

The Tariff Discussed from the Farmer's Standpoint on page 2

FARM AND DAIRY

AND
&
RURAL HOME

See Column's
Dairy and Cattle Dept's



DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE



Peterboro, Ont., Jan. 8, 1914



Farmer Autoists Now Dream of "The Good Old Summer Time."

ISSUED EACH WEEK

Rural Publishing Co., Ltd., Publishers

ONE DOLLAR A YEAR



The B-L-K Milker

A Description

The machine consists of a strong, heavily tinned steel pail, on the top of which is a metal cover, termed the pulsator. It fits loosely on a gasket that makes an air tight joint when the suction is on. A nipple projecting from the suction fitter on the pulsator connects the pail by a hose with the stanchion cock on the pipe line.

Each Pulsator Milks Two Cows at One Time

Two pieces of hose connect two cocks on the pulsator with two groups of four test cups each. The metal test cup with its rubber mouthpiece fits over the test and is held in place by the suction. The pulsator alternately makes and breaks the vacuum, first drawing the milk from the teat, then allowing a fresh supply to enter. This exactly imitates the calf's sucking, and is a more natural action than that of the hand.

As the milk is drawn from the teats it is sucked into the pail. An inspection glass in the milk passage permits the operator to see when the milk flow stops. From 12 to 18 cows per hour can be milked with one pulsator, depending upon the way in which it is handled, and an operator can care for two, or under some conditions, three pulsators.

An accurate account of each cow's yield and the quality of the milk can be kept by using the partition type milker.

The amount of space at our disposal in this issue limits the information in this announcement, but if you'll drop us a card we'll gladly send you our literature on the B-L-K Milker and Simplex Separator.

D. Derbyshire & Co.

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"Eaten Out of House and Home." The Dream of the Unprogressive Dairyman.

THE CAPITALISTS AND THE FARMERS*

R. McKENZIE, Winnipeg, Man., Secretary, Manitoba Grain Growers' Association

IN ADVANCING reasons why it is the interest of Canada that the government should concede to the requests made in the resolutions presented to you by the President, selected large-ly from government returns showing the economic condition of Canada and the relations the protective system has to trade conditions.

Canada imported for home consumption in the year ending March 31st, 1913, in round figures \$685,000,000 worth of merchandise, and exported \$375,000,000 worth of goods, that extent paid for her imports, leaving a balance of \$310,000,000 to be provided for in some other way.

ENORMOUS INTEREST CHARGES In addition to this adverse trade balance Canada has to provide for interest charges on borrowed money. That interest charge is now estimated to be \$75,000,000. The total amount, therefore, which had to be paid other- wise than by export, was \$385,000,000.

How was this to be done? We are paying for it now by borrowing. Clearly we cannot continue borrow- ing to meet the balance against us, which is increasing year by year at an alarming rate. From 1896 to 1903 we exported more goods than we imported, and went into public debt during that period went into public debt to improve conditions. Since 1903 the percentage of imports over exports has increased alarmingly, and now stands at 43 per cent. We doubled our exports in the last 13 years, and increased our imports fourfold during the same period. In addition to borrowing for necessary public works, we borrowed money for export imports and also for interest on previously borrowed money at such increasing rates that lenders got alarmed and called a halt.

Clearly the sensible thing to do is to stop borrowing money to pay for export to meet our obligations. Our source of wealth is our illimitable natural resources, in fertile soil, mines, forests and fisheries. The natural wealth in mine, forest and fisheries can be depleted. The "abstract from an address delivered to the Hon. E. Borden and members of his Cabinet on Dec. 12 by Mr. McKenzie as chief waiter on the government on that date.



Trade In-crease
Vol. XXXI

Points on Herd

HERE are herd-by buying man who rais- be long run. The records or any advan- self does no- a natural r- does not hold- erd are l- readers, too- nough in eli- sists.

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COMBINES FORMED

Being protected from outside com- petition by customs duties, the manu- facturers have seen a gain to them- selves in a combination of interests. The outstanding economic fact, which doubled our exports in the last 13 years, and increased our imports fourfold during the same period. In the last five years in our country, 56 industrial mergers were negoti- ated, with an aggregate authori- zed capitalization of \$495,938,295. The aggregate absorbed 248 in- dividual companies. The aggregate capitalization of 206 of those in- dividual companies was approximat- edly \$167,289,182, indicating that whereas the people of Canada had to provide dividends on \$167,000,000, they have now to provide dividends on three times that amount.

This enormous increase in capital- ization is almost wholly made up of common stock, which admittedly presents very little real investment being simply protection capitaliz- ed. A few outstanding illustrations are given in the following table.

(Continued on page 13)

FARM AND DAIRY & RURAL HOME



We Welcome Practical Progressive Ideas



The Recognized Exponent of Dairying in Canada

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

Vol. XXXIII.

FOR WEEK ENDING JANUARY 8, 1914

No. 2

THE BREEDING OF DAIRY CATTLE

Points on How to Improve the Dairy Herd for Sure and Profitable Production. A Summary of an Address by Prof. Barton, of Macdonald College, Quebec, at the Guelph Winter Fair

THERE are two ways of building up a dairy herd—by buying and by breeding. While buying may be the shortest method, the man who raises his own stock is better off in the long run.

The records of grade dairy cows in Canada are a disgrace. We must look to pure bred sires or any advancement. The name "pure bred" itself does not stand for much. Why? There is a natural range of quality in all strains. It is not held that all the animals in a good breed are high-class individuals. Breeders to-day are not careful enough in eliminating the culls and misfits.

The unprecedented demand for pure bred stock increases the danger of feeding too many of these misfits. Speculation, too, is doing serious injury to breed interests. Ignorance is the part of both the buyer and the breeder is largely responsible. Many do not have a clear idea of the most desirable type. I wouldn't advise a man to go into the breeding of pure bred cattle unless he has a proper ideal in view.

All breeders are working for merit, at a great many are working at the wrong end. They are aiming to produce a few animals of extra merit, but at the same time are not culling the poor ones. We should breed only on individuals which produce uniformly good offspring. Performance is a good basis to work from, but the sales and tester are not everything. No matter how good a producer an individual may be, if she has not the necessary type she should not be used to raise breed stock.

I know of one high producing cow that made world's record, and of seven daughters and grand-daughters, not one ever became as good a producer. This particular cow, though a high record maker, was of poor type.

The crossing of a good individual with a rather indifferent one of the same breed is likely to give the same results as crossing two animals of different breeds—you don't know what you're going to get. It is best to confine breeding to a few of the best individuals.

Breeding individuals should be representative of the breed and of breed character. It is difficult to raise high-class stock from plain cows. In respect to type, utility should be sought rather than the over fine type. Once the type

has been established, select from within the strain.

Strength and substance are important. Our cows to-day are working at higher pressure than did the cows of some years ago. Then summer dairying was almost universal and the cows were dry several months during the winter. Now that the demand for milk in our cities is increasing so rapidly, winter dairying is coming into vogue and cows are dry only a short time. The heavy feeding relative to winter

of the calves, not breeding too young, care taken to develop the milking qualities, such as proper feeding, and conservation of strength. The extreme high tests that many breeders are working for are liable to reduce the strength of the cow. Overworked animals cannot be the best breeders.

Addition by Elimination

E. F. Eaton, Colchester Co., N.S.

"Blood counts," remarked the peniless fornic count to the rich meat packer's daughter. "Oh, yes, and horns, hair, hoofs, everything; nothing goes to waste in daddy's business," was the practical response.

The foregoing is a joke. At least I read it in the joke column of our local newspaper. A thought that occurred to me is that this joke also exemplifies the efficiency of our packing concerns, an efficiency that is characteristic of almost all of our great centralized industries to-day. I have been informed that in many industries the main lines of manufacture are sold at cost and that all of the profit is made on utilization of the by-products.

Farmers are just beginning to wake up to the fact that we too must keep our eyes open for the leaks or we will get left in the race. In the past we farmed virgin soil that would yield crops under the poorest management. We were not as thrifty as we might have been. In fact, we could not afford to chase too strongly after small things. But the day is rapidly passing. The day is coming when we will need to make our profits by attending to the small losses that heretofore we have never given a thought.

One of the most frequent sources of loss I believe is in the manure pile. We have not been taught to put a premium on fertility. I should estimate that with a herd of 30 cows, and the manure simply piled in the barnyard in a careless way to leach and fire-fang, that the loss in one year would amount to at least \$100. A pretty substantial leak.

My father has dealt considerably in agricultural implements. He knows just about how much each farmer in the locality spends for implements, and he tells me that on a farm of average size the loss through the poor care of the implements and from consequent short life, amounts to at least \$100, and in some cases he believes it is nearer \$300. Another leak worth taking care of.

We surely need to take a leaf from the business book of that Chicago packer whose daughter gave his secret away.



On Pastures Green in Sunny Southern Alberta

Alberta dairymen contribute largely to the grand total output of the Canadian dairy industry, and many fine pure-bred herds are found in the province. The Holsteins here illustrated are a few from the herds of Hinchey Bros., who have made a name for themselves on the Western Fair Circuit. Cows such as these make good foundation stock for the building of a great and profitable industry.

dairying has weakened stock. A number of fine herds have been destroyed by over work.

Breeds, of course, vary as to standard size. While we do not want over grown animals of any particular breed, we want them up to the average. In one herd I saw 100 Jerseys, of the best 50 cows, 15 weighed over 1,200 pounds; only eight weighed less than 900 pounds. Of the 50 poorest, only four weighed over 1,200 pounds, while 34 weighed less than 900.

There are defects to be remedied in all breeds. We can see this at any show of dairy cattle. In the matter of records, we want uniformity of performance; not spurts. The cow that makes a high record this year and does poorly the next, or does well for one month and then drops off rapidly, is not the most desirable.

In the development of the breed, there are four main contributing factors: Better feeding

My Preference in Silos

A. G. Frew, Norfolk Co., Ont.

I saw in a recent issue of Farm and Dairy an article asking advice on silos and what kind to build. Our experience does not extend much over two years, but when we contemplated building we were in the same boat as Mr. Martin and many others who have given silo erection a thought. We saw several silos in the dead of winter when it was freezing very hard, and this is what we found: In the cement silos the ensilage around the edges was frozen very thick in some places, probably a foot or more back from the edge; the stave silos were also frozen a good deal, and in the lath and plaster silo, one which had neither top nor outside boards on, the ensilage was not frozen nearly so much as in the former types. In fact, I heard one man say that the ensilage in his new cement silo was dried out for a foot or more around the edge. Probably the latter being a new silo would account for its absorbing the moisture.

We put up a lath and plaster silo, and so far having good ensilage we could not have asked for better. We had a little trouble with our ensilage moulding, but that was not the fault of the silo, it being due to the corn being too dry and ripe before filling; this was overcome by watering frequently. Our silo is 12 feet wide and 35 feet high. We put in a cement foundation five feet high, then the circle was laid on the cement and bolted, next the studding was put up, these being nailed 16½ inches apart. On the outside we put six-inch elm bands doubled and nailed to break joints; these were put up in order to leave doors two and one-half feet high, with spaces between three and one-half feet. The interior was lathed with elm strips, close enough that the plaster would stick. On the top of the lath we put a coat of plaster, which has stayed on well. We boarded the outside, but metal could be used to good advantage. The top has a flat roof, with a door in two pieces which lifts off; this is a great convenience when filling, they being three feet wide.

We would advise a good wide chute, as it gives plenty of room at the bottom for working.

What is a Farm?

By L. McCoskey

Did you ever talk to a city man who had the back-to-the-land fever? Did you ever analyze his desires? What does back to the land mean to the city man?

I'll guarantee that in nine cases out of 10 it means a home. He believes that his farm will yield him a comfortable living and perhaps a little more. He probably has his plans for a heavy producing herd, hens that lay 200 eggs a year, and pigs that reach 200 lbs. in five months. But when you get right down to the basis of his dreams the real thing he yearns for is a home. Something which he owns and in which he can take a pride and something which he can pass on to his children.

Compare the city man's conception of a farm with that of many farmers. Right in my own district are dozens of farmers who have never thought of the farm as a home. When they bought their farms all of their attention was riveted on the character of the soil and the suitability of the buildings for the line of farming that they proposed to undertake. The conveniences and comforts of the farm house, the beauty of its surroundings, or possibilities for beautifying them, were the last thing considered. The house is merely a place to live in, while money is being made from the farm. Their dream for the future is a house in the town, with a good-sized garden; and the farm—well, that will be sold to enable them to retire. I think I have here depicted fairly accurately the

conception that many of us have of the farm, though I am glad to say that there are thousands with a higher ideal.

The city man's ideal appeals to me. It is the farm that is the accessory to the home, not the home that is accessory to the farm. Rural life here in Canada has been made less attractive than it might be because of our lack of the farm idea. It would be staggering could we get accurate statistics of the number of farmers whose ideal is to get enough money on which to retire to town. If we farmers would make up our minds that we are going to stay in the country and make it our home and a home for our children, there would be more community spirit, a greater desire to improve our rural districts and make them suitable places in which to live. Then we would have real living, the kind of living that considers the home first, the farm second.

Better Than His Lost Hand

A concern advertising their milking machines regularly in Farm and Dairy recently received the following letter from a customer:

"The milking machine installed for me on



The Dairy Stable as it used to be

This sanitary dairy stable, in its time one of the best in Canada, was in the basement of the barn at the Central Experimental Farm that were burned recently. When the buildings are reconstructed it is planned to have a much more complete stable even than this one.

May 29th last has proved a great thing for me. Perhaps you remember that I had lost the use of one hand and farming was getting to be quite a problem, but the dread of farming even with one hand has about disappeared now, for if anything should happen that I would have no help for a few days, my little girl, nine years old, and myself could do the milking.

"I find the machine very easy to operate, and it has not failed in doing the milking once. I have never had the teats of my cows in better condition, not having one with sore teats this summer. I have milked the same herd of cows this year that I did last, and each cow has yielded me about \$80 more than they did last year. My cream went to the same factors both years. This cream went to the same factor that the milk is all right. I shall keep both year's bills on hand to show any one who wishes to know how my cows stand the test of machine milking.—A. H. Sweet, Sweetsburg, Que."

The Art of Dairying

F. E. Ellis, Peterboro Co., Ont.

Successful dairy farming is an art. When we speak of an art, we mean an occupation of sufficient interest to imbue its followers with a devotion for it; an occupation, in fact, which one can not have great or permanent success without love and devotion.

The true artist follows painting because he loves to paint. Who ever heard of a successful portrait painter talking about the drudgery of his work? Who ever heard a real poet talking disparagingly of his work? Did either of these artists despise their work they could not be successful in their calling.

It is love of dairying that raises it above the level of a mere occupation and makes it an art. The painter works with his paint and canvas, the poet with his pencil and pad, but we dairymen work in living flesh and blood. Who can imagine a more engrossing occupation than in striving to improve living animals that make returns to us just in proportion as we devote our best energy and ability to them? Go where you may, you will find that the most successful dairymen regards his occupation as an art, and he gives to it a love and devotion.

But how often we hear that dairying is drudgery, that it is too confining, that one cannot get hired help on the dairy farm, and other complaints without number. Why is this? I believe that the biggest explanation is that the cows we milk are not good enough to inspire their keeper with any special pleasure in giving them attention. Poorly bred and poorly fed they represent to both owner and hired man only additional and confining work. Hundreds of dairymen right here in Ontario have testified that the day on which they began to take a real interest in their work was the day when they purchased their first pure bred animals, or the day when they started to test and to weed.

A second reason for not perceiving the art is that we work too long hours. We still regard the milking in the same light as we did when dairying was not a special industry and when milking a couple of cows was part of the chores to be done after supper. Milking on the dairy farm is one of the big operations of the day, and we should plan to have it done at six o'clock.

Satisfaction is a state of mind. But when we change ourselves from thinking to working beings and chore around from five in the morning till ten at night, satisfaction becomes impossible to us. People who work too hard cannot think and lose their appreciation of the fine points of their calling.

Here are two of the points that will enable us to see the art in dairying—good cows and the work compressed into a working day of reasonable length.

It is admitted by all students of sociology that the country is the seed bed of the whole population. It, therefore, becomes a question of prime national importance to maintain the quality of this seed bed. If conditions are such as to cause the withdrawal of the best blood from the rural districts, or such as to favor the deterioration of rural life, then social and national disaster are imminent. The modern large city, with its hideous problems, its enervating atmosphere, its inequality, with its crushing and crippling of child life, is in many respects a blot upon our civilization. Rural degeneration, sapping the very life of future generations, is even worse. The large city, dominated by a few rich parasites, with an ignorant, inefficient and dependent rural proletariat, together mark pronounced social decay, and the time is not far distant when such a civilization must disappear and the grand temples which it raised to its false gods crumble to ruin.—W. C. Good, Master of Dominion Grade.

Humus Soil in Time of Drought

D. Clark, Prescott Co., Ont.

A year ago this fall I plowed down a clover sod and a portion of a wheat field lying alongside. The soil in these two fields is of exactly the same character. The treatment that they have received for the last dozen years has been practically the same. The two fields were seeded with oats. When the dry weather struck them this summer, you could have drawn a line up and down the field where the clover plowing ended and the wheat stubble began. The first survived the drought in good shape. The latter yielded less than half a crop.

A few years ago in a period of severe drought I seeded oats on a potato field. Half the field was heavily manured; the other half not at all. The oats on the first half did not come ahead any faster than the oats on the second until the drought came; and the drought was severe. Then the patch lacking manure wilted right down, and the crop did poorly from then on.

I believe that the results in both of these cases traced to the same source. In the first case the clover sod plowed down provided a good supply of humus. In the second case it was the manure that supplied the humus. This humus, which is simply decayed vegetable matter in the soil, seems to hold the moisture, and next to irrigation is the best thing for tiding crops over a dry season. We have had so many seasons of drought in Ontario in the last few years, even when sandwiched in between exceptionally rainy seasons, that I believe it is up to us to direct our farming operations so as to always keep in the soil a liberal supply of humus. Of course, the way to achieve this is to follow the short rotation with the frequently plowing down of sods.

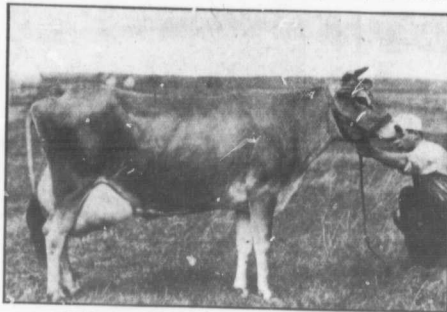
IMPROVING A LIGHT SOIL

In the case of an exceptionally light soil, when one wishes to improve the fertility, I would advise plowing down not only the sod but the whole crop. I have had a little experience in this line myself. When I first came on this farm what we called the "hill" field, composed of a very light sandy loam, was so poor that it did not produce 15 bushels of oats to the acre. I did not then have the manure to apply to the land, so I seeded to rye, about the only crop that would grow well. When this had attained a nice growth I plowed it under, worked it up, and the following spring seeded with clover. The clover made a rather poor growth, and it too was plowed under. Next year we summer fallowed until the middle of July, then sowed turnips and kept well cultivated, and the next year the field was ready for any crop we cared to sow. Of course, we have always endeavored to keep that field well supplied with humus, as otherwise the soil is so light that the least drought would severely check growth.

I have been told that there is a danger in plowing down excessive quantities of green matter, as I did in this field, in that you may make the soil sour. This danger, however, can be easily got around by making applications of lime or wood ashes on the first indication of sourness.

The Formation of Seed Centres*

There are required in Canada each year, 40 million bushels of seed grain. We can realize then the opportunity that awaits the producer of high-class seed. To take advantage of this opportunity has been the object of the Canadian Seed Growers' Association. In asking its members to grow seed of the best varieties, of strong vitality and free from impurities, the C.S.G.A.



Eminent's Best as She Appeared Before Her Great Test

is asking no more than is done by the best farmers.

The demand for registered seed is increasing fast. The farmers are realizing that better seed grows better crops, which in turn produce seed that sells well. The C.S.G.A. has had a far-reaching influence. Every grower of pure seed in a district has been a demonstrator of what good seed will do. And such demonstrations do far more good than talking.

NEED FOR EXTENSION

It has for some time been felt that the work of the C.S.G.A. could be greatly helped if all the growers of pure seed in a district were organized to form a seed growing centre or club. Each of these centres could produce seed for the growing of which it might be specially adapted. If these centres be well distributed, then there will be no dearth of good seed.

The C. S. G. A. is ready to assist in the formation of these centres. Where local associations are formed, the individuals will be responsible to the association and the association to the C.S.G.A. We have already corresponded with the district representatives and nearly all have replied as strongly in favor of the idea. In Ontario, for instance, there are 31 farmers' clubs, with a total of 337 members, who have subscribed for 1,164 bush. of pure seed. These clubs the C.S.G.A. could recognize as seed centres and direct purchasers to them.

ADVANTAGES GAINED

The scheme as outlined presents a number of advantages. Heretofore, every member of the C.S.G.A. has had

* Synopsis of an address delivered by C. J. Neumann, Secretary, C.S.G.A., at the Guelph Winter Fair

to conduct a breeding plot and make head selection of grain in order to keep his seed up to the standard. In a record centre this work could be carried on by a few of the members for the benefit of all. There are always a few men in every community who are peculiarly adapted to such work. Then, too, when the

(Concluded on page 30)

Developing the Young Stock

G. A. Dimor, Michigan

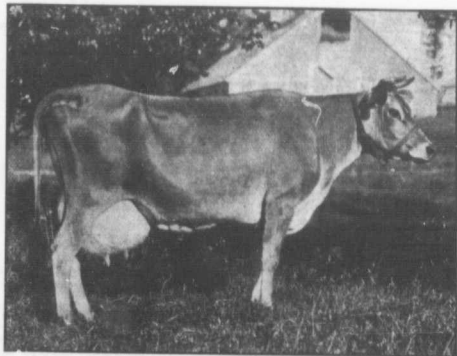
Good breeding will do much, but it cannot do everything, and the man who wishes to see his herd improve year by year must give very careful attention to the development of the calves. Much might be said on this subject, but we will only touch on a few of the most important features.

As a rule the first feed of the new-born calf should be from the mother's milk, being careful that the calf does not over-eat. The young calf should be fed three or four times a day, receiving only about two pounds of milk at a feed if fed four times a day. The milk should always be at blood heat and fed from absolutely clean pails. If the pails can be scalded at each feed so much the better. Regularity in feeding is as necessary as cleanliness. At all times the calf should have a clean, dry bed and plenty of good, pure water.

As soon as the calf is old enough we would keep good hay within his reach, and believe that a mixture of bran and oats, with perhaps a little charcoal, makes a very desirable grain mixture. They should also have salt within their reach. The milk should always be sweet and the change from whole milk to skimmed milk should be made very gradually.

We believe that the milk as fed should be carefully weighed so that the ration may be gradually and carefully increased. We believe that most of the difficulty in raising calves is due to carelessness rather than to lack of knowledge. When the calves have reached the age at which they can consume a reasonable amount of grain we believe in giving them a good generous ration made up of feed that will have a tendency to produce bone and muscle rather than fat.

(Concluded on page 30)



After the Test. Now the Champion Jersey Cow of the World

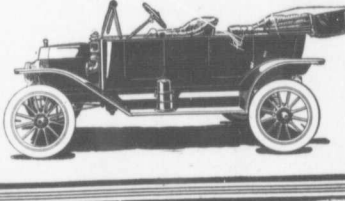
These two illustrations of Eminent's Best, the champion Jersey cow of the world, give one a good idea of just how a high record cow looks before and after her test. Breeders tell us that good condition is an important factor in enabling a cow to make a great record. A good cow will turn her surplus fat into milk, and this Eminent's Best appears to have done. Her records are 17,382 lbs. 13.6 oz. milk, 1,132 lbs. 12 oz. butter. Study the type portrayed in these two illustrations. We never make a mistake in buying cows of this character. This great cow is owned by Rosecroft Farm, Sidway, Mich.



Buy It Because
It's a Better Car

Model T \$650
Touing Car
f. o. b. Ford,
O n t a r i o

Get particulars from Ford Motor Co., Ford, Ont.



Make Your Stock and
Poultry Pay Better with

Royal Purple

STOCK AND POULTRY SPECIFICS

At a cost of less than a cent a day per head of stock it will increase their value 25 per cent. Permanently cures Colic, Debility, Worms, Bots and Skin Diseases. Tones up run-down animals so that they quickly gain weight and vigor. Increases the yield of milk cows three to five pounds a day, besides enriching the quality of the milk.

ROYAL PURPLE is not a food. It is a conditioner—the best ever so'd. If there is any better we would be making it. It enables your stock to eat the natural food they should eat and get the most benefit from it. Here is the advice of all thorough veterinary doctors—"Feed your stock on food of your own growing"—not pamper them with soft predigested mush so that after a time they cannot digest good, wholesome food. Feed the good food grown on your own farm—lay, oats, bran, chob, etc. You know what these things cost you and what they will do.

ROYAL PURPLE is an aid to these natural foods and if you use it as directed, we can guarantee better results than if you feed any of the concoctions offered on the market as "prepared foods."

Try R On a Poor-Conditioned Animal

If there is a run-down, poorly nourished animal on your farm, see what **ROYAL PURPLE SPECIFIC** will do for it. A 50-cent package lasts a cure 70 days. The cost is so trifling that no farmer in Canada has any excuse for having out-of-

health stock around his place. Try it on the poorest-conditioned animal you have and we know you'll be surprised at the result of a short treatment. Cattle and hogs fatten a month earlier than without it, which means you save a month's feed and a month's labor. You can bring six pigs to the pink of condition at the cost of \$1.50. Steers treated in the same way cost less than \$1.00 each to put in prime state for market. **ROYAL PURPLE SPECIFIC** fattens and keeps well horses, mares, cows, calves, steers, hogs. Sold in packages, 50c, and air-tight tin, \$1.50.

Try ROYAL PURPLE POULTRY SPECIFIC on Your Hens

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The Pampered Pig

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

There is an apocryphal story of the English tourist in Ireland, who, upon entering one day the humble cabin of an Irish peasant and remarking upon the free and easy way in which the pig had the liberty of the whole house received the reply: "Sure, and why not? Indeed, he's the gentleman what pays the rent."

But what suggested the story is that my smallest pig has not been thriving of late. In the early fall, he had as a domicile a small, dark pen in an old tumble-down shed on the hill. In a breeze, there was more air inside than out. So we moved him down to a nice pig's parlor in the basement of the big barn. Here were smooth plank walls, a concrete floor, concrete feed bowl; concrete walls all round. One part of the pen floor was elevated a little, and with plenty of straw on it; while the lower flat usually was mostly slop.

But this young pig seemed to prefer the bungalow type of sleeping place and laid down to rest him in the wet. Therein he showed apparent lack of judgment; for, as a result and before I noticed the trouble, he was all crippled with rheumatism. I am not hard-hearted; but surely that pig makes funny faces as he tries to move around without showing the fact of his crippled condition. Nothing for it but to take him out of that; and so he is back again to a very plebeian shanty.

But there is a moral and a lesson here for us all. Concrete and civilization, all very nice in their way, are taking the strength and vigor away from both pigs and people. If we only could discover the co-relation between cause and effect.

I had a monstrous big turnip in my field this fall. Why is it so big, and the next one so small? If I could answer the question, why I might have every turnip in the field a monstrosity.

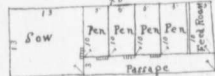
Perhaps we have the most luxuriously appointed pig apartments for our swine anywhere. But he is fat from me to make that same boast as to the pork. I have begun to draw comparisons and inferences, investigate, and arrive at conclusions. Who have the best looking pigs, and what feature in their pigginess is common to them all?

Instead of 100 to 200 square feet of floor space a pig, I find that the best pigs have generally not much more space than to turn around in. Then, consider one: A pig does not need exercising space. This refers to the butcher's pig; not the breeding sow. Also, some of the choicest pigs are in cold sheds that let the wind in like a herring net. Conclusion: A pig will thrive in a cold, free-punctured place, so long as he is not

in the direct draft. And, finally: Every decent looking pig had a dry floor. Another thing I noticed was that any respectable pig will make his dirt in one place and keep his bunk clean.

MY IDEAL HOG HOUSE

Now, if I were building a pig house, I would have it 13 feet wide and built on a side hill so as to have a little sort of cellar under it. For four pens for butcher pigs, and one pen for a brood sow, make the building 40 feet long. Then cut off 13 feet at the farther end for a sows pen for the brood sow and have a little door for her out into her yard. Have no yard for the other pigs; for them, once inside, stay inside, and grow and get fat. Then (on the high side of the hill) a three-foot wide passage-way the length of the rest of the building; and the balance divide off into four pens five feet wide and a feed room five feet wide. The thickness of walls and partitions will amount to use the extra two feet of length. A ceiling only 6½ feet above floor; and with a pitched roof give



enough loft space for straw and clover hay. The floor under the pigs make of single thickened planks and quartered cross between them; or just poles. Every fall and spring put a few loads of dry earth into the cellar space and remove it after six months well soaked with liquids from the pigs above.

Nothing but the roof need be tight. I would prefer the walls just up and down boards; and perhaps not battened except on the pigs' side. He too only a few small windows, not too many. Light make a pig restive. Crate feed the pig from start to finish; stuff him and keep him dry. Don't give him much drink. Too much slop leaves no room for puddling. Therefore, make my deductions from watching my neighbors; or to put it without any appearance of offence, watching my neighbors' pigs and what inwardly and outwardly is adjacent thereto.

Who Got the Difference

Editor, Farm and Dairy.—In Farm and Dairy, Nov. 13th, it is stated that one of Montreal's leading provision merchants remarked to a Farm and Dairy representative that "the tariff will not affect the price of the virgin to any great extent." On Nov. 15th one of Montreal's leading wholesalers notified his country buyers of near-by towns that they would pay, delivered at Montreal, nine cents per pork.

I had the opportunity of following the pork deal up on Nov. 17th, being in one of the towns where this offer was made. A man had some pork for sale, and the price offered him was \$6 to \$7-\$8 cash and \$7 in store. The next day I was in Montreal, and I tried to buy some of my pork at one of the packers' retail stores. They asked 23c a pound for choice pieces and from \$6 down to 15c; the cheapest sausage was 10c a pound.

An analysis of the above figures from Nov. 22nd to Nov. 29th amounts to the following:

Farmer, 6c to 7c.
Country stockkeeper, 9c, to deliver above in a month.

Consumer in month pays 15c to 23c and 10c to 16c for sausage.

Who gets the rest?—C. A. Stevens, Richmond Co., Que.

A draughty stable is an abomination to the cow. A few battens will close up the cracks.

The Feeders' Corner

The Feeders' Corner is for the use of our subscribers. Any interested are invited to ask questions, or send home all questions which will receive prompt attention.

Value of Roots and Corn

What value per bushel have potatoes as feed for pigs? I can purchase 20 tons of 15 per cent sugar beets. What are worth a ton for fattening hogs? I can buy both them and sugar beets. What is the difference between the carb-hydrates of a potato, sugar beets and corn (grain)? A 20-ton crop of beets of 15 per cent carb-hydrates equals 1,600 lbs.; a 200-bushel crop of potatoes of 15 per cent carb-hydrates equals 1,600 lbs.; 40 bushels corn bushel leaves table at: Corn, \$25 an acre, worth nearly as much as potatoes, and little less than beets. Is my reasoning right?—*Herb Smith, Leamington, Ont.*

When boiled and mixed with meal it will require from 400 to 450 lbs. of potatoes to be equivalent to 100 lbs. of mild meal. Sugar beets may be placed at about 500 lbs. of beets equivalent to 100 lbs. of meal, though the amount of meal they will replace varies very considerably.

There is not any material difference between the carbohydrates in potatoes and roots and the carbohydrates in ordinary grain. It is a fairly satisfactory method of making comparisons to compare roots and grain on the basis of the dry matter which they contain. I should think that land that will produce 20 tons of beets an acre or 200 bushels of potatoes at mild prices can raise more than 50 bushels of corn an acre.

There is another feature of roots which must not be overlooked, and that is they must be fed in conjunction with meal in order to give satisfactory results. If roots or potatoes are fed alone they are entirely unsatisfactory. In addition to this roots are perishable and will last only a limited time, whereas grain may be kept almost indefinitely with very little difficulty and retain its feeding value.

Feed for One Cow

Kindly let me know the best and most economic meal ration for a cow when she is dry for about six weeks before freshening, also rations for around the freshening period and from then on until she has come to her regular flow of milk. The cow is a junior four-year-old, and weighs about 400 lbs. Should she be fed meal and roots twice a day or three times? Bran costs \$2 a ton, oat chop \$2, oil cake \$30 or over and cotton seed meal the same. Corn is expensive. Is there any hindrance in the making of a good cow if she comes in 12 months after her last calf?—*E. F. Bruce Co., Ont.*

Before calving the feed of the cow should be cooling in character. Silage, roots, clover hay, and fodder corn without ears are all desirable for roughage. For concentrates, bran, middlings, oats and a little oil meal are satisfactory. No definite rules can be given as to the best amount to feed at this time, as the requirements of cows vary widely when they are dry. As a general rule, we would say feed the cow to get her in good condition, but not butcher fat. This will usually require liberal rations of roots and clover hay, with a small grain ration, say three or four pounds a day.

Many dairymen give their cows only tepid water after calving, cold water may be followed by disastrous results. A little oatmeal or ground oats in the water will provide the necessary nourishment. The ration that is fed right along through her milking period may then be started, but in small quantities, the amount being under rather than equal to the desire of the cow.

Of the foods suggested by our correspondent, a desirable grain ration would be two parts oats, and parts bran, one part oil cake, and

one part cotton seed, fed in the proportion of one pound of grain to four pounds of meal. This ration would be fed with mixed hay. With clover hay increase the proportion of oats.

A good dairy cow will readily consume 35 to 40 lbs. of roots daily. While cotton seed meal and oil cake are the most expensive feeds per cow, listed, they are the cheapest of all in proportion to the amount of protein that they contain, and it is protein that is most valuable in the case of a fresh cow. One-third of the ration made up of these grains is a trifle heavy, but a cow getting liberal quantities of roots can consume more heavy grain feed to advantage than a cow altogether on dry feed.

We would suggest that the grain be fed on the roots night and morning. Whether or not it is advisable to feed a cow three times a day is still a disputed point. Many dairymen feed roots or silage with the grain in the morning and at night, with hay at noon and straw just before they leave the stable at night.

It is generally agreed that at least 12 months should be allowed for each lactation period, and of these six to eight weeks should be spent resting. In a mature cow it is doubtful if calving again in 10 months would work any permanent injury, but in the case of the heifer it might stunt the animal in size.—*E.*

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Fertilization of Apple Orchard

One of the most appreciated speakers at a recent convention of the Ontario Fruit Growers' Association was Prof. John P. Stewart, of the Pennsylvania State College. Prof. Stewart who speaks on orchard fertilization, has recently published the results of this experimental work, which he summarizes as follows:

"The experiments of this Station have shown that the fertility needs of an orchard may be the most important check on its production. Variations in fertilization alone have resulted in average differences ranging from 50 to 400 bushels an acre annually for the past four or five years, depending on the experiment. These results were accompanied by similar differences in the growth and general vigor of the trees.

MORE FERTILITY THAN WHEAT

"The total plant-food draft of a mature and active orchard is greater than that of a 25-bushel crop of wheat in every important constituent except phosphorus. It is practically inevitable, therefore, that sooner or later the output will be reduced or off seasons will be developed in any productive orchard because of a lack of sufficient plant food.

"The mineral requirements of wood are comparatively low. This largely accounts for the fact that young trees usually do not make a profitable response to fertilizer applications, although they frequently respond well to manure or to other methods of conserving moisture.

"The time required for results to appear has been surprisingly short in all cases where fertilization has proved to be really needed. In such cases, both the value of fertilization and the kinds needed were clearly evident by the middle of the second season, and no material changes have occurred since.

"Neither acid phosphate nor 'floats' when applied alone have resulted in any important benefit. We are, therefore, 'completing' the fertilization of their plots by the addition of nitrogen and potash, in order to test further their relative values as carriers of phosphorus for trees. Basic slag was introduced into this comparison in 1912.

"Lime also has failed in most cases, though it may have some value in aiding growth. In addition, it may have some indirect value in facilitating the growth of leguminous intercrops, and also in correcting a possible toxic action possessed by the basic radicals of a number of salts, some of which are present in commercial nutrients.

"At present the high-grade sulphate in our experiments is showing no superiority over the muriate as a carrier of potash, but the reverse is usually true. The lower cost and easier handling of the latter, therefore, give it the preference. It is possible that the low-grade sulphate, or the 24 percent 'double-manure salt,' as it is often called commercially, may be superior on account of its magnesium content, but this has not yet been fully demonstrated.

"The influence of proper fertilization is not transient. The gains from it have been greater in the sixth and seventh years than at any time before. In one case, these gains have exceeded 1,100 bushels an acre. Where the crops of the full years are not too high, the

yields usually have been greatly steadied by proper fertilization.

"In all our experiments, the action of manure has proved to be practically identical to that of a commercial fertilizer rich in nitrogen and phosphorus. Their successes and failures have coincided with but two exceptions, and in those cases moisture rather than plant food was apparently the controlling factor. The commercial nitrates and blood have acted more quickly than the manure, and the potash in the latter has apparently been less effective than that in the commercial forms.

"Manure and potash are the only fertilizing materials that have shown a consistent benefit on the average size of the fruit. This is doubtless associated with their favorable relations toward available moisture, which is the chief determinant of fruit size. Above a rather indefinite point, however, the size of the crop on the tree becomes the dominant influence on fruit size. Proper thinning and moisture conservation, therefore, are the most important means of improving the average size of fruit.

EFFECT ON COLOR

"The red colors in apples can not be increased materially by any kind of fertilizer applications, though potash and possibly phosphorus may be of some slight assistance. These colors are directly dependent upon sunlight and maturity, with the latter occurring preferably on the tree. Late picking, open pruning, light soil and culture, and mildly injurious sprays, therefore, tend to increase the red in fruits, while opposite conditions decrease them.

"The retarding influence of nitrogenous fertilizers or manure on color makes it advisable to use them less freely on some of the red varieties, especially those in which the color comes on rather tardily, such as the York Imperial. On the lighter soils, or in localities with the longer growing seasons, this precaution is less important.

"The fertilizing elements found effective in certain experiments were not so in others. In one of our experiments, no form of fertilization has yet shown a profitable response, and in two others such responses have come only from manure and mulches. It is evident, therefore, that the actual fertilization of a given orchard is still largely a local problem.

GENERAL PRINCIPLES.

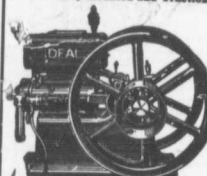
"Present evidence indicates that the nitrates, or other specially soluble plant foods, are best applied soon after the fruit has set. In addition to greater effectiveness, this delay enables the rate of application to be varied somewhat in accord with the amount of fruit set, making the applications heavier when the crop is heavy and vice versa. In the long run, this plan should steady the yields, and give maximum benefits from the fertilization applied.

"The general fertilizer that we are now recommending is a combination carrying about 30 pounds of actual nitrogen, 50 pounds of actual phosphoric acid (P₂O₅), and 25 to 50 pounds of actual potash (K₂O). These are the amounts per acre for bearing trees. Only when potash is known to be needed should the larger amount be used.

"This general fertilizer can be modified and directly adapted to the actual needs of any orchard by following a local testing plan."

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We would not select a heifer with a steep head for our herd for breeding. Masculine looking pullets are equally undesirable as layers.

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Walter H. Smith, B.S.A., Leeds Co. Ont.

Farmers in the neighborhood of Athens, Ont., have a novel method of disposing of their poultry. A fair is held each year at which buyers attend and secure all the poultry of the neighborhood. This year the Boys' Poultry Show was held in connection with the fair. The advertising had been pushed and as a result, not only were there a large number of farmers present with their poultry, but a goodly number of both Canadian and American buyers were present to bid for this poultry. The quantity offered for sale can best be arrived at by stating that the amount of money paid for this poultry was something over \$10,000. Turkeys brought from 20c to 22c a lb.; geese, 11c to 12c; ducks, 15c to 16c and chickens, 12c to 17c.

The idea of holding an Annual Poultry Fair is a good one. Competition among the buyers is encouraged, the benefit of a home market is secured by the farmers, and the extra price paid for superior classes of fowl tends to encourage the rearing of better poultry.

It is to be regretted that more of the farmers do not practice crate fattening of their chickens, preparing them for market. While the best chickens fattened in the ordinary way will bring from 16c to 17c a lb., crate fattened birds properly plucked and shaped would command from 20c to 22c; no further argument for crate fattening is needed.

While the older people were mostly interested in the dressed poultry, the boys of Athens, who have a local poultry club organized, were chiefly interested in their own poultry show, where they exhibited specimens of pure-bred stock. This is the first attempt of the boys to hold a show, and it was a success. As a direct result of this show the membership of the club was increased. The specimens of the pure bred exhibit aroused considerable interest among the farmers present, as well as giving them an idea as where to secure stock and eggs for the improvement of their farm flock.

The Boys' Poultry Club was organized, and is conducted, under the directions of the District Representative. It is a movement from which good results may be expected.

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Northern Zone	(Maine, N. H., Vt.)	Field in bush	Complete bush including plants, soil and irrigation
\$100 1st Prize	A. B. Cobb, Lee, Me.	502.6	690
50 2nd "	O. B. Keene, Liberty, Me.	418.6	660
30 3rd "	J. L. Demeritt, Sangerville, Me.	405.5	615
25 4th "	Frank J. Hersey, Dexter, Me.	465.8	607
20 5th "	D. L. Brett, Oxford, Me.	400.	525
15 6th "	W. S. Hodges, Phillips, Me.	311.1	523
10 7th "	R. J. Martin, Rochester, Vt.	331.8	520
Gratuity.	Geo. E. Burditt, Rochester, Vt.	457.8	634

Southern Zone	(Mass., R. I., Conn.)	Field in bush	Complete bush including plants, soil and irrigation
\$100 1st Prize	A. W. Butler, Brockton, Mass.	363.1	589
50 2nd "	Jos. Howland, Taunton, Mass.	344.9	574
30 3rd "	Henry A. Wyman, Rock, Mass.	342.5	558
25 4th "	Edwin L. Lewis, Taunton, Mass.	260.2	515
20 5th "	W. C. Endicott, Danvers, Mass.	217.7	503
15 6th "	Luther Holton, N. Franklin, Ct.	183.8	450
10 7th "	Dudley P. Rogers, Danvers, Mass.	185.7	430

Send us your name for complete and instructive statement concerning the results of the contest and how these great yields of potatoes were obtained. No other fertilizer than the Stockbridge Potato Manure was used.

BOWKER FERTILIZER COMPANY

43 Chatham Street, Boston, Mass.

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Purity Salt

IS

The Dairyman's Favorite

Makes Tastier Butter and Better Cheese

Don't take our say so. Write to our factory and we will send you samples to prove our statement. You can be your own judge.

Prices will be mailed also.

Write to-day, to-morrow is too far away

THE WESTERN SALT CO., LIMITED
DEPT. "A" COURTNEY AND MIDDLETOWN, ONT.

The Most Popular Premium

The semi-porcine forty-piece ten set that we have been offering for four new subscriptions to Farm and Dairy has become one of the most popular ever offered.

We have given away a large number of these, but the supply is unlimited. Write us today sending four new subscriptions with four dollars. We will express the ten set to you.
FARM AND DAIRY, PETERBORO

Ridgetown Creamery

For Sale, Cheap

Apply to

JAS. IRELAND, RIDGETOWN, ONT.

CREAM WANTED

Cheese Factories are Closing for the Season

How about your Cream?

We will buy your Cream all the year through

Returns are made every week

Ship your New Laid Eggs to us

We pay highest prices for both Cream and Eggs

THE BOWES COMPANY LIMITED

74-76 FRONT STREET E., TORONTO, ONT.

Say

"I saw your ad. in Farm and Dairy" when you write Advertisers. Then you get full benefit of our absolute Guarantee.

SHIP US YOUR CREAM

WE Supply Cans and Pay All Express Charges within a radius of 100 miles of Berlin. Send a Statement of Each Shipment. Pay Every Two Weeks.

WRITE FOR FULL PARTICULARS

THE BERLIN CREAMERY CO.
BERLIN, CANADA



The Selection of a Boar

By W. B. Richards

The selection of the boar to be used cannot be too carefully done. It is saying "the sire is half the herd" is very true, because he exerts his influence on every pig in the herd if only one sire is in service. For this reason it is very imperative that the boar be equal and if anything superior to the sows. If one's yearly pig crop is to be superior to that of the preceding year, it can be done with the least expense by getting a better boar than formerly used. Grade herds can soon be improved in merit through the use of good boars. The progress made with the pure bred herd must come also in this way. In selecting a boar, get one that has male characteristics well developed, which are indicated by a strong rather than a feminine head, a well crested neck and plenty of vitality. If the boar is 12 months old or over, a strong development of shoulder may be allowable, although coarseness in these parts is not desirable. In addition to the masculine characteristics he should possess those points relative to form that are desirable in his breed and class.

Good heart girth to furnish a large capacity for the vital organs is essential in all breeding animals and should never be overlooked. A strong, well-developed back is very desirable, but often found deficient. A boar should stand up on his toes well and be devoid of any weakness of pastern. Never buy a boar with small indefinitely placed testicles or one that is

FOR SALE

Cheese and Butter Factory

Building 20 x 80. Living rooms upstairs. Make for past 5 years from 50-60 tons.

Terms Easy

C. L. MATTLAND JASPER, ONT.

ruptured. A ruptured pig may prove fertile, but he may produce ruptured pigs or transmit the tendency.

Hog Profit Notes

By T. F. Peck

In raising hogs for the market, or for his own meat, the farmer should use the breeds that make the better, bigger, and thrifter animal. It is hard to understand why some farmers are opposed to getting rid of the mongrel breeds. The hog that is capable of turning corn and slops and good pasture grasses quickly into pork is the variety every farmer should have.

It will be well to understand that the man who buys his hogs and his feed will not make much in the transaction. The hog raiser should grow his own feed, and he should breed his own animal.

If you have hogs of the run-down, worn-out breed, get rid of them. Stringy, razor-backed animals will eat as much feed as the better breeds. Get a good boar for yourself if you can; if not able to do that, buy one in partnership with two or three of your neighbors.

Buy a few good sows if you have none and give some consideration to pasturage. Keep the boar and the sow and the young pigs out of the horse lot and give them a chance to grow.

Hog raising ought to be as much a part of farming operations as is the growing of crops. We ought to grow all the hogs that can be economically fed.

Paralysis in Pigs

By H. Preston Hoskins.

Weakness of the hind quarters is a condition frequently seen in growing pigs. It is a form of paralysis and the exact cause cannot be stated for all cases.

One of the most plausible explanations of paralysis in young pigs is improper feeding. A deficiency of mineral matter, especially lime salts in the diet, is believed to be responsible for the majority of cases. The shortage of lime salts results in the improper development of the bones of the growing pig, and the condition known as "rickets". On the other hand, the diet may be all right, well balanced and wholesome, and yet the pigs may not be able to assimilate their feed and get the proper nourishment from it. In this case, the fault lies with the digestive organs. Pigs raised in damp quarters may develop weakness of the hind parts, often said to be of a rheumatic nature. In this case the remedy is self apparent.

So it is evident that paralysis, rickets, malnutrition and rheumatism are similar conditions as far as symptoms are concerned. The same general line of treatment is indicated in all these conditions. Good, wholesome feed, a well-balanced ration, plenty of fresh air and sunshine, and with dry, clean, roomy, well-drained and ventilated pens, are the first requisites.

Then see that the pigs have access to a supply of mineral matter in the form of charcoal, bone meal, crushed limestone, wood ashes, and salt. For medical treatment, tonics are indicated, nux vomica being generally accepted as the best. The bowels should be kept moving freely by laxatives. If treatment is started early, recovery may be expected; but quite often these conditions are allowed to progress too long before receiving proper attention, and then treatment is usually of no avail.

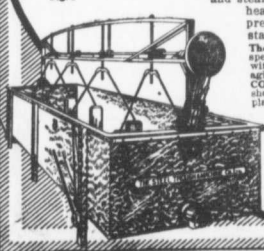
I am a constant reader of Farm and Dairy, and have profited much from it. — Mac O'Brien, Northumberland Co., N.B.

TWEED DAIRY APPLIANCES

Fig. 2 Your greatest profit lies in keeping pace with the times

STEEL has supplanted wood. It is more sanitary, easier to clean, practically acid proof, and a hundred times as durable. We feature four lines for the up-to-date cheese factory. The "TWEED" Steel Cheese Vat, Fig. 1—Of heavy galvanized steel, perfectly riveted and soldered. Our patent draining system insures perfect draining to the last drop. Water and steamproof asbestos lining, a perfect heat holding device. If not as represented when they reach your station, send back at our expense.

Fig. 1



The "LEAL" Milk Agitator, Fig. 1.—Does away with costly equipment. Run at any speed desired. Works smoothly and efficiently on steam connected from boiler, without attention. No engine, shafting, belting or pulleys required. Each agitator fitted with engine of its own.

COPPER STEEL WHEY TANK, Fig. 2.—Practically acid proof sulphuric acid test shows ordinary boiler plate dissolves 120 times quicker than the copper steel plate we use. Guaranteed very durable. Price so reasonable no factory can afford to do without. Very sanitary and easily cleaned.

WHEY WEEGHER, Fig. 3.—Eliminates disputes. Each man gets amount of whey line him with his milk is passed through our weigher. Practical and can't lie. Adapted by Dominion Government.

We manufacture a very full line of Tanks, Cisterns, Lavatory Equipment, Food Cookers, Heaters, Trays, etc. Gasoline Pumps, Evaporators, etc.

Write for Tweed Dairy Catalogues and Prices.

THE STEEL TROUGH & MACHINE CO., LTD.

131 JAMES STREET, TWEED, ONT.

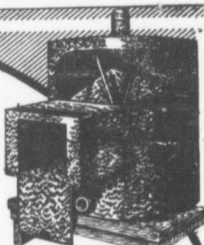


Fig. 3

Sent on approval. Fig. 3 does away with costly equipment. Run at any speed desired. Works smoothly and efficiently on steam connected from boiler, without attention. No engine, shafting, belting or pulleys required. Each agitator fitted with engine of its own.

COPPER STEEL WHEY TANK, Fig. 2.—Practically acid proof sulphuric acid test shows ordinary boiler plate dissolves 120 times quicker than the copper steel plate we use. Guaranteed very durable. Price so reasonable no factory can afford to do without. Very sanitary and easily cleaned.

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131 JAMES STREET, TWEED, ONT.

The Hired Man's Side

There are two outstanding reasons why farmers should endeavor to give men continuous labor the year round. Reason No. 1 is that if we don't, we will soon not be able to get efficient hired labor at any price.

The second reason is a humanitarian one. What is the hired man to do during the months of idleness? We are not intentionally cruel when we dismiss our help in the fall; we may never give the subject a thought. But if we could get a record of the hardship and suffering that seasonal employment only has caused, we would get a big appreciation of the importance of year-round employment from a humanitarian standpoint.

The following letter speaks for itself. The writer, a hired man, may be a little hard on us and use somewhat strong language. But just how would we feel if we were facing a long, cold winter without money to keep our loved ones warm and well fed? Let us try to imagine ourselves in his place.

THE LETTER

"I have been an interested reader of Farm and Dairy this summer. I am not a subscriber myself, as I have only been in the country of Canada seven months, and did not see how I could afford the luxury of a paper. I work for one of your subscribers, and he has handed a few over to me when he has got through with them.

"Now, do not think I am writing with my temper all heated up. The words may sound like it, but I must say what I think. My opinion of the Canadian farmer is that the majority are of a mean and grasping nature. I can't think of any other explanation of their endeavors to cram and hustle one and one-half days' work into one, so that they can dispense with hired help when they get their work done. They then expect the man to be ready in the spring to start work when they want to rush in their seed. They don't care what the man does in the winter. Probably he is expected to lie dormant till the warm weather comes to thaw him out.

"I was engaged at an agency in Toronto, and saw the letter myself that my employer had written, saying he kept a man nine months in the year and there was lots of work in the vicinity for the other three. His letter was dated nearly two months before I applied for the job. Help has been plentiful round here in the spring, as my employer was without a man when I landed here. I have been here five months, and I have already got an intimation that my services are to be dispensed with, the reason being that it has been a bad year.

"I have a wife and child to keep all winter and only had five months to prepare for winter, which is another five. Now, I would like some advice how to do it. I know the winter, as to its severity of a Canadian winter, as it is not my first experience. I have been in Canada before. But I am given to understand the customs in this part are different to the district I am in before. For one thing, living is ever so much higher. I can get produce from the farm only at occasional times, and then I am charged more than the prices, as I am told they can get that price in the village.

BABY COMPLAINTS

"I kicked a little the first few weeks I was here, about long hours and promises I did not consider fulfilled. It was told I was a grumbler, and that I could get if I paid my fares from Toronto. This I could not do, as I had spent my money in furnishing the house. I said I would never say another word, and I never have. We have not had a wrong word since. As long as I don't squeal, I can get along all right, but as soon as he gets his turn served, I can go.

"You pride yourselves, as Canadians, on not having workhouses in Canada, but you soon will have if you have not the equal now in Houses of Industry, Refuge, and jails. I am not thinking of visiting one of these "homes." But your farmers, back-packing on their promises and terms of hire, may send lots there who, like me, do not expect going there.

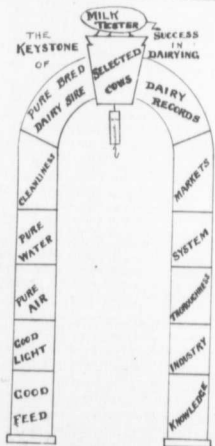
"Seeing that I am facing the winter, with the prospect of about two weeks' work ahead of me and a very few dollars in pocket, it is not very encouraging to me. I would like a word or two of advice, if you could spare time, as it is work I want, not charity, which I find Canadians are prone to give."

Red Color in Holsteins

I have been using a pure-bred Holstein sire in my pure-bred herd, and recently have had several calves of a reddish color. Do you suppose my sire is really pure-bred?—H. E.

Holstein bulls may sire reddish calves but it is only rarely that such an animal crops up. The usual explanation is that it is a case of atavism, or throwing back to remote ancestors. Nearly every breeder gets a red calf at some time or other, and simply has to knock it on the head. In the case of a herd bull siring red calves the trouble is a serious one; and the worst of it is that where a bull shows this failing at all he usually sires a large percentage of off-colored calves. For use with a grade herd the color does not make much difference. In a pure bred herd or district the only thing appears to be to get rid of the animal as soon as possible—and "get and be it."—W. A. Clemons, St. George, Ont.

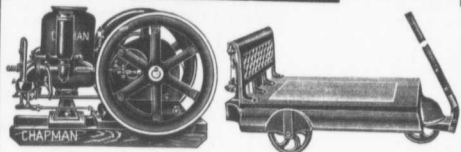
No important development is likely to come unless a group of people get together and work for it. Schools, roads, and churches all come as a result of a common spirit which determines to bring about improvement.



The Way to Success

This is a rough sketch of the arch that was a feature of the Dominion Dairy Exhibition. It is the largest National Dairy Exhibition. It explains itself and the argument has been proved correct in the experience of thousands of dairymen.—Sketch courtesy Mr. Whitley.

Ontario Wind Engine & Pump Company's LINES ARE SUPREME



We made our goods good, our users made them famous. We manufacture what our customers say to be the best Kerosene and Gasoline Engines, Wind Mills, Feed Grinders, Saws, Pumps, Scales, Tanks, Water Basins, Stanchions, Well Drills and Pressure Tanks, and we believe they know.

If you do not own an Aylmer Scale, either Portable, Pitless, or Three-wheel Wagon Stock Scale, your farm equipment is not complete. You are losing each year in hard dollars the price of a scale.

The majority of people are honest, but they all make mistakes. Get an Aylmer Scale to weigh what you sell. Correct the honest and catch the dishonest.

Get our illustrated Scale Catalogue—it shows scales from 5 pounds to 5 tons.

It is interesting. It's yours for the asking.

Ontario Wind Engine & Pump Co., Limited

Head Office: TORONTO

Branch Houses: WINNIPEG CALGARY MONTREAL

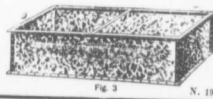
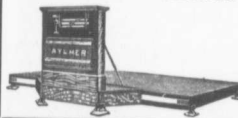
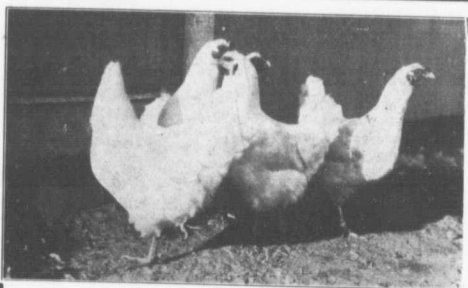


Fig. 3 N. 13



GET IN ON THIS

February Poultry Special

WHY DIDN'T YOU eat more eggs and chicken pot pie last winter? Because eggs were 4c and 5c each, and chicken equally out of reach.

"OUR PEOPLE" have already recognized the value of poultry on their farms. Ninety-nine per cent of them are poultrymen. It's no longer a mere sideline of farming. It's one of the branches of the farm that furnishes an excellent income. Ask the housewives about it.

THE FEBRUARY SPECIAL POULTRY NUMBER of Farm and Dairy will give our advertisers one of the best sales privileges of 1914. It will go to over 32,000 of our thrifty, progressive farmers.

THIS BIG NUMBER will contain a wealth of spicy information from our practical and leading authorities.

"OUR PEOPLE" appreciate these Specials. Our dairy breeders were pleased with our Big Breeders' Magazine Number. Space in it had an added value to them, and our December 4th issue carried 50 times as much live stock as our previous issue.

OUR POULTRYMEN are anticipating our February 5th Special. So it's up to you to come along right away for the good service this number will give you. Reserve it now. Don't come too late. Better drop us a line today.

ADVERTISING DEPARTMENT

Farm and Dairy - Peterboro, Ont.

FARM AND DAIRY

AND RURAL HOME
PUBLISHED EVERY THURSDAY

SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.20 a year. For all countries, except Canada and Great Britain, add 50c for postage.

ADVERTISING RATES. 10 cents a line flat, \$1.40 an inch an insertion, one page 40 inches, one column 22 inches. Copy received up to the Saturday preceding the following week's issue.

UNITED STATES REPRESENTATIVES
EDWIN WELLS SPECIAL AGENCY

Chicago Office—People's Gas Building
New York Office—256 5th Avenue

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 16,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 17,500 to 18,000 copies. No subscriptions are accepted at less than the full subscription rate.

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

OUR GUARANTEE

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

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

The Rural Publishing Company, Limited
PETERBORO, ONT.

Who is the Real Middleman?

We are ever ready to settle the blame for the high cost of living and the small returns to the producer on the unlucky middleman, who handles our products between producer and consumer. But is he the only middleman? The following incidents, which are typical of real estate profits, afford a clue to the identity of another middleman of whom we seldom think—the landlord. An Edmonson man sold for \$850,000, one hundred and forty-five acres of land, which he bought in 1898 for \$1,450. This man pocketed over \$50,000 a year in increment that was entirely unearned. In Toronto an Albert Street property was purchased for \$45,000 recently, and inside of one month was sold for \$55,000—another man who got something for doing nothing. The Manufacturers' Life Insurance Co. sold their property on the corner of King and Yonge Streets, Toronto, at a profit of \$294,000 over the purchase price two years previously.

Such instances might be multiplied indefinitely. City property has this value because many people live there and because many farmers trade with that city. Middlemen must pay enormous rents for the use of this high-priced land. The landlord's share is a very substantial portion of the so-called "middleman's profit." Who then is the real middleman?

Dairyman Turns Detective

It was not a hair-raising detective story that a few years ago caused one of the best-known farmers of Ontario county to turn detective. It was just a copy of Farm and Dairy such as you now hold in your hand. The article that inspired this farmer told of robber cows in the dairy herd. "Guess some detective work is needed in my own herd," he remarked, and began forthwith to rule a large sheet of cardboard for milk records.

Our friend had what was then considered a good herd of Shorthorns. Six months of record keeping decided him that over half of that herd would be more profitable to the butcher than the dairy. He bought in some Holstein grades.

Milk records began to climb up. Gradually the Shorthorns were displaced by Holsteins, and from Holstein grades he climbed to Holstein pure bred, and his large herd to-day is composed almost exclusively of registered stock. This farmer is still a detective twice a day every day in the year. He tests the honesty of every cow in his herd. Robbers are not allowed there. His name? Well, we are not at liberty to give it, but if we did, it would be well known to the most of our Folks. The moral? We leave that to you.

A Naval Policy for Canada

The fourth question of Farm and Dairy's referendum published on page seven this week, reads as follows: Which would you prefer—(a) Sending \$35,000,000 to the Imperial Government as a temporary gift, to be expended for naval defence? (b) Expending \$35,000,000 to start a Canadian Navy? (c) Not spending any money for either purpose, but spending hundreds of thousands of dollars, if necessary, towards the establishment of universal peace and disarmament, and the settlement of international disputes by arbitration?

No subject of public policy has been more thoroughly discussed than the relative merits of the first two of these three proposals. From the standpoint of the taxpayer they have equal merit. They both call for \$35,000,000 of Canadian revenue. Advocates of the second policy argue that Canadian money should be spent for the benefit of Canadian workmen; hence the Canadian navy should be built in Canada; in the gift of \$35,000,000 to the British Admiralty for naval purposes they see taxation without representation, a thing contrary to the spirit of democratic government.

For the first policy the most powerful argument that will occur to thoughtful people is that this method of aiding Great Britain would not menace us with an armament trust. We all know the influence of the armament trusts of Great Britain and Germany. Through their control of a large section of the press they are enabled to stir up national animosity and to keep voters passive, while their hard-earned wages are being appropriated for armament extension. The influence of the armament trust extends into Parliament and even into the Church itself. The bribing of legislators they consider no sin, so long as it brings them additional business. The establishment of branches of these concerns in Canada for the construction of a Canadian navy would lead inevitably to the same conditions here that prevail in older lands and the malign influence of the armament trust would constitute a menace of no mean proportions. Hence of the two policies, many prefer the one advocated by Mr. Borden.

The Best Naval Policy

The Liberal and Conservative naval policies present a choice of two evils. The most humane, the most Christ-like, and economically the soundest policy, we believe, is that advocated by the organized farmers of Canada—restricting military expenditures, and spending hundreds of thousands of dollars, if necessary, towards the establishment of universal peace. In their conventions and through the delegations that they have sent to Ottawa from time to time, the organized farmers have voiced the third clause of Farm and Dairy's referendum. Our farmers see clearly what war means—heavier taxation, less money for constructive purposes, thousands of men drawn from productive enterprises and inevitably the corruption of the public morals and ideals.

And yet to this end nations have been striving. There has not been one per cent. as much money expended on the promotion of peace as on pre-

paration for war. Peace societies have been upheld financially by private donations. The long strides that these societies have made towards securing the settlement of all international disputes by arbitration with limited sums at their disposal but serves to show what could be done were these societies backed up with the funds and influence of such a country as Canada. We believe that the farmers of Canada would speak strongly for peace did they have the opportunity. Whether or not we are right the results of our referendum will indicate. We request all of Our Folks to fill the ballots which will be published in Farm and Dairy, January 20th issue, taking particular care in the marking of question No. 4. Help us to make known what our farmers really desire in regard to this great subject.

Community Social Centres

A rural community without a community centre is as much to be pitied as a man without friends. Life to both is apt to be monotonous and uninteresting. Man is a social animal. His intellect expands by contact with the intellect of others. The farmer who lives into himself will only tread deeper the rut in which his fathers trod. Where, however, he meets with his neighbors and they exchange ideas and discuss the suggestions advanced in the agricultural press and the Government bulletins, there is a community of ideas and the man brings to bear on his own farm management the concentrated thoughts of all his neighbors. So, too, the women folk by getting together and exchanging ideas will develop plans that will reduce labor and make their housework more interesting.

But the community centre has its social as well as its educational value. We need to meet and enjoy ourselves. Particularly is this true in the case of the women. Lack of social opportunities has driven many a young man from the farm, but the same cause has been even more largely instrumental in crowding our cities with young women and leaving our country districts in such a condition that in almost every rural township of Ontario males exceed females in number. The same is true of the other provinces.

The ideal community centre is the one that includes in its programme men, women, and children, furnishing instruction and enjoyment for all. Its appeal to every member of the family has been the strong point of the Dominion Grange. It was the strong point of the old Ontario Literary. Has your community a community centre? If not, you can do your friends and neighbors no better service than by becoming instrumental in the organization of such a centre, call it what you may, grange, society, or club.

The district representative system now so popular in Ontario and Quebec, is making rapid strides in the United States. Across the line the farm adviser, as he is called, is a very popular man, and some countries are paying as high as \$4,000 a year to get experienced and expert advisers. A story comes from Ohio that illustrates why the system is so popular. This representative or adviser is located in a section where much commercial fertilizer is used. He discovered that if fertilizer could be purchased in one thousand-ton lots, it could be got five dollars a ton cheaper. Accordingly he asked his constituents through the press to order their fertilizer through him. Altogether he ordered one thousand nine hundred tons of fertilizer, saving five dollars a ton, or \$9,500 on the single deal. Truly an enterprising representative need not lack opportunities for earning his pay directly in dollars and cents!

Comments "Swapping Bulls" Idea

The Farm and Dairy editorial re "Swapping Bulls," that appeared in the December 13th issue, appealed to me very forcibly. I have just had the experience of parting with a high-class animal for the sole reason of preventing in-breeding. The animal was just in his prime, four years old and a grandson of the famous Holbon De Kol. He would have given good service for several years, but I had to sell him at a great sacrifice. Would it be gladly swapped with someone who was in the same predicament.

Some drovers have a prejudice against the black and white cattle, and in several cases I have known them to pay a ridiculously low price, such as three cents a pound for animals in prime condition, just because they were of Holstein breeding, when bologna bulls were quoted at from four and one-half to five cents a pound. I know of other drovers, however, who make no distinction.

I hope this important matter will be taken up and some method adopted, whereby this great sacrifice can be lessened.—Sinclair Adolph, Perth Co., Ont.

AD. TALK

CCXXII

The 1914 Way of Selling Seed Grain

In reference to results from advertising in Farm and Dairy, I am pleased to tell you that it has done me great satisfaction. For several years past I have not had enough oats to fill the orders I received. I only used one other paper, and as far as I can tell, the sales to readers of Farm and Dairy were more in proportion to the amount charged. Last year from the two ads. I received 112 applications for sample, and over 20 orders, and sold over 2,000 bushels (all my own growing) before the 30th of March, and I would advise all farmers to write in one or more of the best agricultural papers—yours truly. A. FORSTER, Dec. 25, 1913.

Mr. Forster strikes the right note in his advice to his brother farmers. There are scores of us throughout Ontario and the east who have much excellent seed grain in our granaries, but which will be fed to the stock from our inability to sell it to advantage. There will be thousands of other farmers who next spring there will be a big demand for O. A. C. 21 and Redchurn Barley, O. A. C. 72, and other good varieties of oats. Also for potatoes. We know, moreover, that good seed corn will be particularly scarce.

Now, farmers with choice seed, why not let it be known you have it for sale? Most of us are ready now to purchase our seed grain for next year. Why should we not get in touch with each other? Mr. Forster has shown the way. He has proved, too, that it pays to tell his brother farmers what he has for sale. Why should his methods not be more general? Both of us would profit thereby.

During the coming spring there will be a big demand for O. A. C. 21 and Redchurn Barley, O. A. C. 72, and other good varieties of oats. Also for potatoes. We know, moreover, that good seed corn will be particularly scarce.

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Capitalists and the Farmers

(Continued from page 2)

The Canada Cement Co., Montreal, capitalized at \$38,000,000, absorbed 11 companies with a total capital of \$17,750,000; Amos, Haddon & McCreedy, boots and shoes, capitalized at \$11,500,000, absorbed two companies, capital \$3,500,000; Canada Cereal & Milling Co., capitalized at \$3,250,000, absorbed eight companies with \$809,000 capital; Dominion Cannery, Hamilton, capitalized at \$12,500,000, absorbed 45 individual companies whose capital was given as \$1,324,000. All the other mergers are similarly inflated.

MANY INTERESTS AFFECTED

Operations have not been confined to one or a few classes of commodities. Combines have been formed for handling soap, cereals, asbestos, lumber, flour, milk, cars, leather, bolts, cement, dried fish, carriages, bolts, nuts, steel, coal, ice, fells, shoes, furs, crockery, paints and jewelry. Arrangements have also been made for navigation, light and power, brewery, canning, retail box trade and other companies. These instances are sufficient to exemplify the widespread nature of the new feature in the commercial and financial progress, which is slowly painting a new economic map of the Dominion.

This consolidation of individual companies into combines, and combines into trusts, has the farthest effect of centralizing capital and power in the hands of a few individuals. By an interlocking of directors the same men control or bank the same men control our banking institutions, our loan companies, our insurance companies, our transportation companies and our industrial institutions. It is stated on good authority that Canada's economic structure is in control of about 23 capital directors, who are members of 90 of the 121 corporations of Canada having a capitalization of \$600,000 or over.

EFFECT OF THE TARIFF

The method that has hitherto been pursued in this country of collecting revenue through customs duties enables one group of individuals to levy toll upon their neighbors, and is inherently unsound. It is so because it destroys the balance of equities in taxation. When customs duties are levied not for revenue purposes, but for the protection of a certain class in the community the practice becomes vicious as it enables that class to levy a tribute on the rest of the people.

Wherein should we tax the money invested in agriculture for the benefit of capital invested in manufacturing? On what principle of justice can a government give a man who invests \$100,000 in a manufacturing industry the privilege of levying a tax on 10 men who invest \$10,000 each in land to develop the natural wealth of the country?

PRESIDENT'S QUESTION

By virtue of what principle will you tax the farmer in order to give work to the working man? On what principle will you tax the working man to give better prices to the farmer?

The essence of a protective tariff is the power it gives the manufacturer of a commodity to levy a tribute on the users of that commodity. This privilege, granted by statute to manufacturers, is directly responsible for results in Canada that are deplored by thinking men. A few men become millionaires, while the masses become poorer; a few live in mansions while many are reduced to shams. Manufacturing is unduly expanding, while the farming industry languishes because of being drained of its life's blood.

There's no good reason why you should wait till spring before getting a

DE LAVAL

ON the contrary you may buy a De Laval Cream Separator NOW and save half its cost by spring. If, for any reason, you can't conveniently pay cash you can buy a De Laval on such liberal terms that it will actually pay for itself.

AS to your NEED of a separator, if you have the milk of even a single cow to cream you are wasting quantity and quality of product every day you go without one. This waste is usually greatest in cold weather and with cows old in lactation, and it counts most, of course, when butter prices are high. Then with a separator there is always the sweet, warm skim-milk and saving of time and labor, in addition.

WHEN it comes to a choice of separators De Laval superiority is now universally recognized. Those who "know" buy the De Laval to begin with. Those who don't "know" replace their other separator with a De Laval later—thousands of users do that every year. If you already have some other machine the sooner you exchange it for a De Laval the better.

WHY not start 1914 right in dairying? SEE and TRY a DE LAVAL NOW when you have plenty of time to investigate thoroughly. The nearest DE LAVAL agent will be glad to set up a machine for you and give you a free trial.

DE LAVAL DAIRY SUPPLY CO., LIMITED MONTREAL PETERBORO WINNIPEG VANCOUVER

Keep The Boy On The Farm

By making home interesting for him. Give him his own interests, and see the change.

Get Him, Started Breeding Pure Bred Stock

It not only pays, but has kept thousands of boys at home interested and happy.

Two Of The Many Who Were Satisfied

July 16, 1913 Farm and Dairy Peterboro

Received my pig O. K. It is a dandy, and I am much pleased with it, and it is much larger than I expected.

Thanking you very much for it, I remain as ever, W. O. LINT

P.S. Will send photo of it later on.



A Premium Pig

This is a picture of the type of pig that Farm and Dairy are giving away. It is a Yorkshire, splendid for Bacon and for which there is always a good market.

July 17, 1913 Farm and Dairy Peterboro

I received my pig and I am very pleased with it. I do not see how you can give so good a premium for so small an amount of work. I am indeed pleased with it and think she is a dandy. What price do you charge for a male of the same breed. Please let me know and oblige. Yours etc. ROBT. NEEDHAM

Notice the interest displayed by the boys whose letters appear above! Will they be likely to leave the Farm? Are they more interested in the City than the Country?

FATHER—MOTHER

Keep your boy at home by helping him to get Nine New Subscribers to our paper, and a Pure Bred Pig.

Don't fail to take advantage of this opportunity. Fill in the blank now and be sure to get your supplies right away.

Form and Dairy Peterboro I will try and secure 9 new subscriptions to earn a pure bred pig. Please send me sample copies, receipt forms and order blanks. Signed, P.O. Prov.

The Upward Look

Thy Kingdom Come

I wonder how many times in our lives we have repeated these words thoughtfully, thoughtlessly, earnestly, carelessly. They have been so familiar to us, from our earliest childhood when we learned to repeat them at the beloved mother's knee, that very often the mind does not grasp the deep, grand meaning underlying them.

Can we think of Christ being selfish, passionate, untruthful, giving way to these and other "besetting sins?" If we cannot, then how can be pray "Thy kingdom come," if we do not strive with all our energy and power to be more like Him in our every-day life?

So will we not begin the very moment our decision is made, in our New Year's resolutions, that we will strive to conquer our own faults, whatever they may be.

May we not put off this struggle, which will indeed be a hard one, until to-morrow, next week, next month. Before we realize it, this year is past, and as far as advancing His kingdom by our example, our opportunity is past.

I will never forget a talk I once heard given by "Moody" as to the most practical way of governing our-

selves. As it was many years ago I do not remember the words, but the thought was: "The first time we lose our tempers apologise at once; the next time we tell a falsehood go at once and tell the truth; so whatever the wrong we have done, right it as soon as we possibly can. When we have done this once or twice we will not let similar wrong-doing occur very often."

Above all we must not forget other words in this grand old prayer, "Thine is the power." Only by the earnest heartfelt constant prayer for His power and the humble, contrite, sorrowful plea for forgiveness after failure, can we hope this coming year to be loyal and faithful subjects of His kingdom on earth.—I. H. N.

Children's Rights

"Probably of all problems that lie before us," said Archdeacon Oody at the last Women's Institute Convention in Toronto, "not the least is the problem of child welfare. The neglect of children is not merely a crime, it is suicidal to the state itself. All those, however, who love their country will seek methods of prevention rather than means of reformation. Most necessary is it to secure the godly upbringing of the children of this realm."

The first right of the child dwelt upon was the right to be born. A serious problem is the diminishing

birth rate. "May no other of the rights of women of which we hear," said he, "encroach upon their right to be wives and mothers."

The second right is to be well born. "I do not mean," said Dr. Coily, "in the sense of being born of high lineage, but the right to be born sound physically, mentally and morally." Then comes the right to live. "One of the greatest disgraces to our civilization is the high mortality of infants. Decent housing, healthy surroundings and good mothering are their alienable rights."

The fourth right of the child is the right to protection. The speaker emphasized particularly that children should be shielded from drunken parents. "We should never grudge the cost of all endeavors to give the children a chance to live free from the threat of the parental blow."

The right to play means just the right to childhood. The last right of the child is the right to be well educated. We are learning that education relates to the physical and moral side as well as the intellectual. Education fails to educate when it fails to equip for the duties of life. Children should be well nourished whoever pays for it. They should be medically inspected and taught the elements of personal hygiene. Manners and morals also form a very important part of education, and it should be remembered not only in Sunday school but in day school as well, that we cannot secure a sound

basis for morality apart from the fundamental basis,—religion.

"In your hands," said Archdeacon Oody in conclusion, "lies the making and the guiding of those who shall come after and be the heirs to the larger life that is to be in this Dominion. Remember that the true measure of greatness is the growth and power of the soul."

Cheer Up

There is a certain big bird whose well-known whistle repeats: "Boys! Boys! Cheer up! Cheer up!" I have sat at tables where the fault-finding and angry quarrelling during the meal took away all appetite and caused eating to be merely a mechanical act, quite without pleasure or profit; and again I have eaten at farmers' tables where jokes, anecdotes and plans for the future kept everyone laughing and in a merry humor. Each one rose from the table in a peaceful, rested frame of mind. Here is what one woman does, says an exchange:

"A woman in Harlem has hit upon an idea for keeping her family happy during the evening meal. She makes each of the several members of the family tell of some funny incident which has come to their notice during the day, and so creates plenty of laughter, as well as training the children's powers of observation." But there is never a joke or a story at the expense of another. Try it at your own table if conversation lags.—Ex.



Why don't some flours behave? Why don't they keep good?
 Because they contain too much of the branny particles, too much of the inferior portions of the wheat—may be little pieces of the oily germ.
Which act on one another—that's why some flours "work" in the sack.
FIVE ROSES is the purest extract of Manitoba spring wheat berries.
 Free from branny particles and such like. It will keep sound, and sweet longer than necessary.
 Keep it in a dry place, and when needed you find it even healthier, sounder, fresher, drier than the day you bought it.
 Buy lots of FIVE ROSES.
 It keeps.

Five Roses Flour

Not Bleached



Not Blended

Mental Training before School Age

Mrs. Ivan F. Follott, York Co., Ont.
In my article that appeared in Farm and Dairy a few weeks ago I dealt with what a child should be taught of its physical welfare before going to school. In this article I will deal with the mental side of the question.

Under the head of mental I have placed merely that which relates to the child's studies. Some teachers prefer the child to come to them with any idea of real school work. Some parents prefer to send them

that way, but they are not supposed to be considered here. Definitely speaking, under the mental I have put number work, color, nature study, oral composition and in conjunction with all these, the training of the memory and the senses.

This can be easily done by the mother while she is at her every-day work. "How many eggs did daddy bring in to-day?" "Bring me up five or six apples for a pie, please." "There are too many potatoes here. Please take out a half dozen and bring in a dozen carrots with you." Thus the child is learning helpfulness and number work at the same time.

Color is just as easy. "What color are those curtains, Mary?" "Bring your tan stockings for me to darn!" Fruits, birds, flowers can all be brought into use in teaching color if we can't afford to have the colored balls, prisms, etc., used in the kindergarten.

When the child brings you in a bouquet, start your nature study going. True, it may be composed of weeds, but who needs to know weeds more than the country child? The little birds' nest found on the ground is an object of interest to them, and you can make it of educational value as well by having them note how and

of what it is made. The crow, the cricket, the bee and the pig all lend their aid, for the simple things learned of every day objects now will help to increase the child's powers of observation later on.

Our little ones are very fond of playing a game that you might call for want of a better name—"What is it made of?" They go the whole list of known things almost from baby's high chair up to "old Bob." Their questions rather startle one sometimes, but as yet they are rather easily put off if a very satisfactory answer can't be given. Such a game we have found gives a chance to learn in a host of simple facts concerning wood, minerals, clothing, etc., and tends to make them think.

EVERY man has two educations—that which is given to him, and the other, that which he gives to himself. Of the two kinds, the latter is by far the most valuable. Indeed, all that is most worthy in man, he must work out and conquer for himself. It is that, that constitutes our real and best nourishment. What we are merely taught, seldom nourishes the mind like that which we teach ourselves.—Richter.

Nature study, memory work and oral composition can be combined to good advantage. Take one of the common grains or seeds and have them tell you what happens to it from the time it enters the ground till it comes to the table. You will have to tell them first and they may frequently get the cart before the horse in their re-telling, but it will serve a four-fold purpose: to teach them of nature, train their memory; help them in their language lessons and impress upon their young minds the thought of how dependent we are upon God and one another.

Writing can scarcely be left off the list since Montessori in her system places it in the foremost ranks. By that system little Italian children of four learn to write all the letters in six weeks, and children of five in four weeks and write them well too. One strange point in this Italian method is that writing precedes reading. The children at first read what they themselves have written. Froebel, as far back as 1826, advocated this method also. Give a child a pencil, paper and a copy and even if he does seem to make very poor headway, he will at least learn something of holding a pencil, etc. Watch a young child trying to write for the first time and the importance of such practice will be easily recognized.

In all this the sensory nerves are being trained, but as a special ear training have them try to distinguish voices, footballs, bells, etc. Drop nuts, beans, marbles, or pebbles on the floor or on glass and have them note differences in sounds. Stop him in his play and ask him to tell you the different sounds he hears. Practice will make him surprisingly proficient in this. Those who have studied the subject say that lack of proper ear training is frequently the cause of the heedlessness, inattentiveness and apparent disobedience of children. They hear, but not with intelligence; as we often say it goes in one ear and out the other. Teach the child to listen intelligently and who knows but what we will have helped solve the problem of discipline! Teach feeling by having the child with closed eyes tell which of several pieces of cloth is cotton, which woolen, which velvet, etc. The busy mother can think out games best suited to her own babies and circumstances. Such games will be admirable ones for the "ahut in" child.



Mr. Edison's Wonderful New Instrument

Mr. Edison's Latest Invention

Just Out—The perfected musical wonder of the age. And shipped on a stupendous special offer direct from us.

WRITE today for our new Edison Catalog—the catalog that tells you all about the wonderful new model Edison with Mr. Edison's new diamond point reproducer. It will also tell you about our new Edison offer! Now read:

Mr. Edison's *Pat and His* by



among all his wonderful inventions is his phonograph. He was for many years striving to produce the most perfect phonograph. At last he has produced this new model. Think of it: over 25 years of work on all the epoch-making inventions—then his pen and hobby perfected!

Endless Fun

Happiness is life—and real happiness is found only in a real home where the happy and content family gather together for mutual enjoyment and recreation.



Such a variety of entertainment! Here the latest up-to-date song hits of the big cities, laugh-out-loud funny stories, your favorite and your own music, the grand old church hymns, the masculine choruses, the soothing organ, the croaking forest lull, the whistles, the two-step, the rags, dances and quartets. All will be yours with the Edison in your home. Send the coupon TODAY.

Free Loan Offer:

We will send you the new model Edison and your choice of all the brand new records on an absolutely free loan. Hear all the waltzes, two-steps, vaudivilles, minstrels, grand operas, old sacred hymns, every kind of comic and popular music, also your choice of the highest grade concertos and operas, as rendered by the world's greatest artists. Entertain your family and your friends. Then, when you are through with the outfit you may send it back at our expense.

Remember, not a penny down—no deposit—no guarantee—no C. O. D. No one obligation to buy—a full free trial in your own home—direct from us—direct to you—returnable at our expense or payable (if you want) to keep it at the actual rock-bottom price and price from us.

The Reason: Why should we make such an ultra-liberal offer? Well, we'll tell you—we are tremendously proud of this magnificent new instrument. When you get it in your town we know every body will say that nothing like it has ever been heard—so wonderful, so grand, so beautiful, such a king of entertainers—we are pretty sure that at least some one, if not every one, somebody else, will want to buy one of these new style Edisons especially as they are being offered now at the most astounding rock-bottom price and on easy terms as low as \$2.00 a month.

Our New Edison Catalog Sent Free!

Your name and address on a postal or in a letter, (or just the coupon) is enough. No obligations in asking for the catalog. Get this offer—while this offer lasts. Fill out the coupon today.

F. K. Babson, Edison Phonograph Distributors
Dept 7671 355 Pettus Ave., Waupac, Wis.
U. S. Office, Edison Block, Chicago

To
F. K. BABSON
Edison Phonograph Distributors,
Dept 7671 355 Pettus Ave., Waupac, Wis.

Gentlemen—Please send me your new Edison Catalog and full particulars of your free trial offer on the new model Edison Phonograph.

Name _____
Address _____

WHAT EDUCATION SHOULD FARMERS' DAUGHTERS RECEIVE ?

Alice A. Ferguson, York Co., Ont.

THE pursuit of knowledge is elevating and refining. The earnest student soon forms ideals that lifts her life above the commonplace, and yet with all this, the sensible girl comes back from college to the farm to be a better help on the farm than before, because more intelligent.

Education does not unfit a girl for her duties at home. If it does, the fault lies in the girl herself, or in her training. It should develop abilities hitherto scarcely realized, and widen her sphere for usefulness. By being away from home—as is often the case when attending High School—she sees other women's methods of housekeeping, tests foods differently prepared, and comes home with fresh ideas for more variety in the daily menu, or for home furnishings.

Farmers' daughters should not be slaves, but free. Education should develop desires for reading and for arts. I have in mind a girl who attended High School for a term or two, having to give it up on account of her eyes. She became an excellent

housekeeper, and found time to paint some very creditable pictures, which afterwards adorned the walls of the manse, where she went after marriage. She became an expert at art needlework, as well as acquiring a good musical education. She was in every way suitable for the wife of an educated man.

PRACTICAL RESULTS OF EDUCATION
In another farm household where there are two daughters, they have taken training at Macdonald Institute, Guelph, also in learning dressmaking and millinery, so that the home sewing can be well done by them.

Farmers' daughters should receive the best education possible. They are usually as bright and capable as other students, and do town girls. In their earlier years, farmers' daughters are imbuing knowledge at first hand in sanitary science, household economics, to the town girl. The farm is a university where nearly every known subject may be studied, and naturally at least a kind of smattering of knowledge of different

a course at high school.

The farmer's daughters should be given at least a short term at High School, longer if it can be given. Life on the farm is free, untrammelled, and unconventional. When the country girl mingles first with other society, she may feel awkward or ill at ease.

Mingling with other kindred spirits at High School or college rubs off the sharp corners, smooths the rough lines, and soon the peg fits comfortably in the hole.

Farmers' daughters should be worthy to be the wives of good, intelligent men, whether farmers, business men, or professional men. Men want in a wife not only a home maker, but a companion, who can understand and enter intelligently into their flights of thought. For this purpose, a farmer's daughter should be given an opportunity to develop her abilities, and should be encouraged to assist in public functions and become used to living in the public eye. This will give self of manner freedom from self-consciousness, and ability to assist gracefully when called upon to perform some public duty.

The farm is the best place in which to develop strong bodies, sound mind and healthy spirits. The variety of work, the freedom from irksome restraint, the happy, healthy environment, coupled with an educated intelligence and kind heart, should make the farmer's daughter not only a peer, but even a superior of the girl in the city, who knows how to do only the one thing, and not even that very well. The farmer's daughter should be worthy of any man, and is often too good for most men.

More Moisture for Living Rooms

"Too often we do not supply our living rooms with a sufficient amount of moisture to safeguard our health properly," says Laura M. Stewart, instructor in home economics in the University of Wisconsin.

"One reason for so much throat and nose trouble during the winter months is that the mucous lining is deprived of its necessary moisture, making it less resistant to germs. This lack of moisture also causes the furniture to crack and spread at the joints."

In country homes where neither hot water nor steam heat is used, the housewife may have the air sufficiently moist by keeping a small basin of water on the back of the stove.

The Best **HIRED HAND** For Farm Cleaning

A "HIRED HAND" that is dependable, willing and always on the job.

IN HOUSE, DAIRY AND BARN

Old Dutch Cleanser cleans in a way that makes other cleaning methods look doubtful.

The Old Dutch Cleanser way is a thorough way, **AN EASIER AND QUICKER WAY**

No job too big or too small for Old Dutch Cleanser. Many Uses and Directions on Large Sifter Can—10c.



DON'T BE WITHOUT IT



Standard Gasoline Engine

Everyone sold on a strong guarantee. Ask for our catalogue of engines

LONDON CONCRETE MACHINERY CO., Dept. B. LONDON, ONT.

Largest Makers of Concrete Machinery in Canada

GET YOUR MONEY'S WORTH

If you have any money to spend on your home, let us tell you where to buy the things that count.

We know what is in all the shops, and can make you go twice as far for you, as you can for yourself. Try us.

Send us \$1.00 for each room you want to fix up and we will send you ideas for color and samples of material with information as to where the stuffs can be bought and at what price.

Anything you want to know about fixing up your home ask **SMALL HOUSE DECORATING COMPANY** 1 Liberty Street, New York, N.Y.



The New Dress and the Old

A. C. HELD

Yes, here to town, hee ye, Mandy, en yer bought a bran'new dress, An' yer goin' to hev it made up right in style jus' like the res'. Made with all the bows an' fashin' that the dresses have this spring. An' I s'pose ye'll feel on Sunday yer in style an' be the thing. Well, o'course I know it's a nat'ral fer Dressed up like the other ones is, an' it's right, but ez er me. Jes' please leave out bow an' fashin' I'm old-fashioned as ye see. I like ye bes' as ye air now, Jes' that way, jes' as ye be.

Yes, jes' as ye stan' there, Mandy, with yer gingham dress o' bows. An' the fear on the shoulder an' your arm a-strivin' through-out the front of 'suntanet that your Mother waster wear. An' the sunlight a-shinin' on ye an' a lightin' up yer hair. Don't think fer a minit, Mandy, I be frudin' ye the new dress. An' I'll feel proud o' ye Sunday when I see ye with the res'. But when agin on Monday you blow the horn for me. I like the dear old gingham dress, I like ye as ye be.

An' ye ask me, do ye, Mandy, why I like that o' worn dress. I smile ez I tell the reason, fer it's the first time, do ye see. When I met yer mother, Mandy, fer She'd a dress on, jus' like your's is, an' it come jes' to the knee— An' a faded old sunbonnet, she's a holdin' to an string. An' I thought o' all Dad's treasures she's about the sweetest thing. So ye see it's all Dad's weakness to cling to this memory An' that, my girl, is the reason I like ye as ye be.

DON'T LET YOUR WIFE BEND OVER A WASHTUB

all day, rubbing and scrubbing in a hot, steamy wash-house. Think of the drudgery—the backache—the serious illnesses too often caused by chills. Avoid this! Get her a



Maxwell

"EXCEL-ALL" WASHER

and ease this burden and save money. Clothes washed cleaner and whiter in half the time. A dry, clean floor, too.



Go with the wife to the nearest Maxwell dealer and see the Maxwell "Excel-All" Washer. Notice how easily it works—almost runs by itself. See the improved swinging adjustable wringer board. Rusts on ball bearings with assisting spiral springs. It means lighter work and better health. Also enquire about our Washers for Water, Electric or Gas Engine Power.

DAVID MAXWELL & SONS, ST. MARY'S, ONT.

NEW COAL OIL LIGHT BEATS ELECTRIC OR GASOLINE

10 Days FREE—Send No Money

We don't ask you to pay us a cent until you have used this wonderful modern light in your own home for ten days. Then you may return it at our expense if not perfectly satisfied. We want you to prove for yourself that it gives five to fifteen times as much light as the ordinary oil lamp, beats electric, gasoline or acetylene. Lights and is put out just like the old oil lamp.

BURNS 70 HOURS ON 1 GALLON OIL
Gives a powerful light in your home or office. Burns common coal oil (kerosene), no odor, no noise, no smoke, no fumes, no soot, no gas, no inconvenience.

\$1000.00 Reward
will be given to the one who shows an oil lamp equal to this Aladdin in every way (despite the eight dollar cost) to the world if there can be made such a challenge to the world if there is one. Write for details to the Aladdin! We want one person in each locality to whom we will refer customers. Write quick for our 10 Day Absolutely Free Trial Proposition. Absolutely No Money Down, and we will pay for our ONE FREE.

AGENTS WANTED
to demonstrate in territory where oil lamps are in use. Experience unnecessary. If a 7c gas is average free make a day and make a dollar. You will be glad to see the Aladdin. You can get it in 10 days. Write quick for our 10 Day Absolutely Free Trial Proposition. Absolutely No Money Down, and we will pay for our ONE FREE.

MANTLE LAMP CO., 721 Basha St., Montreal & Winnipeg.

ANNUAL MEETING Union Bank of Canada

Held at Winnipeg, December 17th, 1913

The Forty-ninth Annual General Meeting of the Shareholders was held at the Banking House in Winnipeg, on Wednesday, December 17th, 1913

The Annual General Meeting for the election of directors and other general business, was held at the banking house, in the City of Winnipeg, on Wednesday, the 17th of December, 1913. The meeting was largely attended. The Chairman read the Annual Report of the directors, as follows:

FORTY-NINTH ANNUAL STATEMENT

29th November, 1913
PROFIT AND LOSS ACCOUNT

Balance at credit of account, 30th November, 1912	\$ 75,483.76
Net profits for the year, after deducting expenses of management, interest, due depositors, reserving for interest and exchange, and making provision for bad and doubtful debts, and for rebate on bills under discount, have amounted to	790,096.27
being slightly over 2 per cent on the paid-up capital during the year.	
Which has been applied as follows—	
Dividend No. 194, 2 per cent paid March 24, 1913	\$100,000.00
" " No. 106 2 per cent paid June 1st, 1913	100,000.00
" " No. 106, 2 per cent paid September 1st, 1913	100,000.00
" " No. 107, 2 per cent payable December 1st, 1913	100,000.00
Bonus of 1 per cent payable March 1st, 1914, to shareholders of record as on February 28th 1914	50,000.00
Transferred to Ret. Account	100,000.00
Reserved for depreciation in securities owned by the Bank	125,000.00
Written off Bank Premises Account	50,000.00
Contribution to Officers' Pension Fund	10,000.00
Balance of Profits carried forward	885,579.03

GENERAL STATEMENT

LIABILITIES

Notes of the Bank in circulation	\$ 6,387,179.00
Deposits not bearing interest	4,818,886.18
Deposits bearing interest	45,887,212.01
Balance due to other Banks in Canada	64,956,238.19
Balance due to Agents of the Bank and to other Banks in Foreign Countries	415,539.92
Bills payable	150,266.00
Acceptances under Letters of Credit	634,390.57
Total Liabilities to the public	\$ 71,122,625.42
Capital paid up	5,000,000.00
Res. Account	3,400,000.00
Dividend No. 107	100,000.00
Bonus payable 1st March, 1914, to Shareholders of record as on February 28th, 1914	50,000.00
Dividends unclaimed	3,328.03
Balance of Profit and Loss Account carried forward	90,579.03
	\$ 80,766,532.48

ASSETS

Gold and Silver Coin	\$ 82,412,330.27
Dominion Government Notes	4,134,561.00
	\$ 7,266,831.27
Notes of other Banks	897,356.00
Cheques on other Banks	1,631,262.00
Balance due by other Banks in Canada	170,262.07
Balance due by Banks and Banking Correspondents elsewhere than in Canada	617,031.00
Dominion and Provincial Government Securities not exceeding market value	570,707.50
Canadian Municipal Securities, and British, Foreign and Colonial Public Securities, other than Canadian	440,461.42
Railway and other Bonds, Debentures and Stocks not exceeding market value	2,212,271.16
Call and Short (not exceeding 30 days) Loans in Canada on Bonds, Debentures and Stocks	3,350,894.32
Call and Short (not exceeding 30 days) Loans elsewhere than in Canada	8,608,756.16
	\$ 67,565,780.14
Other Current Loans and Discounts (less rebate of interest)	\$ 7,746,969.15
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest)	1,640,672.84
Liabilities of customers under Letters of Credit, as per contract	554,645.29
Real Estate other than Bank Premises	112,318.29
Mortgages on Real Estate sold by the Bank	153,471.25
Overdue Debts, settling Loss provided for	2,031,631.02
Bank Premises	240,000.00
Deposit with the Minister of Finance for the purposes of the Circulation Fund	1,300,000.00
Deposit in the Central Gold Reserve	5,255.37
Other Assets not included in the foregoing	\$ 80,766,532.48

G. H. BALFOUR, General Manager
JOHN SHARPLEY, President

The Directors have pleasure in presenting the Report showing the result of the Bank's business for the year ending 30th November, 1913.

The New Bank Act, as revised, went into force on July 1st. You will notice several changes in the form of our statement. Under Sec. 2 of the new Act, you are required at this meeting to appoint Auditors for the Bank, and to vote the amount of their remuneration.

A rate set of by the meeting will be submitted to you for approval and adoption if thought advisable. It will be necessary to change the date of our Annual Meeting from December to January in order that the Auditors may have sufficient time in which to complete their duties.

Your Directors wish to place on record their appreciation of the excellent advice, helpful guidance and valuable work by the Bank's Committee in London, England.

It is with the deepest regret the Directors have to record the death of the Honorary President, the Honorable John Sharpley, in Canada for many years a Director, and for five years the honored and esteemed President of this Bank. His present standing is largely due to his great interest in its welfare and sound judgment in business matters.

Mr. Wm. Price, of Quebec, was elected Honorary President, and Mr. Geo. H. Thomson has succeeded him as Vice-President.

The vacancy on the Board has been filled by the election of Mr. B. B. Cronin, Vice-President of the W. B. Brock Company, Limited, a gentleman of long business experience in Canada. We feel sure his judgment and influence of Mr. Cronin will be of great advantage to the Bank.

During the past thirty-one Branches and Agencies of the Bank have been opened in the several Provinces as follows: In Ontario, Quebec, British Columbia & Manitoba 4, Saskatchewan 1.

Three branches in Ontario which were not giving satisfactory results have been closed. The total number of Branches and Agencies is now 33. The annual inspection of Head Office and of all Branches and Agencies of the Bank has been made.

JOHN GALT, President.

The President, Mr. John Galt, moved that the report be adopted and printed for distribution among the Shareholders, and addressed the meeting as follows—

The President's Address

In moving the adoption of the Directors' Report, I have an opportunity of placing before our Shareholders a review of general conditions in Canada as they present themselves to us. The financial statement will be dealt with later by the general manager, and I shall not discuss that statement as satisfactory as it shows steady progress, and also indicates the conservative policy, which, in my judgment, is characteristic of the management of the Bank.

The year 1913 has been a trying one both for borrower and lender. There has been a general feeling of uneasiness which has caused financiers to carry an unusually large proportion of their funds in a liquid form. This has curtailed the loaning power of all the Banks and has checked the encouragement of new business, but we have been careful to see that our customers have had the money necessary to carry on their legitimate trade, and I do not think we have given any of them reason to complain.

The capital available for investment in Canada and large scale enterprises has been pretty well absorbed. It is clear that when the supply is exhausted, the capital necessary for their development will, undoubtedly, be forthcoming when financial conditions become more settled.

The causes underlying the feeling of anxiety to which I have referred were world-wide in their nature, and are now receding, but the caution is advisable and that strictest economy in both public and private affairs is necessary.

Speculation in real estate is over for the present, but the demand for building sites must continue in a country where the population is steadily increasing, and holders of such property should not be apprehensive of this class of investment. That the inability of speculators to turn over their property has had little effect on the general business of the country is largely due to the conservative and Canadian Bankers, who have consistently discouraged and refused to finance speculative land operations.

CROP OF 1913

The statistics which are at our command will be furnished by the Superintendents in their reports on the several Provinces. I may say, speaking generally, that the crop results have been satisfactory. In the three great wheat growing Provinces the harvest has been a banner year. Not only has the yield been large, but the average quality has never been equalled, and the cost of harvesting has been unusually low owing to the magnificent weather we have enjoyed. The same may be said of the crop of oats. However, the yield evidence has indeed been kind to us, and that, too, at a time when we needed it most. The railways have done splendid work in handling our grain facilities, and had far complaints of shortages of cars. With our present facilities, expect much more wheat to be delivered at lake ports before the close of navigation than in any previous year, and this year, and the need of interior storage for our grain will be urgent for some time to come.

MIXED FARMING

There is a marked increase in the number of live stock. Farmers are becoming more and more convinced of the advantages to be derived from the fact and are realizing that their borrowing credit is greatly enhanced when their Bankers if they can show a good proportion of cattle and horses on their books should look with favor on loans for the purchase and handling of live stock.

BRITISH COLUMBIA

Trade conditions in British Columbia have not been as bright during the year as in the other Provinces. The fishing industry has been satisfactory, and coal strikes on Vancouver Island, which have lasted for months, have thrown a great many men out of employment.

The mining industry has had a good year, and the recent revision of the United States tariff, by which fish now enter that country free, will be of advantage to the trade.

The mining industry has yielded satisfactory returns, a very large increase in the production having taken place over the preceding year.

The fruit crop for 1913 has been a record one, the value of shipments from the Okanagan District alone being in the neighborhood of \$14,000,000.

Railroad expansion has been active and about 2,300 miles was under construction during the year.

Stringent money conditions have checked many Municipal undertakings, and crops, will be the cause of unemployment during the coming winter.

Large harbor improvements have been undertaken at Victoria which have improved the shipping facilities of that port.

In Eastern Canada, trade conditions have been good, and the crop results have been most gratifying.

PROVINCE OF ONTARIO

Crops have been of a good average and we have again to report a prosperous year.

PROVINCE OF QUEBEC

Along both shores of the St. Lawrence and in the Eastern Townships, conditions were favorable, and abundant crops were harvested in good order.

The lumber trade has experienced a good year, and the removal of the United States duty on lumber should stimulate trade.

MARITIME PROVINCES

Weather conditions have been satisfactory with the result that all crops have been above the average. The fishing industry has also experienced another profitable year.

GENERAL

Good Roads—The question of good roads is of paramount importance, and there remains a great deal to be done. We are glad to be able to report that the Legislatures of the various Provinces are giving their attention to this important question—Reports continue to be of a satisfactory nature. Approximately 400,000 people have entered Canada during the year ending September, 1913. The immigration authorities report a recovery on the class of these new settlers, and estimate them to be worth \$1,000 per capita to Canada.

While we believe trade conditions to be generally satisfactory, we still consider that it is the duty of this Bank to exercise caution and to discourage any attempts to undertake large commitments under existing conditions in Europe are readjusting themselves after the recent disturbance.

FINANCING OF MUNICIPALITIES

From our point of view it is very desirable that the Provincial Governments should make a study of the financial conditions of the municipalities. A commission should pass on all issues after expert examination of proposed expenditures. If these issues carried the guarantee of the Province, and were approved by the municipalities, they would have a sound basis, and the saving to the community would be very large, both in the difference of value and in the supervision of expenditure exercised by the Government. Under the

present system the initial financing falls upon the Banks because they have to

The proposed legislation by the Province of Saskatchewan along these lines is

NEW UNITED STATES TARIFF

The recent reduction in the United States tariff should result in obtaining a

In conclusion, we think that the figures which have been laid before you

General Manager's Address

The General Manager, Mr. G. H. Balfour, addressed the meeting as follows:

The early marketing of the Western grain crops has had an important bearing

Dealing with the figures in the increased volume of deposits.

Being pleased to say that after making ample account in the Balance

The total contribution to the Special Reserve Account, as against \$75,483.76

Deposits have increased by \$2,993.00, which, considering financial conditions,

Real Estate and other Bank Premises has been reduced by \$150.00.

Mortgages on Real Estate sold by the Bank are larger by \$47,000 than a

The total assets of the Bank are now over \$80,000.00, as against \$69,400 in

PROGRESS OF THE BANK

During the year three Branches were closed in Ontario.

In connection with the very satisfactory manner in which the railway com-

Before sitting down I desire to bear testimony to the efficiency and loyalty

AUDITORS

Messrs. T. Harry Webb, C.A., E. S. Read, C.A., and C. B. Hogan, C.A., were

The Scrutiny of the accounts of the Bank for the year ended on December 31st

Selected Honorary President, Mr. John East, President, Mr. R. T. Riley and Mr.

Facts of Tuberculosis

The tuberculin test will detect over 98 per cent of cases.

About 15 per cent of tuberculous in children has been found to be of bovine origin.

The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this

Notes on the Season's Work

R. W. Ward, Dairy Instructor, writes:

This shortage has been brought about by a number of causes.

Let me say to the owners and makers to be sure and have every-

Why Differ: Fat Prices?

In looking over annual reports we hardly ever see two creameries that

I wish to say there are a whole lot of people who read this article

that this applies to. I know of num- erous cases where creamery man-

The creamery with a big run has a decided advantage over the creamery

Keeping a checking system is very helpful in getting results.

These makers should realize the responsible positions which they hold.

FOR SALE—Cheese Factory in one of the best sections of Western Ontario.



Give me a chance to PROVE my flour

I WANT folks to know what a splendid flour Cream of the West is. I want you to buy a bag at your grocery store. Use it for a couple of bakings and see the result.

Cream of the West Flour is guaranteed for bread

With Cream of the West you will have success or your money back. Your bread will do you credit or you don't pay one cent for the flour. Bring back what you have left in the bag and your grocer will refund your money in full.

It's an absolutely straight guarantee, madam, and all the best dealers co-operate. A strong, nutritious, light-rising flour, unbeatable for bread. That's Cream of the West. Try it.

Prices Direct to the Public

In order to introduce Campbell's Flours and other products, and to oblige a great many country customers who write direct to our mills because they live in sections where they cannot buy Campbell's Flours, etc. at local stores, we have decided to quote today the following special prices to farmers in Ontario on flours and feeds:

FLOURS	Per 90-lb. Bag
Cream of the West Flour (for bread)	\$ 2.85
Queen City Flour (blended for all purposes)	2.45
Monarch Flour (makes delicious pastry)	2.40

FEEDS	Per 100-lb. Bag
"Bullrush" Bran	\$ 1.25
"Bullrush" Middlings	1.30
Extra White Middlings	1.40
"Tower" Feed Flour	1.60
"Gem" Feed Flour	1.75
"Bullrush" Crushed Oats	1.65
"Gem" Course Feed	1.55
Oatmeal (mousses, oats and corn)	1.80
Cracked Corn	1.80
Corn Meal	1.75
Oil Cake Meal	1.75

Prices on whole oats, whole corn and other grains supplies upon request.

TERMS: Cash with order. On shipments up to \$50 the buyer pays freight charges. On shipments over \$50 lbs. we will prepay freight to any station in Ontario, east of Sudbury and south of North Bay. West of Sudbury add to above prices 10 cents per bag. Points on T and N. O. line add 50 cents per bag to cover extra freight charges. Make remittance by express or post office money order, payable at our Toronto. Prices subject to market changes. Address all letters to

THE SALES MANAGER

The Campbell Flour Mills Co., Limited
TORONTO

Mention this paper

The Formation of Seed Centres (Continued from page 5)

selection is done by only a few men, there is likely to be much more uniformity.

In the Rainy River district, for example, where a seed centre has been organized for the purpose of raising good seed potatoes, a few of the members will conduct the selection plots. In the case of the River Front Corn Club, of Amherstburg, a recently organized club of seven members, the selection will be done by one man who is an eminent authority on corn. While this club is small, it is quite large enough for a beginning. These men have pledged themselves to produce and sell nothing but the best.

The seed grown by any record centre must trace to elite seed and not be more than three generations removed from selected stock.

BETTER RAILWAY RATES
Another advantage that the formation of record centres offers is in the matter of railway rates. In this respect there should be a possibility of obtaining lower through rates. A much larger trade could then be built up between western and eastern Canada.

Complaints have been heard of the quality of seed obtained from seedsmen. In some cases seed turned out to be of an entirely different variety than it was stated to be. Probably the seedsmen are doing their best, but there is no doubt that the C.S.C. A. should control the seed trade. The quality of seed could then be kept up to a standard. This is an end to which we must all work.

There are golden opportunities in the production of high-class seed if we will but grasp them.

Leasing Farm on Shares

Can you give me a practical plan of leasing a dairy farm on shares? I have 150 acres near Toronto, and I am stocked with a good herd of pure bred and grade Holsteins, also a full equipment of horses and up-to-date class of implements. Being a single man it is not convenient for me to work it, but would like to take some interest in developing the herd and farm. I think it necessary for a farmer to get his pay directly out of his daily toil, to make him thrifty and successful. If you know of some simple method of distributing part of the proceeds as compensation to the lessee for all the labor expended, I would be much obliged. I know the lessee should be required to invest something in the stock.—J. H. S. York Co., Ont.

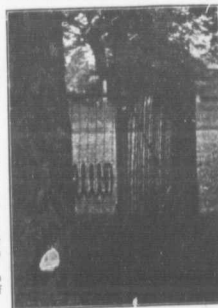
In my opinion the only really satisfactory way to handle a farm under such conditions as described above is for the owner to handle it himself. The next best plan would be to hire a man and give him, in addition to a small fixed salary, a certain percentage on sales of certain kinds, say, milk, cream, etc., and a small premium on stock brought to one year old in good shape on the farm or sold off, as in the case of bulls or old heifer calves. A man capable of managing such a farm should be earning, in addition to house rent, fuel, milk and vegetables, at least \$60 or \$70 a month. This might be taken as a basis in fixing the percentage part of his wages.

If, however, it were preferred that the man should depend upon the returns entirely for his remuneration, that is, should pay a fixed rental and have all income for himself, then I would advise that only a most highly recommended man be taken as a tenant. Where machinery and live stock belong to the proprietor, the possibilities of trouble and loss to the proprietor are innumerable.

I would suggest the valuing of the farm at its true agricultural value, having in view its convenience to market, its buildings and its soil; but, of course, ignoring any 'real estate' value it might have. The live stock

and implements should then be inventoried and the rent be fixed at say five per cent. of this valuation. Sales from live stock should be made only after consultation between owner and tenant, and the price should be either reinvested in productive stock or divided in some fixed proportion. The necessary service bulls should be purchased by the proprietor. Raising stock to a given age, whether pure bred or grade, should be worth certain fixed sums to the tenant. Risks would have to be borne by both in certain proportions of predetermined valuations. In fact, such a variety of contingencies is likely to arise that probably the only satisfactory solution of the problem would be to avoid it.

One solution, however, suggests itself. Sell the live stock to the tenant. Sell the value for amount, take his note for the valuation, renewable annually, on the new valuation shown



Novel Tree Protection

If the gate swings back against the tree, constant contact is apt to wear off the bark, making the tree unsightly. An ordinary bed spring, or a coat of spring from some of the farm machinery, arranged as seen in the illustration here with, will overcome the difficulty.

ing things to be in good shape, the tenant to be allowed fixed prices for increases in live stock and to suffer fixed amounts for losses in live stock.

I may say in conclusion, however, that the more I consider the matter, the less does such a scheme as the letting of a farm, together with the necessary implements and live stock (especially where the cattle include a number of pure breeds) for a fixed rental, seem to me practicable.—J. H. G.

Developing the Young Stock

(Continued from page 5)

Next to an abundance of good feed we believe in plenty of sunshine and fresh air, and in something that they should have at all times and under all circumstances. With double glazed sash and the King system of ventilation properly installed an abundance of sunshine and fresh air may dance of without making the building too cold. Damp and filthy stables should not be tolerated. We do not believe it is wise to have the heifers freshen at a very young age, but prefer to give them a reasonable chance for development before they are called upon to take on the burdens of motherhood.

The Town Hall of Millbrook, Ont., will be headquarters for a short course in agriculture, extending from Jan. 19th to Feb. 20th, under the management of R. S. Duncan, B.S.A. This course will be of particular interest to young men from 16 to 25 years of age. All branches of agriculture will be discussed in a practical way.

January 8, 1914

MARKET REVIEW AND FORECAST

Toronto, Monday, Jan. 6.—What has been the trend of the market for farm produce during the past year? Farm and Dairy Marketman believes that the big lesson to be derived from the year's operations is the increasing importance of farming. With the live stock and the raw products of the farm not so substantial a business as it was at the beginning of 1914 than they have been in past years. Live stock, however, is selling at such prices as were never before realized in Canada. The rapid growth of our cities is creating a great demand for our milk and cream, and the supplying of this demand opens up a new and most profitable market for the Canadian devotee his attention to the cropping of his farm is working in the wrong direction.

Taking the year as a whole, either in the West or in Canada show a satisfactory balance. The year has been particularly prosperous for the live stock trade. The latter part of the year, however, has been more and more attributed to the trying in lands, particularly in Western Canada. The demands of producing industries for capital in this country are too great to allow of capital being diverted to land speculation without a serious retarding of our growth.

WHEAT
Reports from the winter wheat belt are most favorable, the entire belt being covered with snow. The market shows a slack demand all around, particularly for local consumption. The statistical position in Canada, however, is strong, a large percentage of the crop having been shipped early in the season. Quotations are a trifle stronger than last year, and substantially the same as a year ago. No. 1 Northern, 97¢; No. 2, 95¢; Ontario No. 2, 84¢ to 86¢ outside; No. 3, 81¢ here.

The holiday spirit seems to possess the course grain market and trade has been normal for the past week. There have been few price changes. Quotations are as follows: Oats, C.W. No. 2, 42¢; No. 3, 39¢; barley, No. 2, 34¢ to 35¢ outside; 35¢ to 36¢ here; corn, 71¢ to 72¢; peas, 41¢ to 42¢; buckwheat, 56¢ to 58¢; rye, 44¢ to 45¢; malting, 55¢ to 56¢; C.W. No. 4, 41¢ to 42¢; No. 5, 40¢ to 41¢; No. 6, 39¢ to 40¢; corn, 71¢ to 72¢; barley, malting, 60¢ to 62¢; feed, 48¢; buckwheat, 56¢ to 57¢; feed, 48¢; wheat, 72¢ to 73¢; peas, 41¢ to 42¢.

COARSE GRAINS
Supplies of bran are short and quotations have ruled firm at recent levels. Toronto prices are: Bran, 82¢ shorts.

\$2.50 to \$2.75; middlings, 82¢ to 83¢. Montreal dealers ask for bran, \$2.00 to \$2.10; shorts, 82¢ to 83¢; middlings, 82¢ to 83¢.

HAY AND STRAW
Exports to both the United Kingdom and the United States have been practically all over the last few weeks. A strong Ontario cutting for hay, and Quebec for the Maritime Provinces. Wholesale dealers here quote No. 1, \$14.00 to \$15.00; No. 2, \$11 to \$14; No. 3, \$8 to \$9; baled No. 1 hay, 5½ to \$16.00. No. 2, 4½ to \$15.50; No. 3, \$10.50 to \$11.

EGGS AND POULTRY
Here are laying freely in the country and supplies of new-laid eggs are liberal. Cold storage, the price is a shade lower. Still depend, are on the upward march. Wholesale quotations are: New laid, 45¢ to 46¢; storage, 35¢ to 36¢; Ontario select, 37¢ to 38¢; storage, 35¢ stronger, with fresh full stock at 41¢; No. 1 stock, 35¢; select, 36¢ and new laid, 35¢.

Quotations on poultry are: Dressed fowl, 15¢ to 16¢; alive, 16¢ to 17¢; chickens, 15¢ to 16¢; alive, 16¢ to 17¢; geese, dressed, 15¢ to 16¢; alive, 16¢ to 17¢; turkeys, 15¢ to 16¢ and 14¢ to 15¢.

A strict embargo has now been imposed by the United States on Canadian potatoes, until such time as we can prove that there are no potato diseases in this country and will make permanent the recent decline of 10¢ in Canadian prices. Both quoted and No. Brunswick potatoes are of store and 86¢ to 88¢ in car lots. No. 1 Montreal Green Mountain continue easy at 85¢ a bag; Quebec continue easy noticeable at the trade prefers Green Prime beans are quoted at Toronto, \$2.10 to \$2.20; bus.; hand-picked, \$2.20 to \$2.30. Three-pound pickers are being sold in Montreal for \$1.90 and hand-picked at \$2.00.

DAIRY PRODUCTS
The standard complaint regarding dairy butter at this time of year is the stable color as well as its attractiveness. This year no exception. Farmers receive better returns for their butter than it is made dependent on the market, when the dealers can do it. Prices continue steady in a moderately active market. Wholesale dealers are quoting factory separator prints at 24¢ to 25¢ and ordinary prints, 22¢ to 23¢; fresh creamery prints, 30¢ to 31¢; fresh solids, 38¢ to 39¢; storage, 36¢ to 37¢. Cheese quotations are: No. 1, 15¢; twin, 15¢; old large, 16¢ to 15¢; twin, 15¢ to 16¢.

MILK PRICES
Supplies of bran are short and quotations have ruled firm at recent levels. Toronto prices are: Bran, 82¢ shorts.

MONTRÉAL HOG MARKET
Montreal, Saturday, January 3.—The market for the remained steady prices current are the same as those of last week, selected lots being quoted at 39.25 to 39.50 a cwt. The market for change in value, steady, but without \$13.75 to \$14 a cwt. Supplies are tight.

MONTRÉAL BUTTER AND CHEESE MARKET
Montreal, Saturday, January 3.—The principal item in the above is the cheese stocks in store in Montreal and the principal markets in Great Britain, and the below is shown a statement giving the month ago and the exports for the year ago:

	Jan. 2,	Nov. 9,	Jan. 2,
	1914,	1913,	1913,
Montreal	22,250	47,747	88,549
England	1,250	1,774	8,849

The following table shows the stocks of Canadian cheese in the principal English markets on the dates mentioned.

	Jan. 2,	Dec. 31,	Jan. 2,
	1914,	1913,	1913,
Liverpool	33,100	52,100	56,600
London	109,000	149,000	133,000
Ireland	8,000	10,000	119,000
Total	222,100	306,100	306,200

The figures show a very small quantity of Canadian cheese available this year, and the small amount is due to the fact that there has been an exceptional demand for Canadians during the last few weeks on account of the small arrival of cheese from New Zealand, the strike of the dock laborers in New Zealand having interfered with the shipment of cheese from there to Great Britain. The cheese are required to be over and over again, and it is going forward in larger quantities, but will not reach England for four or five weeks, and it is very likely that the markets in England at the end of this month will be almost entirely cleared of stock, and the

A profitable cow ration

Caldwell's Dairy Meal is not an experiment, but the result of a great many experiments conducted under the supervision of the greatest feed experts in Canada. Here's all that

Caldwell's Dairy Meal

contains: Gluten Feed, Cotton Seed Meal, Dried Grains, Barley, Malt Combinations, Molasses Meal.



Here's the guaranteed analysis:—
Protein - - - 20%
Fibre - - - 10%
Fat - - - 6.3%

Caldwell's Dairy Meal is palatable, easily digested and assimilated and guaranteed to increase milk flow greatly, while at the same time keeping your dairy herd in excellent health and condition. Its systematic use is a first-class investment.

It is more than likely that you are a consistent user of Caldwell's Pure Cane Molasses Meal. If your Feed-man hasn't stocked our Dairy Meal as yet, it will pay you to write for booklet and full particulars.

The Caldwell Feed Co. Ltd., Dundas, Ont.
Molasses Meal, Dairy Meal, Cream Substitute, Call Meal, Poultry Meals.

LAKELAKE SALE

Remember that PIETERTJE HENGERVELD'S COUNT DE KOL sired 13 daughters that made an average of better than 100 lbs. of milk each in one day. He sired 10 cows that average better than 30 lbs. of butter in seven days. He sired 13 cows that made an average of better than 115 lbs. of butter in thirty days.

There will be granddaughters of this great bull offered at the Lakelake Sale at BRONTE, ONT., on TUESDAY, 9th JANUARY, 1914. These heifers are sired by COUNT HENGERVELD FAYNE DE KOL, the senior bull at the Lakelake Farm, and are bred to DUTCHLAND COLANTHA SIR MONA, our son of COLANTHA JOHANNA LAD. Three daughters of COLANTHA JOHANNA LAD have recently completed the following records:

- Dutchland Colantha Vale (Fr. 2-year-old), 365 days; milk, 27,750.2 lbs.; butter, 888.5 lbs.
- Dutchland Colantha Mona (Fr. 3-year-old), a full sister to DUTCHLAND COLANTHA SIR MONA, 365 days; milk, 22,645.6 lbs.; butter, 762.5 lbs.
- Dutchland Changeling Colantha Lad (Fr. 3-year-old), 365 days; milk, 21,239.8 lbs.; butter, 945.0 lbs.

DO NOT MISS THIS SALE. All females old enough are in the RECORD OF MERIT. Everything offered will be sold, and there will be no side bidding.

Catalogues from

E. F. OSLER, BRONTE, ONT.

COL. D. L. PERRY, of Columbus O., Auctioneer

St. Lawrence Sugar
Children Need Sugar
Pure sugar is necessary to the health of young or old. Good home-made candy, sugar on porridge, fruit or bread—not only pleases but stimulates.
Buy St. Lawrence Extra Granulated in bags and be sure of the finest pure cane sugar, untouched by hand from factory to your kitchen.
Bags 10 lbs., 25 lbs., 50 lbs., Cartons 5 lbs., 2 lbs.
FULL WEIGHT GUARANTEED.
Solely by Best Dealers.
St. Lawrence Sugar Refineries, Limited, - Montreal.

HOLSTEINS

Lyndale Offering

One Yearling Bull-tuberculin tested... of his parent dam average 27 lbs. butter each in 7 days...

BARN BROS. - LYN, ONT.

OXFORD DISTRICT

The Holland of North America Is the place to buy Holsteins of quality... Full list of breeders in the Oxford District...

Anyting in Holstein Females

From 1 week to 3 yrs. old, 75 head to choose from... SPECIAL OFFER! 10 Heifers rising 2 yrs., bred, and bulls from 7 to 10 mos.

Wm. HIGGINSON - INKERMAR, ONT.

MANOR FARM

Senior Herd Sire, Prince Hengerveld of the Pontiacs, a cow of King of the Pontiacs and from a daughter of Pieterje Hengerveld Count De Kol.

We are offering a limited number of cows in calf to them for sale.

Wm. HIGGINSON - INKERMAR, ONT.

CLARION-BRAE FARMS

Offers Young Holstein-Friesian Bulls by imported sire, who has nearly 40 of his nearest female relatives averaging 30 lbs. butter in 7 days.

GEO. J. WORTHOTT - SOLINA, ONT.

NORFOLK SALE, SIMCOE, MARCH 11, 1914

Norfolk Holstein-Friesian Breeders' Club J. ALEX WALLACE, Secretary-Treasurer SIMCOE, ONT.

DAIRY HERD FOR SALE

9 head Holsteins, 3 to 8 years old, freshening in January to March. All heavy milkers, in good condition.

R. G. ALLISON - BRISTOL, QUE.

FAIRVIEW FARMS HERD

Is the only place on earth that you can secure a young bull that is a brother to the sire of the cow holding the championship of Canada as well as the United States.

E. H. DOLLAR, NEWELTON, NEW YORK, NORA PRESCOTT, ONT

CLEARING AUCTION SALE

HOLSTEIN-FRIESIAN CATTLE

Port Hope, Ont., Friday, Feb. 6th, 1914

This comprises the oldest established herd of Holsteins in Canada, the first importation being in 1863. The thirty pure bred offspring have in them a combination of the most fashionable blood and are offering of selection of sire and in mating, they have been developed into big producers at the stall.

Excellent railway facilities—all G. T. R. trains stop at Port Hope in forenoon.

Catalogues will give you full particulars regarding animals and their breeding. Drop a card for one.

JOHN H. MACKLIN - PORT HOPE, ONT.

HOLSTEINS

15,345 lbs. in 1 Year

For a 3-year-old, milked twice per day, she is a daughter of Dutchland Countess II Abbecker. A pair of his sons from 22 and 23-lb. 1-year-olds for sale.

LADLAW BROS. - AYMER, ONT.

AGENTS in your district for new subscriptions to this practical journal.

FARM AND DAIRY, Peterboro, Ont.

AVONDALE FARM

KING OF THE PONTIACS BULL CALVES

We have just sold ALL BUT TWO OF ROSS OF KING PONTIACS ARTS CANADA that are fit for service.

PRICE, \$275.00, for each of these splendid individuals.

A. C. HARDY, BROCKVILLE, ONT.

balance of Canadians left uncollected should fetch all prices. There is more demand for butter since the holidays have passed, and insect-bearing Tomatoes fall-made creamery is quoted at 25c to 26c and finest June at 27c to 28c.

OUR FARMERS' CLUB

Correspondence Invited

PRINCE EDWARD ISLAND

KING'S CO. P. E. I.

Montage, Dec. 25. - We are having very good weather here; no snow yet; very little frost. It is raining here today.

QUEBEC

RICHMOND CO. QUE.

DANVILLE, Dec. 31. - For the last week we have had regular winter weather. On the night of the 23rd it began to snow, and in 12 hours there was good sleighing.

ONTARIO

OXFORD CO., ONT.

AYR, Dec. 29. - We had a fall of snow on the 23rd, covering the ground nicely but not enough to prevent sleighing on the roads.

ELGIN CO., ONT.

TALBOTVILLE, Jan. 3. - We have had exceptionally fine winter weather during all the month of December. The roads are splendid, and sleighing is about like in the good old summer time.

GREY

THORNBURY, Dec. 30. - We have had a dandy fall; just the weather for outdoor work. A slight snow on or two with an occasional rainfall, has increased the water supply.

LAMBTON CO., ONT.

WYOMING, Jan. 1. - The auction sale of young cattle and cows that were brought from Prince Edward Island by the Lamont did not sell very well, but it is reported that the money was made after freight and other expenses.

UNION BANK PROSPEROUS

Gains in net profits, in deposits, in reserve account, current loans and total assets characteristic of the 19th annual report of the Union Bank of Canada, whose annual meeting was held in Winnipeg, Dec. 27th.

of \$750,000, or \$46,000 more than for 1913. The note circulation increased from \$4,700,000 to \$5,320,000, while the deposits made a gain of nearly 55,000,000, and now stand at \$48,965,000.

SALE DATES CLAIMED

Lakeview Holsteins, E. F. Osler, Bedford Park, Ont., Jan. 20th; Southern Ontario Commission Sale Co., 75 Road of Holsteins, Tillsonburg, Feb. 10th.

Dispersion sale of Holsteins, 49 females

Manor Farm

Bedford Park, Ont., December 22nd, 1913. Advertising Manager, "Farm and Dairy," Peterboro, Ont.

Dear Sir, With regard to the Farm and Dairy of an advertising medium I can frankly say that since we started to advertise some two years ago, we have had no bother in disposing of our bull calves, and in fact now have orders to fill for Nova Scotia, British Columbia, and also locally.

Yours truly, (Signed) Gordon S. Gooderham.

Mr. Gooderham is one of our foremost Holstein breeders who finds the most profitable way to sell his surplus stock is through our columns. He writes: "I have sold my calves on your columns. I have sold my calves on your columns. I have sold my calves on your columns."

Evergreen Stock Farm

A. E. Huxford, Box 11th, Norfolk Holstein-Friesian Breeders' Club, Simcoe, Ont., Mar. 11th, Oxford Holstein Breeders' Woodstock, Mar. 25th. H. F. Patterson, Alford, Ont., Holsteins, Mar. 23rd. R. O. P. Holsteins, Geo. H. McKenzie Thornhill, Mar. 12th. G. B. Gooderham, Bedford Park, Mar. 25th, Holsteins.

Wm. J. Jackson, Peel Co., Ont., writes: "We couldn't think of stopping Farm and Dairy."

Burnside Ayrshires

Winners in the show ring and dairy tests. Animals of both sexes, imported or Canadian bred, for sale. Long Distance Fowls in Honor. R. E. NESS - HOWICK, QUE.

Percheron Clydesdale and Shire

Stallions, Mares and Fillies

Belgian, Hackney and French Coach Stallions

We have a better bunch of stallions and mares in our barns at present than we have in Ottawa at Fall Stock Show. To sell cheaper than any other man in the business.

We raise our own feed, do our own buying and selling. No commission agents to share profits with. We have males big, stylish black and grays, with right kind of bone and good feet and are in a position to sell cheaper than any other man in the business.

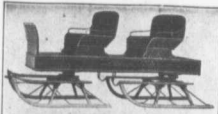
This speaks stronger than words as to the quality of my stock. These horses will be in Ottawa at Fall Stock Show.

J. E. Arnold, Grenville, Que.

Grenville is midway between Montreal and Ottawa, C.P.R. and C.N.R. Three trains daily from each of these cities.

Farm and Dairy's Referendum

Farm and Dairy believes that the will of the people should decide all questions of public policy. We believe that the Referendum is the best way to find out exactly what the people think. Accordingly we will hold a Referendum in the issue of Farm and Dairy for January 29, by which readers, men and women alike, are invited to express their opinion upon eight questions of pressing national importance.



WHEN YOU BUY A SLEIGH
 don't get one with a short narrow box, and the sleigh with short runners, and the round edge shoeing 12" or 14" x 4" x 1/2" bolted steel runners and drop tailgate. Runners are 4" on the outside and 3" on the inside. Square edge spring steel shoeing 1 1/2" x 3/4" x 1/2" with rubber and steel contact. The GIDLEY is braced throughout with steel, and has spring steel with imported whetstone. Furnished with complete outfit. Delivered at our nearest Railroad Station in Ontario, or Ontario freight allowed. Shipped to other provinces for \$46.50. If not as represented we will refund your money. GIDLEY QUALITY IS GUARANTEED. Now in stock. Delivery Rights \$35 to \$47 delivered at any of the following Carriage Co., Sales Dept. B, Peering, O'P.

Well DRILLING MACHINES
 Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on skids. With engine or horse power. Simple, sturdy and durable. Any mechanical contractor these machines. Send for catalogue WILLIAMS BROS., ITRACA, N.Y.

DAIRYMEN! You can buy Cotton Seed Meal
 At \$55.50 F.O.B. Forest
 Forest Creamery Co., Forest, Ont.
 H. FRALEIGH - FOREST, ONT.

Is Your Farm Paying?
 A great many farmers at the present time find that their farms are not paying, but they do not know just where the leak is. In other words these farmers keep no books. Start the new year right by getting a

Farmer's Record and Account Book
 These books are most complete and have been prepared especially for us to meet all the needs of the dairy farmer. An account book is something every farmer should have, and this is the best and most complete you can get. Send us one new subscriber with one dollar and we will mail this book to you. Should all your friends be subscribers to Farm and Dairy, and you are desirous of securing one of our account books we will send you one upon receipt of 25 cents.

FARM AND DAIRY
 Ad. Dept. Peterboro, Ont.

For a Horse
 Save a horse and you save a dollar. Don't sell or destroy any horse on account of Spavin, Splint, Ringbone, Curb, Sprain or Lameness. A blood one dollar for a bottle.

KENDALL'S SPAVIN CURE

has saved a great many horses - has put them back to work, over 35 years of success have proved its value.
 Dr. W. J. Kendall of St. Louis, Mo.
 "I have been using your Spavin Cure for many years. It is the best I have ever used." - Dr. W. J. Kendall, St. Louis, Mo.
 Get Kendall's Spavin Cure at your druggist's. Price, 25c per bottle, a bottle for six at special price on the "Home Free" at Druggists.
 Dr. W. J. Kendall Co., Eschburg Falls, Vermont, U.S.A.

THE QUESTIONS

- Are you in favor of Dominion Legislation providing for the incorporation of cooperative societies?
- Are you in favor of having the Government own and operate all (a) Express Companies?
- (b) Telegraph and Telephone Companies?
- (c) All Railways?
- Are you in favor of extending the franchise to women on equal terms with men?
- Which would you prefer— (a) Sending \$35,000,000 to the Imperial Government as a temporary gift, to be expended for naval defence?
- (b) Expending \$35,000,000 to start a Canadian Navy?
- (c) Not spending any money for either purpose, but spending hundreds of thousands of dollars, if necessary, towards the establishment of universal peace and disarmament, and the settlement of international disputes by arbitration?
- Are you in favor: (a) Of increasing the British Preference to 50 per cent.?
- (b) Of increasing the British Preference year by year until within from five to ten years we shall have complete free trade with the Mother Land?
- Are you in favor of raising by a tax on land values only, (a) All school and municipal taxes?
- (b) All Customs taxes, thereby making the adoption of complete free trade ultimately possible?
- (c) If not in favor of having all Customs taxes abolished, do you favor the removal of the duties on agricultural implements and the Dominion Government raise the necessary revenue by a direct tax on land values instead?
- Are you in favor: (a) Of the Dominion Government granting money for the improvement of highways, and designating, in consultation with the Provincial Governments, where and how such money shall be expended?
- (b) Would you prefer the money so granted should be expended under the control of the County Councils?
- Are you in favor: (a) Of the Referendum?
- (b) The Initiative?
- (c) The Right of Recall?

RULES
 1. The official ballots will be published in Farm and Dairy once, on January 29, 1914. Extra copies of this issue cannot be sent, since this Referendum is for Farm and Dairy readers only.
 2. There will be a woman's ballot and the wives, mothers and any women 21 years of age may vote as well as the men 21 years of age.
 3. Each question should be answered simply by writing "Yes" or "No" after the question.
 4. The ballot will be absolutely secret. Readers must sign the ballot otherwise it will be rejected as a spoiled ballot. No names however, will be published. No only the total numbers voting "Yes" or "No" on the question.
 5. The ballot should be mailed to "Referendum, Farm and Dairy, Peterboro, Ont." as soon after January 29 as possible.
 6. Letters to Farm and Dairy are invited dealing with any of the questions in the Referendum. Letters opposing Farm and Dairy's policy are just as welcome and will be published just as freely as those in favor, but all letters should be as short as possible.
AN EDUCATIONAL CAMPAIGN
 While we are anxious for as large a response as possible, the educational effect of the Referendum is still more important than the actual voting. Our folks will be able to study all these questions through the columns of Farm and Dairy during the next few weeks, and make up their minds calmly and deliberately, free from outside influences, such as party leaguers or the personality of particular candidates. No one knows everything. There is a splendid chance for us to learn more about them from each other.

WE SELL DIRECT. GET PRICES ON DILLON'S LITTER CARRIER
 R. DILLON & SON OSHAWA, ONTARIO.

FOR SALE—2 care well cured, good, Clover Hay (red clover and some alfalfa). Send price per ton, L.O.B. Bridgton Station - C. P. Prett, Wilkesboro, Ont.

Breeder's Directory
 Cards under this head inserted at the rate of \$4.00 a line per year. No card accepted under two lines not for less than six months, or 25¢ inserted during twelve months.

FOR SALE—2 Bona of King Fayre Segis Clyde Filling and 2 Stations, Yearlings. - R. M. Holtby, Manchester, Ont.

Learn to Stuff Birds
 Do you ever have a bird? Be sure to write for our new book. Find out how to stuff and how to mount them. Free trials and the full number and information about the book. Every bird you stuff is guaranteed to be perfect. Write Today! Every trophy you take is valuable. Send for our new book. Address: Prof. J. W. ELWOOD, Taxidermist 5171 Broad St., Omaha, Neb.

EGGS, BUTTER AND POULTRY
 For best results, ship your live Poultry to us also your Dressed Poultry, Fresh Dairy Butter and New Laid Eggs. Egg cases and poultry crates supplied. Prompt Returns.
Wm. DAVIES Co. Ltd.
 Established 1864 TORONTO, ONT.

FOR SALE
 Creaming Equipment and Machinery, including boilers, water cans, etc. Also ice cream freezer and shipping tubs. This is an excellent opportunity to secure thoroughly up-to-date machinery. Full particulars will be mailed on application.
 Box 522, Farm and Dairy, Peterboro, Ont.

CREAM WANTED
 Toronto consumes daily the milk and cream from over 14,000 cows, and the butter from over 70,000 cows. We need your cream.
Toronto Creamery Co., Ltd.
 15 Church St., TORONTO

1595 AND UPWARD ON TRIAL
AMERICAN CREAM SEPARATOR
 A SOLID PROPOSITION, to fully guaranteed, a new, latest model separator for \$15.95. This separator will yield more cream than any other separator.
 The best is a sanitary marvel, only cleaned by turning the handle. The picture, which illustrates the separator, is sent free from WINDYBEE, C. O., 1011 St. JOHN, N. Y. Write for literature, or call on our office for a demonstration. Address: WINDYBEE, C. O., 1011 St. JOHN, N. Y.
AMERICAN SEPARATOR CO. BAINBRIDGE, N. Y.

See that every bag of cement
you buy bears this label. It is
your guarantee of satisfaction



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For farm buildings,
country roads, or
railroad bridges

CANADA Portland CEMENT

Can be depended upon to make concrete that will last for generations. There is only one grade—the best that science and skill can make, and we have reduced the price of "Canada" Cement until it is within your reach for practically every purpose.

Canada Cement Company Limited
Montreal

There is a Canada Cement dealer in your neighborhood—if you do not know him, ask us for his name