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Toronto, Ont., July 19, 1917

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CANADA



FARM CHATS

H. Percy Blanchard, Hants Co., N.S.

Little Dorrit.

H. Percy Blanchard, Hants Co., N.S.

LITTLE Dorrit is a child of mystery, where in the dawn of his history. One Sunday evening, to be exact, the eighth day of April last, the sheep were out to the brook for the afternoon. Next morning, going up to the barn, I found a fine lamb, not a day old, but dead. His unnatural mother had simply deserted it, unconcerned; gone into the barn, and left the little thing to die.

Next Wednesday morning, when I went into the barn, I found the small, lost little lamb I ever saw. It had just arrived, and bleated mournfully, but its mother, somewhere close by, gave it not even a glance. It was so weak and small it could not stand. About an hour later, I saw a sheep, No. 207, that seemed about to lamb, so I put her in a pen by herself, and in a short time she had a nice ewe lamb. Then I thought that perhaps the wee lamb was hers also, and put it in with her, but all the little thing got was shoves and butts. Its mother was somewhere, so I went over all the other ewes in the waiting list, and found just one that had milk in her udder, No. 231, the "Climber." She got her name because she always liked to climb to the top of the hay-rick to feed, rather than pull the hay through the slats. So I put the "Climber" and the wee lamb in a spare pen. I had to hold the sheep down on her side and let the lamb suck. Its underpinning was shaky, but its vacuum was great. I named the wee lamb Tiny Tim, but to this, Eleanor demurred. Now, Eleanor has the main oversight of the nomenclature of our flocks and herds. She names the cows, the lambs, and the colts. There was Aznes and Shiny-Boss, Shaky-Shanks, and Beauty. "Tiny Tim," she objected, was a boy's name, and the wee lamb was a lady lamb. So we compromised on "Little Dorrit."

I have always had poor success with bottle fed lambs. They would get thin and weak, and then their stomachs would get upset, and that was the end of them. Everyone said not to feed the milk straight. Put water in it; hot water. They explained that cow's milk was too strong. Some said to add a little molasses, as a physic. Another warned against molasses, but advised brown sugar. One old Irish sergeant told me how they used to feed buttermilk to young calves, by putting baking soda in it. His argument was that the soda counteracted the acid in the buttermilk, and that soda in the lamb's milk would prevent the milk from souring in the lamb's stomach. But now that I had this orphan, "Little Dorrit," on my hands, feeding became a live question. No. 231 was not even a good step-mother, and to-day I charge her with heartlessly deserting her own lamb on that Sunday night aforementioned, with the result that it perished. Now, five pounds of cheese's milk makes a pound of cheese, (ugh! I have smelt sheep's cheese), and it has much more butter fat than cow's milk. I argued then that cow's milk was not too rich, but too poor. But cow's milk with "cheeses" quicker in the stomach than sheep's milk. So, with a bottle that held about a cupful, I compromised on orthodoxy, and allowed a scant inch of water. (Instead of half-an-inch) and the rest I filled up either with strippings or clear milk, plus a turn or two on the separator of cream. The logical deduction was to add cream to reduce the toughness of the milk curd in the lamb's tummy.

And Little Dorrit began to grow.

She got steady on her pins. When on her fortnight birthday I elapsed off the superfluity of her tail, (you know Little Bo Peep's sheep left their tails behind them) she seemed quite chipper over it. When I added her ear tag, she strutted around with it as an ornament, proud of the fact that she was No. 265. And now she trails round after me like a dog. In fact, when I go after the milk pail she follows me into the kitchen. So much for a daily bottle of cream and a quiet country life.

Does the Car Pay?

D. W. Inglis, Grenville Co., Ont.

THE success or failure of any business depends very largely upon good management and efficiency. Now, when reliable help is so scarce, it pays the farmer to be as efficient as he can. The car assists him in getting his produce to market. With a trailer he can take his cream or milk to the station in a short time and thus get it to its destination in good condition and secure the highest price for it. Further, he can take fruit and other perishable produce to the market quickly. With a horse it would be much harder and besides he would lose a great deal more valuable time which he might be at home doing other necessary work. He would either have to keep a driving horse or else have the horse away from work on the farm. In the winter any of the horses could do the driving, as they are not very busy, but it is different in summer.

In the rush seasons, if anything is broken on the implements, he can go for repairs and be back in a little while. With a horse it might be half a day or more before he could get the crop waiting to be attended to. It has often happened that a car has made a considerable saving in this way.

In buying or dealing he can go in his car and see his intended purchase and be back in half the time that he could with a horse and, besides, his car will cover twice the ground. If the car owner lives at a considerable distance from school and the children are too small or not able to walk so far, the farmer's wife can take them and be back in a short while, for she is busy too. She would not have to hitch up the horse, and the car would be practically safe, whereas many horses are not.

The car saves the farmer's time and, on most farms, time is valuable. The car costs only when it is running and that not excessively while, with proper care, it will last for years. A horse must be fed all the year round and, with a shortage of food and the consequent high prices of feed, this is a point the farmer can well afford to consider.

Indirectly, in a way, it further pays for itself in the amusement that it affords. The farmer takes a trip through the neighboring country that he otherwise would not and is able to apply new or different methods on his own place. As he has seen in successful operation on the farms of his neighbors and friends. With a horse he would be less likely to go out and more or less inclined to grow conservative toward the newer methods.

One great objection to the country in the past has been its isolation, its grind, as compared to the city. To-day, the auto and the telephone are fast overcoming this and the young people, and those who are no longer young, are glad of the opportunity of being able to attend a show, a lecture, a meeting or church by means of their auto. After one's day's work a spin on a pleasant evening is very refreshing. Taken all in all, the answer to the question, "Does a car pay?" is an emphatic "Yes."

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FARM AND DAIRY & RURAL HOME



It is the Practical Progressive Idea.

The Recognized Exponent of Dairying in Canada

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

VOL. XXXVI

TORONTO, ONT., JULY 19, 1917

No. 29

Should the Railway Companies Be Allowed An Increase?

Roderick McKenzie, on Behalf of the Canadian Council Against Higher Freight and Passenger Rates

THE railway companies of Canada have asked the Board of Railway Commissioners for a recommendation to the Governor-General-in-Council, for a passage of an Order-in-Council, under the War Measures Act, granting to the applicants a general advance of 15 per cent. in the tariffs of tolls on freight and passenger traffic. The applicants, as a reason for making their application make the plea that the cost of operation of their railways has increased largely within the last year or two, an expression that is common in all business enterprises, but seem to have lost sight of the very large and substantial increase in their earnings in the same period, and make no attempt to show to what ratio of working expenses to gross earnings is very materially reduced.

The statement of the grounds on which the application is made is, "Nothing is more essential to the welfare of Canada, whether considered in its own interest or as a part of the Empire, than that the railways operating within its borders should be in a position to respond immediately and effectively to the fullest demands made upon them, either by the general commerce of the country or in connection with the defence of the realm."

"Every industry, whether engaged in war preparation or in the manufacture of commercial commodities, and every individual in Canada is affected, either directly or indirectly, by the efficiency or inefficiency of transportation facilities, and while at the present time, owing to the scarcity of skilled labor and other causes due to the war, it may not be possible to maintain the transportation service in a condition of highest efficiency, it is an imperative duty on the part of everyone to see that the service is adequately sustained."

Lack of Labor—Not Money.

The implication here seems to be that the present inefficiency of the railway transportation facilities is due to scarcity of skilled labor, and other causes due to the war, and that because of these facts, the railways find it impossible to maintain the transportation service in the highest efficiency.

A prominent railway official in making a presentation before another commission in this building a few days ago, stated, with the greatest emphasis, that the railway which he represented could not possibly, under any circumstances, increase the service this year for want of skilled labor, and the difficulty of securing additional equipment due to the same cause. Now the railways come before this Board with a claim that with the present revenues and rates applicable to their enterprises, it is impossible to adequately sustain their service to make needed betterments,

claiming that it is not men, but more money they need.

Pressure is being brought to bear upon the Government from many sources to reduce the cost of living by arranging the process of distribution of commodities that enter into the living of the people, that the cost would be more equitably distributed, giving the producer a larger share of that which the consumer pays by reducing the undue share that now goes to the speculator or middleman. Here we have the railway companies, the principal agencies in distribution, asking you to recommend to the Government to pass an Order-in-Council authorizing railway companies to add some \$39,000,000 to the cost of living of the people over and above what they now pay. Those who were making representations for a reduction in the cost of living have not so far met with any degree of success, and it remains with you as to whether or not those who are advocating this increase in the cost of living should meet with success.

Why Stunt Primary Industries?

The primary producers of wealth may allege with more force than the railways, and with equal sincerity, that nothing is more essential to the prosecution of the war and to the welfare of

Canada than efficiency of production. Production will not be efficient if it is not duly rewarded, and it may be assumed that in the case of farm industry, where the meagreness of the rewards of capital and labor have already caused an alarming depopulation of the land, this request of the railways, if granted, would make matters worse, as a great part of the proposed burden would fall directly on the primary industries or be shifted upon them in due course. Whatever addition is made in the interest of railways, to the toll of freight traffic, is an added burden on the primary industries. The added burden of manufacturers and commercial interests, by reason of an increase in freight rate, they will pass on to the consumer.

According to press reports, the Canadian Manufacturers' Association gave their consent to the proposed increase. Their attitude is readily understood; they are in the happy position of being able to pass the increased cost on to the consumer of their goods. The producer of farm products and the consumer must, therefore, pay all the costs, and on them will fall the burden of the proposed added cost to the freight tariff.

Cost of Increase per Freight.

Applying an increase of 15 per cent. on the gross earnings of the Canadian railways of \$263,157,157 would involve an additional charge on the Canadian public for freight and passenger traffic of upwards of \$39,000,000—\$5.00 per capita—\$25.00 on every family of five. But that is not all. All those engaged in manufacturing and buying goods to sell again would add the additional cost for freight to the selling price of their goods. It is on that portion of the population who are less able to pay that the burden of the additional tax would fall. Of this amount about 48 per cent., or \$18,698,000, would fall to the lot of the C. P. R.; \$5,132,100 would go to the C. N. R., and \$5,873,000, or 15 per cent., to the G. T. R.

Is this increase justifiable? Is it needed? I submit that it is not. If the C. N. R. and G. T. R. need assistance, it could be provided them in a cheaper way. Is it just to the people of Canada to be taxed \$39,000,000, of which the C. P. R. gets \$18,000,000, based on their earnings of 1916, and would amount to \$21,000,000 based on their earnings of 1917, in order that the C. N. R. could get assistance to the extent of \$5,000,000?

I have before me a table showing the gross earnings, operating expenses and the percentage of operating expenses to gross earnings of the railways of Canada since 1875. It shows for the year ending June 30th, 1916, that the operating expenses took \$68.90 out of every \$100 of the gross earnings, and only in six years, namely, 1897, 1898, 1900, 1902 and 1912 was the ratio of operating expenses to gross earnings less than in the last fiscal year. It is true the operating expense

(Continued on page 8.)



Wisdom on the Land Question

MILLIONS of acres of farm land are being held out of use and other millions of acres are being cultivated on a wasteful and inefficient basis. Land values have risen at an unprecedented rate. They are based not upon what the farm will earn at the present time, but on an expectancy of what it will be worth in the future. The farmer's son or the tenant farmer, with little or no capital, cannot hope to acquire possession of a farm when the price of land is so high that his earnings would not pay the interest on the investment. The result is that land remains idle or in the hands of tenants and thousands of farmer-boys desert the country for the city.

What we need, and need badly, is a programme of taxation which, without throwing additional burdens on the bona fide farmers, will place land now idle within the reach of men of limited means who possess the ambition and the ability to cultivate it.—Carl Vrooman, Assistant Secretary of Agriculture of the United States.

The Size of the Jersey

Are Large Jerseys Even Desirable?

ON the Island of Jersey the dairy cattle breeders seem to be a unit in agreeing that the Jersey is at her best as a small cow. American breeders are not so unanimous, and we find the breeders of United States and Canada divided into two camps, one striving to maintain the Jersey as she is on the Island of Jersey, and the other camp breeding for greater size than is common in the native home of the breed. This much disputed point came up in a conversation which I had with Mr. D. O. Bull, of the firm of Bull & Sons, Brampton, the most extensive Jersey breeders and importers in Canada.

"Many breeders," said Mr. Bull, "have made a great mistake and failure of their endeavors by trying to make the Jersey a big cow, which nature never intended her to be. Just recently I was in the United States, and in our group on the train there were some of the best known Jersey men of the continent. The question came up as to why we have to go back to Jersey to get breeding stuff that really looks breezy, and the answer on which the most of the company agreed, is that too many breeders in America have endeavored to upset the type of the breed and to increase its size. They have tried in a single lifetime of breeding to undo characteristics which are the result of hundreds of years of work by the founders of the breed. Such a course is bound to result disastrously.

"My ideal Jersey cow," concluded Mr. Bull, "is a big little cow, one set near the ground, with a long, well sprung rib, great capacity, great constitution, but not great size, nor any tendency to coariness. This is the animal developed through hundreds of years, and it is in this form that the Jersey is most efficient and most desirable."

Swat the Fly

Head Off the Flytime Drop in Milk Production

THE advent of hot summer weather is usually closely followed by a decrease in the milk flow. This in turn is followed by a decreased milk check. The causes of the falling off in milk production are not difficult to find. The grass becomes parched by our excessively hot summer weather, and does not contain the same succulence as does the fresh grass of the early summer. This, of course, is something that cannot be remedied by the dairyman unless some system of green feeding be resorted to, and this will appreciably increase the labor required in feeding the cows.

Two other causes, however, which act with this to lower the milk production may be more or less controlled. These are the absence of shade in the pasture and the presence of the fly. If cows are pastured where grass is at all scarce on account of dry weather, it follows that the cow must cover more ground to keep up her food supply and consequently her milk supply. This she will not do if shade is not provided from the sun during the hot part of the day. Her vitality will be sapped, and she will not have the energy to forage about for sufficient grass to keep up her normal milk supply.

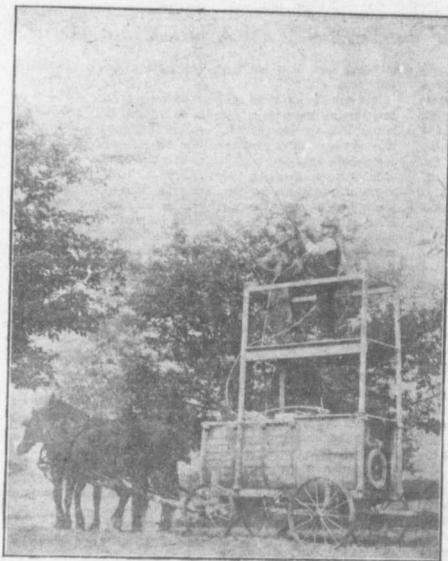
The fly then acts as the last straw. Not only has the milch cow to seek food where the grass is poor and the sun is hot, she must needs spend

considerable energy in keeping up the fight against her arch enemy, the fly. It has been found by observers in Wisconsin that the advent of fly time brings a drop in milk production of from five to 20 per cent. It is easy to see that much of the profits from the dairy herd will quickly leak away under such conditions.

The solution of this problem is this—give the cow shade, at least during the hot part of the day, and swat the fly.

The best time to swat the fly is before. Remove his breeding place. If he wants to perpetuate his species, he will have to move over to your neighbor's barns. Chances are that he will so resent your refusal to supply him with a home that he will cut your name from his list of acquaintances.

The home, sweet home, of the fly is the manure pile. Get rid of this. Take the manure direct



In Any Year the Well Grown Apples Top the Market.

The apple crop will not be a large one this year. The British embargo has been put out of our best market. Under these conditions many will be tempted to neglect their orchards. The best orchardists, however, will continue to spray and to cultivate as in other years. They know that good clean fruit will find a market and that one year's neglect will be reflected in the orchard next year when conditions may be more promising.

to the field. It will pay you in greater fertilizing value, and will result in a decrease in the population of flies about the cow barns or pasture fields.

During the past few years, many fly sprays have been put on the market for the use of dairymen. The chief drawback to these is that none of them give relief for long enough periods and that many of them have a decidedly unpleasant odor, especially if they happen to drip into the milk. These sprays, however, have a place. If cows are being taken into the barns for a certain period each day, they may be sprayed before entering the barn. The barns should then be screened, and if kept scrupulously clean inside, little trouble will be experienced with flies. Fly sprays applied just before milking are a great source of relief, both to the cow during the milking period and to the milker.

The great thing to bear in mind, however, in fighting the fly, is that if his breeding place is destroyed early in the season, it will not be

necessary to worry about fly sprays at a later date. If, therefore, the milk supply is to be kept up this summer, during the hot weather, the dairyman should see that his cows have some shade during the hottest part of the day, and that the flies spend their vacation at some resort as far removed as possible from his pasture.

Clean Milk for the Factory

The Farmer Sets the Price of Cheese

ASIDE altogether from the aesthetic viewpoint the milk for the cheese factory should be pure. The proper care of the milk for this purpose pays the dairyman in actual dollars and cents in higher prices for his milk.

When cheese is sold a certain number of cents per pound is first deducted by the company to pay the expenses of its manufacture.

The remainder goes to pay the dairyman for the milk. Out of his share, the farmer must first deduct enough to pay for feed, labor and interest on capital invested in stock and buildings. If any remains after this, it goes to make his profit, so that the farmer's actual profit is contained in the last cent or fraction of a cent obtained for the pound of cheese. Thus a cut in price of half a cent a pound of cheese for inferior flavor or texture (corresponding to a cut of five cents a cwt. milk), may mean the complete loss of the profit on that pound of cheese.

The only way for the farmer to make dairying a profitable business is by having his cheesemaker turn out a fine grade of cheese—one that will command a high price on the market; and if the cheesemaker is to turn out a high grade of cheese the farmer must supply him with a high grade of milk.

Good milk from the cheesemaker's standpoint is that having a low bacterial content, and an absence of those organisms which produce gassy fermentations. Gassy fermentations in milk are the bane of the cheesemaker's existence. They cause openness in texture, bleaching of color and a marked deterioration in the flavor of the cheese made from such milk. They are responsible for the greater portion of the cuts in prices paid for cheese on the market, and are difficult of control.

These gassy fermentations are caused by the growth in the milk of organisms belonging to either the B. coli or to the B. lactis aerogenes group. Both of these organisms come from manure, and are always associated with filth. If we prevent their entrance into the milk or their growing there after having been admitted, we have made a great stride toward the production of high grade cheese.

Methods of Control.

The flank and udder of the cow should be wiped down with a damp cloth to prevent dust and bits of manure falling into the milk. The milker's hands should be well washed before milking and dry milking should always be practiced. Dusty garments may be covered by a large apron or other garment.

Temperature has an enormous influence on the rate of growth of bacteria in milk. Ice is cheap, and where a good quality of milk is to be produced, it is almost indispensable. Where ice cannot be obtained, however, milk should be cooled to about 50 degrees F. immediately after it is taken from the cow by being placed in running water.

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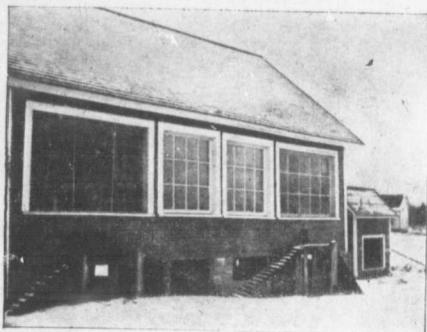
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One of the Hen Houses with Cotton Fronts Open. Note the space underneath. It ensures dryness in winter and a cool, shady spot for the hens in summer.



A Portion of the Dairy Stable at Blue Sea Lake Farm. This stable represents a maximum of comfort at a minimum of cost. Note the big windows and the ventilating chutes.

Blue Sea Lake Dairy Farm

The Country Home of D'Arcy Scott, of the Dominion Railway Commission

D'ARCY SCOTT is well known to Canadians as a member of the Dominion Railway Commission. In that capacity he is rendering his country valuable service. It is not so well known that the Vice-Chairman of the Railway Commission makes farming his hobby, and that the problems of farm management and good scientific farm practice are just as interesting to him as to all the other good farmers of the land. His farm is at Burbidge, a station on the Gatineau branch of the Canadian Pacific Railway, about 70 miles from Ottawa. It consists of about 125 acres and extends from the railway station to the waters of Blue Sea Lake. The location is a beautiful one. The lake is about eight miles long and about two and a half miles wide at its widest point opposite the farm. This is a popular summer resort for the people of Ottawa, and neighbors are many and agreeable. There are about 30 cottages around the lake.

The soil varies from a clay loam to a sandy loam. About 75 acres are cleared. Apart from the garden, orchard, and paddocks for bull, pigs and calves the farm is divided into four fields. Three of the fields are each about 15 acres in size, and the fourth is considerably larger. A four year rotation of crops is the practice at the farm, consisting of grain, hay, pasture, hoe crop. Therefore, unless this practice is varied for a special purpose, there is a field of grain, a field of hay, a field of pasture, and a field of hoe crop each year. An everlasting brook runs through the farm, and the fields are so arranged that access to the brook is provided for the cattle from whichever of the four fields happens to be in pasture in any year. The banks of the brook are nicely shaded, so that during hot summer weather the cattle always have cool, fresh water and shade. The drains have been put in to serve about 10 acres of land that was low.

The farm has been heavily manured. For several years it has been the practice, in addition to the manure from the cattle on the farm, to have manure shipped by the carload from Ottawa. During 1915, from spring until fall, the manure of the stables of the E. B. Eddy Company, Gilmour & Hughson, and the Dominion Transport Company was put upon the farm. Two cars, specially equipped for the hauling of manure, were set aside for that purpose by the C. P. R. The land

has now become so well fertilized that it is expected that the manure from the stock on the farm will be sufficient to keep it in good shape. The soil is easy to cultivate, and is practically free from stones.

French-Canadian Cattle Favored.

As the chief source of revenue from the dairy is selling fresh cream, pure bred Canadian cattle are kept. That breed, sometimes called the Canadian Jersey, is very well suited for the cream business, as Canadian cows give milk of a high percentage of butter fat and will stay in milk for a long period of time. They have been well described as "Canada's Cream Cow." They are very hardy, stand our winter climate well, and are not subject to tuberculosis. The herd have been given the tuberculin test from time to time, and are absolutely free from the disease. The herd at present consists of 14 pure bred females, a pure bred bull, a young bull, and about half a dozen half-breed females. Records of every pound of milk from each cow at each milking are kept, and all pure bred are entered for the Record of Performance at the beginning of each milking period. A number of the cows are now on the Record. Some of the performances of members of the herd are as follows: Florada, 6,412 lbs. of milk; Guestina (in 2-year-old class), 6,821 lbs. of milk and 4.69 per cent butter fat; Maid of Two Mountains (in 2-year-old class), 6,947 lbs. of milk and 4.95 per cent. butter fat. The bull, Alan of Blue Sea Lake, is out of a Record of Performance cow sired by a bull, a son of LeBel, one of the best Record of Performance cows at the Central Experimental Farm at Ottawa. Cattle from the Blue Sea Lake Dairy Farm herd have won a number of prizes at the Toronto and the Ottawa Exhibitions.

Three pure bred Yorkshire sows, and a pure bred Yorkshire boar have been kept on the farm. "It is desirable," says Mr. Scott, "to keep

enough pigs to use up the skim milk, roots, and grain that are available on the farm. Some shorts must be bought each year for pigs, but it is not wise to keep more pigs than the farm can supply food for, after providing for the cattle and horses." At the recent Ottawa Winter Fair pigs from the farm won a prize in the bacon hog class and the dressed carcass class.

Poultry.

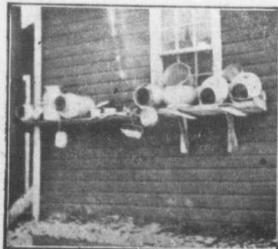
Two hundred and twenty-five Barred Plymouth Rock hens are on the farm. The poultry department has proved quite remunerative. During the winter months, even in normal times, 60c per dozen is the price got for the eggs, and the farm is unable to supply the demand. During the times when eggs were cheapest, a couple of years ago, 30c a dozen was the lowest price that eggs were sold for, and all the eggs produced were disposed of at that price. The cockerels were sold as broilers last summer at a very satisfactory price to a large consumer in Ottawa. For the year ending April 29th, 1915, the sale of eggs amounted to \$607.51, and of poultry to \$231.13. The year 1916 showed quite as high if not higher returns from this department.

A few colonies of Italian bees are kept on the farm. In addition to the value of the honey they supply, the bees are beneficial for cross-pollination purposes with the fruit trees and plants in the garden.

The Garden.

Apart from the orchard, the garden is one and one-third acres in size. It slopes gently to the south. The soil is excellent for the growing of vegetables and small fruits. The garden is under drained with tile drains, laid every 20 feet. It

is also equipped with the Skinner Irrigation System; that is, rows of pipes 44 feet apart and running the length of the garden with holes or nozzles every three feet in the pipes. This system is connected with a pump at a large reservoir of water. By starting the pump, which is operated by a gasoline engine, and turning on taps, the whole or any part of the garden can be watered. This system is very beneficial in dry weather, particularly in (Continued on p. 6.)



Nothing Equals the Sun for Keeping the Cans Sweet.

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—engine smile
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LOOK FOR THE
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Absolutely the one great convincing engine value of the day.

Fairbanks-Morse Quality at a Popular Price

That's the story in a nutshell. This new "Z" Engine puts dependable, efficient, economical "power" within the reach of every farm.

"More Than Rated Power and a Wonder at the Price"
Simple—Light Weight—Substantial—Fuel-proof Construction—Oil Barrel Cylinder—Bore—Leak-proof Compression—Complete with Built-in Magneto. Quick starting even in cold weather. Low first cost—low fuel cost—low maintenance cost. That's the "Z" Engine.

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The Canadian Fairbanks-Morse Co., Limited

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"Z"

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3 H. P. \$118.

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Important Dealer Service

When you buy an engine from your dealer, you deal with a local representative of the manufacturer. He shares their responsibility. He stands behind the engine he sells. He's responsible to you. He's a "guy" you can see that you can talk to. And he's as near you as your telephone says that you want him.

The Surest Way to sell your surplus stock is through the live stock columns of Farm and Dairy. The cost is little and the results certain. Send in your ad.

Patriotism, Production and Profit

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SYDNEY BASIC SLAG

The Canadian farmer is asked to help in winning the war by producing more food stuffs. To get a bumper crop of Wheat the sure way is to apply Sydney Basic Slag. It costs Twenty Dollars per ton, the same as before the war. At this price no man can afford not to use fertilizer. Send us your name and address and our Salesman will call and tell you all about Sydney Basic Slag. If you have a little time to spare perhaps you could distribute a car of twenty tons among your neighbors. You will be reasonably remunerated for your trouble, but, above all, you will be doing your bit in helping to win the war by increasing food production.

THE CROSS FERTILIZER CO. LIMITED

Sydney - Nova Scotia

HORTICULTURE

Orchard and Garden Notes

DO not let a crust form on the garden. Keep the cultivator going.

The Icicle is a good white radish for late spring and early summer use.

A last planting of beans and sweet corn may be made now with a chance of their maturing enough to be used.

The old strawberry bed may be plowed up and rutabagas sown on it, if it is near water and not too much sod in it, coley may be set out. Cabbages are also sometimes put on land of this sort.

Sow some endive and Chinese cabbage for late fall use.

Plant lice thrive at this time of year. Tobacco preparations or soap suds usually will destroy them.

This is the season when the canning machine should be in use frequently for both fruits and vegetables.

Currants and gooseberries may be mulched with clean hay or lawn clippings when the fruit is so far advanced as to make cultivating injurious.

Keep the seed pods of peas and sweet peas if you want them to continue to blossom. When sweet peas begin to blossom give them plenty of water at the roots. Manure, nitrate of soda or other nitrogenous fertilizer may be put on onions and leaf crops if they do not seem to be growing well. About 900 pounds per acre is used.

Swiss chard is prepared for table use in the same manner as beet tops. It is also liked very much by chickens. Cut off a part of the leaves at a time and others quietly grow in their places.

A Test for Cooperation

THE fruit marketing situation offers a great opportunity to put a cooperation this year to the test, on a scale never before attempted in fruit growing. It will recognize that by individual effort the fruit crop could not be marketed. Even in a normal season when the surplus fruit is shipped overseas it has required the large cooperative organizations to prevent one market from becoming glutted with fruit, while the possibilities of another market were not nearly developed. This year if a million barrels of apples more than usual are to be marketed in Canada the strictest tab will have to be kept on the possibilities of every market, and every market will have to be developed to its utmost. This can be done only through cooperative marketing.

The cooperative effort should be extended through picking, grading, packing and marketing. If the market is going to be crowded with apples, it is only right that culls should be disposed of in some other way besides through the marketing. To insure that all high grade apples find a market, let the grading apples be a little more rigorous than is usually the case.

The task which faces cooperative associations in finding in this abnormal year markets for Canada's apple crop is the bleakest which has yet faced them. If the members of these organizations throughout Canada give them their entire support and leave it to the directors in charge, who are in a position to know where the fruit should be marketed, a serious calamity in apple marketing will likely be averted. This is a year when fruit growers for their own interests should at least be in cooperation with the large cooperative organizations a fair chance to show what they can do.—S. R. N. H.

Blue Sea Lake Dairy Farm

(Continued from page 5)

growing strawberries and vegetables requiring a quality of water. In the garden there is an apparatus bed about seven years old, containing about 300 plants; a strawberry bed of over 1,000 plants, a raspberry bed and four rows of bush fruit, consisting of red raspberries, red and white currants, gooseberries, and blackberries.

Over 100 of early apple trees, and a number of plum and cherry trees have been planted, but as they are only a few years old are not yet bearing. These trees have been put in in four different runs that have been arranged for the poultry and enclosed with a poultry fence. The idea being to combine poultry yards and orchard. But, the fences have been so arranged as to permit of the shutting of the hens out of the orchard at any time without interfering with their access to the hen houses.

Buildings.

The farm is well equipped with buildings. The farm house is warmly built with five bedrooms, a living-room, a kitchen, an outer kitchen, and a wood-shed. The barn is an old-fashioned log building. A new roof was put on it a few years ago. The stable is made of brick. It is well lighted and ventilated. Water bowls are in front of the cows, supplied from a 1,000 gallon tank, which is filled with a pump operated by a six horse power gas engine. The liquid manure is drained from the gutter to a cement cistern, from which it is pumped for use in the garden. The feed room of the stable is a power boiler engine, which drives a straw cutter, grain grinder, root pulper, and bone cutter. There is a silo 36 x 14 feet connected with the feed room. A well pen, under the same roof as a stable, has a paddock of about an acre in size, connected with it for the bull to exercise in, including the feed stalls for only three animals in the stable and the heifer annex. There are several pens for calves in other buildings also. The piggery is a modern up-to-date building, it runs east and west with many large windows on the south side. It has a cement floor and iron post partitions between pens. There are three pens which will accommodate from five to ten pigs each. There are several runs behind the piggery. The feed room at one end of the piggery is well equipped with cement root cellar, running water and boiler. The dairy is a modern building with cement floor and is well lighted and ventilated. It also has running water in it.

The poultry department is well supplied with housing for a number of chicken coops. There is accommodation for about 600 hens, and a cement cellar for incubators. There are three incubators and a number of brooders on the farm. There is sufficient plant to raise 2,000 chickens a year. Other buildings, such as carpenter shop, tool shed, ice house, implement shed, horse stable, and granary, are also found on the place. Implements and Machinery. There are three young and heavy Clydesdale grade horses on the farm, and a very complete outfit of machinery. Everything has been arranged with the object of saving labor. Most of the implements are for three horses. They do almost as much work as two two-horse implements, and save the wages of a teamster. There are two gasoline engines on the farm. A one and a half horsepower engine drives a cream separator and churn in the dairy, and a six horsepower engine pumps the water for the stable, and the dairy, and as well as supplying water for the irrigation system in the garden, and to a

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hydrant and hose line for fire protection. In addition to operating the machinery in the feed room of the stable, this engine, which can be moved about, operates a saw for cutting firewood, provides power for the threshing machine, the ensilage cutter and carrier used for filling the silo.

Markets.

Spplendid markets exist for all the products of the farm. In the summer time the residents around the lake come to the farm for milk, cream, eggs, poultry, vegetables and fruit. At other seasons of the year the product of the farm is shipped to Ottawa where good customers have been found. Cream is sold to two merchants in Ottawa, who take the entire output of the dairy. Eggs are sold to private customers. The farm is well known in Ottawa. Its produce has a good reputation, and its production could be doubled in quantity Mr. Scott believes, without acquiring more land. The illustrations in connection with this article will give an idea of the practical basis on which Mr. Scott is running his agricultural side line.

POULTRY



Cheaper Poultry Feed

ON account of the scarcity and high price of feed the poultry industry of this country is threatened by the prospect of the wholesale slaughter of laying stock and a serious falling off in the number of pullets to be matured.

The necessity for retaining for milling every possible bushel of wheat suitable for that purpose need not be emphasized. To provide poultrymen with feed for rearing their young stock without unnecessarily lowering the supplies of milling wheat, the Federal Department of Agriculture has requested millers throughout Canada to put on the market the cracked and shrunken wheat removed from grain before it is milled.

In addition to small and broken wheat these cleanings consist chiefly of the seeds of wild buckwheat, a near relative of the cultivated buckwheat. The Poultry Division of the Central Experimental Farm has used wild buckwheat in feeding experiments and reports it to be a highly satisfactory poultry feed, and has ordered two cars of buckwheat screenings for the Central and Branch Experimental Farms from the Canadian Government elevators at Fort William. Fowls used to good grain do not take to it at first, but when they become accustomed to it they eat it readily and do well on it.

The mill cleanings from local flour mills also contain traces of many other weed seeds, including several kinds of mustards. These, however, would not as a rule amount to more than two or three per cent. of the cleanings in the case of the standard grades of Western wheat. This material is specially recommended for backyard, suburban and professional poultrymen. On farms the cleanings from yards and poultry houses where it had been fed would have to be disposed of so as not to disseminate noxious weeds in grain fields.

Those interested in obtaining this class of feed should immediately arrange with local mills or feed dealers for a supply. The mills cannot be expected to keep this material for poultry unless it is demanded for that purpose and that rests with the poultrymen themselves.



All New Fords Have Champion "X" Plugs

The fact that all new Ford and Maxwell cars are exclusively equipped at the factory with Champion Spark Plugs is the best reason in the world why owners of these cars should replace with Champions.

The manufacturers selected Champions because they insure maximum efficiency in their motors—prevent loss of compression and are absolutely dependable in emergencies.

The Champions illustrated were developed especially for service in Ford and Maxwell motors and efficiently meet their exacting requirements.



Champion Toledo

Dependable Spark Plugs

Have been chosen as factory equipment by over one hundred motor car manufacturers with a combined output of eighty per cent of all automobiles made.

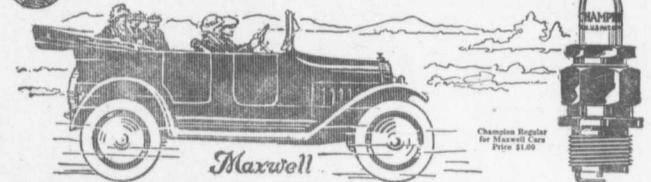
Be guided by the selection of the engineers who made your motor when replacing the Spark Plugs in your Ford or Maxwell.

Dealers everywhere sell Champions specially developed for every make of automobile, motor boat, gas engine or tractor.

Be sure the name "Champion" is on the porcelain—its your guarantee of "Complete satisfaction to the user—Free Repair—Replacement or Money Back."

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

All New Maxwell Cars Have Champion Regular Plugs



Maxwell

HINMAN THE UNIVERSAL MILKER



Eventually!

Why Not NOW Install a HINMAN

The Sanitary Milker

Sanitary because there are:

- No Pipe Lines to Clean Out.
- No Rubber Linings to Test Cups.
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- No Congestion of Gauges, Safety Valves, etc.
- No Air or Vacuum Tanks.
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If you have 10 Cows or More, You Need a HINMAN.

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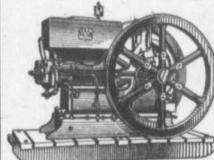
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It Will Pay You to mention Farm and Dairy when writing Advertisers.

Branford Kerosene Engines

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Stationary, Mounted, Tractor



These engines are the perfected product of years of study and experimentation with Internal Combustion Engines, and are a demonstrated success on thousands of farms throughout Canada. Get one this season and let it replace your hired man. It's a glut for work and its running cost is little, as it runs on coal oil or naphtha.

We also manufacture a full line of Grain Grinders, Saw Frames, Pumps, Tanks, Water Boxes, Concrete Mixers, Windmills, etc.

Catalogue of any line mailed on request.
GOOLD, SHAPLEY & MUIR CO. LTD.
Branford, Winnipeg, Regina, Calgary

Farm and Dairy

AND
Rural Home

"The Farm Paper of Canada's Dairy Farmers"
Published Every Thursday by
The Rural Publishing Company, Limited
Peterboro and Toronto

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SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.20 a year. For all countries, except Canada and Great Britain, \$1.50 for postage.

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The paid subscriptions to Farm and Dairy exceed \$1,000. The actual circulation of each issue, including copies of the paper sent to subscribers who are in arrear, and sample copies, varies from 22,500 to 23,000 copies. No subscriptions are accepted at less than the full subscription rates.

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

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

Refuses shall not ply their trade at the expense of our subscribers, who are our friends, through the medium of this issue, but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

The Rural Publishing Company, Ltd.
PETERBORO AND TORONTO

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

The District Conventions

THE success of the district conventions of the United Farmers of Ontario this year, fully

justifies the wisdom of the executive in instituting them. The twenty-five meetings held have covered the province from one end to the other. Every cooperating farmer has had an opportunity of hearing the aims and objects of his movement expounded by its leaders. That farmers are keen to know more of this great movement was evidenced by the attendance at these conventions, which averaged at least five hundred. In some cases, with fine weather and an abundant crop of weeds, attendance was reduced to thirty-five or forty men, but at another outdoor meeting fully five thousand people turned out to discuss the farmers' problems.

These conventions cannot but result in much good to the farmers' movement in Ontario. For the first time many received a correct impression of the magnitude and scope of the work that is being accomplished. They learned that the farmers of Ontario are now conducting a million dollar business. Mr. John Kennedy, the Vice-President of the Grain Growers' Grain Company, did a notable service for the movement in the East by telling of their inspiring success in the West. His visit among us will be best remembered, however, because of his stirring appeals to our farmers to cooperate, not only for class advancement, but for social improvement and social justice for all classes through the enforcement into legislation of the planks of the farmers' platform. In these conventions East has met West, a stronger bond of union has been knit between us and our own movement has been placed on a stronger basis than ever before. Let us not forget, however,

that while the U. F. O. has accomplished much, it has as yet touched but the fringe of its possibilities. Its future development lies with the farmers of Ontario who are appealed to give the movement their loyal support.

The Price of Bran

A COUPLE of weeks ago it was announced in Farm and Dairy that Montreal millers had sold three hundred car loads of bran to go to the United States at \$25 a ton. More recent enquiries reveal that millers generally are shipping immense quantities of bran to the United States at prices ranging from \$25 to \$27.50 a ton. At the same time the price in Canada has ranged from \$30 to \$32 a ton, and is going higher, so we are told. The more favorable price quoted to American buyers cannot be explained on the basis of the quantities on which they purchase as the United Farmers of Ontario would be glad to buy bran in lots of 100 car loads, could they get it at the same price as is accorded United States dealers; in fact, it looks like a deliberate attempt on the part of our millers to maintain the Canadian price at the highest possible level. These same millers a few years ago were giving most vigorous support to the slogan, "No truck or trade with the Yankees." With but two notable exceptions, they fought reciprocity tooth and nail. Now, just six years later, they are so fond of trucking with the Yankees, that they are giving them mill feeds at a low price in order that they will thereby be enabled to exact the utmost tribute from their own particular field among the Canadian farmers.

A single act by the Federal Government, the removal of the tariff on bran, would make such exploitation impossible. Were farmers as well organized as they should be, they would be in a position to force the government to take this action, which is necessary for their protection.

Oleomargarine Again

THE Ratepayers' Association of the city of Toronto, in their most recent meeting, have recommended that the Food Controller, Hon. W. J. Haana, be asked to propose that oleomargarine be manufactured in Canada. This decision was not a unanimous one, but it commanded a sufficient majority to show where city folks stand on the subject. One of the deciding factors in the debate was a letter from Dr. Hastings, Medical Health Inspector, in which he endorsed oleomargarine as follows: "It is a perfectly wholesome article of food, is an excellent substitute for butter, and is, in fact, quite equal to any market butter, other than grade A." Dr. Hastings stated further that if oleomargarine were made under proper government supervision, there could be no objection to it whatever.

In his contention that oleomargarine is "quite equal to any market butter other than grade A," Dr. Hastings is in error. During the past few years, numerous experiments in nutrition have been conducted in the United States, and all of these experiments lead to the same conclusion—that butter contains some vital "principle of growth" that other animal fats, "grease," as one prominent councillor called them, do not contain, and animals fed on oleomargarine exclusively made only the fraction of growth of animals fed on butter, although so far as chemists could determine, one was as nutritious as the other.

In his comparison of oleomargarine with butter, too, Dr. Hastings neglected to state, as do most other advocates of oleomargarine, that there are many different grades of oleomargarine. All grades are not good, and any close investigation of the business shows that the better grades of oleo contain a large percentage of butter fat and other equally high priced ingredients, and that to be sold at a profit, they must be placed on the

market at practically the same price as butter. If consumers, in demanding the removal of restrictions on oleomargarine are anticipating a cheap substitute for butter, they will have to be content with inferior grades of oleomargarine. And these, no one pretends, are comparable to butter.

Let us state again that the dairy farmers of Canada are not fearful of the competition of oleo as such. What they fear, and with good reason, is that cheap grades of oleomargarine will be colored to resemble butter and will be sold as butter. And in the face of such unfair competition, no industry could prosper.

Congratulations, Mr. Hardy

IT is a source of gratification to all Canadian Holstein breeders that one of their number was represented among the consignors to the world's greatest sale of dairy cattle at Worcester, Mass., on June 7 and 8. The satisfaction that will be felt in Canada is all the greater because of the high prices that were realized on the Canadian consignment, the five animals, from Avondale Farm bringing a total of \$17,425, and one yearling bull selling for \$9,000. We trust it is not too late, although the sale is now over a month old, to extend our congratulations publicly to Mr. Hardy on his success.

Unlike many wealthy men who go into breeding dairy cattle for a few years and then quit, Mr. Hardy has stayed with the game through fair weather and foul, and in the face of many difficult circumstances. The fact that such high prices have been paid for his animals by men who know the worth of good stock is a fitting climax to his years of effort and expense. Not the least noteworthy fact in connection with Mr. Hardy's successful sale is that two of the young bulls sold were purchased to head a couple of the best known herds in the United States. Mr. Hardy's consignment to the Worcester sale is a great advertisement for Canadian Holsteins generally.

The Crop Outlook

THE crop situation in both Eastern and Western Canada is promising. Rain is needed in the Maritime Provinces, in Quebec and in some sections of Eastern Ontario. Central and Western Ontario have had, if anything, too much rain. Reports from the Canadian West are conflicting, but it is encouraging to learn that, up to date, conditions have been identical with those of 1915, when the West reaped its bumper crop. Spring rains everywhere are looking well, hay will be a normal crop, fall wheat is improving, and potatoes and roots are much ahead of last year and promise an average crop at least. It is fortunate that crops promise so well as they do. Another season of heavy feed buying such as we had last winter, would bankrupt many farmers. The main consideration now is to keep the hoe crop in good condition, a difficult proposition in many sections, and to store the hay and grain available in the best possible way with the labor available.

The labor situation seems to be fairly satisfactory. Wages will be high, but in most districts farmers express confidence in their ability to handle the crop with their own labor and such as is available in the community. To this end there will be more cooperative work between neighbors than ever before. Those who are hard pressed or who could handle their harvest to better advantage with additional help, should remember that many city men are sincerely anxious to aid in the garnering of this year's crops, and that such help can be had through War Production Clubs or the employment bureaus of the provincial departments of labor.

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Should the Railway Companies be Allowed an Increase?

(Continued from page 3)

is increasing from year to year, but it is also true that the gross earnings are increasing at a larger ratio.

For the months of January, February, March, April and May, 1917, the five months in which the railway earnings are available, the increase in the C. P. R., as compared with the same period last year, is 13.25 per cent.; C. N. R., 25.52 per cent.; and the G. T. R., 9.51 per cent.

Rates on C. P. R. Are Ample.

I have under my hand the report of the C. P. R. for the half year ending December 31st, 1916, and an analysis of that report clearly indicates that the C. P. R. does not need any raise in their freight rates, as in no time in their history did they put out such a favorable statement for the shareholders, as they did for that period. The freight and passenger tariffs under which they were operating since the system was established, have proved to be ample to make the business of the railway eminently profitable.

For the six months ending 31st December, their gross earnings were \$76,717,965.46, and for the first five months of this year, \$65,569,000, or for eleven months, \$131,286,965.36, as compared to \$124,000,000 for the preceding twelve months. With one more month to be added, it will make the year's earnings approximately \$150,000,000 as compared to \$124,000,000 for the previous corresponding twelve months.

C. N. R. Shows Increase.

The annual statement of the C. N. R. for 1916, also shows a gratifying increase in business, as compared with former years, being \$36,476,274, as compared to \$25,912,105, an increase of \$10,564,169, or total increase of operating revenue of 36.91 per cent. The working expenses in 1916 were \$26,102,744, leaving a balance of net earnings of \$9,373,530, as compared to \$6,829,221 in 1915. The fixed charges, however, of 1916, were somewhat more than the net earnings, being \$9,621,657 leaving a net loss of \$248,128, as compared to a loss of \$1,640,283 in 1915. I have not been able to secure the earnings for November and December, but the earnings for January, February, March and April, 1917, are \$15,553,206, as compared to \$12,694,500 for the corresponding months in 1916, making a betterment of \$2,858,706 in the first five months of 1917, and for the nine months, a betterment of \$4,901,760 or a betterment of 30 per cent.

The annual statement of the C. P. R. clearly indicates that they do not need an increase in revenue by legislation or Government action with the passenger and freight tolls as now existing, their own financial statement sets forth their surplus earnings as being very large indeed, and that they have cash on hand apart from their investments and other liquid assets, sufficient to meet any undue demand that may arise for supplying the necessary equipment to give efficient service on all lines, and any abnormal rise in the price of either wages or supplies.

The Question Summarized.

The other parties to this application are not so happily situated, but if this Board would grant the request of the applicants to work out that the C. P. R., who are not in need of any assistance, would get 48 per cent., or in the neighborhood of 21-000,000 (based on their earnings of 1917), of the increase, and the other applicants that need assistance, would get a little better than \$5,000,000 apiece. In view of this fact, and in view of the general principle, that it is inherently unsound business to en-

courage corporations to depend on legislation, rather than efficiency to increase their surplus earnings, we submit that in the interests of Canada, the Board should not grant the request.

If it is found to be necessary to assist the Grand Trunk and Canadian Northern in securing equipment to enable them to give better service, I would suggest that instead of granting the proposed increase, that the Government be recommended to lend them sufficient rolling stock to enable them to give the public tributary to their lines, efficient service. Their statement shows that there is improvement in their earnings from year to year, and assistance, such as I have indicated, should be all that they need. In any event, it would be suicidal to the development of Canada to further increase the cost of transportation. Industries of all kinds are growing under the load that is imposed upon them to maintain transportation companies. The development of agricultural industries, especially, will suffer unduly. In addition to paying the increased freight on their product that goes for shipment to the various industries, consumption, all with one increased charge of inbound freight will be transferred to them and the consuming public, by both manufacturers, wholesalers and commercial interests.

Wayside Cleanings

By "Eurebras"

The Weed Crop

As we congregate on the street corners or market square on Saturdays the general topic of conversation is the slow growth of the corn and the too rapid development of the weeds. It seems to be a subject that almost ever shadows the latest war news, possibly because of its being more closely connected with our everyday life.

One farmer was telling last week how badly infested with twitch was his corn patch and another claimed a worse mess for his field in that it was full of soru thistle and in like manner were stories told by different ones present. While driving home I was impressed by one man's corn field because of its abundant weed crop. He, with three other men, was struggling to hoe it into a semblance of cleanliness, but he must have found it discouraging, especially so when it rained every few days and stopped his work. A little farther along the road was another field nearly the same size but quite different in crop of corn and also of weeds. It was something of the previous history of those two fields it made a good object lesson to me. The clean field had been well plowed last fall and considerable cultivation done on it; the other poorly tilled and no cultivation. The good farmer is now reaping his reward. The well planned and carefully followed short rotation is a time and money saver when our country is at peace or war.

While talking of weeds my mind at once goes to our own farm, and those yellow flowers appearing in spots in nearly every field. It has been carefully pulled for many years, but still there appears each year some evil-demon of its presence. Another bad weed we have that is giving us much trouble is black bindweed, and I would be very grateful if some person would suggest a method for complete eradication that will not cost more than



BUYING A DE LAVAL SEPARATOR NOW

Is real thrift and genuine economy

"THRIFT" means saving wisely. "Economy" means spending wisely.

There is no economy in going without money-saving and labor-saving equipment.

It is poor economy to try to do without a De Laval Cream Separator—a machine which would not only save you a lot of time-wasting work, but would add from 15 to 25 per cent. to your cream crop by putting a stop to your butter-fat losses.

This country is at war. The nation cannot afford, and you as an individual cannot afford, to allow the present enormous waste of one of our most valuable foods—butter-fat—to continue an unnecessary day.

See the local De Laval agent to-day. Get him to explain to you how the De Laval saves butter-fat that is lost by gravity skimming or the use of an inferior or half-worn-out separator. If you do not know the De Laval agent, write to the nearest De Laval office for new catalog or any desired information.

Every New De Laval is equipped with a Bell Speed-Indicator

THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos, Alpha Gas Engines, Alpha Churns and Butterworkers. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



The Value of Pigs Increased

20%



During Last Year

GET A Pure Bred Pig Free

It's quite easy for you to call on or telephone a few of your neighbors. Tell them about Farm and Dairy. Tell them how useful it has been to you, and how much valuable help you get from it. Show them it's the cheapest and best hired help they can get. Tell them of its fight for better dairy condition, greater cooperation among farmers, and more money for them. Get their subscriptions. Send only twelve new yearly subscriptions at \$1.00 each and we will send free of charge to you, a pure bred pig. Your own choice as to variety. Pedigree for registration. If you don't want your own, we will get the full number of subscriptions, send in all you can get, and we will pay you a cash commission on each subscription sent in. Right now is the time to begin. Say to yourself NOW, "Here is an opportunity for me and I am going to take it."

Circulation Department

FARM AND DAIRY - Peterborough, Ont.

Further information and sample copies sent on request

the land is worth. About the worst her." This seems to be the feeling patch on the whole farm in is the garden. Our cows would express if possible where it has been hood every each time we bring them to the barn, year for at least eight or 10 years. and they are making true my old friend's statement, for they are milking much better than before going into the Spring Sown Pasture.

We are almost ready to pass our verdict upon the new pasture mixture, even if we have only had the cows on it a little over a week. Years ago an old and successful dairyman told me a secret about cows. It was; "If you wish to get milk from a cow satisfy used by the keepers of these animals,



Your Friends Will Drive for Miles to Hear this Splendid Phonograph

First District Prize in Bread-Making Contests at School Fairs

IN this announcement we tell you more about the wonderful phonographs and other prizes that proud young girls are going to win this fall by competing at the Rural School Fairs in Ontario. Five splendid instruments and many other prizes are offered for the best

loaves of bread baked with Cream of the West Flour. Every girl between 12 and 18 years of age has a chance to win one of these magnificent phonographs. If you want to make your chances better, the way to do is to start right away to practise baking bread with

Cream of the West Flour

the hard wheat flour that is guaranteed for bread

At our big mills in Toronto we have many letters testifying to the superior qualities of Cream of the West Flour. It is to have more people try it, and thus always want it, that we put on this contest and offer such splendid prizes as the Pathe phonographs, books, bread mixers, etc.

The Pathephone

Just imagine the fine times you can have with this splendid phonograph. Your friends will envy you, and gladly drive for miles to hear its wonderful music. Think of the fun you can have with it, how grandpa and grandma will enjoy the old songs, like "Annie Laurie", how the fast band music may make grandpa's dancing feet wake up, how you can drive over to the concert and help the programme. What a fine thing for the winter evenings, too! Each of the Pathephones we offer (with twelve records) is worth \$1.50.

Just make up your mind to win the phonograph and practise—practise—practise baking with Cream of the West Flour. That's the way to increase your chances. Start right now.

We have selected five of the famous Pathephones as the leading prizes for the contest because we desired everyone to know at once that no ordinary phonograph is offered. This prize carries with it the reputation of the celebrated Pathe Brothers of Paris, France, whose names

stand for best quality all over the world in moving picture films and phonographs.

The Pathephone reproduces beautiful songs, band and orchestra music better than any other phonograph does. Besides that, you can do things with it that you could not do with most other instruments.

You know that most phonographs have a sharp steel needle-point that runs in the grooves of the flat record to get the music out. A new needle has to be put in for every record. Instead of the needle the Pathephone has a little round jewel called a sapphire. It never needs changing. Just think of all the trouble this permanent reproducing needle saves!

The hard steel needle of the ordinary phonograph digs and tears its way around a record. No wonder the record soon wears out, and the music gets spoiled. Pathe records can be played over and over again a thousand times and still give the same splendid music. The reason is that the round sapphire ball does not wear the record. And it is permanent itself—does not wear out as needles do.

The Pathe records that you get with this splendid phonograph prize—a dozen of them—are different from ordinary records, too. They make better music, because the wonderful little sapphire ball-point fits snugly into and over all the little hills and dales that fill the circular-shaped groove in the record, and draws out all the music. The sharp steel needle misses much of the

sound. The Pathephone always gets lovely, full, round tone—sweet as a flute.

Another reason for the Pathephone's splendid tone is that it has an all-wood sound chamber through which the sound comes. This makes the tone pure and sweet—not hard and metallic as it would be with the ordinary metal outlet. There is less scratching than in other phonographs.

Now you sometimes want to play records that are not like the Pathe records and require needles. To provide for this, there is a special reproducer given along with the Pathephone with which you can use any record requiring the needle-point reproducer. Thus with the Pathephone you can play all records.

Here is a splendid thing. By just pushing a little rod in or out, as required, you can make the music softer or louder. Thus you can put your own ideas into the music in the way that just suits your own moods.

Again we say, practise baking bread with Cream of the West Flour and build up your chances to win. You can get our flour! If your dealer does not sell it, just write us a letter (address below) and we will immediately reply telling you the nearest place to get it in your neighborhood.

See opposite page for conditions, and descriptions of the other prizes in this contest.

The Campbell Flour Mills Co., Limited, (West) Toronto

 Keep this announcement for reference.

 SEE OPPOSITE PAGE

Eight Hundred Girls May Win Prizes

In Bread-Making Contests at Rural School Fairs

EVEN if you do not win the splendid phonograph described on opposite page, remember that, altogether, about eight hundred girls in the Province may win prizes. You see you have lots of chances to win. Any of these attractive prizes, described below, would make it well worth your while to compete. Even if you were to win no prize at all, your time will be well spent, for no young girl can learn too much about good bread-making. Be sure to read the conditions of the contest explained below if you have not already learned the rules of the contest.

On the opposite page we described the Pathophone to be given as first prize in each district. Now we come to the rest of the prizes.

SECOND DISTRICT PRIZE—SET OF DICKENS' WORKS

One of the eighteen books in this set is called "David Copperfield," the wonderful story of a poor lad's adventures facing the world. Another is "The Old Curiosity Shop," the story of Little Nell; another book is about "Oliver Twist," whose strange adventures with Old Fagin and other bad men are told in a manner that holds the reader spellbound. All the books of the set are like that—eighteen books, mind you, all beautifully cloth-bound, with gold titles and many pictures.

THIRD, FOURTH AND FIFTH DISTRICT PRIZES—CANUCK BREAD MIXERS

Instead of using a number of utensils, lifting and kneading the dough several times, all you have to do is to put the ingredients into the Bread Mixer. Then you turn the handle for three minutes. When you take out the dough, you find it is both thoroughly and evenly mixed. The Bread Mixer is as easy to clean as an ordinary pail. Besides taking the hard work out of bread-making, the Canuck Bread Mixer enables you to have a perfectly even texture of crumb in your bread when it is baked.

Prizes at your Local Rural School Fair



FIRST PRIZE—GIRL'S OWN ANNUAL

Fortunate indeed will be the winner of this splendid big 800-page book, whether she be 12 or 18 years of age, for it will intensely interest every girl. It contains dozens of fine pictures, and toems with just the kind of stories you like best. Besides, it tells how to do many things like crocheting, sewing and drawing pictures. It tells about famous people and about the war. And it gives all sorts of information about flowers, animals, curiosities—everything you want to read about. Remember, too, that the winner of this beautiful book also secures the chance of winning the phonograph. (See conditions below.)

SECOND LOCAL PRIZE—STORIES OF FAMOUS MEN AND WOMEN

The most interesting living famous in the whole world of boys, especially famous women like

the late Queen Victoria; Grace Darling, the heroine who saved the sailors' lives; Florence Nightingale, who went to the Crimean War, many years ago, to nurse the poor wounded soldiers. This book tells all about these celebrated women; and, besides, there are many other famous people who did great deeds—all told about in the most interesting way in this fine book. There are many pictures, and the book is beautifully bound.

THIRD LOCAL PRIZE—BRITAIN OVERSEAS

The building up of Britain's world-wide empire was not done without many interesting adventures in strange, far-away lands, with curious people inhabiting them. What could be more interesting than the stories and pictures of the different countries and people that fill this splendid book?

FOURTH LOCAL PRIZE—QUEEN'S GIFT BOOK

Many of Great Britain's most famous writers and artists wrote stories and poetry and made pictures for this book. Queen Mary gets all the profits this book makes, and with it she helps disabled soldiers.



THE GUARANTEED FLOUR

"Each loaf must be accompanied by part of bag which shows the face of the Old Miller."

Here are the Conditions of the Contest—Read them Carefully:

This is the way we conduct the contest: We have divided the Province into five districts, each with several counties. (See the list of districts below.) In each district we give one of the five phonographs, one of the sets of Dickens' Works, and the Bread Mixer. These are called the District Prizes. To try for them you compete at your local rural school fair. If you win the first prize there, you then, without any further work on your part, automatically become a competitor for the Pathophone and the other District Prizes. Read these conditions carefully.

Every girl may compete at the rural school fair in her district, whether or not she attends school, providing that her 12th birthday occurs before November 1st, 1917, or her 18th birthday does not occur after November 1st, 1917. One loaf of bread must be submitted baked in pan about 7 x 2 inches and 1/2 inches deep, and divided into two loaves, so that they may be separated at the fair. The loaf must be baked with Cream of the West Flour. One half will be judged at the fair. The other half of the prize loaf will be sent to Ontario Agricultural College, Guelph, to compete in the District Contests of Bread-making and Flour Testing. The judging will be done by Miss M. A. Purdy, of the Department of Broommaking and Flour Testing. The local contest at the fair will be conducted under the same rules as all the other regular contests at your fairs.

THE STANDARD by which bread will be judged will be as follows—

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|----------------------------|----------|
| 1. Appearance of Loaf..... | 15 marks |
| (a) Color..... | 5 marks |
| (b) Texture of Crust..... | 5 marks |
| (c) Shape of Loaf..... | 5 marks |
| 2. Texture of Crumb..... | 40 marks |
| (a) Evenness..... | 10 marks |
| (b) Siftiness..... | 20 marks |
| (c) Color..... | 5 marks |
| 3. Flavor of Bread..... | 45 marks |
| (a) Taste..... | 20 marks |
| (b) Odor..... | 20 marks |

IMPORTANT.—Each loaf must be accompanied by the part of the flour bag containing the face of the Old Miller, and an entry form must be signed by the girl and parents or guardian, stating date of birth, P.O. address, and giving name of dealer from whom Cream of the West Flour was purchased. The form will state that the girl actually baked the loaf entered in the competition. The forms will be provided at the time of the fair. The decision of the judges is final. Not more than one entry may be made by each girl and not more than one local prize will be awarded to the same family.

WHICH DISTRICT IS YOURS?—This list shows you which counties you compete against if you become a competitor for the District Prizes.

DISTRICT NO. 1.—Counties of Lennox, Stormont, Dundas, Grenville, Leeds, Frontenac, Lemoine and Addington, Carlton, Lanark and Renfrew.

DISTRICT NO. 2.—Counties of Hastings, Prince Edward, Peterborough, Northumberland, Victoria, Durham.

DISTRICT NO. 3.—Counties of York, Ontario, Peel, Halton, Westmorland, Oxford, Brant, Waterloo.

DISTRICT NO. 4.—Counties of Welland, Hamilton, Norfolk, Elgin, Kent, Essex, Lambton, Middlesex.

DISTRICT NO. 5.—Counties of Bruce, Grey, Dufferin, Simcoe; Districts of Muskoka, Parry Sound, Timiskaming, Algoma, Sudbury, Manitowish.

THE RESULTS of the contests at the fair will be made known in the usual way, as is in the case of all the other regular contests. The District results will be announced as soon as possible after the conclusion of the Rural School Fairs in the Province.

DO NOT MISS THIS GREAT OPPORTUNITY.—Every girl between 12 and 18 years should compete. What a splendid way to stir up increased interest in bread-making! Get a supply of Cream of the West Flour at your dealer's and practice making it as often as possible to increase the chances of winning. If your dealer cannot sell it to you, write to the Campbell Flour Mills Co., Ltd., Toronto, and we will tell you the nearest place to get it.

NO COMPETITION IN COUNTIES NAMED BELOW.—The competition is open to all parts of the Province where Rural School Fairs are held, except the Districts of Eglar River, Kamora and Thunder Bay. Those districts are the only parts of the Province where school fairs are held by the Department of Agriculture in which this competition will not be a feature. There are no district representatives of the Department of Agriculture in the Counties of Huron, Perth, Wellington, Halton, Prescott, Brantford or Lincoln, and no rural school fairs are held in these Counties by the Department of Agriculture. There are, however, a few local school fairs held in these seven counties, and we are opening the competition to these fairs. We will announce later the districts in which each of these Counties will be included.

Write for free folder, giving more fully the complete information about every feature of this great contest.

CUT OUT AND MAIL THIS COUPON:

CAMPBELL FLOUR MILLS CO., LTD.

Please send me name and address of nearest dealer who sells Cream of the West Flour, as my regular dealer does not handle it.

My dealer's name is.....

His Address.....

My name is.....

Address..... P.O.....

The Campbell Flour Mills Co., Ltd.

(SEE OPPOSITE PAGE)

(West) Toronto, Ontario

OUR FARM HOMES



Attract hearts by the qualities we display; we retain them by the qualities we possess.—Seward.

Winning the Wilderness

(Continued from last week.)

THE regiment had reached the Rio Grande, leaving no unconquered spot behind it. It had forded the Tulljian, shoulder-deep to the shorter men. Under fire, it forged a way through Guiguinto and Malolos. Under fire, it had swam the Maricao and the Bagbag. And now, beyond Calumpit, the flower of Aguinaldo's army was massed under General Luna, north of the Rio Grande. A network of strong fortifications lay between it and the river, and it commanded all the wide waterfront.

As the soldiers waited orders on the south side of the river, Doctor Horace Carey left his work and sought out Thaine's company, impelled by the same instinct that once turned him from the old San Juan Trail to find Virginia Aydelot lost on the solitary snow-covered prairie beyond Little Wolf Creek.

"What's before you now?" the doctor asked, as he and Thaine sat on the ground together.

"The Rio Grande now. We must be nearly to the end if we rout General Luna here," Thaine replied. "You've stood it well. I guess you don't need me after all," Carey remarked.

"I always need you, Doctor Carey," Thaine said earnestly. "Never more than now. When I saw Captain Clarke wounded and carried away on the other side of the Tulljian, and could only say 'Captain, my captain,' I needed you. When Captain Eliot was killed, I needed you; and when Captain William Watson was shot and wouldn't stay dead because we need him so, and when Metcalf, Bishop, Agnew, Glasgow, Ramsey and Martin, and all the other big-brained fellows do big things, I need you again. Life is a great game; I'm glad I'm in it."

Horace Carey had never before seen Thaine's bright face so alert with manly power and beauty and thoughtfulness. War had hardened him. Danger had tried him. Human needs, larger than battle lines alone can know, had strengthened him. Vision of large purposes had uplifted him. As he stood before the white-haired physician whom he had loved from earliest memory, Carey murmured to himself:

"Can the world find grander soldiers to fight its battles than these sun-browned boys from our old Kansas prairies?"

"We are going across to Luna's stronghold in a few minutes. Watch him go into eclipse before Fred Funston. If you stand right here, you'll see me helping at the job. Good-bye," Thaine declared, and, at the buckle call, fell into his place.

Beyond the river a steady fire was opened on the American forces, and no bridge nor boat was there by

which to cross. Doctor Carey stood watching the situation with a strange sense of unrest in his mind.

"There must be rafts," declared Colonel Funston.

And there were rafts, hastily made of bamboo poles.

"Somebody must swim across and fasten a cable over there by which to tow the rafts across. Who will volunteer? You see what's before you!" Funston asserted.

Horace Carey saw two soldiers, Corporal Trembley and Private Edward White, seize the cable, plunge into the river, and strike out directly toward the farther side filled with Filipino forces.



A Picturesque Spot in a Farm Garden.

This artificial lily pond is found in the garden of Dunain Farm, the beautiful farm home of Mrs. Barlow Cumberland, Fairfax Co., Ont. This is but one of several beauty spots around this home and, there are few places where the comforts of life are more enjoyed than on Dunain Farm.

Rifle balls split the water about them. Bullet after bullet cut the air above them. Shot after shot from the ambushed enemy hurtled towards them. The two young men surged steadily ahead, bent only on reaching the bank and fastening the cable. They knew only one word, duty, and they did the thing they had agreed to do. Once across the river, they ran nimbly up the bank and made fast the rope's end, while cheer after cheer rose from their comrades watching them, and the battle cry of the Fighting Twentieth, "Rock Chalk, Jay Hawk, K. U.," went pulsing out across the waters of the Rio Grande as full and strong as in the days when it rolled out on the university campus on far-away Mount Oread, beside the Kaw.

The rafts sped along the cable, and squad after squad went pell mell into the waters of the Rio Grande, under General Luna's stronghold, the Thaine Aydelot was on the last raft to cross the river. Doctor Carey watched with eager gaze as the last men reached the farther bank. He saw them scrambling up from the water's edge. He saw Thaine turn back to lift up a comrade blinded, but not injured, by the smoke of a gun. He saw the two start forward. Then he saw the faint "ping" of a Mauser came to his ears, and Thaine threw up his hands and fell backward into the water and sank from sight, while the

other soldiers, unknowing, rushed forward into battle.

For a moment Horace Carey stood like a statue, then he sprang into the river and swam against the fire of the hidden foe where Thaine Aydelot had disappeared. Ten minutes later, while Luna's forces were trying vainly to reach the daring Americans, Thaine Aydelot lay on a raft with Carey, with a Red Cross aid, was pulling towards the south bank.

When the Fighting Twentieth soldiers were relieved from service, and turned their faces gladly toward the Kansas prairies, whither hundreds of proud fathers and mothers and wives and sweethearts were waiting to give eager, happy welcome, Thaine Aydelot lay hovering between life and death in the hospital at Manila. The white-haired doctor who had saved him from the waters of the Rio Grande watched hourly beside him, relying not so much on the ministrations of his calling as in his trust in an Infinite Father, through whom at last the sick may be made whole.

CHAPTER XX.

The Crooked Trail.

Life may be given in many ways. And loyalty to truth be sealed. As bravely in the closet as the field. —Lowell.

"HERE'S yo' letter from the Philippines, Mis' Virginia; Mr. Chambers done bring hit for you all." Boanerges Peeperville fairly danced into the living-room of the flower inn. "They ain't no black mournin' aidge bindin' it round

The pathos of the dark face was pitiful.

"My best love to Bo Peep," Virginia pointed to the line as she read. "Kin I please have this buh envelope?" Bo Peep pleaded, and, clutching it as a sacred treasure, he said: "Mis' Virginia, didn't I done tellen you, Mis' Thaine would come back?" "Did you know?" Virginia asked with shining eyes.

"Decuz of what Doctah Horace left for me to tell you. It can't do no harm to tell hit thus fah."

Bo Peep hesitated, and Virginia looked curiously at him.

"Doctor Horace won't never come back. I tol' you that sufficiency times. When he left, he say, 'Tel Mis' Virginia, if I don't come back, I's done take care of him, 'cause I's de boy, —hit can't do no harm to tell you that while Mis' Thaine still right to us. An' I didn't be tak' care of Mis' Thaine. Did he be in his place?" he said, and he went on to tell her, "an' I didn't be see Mis' Thaine fall back with a bullet pushin' him right into de water! Yes, an' be drowned right then and fish him out, 'cause he stay right time an' day time right by the blessed boy, till he's pullin' him out of dangal, de death's wing? Oh, yo' son doze comin' back 'cause Mis' Thaine say he sho' goin' jus' tak' care of him."

"But, Bo Peep, why do you not believe we'll have Horace here again?" Virginia asked.

"The black man only shook his head mournfully as he answered determinedly. "Eef yo' saves a life, you has to give one for his' mos' evens' time, an' he mo' specially in the Philippines, 'cause they's so murderful and slaughterous."

"Oh, you ought not think that way," Virginia urree. "Run quick, now, and take the news, Asher. I don't know where he is this mornin'."

"He's talkin' to Mr. Dahley Chambers out to the barn," Bo Peep said as he hurried away.

Asher Aydelot was standing before the big barn doors when Darley Chambers turned from the main road and drove into the barnyard. It was a delicious April morning, with all the level prairie in a smiling back at the skies above them, and every breath of the morning breeze bearing new vigor and inspiration in its caressing touch.

"Good morning, Chambers; fine morning to live," Asher called out cheerily.

"Mornin', Aydelot; fine day, fine! Miss Shi told me last day f I she got her first inspiration for buyin' a quarter of land with nothin' in it, and makin' it pay for itself, out of one of Cobourn's Agricultural Reports. I reckon if a look like that could inspire a word of wisdom, a word of mornin' like this is ins'p'ring plenty in a to a more uprighteous line of goods than he generally carries. I never see the country look better. Your wheat is tremendous. How's the country look to you?" Chambers responded.

"I can remember when it looked a good deal worse," Asher replied. "The Coburn Reports must have helped to turn bare prairie into a weedy boom lots into harvest fields."

The two men had seated themselves on the sloping driveway before the barn door. Asher was chewing the tender joint of a spear of foxtail grass, and Chambers had lighted a heavy cigar.

"You don't smoke, I believe," he said cordly, or I'd insist on offering the mate."

"No, I is in a chew," Asher replied, as he bent the foxtail thoughtfully in his fingers and looked out toward the wheat fields already rippling like waves under the morning breeze.

"Say, Asher, do you remember the day I come down this valley and tried

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my danged best to get you to sell out for a song? I've done some pretty scaly things, all inside the letter of the law, since then, but never anything that's stuck in my craw like that. I guess you ain't forgot it, neither?"

"I remember more of those first years than of these later ones, and I haven't forgotten when you came to the Grass River schoolhouse one hot Sunday about grasshopper time, but I don't believe anybody holds it against you. You were out for business just as we were," Asher replied with a genial smile.

"Say! D'precollect what you said to me when I invited you to cast your votes over this very country, a burnt-up old prairie that day, so scorched it was too dry and hot to cut up into town lots for an addition to Hades?"

Asher laughed now.

"No, I don't remember anything about that. It was just the general line of events that stayed with me," he said.

"Well, I do; and I'll never forget the look in your eyes when you said it, neither. I'd told you, as I say, just to look at this God-forsaken old plain and tell me what you see. And you looked, like you was gazing at heaven almost, and just said sorter solemn like an' prophetic: 'I see a land fair as the Garden of Eden, with grazing herds on broad meadows, and fields on fields of wheat, and groves and little lakes and rivers—a land of comfortable homes and schoolhouses and churches, and no saloons nor breweries.' And then I broke in and told you I see a danged fool, and you says, 'Come down here in twenty-five year and make a hunt for me then.' And, by golly, Aydelo, here I am. You've everlastingly conquered the prairies for sure, and you are a young man, not fifty-five yet."

"Well, you can see most of those things that I saw that day out yonder, can't you?"

Asher's eyes followed the waving young wheat and the blossoming orchards, the grove, full of birds' songs, and the line of Grass River running deeper year by year. Then he looked at his hand, brown hands and thought of the toil and faith and hope that had gone into the conquest.

"Yes, I'm still among the middle-aged," he said, straightening with his habitual military dignity of bearing. "But I don't know about this everlasting conquest of the prairies. There's still some of it waiting over beyond those headlands in the open range where John Jacobs has a big holding. I'll never feel that I have conquered until my boy proves himself in civil life as well as on the battlefield. If I can bring him back when he is through with the Orient, then, Darley Champer, I will have done something beside subdue the soil. Through him, I'll keep the wilderness from ever getting hold again. If we live so narrowly that our children hate the lines we follow and will not go on and do still bigger things than we have done, do we really make a success of life?"

At that moment Bo Peep appeared with Doctor Carey's letter, and the subject shifted to the problems of the far East.

"We aren't the only people who are having trouble," Asher said. "I read in the papers that the Boxer uprising that began in southern China last year is spreading northward and making no end of disturbance."

"What's them Boxers wantin'? Are they a band of prize ring fellers?" Darley Champer asked.

(To be Continued.)

"How can I remove the odor of fish from the dish in which it has been cooked?" Try leaving warm water and a teaspoon of mustard stand in the dish for a while and then wash.

THE UPWARD LOOK

God's Care for His Creatures

THE conies are but a feeble folk, yet make their houses in the rocks.—Pro. 30:26. The high hills are a refuge for the wild goats; and the rocks for the conies.—Psalms 104:18.

Lately, a few days were spent away up north on an island, in the centre of a beautiful mountain-encircled lake. In some of our expeditions when we forced our way through the dense underbrush and climbed over great fallen trunks, green with the exquisite growth of years, we knew that probably our feet were the first to step in those wondrous places. It was the best of opportunities to obtain a slight acquaintance of the dwellers of that forest island.

Deer, foxes and mink, were all to be seen, the wild laughter of the loon to be heard, and strange sounds of scurrying feet after night fall to be wondered over. One of the most frequent visitors was a rabbit with brown body and white spots. Our naturalist explained that he had not yet completed the change from his winter to his summer suit. In winter his coat corresponds with the snowy white; in summer with the earthy brown.

Another frequent visitor was a shy thrush, his brown coat so like the ground that we would scarcely have detected him, if it had not been for his quick movement, as he gaily hopped or fluttered about.

An active black and white creeper warbler hurried up and down and around the alders and wild cherries, their bark, with their white spots so like his own marking, that he seemed to be a part of them. Often we would think he had gone, but watching carefully we would see that he was still there.

Thus has God—so wonderfully provided for the protection of these His little wild creatures by the wise correspondence of their coloring and that of nature, detection is made more difficult and unlikely.

If our Creator's care is shown so clearly for these little animals, can we ever doubt it for ourselves, His highest creation of all.

The rabbits, or conies which is another name for them, have not the least realization of this wise planning for their safety. But we, who are made in His likeness must realize His shielding and guidance and love of which we have wonderful instances all our lives long.—I. H. N.

Household Waste

IN Canada there is even less household economy than in Great Britain. It is estimated that the average English family spent 25% too much on foodstuffs before the war. The percentage was certainly not lower in the Dominion. Since August, 1914, that waste in expenditure has largely declined but a British writer was forced to say eighteen months after the beginning of hostilities that "the amount of waste which most English households still tolerate is at once the wonder and despair of all visitors who come to us from thriffter countries."

England is on rations now. Ask the Canadian who has just come back from England who he thinks the living conditions in the Dominion as compared with the United Kingdom. The answer will prove that there are still millions that could be saved in table economy here. The same millions must be saved. They are needed for investment in War Savings Certificates. Do your bit and economize.

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taxes do not amount to a hill of beans alongside of the new values.

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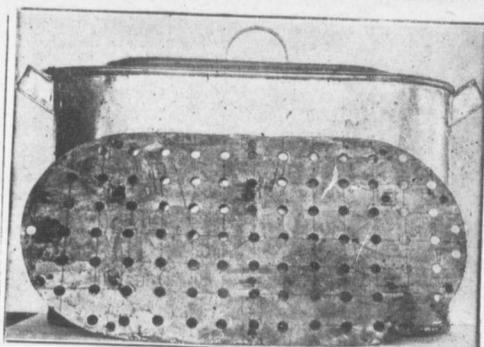
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Mobilizing Crops for Winter

IN our issue of last week appeared a method in our columns on previous occasions, but for the uninitiated, and like to draw the attention of our work to the importance of canning method do not mean that the foods possible this year. Canning is one of the methods of mobilizing all our cooked fruits and vegetables in the practice of economy and thrift. Some of our most delicious fruits and vegetables can be easily prepared in two distinct processes in canning. Scalding means to dip the article in boiling water for one minute and then son, but during that season yield most abundantly. To prevent the waste that resort to methods of preservation, particularly to canning. Canning not only conserves the surplus supply, but also aids in supplying variety to the diet throughout the rest of the year. If we are to have meatless days we will find it hard to vary the diet without a larger variety of fruits and vegetables than in former years. Then, too, there is magic in the word "home-made." The quality of the home-canned fruits and vegetables, providing they are carefully done, is far superior to the commercially-canned article.

Canning is either an easy routine job or a terrific undertaking, according to the way we approach it. In all canning, by whatever method, a few general rules carefully observed, will pretty well assure success: (1) Absolutely cleanliness in everything; (2) Perfectly sound and fresh goods; (3) Complete sterilization; (4) Complete exclusion of air when sealing.

It is false economy to buy anything but the best jars. There are a number of excellent makes on the market. The main point to bear in mind when selecting jars is, that the tops or covers fit tightly. The fruit or vegetable will set keep in a leaky jar. Jars with large mouths, or jars with mouths of the same size as the rest of the jars are preferable to jars with small mouths. It is much easier to put in the fruit or vegetable and take it out again. They should be of few parts and easily washed.

It is well to have new rubber rings each season, although we are told that if old rings are dipped in melted paraffine, or a mixture of paraffine and sealing wax, when cool they will do duty as well as new ones. All utensils such as paring knives, colanders, strainers, measures, spoons, bowls, dishes and towels, as well as hands must be absolutely clean. Cleanliness is indeed an important factor and used in this connection really means sterilization.

The cold pack method of canning fruit and vegetables is now coming to be considered the best by canning and expert housekeepers. We have explained the stages of this

method in our columns on previous occasions, but for the uninitiated, and like to draw the attention of our work to the importance of canning method do not mean that the foods possible this year. Canning is one of the methods of mobilizing all our cooked fruits and vegetables in the practice of economy and thrift. Some of our most delicious fruits and vegetables can be easily prepared in two distinct processes in canning. Scalding means to dip the article in boiling water for one minute and then son, but during that season yield most abundantly. To prevent the waste that resort to methods of preservation, particularly to canning. Canning not only conserves the surplus supply, but also aids in supplying variety to the diet throughout the rest of the year. If we are to have meatless days we will find it hard to vary the diet without a larger variety of fruits and vegetables than in former years. Then, too, there is magic in the word "home-made." The quality of the home-canned fruits and vegetables, providing they are carefully done, is far superior to the commercially-canned article.

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Pockets an Ancient Institution

IMPORTANT NOTICE

Farm and Dairy patterns shown in these columns are especially prepared for Our Women Folk. They can be relied upon to be the latest styles and include the most novel features of the latest patterns. When sending your order please be careful to state bust or waist measure (or adult size) for children, and the number of the pattern described. Orders are filled within one week to 10 days after receipt. Price of all patterns sent to Our Women Folk, 10 cents each. Address orders to Pattern Dept., Farm and Dairy, Peterboro, Ont.



HERE is no need nowadays to long for pockets in our costumes. It is many a day since members of the fair sex have been so favored with pockets as at the present time, and they are not by any means small. In fact some of the designs are quite tremendous. All of us no doubt appreciate the luxury of having pockets once more as they seem such a necessary luxury. If we get out some of the old dresses of our grandmothers in the days of pocket, we will notice that the majority of them were out of sight, quite a contrast to those of today, as in almost every case nowadays, they prefer the full glory of being seen and appreciated, rather than hiding away as though ashamed of their existence.

The pocket is really quite an ancient institution. Originally, it was a detached affair. They were frequently made in pairs and of various materials. Some of the pockets worn by women in colonial days were flat with slits running from the top nearly half way to the bottom by means of which the contents of the bag might be inserted. Some of these early pockets were of figured calico, or more elaborate ones of silk. They were sometimes attached on to a band which was fastened around the waist. That pocket was quite a cherished possession in older days in either country or city. The pockets frequently mentioned in wills as being left in legacies. Not until about half a century ago do we learn that pockets were considered a part of the costume by women.

2111—A pretty gown. Here is a design which would make up nicely in some of the dainty flowered material, and could be finished attractively with lace and in-sets. It is a good plan to put four or five inch bands on the summer dresses this year as they are being made so short, and probably next summer, also. Fashion will demand longer skirts. In this way a dress can easily be lengthened if necessary. Three sizes: 16, 18 and 20 years.

2116—A set of sporty frocks.—The three styles of cap shown will no doubt give to many our Women Folk, 1 is especially suited to motoring and many caps of this design are being worn this season. The three designs are included in the pattern. Two sizes; medium and large.

2107—A summer dress.—This style with the blouse in a plain effect coming out over the skirt, is a variation from many of the other summer designs. The sleeves may be made from contrasting material. Six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure.

2109—Girl's Dress.—A dress made from this design should be practical as the bolero might be used only on special occasions and the other portion of the dress more frequently. The effect without the bolero is quite pleasing as will be noted in the small front view. Flowered material should work up nicely for use in the bolero. Four sizes: 4, 6, 8 and 10 years.

2124—A practical Work Suit.—More and more people are coming to believe that a costume after the style of the one here-fashions around the waist. That pocket was quite a cherished possession in older days in either country or city. The pockets frequently mentioned in wills as being left in legacies. Not until about half a century ago do we learn that pockets were considered a part of the costume by women.

2104—A charming Lounging Robe.—This robe looks fine in dairy enough for an afternoon dress and the design is certainly most attractive and simple. Four sizes; small, medium, large and extra-large.

2108—Play Suit for Boys.—Here is a sensible and attractive suit for the small boy in hot weather. It looks cool and comfortable and easy to get on and off. Four sizes; 2, 3, 4 and 5 years.

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CITY MILK SUPPLY

Winnipeg Milk Producers' Strike

AS we go to press Winnipeg is facing a milk famine. The inability of the city dairies and the milk producers' association to get together has led to the refusal by the latter to supply the companies with milk until the wrongs under which their labor are righted.

The producers' strike is receiving only five cents a quart for their milk, while the Crescent Creamery company is selling it for 12 cents. They were further incensed by the action of the company in sending them circulars and new forms of contracts to be signed by July 4. The circulars stated that, if the contracts were not signed by the appointed date, the company would infer that it was not the intention of the producers to supply it with milk.

Get More Than They Need.

In defence of this action the company claims that 2,000 gallons daily in excess of the requirements is being received. This surplus has entailed a loss to the company, which has accepted the milk purely with the view of encouraging production and helping out the producers, who have been paying high prices for feed during the early spring months.

Before going on strike a deputation waited on the city but failed to get asking that they might be allowed to peddle milk on the streets to prevent serious losses to children and invalids. They offered to sell milk in this manner at a price of a dollar. The board of control, however, stated that it was not within their power to suspend the license by-law. With this refusal behind them the milk producers felt justified in continuing down on all milk shipments to the dairies.

As the City Dairy, when interviewed by the producers' executive, had said it was willing to pay 26 cents a gallon to the dairymen, provided the Crescent Creamery did the same, the producers decided at first to call off the strike for this concern if it would sign a contract for three months, starting at 26 cents, with 1 cent increase per month up to 23 cents, and apply the strike only to the Crescent Creamery, which had met them with a flat refusal.

The City Dairy was telephoned to and in answer Messrs. Max Steinkopf and Fratin came to the meeting to discuss the matter. The company, however, refused to sign any contract. Mr. Steinkopf stated he was still willing to pay 26 cents a gallon to the dairymen with whose hard lot he said he sympathized entirely, provided the Crescent Creamery paid the same figure.

The result was that no understanding could be reached and the meeting decided that the milk shippers would not deliver any milk to either company so long as they refused their terms.

They also decided that the strike could not be settled on terms which would allow them to live, to start a plant of their own with pasteurizing facilities, and thus put the two creameries out of business.

The Dairymen's Position.

The economic situation which the dairymen say justifies the present strike is as follows: A good cow could be bought last year for \$80 to \$90; 60-day the same cow costs \$125 to \$140. Short-cut hay was \$15 a made grass very short and of inferior quality as a milk producer. Their expenses and labor have thus increased and their remuneration has remained stationary.

They have other grievances also.

They sell milk to the creameries at present 20c and 21c; but the creameries weigh the milk, and instead of paying them on the gross weight, pay them by the gallon, through which process they lose about three or four per cent. Therefore, the creameries deliver pasteurized milk, which contains three per cent. fat, while the milk the producers deliver contains often four and four and one-half per cent. fat, being received by the creameries to make cream or butter.

As yet not all dairymen have joined the association. There are in Manitoba about 500 dairymen dealing with the creameries. Of this number 400 have paid the entrance fee of \$2. As there was a rumor that the Crescent Creamery was trying to procure milk from the cheese factories, Professor Villeneuve, of the Agricultural college, secretary to the association, went out to St. Pierre to interview the cheese factory owners there.

New Chief R. O. P. Inspector

THE position of Chief Inspector in the Canadian Record of Performance, held by the death of Mr. Dan Drummond, was filled by the promotion of Mr. C. S. Wood.

Mr. Wood has been an inspector on the staff of the Canadian R.O.P. since 1914, and a veteran of the South African War, having served with Brabant's Horse, a Colonial Corps. He returned to Canada in 1901 and has occupied the position of dairy herdsmen for three years on the farm of Robt. Reid & Co., Hintonburg, for four years at the Ontario Agricultural College, Guelph, Ont., and for six months at the Central Experimental Farm, Ottawa.

He took the short course in dairying at the Agricultural College, and for three and a half years was permanent official tester in the dairy department of the college, during which time he acted as inspector on the Record of Merit for the Holstein-Friesian Association.

Mr. Wood is a thoroughly practical dairyman. In connection with his field work he has gained a recognized reputation as an expert judge and feeder of dairy cattle, and as a specialist in matters pertaining to milk testing. The qualifications he has exhibited in these and other directions since his employment in the federal service have commended him to the Minister in connection with his appointment to his present position.

Lloyd-George's Appeal to Canadian Farmers.

ASTIRING appeal has been made by Lloyd-George to the farmers of the British Empire to increase production. The first step which the British Empire holds against the Germans is held by those who work on the land, as well as by those who fight on land and sea. If it breaks away at any point it breaks everywhere. You workers on land must hold your part of the land as strongly. Every day's labor you do helps to shorten the struggle and brings us nearer our goal. Every idle day, all letting, lengthens the struggle and makes defeat more possible. Therefore in the severest hour, stand as workers on land do your duty with all your strength.

That Canadian farmers will respond to this appeal as patriotically as the Canadian boys responded to the call for arms is undoubted. The world food shortage is so serious and the spectre of the world hunger so real that every extra pound of food is needed to back up the boys at sea. It is needed now and in 1918. In addition, there is the added stimulus of extraordinarily high prices for all food products—a situation which is bound to continue this year and 1918.

The Makers' Corner

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

Pasteurize Storage Butter

LAST year the Government of New South Wales, Australia, financed a scheme for the storage of 20,000 boxes of butter against the winter shortage. The storage of butter on such a scale under the supervision of dairy experts presented a rare opportunity for making comparisons between the keeping quality of pasteurized and unpasteurized butter in cold storage. Pasturization here proved its value in dollars and cents, when the butter was sold.

One of the largest contributors to this cold storage scheme submitted both pasteurized and unpasteurized. These butters graded from 92 to 94 points on being first examined prior to entering into the cold store, and whereas pasteurized butter rarely showed a deterioration of more than one point during the three months in store, a good deal of unpasteurized butter deteriorated to a second quality, grading about 80 points. This latter butter developed fishiness, whereas butters pasteurized by the same company showed no trace of fishiness. If all we can do is to pasteurize, this company had been pasteurizing the butter in price realized at the end of the storage period would have been sufficient to have paid for the installation of a complete pasteurizing plant.

Some of the factors which are aiming at getting a large quantity of their produce passed into the storage scheme, endeavored to make a first-class butter by the blending of tainted and untainted creams, and afterwards neutralizing and pasteurizing same. The process failed to enable them to produce choice quality. This showed the folly of blending tainted and untainted creams, even though neutralization and pasteurization is adopted.

About Cottage Cheese

A POUND of cottage cheese contains as much protein as 1 1/2 lbs. of sirloin steak or 1 1/2 lbs. of pork chops. Protein is muscle-making material and there is need of a good supply of it in the working man's diet. Most is largely used for the protein it furnishes. The present prices of meat are leading people to consider other sources of protein, and cottage cheese is sure to be one of the foods selected to supplement meat when its value is known. It should be said that cottage cheese does not contain as much energy, heat-making material, as meat, but it is as valuable a food for the body as meat. It is not only a food for the working man, but it is also an excellent food for those doing light work or feeding a sedentary life.

From 10 lbs. of skim milk or buttermilk 18 to 20 lbs. of good cottage cheese can be made. The expense and work of making it on a large scale, such as could be provided in a creamery, are small. The farmer can easily supply the family with cottage cheese through this nutritious product and in many cases can find a ready market for a considerable amount in the city.

City people like cottage cheese when it is good, and will buy it if the price asked for it is not too high. Selling little amounts of cottage cheese in extra packages for 10 or 15 cents has made it a reliable man food, and we have heard people say it is more expensive than meat when obtained in this way. We would enter no pro-

test against putting up cottage cheese in small packages, but it would also be offered in 2, 3, 5, and 10-lb. lots and at a price which will lead the consumer to buy it in large amounts. When 15 lbs. of cottage cheese are obtained from 100 lbs. of skim milk and sold for 10 cents a pound it means a gross return of \$1.50 a hundred for skim milk. It is a cheap food even at 15 cents a pound. The cost to manufacturer and place cottage cheese on the market should not exceed, in most instances, more than 25 cents per 100 lbs. skim milk.

We have in cottage cheese a valuable food product. The consumers should be taught that it is a food and not a delicacy, and that it will take the place for a pound of meat. Further, the dairy interests, including dairy farmers and creameries, should investigate the possibilities of cottage cheese and attempt to create a larger market for it. Supplying it in liberal quantities, at reasonable prices, and of good quality, should lead to a large and profitable demand for the product.—Hoard's Dairyman.

Cooling the Cream

EDITOR, Farm and Dairy.—We are being continually urged to produce more milk this year, to save more and to conserve more. If the statistics we get as to the danger of world wide starvation are correct, then wisdom only knows what to do. If all we can do is to produce more, we are very much struck in reading over the food exports and imports of the United States to find that for several years back United States people have actually eaten more of their own produce. Doesn't look as if they were the world, does it? We Canadians, however, can do much to increase our surplus by saving food that in other ways is practically wasted. I suggest that I would like to pass along is that we take better care of the cream this summer. Bacteria destroy real food, when they sour cream and the inferior butter manufactured from inferior cream, is not such a good feed as good butter. Here are a few ways in which patrons I collect cream, are caring for their cream.

The best patrons put up ice. When their sweet cream is an easy matter. Many farmers, however, always have a good bucket of cream ready for me, but have no means of cooling tank back when the pump of windmill and a stock watering tank. The cream cans are submerged in water in the intermediate tank and as every bit of water has a cooling effect on the cream, it is almost always cold. One of our patrons have insulated this cream tank and their cream is usually not only of good flavor, but also sweet. Another patron who invariably has good cream, lowers a short gun into an old well. He is a careful man, I would not advise a careless man to pollute his plan, as one spill would ruin the cream. I would say that it couldn't be used again for weeks.

One of the commonest mistakes made is to mix in the fresh cream from the separator with the old cream before it has been sufficiently cooled. A bigger mistake yet is to wash the separator just one day in hot summer weather. I have been talking the latter point for a long, long time but don't seem to have made much impression. I guess nothing short of cream grading and paying about five cents a pound butter or more for good cream than for poor cream, will make the average farmer do it. If his wife, wash the separator twice a day.—Cream Dealer, Victoria Co., Ont.

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Notes, Queries and Answers

Combating Horn Flies.

Is there a suitable spray, the cost of which is not prohibitive, for combating horn flies?

For the control of the horn fly, the following measures have been recommended: Spray the cattle lightly each morning with a mixture of fish oil, 100 parts; oil of tar, 50 parts, and carbolic acid one part. Mix thoroughly before applying. As the eggs of the horn fly are deposited in cow manure, in which the larvae develop, stables and barnyards should be kept clean, and when manure is taken to the fields, it should be spread thinly as with a spreader, so as not to afford a breeding place for the development of the pest.

Girl Coming of Age

WOULD you kindly tell me if a girl comes of age when she is 17? I understand she does, and would like to know if at that age she could inherit money—her father's daughter, Heilmann Co., Ont.

A girl does not come of age so as to be entitled to receive and give receipt for moneys payable to her until she is 21 years old. Moneys for infants which come under the control of the official guardian are paid into court and will only be payable out in whole or in part before the beneficiary attains 21 years of age upon an order of a High Court Judge. Such orders are occasionally made when it can be shown that advances are desirable in the interest of a beneficiary for his or her maintenance or education.

Cow With Cough

I HAVE a cow that is troubled with a cough. Green water runs out of her mouth sometimes and she pants and is short of breath. She is in good condition. Would it be indigestion, and what would help her?—E. Wright Co., Que.

The symptoms indicate tuberculosis of some of the respiratory organs, for which nothing can be done. The best means of reasonably definite diagnosis is the tuberculin test by a veterinarian. If she be not tubercular, the cough will not likely interfere materially with health.

Fatality in Sheep

AS I have had considerable trouble with my sheep this spring I am seeking advice. The first symptom is that they seem full and sloppy, holding their heads low to the ground. They are somewhat stupid, discharging somewhat from the mouth and nose. They will not eat, and die in about four days. They do not seem to mind much pain. I have lost three now and another is dying. Some time ago I cleaned out a storehouse and burned some old boots and rubbers and some old salt bags. I noticed that the sheep ate some of the ground where this was burned, likely looking for the salt. Would this have caused the trouble? Their pen was also very damp for a few days during the sloppy weather. If you could give me the cause and also if you could give me the cause and also if treatment it would do me a great favor. The discharge from the bowels is almost like slime.—H. S. Farry, Sound Dit., Ont.

The sheep die from digestive trouble. The dampness of the pen referred to would predispose to this. The food consumed may be responsible. See that their quarters are dry and comfortable and that they get daily exercise. Add to their drinking water one-quarter of its bulk of lime water. Feed on good hay (clover if possible) and feed a reasonable ration of whole oats daily and a few raw turnips or mangels if procurable. They may be able to get a little grass, which will do better than raw roots.

TRADE MARK Wilkinson Climax B REGISTERED Ensilage and Straw Cutter

Our "B" machine, built especially for the farmer. A combination machine—it will cut and deliver green corn into the highest silo or dry straw or hay into the mow. 12-inch throat, rolls 6 inches and set close to knives—solid, compact cutting surface. Can charge cut without stopping. Can be reversed instantly. Direct pneumatic delivery. Kalle wheel carries faxes. No lagging, reversing cut, wheel always in balance. Steel faxes.

Made in America—mounted or unmounted. We also make large type machines for custom work. Ask your dealer about this well known machine and write us for new catalog showing all styles.

THE BATEMAN-WILKINSON CO., LIMITED
408 Campbell Ave., Toronto, Canada.



Did you see some article in this issue that interested and helped you? It may help your neighbor also. Pass along your old copies of Farm and Dairy.

FARMERS



John Hallam Toronto Limited

The Highest Prices Ever Paid for Wool Are Now Being Paid By Us

Mr. Farmer, you can get more money for your wool by sending it direct to us. In all probability it will come to us anyway at some time, no matter to whom you sell it.

For over thirty years we have been one of the largest buyers of wool in Canada. We could not continue in business for this length of time if we had not treated our customers fairly and pay top prices. We send your money the same day as wool is received, only deducting freight or express charges.

We are now paying for wool as follows:

Unwashed fleeces—fine 51c to 62c per lb.
Unwashed fleeces—coarse ... 60c to 61c per lb.
Washed fleeces—fine 74c to 77c per lb.
Washed fleeces—coarse 71c to 74c per lb.

Ship to-day or write us telling how much wool you have, if washed or unwashed, and breed of sheep clipped from. We will then quote you a straight price and send you shipping tags with full instructions.

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Any farm is alive with opportunities to
KODAK

The youngsters with their pets, the family reunions and home-comings, the scenic beauties of farm and neighborhood, the interesting incidents that make up farm life, the farm, itself, with its orchards and fields and cattle and barns, offer material for pictures of which any album might well be proud.

There is a practical side to Kodak as well, for any farmer. You can read about it in the little free booklet, "Kodak on the Farm," if you will send for a copy.

Remember, it is easy to make pictures—good pictures—and if you think it's expensive that shows that you ought to find out more about it.

Kodaks from \$7.00 up. Brownie cameras, \$1.25 up.



CANADIAN KODAK CO., LIMITED
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FROST & WOOD BINDER

This year of all years you must have machinery on which you can depend—no matter what your field conditions are at harvest time.

The Frost & Wood Binder will harvest any crop—big, medium or light—in perfect shape.

It is light in draft and so easy to run that inexperienced help or any boy able to handle a team can operate it.



SURE CUTTING—SURE TYING—EASY LEVERS—NO CHOKING or THRESHING

The high quality materials of which the Frost & Wood Binder is built—its design—its light draft and its satisfactory work are known and appreciated by every user. Don't waste valuable time and more valuable crop this year "fussing" with an old machine, when you can be sure of steady cutting and clean work with a new Frost & Wood Binder. The investment is small compared to the returns you will receive. Talk it over with our nearest agent.

Let us send you the new F. & W. Binder folder or get it from the nearest Frost & Wood agent.

THE FROST & WOOD CO. Sold in Western **THE COCKSHUTT PLOW Co.**
 Ltd., SMITHS FALLS Ontario and Western Limited
 Montreal St. John Canada by Brantford, Ont.

Postal Card Reports

Correspondence invited.

KINGS CO., P. E. I.

HERMANVILLE, July 2.—The latest season for forty years. Considerable grain (oats) sown as late as last week in June. Good prospect for crops, however. Potatoes coming up well. Hay crop very poor; also pasture. No clover—all killed last winter. Poor prospects for dairymen. Feed prohibitive. Cracked corn 180 a ton; oats \$40 a ton; no middlings—J. A. M.

KING'S COUNTY, P. E. I.

Hermanville, July 7.—Weather for the past week has been cloudy with rain showers and high winds—fine for the growing crop, especially the late sown grain. All crops look well, but the early corn is inclined to be woody. Potatoes coming on splendidly, and are being cultivated. Wool 70 cents a pound—a wonderful price. Pastures improving and milk better. No clover this year.—J. A. M.

COMPTON COUNTY, QUEBEC.

BURY, QUEB., July 10.—Haying is getting under way with excellent crop. Grain will be good, especially what is on wet land. All meats are in excellent demand. The outlook for root crop is not good, as weather is much too wet. Help is very scarce. Some farmers have a hundred tons of hay to house and no help.—G. W. P.

SHERBROOKE COUNTY, QUEBEC.

LESLIMONVILLE, July 11.—The prospect for the hay crop is excellent in this locality, though haying will be much later than usual. Help is scarce and the scarcity of machines is being severely felt. Pastures are good and dairy receipts are better than usual as we have not extremely hot weather to interfere with production. Grain is a good deal injured by the extreme wetness. On the whole the crop outlook in this part of the province is excellent.—H. M.

LEEDS COUNTY, ONTARIO.

BROCKVILLE, July 9.—Seldom have crops looked more promising in this vicinity than at present. Indications point to a bumper harvest. Oats, barley and rye are doing well, and corn, potatoes never looked better, and the tubers promise to turn out all right, even though the potato bug has made its appearance. Other vegetables are plentiful. Haying will be over by the end of the week.—T. G.

HASTINGS COUNTY, ONTARIO

Tweed, July 5.—Farmers have begun cutting clover which is a good crop. Some sweet clover is being harvested here for the first time and has given a good cut. If the weather is favorable a fairly large area will be devoted to seed clover this season. Pastures continue good, but recent heavy rains have hindered hay making to some extent. Both fall and spring grain show good progress.—H. S. T.

NEW WESTMINSTER COUNTY, B. C.

Chilliwack, B. C., July 6.—June has been a wet month. We have had some good hay weather but it has been catchy. Haying here will not likely be general until about the 15th or 20th. The crop of this turning crop this year has been almost a complete failure on account of the hot dries. Mangolds have suffered but little from this pest. The corn crop this year of June has hindered its growth. Some pastures and meadow lands are looking good in most cases. Grain crops, too, are coming along nicely. The price of hay is still going up. It now is worth 16 cents a pound, live weight, but feed is correspondingly high.—N. C.

AYRSHIRE DOES HER BIT

THE seven-year-old Ayrshire cow, August Lassie, owned by the Lawrence, August Lassie, owned by the Lawrence, West Virginia, has completed an official yearly record of 19,582 pounds of milk, 82.50 pounds butter fat, test 4.11 per cent.

August Lassie was born August 5, 1910, and already has three official records to her credit. On February 1, 1915, she completed her first official Advance Registry Record, producing 10,047 lbs. of milk, 398.34 lbs. butterfat. On March 15, 1916, she finished her second record with 7,754 lbs. milk, 720.05 lbs. butterfat, test 4.66 per cent, and has the record. Just completed, 19,582 lbs. milk, 831.65 lbs. butterfat, test 4.35 per cent.

The completion of this last record gives August Lassie a three-year cumulative average record of 17,979 pounds milk, 649.92 pounds butterfat, 4.11 per cent test.—J. G. WATSON, Extension Service.

FOR SALE

Two pure bred registered Jersey BULL CALVES, two and three months old, breeding the BEST PRODUING IN ONTARIO, price \$40.00 each. For full particulars, apply to
 E. A. SMITH, 386 Talbot St. ST. THOMAS, ONT.

BUILD A STURDY STAVE SILO

Cost Less and 100% More Durable

Our Preservative Process is an Exclusive Feature.

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ewe lambs for BREEDING PURPOSES

The Sheep Breeders' Associations in Quebec are offering several hundred choice ewe lambs for breeding purposes—Shropshire, Oxford, Hampshire, Leicester and Cheviot grades. Prices, \$12.00 to \$18.00 each. Orders also received for pure bred rams of the above breeds at \$20.00 to \$40.00 each.

Apply

A. A. MACMILLAN, in Charge of Sheep Husbandry, Macdonald College, Que.

LAKESIDE AYRSHIRES

A select lot of young bulls, all ages, sired by Auchenbrin Shire Farm (Imp.) 35715 (8865), Grand Champion at both Quebec and Sherbrooke, from Record of Performance Bulls. Write for catalogue.

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GEO. H. MONTGOMERY, Dominion Express Bldg., Montreal.

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Every Farm should have an Ayrshire

MORE MILK MORE BUTTER MORE MONEY

World-famous as the economical producer among dairy cattle.

WRITE W. H. STEPHEN, Secretary CANADIAN AYRSHIRE BREEDERS' ASSOCIATION, BOX 508—HUNTINGDON, QUE.

SPRINGBANK AYRSHIRES

For sale, one choice yearling bull; a few bull calves from 3 to 8 months old, and a few choice heifer calves. All are bred to color and type, and from I.R.O.P. dams.
 A.S. Turner & Son, Ryckman Carvers, Ont.

Special Offer

of pedigreed TAMWORTH stock. Young sows in pig, also males and females about to be weaned.

HEROLD'S FARMS

Beasville Ontario

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Market Review and Forecast

TORONTO, July 16.—A special press bulletin issued by the Census and Statistics Office indicates that wheat in most places is coming up well. Potatoes generally should be a fair crop although Maritime Provinces and Quebec report a big hay crop. Ontario's hay crop will be from fair to light. Spring grain is promising, but from 10 to 15 days late. The fall wheat district, south of Parry Sound, will average but half a crop. Manitoba wheat is showing two weeks' later than last year. May frosts and prolonged dry weather will result in short straw and only fair yield. Some rain has fallen, but moist warm weather is needed. Alberta has been more fortunate in regard to rain and crops are promising. Latest reports from Saskatchewan state that grain is burning up for want of rain. British Columbia reports an average crop and 30 per cent. increase in fruits.

Cattle are moving slowly at slightly decreased prices. Prices of grain have fluctuated during the week, as a result of the United States crop report and the German Chancellor's speech, but again resumed normal.

WHEAT.

With only limited quantities available, the market for Ontario wheat is showing greater strength than would otherwise be the case, but at recent price movements demonstrate, its market value fluctuates quite easily with the outside market. Quotations:

Manitoba wheat, track, bay ports, No. 1 Northern, \$2.54 1/2 nominal; No. 2, \$2.51 1/2; Ontario wheat, No. 2 winter, \$2.35 to \$2.40 according to freighta out; No. 3, \$2.13 to \$2.18.

COARSE GRAINS.

The upward movement of corn prices on the Chicago market was reflected in the advance of the Toronto cash price to \$1.59, according to quotations. Quotations follow:

Manitoba oats, track, bay ports, No. 2 C. W., \$1.15-2; American corn, No. 3 yellow, \$1.19; pea, nominal; barley, matted, \$2.1-2; No. 3, \$1.1-2; extra No. 1 feeding, \$1.1-2.

MILL FEEDS.

One dollar a ton advance in the price was the feature of the mill feed market last week. The increase in price is due to the continued drop in American buyers for supplies for the July and August delivery. No change in price in other lines, the demand being steady for small lots. Bran, \$32; shorts, \$38 to \$39; middlings, \$42; good feed flour, per bag, \$2.60 to \$2.90. At Montreal, bran, \$33; \$34; shorts, \$35 to \$37; middlings, \$40 to \$42; molasses, \$44 to \$45.

HIDES AND WOOL.

Country Markets.—Beef hides, flat, cured, \$26 to \$24; deacons, or hob calf, \$17.50 to \$22.50 each; horsehide, country (take-off), No. 1, \$6 to \$7; No. 2, \$6 to \$6; No. 1 sheepskins, \$2.00 to \$2.50. Horseshair, farmers' stock, \$37.

Wool.—Washed fleece wool, as to quality, fine, \$32; coarse, \$25. Washed wool, fine, 70c; coarse, 65c.

POTATOES AND BEANS.

Potatoes, new, bb, \$7 to \$7.50; West-erns, \$2.25.

Beans.—Japanese, hand-picked, bushel, \$7.50 to \$8; Canadian, hand-picked, bushel, \$2.25; prime, \$2.75.

EGGS AND POULTRY.

Eggs have advanced a cent a dozen, according to the prices which wholesalers are paying at country points for cases returning to the city. To the retail trade, 35c. While there are plenty of eggs arriving to supply the demand for immediate consumption, they are not so abundant as a few weeks ago.

Chickens, spring ... \$10 to \$20 25c to 30c
Hens, under 5 lbs. ... 15c to 20 20c to 25c
Hens, over 5 lbs. ... 15c to 20 20c to 25c
Roosters ... 14c to 16 16c to 20
Ducks ... 12c to 16 16c to 20
Ducklings ... 12c to 16 16c to 20
Turkeys ... 15c to 20 15c to 20

Butter is easy with no change in last week's price of 32c to 33 1/2c for cream-pats. Montreal prices are as follows: First quality, 30 1/2c to 31c; second grades, 28c to 29c; third quality, 26c to 27c; finest 28c to 29c.

The good condition of the pastures has resulted in an abundant flow of milk, and this

consequently a large output of dairy produce. London advices indicate that the market there is very unsettled. The late arrival of Canadian grass-fed cheese has adversely affected the market, and much attention is paid to fodder-fed goods. Prices on country boards are remaining at most the same level as last week. Most of the sales being made at a figure above 21c. Cheese board sales follow:

CHEESE BOARD SALES.

Lindsay, July 9.—750 boxes were offered. All sold at 21 1/2c.
St. Pascheh, Que., July 10.—85 boxes of butter sold at 35 1/2c; 823 boxes of cheese sold at 21 1/2c.
Madou, July 11.—656 cheese were boarded; all sold at 21 3/4-16c.
Woodstock, July 11.—Seven factories boarded 1,360 boxes of assorted cheeses on the local board to-day. All sold at the same price as was disposed of at 21c.
Kingston, July 13.—740 white, 120 colored were boarded; 809 sold at 21 cents.
Picton, July 13.—2,156 boxes of cheese boarded at 21c; 212 colored, 20 cents.
Cornwall, July 13.—3,289, of which 2,910 white and 379 colored. All sold at 21 1/2-16c.
Listowel, July 13.—2,220 colored, 770 white cheese were boarded. Sales made at 21c.
Perth, July 13.—1,700 boxes of cheese and 12 boxes of butter. The cheese all sold at 21 1/2-16c and the butter at 31c.
North Bay, July 13.—Cheese boarded, 2,500 boxes. All sold at 21 1/4-16c.

LIVE STOCK.

Trade on this market has been fairly active during the week, and prices for the most part steady. While the offerings were not heavy, demand has been present farmers evidently being keen to offer their cattle on grass for some time. The price of hogs, with the prevailing tendency the week previous, reversed somewhat. Quotations follow:

Choice heavy stockings ... \$11 to \$12.25
Butchers' choice handy, ... 11.00 to 11.50
do good ... 10.50 to 11.00
do common ... 8.50 to 9.00
Butcher's bulls, choice ... 9.00 to 9.50
do good ... 7.00 to 8.00
do medium ... 7.00 to 7.50
Butcher's choice cows ... 8.25 to 8.75
do good ... 7.25 to 7.75
do medium ... 6.75 to 7.25
Feeders, 500 to 600 ... 8.00 to 8.50
do medium, 700 to 800 ... 7.25 to 8.25
Stockers, 700 to 900 lbs. ... 8.00 to 8.25
do medium ... 6.00 to 6.50
Canners ... 10.00 to 12.00
Milkers, good to choice ... 9.00 to 12.00
Cows and medium ... 4.00 to 5.00
Springers ... 10.00 to 12.00
Calves, veal, choice ... 12.00 to 15.00
do medium ... 10.50 to 11.50
do common ... 6.00 to 8.50
do heavy fat ... 6.00 to 7.00
do gray fat ... 5.00 to 10.00
Spring lambs, cwt. ... 16.00 to 17.00
Sheep, yearlings, choice clipped ... 10.00 to 11.00
Sheep, ewes, light, clipped ... 9.50 to 9.50
do heavy and backs ... 6.50 to 7.50
do culls ... 4.00 to 4.25
Hogs, fed and watered ... 16.25 to 20.00
do off cars ... 16.50 to 20.00
do f.o.b. ... 15.50 to 20.00

A GOOD TEST.

The Jersey cow, "Judy Dentonia," owned by Mr. Isaac Hetherington, of Smith Township, Peterborough Co., recently completed a creditable test. In thirty days "Judy" produced 1,529 pounds, representing in butter 35 lbs.

HIGH RECORD JERSEYS IN B. C.

COWS of the Jersey breed are doing good work in British Columbia. In the district of Nanaimo there has been recently distinguished themselves B. P. Solly, of Lakeview Farm, Westhead, B. C. "Flashes Model Jersey" has completed a 30-day record, producing 9,015 lbs. of milk and milk fat, during her first lactation period, which places this holder amongst the half dozen highest yielders in Canada. In her class, she is a nine-year-old Jersey now on test, has produced 83 lbs. of milk recently in 15 days, an average of 57 lbs. daily, while on three occasions this cow has yielded 60 lbs.

AVONDALE SALES TO THE UNITED STATES

THE FIRST SON OF CHAMPION ECHO SYLVIA PONTIAC to be sold went last week to the well-known A. A. HARTSHORN HERD, at Hamilton, N.Y. At WORCESTER SALE, we sold sires to Messrs. Ralph Stevens and Quentin McAdams, two of the leading breeders in the United States.

We have only five of his sons left and they won't stay long as three went last week. They are all from splendid dams, and we want some of them to stay in Canada.

We offer SIX beautiful sons of WOODCREST SIR CLOYDE—all grand individuals and from the best of dams, having records from two year class to mature cows with over 30 lbs. His first daughter to frothen has just finished a 22 lb. record. We can suit almost a purpose and offer them at bargains.

CHAMPION is still open for service to a few approved cows. He has just been bred to the \$18,000 champion 3-year-old 42 lb. heifer, sold to Worcester; also the champion Jersey 2-year-old of Roycroft Farm.

H. LYNN SUPT.

Avondale Farm Brockville, Ont.

HIGHLAND LAKE FARMS

Some of the bulls we have for sale at attractive prices:

1. Born May '17, two dams average 35.62 lbs.
2. Born March, '17, two dams average 34.16 lbs.
3. Born March, '17, two dams average (1 at 3 yrs.) 34.23 lbs.
4. Born March, '17, two dams average (1 at Jr. 2-yr.) 33.12 lbs.

These are sons of MARY ECHO SYLVIA, the world's record cow (under load), a son of AVONDALE PONTIAC ECHO, our herd sire in Canada. Send for extended pedigrees and prices on these and others, a few of average size, one from 111-lb. cow. We guarantee satisfaction. Twenty-five females for sale.

R. W. E. Burnaby Farm at Stop 55 Young Street Rad. Jefferson, Ont.

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 20-lb. calf, whose dam and two great-grand-dams average 35.4 lb. butter in 7 days. Also 11 bull calves of lesser note, and females of all ages.

R. R. No. 4. PORT PERRY, ONT.

Registered Holsteins

Bulls from one month to 17 months old for sale. All from our grand herd sire, Echo Segis Fayne, whose sire is half-brother to Segis Fayne Jehanna, the world's wonder cow, that has just made a record of 69 lbs. in 7 days. JOHN M. MONTLE, Sunnyside Stock Farm STANSTEAD, QUE.

CLOVER BAR HOLSTEINS

A choice bull calf born March 17, 1917, whose three nearest dams average 30 lbs. butter in 7 days and 100 lbs. milk a day; also a few others from R.O.M. dams.

P. SMITH, R.R. 3, STRATFORD, ONT.

RIVERSIDE HOLSTEINS For Sale, Choice Young Bulls, sired by King Johanna Pontiac Korndyke, a grandson of Pontiac Korndyke, and a brother of Pontiac Lady Korndyke, 38.09 butter in 7 days, 166.92 lbs. 30 days—world's record when made. 15 females bred to "King." J. W. RICHARDSON, C. CALEDONIA, ONT.

LAKEVIEW HOLSTEINS

Are still in the lead. The latest Holstein year book shows that they held 4 Canadian records for butter, and Lakeview bulls have won all honors also offering several richly bred young fellows that are looking forward to the fall fair, and we have decided to give \$25.00 in gold to the man that buys the 1917 winner. Don't miss this opportunity. Act quick, and plan to spend a day at Lakeview. Terms cash or time. Major E. F. OSLER, Prop. Brant, Ont. T. A. DAWSON, Mgr.

KING SEGIS WALKER'S

Oldest daughter with first calf made 450 lbs. milk and 24 lbs. butter; with her second calf, 560 lbs. milk and 29 1/2 lbs. butter. Her first granddaughter, through his son, at 2 years 2 months, made 440 lbs. milk and 23 1/2 lbs. butter. Young stock for sale.

A. A. FAREWELL, OSHAWA, ONTARIO.

VILLA VIEW OFFERS FOR SALE

Villa View, the home of King Segis Alexraia Calamity and Dutchland Pontiac Calamity, the two herd sires that are backed up by more dams than any other herd in Canada. We have a few ALCRAIA bulls for sale at reasonable prices.

ARBORG BROTHERS, Serriville, Ont.



Organized Marketing on a Business Basis Means Increased Profits for You

It can be done, too—that's certain, because Ontario Farmers are doing it now

There are at present upwards of 200 GROWERS' BUSINESS ORGANIZATIONS helping in the MARKETING OF ONTARIO FARM PRODUCTS, besides scores of farmers' clubs which buy or sell co-operatively. These associations and clubs now handle:

Fruit	Beans	Live Stock (for Butcher)
Potatoes	Vegetables	Live Stock (pure-bred)
Onions	Seed Grain and Corn	Poultry and Eggs

Here are some encouraging results of last year's operations:

	Value of Products Sold.	Average Sold.
23 Fruit Associations	\$442,775.70	\$19,251.11
14 Egg Circles	111,035.22	7,931.68
12 Farmers' Clubs	178,624.39	14,855.36

THESE FACTS EXPRESSED IN FIGURES SPEAK FOR THEMSELVES. They prove that an efficiently organized farmers' marketing association PAYS, AND PAYS WELL. But again, this must be emphasized—the association must be efficiently organized.

THESE FACTORS MAKE FOR SUCCESS

Grading Comes First

Farm products are generally graded before they reach the consumer—and are sold accordingly. But they are seldom graded on the farm—too often they are sold ungraded and at a flat rate. That means that the high class products command the same price as the low grade, while all are sold for what the medium product really is worth. This system is manifestly unjust—it discourages the good farmer and encourages the careless farmer. Only graded products sell at their real market valuation.

Then Packing and Finish is Important

Consumers buy very largely what appeals to the eye. An attractive and suitable container, a neat pack, and the proper finish, make for quick sales and increased prices. It is always good business to give the consumer what he wants, the way he wants it. Superior packing and finish bring the superior trade.

Continuous Supply—A Vital Factor

When the supply diminishes, prices increase and the



demand lessens. Superior products will sell at this time profitably; besides they make for regular and permanent trade. As long as the demand lasts the customer should not be disappointed, and the market lost for lack of supply.

Study Markets and Market Conditions

Markets are, in the final analysis, simply consumers, and they have their preferences and their dislikes. It is good business to study and to cater to these. Then, too, often the local market becomes glutted; a knowledge of more distant markets, their demands, the best and quickest means of transportation, and the most efficient methods of selling are essential for the profitable sale of the surplus products.

THERE IS NOT A DOUBT but the most efficient way of supplying these principles in the case of the vast majority is by CO-OPERATIVE SELLING, ORGANIZED UPON A ROCK BOTTOM BUSINESS BASIS.

Working Together for Mutual Benefit

A Co-operative Marketing Association establishes the reputation of the district—the association's name and brand stand for quality.

It eliminates the low-grade product—successful egg circles, for instance, have already eliminated the 17% of bad eggs in their districts. It encourages community breeding of live stock and community specialization generally in those crops best adapted to prevailing local conditions.

Because of this, it attracts buyers to the district and increases prices. This in turn creates a greater interest in, and a greater knowledge of, markets, market demands and conditions, and, in consequence, new markets are developed and products are sold that would otherwise be wasted. Thus, for instance, where no co-operative fruit association exists apples may waste on the trees or be fed to hogs while the consumers' demand is strong and organized societies make ready sales.

Co-operation, in short, PAYS, AND PAYS WELL, and despite all prevailing obstacles is being applied upon an increasingly important scale in Ontario. Is the time yet ripe to organize an association in your own district?



ONTARIO

Practical and Timely Information

If you wish full information upon any of these questions or upon any others concerning practical co-operation in Ontario, or if you wish assistance in organizing an association in your own community, write the office of the Commissioner of Agriculture, Parliament Buildings, Toronto.

For general information upon the subject of organizing a co-operative society, write the office of the Commissioner of Agriculture for Bulletin No. 234—Co-operative Marketing Association.

Ontario Department of Agriculture

Parliament Buildings, Toronto

SIR WM. H. HEARST
Minister of Agriculture

G. C. CREELMAN
Commissioner of Agriculture

