of the resolution rather than after.

bringing in a cheaper artificial product to compete with it.

Wilson at the present time, said Mr. Wilson, had a chance to air their opinions before the passing of the resolution rather than after.

there will be from ten to fifteen per cent reduction in butter production in the western provinces this year. The scarcity of labor and the profit in wheat growing is making for an exodus from dairying. It is only by the greatest efforts that the governments are keeping the farmers interested in dairying and what argument, asks Mr. Wilson, will we have for the greater production of butter now? The situation which will likely result in Western dairying will be a serious one not only for the butter interests, but also for the city milk supply. It will likely be more what, less than what, and from the standpoint of food for children the situation will most likely be aggravated.

Robertson Asks Chance to Protest. Mack Robertson, a creameryman of Belleville, in a brief talk before the committee, voiced the dissatisfaction of the dairymen of his knowledge with the resolution admitting margarine in manufacturing oleo, said Mr. Robertson, you are not producing any new food. You are introducing a cheap fads in a misleading form and selling as butter substitutes. If cheap fads are wanted the consumer can buy lard and the other fats used in margarine still cheaper in their natural state.

Mr. Robertson pointed out the numerous dairy farms for sale, and stated that anything denigrating the dairy interests would be for Canada, for on the dairy cow depends largely the fat supply of a country. Not only do we get our butter and cheese from her, but her milk raises our calves here, and plus "the butter" said he, "is like killing the goose that lays the golden eggs."

As a war measure the admission of oleo may be all right, but Mr. Robertson believes that the "bills" once lifted they will stay up. He said that a chance be given, before the recommendation becomes law, for the dairymen of Canada to express their views.

Committee to Deal With Cost of Milk Production

THE Milk Committee which is at present advising Food Controller Hanna on subjects relating to the control of prices in dairy products, are now working on the costs which enter into the production of milk, so that when the time comes for taking steps to safeguard the interests of either the producer or the consumer, he may save safely.

The basis on which the committee is working is that the producer must have a fair profit, or he will not produce. This is one thing on which the committee is agreed, for even the city dweller is interested in at least having a little cream for his coffee at breakfast. Contrary to the practice with regard to margarine the committee is consulting the milk producers before taking drastic steps.

A number of forms were sent out a couple of weeks ago asking representative dairy farmers a large number of questions regarding factors entering into the cost of production. Considerable data has come in, and they are going farther (this time in the right direction) and have summoned to a meeting of the committee for Oct. 24 a number of those men who will give evidence. These men are as follows: P. Palliser, Calgary; L. E. Townsend, Craik, Sask.; W. J. Cunningham, Winnipeg; J. R. Griffin, Freeman, Ont.; A. F. Lewis, Hiramton, Ont.; M. W. Doherty, Malton, Ont.; J. B. Long, Ottawa; W. P. Stephens, Huntington; N. W. Eveleigh, Sussex, N.B.

Will Conserve Farmer's Interests. The general feeling of the committee seems to be that the dairymen must be given due consideration in any price fixing, so that they may be encouraged to increase the production of milk. The price fixes will

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probably be on a sliding scale basis, so that fluctuations in the feed and labor markets will be followed by changes in the price to be paid for milk. On the other hand the committee seems favorable to a strict control of distributors of milk. The first thing will be to endeavor to prevent the present wastage of labor in the duplication of milk routes. Large distributing centres will probably be arranged for in the different cities and the small dairy will disappear.

October The A T con sary held in trator I rate the charges a factories these 22 patron costs; one costs. The three or f Owing to paid for centive the their milk of Almont a Impres rons are guarded wa for the reason the only pro ing process was polit cul to of magistrat is very str moun in th be made Chief Ins crossing th of having \$100. A he said, a public of fence and out the pr

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.

Patrons Watering Milk

At a meeting of the executive committee of the Eastern Ontario Dairymen's Association held in Toronto recently, Chief Instructor Publow reported that up to date the public prosecutors had laid charges against 39 patrons of cheese factories for watering their milk. Of these 39 cases, 25 have been settled; 22 patrons have been fined \$50 and costs; three have been fined \$30 and costs; one, \$20 and costs; two, \$10 and costs. The costs as a rule amount to three or four dollars.

Owing to the increased price being paid for milk, there is a greater incentive than usual for patrons to water their milk. Secretary T. A. Thompson, of Almonte, said that there is a general impression that a good many patrons are watering their milk in a guarded way, so as to make it difficult for the fraud to be detected. For this reason there was an impression that only the most flagrant cases were being prosecuted. In reply to this it was pointed out that it is often difficult to obtain a conviction before a magistrate, unless the proof of fraud is very strong. The board was unanimous in the feeling that efforts should be made to stamp out this practice. Chief Instructor Publow favored increasing the minimum fine to \$50 and of having a maximum fine as high as \$100. A few fines of this character, he said, would be a warning to the public of the seriousness of this offence and thus would help to stamp out the practice.

Progress in Manitoba

M. R. GIBSON is delighted with the progress that has been made in creamery butter-making this year. Despite the very high cost of labor, and the dearth of feed, the season shows a decided increase over 1916. Up to October 5th a total of 89 carloads of creamery butter had been exported from the province, and the end of the year will see almost one hundred carloads sent out. This compares with a total of 68 carloads for the full twelve months last year. At present this butter is selling at 42 cents per pound at point of production.

The increase in make has been particularly gratifying in a few districts. For instance, five creameries have run all season between Lakes Manitoba and Lake Winnipeg, where prior to this year there was only one creamery. These five factories have all done a nice season's business, and between them close to half a million pounds of high grade and high priced butter will be sold this season. This means the bringing into that part of the country—where the homesteaders have badly needed actual cash—of upwards of \$200,000. And now that so many of the farmers there have the nucleus of a dairy herd, they may be depended upon to increase the size of these herds right along.

In two or three of the older dairy districts this has already been done to such an extent that individual rural creameries will make about half a million pounds of butter each this year. When the industry reaches this stage, the costs of cream gathering and manufacture are reduced pretty well to the minimum.

Condenseries Threaten Live Stock

MILK condensing plants have sprung up all over the country, and most of them have located in the midst of creameries or cheese factories. Naturally there has been confusion and resentment among the farmers, and a lively rivalry is taking place. The operators of condensing plants claim they are paying more for milk to the farmers than is possible for the creameries to pay, and the creameries contend that if the full value for the skim milk is allowed and all the benefits which are derived from skim milk when it is fed to young

stock are taken into consideration, the creameries or cheese factories are paying as much or more than the milk condensing plants.

It is not our purpose to take sides with either of the three, as there are good arguments on either side, but while we argue, the condensing plants are being built, and they seem to be getting a large amount of milk, which is being evaporated and canned for the markets of the world. It is probable condensing plants will flourish for some time as nearly every country is looking to the United States for a supply of canned milk.

Whether or not the condensing

plants will be a benefit to the farmers above the creameries and cheese factories remains to be seen. On the one side there seems to be the greater immediate profit, and on the other side, if the farmers dispose of all their milk they do not have skim milk for their livestock and as a result of this they will raise less live stock and hence will have less manure to keep up the fertility of their land which may eventually reduce the yield of all kinds of crops. All these factors should be taken into consideration by a community of farmers in making their decision.

—Butter, Cheese and Egg Journal.



Exemption Tribunals.

Exemption Boards have been chosen in such a way as to make them absolutely independent and removed from all influence. There are over 1,250 boards throughout the country, each composed of two men, one appointed by the county judge in the district concerned and one selected by a joint committee of Parliament. Being familiar with local conditions where they sit, the members are well-fitted to appreciate such reasons for exemption as are put before them by men called up.

Exemption will be granted to those who can establish that it is in the national interest that they remain in civilian life. This is for the Exemption Board to decide after having received full information in each case.

The grounds on which exemption may be claimed (which are similar to the grounds recognized in Great Britain and the United States) are as follows:—

- (a) That it is expedient in the national interest that the man should, instead of being employed in Military Service, be engaged in other work in which he is habitually engaged.
- (b) That it is expedient in the national interest that the man should, instead of being employed in Military Service, be engaged in other work in which he wishes to be engaged and for which he has special qualifications.
- (c) That it is expedient in the national interest that, instead of being employed in Military Service, he should continue to be educated or trained for any work for which he is then being educated and trained.
- (d) That serious hardship would ensue if the man were placed on active service, owing to his exceptional financial or business obligations or domestic position.
- (e) Ill health or infirmity.
- (f) That he conscientiously objects to the undertaking of combatant service and is prohibited from doing so by tenets and articles of faith, in effect on the sixth day of July, 1917, of any organized religious denomination existing and well recognized in Canada at such date, and to which he in good faith belongs.
- (g) That he should be exempt because disfranchised under the War Time Election Act.

No Claim for Exemption should be put forward unless one or other of these grounds in fact exists, and no loyal citizen should assist in, or allow himself to be made a party to, any Claim for Exemption unless thoroughly satisfied that it is made in good faith.

Exemption may be applied for by the men selected themselves or by their parents, near relatives or employers. Application for exemption must be made on printed forms to be found at every post office, which are to be filled in and left with the postmaster if exemption is desired. The postmaster will forward the form to a Registrar, who will send it to the appropriate Exemption Board. In due time, then, the Applicant will get notice as to when he must present his case before the Board.

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WE OFFER:—
1. Sir Clyde's Pride, born Nov. 25, 1914, dam a 27-lb. cow, whose whole crop this year is 22 lbs. butter in 7 days at 25 months. About half black and white, a beautiful individual. \$200.
2. Sir Clyde Clothide Pontiac, born Jan. 25, 1917, seven-eighths white, from a 19-lb. junior two-year-old grand-daughter of the above-named cow, her dam being a 23-lb. four-year-old and her sire, King Pontiac Arta Canada.

Both these bulls are superb individuals, straight and deep. At above price will be crated, placed on train, guaranteed to please.

We have four calves—some with higher—individual \$200.
We offer half a dozen beautiful Shropshire Ram Lambs, from \$16 to \$20, registered and transferred. They won't last long at this price.

We are offering several fine yearlings sired by K. P. Arta Canada and Woodcrest Sir Clyde. They are of the finest breeding and good individuals, but not quite up to our standard, so you have our reason. Bred to Woodcrest Sir Clyde or our May Echo Sylvia bull and offered at very low prices.

H. LYNN, AVONDALE FARM, BROCKVILLE, ONTARIO.

AN OAK PARK CHAMPION

In announcing a contingent sale of Pure-bred Holsteins, from the foremost herds in Ontario, to be held at Oak Park Stock Farm, Oct. 30th, 1917, the last day of the Provincial Plowing Match, I wish to state that I am continuing to the sale.

Lakeview Dutchland Hengerveld 2nd, No. 16259

Grand champion at the Canadian National Exhibition and the Western Fair, 1916, 1917, and 1st no. 1 in 1918.

He Was Never Defeated in the Show Ring

He is a brother to the Canadian Champion, senior three-year-old, with 44.80 lbs. butter in seven days, and his dam has 27.45 lbs. butter in seven days, an average test of 4.63 per cent. butter fat. This record was made one month after calving and in July and August, and on grass. He is guaranteed in every way. He was born January 17th, 1913, and weighs now 2500 lbs.

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

HIGHLAND LAKE FARMS

Hard sire, AVONDALE PONTIAC ECHO (under lease), a son of MAY ECHO SYLVIA, the world's record cow. Only one other 41-lb. bull in Canada. We have young bulls for sale, whose two nearest dams (both Canadian champions) average as high as 35.52 lbs. butter in seven days; another whose two nearest dams are both 100-lb. cows, and one ready for service from a 41-lb. sire and an 18,000-lb. two-year-old dam.

Send for our "Book of Bulls." A few females for sale. Satisfaction guaranteed.

R. W. E. Burnaby Farm at Step 55 Yonge Street Radial Jefferson, Ont.

RIVERSIDE HOLSTEINS

For Sale, Chosen Young Bulls, sired by King Johann Pontiac Korndyke, a grandson of Pontiac Korndyke, and a brother of Pontiac Lady Korndyke, 54.92 butter in 7 days, 156.22 lbs. 30 days—world's record when made. Also females bred to "King." J. W. RICHARDSON, CALEDONIA, ONT.

VILLA VILW OFFERS FOR SALE 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 22.85-lb. cow that has milked for four years without a dry, and had a calf each year—price \$160. Both sired by the \$2,000 bull. AROGAST BROTHERS, Sebringville, Ont.

KING SEGIS WALKER'S

Oldest daughter with first calf made 456 lbs. milk and 24 lbs. butter; with her second calf, 560 lbs. milk and 23 1/2 lbs. butter. His first granddaughter, through his son, at 3 years 3 months, made 440 lbs. milk and 23 1/2 lbs. butter. Young stock for sale.

A. A. FAREWELL, OSHAWA, ONTARIO.

HOLSTEINS

We have the only two sons in Canada, of the 46-lb. bull Ormsby Jane King—only mature son of the world's most famous cow. One of them for sale, also a 50-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. R. M. HOLTVY, R. R. NO. 4, PORT PERRY, ONT.

Dutchland Colantha Sir Mona

Is the sire of
Lakeview Dutchland Hengerveld 2nd, the bull that won senior champion and grand champion at both Toronto and London, 1916 and 1917, and Lakeview Dutchland Arta, the highest producing senior three-year-old in Canada—54.66 lbs. butter in 7 days with an average test of 4.58 per cent. Also the sire of Lakeview Daley's Mowse Bull, the highest going bull almost fit dam averaged over 23 lbs. butter in 7 days.
MAJOR E. P. OSLER, Prop., Bronte, Ont. A. DAWSON, Mgr.

Market Review and Forecast

TORONTO, Oct. 23.—Sir Thomas White, Minister of Finance, announced the financing of the "exportable surplus of the Canadian wheat crop this year, estimated at \$150,000,000. The amount involved was \$150,000,000. This news has been received with a great deal of satisfaction in Western Canada, where it is regarded as a big step forward in the matter of getting the crop moved.

Recent heavy rains have thoroughly moistened the soil and falling in now general over Ontario. Potatoes are being harvested and the yields are good with a tendency to not in some sections. During the past week, the grain market has been steady but inactive, the hay market has firm and cattle have sold at steady prices.

WHEAT.
The principal source of activity in grain circles here is the light buying of Western wheat. Shipments are being pushed pending the close of the season of navigation and stocks on this side of the lakes are accumulating. Farmers are busy and very little Ontario wheat is available, a few cars being purchased at \$11.10 to \$12.15, most of these purchases being for government account. The action of the Government in establishing a floor price and limiting the profits on flour is being looked upon with interest and there is little buying for the market and there is little selling.

MANITOBA (Wheat)—In store, Fort William, nominal (including 2 1/2 tax); No. 1 northern, \$2.17; No. 2 northern, \$2.17; No. 4 wheat, \$2.10 1/2.

COARSE GRAINS.
Oats are practically the only active feature of the coarse grain market and a few car lots of Ontario oats are coming in at 62c to 65c E. C. Some Western oats are \$20 being offered. Quotations follow:

Manitoba oats—No. 3 C. W., 65c; in store, Fort William, No. 3, 64c; extra No. 1 feed, 64c; No. 1 feed, 63c; American Corn—No. 3 yellow, nominal, Ontario Wheat—New 20-lb. nominal, 62c; 25-lb. nominal, 61c; No. 2, 60c to 62c, nominal; No. 3, 59c to 61c, nominal; No. 4, 58c to 60c, nominal; No. 5, 57c to 59c, nominal; No. 6, 56c to 58c, nominal; No. 7, 55c to 57c, nominal; No. 8, 54c to 56c, nominal; No. 9, 53c to 55c, nominal; No. 10, 52c to 54c, nominal; No. 11, 51c to 53c, nominal; No. 12, 50c to 52c, nominal; No. 13, 49c to 51c, nominal; No. 14, 48c to 50c, nominal; No. 15, 47c to 49c, nominal; No. 16, 46c to 48c, nominal; No. 17, 45c to 47c, nominal; No. 18, 44c to 46c, nominal; No. 19, 43c to 45c, nominal; No. 20, 42c to 44c, nominal; No. 21, 41c to 43c, nominal; No. 22, 40c to 42c, nominal; No. 23, 39c to 41c, nominal; No. 24, 38c to 40c, nominal; No. 25, 37c to 39c, nominal; No. 26, 36c to 38c, nominal; No. 27, 35c to 37c, nominal; No. 28, 34c to 36c, nominal; No. 29, 33c to 35c, nominal; No. 30, 32c to 34c, nominal; No. 31, 31c to 33c, nominal; No. 32, 30c to 32c, nominal; No. 33, 29c to 31c, nominal; No. 34, 28c to 30c, nominal; No. 35, 27c to 29c, nominal; No. 36, 26c to 28c, nominal; No. 37, 25c to 27c, nominal; No. 38, 24c to 26c, nominal; No. 39, 23c to 25c, nominal; No. 40, 22c to 24c, nominal; No. 41, 21c to 23c, nominal; No. 42, 20c to 22c, nominal; No. 43, 19c to 21c, nominal; No. 44, 18c to 20c, nominal; No. 45, 17c to 19c, nominal; No. 46, 16c to 18c, nominal; No. 47, 15c to 17c, nominal; No. 48, 14c to 16c, nominal; No. 49, 13c to 15c, nominal; No. 50, 12c to 14c, nominal; No. 51, 11c to 13c, nominal; No. 52, 10c to 12c, nominal; No. 53, 9c to 11c, nominal; No. 54, 8c to 10c, nominal; No. 55, 7c to 9c, nominal; No. 56, 6c to 8c, nominal; No. 57, 5c to 7c, nominal; No. 58, 4c to 6c, nominal; No. 59, 3c to 5c, nominal; No. 60, 2c to 4c, nominal; No. 61, 1c to 3c, nominal; No. 62, 0c to 2c, nominal; No. 63, 0c to 1c, nominal; No. 64, 0c to 1c, nominal; No. 65, 0c to 1c, nominal; No. 66, 0c to 1c, nominal; No. 67, 0c to 1c, nominal; No. 68, 0c to 1c, nominal; No. 69, 0c to 1c, nominal; No. 70, 0c to 1c, nominal; No. 71, 0c to 1c, nominal; No. 72, 0c to 1c, nominal; No. 73, 0c to 1c, nominal; No. 74, 0c to 1c, nominal; No. 75, 0c to 1c, nominal; No. 76, 0c to 1c, nominal; No. 77, 0c to 1c, nominal; No. 78, 0c to 1c, nominal; No. 79, 0c to 1c, nominal; No. 80, 0c to 1c, nominal; No. 81, 0c to 1c, nominal; No. 82, 0c to 1c, nominal; No. 83, 0c to 1c, nominal; No. 84, 0c to 1c, nominal; No. 85, 0c to 1c, nominal; No. 86, 0c to 1c, nominal; No. 87, 0c to 1c, nominal; No. 88, 0c to 1c, nominal; No. 89, 0c to 1c, nominal; No. 90, 0c to 1c, nominal; No. 91, 0c to 1c, nominal; No. 92, 0c to 1c, nominal; No. 93, 0c to 1c, nominal; No. 94, 0c to 1c, nominal; No. 95, 0c to 1c, nominal; No. 96, 0c to 1c, nominal; No. 97, 0c to 1c, nominal; No. 98, 0c to 1c, nominal; No. 99, 0c to 1c, nominal; No. 100, 0c to 1c, nominal.

MILL FEEDS.
There is an active demand for mill feeds with prices unseasoned. Shorts are here quoted \$42; bran, \$35; middlings, \$45 to \$48; good feed No. 1, per bag, \$45; at Montreal, bran is quoted \$35; shorts, \$40 to \$42; middlings, \$45 to \$50 and meal, \$55 to \$60.

HAY AND STRAW.
The hay market is firm with some enquiry from the United States. It is expected that quotations will go higher. No. 1 hay on track Toronto is quoted \$12.50 to \$13.50; No. 2 hay, \$11.50 to \$12.50; No. 3 hay, \$10.50 to \$11.50; No. 4 hay, \$9.50 to \$10.50; No. 5 hay, \$8.50 to \$9.50; No. 6 hay, \$7.50 to \$8.50; No. 7 hay, \$6.50 to \$7.50; No. 8 hay, \$5.50 to \$6.50; No. 9 hay, \$4.50 to \$5.50; No. 10 hay, \$3.50 to \$4.50; No. 11 hay, \$2.50 to \$3.50; No. 12 hay, \$1.50 to \$2.50; No. 13 hay, \$0.50 to \$1.50; No. 14 hay, \$0.50 to \$1.50; No. 15 hay, \$0.50 to \$1.50; No. 16 hay, \$0.50 to \$1.50; No. 17 hay, \$0.50 to \$1.50; No. 18 hay, \$0.50 to \$1.50; No. 19 hay, \$0.50 to \$1.50; No. 20 hay, \$0.50 to \$1.50; No. 21 hay, \$0.50 to \$1.50; No. 22 hay, \$0.50 to \$1.50; No. 23 hay, \$0.50 to \$1.50; No. 24 hay, \$0.50 to \$1.50; No. 25 hay, \$0.50 to \$1.50; No. 26 hay, \$0.50 to \$1.50; No. 27 hay, \$0.50 to \$1.50; No. 28 hay, \$0.50 to \$1.50; No. 29 hay, \$0.50 to \$1.50; No. 30 hay, \$0.50 to \$1.50; No. 31 hay, \$0.50 to \$1.50; No. 32 hay, \$0.50 to \$1.50; No. 33 hay, \$0.50 to \$1.50; No. 34 hay, \$0.50 to \$1.50; No. 35 hay, \$0.50 to \$1.50; No. 36 hay, \$0.50 to \$1.50; No. 37 hay, \$0.50 to \$1.50; No. 38 hay, \$0.50 to \$1.50; No. 39 hay, \$0.50 to \$1.50; No. 40 hay, \$0.50 to \$1.50; No. 41 hay, \$0.50 to \$1.50; No. 42 hay, \$0.50 to \$1.50; No. 43 hay, \$0.50 to \$1.50; No. 44 hay, \$0.50 to \$1.50; No. 45 hay, \$0.50 to \$1.50; No. 46 hay, \$0.50 to \$1.50; No. 47 hay, \$0.50 to \$1.50; No. 48 hay, \$0.50 to \$1.50; No. 49 hay, \$0.50 to \$1.50; No. 50 hay, \$0.50 to \$1.50; No. 51 hay, \$0.50 to \$1.50; No. 52 hay, \$0.50 to \$1.50; No. 53 hay, \$0.50 to \$1.50; No. 54 hay, \$0.50 to \$1.50; No. 55 hay, \$0.50 to \$1.50; No. 56 hay, \$0.50 to \$1.50; No. 57 hay, \$0.50 to \$1.50; No. 58 hay, \$0.50 to \$1.50; No. 59 hay, \$0.50 to \$1.50; No. 60 hay, \$0.50 to \$1.50; No. 61 hay, \$0.50 to \$1.50; No. 62 hay, \$0.50 to \$1.50; No. 63 hay, \$0.50 to \$1.50; No. 64 hay, \$0.50 to \$1.50; No. 65 hay, \$0.50 to \$1.50; No. 66 hay, \$0.50 to \$1.50; No. 67 hay, \$0.50 to \$1.50; No. 68 hay, \$0.50 to \$1.50; No. 69 hay, \$0.50 to \$1.50; No. 70 hay, \$0.50 to \$1.50; No. 71 hay, \$0.50 to \$1.50; No. 72 hay, \$0.50 to \$1.50; No. 73 hay, \$0.50 to \$1.50; No. 74 hay, \$0.50 to \$1.50; No. 75 hay, \$0.50 to \$1.50; No. 76 hay, \$0.50 to \$1.50; No. 77 hay, \$0.50 to \$1.50; No. 78 hay, \$0.50 to \$1.50; No. 79 hay, \$0.50 to \$1.50; No. 80 hay, \$0.50 to \$1.50; No. 81 hay, \$0.50 to \$1.50; No. 82 hay, \$0.50 to \$1.50; No. 83 hay, \$0.50 to \$1.50; No. 84 hay, \$0.50 to \$1.50; No. 85 hay, \$0.50 to \$1.50; No. 86 hay, \$0.50 to \$1.50; No. 87 hay, \$0.50 to \$1.50; No. 88 hay, \$0.50 to \$1.50; No. 89 hay, \$0.50 to \$1.50; No. 90 hay, \$0.50 to \$1.50; No. 91 hay, \$0.50 to \$1.50; No. 92 hay, \$0.50 to \$1.50; No. 93 hay, \$0.50 to \$1.50; No. 94 hay, \$0.50 to \$1.50; No. 95 hay, \$0.50 to \$1.50; No. 96 hay, \$0.50 to \$1.50; No. 97 hay, \$0.50 to \$1.50; No. 98 hay, \$0.50 to \$1.50; No. 99 hay, \$0.50 to \$1.50; No. 100 hay, \$0.50 to \$1.50.

POTATOES AND BEANS.
Just what the price will be when the main potato crop comes on the market, a matter of conjecture. At Montreal, there is an active demand for potatoes, stimulated by many enquiries from the

United States, and Green Mountains have been quoted at \$2.15 a bag in car lots. At Toronto the price of potatoes is \$1.50 a bag, wholesale, and supplies are not long. Apparently the investigation of the Boston market has convinced the trade that it would be inadvisable to force the price of potatoes down to \$1.25 retail.

Foreign, hand picked beans are quoted at \$1.50 a bushel here.

EGGS AND POULTRY.
The egg market hinges on the export situation. The demand for export eggs is strong, but the effect of this demand on the market is nullified by the absence of ocean space. Eggs are now retailing in Great Britain and Canadian eggs have bid up to 52c for British importers have great space to be found, this week materially strengthened on the market. Receipts have fallen off rapidly of late, but the price is still firm at 42c to 44c at country points. At Montreal fresh eggs are quoted to the trade at 42c to 44c.

Receipts of poultry have increased rapidly during the past week. The buying price delivered to Toronto is as follows:
Chickens, spring 25c to 26c to 27c
Hens, under 4 lbs. 17c to 18c to 19c
Hens, over 4 lbs. 15c to 16c to 17c
Ducklings 17c to 18c to 19c
Turkeys 17c to 18c to 19c

DAIRY PRODUCTS.
Apparently the make of butter and cheese in Canada this year will not be as great as last year. Since May let the receipts at Montreal show a decrease of 131,383 packages as compared with the corresponding period a year ago. A very firm market is expected. The butter market at that point due to limited export and a keen demand from both local and outside buyers. Pastured creamery has sold up to 46c to 46 1/2c at Montreal, 45c to 46c at country points, 45c to 46c at country points.

Montreal reports a decrease of 276,438 boxes of cheese and dairy milk fat, compared with the corresponding period a year ago. Prices at Montreal are practically the same as those of previous weeks. Ap-

GLAZED SASH 65c

BUY NOW 65c AT OLD PRICES
No. 1 clear white pine already glazed. Specially low price for immediate shipment; safely packed. Over sixty sizes and styles, and celler sash, also storm sash. We sell direct. Builders catalogue free. THE HALDAY CORPORATION LTD., Factory Districts Hamilton, Canada

WANTED

Crazy-fed chickens (good size), bled and picked clean to the wing tips.
LARGE FOWL ALIVE
Write for our price list.
713 Spadina Ave., Toronto, Ont.

Choice Yorkshire Hogs For Sale, at Right Prices

Born and sows for sale, 13 acre from suckers up, from best prize-winning strains. Also T. Kinghouse, Emboden, Africa, White and Black, Chester, Geese, Mammoth Bronze and White Holland Turkeys. See winings at Toronto Exhibition. 200 White Leghorn Cockerels—Barro's 282-egg strain, at \$2 each.

T. A. KING MILTON, ONTARIO.

HOLSTEINS

We are offering some young, strong cows of good type and breeding at right prices. Also some young bulls from tested dams, and whose individuality must be seen to be appreciated.

H. W. PARKINSON

Haldimand Co., R.R. NO. 6, Hagersville, Ont.

THE O'REILLY 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, Harwood.

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'REILLY High Lawn Farm, R.R. 9, PETERBORO, ONT.

parently there is a rapid falling off in the make.

St. Hyacinthe, Que., Oct. 13.—550 packages butter, six factories sold at 45½c. Cheese at 21¼c.

Cornwall, Que., Oct. 13.—282 packages butter, six factories, sold at 45½c. One factory unused.

Bellefleur, Oct. 13.—415 boxes white offered, \$10 sold at 21½c, balance at 21 5/16c.

Cornwall, Ont., Oct. 12.—1,328 white and 194 colored sold at 21¼c. At this date last year 1,824 sold at 21¼c.

Kingston, Oct. 13.—At the Cheese Board meeting to-day 423 were offered and sold at 21 5/16c.

Campbellford, Oct. 13.—At the Cheese Board to-day the offerings were 480 white. All sold at 21¼c.

LIVE STOCK.

The outstanding feature of last week's market was the increase of 2,763 head of cattle over the previous seven-day period, and the 6,000 head on sale on the opening day being the largest offering at the Union Stock Yards in five years. As would be expected with such a large number of cattle available, trade was inclined to be slow. Towards the end of the week there was a decided improvement in demand and the market closed firm. The highest figure paid was \$10 per cwt. for a lot of heavy steers around 1,200 lbs. Good butcher steers and heifers sold at from \$10 to \$10.50 per cwt. A demand for butcher cows held their share of cattle firm, some choice cows selling from \$25 to \$32.50. Milkers and springers were fairly good, bringing prices from \$10 to \$12.50.

The hog market at the close of the week showed a decrease in the prices paid over the previous week. Closing prices were \$17.75 to \$18 for hogs fed and watered, as compared with \$18.75 the previous week.

Prices on spring lambs were easier, \$16 to \$18.50 being paid. Sheep brought from \$5.50 to \$13. Choice veal sold at from \$14 to \$15.50.

Choice export steers	.....\$11.50 to \$13.25
Butcher's choice handy	.....10.25 to 11.50
do good	.....8.00 to 9.75
do medium	.....8.00 to 8.50
do common	.....7.25 to 8.50
Butcher's bulls, choice	.....8.25 to 9.25
do good	.....7.50 to 8.25
do medium	.....6.25 to 7.25
Butcher's choice cows	.....8.00 to 8.50
do good	.....7.00 to 7.50
do medium	.....6.50 to 7.25
Feeders	.....8.00 to 8.50
Stockers, good	.....7.25 to 8.50
do medium	.....6.75 to 7.25
Canners	.....5.25 to 5.75
Milkers, good to choice	.....\$9.00 to 12.00
do com. and medium	.....6.00 to 8.00
Cows, vial, choice	.....10.00 to 15.00
do medium	.....6.00 to 8.50
do common	.....4.00 to 7.00
do heavy fat	.....8.00 to 10.50
Spring lambs, cut	.....16.25 to 16.50
Sheep, ewes, light	.....8.50 to 12.00
do heavy and bucks	.....7.50 to 9.25
do culled	.....4.00 to 5.50
Hogs, fed and watered	.....17.75 to 18.00
do off ears	.....15.00 to 18.25
do f.o.b.	.....16.75 to 17.00
Less \$1 to \$3 on light or thin hogs; less \$1 to \$1.50 on sows; less \$4 on stags; less \$5c to \$1 on heavy	

Postal Card Reports

Correspondence invited.

CARLETON, ONT.

HELENA HAY, Oct. 8.—Most of the grain has been threshed and grain has turned out well. The clover has all been filled, the corn being an average crop. Potatoes are better than last year, but in some cases a very poor crop. The root crop is very poor owing to the very dry weather. The beans seem to be a better crop than last year, having ripened before the frost did any damage.—A.D.

HASTINGS CO., ONT.

TWINEY, Oct. 13.—Most of our farmers are busy just now filling their silos, several of which have been erected this season. Corn is not a heavy crop but is going into the silo in very good condition. Our farmers have recently organized a branch of the United Farmers of Ontario, and intend buying and selling cooperatively. To date they have received a shipment of fruit and shipped three shipments of hops and are well pleased with the experiment. Most of the farmers have joined the Association and are quite enthusiastic regarding its prospects.—H.S.T.

SALE DATES.

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

Mr. H. Bollart, at Maple Grove Stock Farm, R. R. No. 1, Tavistock, Ont., is announcing the November 24th as the date of his complete sale of pure bred and grade Holsteins, farm stock and implements. Breeders make note of the date.

The 4th commencement sale of the Southern Counties Ayrshire Breeders' Club will be held at Woodstock, Ont., on Monday, December 10th, 1917. Mr. John McKee, Norwich, Ont., is Secretary of the Club.

A commencement sale of 40 head of pure bred Holsteins will be held at Oak Park Stock Farm, R.R. No. 4, Paris, Ont., on October 26th, at 1 p.m. This is a sale of the Braut County Feeders, N. Y. Paper, St. George, Ont., is Secretary.

T. F. Armstrong will hold an auction of Holstein cattle at Tillsonburg, Ont., on November 27th, 1917.

On December 11th, 1917, the Niagara Peninsula Holstein-Friesian Club will hold a commencement sale of 60 head of pure bred Holsteins, at Welland, Ont. Mr. W. L. Honek, Black Creek, is the Secretary.

AUCTION SALE
— OF —
Pure Bred Stock

Under instructions from the Minister of Agriculture, there will be held at the

Ontario Agricultural College
Guelph, Ontario

— ON —

THURSDAY, NOVEMBER 1st, 1917

A Public Sale of surplus Pure-bred Stock belonging to the Ontario Government, and comprising Shorthorn (beef and dairy), Holstein, Jersey and Ayrshire cattle; Yorkshire and Berkshire swine.

For catalogues apply to

A. LEITCH, Ontario Agricultural College, Guelph, Ont.

34th ANNUAL
Ontario Provincial Winter Fair

Guelph

November 30th to December 6th, 1917

ENTRIES CLOSE NOVEMBER 14TH

W. W. Ballantyne, President
STRATFORD, ONT.

R. W. Wade, Secretary
Parliament Bldg., TORO: NT, ONT

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 rams, 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**

INGLEWOOD AYRSHIRES & FRIESIAN SWINE
One young bull fit for service. Three bull calves from cows with large official records. All are sired by a son of the Canadian champion two-year-old milch cow.
WILSON McPHERSON & SONS ST. ANN'S, ONTARIO

LAKESIDE AYRSHIRES
A choice selection of young bulls for sale from Record of Performance dams, imported and Canadian bred. Sires: Auchenbrain Sea Foam (Imp.), 2178; a son of many times grand champion Fairbairn Mains Triumph (Imp.), 4137; a son of the noted Hobland Perfect Piece. Write for catalogue.
Proprietors: **GEO. H. MONTGOMERY** Dominion Express Bldg., Montreal. Manager: **D. McARTHUR**, Phillipsburg, Que.

SPRINGBANK AYRSHIRES
Bulls from one month to twenty months old for sale, and a few heifer calves. All are bred to color and type and from I. O. F. dams. If you need a well bred bull or heifer write at once.
A. S. TURNER & SON
Ryckman's Corners, Ontario

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.

Every Farm should have an Ayrshire

MORE MILK MORE BUTTER MORE MONEY

World-famous as the economical producer among dairy cattle.

WRITE W.F. STEPHEN, Secretary
CANADIAN AYRSHIRE BREEDERS' ASSN.
BOX 608—HUNTINGDON, QUE.



DISPERSION SALE

21 Head OF 21 Head

PURE BRED HOLSTEINS

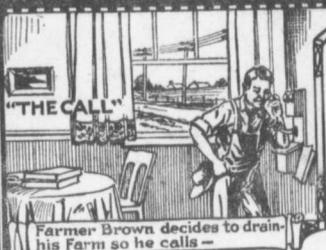
FROM
Big Creek Stock Farm

Nov. 6, 1917 at 1 P.M.

This is an excellent opportunity for admirers of the black and whites to secure some good foundation stock. Make a point of being with us on Nov. 6. You will not regret it. Write for catalogue to

W. J. THOMPSON, R.R.1, Port Rowan, Ont.

Ask Your District Representative for Information—



Farmer Brown decides to drain his Farm so he calls—

Always read



his District Representative who promises to make a drainage Survey at once

Your District Representative Wants to Work With You

That is his mission and his desire. A graduate of the Ontario Agricultural College, he is familiar with the science, and having been a practical farmer, he understands the practice of farming. He is the connecting link between the farm and the various branches and institutions of the Ontario Department of Agriculture. He is the Practical hired man of the community, and he may save you many dollars. It costs nothing to give him a trial.

Forty-seven District Representatives in the Province of Ontario

freely offer their services to every farmer in their respective counties along the various lines listed below. **THEY ARE ALWAYS READY.** Write each at his office, call upon him personally, or telephone him. He has an automobile and can reach you quickly—but they are served first who call first.

Bringing Dollars to Your Farm

RIGHT IN YOUR FIELDS the representative will work. He will survey your lands for drainage, give information and practical demonstration regarding the control of blight and grain smut, the formalin treatment for grain smut, the control by spraying of mustard, the identification and control of insects and fungus diseases affecting field crops and orchards, the practical value of commercial fertilizers, the most approved methods of cultivating, pruning, spraying and general care of orchards. **HE WILL, IN FACT, SECURE FOR YOU THE INFORMATION YOU DESIRE CONCERNING ANY METHOD, QUESTION OR PROBLEM RELATING TO FARMING IF IT IS TO BE OBTAINED—and he will do it free of charge.**

ORGANIZING THE COUNTY is part of his work. If you believe a farmers' club, fruit-growers' association, ploughing match, co-operative egg circle or co-operative association of goods or produce, breeders' club, local fall fair, standing field crop competition, Board of Agriculture or any other organized body is required in your community, write your District Representative about it. He will assist you to put the organization upon a firm footing.

HAS THE LABOR SHORTAGE prevented you from attending an Agricultural College Short Course? Then see your Representative. He will bring the college to your community. He will organize a short course in stock judging or seed judging and in scientific, yet practical, agricultural sciences or domestic sciences which all may attend. **YOU MAY RECEIVE THE BENEFITS OF A COLLEGE SHORT COURSE, THEREBY, WITHOUT LEAVING YOUR TOWNSHIP.**

IS SPECIAL INFORMATION desired in your community upon any particular phase of livestock raising, fruit growing or farming? If so, your Representative will arrange for public lectures to be given in your community on any subject of importance to the community, in fact, will be discussed. Write your District Representative about it.

ARE HIBED MEN SCARCE? Your District Representative can help you there, too. He is an agent of the Ontario Labor Bureau and can, perhaps, put you in touch with the very man you are looking for. Ask him about it now—get your order in early.

Young Farmers Today—Leaders Tomorrow

RURAL DEPOPULATION BEGINS in the wrong attitude of mind in the child. The rural school fairs conducted by the District Representatives are organized to correct such an attitude. They give the child a new point of interest and a greater enthusiasm for the farm and farm life. Incidentally they serve to introduce the best varieties of grain and in the community. The school fair day has also become the big picnic day of the township. Write your Representative for full particulars.

YOUTH IS AMBITIOUS. The young man and the young woman naturally wishes to learn, to discover new facts, and to practice them in a way that will command attention and respect. Many, unfortunately, have not the time to attend the O. A. College or the Macdonald Institute at their chance. Courses in agricultural science of from four to six weeks are organized every year in each county where a representative is stationed, which all young men in the district are invited to attend. Free of charge. Similar courses in domestic science are being provided for young women. Every young per-

son in these 47 counties and districts should make full enquiries NOW regarding these valuable courses to be held this winter when work at home is less pressing.

YOUNG FARMERS will soon be our agricultural leaders—for soon they'll be old farmers. To enable them to help themselves most efficiently an organization for them has been provided. Each year the students of the short courses—girls and boys—are organized into definite societies to help themselves socially, educationally and financially. Watch this movement. Our Ontario Junior Farmers' Improvement Association is exerting an ever increasing influence in the Province.

BUT APPLICATION OF KNOWLEDGE is the true test of educational efficiency, urge some. And it is by its application that the knowledge gained at short courses stands the test. Every year these young men take part in profit competitions in which the principles taught at the courses are tried out in practice. Grains in each county compete for the largest profit in growing an acre of varied crops, in feeding hogs, baby beef, dairy cows and poultry. Home garden contests are also arranged, while a big inter-county livestock judging competition for young farmers is a notable feature. Ask your representative about it.

These Are Some of the Ways, But Not All

in which your District representative desires to co-operate with you. **CALL AT HIS OFFICE.** It is conveniently located, well furnished and equipped, and has an excellent reading room where you may read the latest bulletins, authoritative text books and the best farm journals. You may hold agricultural organization meetings or others of similar nature upon request and free of charge. Demonstration material there may interest you. Perhaps you may secure a tractor at cost to assist you in your field operations. **YOUR VISIT WILL BE WELCOMED AND IT WILL PAY YOU.** When writing or visiting kindly mention this advertisement and give full information regarding the exact nature of your case. It will ensure prompt attention and an immediate reply.



he makes fast time in his Car with which every Office is equipped

Ontario Department of Agriculture

Parliament Buildings
TORONTO

Sir Wm. H. Hearst
Minister of Agriculture

Dr. G. C. Creelman
Commissioner of Agriculture



So the survey is made at no cost to Farmer Brown and every one well satisfied

Call at His Office and get acquainted