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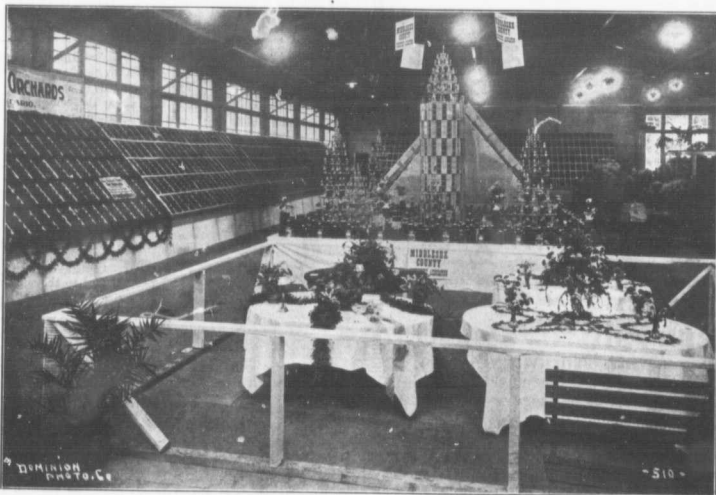
FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

NOVEMBER 21

1912.



HEREIN IS EVIDENCE OF THE EFFECTIVENESS OF UP-TO-DATE ORCHARD MANAGEMENT. The past season in Ontario has not been favorable to the production of high quality fruit. The damp weather was conducive to the growth of fungus diseases. Days on which the sun shone have been so rare that growers feared that exhibition fruit would not color properly. But in spite of these drawbacks the exhibits at the Ontario Horticultural Exhibition held in Toronto last week, a part of which may be seen in the illustration herewith, were as good as in any former year. Diseased or undercolored fruits were not in evidence. Surely this is strong testimony to the value of progressive methods of orchard management such as were practiced by the exhibitors at this fair!

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

High Farming at Hilldale

By "Your Uncle Henry"

I have been doing some tall thinking of late over at the old farm. You knew I have just recently got back from a trip out West. I was over to see one of my nephews the other day. He was all eager to hear about the West. Says he: "What do you think about the West anyway? Do you think it would be a good place for me?"

This was after supper. I had gone out to the barnyard with my nephew, leaving the women folks and your Aunt Maggie with them to finish up the supper dishes. I went out with my nephew in order that I might talk with him while he was finishing up his chores.

To my nephew's question I replied: "The West is a great country. But you knew we have things here in Ontario that they have not got out there, and I tell you Ontario suits me pretty well." "But," said my nephew, "don't you think a fellow like you could get along much better out West? Of course you know I have things pretty cosy down here. I own this 100-acre farm, and it is a good farm too, and I have gotten now that I can get along and do nearly all of the work myself. I don't need to hire a man any more. But somehow I don't seem to get along the way I think I should."

IT PAYS TO GO TO A MAN

"Well," said I, "don't you think it would pay you to hire a man? If one man working with his own two hands could get rich quick that way, why, man alive! all of the laboring men would be rich! I tell you it would pay you to hire a man. Hire him by the year. Then see to it that he has enough work to do that will bring you in enough to pay his wages and a profit besides. It seems to me it is time enough for you to think about going out West and looking for a country of greater opportunities, when you have gotten to the limit of the possibilities right here on your own farm, where you have opportunities, comforts and many kinds of advantages that you could never have out West!"

"I see you do not keep many cows. You have no silo. You grow no corn. You feed the cows you have on hay and grain. These are expensive feeds. They will not make milk as well as corn fodder, or better still, corn ensilage, and they cost you much more to produce. I know it would pay you to grow at least 10 acres of corn on this 100-acre farm."

"Then you should have some alfalfa, bran in protein, corn—that protein you know being the stuff that makes milk and muscle, and which is so expensive to buy when you get it in mill feeds or other stuff you buy upon the market."

A WELL-TIMED CONCLUSION

"Now before one ought to think of going else where, he ought to develop these things at home. He ought to do his best here, and then, if things do not go to suit, it is plenty of time to change and look for new fields to conquer, even over the distant hills, which always look so green."

Like the Dutch uncle that I am, I talked to my nephew about several other things along this line, about which I have been reading in Farm and Dairy and practicing on my own farm. He agreed that I was right and that it would pay him to keep more stock, grow more cheap feed and have a silo to keep corn in, so that it would be in the best shape for feeding through the winter.

When we got back to the house I found it late; the women folks set in

to sold us over being such a long while doing up those chores.

During the evening, before your Aunt Maggie and I left for home, my nephew introduced a new subject by getting out the Saturday Globe and reading to me a portion of Peter Arthur's writing, which brought out another idea I would like to discuss. I will have to leave it for another time, but before I close I will give you the main idea. Think it over and I'll talk about it next time I write.

A NEW IDEA FOR US FARMERS

"The producer and the salesman are two entirely different beings. Anyone studying farm conditions is bound to see that farmers naturally fall into two classes—the producers and the traders. Those with a bent for business—who have a faculty for buying and selling often prosper, while those who rely on producing seldom prosper, and often become so discouraged that they even fail as producers. An investigating psychologist would certainly find a great difference between a man whose bent is to deal with nature, and the one who is able to deal successfully with his fellow-men. The producer is entirely handicapped when it comes to getting a fair price for his produce. Therein it seems to me is the most difficult problem with which educationists and economists have to deal."

Distribution of Seed

A distribution of superior sorts of grain and potatoes will be made during the coming winter and spring to Canadian farmers. The samples for general distribution will consist of spring wheat five pounds, white oats four pounds, barley five pounds, and field peas five pounds. These will be sent out from Ottawa. A distribution of potatoes (in three pound samples) will be carried on from several of the experimental farms, the Central Farm at Ottawa supplying only the provinces of Ontario and Quebec. All samples will be sent free by mail.

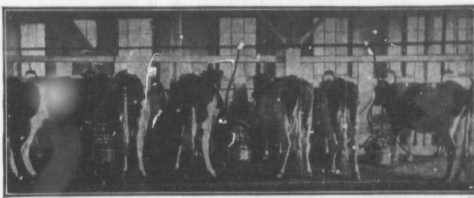
Applicants must give particulars in regard to the soil on their farms, and some account of their experience with such kind of grain (or potatoes) as they have grown, so that a promising sort for their conditions may be selected. Each application must be separate and must be signed by the applicant. Only one sample of grain and one of potatoes can be sent to each farm. Applications on any kind of printed form cannot be accepted. If two or more samples are asked for in the same letter only one will be sent.

As the supply of seed is limited, farmers are advised to apply early, but the applications will not necessarily be filled in the exact order in which they are received. Preference will always be given to the most thoughtful and explicit requests. Applications received after the end of January will probably be too late.

All applications for grain (and applications from the provinces of Ontario and Quebec for potatoes) should be addressed to the Dominion Cerealists, Central Experimental Farm, Ottawa. Such applications require no postage. If otherwise addressed delay and disappointment may occur.

Applications, for potatoes, from farmers in any other province should be addressed (postage prepaid) to the Superintendent of the nearest Branch Experimental Farm in that province—J. E. Grisdale, Director, Dominion Experimental Farms.

I would not be surprised to see in the next issue of the Holstein-Friesian Blue Book, eight or ten 40-lb. butter records recorded. It is only reasonable to suppose that one will shortly have the 40-lb. cow.—J. W. Dimick, Woodcrest Farm, N. Y.



Let The B-L-K Milk Your Cows!

Save yourself all hand milking; do without the women at the barn to help with milking; be independent of hired men

AND MAKE MORE MONEY

The B-L-K Mechanical Milker is a demonstrated success. It has been in use for several years on leading Canadian Dairy Farms. It is a demonstrated success—not an experiment.

It will pay to have a B-L-K Milker to do your milking.

Each B-L-K milk 2 cows
Costs only \$75 a pair. Complete outfit, power and pump

Costs \$287.90 for Two-Machine Outfit

Write us to send you an estimate of cost for your stable. Remember the B-L-K Milker is a demonstrated success; the price is much less than others.

One of our users milks 100 cows in two hours at an actual saving of \$1,568.00 a year over old cost of hand milking.

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The B-L-K is The Milker for you. Write us to tell you all about it.

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FARM AND DAIRY

RURAL HOME

HOW A GREAT HERD OF PURE BRED CATTLE WAS FOUNDED

A Story of How Mr. E. H. Dollar, Heuvelton, N.Y., Has, in Eight Years, Established one of the Greatest Holstein Herds in America. His Own Explanation of his Outstanding Success and Something About his Herd.

MOST of the readers of Farm and Dairy are familiar with the name of E. H. Dollar, of Heuvelton, N.Y., but only a few of our readers have heard of the outstanding success he has made of the breeding of pure Holstein cattle. Mr. Dollar came within about eight miles of being a Canadian. That is, he was born on his home farm at Heuvelton, which is only some eight miles from the Canadian border just across the St. Lawrence River from the town of Prescott.

It is only eight years since Mr. Dollar started breeding pure bred Holsteins. In the interval, he has made thousands upon thousands of dollars and has built up one of the most noted Holstein herds in the world. When his farm was visited recently by an editor of Farm and Dairy, we found that his herd comprised some 70 head of cows in milk. For the last two years 50 cows in his herd have averaged 12,155 lbs. of milk a year each. This seems almost incredible, but when you learn a little more about this great herd you will realize how it has been possible to bring the herd to this high standard. The cream is shipped to New York City, 430 miles away, where it averages, net on the farm, 814 for 40 quarts of 40 per cent. cream. The skim milk is used on the farm.

AN OLD HOMESTEAD

The farm on which Mr. Dollar lives was settled on by his grandfather 76 years ago. It comprises 450 acres, of which 300 are under cultivation. Corn and clover hay are grown, including some alfalfa. Mr. Dollar likes the alfalfa, but has had a little difficulty growing it. He intends, however, to stick to it.

Mr. Dollar was born and raised on the farm, but left it when he reached young manhood, and became a stenographer in an office of the Standard Oil Company. Much of the success he has since met with on his farm he attributes to the business experience he gained while he occupied this position. "From it," said Mr. Dollar to our editor, "I obtained a better education that I received in any school I ever attended. It taught me what to cut out, both as regards crops and work, because of their being unprofitable. It has led me also to keep a book account of everything done on the farm, so that I need never repeat an unprofitable experience." In 1899 Mr. Dollar got tired of city life and returned to the farm.

"Some of my neighbors did a lot of talking," said Mr. Dollar, "when I started to run the farm,

as they thought I lacked experience and would soon make a failure of it. It did not take me long to notice, however, that they were no farther ahead with their farm operations than they had been when I left the farm.

"When I started I thought one Holstein was as good as another. It took me some time to find my mistake. When I started I stocked up with only ordinary animals. That I had made a mistake by so doing did not come home to me until I had some young stock for sale. Then I found that almost all the other breeders had equally as good stock as I had, and that they also were trying to sell. I, therefore, had no special advantage over them, and it was not an easy mat-

think much of paying \$1,000 for a good heifer and several times that amount for a high-class bull.

"Such success as I have had has dated from that time. Pontiac Kornydke soon developed into the greatest Holstein bull that ever lived. He has 84 officially tested daughters, whose average test is 4.03 per cent. of fat. Twelve of his daughters have official records of over 30 lbs. of butter a week, and all but one of them have been bred or developed here on my farm."

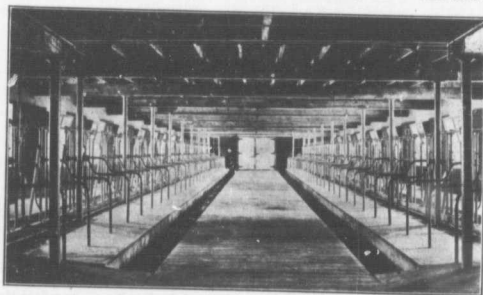
No better evidence of the great prepotency of Pontiac Kornydke need be furnished than the fact that his daughters have all made much larger records than their dams. Pontiac Pet, one of his daughters, has a record of 25,840 lbs. of milk in a year. She was bred from a dam having a record of only 13 lbs. of butter in seven days. Pontiac Clothilde 2nd, with a record of 37.21 lbs. of butter in seven days, was out of a dam with a record of 23 lbs. of butter. Another of his daughters, Fairview Sadie Kornydke, with a 36.20 lb. record, was out of an untested dam. His record has shown him to sire good ones out of any kind of a cow. "I have bred a number of his daughters back to him with excellent results, including Pontiac Lady Kornydke, the cow which held the world's records for seven and 30 days," said Mr. Dollar.

SOME BIG PRODUCTIONS

In view of the large number of noted large producers included in Mr. Dollar's herd, readers of Farm and Dairy will begin to understand how it is that 50 animals in it averaged over 12,000 lbs. of milk for a year. Two of his animals, Pontiac Pet and Pontiac Darkness, between them averaged 25,000 lbs. of milk each.

Other noted females in this herd included Pontiac Queen Kornydke, whose production last year exceeded 22,000 lbs. of milk, and who, during the first five months of lactation this year produced over 500 lbs. of butter fat. Pontiac Lady Kornydke gave 21,850 lbs. of milk last year as a four-year-old, and last spring, after being dry less than six weeks, produced 39.02 lbs. of butter in seven days and 156.92 lbs. in 30 days. This great cow, when she made this record, raised the best previous 30 day record by over 11 lbs. She also produced 297 lbs. of butter in 60 days, which was about 40 lbs. greater than the best previous 60 day record.

Still another great producer last year was Bell Pieterje De Kol Parana. She gave a little over 20,000 lbs. of milk in the year, and lacked only 12 lbs. of producing a ton and a half of milk in a month, which was more than twice her own weight. Not being a high tester, she has not got as good a record for butter production as some of the other animals in the herd, although



Simple Sanitary Arrangements Such as are Now Common in Breeders' Stables

It was a common saying at one time that the better bred a man's stock the poorer were his buildings apt to be. This is not so now. Breeders of pure-bred stock now realize that good stock deserves good stabling, and that good stables make sales easier. To say nothing about the greater satisfaction that the breeder himself will get from working in pleasing surroundings. The model stable here depicted is that of E. H. Dollar, Heuvelton, N.Y., the story of whose wonderful success with pure-bred cattle is told in the article adjoining.

ter for me, a young breeder, to dispose of my surplus. I then suspected what I have since found to be true, that if a breeder has just a little better stock than his competitors he has no difficulty selling it, as that is the class of stock which the men with money are looking for.

WENT AFTER GOOD ONES

"When I found my mistake I had about 10 cows. They milked well, but were not high testers. I, therefore, decided to get rid of them and to purchase some of the best stock I could get hold of, even if I had to pay a pretty good price to do so. With this intention I started to hunt for such animals as I wanted. This search resulted in the purchase, seven years ago, of Pontiac Kornydke, for \$1,000, and a bunch of yearling heifers for \$100 each. These seemed awful prices to me at that time, but now I don't

she has the exceptionally good record of 30.11 lbs. of butter in seven days as a seven-year-old. Another animal worthy of mention is Lady Korndyke Pauline De Kol, with a record of 29.14 lbs. of butter as a four-year-old. Last year, she produced just a few pounds under 21,000 lbs. of milk after dropping twin calves.

THE OLD BULL'S DAM

The dam of Pontiac Korndyke is another proof of the ability of a good cow to transmit her qualities to her offspring. She was Bell Korndyke, and produced a calf every year until she was 21 years old. "I saw her," said Mr. Dollar, "when she was eighteen years old, and she then did not appear more than eight years of age. She has a record of 25.77 lbs. of butter and 609.8 lbs. of milk in seven days. Her average per cent. of fat was 4.04."

Another bull in this herd which has already proven his worth is Sir Johanna Colantha Gladi. Mr. Dollar paid \$2,500 for him when he was two months old. At that time he was the highest bred bull living, being out of Pontiac Gladi, which as a four-year-old had produced 32.01 lbs. of butter in seven days. The average test of his two nearest dams was 33.61 lbs. of butter, his sire's dam, Colantha Fourth's Johanna, having a record of 35.22 lbs. of butter. She is the great Wisconsin cow. "I bought him three years ago," said Mr. Dollar, "to breed to the daughters of Pontiac Korndyke."

At the time Mr. Dollar bought Pontiac Korndyke, he also bought 10 of his daughters. At that time they had not been tested. All have since made good. One of them, Pontiac Rag Apple, sold for \$8,000. "I paid \$600 for her," said Mr. Dollar. "She and her two sons between them netted me \$17,000. She was the greatest money making female I have ever had on the farm."

"Pontiac Korndyke is a little over 14 years old, and I still hold a half interest in him. When he was nearly 11 years old I sold a half interest in him for \$2,500. (Note.—See the introductory article page 3, October 17th issue of Farm and Dairy, for an account of what this great bull has done to enrich the breeder, Mr. H. B. Davis, of Chester, N. Y., who bought this half interest.—Editor.) This year 16 cows from outside herds are being bred to him at a fee of \$500 a cow. Many farmers tell me about their cows, and claim that if I had them I would be able to make 30 lb. records with them. I have my doubt on this point, as the only cows with which I have been able to obtain 30 lb. records have been those bred from the old bull."

Several Canadian breeders have appreciated the stock that Mr. Dollar has for sale, and have secured several splendid animals at long prices. A list of some of these Canadian purchases is published on page 25 of Farm and Dairy this week.

FARM BUILDINGS

Our editor was able to spend only about an hour with Mr. Dollar. Unfortunately his stock was out in the field, and could not be inspected. Mr. Dollar has a comfortable home and attractive barns. Beside the house is a garage in which his automobile is kept, he being one of those farmers, now becoming somewhat numerous, who can well afford to keep an automobile. The cow stable is large and comfortable and well-lighted. While we were with him, Mr. Dollar gave directions to his men regarding the work they were to do during the afternoon in a manner which showed how carefully he kept track of their work, as well as of the general work of the farm. His private office was such a one as we frequently read about but seldom see on a farm. From it he had telephone connection with the barn and the city. In it were a commodious desk, easy chair, and books that showed the business instincts of their owner. In the corner was a safe,

something we suspected that might be needed on such a farm.

While Mr. Dollar's success has been unusual, and is one that cannot be duplicated by many, still it should afford encouragement to all breeders of pure bred stock. No person can tell how successful they may be until they have launched into the business with the same faith and foresight that Mr. Dollar used when he made his start.—H. B. C.

A Mortgage May be a Blessing

L. K. Shaw, Welland Co., Ont.

Duncan Anderson, farmer and Institute lecturer, once said that a mortgage was about the best thing to have around the farm, providing the right man owned the mortgage.

Mr. Anderson was right. Money raised on mortgage and invested in good stock, needed improvements in the buildings, tile drains, up-to-date machinery and so forth, will bring much bigger returns than would the same money invested in land. And yet in every part of this country of ours are farmers working with inadequate equipment rather than have a dollar against their farm.

I recently heard of a young fellow who is making this mistake of trying to farm without capital. Two years ago when he got married his father gave him a 100 acre farm, free of debt, a cow or two, and with what cash he had he purchased household furniture and some machinery.

THERE IS NO INCOME

That young man has now been farming two years, and if anything, is farther behind than the day he started. He has not stock enough to bring him any returns worth while from that department. He sells some grain, but as his farm is in a somewhat run-down condition when he got it, his grain crops are short. He has no



The Home of one of the Best Known Pure-Bred Holstein Herds in America

The illustration herewith will give Farm and Dairy readers an idea of the extent of the splendid farm buildings that house the Holstein herd of E. H. Dollar, Heuvelton, N. Y. On the right is the cow stable, in the centre the bull pens and to the left a new horse stable just in course of erection. Notice the lighting of these stables. Fully half the linear wall length is in window glass. Notice also that provision is made for ventilation. Two important features too frequently missing in the stables of dairy farmers.

—Photo by an editor of Farm and Dairy.

manure to fertilize the land and no money with which to buy commercial fertilizers. In fact, were it not for the machinery that he borrows from his father-in-law, he would not be able to farm his land at all.

How much better off that farmer would be did he take out a mortgage for \$1,500 or \$2,000, buy some machinery, stock up with a good bunch of dairy cows that would bring him in returns every month of the year and then, instead of continually impoverishing his farm, he would increase its fertility.

And still another instance. Not long ago I was visiting a fine farm in an eastern Ontario dairy section. The farm was in good heart, had fairly good buildings, and a fair supply of machinery. The dairy herd, however, was of the regular 3,000 pounds of milk a cow variety. The boys on this farm had visions of a silo and a herd of good, pure bred Ayrshire cattle on the farm. They have had that same idea for some years

now, but have not made a start to get either.

"The greatest need of the farmer to-day is more capital and cheaper capital," said one of them to me. "If we had that capital we would get that silo and at least a few Ayrshires this summer. But I do not see where it is coming from."

When I suggested mortgaging the farm to get some working capital, the very idea seemed to frighten them. They seemed to think that they would lose their own self-respect as well as caste with their neighbors did they take a couple of thousands of dollars out of the farm where it might have been yielding them three or four per cent. on the investment, but certainly no more, and invested it in dairy cattle where it would yield them anywhere from 10 to 100 per cent. The latter, of course, was good business, but it hardly looked respectable to them.

A GOOD FARM AND MORTGAGED

And here is another instance that illustrated just how the plan of securing capital that I am proposing works out. Only a few weeks ago I visited the home and farm of one of the most successful breeders of pure bred dairy cattle in this country. He had a fine farm, a fine home, and splendid stock. There was evidence on every hand that he was making money off his farm. That evening as we strolled through the pastures looking at his stock he told me something of his history as a farmer and of his present financial condition. When he first started in farming for himself he had a very limited capital. He bought a farm, but put very little of his capital into it; in fact, just enough to secure the deed. The rest went into machinery, stock, improvements in the buildings, and so forth. That was 14 years ago.

"But surely you have your farm all clear now?"

I remarked.

"No," said he, "I haven't. I don't suppose

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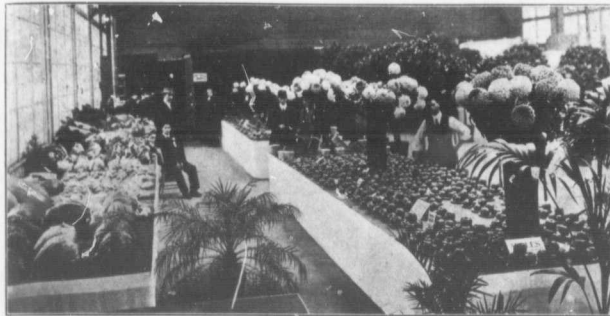
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Ventilation in the Stable

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

We ventilate our stable in order that we may supply our cow and horses with one of the most necessary parts of their daily food, oxygen. The oxygen of the air is food. It enters right into the substance of the animal. If we were to chemically analyze the body of a cow we would find that fully half of its weight is oxygen. The chemists who analyze milk tell us that it is almost seven-eighths oxygen. Did we sufficiently appreciate the importance of this oxygen in the animals' food we would have a better apprecia-



Products of the Orchard and Garden That Show Ontario's Horticultural Possibilities

The illustration herewith gives one idea of the extent of the interests represented by the Ontario Horticultural Exhibition held in Toronto last week. The interests of the fruit grower, vegetable gardener and florist are all represented in this scene; and it is just one-fifth of the entire exhibit. Elsewhere exhibits representing the beekeeper and manufacturers were shown. This fair should be more largely patronized than it now is. It, of all our institutions, stands for that intensive system of agriculture that will become more common as population increases.

tion of the necessity of a ventilating system in our stables.

We all know that if we would have our furnace burn well that there must be a good draught; that is, there must be a good supply of oxygen to unite with the carbon in the coal or wood in order that heat may be emitted. The warmth of our bodies is maintained on the same principle, the union of oxygen with body tissues. Every move that animal makes means consumption of oxygen. And yet there are lots of stables in this country where the oxygen must get in through the cracks or occasionally when the door is open if it gets in at all.

VENTILATION VS. LARGE STABLES

I do not know just how many cubic feet of air a cow uses in a day. I have seen the figures somewhere, and they are simply enormous. We couldn't possibly build a stable big enough to supply the dairy herd with all of the air that they would use in a day. We must make provision for a constant change of air substituting the fresh air outside for the stale air of the stable. This should not be left to regulate itself. A ventilating system is so easy to install that there is no excuse for us not having one.

There are two systems of ventilation that I have seen in operation, and both are giving good service. The system that I prefer is the Rutherford. We added this system after our barn was built, as at the time of building we did not know as much about the necessity of ventilation as we learned later. About a foot from the floor at regular intervals we punched two holes 10 inches square. On the outside we placed a box, leaving a space of six inches between the bottom of the box and the stable wall. The top end was knocked out of the box and the air was thus enabled to get inside the box and then into the stable, but no direct draught was possible. To guard further against draughts a similar box was placed over the opening on the inside of the wall and the air could get into the stable

at either bottom or top. Our shafts for the escape of foul air run from the centre of the stable right to the ridge.

The King system that I have also seen in operation works on a different principle. The opening for the entrance of air on the outside is on a level with the stable floor. The air is conducted to the ceiling through the box provided for it, and enters the stable at the ceiling and from there filters down to the cattle. A convenient way to make provision for air where the wall is of frame is to have the space between two studs for an air shaft, cutting an opening at the

bottom outside and one through the shaft inside at the top. If the wall is of concrete or stone, it is well to make the doorways sufficiently wide that a shaft a foot square may be made between the casing of the door and the wall.

The point on which many are apt to fall down in arranging either of these ventilating systems is in depending on the feed chutes as an exit for foul air. I believe that the shafts that run to the roof of the barn should be used only as air exits and should be built most carefully, as the more carefully the shaft is built and the longer it is, the better will be the draught and the more efficient the ventilation system.

Can I Afford a Spreader?

By F. W. Peck

The season for the most frequent use of the manure spreader is approaching. Many farmers are debating the advisability of purchasing. Many doubt its economy on farms of less than 200 acres. All are aware of the great advantage in extra evenness of scattering manure with the spreader. Most farmers realize that a given amount of manure will cover a larger acreage when spread in this manner. The advantage is especially great on meadows where coarse bunches of straw are a nuisance in the hay crop.

Farms management investigations on a number of farms in Minnesota indicate that the spreader will make a financial profit on any farm which distributes 250 tons or more a year. This takes no account of the added ease of labor to the farmer, but considers only the financial saving and the fact that man and horse labor are enough more effectively employed to more than pay interest, repair, and depreciation charges on the spreader. This amount of manure should be handled on farms of 100 acres or over, or on any farm which has 22 cows, 16 head of young stock, and eight horses or equivalent stock.

Fruit in Alberta

D. W. Warner, Edmonton, Alta.

The question of whether or not it will ever be possible, from a profit-making point of view, to produce fruit in Alberta for our own use, has been much discussed. I do not believe that we will in the near future, at least, produce apples for export. If, however, we do not produce at least a part of the apples needed for home consumption in the next few years we will have only ourselves to blame. I have travelled pretty thoroughly through the settled portions of Alberta, and have seen thriving looking trees in many places and trees bearing fruit in some sections. We, here in Alberta, will never be able to raise all varieties of fruits of the kinds that are now in use. With the continual changes going on, however, the old varieties going out of use and the new, hardier and better ones taking their place, I believe it possible for us to procure other kinds from the new varieties coming into use that will be better adapted to our climate and season. It is more practical to get the adaptable species of all kinds of fruit than to wait for changes in climate to make it possible to produce fruit of the tenderer sorts.

THE CHANGE IS COMING

We are all looking for those changes to take place in varieties that will enable us to produce our own fruit; especially those of us who have seen the settlement of other new countries. In looking back at the changes that have taken place in Nebraska, where I went, when a boy, with my parents in April, 1868, I see prominent among them is the improvement in fruit growing. This improvement has been brought about partially by the adaptation of the more suitable varieties and partially by a favorable change in the climate. It is my belief, however, that most has been done to encourage fruit growing by the propagation of the kinds of fruit suitable to the country and its needs. All fruit growing countries have had to do the same.

Another point that gives me faith in the fruit possibilities of our province is the numerous kinds of wild fruit found growing here. I cannot name all of them, but have seen and know enough of them to convince me of the possibility of growing enough for our own use, which we have been able to do. We have experimented with both cultivated and wild fruits in our garden and have succeeded satisfactorily with both classes; succeeded far beyond our expectations.

A COMPARISON WITH NEBRASKA

We have been more successful than my people were at first in Nebraska, which latter State has turned out to be a good fruit country. I can remember when most of the new settlers in Nebraska had the idea that they would never be able to do much in the way of fruit growing. They are now selling fruit for export in large quantities from that State. The early settlers there had no more faith in successful fruit growing than the new settlers have in it here.

The same conditions have given me faith that we can produce our own fruit here that gave my father (who was one of the pioneers in fruit growing there) faith that he could succeed in that country. In both cases our faith was founded on the belief that where so many kinds of wild fruit of good quality grew it was absolute proof that cultivated kinds would do equally well when the proper varieties were found and the proper care given.

Coming back to the native fruits, I have seen four kinds of currants—the ordinary black and the ordinary red, the little red (much like the cultivated, but smaller), and the skunk berries, which grow along the water courses and in the swamps near the water. This latter is a distinct variety of currant. There are three kinds of cranberries—high bush, low

(Concluded on page 18)

ONTARIO HORTICULTURAL EXHIBITION ESTABLISHES A NEW RECORD

Over 4,000 Boxes of Apples on Exhibition—Three Entries of 300 Boxes Each—Cooperative Societies Largely Responsible for Both Quantity and Quality of the Exhibits

UP-TO-DATE, progressive orchard management will overcome the disadvantages that go with an unfavorable season. Such was one of the great lessons learned by those who attended the Ontario Horticultural Exhibition in Toronto last week. The past season has been unusually wet and dull, and fruit growers were somewhat fearful that the display of apples at this exhibition would not live up to the mark in color and in freedom from fungus diseases. Leading Ontario fruit growers, however, have taken full advantage of the newest methods of orchard management and the apples on exhibition were not only of good color, but practically free from fungus. The number of boxes on exhibition was estimated at 4,000 and the number of plate exhibits at 1,400. Taken all in all the 1912 exhibition is in a class by itself.

The greatly increased accommodation afforded by the Horticultural building, at the Canadian National Exhibition grounds, was fully taken advantage of. The Cooperative Fruit Growers' Associations, the district representatives and individual growers, all did their part to make the apple exhibits as attractive as possible. The flower exhibits with much more room than formerly, were more attractively arranged and added much to the beauty of the Horticultural Hall.

BETTER THAN IN THE U. S.

Honey as compared with previous years has an outstanding exhibit. "I was at the Madison Square Gardens last winter and there were exhibits from six states in the honey section, but the whole together would not equal the Ontario exhibits," said Mr. S. D. House, a United States visitor to the Fair. "I have travelled all over the United States," he continued, "but I have never seen such an exhibit as you have here."

The honey exhibits were arranged in two domes, one in the centre of the building and the other more to the side. The large central dome, an exhibit of the Ontario Beekeepers' Association, had a most attractive display of comb, bottled, canned and brant honey. The display of the Middlesex County Beekeepers' Association lost nothing in attractiveness because of its less extent.

The coming pre-eminence of the box as a package for fancy apples was even more in evidence at this fair than at the previous one. Only 58 barrels were entered in competitive classes and a dozen or so in connection with other exhibits. An improvement in the pack was easily noticeable. The growing importance of Cooperative Fruit Growers' Associations was also witnessed at this fair. At least three-quarters of the exhibits were staged by cooperative associations or by members of associations and practically all of the prize money went their way.

NORFOLK COUNTY ON THE PRIZE

Norfolk county fruit growers literally covered themselves with glory. A little over one-third of all the apples on exhibition came from their county. When the awards were made public it was found that Norfolk fruit had secured 50 firsts, 31 seconds and 10 third prizes. Among their notable winnings were first and second on lots of 100 boxes each, first on 50 boxes, and first and second in classes for 20 boxes, and they also had the sweepstakes box, one of the most coveted prizes at the fair. The winning box was of Spies grown by R. H.

Johnson. A box of Kings, also from Norfolk, was a close competitor. The two largest apples in the show came from Norfolk.

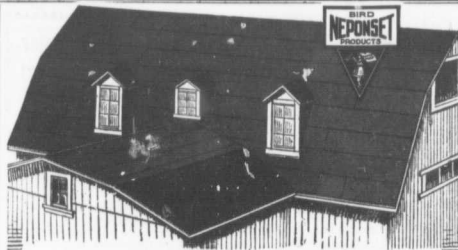
The grand feature of the apple display this year was the half carloads of 300 boxes each. The first prize of \$200 was won by the Northumberland and Durham Apple Growers' Association on an exhibit of Spies. The second prize of \$150 also went to Northumberland and Durham on their Baldwins. Norfolk fruit growers, who also had an entry of Baldwins, had to be content with third place. The Norfolk apples were probably superior from the standpoint of color and quality but not so well graded and packed as those of their competitors.

SOME OF THOSE WHO WON.

Prominent among the winners in the barrel classes were: P. Walker, J. Howe, Fred Doan and John Winter, all of Norfolk. In the single box classes some of the best awards went to R. B. Scripture, Brighton; Northumberland and Durham Apple Growers' Association; T. Cunningham, Norfolk; G. H. Martin and Son, Port Hope; Arcona Fruit Growers' Association; John Watson, Ontario Co., and F. G. Stewart, of Homer. Other exhibitors too numerous to mention secured high places in the box classes. In the plate classes awards were distributed over the entire fruit growing area of Ontario, but here also Norfolk county was most prominent.

County exhibits were a strong feature of the fair. Lambton county had a most striking exhibit of 332 boxes, the different colored apples being arranged to make a map of the county. This splendid exhibit, the finest at the fair, was robbed of much of its effectiveness by a large dome of honey exhibits directly in front of it. Had this dome been removed to the side of the building the Lambton exhibit would have appeared more striking and the whole general effect would have been more pleasing. Brant county had an exhibit of 76 boxes and 12 barrels of splendidly colored fruit. Brant claims to be a Spy county and the excellence of the

(Concluded on page 10)



Don't Experiment with Roofing
It pays to buy good roofing just as it pays to buy good machinery and to keep good stock. Good roofing has good records behind it, not claims.

NEPONSET PAROID ROOFING

has excelled the records of best shingles. A warehouse built in 1896 was torn down last summer with its NEPONSET Paroid Roof still in good shape. NEPONSET Paroid has outworn tin and metal time and again. It is bought by Governments, by Railway Systems—by farmers, because it has proved itself the most economical roofing. Buy NEPONSET Paroid next time.

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International Stock Food conquered England, just as it conquered Canada and the United States, by proving to the Dairy Experts that it is the greatest milk producer and health restorer in the world. The test was made on three cows from the dairy herd of S. W. Hackney, Esq., Leeds, England, Chairman of the Yorkshire Federation of Dairy Farmers. Quantity and quality of milk was tested for a certain time—then "International Stock Food" was added to the regular feed.

INTERNATIONAL STOCK FOOD showed an increase in Milk of 14.2 pints daily, and 1.21 pounds of butter daily. This proves that International Stock Food, added to the regular feed will increase the quantity and improve the quality of milk from every cow.

It shows that International Stock Food aids digestion and keeps cows in better condition. It proves that International Stock Food is a money-maker for the farmer; that every farmer who owns one, or a hundred, cows should feed International Stock Food every day. Make the test yourself—weigh the milk you are getting now—then feed International for a few weeks, and weigh again. Then you'll see how International Stock Food will make money for you.

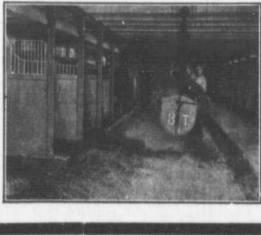
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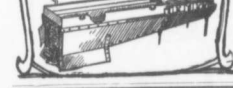
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General Change of Times
October 27th, 1912



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The Feeders' Corner

The Feeders' Corner is for the use of our subscribers. Any interested are invited to ask questions, or for a list of names. All questions will receive prompt attention.

What are "Ajax Flakes"?

I see occasional mention made of "Ajax Flakes." What are they? What is their chemical composition, and how do they compare in value with the other feeds on the market. Gleanery Co., Ont.

Ajax flakes are a by-product of breakfast food manufacture. So far as we know they are not sale in Canada. Ajax flakes are used as the basis of the concentrated meal ration by leading breeders of dairy cattle in the United States.

We understand that several breeders in Canada have endeavored to get Ajax flakes, but without success. We anticipate that milling firms will shortly in this country place on the market a feed of similar character to the Ajax flakes, which are said to be high in per cent. of protein, palatable, and, like oats, they have enough rough fibre to make them easily digestible and safe to feed, there being no danger with them of impaction.

Feeding Without a Silo

I am milking 22 cows, all registered Ayrshires, except four. As I have no silo, what would you advise feeding this winter? I am running a winter dairy butter is selling at 30 cts. a pound, and is still on the increase. Am going to build a silo next summer. Would you advise me as to the best kind and size to build for about 24 milking cows?—W. S. Shefford, Co. Que.

It is difficult to give a suitable ration to be fed in this case as we do not know whether or not W. S. W. S. is clever hay or timothy, nor do we know the prices that rule for the various feeding stuffs in his neighborhood. A good general ration can be made of clover hay, one-third bran and one-third gluten meal. To this might be added a small proportion of oil meal. Oil meal would be especially valuable where no silage is available in that it would keep the animals in good condition and the animal in a thrifty condition generally. If roots are available their palatability and succulence would be a most valuable addition to the ration. Cottonseed meal, if it can be obtained, might be substituted in part for the gluten.

It may be laid down as a general rule that feeds high in protein content, such as cottonseed meal, gluten meal or silage, should be in proportion to the feed value that is present than are the feeds of lower protein content, such as bran and oats. The amount to be fed should be gauged by the amount of milk that the cows are giving. Where clover hay is available one pound of meal to four pounds of milk would be about right. If timothy hay is fed one pound of meal should be given for every three or four pounds and one-half pounds of milk.

For a stock of 24 milking cows and young cattle a silo would be needed with a capacity of at least 100 tons. A circular silo of 15 feet in diameter and 30 feet high would contain this amount. As silage settles considerably after the first filling, it would be necessary to have it a few feet higher to make room for the settling. Either cement, cement block or a stave silo would prove satisfactory.

Never keep silt pails in the dairy, but hang out in the sun. They should be of tin or galvanized iron, and should be washed clean at least once a week; every day if possible.

How Moosejaw is Supplied with Milk

J. A. Caudler, Mgr., Sask Creamery Co., Moose Jaw, Sask.

When we started in the dairy business in Moose Jaw only two years ago, the need was great for a first-class milk. Many farmers were bringing small quantities of milk to town and retailing it themselves. No one was using the bottle delivery system. Conditions were very unsatisfactory to both the farmer and the consumer in the city.

A few of the business men of the city, including implement dealers, lawyers, merchants, real estate dealers, and some private citizens, got together and formed a stock company. A farm of 480 acres two and a half miles from the city limits was purchased. This farm has an inexhaustible supply of pure fresh water.

DIFFICULTIES AT FIRST

We started with a herd of 50 cows, and have now got up to 140. At first we found it difficult to make the farm pay on account of the high expense that was necessary in order to provide feed for the stock, and until we could grow it on our own farm. Last year, however, we had a splendid crop and we have been able to make our farm pay a good dividend, even investing the land at \$200 an acre and cows costing us \$100 each. We buy nothing but high grade Holsteins and have bought practically all of them from the Brockville district of Ontario. We keep a few pure bred, but have not gone into the pure bred business very extensively as yet.

Our buildings are equipped in as modern a manner as it is possible to make them, having electric light and electric power and an automatic water supply with individual drinking bowls. We chop our own feed that is also cut up of straw, and find that we can save a great deal of feed by so doing. Our rations so far consist of a small amount of green fax straw mixed with shelled oats, cut green corn, clover hay, and a small amount of corn meal, oat chop, bran, and cotton seed meal. We have made our entire herd produce an average of 29 pounds of milk a cow a day. We also have a herd of 39 pound mark, but as yet have not reached it.

IMPROVE SURROUNDING HERDS

Up to the present we have been selling all our calves when they were three or four days old at \$10 each. In this way we are able to supply the farmers with first-class calves that will in a short time work into good dairy herds. We buy all of the milk that is produced in the surrounding country, with the exception of one two or three cows. We drive 10 delivery wagons in the city and supply almost every household with milk and cream.

We also have a butter factory and buy all of the cream we can get within a radius of 200 miles. On 8th April we opened a branch at Weyburn, Sask., which should prove very beneficial to the farmers of southern Saskatchewan. We also have the most modern plant equipped with the most up-to-date machinery that can be bought, and we are supplying the city of Moose Jaw and nearly all of the surrounding towns with sweet cream and ice-cream.

PROVINCIAL ASPIRATIONS

In order to allow us to branch out to other towns, we have only recently changed our name from "The Moose Jaw Dairy Company, Limited" to "The Saskatchewan Creamery Company, Limited," and changed our capitalization from \$100,000 to \$500,000. We were forced to do this from the fact that our original capital of \$100,000 was fully sold, and we found that we were required more funds to carry on our business.

Through Pullman Sleeping Car to Ottawa via Grand Trunk Railway

The Grand Trunk Railway operate a through Pullman Sleeping Car (electric lighted) to Ottawa, leaving Toronto 10.45 p.m., daily.

Berth reservations and full particulars may be secured from the nearest Grand Trunk agent.

SPECIAL TRAIN TO PORTLAND, MAINE, FOR SAILING S. S. "TEUTONIC," DEC. 14th.

For the accommodation of passengers sailing on the White Star-Timothy Line Steamship "Teutonic" from Portland, Maine, December 14th, the Grand Trunk Railway will run a special train consisting of Vestibule Coaches, Tourist and First-Class Standard Pullman Sleeping Cars, leaving Toronto, at 1.15 p.m., Friday, December 13th, running direct to the Dock at Portland, arriving there at 9.00 a.m., December 14th. Berth reservations, tickets, and full particulars can be obtained from the nearest Grand Trunk agent, or write A. E. Duff, D.P.A., Union Station, Toronto, Ontario.

MAIL CONTRACT

SEALED TENDERS addressed to the Postmaster General, will be received at Ottawa until 10 a.m. on Friday, the 23rd November, 1912, for the conveyance of His Majesty's Mails on a proposed Contract for four years six times per week on Rural Mail Route No. 4 from Peterboro, Ontario, to commence at the pleasure of the Postmaster General.

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

G. G. ANDERSON, Superintendent.

Post Office Department, Ottawa, 25th October, 1912.

A Very In the major alone in is broken plowing illustra snowdrift plow matching

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FARM AND DAIRY

Alfalfa will be in the fall and P.S.B. E.C.

Alfalfa seed about has been practice with the. The all same time a start and form text it through spring it started



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Choking is one of the most common complaints of some animals. It is caused by food or straw getting into the throat and causing inflammation. It is a very dangerous condition and should be treated immediately.

Choking is one of the most common complaints of some animals. It is caused by food or straw getting into the throat and causing inflammation. It is a very dangerous condition and should be treated immediately.

Choking is one of the most common complaints of some animals. It is caused by food or straw getting into the throat and causing inflammation. It is a very dangerous condition and should be treated immediately.

LEG BANDS

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FARM MANAGEMENT

Alfalfa with Winter Wheat

Can I seed alfalfa with winter wheat in the fall and expect it to thrive?—P.R.S., B.C.

Alfalfa seeded along with winter wheat has been a most successful practice with many of our best farmers. The alfalfa, if seeded at the same time as the wheat, makes a good start and forms a sufficient top to protect it through the winter. The next spring it starts off so vigorously that

causal contraction. But the latter is a reagent that dairymen should leave to the veterinary surgeon. Sometimes the administration of these things causes the obstruction to slip down quietly into the rumen. The trouble on the farm is that the only available thing to use is generally a piece of indiarubber piping, and in emergency this would do all right. A piece of round wood could be driven firmly into the hollow tube and cut off square, and if the edges of the indiarubber were rounded off and the whole face made smooth, no bad results would ensue from the careful use of this device. It would



A Very Up-to-date Feature of a New Zealand Plowing Match

In the majority of fall plowing matches here in Canada the single furrow plow alone is in evidence. In this we are scarcely as progressive as our New Zealand brethren. The horse here depicted is a common one in that country. The snow-furrow plow competition might well be added to the attractions at Canadian

it may retard the growth of the wheat and make too great a weight in the base of the wheat sheaves. It is now too late in the season to sow alfalfa successfully, but we would advise you to try this plan another year. It has worked well in Ontario, and we presume would work well in your province, too. Twenty pounds of seed to the acre is a standard for alfalfa seeding.

Choking in Cattle

Choking is one of the most troublesome complaints. Although the symptoms are much the same as getting insensated with gas or "heaven," choking is not by any means the same complaint, although one causes the other. When frothing at the mouth is noticeable and the animal is blown out to a great size, and has a swelled throat and every appearance of being on its last legs, the chances are the throat is choked with a small potato or a piece of turnip.

When anything gets stuck in the gullet in this sort of way the difficulty of removal will depend on the situation of the article in the throat. It is just possible that by gagging the cow the obstruction may be reached from the mouth by the fingers, or it may be forced upwards by outside pressure till it is reached; but when it cannot be reached in this way it becomes necessary to use the probang, and push it down to the animal's throat. This is assisted by giving linseed oil to act as a lubricant, and a little extract of belladonna to relax the mus-

cle and make well oiled and very little pressure exerted. In desperate cases it becomes necessary to puncture the stomach and remove one important source of danger while the other relief is gone about.—New Zealand Dairymen.

Capacity of Silo

I have a silo 11 feet six inches in diameter and 39 feet high, inside measurements. We filled this silo 16 feet the first day, left it for a day and a half, filled it again and in another three days it filled it to the top. We put in nine acres of well cured Lemington corn and two acres of the flint variety, 11 acres in all. How many tons of ensilage have I in my silo and how many cattle can I feed giving 60 lbs. a day to each animal?—A. J. E., Welland Co., Ont.

If filled for the full 39 feet at the last filling, the contents of this silo will probably have settled four or five feet at this date. Estimating that there are now 35 feet of ensilage in the silo with an average weight of 43 lbs. to the cubic foot, we would estimate the amount of ensilage at a little over 50 tons. If each cow is to be fed 50 lbs. of ensilage a day for 180 days, our subscriber has ensilage enough to feed 18 cows for that period.

When to Paint

There is a great difference of opinion as to the best season of the year for outside painting. The early fall months have the following points in their favor:

1. The atmosphere is usually dry and the surfaces are in proper condition. Moisture causes blistering, peeling and cracking.
2. There are fewer insects flying about and sticking to the fresh paint.
3. Cold weather is better than hot weather for new paint. The new paint hardens slowly during the cold weather and by summer it is ready to stand all kinds of weather. Paint applied in the spring is liable to be baked and blistered by the sudden advent of hot weather.

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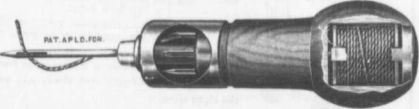
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A fine tool for every farm, factory or work shop. PRICE \$1.00.

A stitch saves many repair bills. It is easy to take when any and wanted thread are always ready. For repairing boots, harness, or shoes, or any heavy sewing it is just the thing. It sews a stitch like a sewing machine.

SEND ALL ORDERS TO

FARM AND DAIRY, Peterboro

LEG BANDS FOR POULTRY

We carry in stock all styles (ask for our Poultry List). The most popular leg band is the "Leader Brand," easy to read, made of aluminum.

No. 1	For birds legs less than six in. in circumference	12	12
No. 2	For birds legs less than six in. in circumference	12	12
No. 3	For birds legs less than six in. in circumference	12	12
No. 4	For birds legs less than six in. in circumference	12	12
No. 5	For birds legs less than six in. in circumference	12	12
No. 6	For birds legs less than six in. in circumference	12	12
No. 7	For birds legs less than six in. in circumference	12	12
No. 8	For birds legs less than six in. in circumference	12	12
No. 9	For birds legs less than six in. in circumference	12	12
No. 10	For birds legs less than six in. in circumference	12	12

ED. KEITH & SONS, Seed Merchants since 1866
124 King Street, East, Toronto, Ontario

Let Us Send You a Sacred Song FREE!

Your Choice of One of the Following Ten

SOLO or DUET

Some-body lov'd me long a-go, Some-body cared for me,
Some-body lov'd me long a-go, Some-body died for me.

TAKE THEM TO THE PIANO OR ORGAN AND TRY THEM OVER

LIFE SONG SERIES—ALL CANADIAN

- | | |
|------------------------|---------------------|
| 1. Jesus Now. | 6. The Golden City. |
| 2. Remember Me. | 7. Mother's Story. |
| 3. Drifting. | 8. He knows. |
| 4. Anchored. | 9. Somebody. |
| 5. Step Out for Jesus. | 10. Glory. |

I know He knows when I am sad and And
I know He knows though I am faint To
I know He knows that I am weak And
I know He knows when I have tried And

Piano *f*

Simple. Sacred Solos, with Quartette, Chorus and Pleasing Piano Arrangements.

These songs are printed on splendid paper, regular sheet music size, and are just like the regular sheet music for which you pay 60c or more.

The songs are all composed by a Canadian, Mr. Gordon V. Thompson, of Toronto.

They are lovely. Try the above over in your own home. Some friends of Farm and Dairy who have tried these songs, and the members of our own staff vote them splendid. One of our friends who has had several years' experience as a church choir soloist, said of these songs, after trying them over:

"They are splendid. I must have each one of the ten at once. They will be a treat for my own personal pleasure and entertainment for singing in our parlor gatherings, or for solo work in connection with our church choir. Mr. Thompson, the composer, must, in addition to being an excellent writer and composer of music, have had some very interesting and definite religious experiences, else he never could have worked in such lovely tones in the airs and such beautiful thoughts in the words."

One of These Songs, Your Choice.

SEND POSTPAID TO EVERY READER OF FARM AND DAIRY

who will spend a few minutes of time filling in answers to our questions, asked on the coupon on this page.

The reason we ask you for this information is very simple. Our advertising department is frequently asked for information regarding the class of readers subscribing for Farm and Dairy.

In order that we may have this information to lay before our advertising patrons, and also in order that we may better know just what will be most suitable to give you each week in Farm and Dairy, we ask for your cooperation in this matter. Fill out the coupon to-day and send it to us by first mail and you will help us more than you will believe in the matter of enabling us to give you a more intelligent service through Farm and Dairy.

Some of the questions may seem a little personal. We ask these of you in good faith, however, and your replies will not be used in any way to embarrass you, and your name will not be mentioned. We will observe the strictest confidence in this matter.

In these days of high cost of living, the buying of supplies for the home is one of the most important things of our every day life. We devote our days to labor, to enable us to obtain money to buy the necessities of life. Unless we buy intelligently we waste part of our labor.

Farm and Dairy is trying to help its readers to get the most and the best for their money. To that end we refuse the use of our advertising columns to those firms whose goods we feel will not give the utmost satisfaction to our readers.

Our people are rapidly discovering that it pays them to read the advertising pages of Farm and Dairy, since Farm and Dairy ads. are of great assistance in making economical and satisfactory purchases.

Everyone Gets a Song Free. There are no Chances to Take.

Send in the coupon by first mail, and your choice of song will be mailed to you promptly, absolutely free in return for your kindness in getting us the information asked for. It will make a splendid Xmas present for a musical friend should you not be musical.

There are no exceptions and no rules to comply with. All you are asked to do to get one of these beautiful, inspiring sacred songs is to answer the questions as fairly as you can and send the coupon to Farm and Dairy.

Send the Coupon to-night. Answers must be received by December 2nd.

FARM AND DAIRY, Peterboro, Ont.

"A Paper Farmers Swear By."

COUPON

CLIP OUT, FILL IN AND MAIL TO-DAY

Please answer all questions as soon as you can, and mail to Farm and Dairy, Peterboro, Ont.

- 1.—How many persons on the average read your copy of Farm and Dairy?
- 2.—Do the women read Farm and Dairy?
- 3.—What becomes of your Farm and Dairy?
- 4.—Do you read any other weekly or monthly publications, if so, which ones?
- 5.—What is the value of the property you occupy?
- 6.—How many acres in your farm?
- 7.—Are you a dairy farmer?
- 8.—How many pure bred cattle have you?
- 9.—Do you own or rent your place?
- 10.—About what is your annual income from all sources?
- 11.—How many rooms are in your home?
- 12.—Do you use steam, hot water, hot air or stoves to heat your home?
- 13.—How do you light your home?
- 14.—Do you cook with coal, gas, wood or oil?
- 15.—What make kitchen cabinet have you?
- 16.—Do you use a vacuum cleaner?
- 17.—Have you free mail delivery?
- 18.—Do you raise chickens?
- 19.—What make of incubator have you?
- 20.—What make of washing machine do you use?
- 21.—Have you a cream separator?
- 22.—Have you a gasoline engine?
- 23.—What horse power is it?
- 24.—What brand of paints do you use?
- 25.—What brand of toilet and laundry soap do you use?
- 26.—What make of piano have you?
- 27.—What make of organ have you?
- 28.—What make of talking machine have you?
- 29.—What make of razor do you use?
- 30.—In buying, do you pay cash?
- 31.—How many live in your home?
- 32.—Do you buy advertised articles?
- 33.—If so, why?
- 34.—Do you buy flower or vegetable seeds?
- 35.—From whom do you buy these?
- 36.—Have you an apple orchard?
- 37.—How many trees in it?
- 38.—What kind of roofing do you use?
- 39.—What baking powder do you use?
- 40.—Do you bake your own bread?
- 41.—What flour do you use?
- 42.—What make of breakfast food do you use?
- 43.—Do you buy of Mail Order Houses?
- 44.—Do the advertised articles you buy give satisfaction?
- 45.—What make of automobile have you?

Name

Post Office..... Prov.....



LOT No. 1
FED CORNMEAL ALONE

LOT No. 2
CORNMEAL & PARTS
OF D. KANGAROO PAINT

Both lots weighed exactly the same at the start. Both fed in dry lot under same conditions. Time of test, sixty-two days.

LOT No. 1 GAINED
42 lbs. each

LOT No. 2 GAINED
97 lbs. each

Examine the above cut carefully. Compare not only the size of the hogs but the bloom and condition as well. This experiment was carried out at a Government Experimental Station, and the figures are guaranteed by the Professor in charge. Write us for pamphlet giving full particulars of this experiment.

This is a fair example of the results which our hog food, **Harab Digestive Tankage**, is giving to successful hog raisers all over the country.

A Trial Will Make You a Regular User
of This Guaranteed Protein Hog Food

We want to ship you a trial order. Write us for prices and full particulars.

HARAB DIGESTIVE TANKAGE

GUARANTEED ANALYSIS
PROTEIN, 6.5% FAT, 8% FIBRE, 6.7%
Registration No. 129

MADE IN CANADA
BY

THE HARRIS ABATTOIR CO., Limited
Toronto, Ontario

HOW TO GET BETTER LIGHT FROM COAL OIL (Kerosene)

Tests by Prof. McKerrow, McGill University, Montreal, on leading oil-burners show the Aladdin Mantle Lamp is the most economical and gives the longest life. It is a safe, reliable, and simple lamp. It is sold over twice as much light as the Rego and other lamps tested. It is sold less safe, clean, quiet, and guaranteed. Better light than gas or electric. To introduce the Aladdin we'll send a sample lamp on 10 Days Trial. Agents Wanted Everywhere. Every Agent for Particulars home needs this lamp. One agent sold over 1000 on 10 days. Evening made profitable. Ask for agents prices and trial order. MANTLE LAMP COMPANY 255 Aladdin Bldg. Montreal and Winnipeg, Can.

GRUMB'S IMPROVED WARRIERS STANCHION

Henry H. Albertson, Burlington, Vt., writes: "I have used your Stanchion for the comfort of my cows." **WHY TORTURE YOURS WITH RIGID STANCHIONS?** Send for specifications of inexpensive yet sanitary cow stalls obtainable for **WALLACE H. CRUMB, 25, Forest Hill Drive, P.O. S.A.S.,** Canadian Iron Works, Orangeburg, N.Y. All correspondence should be addressed to the above office. *Made in England. In some parts made in French or Belgian.*

POULTRY AND EGGS

In addition to operating the largest creamery business in Western Ontario, we are among the very largest egg and poultry handlers. We can guarantee thirty cents or better, your station, for strictly new-laid eggs, and are prepared to pay the highest price for poultry, especially graded chickens. Write NOW for full particulars. **SILVERWOODS, LTD.** Successors to Flavell-Silverwoods, Ltd. LONDON, ONTARIO

Saves Clothes

The Connor Ball-Bearing Washer saves clothes. It washes them without any rubbing on the washboard. And unlike other washers, there is no post or obstruction in the Connor around which clothes might wind or tear.

Connor Ball-Bearing Washer

is the SAFE washer. Nothing about it that can injure the most delicate fabric or loosen a button. Has new improvements and conveniences found on no other washer. No risk in getting one, because fully guaranteed by one of Canada's largest washing machine corporations. Look for the "money back guarantee" on the washer.

Ask for Booklet Send for booklet giving complete description. It will open your eyes. Such a convenient, easy-running, time-saving washer was never thought possible three years ago.



J. H. Connor & Son
Limited
Ottawa, Ont.

Ontario Fruit Growers Meet

(Continued from page 6)

on companies for accounts of six months' standing. Valuable markets are being lost to the Ontario fruit men through excessive freight charges. The trade at "The Soo" for instance will soon be monopolized by the United States unless charges are made more equitable. The rate on fruit from Lyons, N.Y. to "The Soo" was found to be 42 cents a cwt., while from Western Ontario the rate is 60 cents. An investigation into freight rates on American and Canadian lines, brought out the following: Rate from Minneapolis to Sault Ste. Marie, 490 miles, 30 cents; Forest, Ont., to Sault Ste. Marie, 325 miles, 54 cents; Chicago to Sault Ste. Marie, 347 miles, onions and vegetables, 674 miles, 22 cents; Forest to

Success

To get to the top is a laudable ambition. It is not only like to get there ourselves, but we like to hear and read of others who have gotten there. There is nothing like a tale of success to inspire us to greater endeavors.

One of the features of the Xmas and Breeders' Number of Farm and Dairy, coming out Dec. 6th, is the story of how one young man has made the old homestead to produce more bountifully under his efficient management than it ever did before. The story is told by an editor of Farm and Dairy, who visited this young man's home and secured much of the story from his own lips. This is only one of the numerous good features of our Special Xmas Number of Farm and Dairy.

Sault Ste. Marie, 347 miles less, 26 cents. Rates east of Winnipeg are not as satisfactory as they might be but West they are altogether exorbitant. A carload of apples can be sent from St. Catharines to Winnipeg, 1,234 miles, for \$127.20. To send the same car load 489 miles further to Saskatoon would cost \$91.20 additional. Is it any wonder that Ontario growers are losing the western market?

Mr. McIntosh also dealt with the need of cargo inspectors to ensure reasonable handling of fruit at Montreal.

"Nursery Legislation" was a subject of an address by Dr. G. Gordon Hewitt who traced the recent Nova break of *Saxifraga* in Nova Scotia to Ontario nursery stock. The Provincial Government has passed an order requiring that all nursery stock imported into Nova Scotia must be accompanied by a certificate of inspection and is coming from other parts of Canada must be fumigated at the port of entry. Dr. Hewitt believes that the result of this improvement of isolation will be an improvement of conditions in Ontario nurseries.

Addresses of a practical, educational nature were given by L. Ceasar of Guelph, who discussed common insect pests and told us his investigation work in little peach and peach yellows; P. E. Angle, B.S.A., of Simcoe, Ont., described his method of laying out and planting orchard land; "Nursery Stock, Its Selection and Care" was the subject of an address by Prof. J. W. Crow, O.A.C., Guelph. The best varieties of the various fruits were discussed by members of the Association. A. G. Shand discussed "The Revival of the Pear Orchard in Ontario." Probably the most interesting and instructive of the practical addresses were those of Prof. E. P. Stewart, of the State College of P. Stewart, of the State College of P. Stewart, who told of his investigation work into fertilizers and discussed cultural methods. Gains from

fertilization in Prof. Stewart's trials have run as high as 17 times the amount of fruit produced on adjacent check lots not fertilized, and have been as high as \$420 an acre in a single season. All of these addresses will be dealt with more fully in future issues of Farm and Dairy.

The business morning session was conducted in the Horticultural Building at the Fair. Mr. P. J. Cary, Dominion Fruit Instructor, defined a No. 1 apple and by means of a microscope showed the growers how to select the different grades. Prof. J. W. Crow gave an address on "What Fruit shall the Ontario Shipper put into Boxes?" As the market is an important one, this package is only adaptable to No. 1 fruit, and that of the best varieties. If lower grades are boxed the reputation of the Ontario apples suffers. He recommended Kings, Spys, Spitzenbergs, Snows and McIntosh for box packing.

Officers for the various divisions were elected as follows: I. R. B. Whyte, Ottawa; G. H. G. Foster, Burlington; S. Robert Thompson, St. Catharines; I. W. J. Sanders, East Linton.

The Charming Winter Resorts of California, Mexico, Florida, etc.

Now is the time to take advantage of a trip to a milder climate and escape the cold winter months. Round trip tourist tickets are issued by the Grand Trunk Railway to California, Mexico, Colorado, Pacific Coast Points and the Sunny South, at low rates, giving choices of all the best routes. Features in connection with this route, only Double Track Line to Buffalo and Chicago; Fast Service; Modern Equipment; Unexcelled Dining Car Service; Palatial Electric Pullman Sleeping Cars; All elements of safety and comfort. Ask nearest Grand Trunk Agent for full particulars, or write A. E. Duff, D.P.A., Union Station, Toronto, Ontario.

CLEARING SALE—Brook-to-day prize-winning Golden and Columbian Wronches, Barred and White Book, Brown Leghorns. Satisfaction guaranteed.—Thomas Sims, West Lorne.

FOR SALE

3 DE LAVAL TURBINE SEPARATORS, 1,500 capacity. Also 2 second-hand Bolens 12 and 15 horse power. All in good repair. Address **FARM AND DAIRY, Box 388, Peterboro, Ont.**

BUTTER! BUTTER!! BUTTER!!!

Why make butter during the winter months when you can get your cream at the highest market price? If within one hundred miles of Toronto, you can get your own butter-fat for November, 36c per pound F.O.B. your own name on the can, and 2c for shipment if 2 or 10 gallon to suit your requirements. A certificate of inspection and shipment is tested. A post-order will bring a can (specify size suitable) and a suitable you get a system a fair trial.

SILVERWOODS, LTD. Successors to Flavell-Silverwoods, Ltd. LONDON, ONTARIO

FARMS FOR SALE

ELKO FRUIT LANDS in Southern British Columbia on easy terms. Acreage in five to ten acre tracts. Very rich soil. Columbia on one hundred acres, offered at \$5 per acre and \$2.50 to \$4 per month without interest or taxes till 1915. Land suitable for growing apples, pears, plums, cherries, strawberries, raspberries, vegetables, cereals. This land is under the best irrigation. Poultry and live stock raising can be pursued. Town of five hundred people, railway, schools, hotels, the southern coast, graph, telephone, and fine climate. Beautiful scenery. Get particulars from **INTERNATIONAL SECURITIES CO. LTD.** Fruit Lands Department, Royal Bank Bldg., 11 King East TORONTO, ONT.

Why should I use Canada Cement?



NO FARMER who has used Canada Cement asks that question, because his first trial answered it to his complete satisfaction. Yet it is only natural that a farmer who has never used concrete—perhaps yourself—should require convincing reasons before deciding to use it himself.

If we knew where you lived, and knew your name and the names of your neighbors, we could tell you of many men in your own locality who would be glad to tell why they are using Canada Cement. Since that is impossible, this advertisement will try to give you an answer to your question.

"WHAT IS CONCRETE?"

CONCRETE is an artificial stone. It is a mixture of cement, sand and stone, or of cement and gravel, with water. The proportions of the various materials vary according to the purpose for which the con-



THE mixing and placing of concrete is simple, and is easily learned. No elaborate tools are needed.

crete is to be used. This mixture hardens into an artificial stone. This hardening process is rapid at first, and in a few days the mixture is as hard as rock. After that, time and weather, instead of making it crumble, actually makes it stronger.

Since stone, sand and gravel may be found on nearly every farm, the only cash outlay is that required for cement. Cement forms only a small part of finished concrete, and this expense is relatively small.

Concrete may be mixed and placed at any season of the year (in extremely cold weather certain precautions must be observed) by yourself and your regular help.



This allows you to take advantage of dull seasons, when you would otherwise be idle. The mixing and placing is simple, and full directions are contained in the book which we will send you free.

CONCRETE is the ideal material for barns and silos. Being fire, wind and weather proof, it protects the contents perfectly.

"WHAT CAN I USE CONCRETE FOR?"

CONCRETE can be used for all kinds of improvements. By having a small supply of cement on hand you will be able to turn many an otherwise idle afternoon to good account by putting a new step

on the porch, or making a few fence posts, or repairing an old foundation wall. It is a mistake to suppose that you have to be ready for a new barn or silo to be interested in concrete. Besides, it is just as well to become familiar with the use of concrete for small jobs, for then you will be better able to handle big jobs later on.

First cost is last cost when you build concrete. Concrete improvements never need to be repaired. They are there to stay, and every dollar put into them adds several dollars to the cash value of your farm, and in many cases improvements of this everlasting material are actually cheaper in **FIRST COST** than if they were built of wood. The cost of lumber is constantly increasing, and it will not be many years before its cost will be prohibitive.

YOU should use concrete, because by so doing you can make your farm more attractive, more convenient, more profitable and more valuable.



Our mills are located all over Canada, so that no matter where you live you can get Canada Cement without paying high prices caused by long freight hauls.

"Why Should I Use Canada Cement?"

We were the first cement company to investigate the farmer's needs and to point out to the farmers of Canada how they could save money by using concrete. We conducted an exhaustive investigation into the subject, learned the difficulties they were likely to encounter, and how to overcome them, and published a book, "What the Farmer Can Do With Concrete," containing all the information that the farmer could need. We have made a special effort to give the farmer

of Canada not only the best cement that can be made, but also every possible assistance in the use of concrete. Our free Farmers' Information Bureau is at the service of every farmer in Canada. All questions concerning the use of concrete are answered at once, and the Bureau is always glad to receive suggestions from farmers who have discovered new uses for cement.

Last year we conducted a \$3,500 Cash Prize Contest, in which farmers in every Province participated. A Let it guide you to the place where the best cement is sold, in which three times as many prizes are offered, has been announced for this year.



You can easily see why a company that is devoting this much attention to the farmer's needs is in better position to give you—a farmer—a satisfactory service. Canada Cement will always give you satisfactory results. Every bag and barrel must undergo the most rigid inspection before leaving the factory.



YOU should use "CANADA" Cement because its makers offer you not only the best cement made but also careful, conscientious, personal assistance in making use of it.

This book of 108 pages, handsomely bound and illustrated with photographs, was the first and is the best work describing the farmer's uses for concrete ever published. See free offer on this page.

If you haven't received a copy of "What the Farmer Can Do With Concrete," write for it at once. It will be sent absolutely free, without obligating you in any way. Use a post card or clip out the coupon. We will also send particulars of the 1912 Cash Prize Contest. Address:

CANADA CEMENT COMPANY, Ltd.
551 Herald Building, Montreal

Please send me, free, your book: "What the Farmer Can Do With Concrete," and full particulars of the 1912 Cash Prize Contest.

My name is

Address

CANADA CEMENT COMPANY
Farmers' Information Bureau Ltd.
551 Herald Bldg. MONTREAL, Que.

FARM AND DAIRY

AND RURAL HOME

Published by the Rural Publishing Company, Limited.



FARM AND DAIRY is published every Thursday, is the official organ of the British Columbia, Eastern and Western Ontario, and Ontario, District, Dairywomen's Associations, and of the Canadian Holstein Cattle Breeders' Association.

Subscription Price. \$1.00 a year. For all countries, except Canada and Great Britain, add 50c for postage. Notices of the expiration of subscriptions are sent to all subscribers, who then continue or discontinue. No subscription is continued for more than one year after date of expiration. A year's subscription free for a club of two new subscribers.

Remittance should be made by the Post Office Money Order, or Registered Letter. Postage stamps accepted for amounts less than \$1.00. No checks add 20c extra for exchange fee required at the bank.

CHANGE OF ADDRESS.—When a change of address is ordered, both the old and new addresses must be given.

ADVERTISING RATES quoted on application. Copy received up to the Friday preceding the following Monday.

WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical contributions.

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 14,728. The actual circulation of each issue, including copies of the paper sent subscribers free, but slightly in arrears, and sample copies, varies from 15,675 to 17,200. No subscription rates are accepted at less than the full subscription rates.

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

OUR ADVERTISERS

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 our readers are not swayed by unscrupulous advertisers. Should any advertiser herein dishonestly wish to injure a subscriber, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that the facts by which it is stated. It is a condition of this contract that in writing to advertisers you should state your advertisement in Farm and Dairy.

Rogues shall 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.

FARM AND DAIRY

PETERBORO, ONT.

THE CANADIAN NATIONAL

The directors of the Canadian National Exhibition have at last come to recognize that their fair is losing prestige as a live stock exhibition. The stock end of the fair has been losing ground for several years, and in the fair this year a marked falling off was noticed in every department of the live stock exhibit, except in one breed of horses. Had the directors always been as much concerned about the progress of the live stock end of their fair as they now seem to be, this falling off might not have occurred. The erection of a suitable judging arena and a more up-to-date cattle stable along with greater inducements in the prize list are factors that, by their immediate adoption, will serve to check this retrogression in the live stock exhibits and maintain the reputation of the Canadian National as one of the greatest annual live stock exhibitions on the continent.

The stock end, however, is not the only end that has been neglected. Indifference that has been characteristic of the attitude of the management towards the live stock exhibits has also been characteristic of their attitude towards other agricultural exhibits. Dairywomen have good cause to complain in regard to the management of their end of the Canadian National. The arrangements for dairy exhibits are anything but satisfactory. The cream separator exhibits, which should have a prominent place in the grand stand, are found under the grand stand. The dairy building itself is not well planned to show to advantage the few exhibits that are there. To make matters worse a good part of the available space is sold each year to one of the city dairies for an ice-cream booth.

It is time that those directors on the board of the Canadian National Exhibition who are supposed to make the agricultural end their chief concern should wake up and impress on their colleagues on the board the absolute necessity of giving more attention to the agricultural features of the fair. Otherwise the fair is bound to lose in rural patronage and in its status as an agricultural exhibition.

A MATTER OF HEALTH

Anyone in his right mind would not deliberately go into a room, close the door and the windows, open a bottle, and proceed to distribute poisonous germs and gasses around the room, and then lie down and go to sleep in that foul atmosphere. But that is what many of us do every night in the winter when we sleep in bed chambers with the windows closed. This may seem to be a strong statement; but it is none too strong. When we breathe we are taking out of the air the oxygen that is conducive to health and releasing from our bodies carbon dioxide, a suffocating gas, and minute portions of organic matter which float in the atmosphere and are in many cases extremely poisonous. When the room becomes "close," it is an indication that the oxygen of the atmosphere is partially exhausted, and that in its place we are breathing carbon dioxide and inhaling along with the carbon dioxide poisonous substances. This "close" condition of the atmosphere is characteristic of bed chambers where the windows have been tightly closed.

It may be objected that it costs more to keep a house warm when the bedroom windows are raised at night. So also do fresh eggs cost more than stale eggs and good butter more than stale eggs and good butter; but we are willing to pay the higher price every time. The extra cost of heating the house where the windows are raised in the night will be more than returned to us in the better health that we will enjoy, and in the greater enjoyment that we will derive from the rest of the night, and in our increased efficiency for the work of the day.

Many of us who hitherto have slept with closed windows can add 10 years to our lives by hereafter sleeping in

a pure, fresh atmosphere. We will not add these years to the end of our lives but right in the centre where they will do us the most good.

We farmers lay great stress on the ventilation of our stables. How much more important is the ventilation of our bed chambers?

ADAPTATION TO ENVIRONMENT

City folks sometimes seem inclined to think that we farmers are slow, that it takes a long time for a new idea to percolate into our grey matter, and longer still for it to take form in action. When the farmer lived unto himself, had no other access to the news of the day, than the exchange of local gossip, and had no up-to-date agricultural papers to inform him of all that was newest and best in connection with his occupation, there may have been some grounds for this view of the farmer. But what was true at one time is not true now. The farmer is adapting himself to changing conditions quite as readily as is his brother in the city.

In no way is this spirit of progressive adaptation to environment more evident than in the adoption of labor-saving machinery. One of the newest machines on the market, the mechanical milker, is finding favor with our dairy farmers to a truly remarkable degree. We were recently conversing with an agent who handles a milking machine advertised in Farm and Dairy, and he informed us that he had placed orders for sixty milker outfits in Oxford county alone, that their plant is being run beyond capacity, and that orders are stacking up, and that surely is splendid testimony to the progressive spirit that characterizes the present day dairy farmer. And this spirit we must develop if we would hold our occupation of dairying on an equal footing with all other occupations, urban and rural.

TRUE ECONOMY

Economy is a much lauded virtue, and properly so. Sometimes, however, we get mixed in our ideas as to what economy really is. There is that kind of economy that tends to poverty and explains, in large measure, why many men spend their whole lifetime on a good farm and end up just where they began.

We were recently conversing with a young farmer who had these mixed ideas of economy. He was young, energetic, and ambitious to get along in the world. He told us that he intended to be just as thrifty and economical as he could. As we talked further with our friend, we found that his farm, though free of debt, was very much understocked and the stock that he had was of a very poor quality. His money crops were wheat, barley, and oats, which were sold to the grain dealer. We asked him how long he expected his farm to hold out under such a system of farming. He replied that he realized that grain farming was hard on the land, but then he did not have the money to buy more or better stock. He explained that by saving carefully for a few years he expected that he would be

OUR GUARANTEE:

WE GUARANTEE that every advertiser in this issue of Farm and Dairy is able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because our readers are not swayed by unscrupulous advertisers. Should any advertiser herein dishonestly wish to injure a subscriber, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of this contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy."

Rogues shall 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.

able to strengthen his live stock department.

What our friend might profitably do would be to borrow money, take out a mortgage against his farm if necessary, and get a goodly number of good cattle on that farm of his. We venture to say that the money he has invested in his land is not returning him bank interest. He could borrow money readily for six per cent. Good dairy cows properly handled would return a good big profit for the cost of feed and the natural increase of the herd would be more than sufficient to meet the interest on the money invested. And his farm would be improving all the time. But borrowing money, according to this farmer's light, was not economical.

Not very far from this man lived another "economical" farmer. He, too, told us that his farm was clear of debt and that as soon as he could save enough money he was going to put up a silo. We asked him how long he thought that would be and he replied that it might be three years before he could have the concrete silo he desired. Money invested in a silo will pay back both principle and interest in a comparatively few years. Did this farmer borrow the money necessary and build his silo the advantages that he would reap from feeding ensilage would have the silo paid for before he will get started at it, working on his present idea of economy.

Economy is a virtue if we have the right definition of economy. We would say that the economical farmer is the one who is making the very best of his opportunities and has his money invested where it will bring the best returns.

Not Justifiable

Nearly 25 years ago a Canadian bought a property for \$400, which gave him the right to develop power for factory purposes. He has now developed an immense power in all the intervening time, and now he worth \$150,000, and even at that figure declares that he will only give a lease, as he will not sell outright at all figures.

He is clearly within his legal rights; but are such legal rights justifiable? There is an ever-increasing conviction in the public mind that such increases in value belong to the community and not to the individual—Christian Guardian.

Farmers' not prosper was faced delegates to the Farmers' Clubs is Wednesday Institute would more recent Clubs and is

Have you meetings of running in Messrs. Al Brokers, or There is advertisement

These ads could wish defective type could be in work.

But they carry They pulsate real salesmen

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FARMERS' INSTITUTES AND FARMERS' CLUBS HOLD JOINT CONVENTION

Farmers' Institutes in Ontario are not prospering as of yore. This fact was faced squarely and frankly by delegates to the joint convention of the Farmers' Institutes and the Farmers' Clubs in Toronto on Tuesday and Wednesday of last week. Farmers' Institute workers, delegates from the more recently organized Farmers' Clubs and the district representatives,

a total of almost 200, were present to give their views, and discuss methods to revive the interest in agricultural educational work.

In his report on Institute work, Superintendent Putnam made mention of the great work that has been done by the Farmers' Institute. Much of the improvement in the dairy herds of Ontario, in the raising of chickens in the crops grown, and in the introduction of such special crops as alfalfa, he claimed, was due to the good work of the Farmers' Institute. But there is yet much work to be done. Mr. Putnam did not consider that agriculture in Ontario is yet on a high plane. But the Farmers' Institute, as at present constituted, cannot do the work that is to be done. Attendance at the meetings and membership have both fallen off. Local speakers do not assist as they once did. Finances are not on a healthy condition. The lack of suitable farm help, and the migration of the young people to the cities, were given as explanations of this lack of interest. The solution of these problems, indicated by Mr. Putnam was cooperation between the Farmers' Club and the Farmers' Institute. With this conclusion the attending delegates concurred.

Mr. C. F. Bailey, Assistant-Deputy Minister of Agriculture, proposed to the migration of the young folks to the city by increasing the attractiveness of country life. This he proposed to do by holding fall fairs in connection with every rural school in Ontario. At these fairs the boys and girls will show crops of their own growing, stock of their own raising, needle work, and so forth. The scheme has already been tried out at several schools, and with most marked success. At Newmarket, for instance, the children had more grain and vegetables at their fair than were exhibited at the regular fair.

At the evening session on Tuesday, the Farmers' Club movement was under discussion and the benefit of these clubs was told in a most telling manner by Mr. Frank Hart, the District Representative of Waterloo county, who may be termed the "Father of the Farmers' Club movement in Ontario." Briefly, its benefits, as enumerated by Mr. Hart, are: The Club is a local organization, managed by local men, and as it depends altogether on its own members for support, it develops the ability of its members to help themselves. In the education of the past, production has always received first attention. The spirit of the Club movement leads to cooperation, and in this way country farmers are already working together on their marketing problems. But the real value of the Farmers' Club movement in Mr. Hart's eyes, cannot be measured in dollars and cents. His most earnest wish is that the Clubs may be of value from a social standpoint. "I believe," said he, "that many boys and girls have been literally starved into the towns, The barn raising, the logging bee, the quilting bee, and such old time entertainments have passed away. The Farmers' Club offers a high type of social life to the community. A man's social life is certain to be broadened when through the Club he becomes acquainted with 50 or more families of his own community."

The natural sequel to the formation of local Clubs is a central organization to deal with county problems. This stage has already been reached in Waterloo county.

SUPPLY FARMERS WITH MEN
Mr. H. C. Duff, of Grey county, told of the work that the Clubs in his county are doing to supply their members with hired men. During the past summer many old country immigrants had been placed on Grey

county farms, and the immigration department have expressed their appreciation of the assistance rendered. In this county, as in Waterloo, they have a central organization. The board of six members is made responsible for the starting of new clubs in the territory of each respective member. No effort is made to force the Club on the people. The farmers of a section must first ask for a Club. When formed in this way there is little danger of its failure. Mr. Duff told of one prosperous Club of 125 members in one of the poorest sections of the county. At the first meeting they had a good address and a dance. Mr. Duff did not advocate dawdling for Farmers' Clubs, but he pointed out that in this way the Club was catering to the demands of the people, giving them good information along with amusement, and thus doing something to make those young people contented with their country homes. Another line of work that Grey county clubs are working on is to have the prize land at the fall fairs re-arranged so that larger prizes will be given for those varieties of each crop that are best suited to the county.

MONEY MATTERS GREAT INTEREST.
"Cooperative Poultry Circles," was the subject of an address by J. H. Hare, B.S.A., who told of the work that they were doing in connection with the poultry marketing problem in Ontario. "There are many farm clubs," said Mr. Hare, "are one-sided in their operations. They are too purely of an educational nature. If connected with some business interest and showing the members how they can be more active." Mr. Hare did not think that a better line of work could be taken up by clubs than in connection with poultry. He advised District Representatives who wished to take up this line of work, to start in a community where there would be the least difficulty. He himself first approached individual farmers on the subject; then a meeting was called and officers elected. Mr. Hare laid much stress on the importance of securing a good manager. "If you can't get such a manager," said he, "you had better give up at once." In Ontario Co. there are now seven organizations, varying in size from 30 to 195 members each, who last year sold eggs to the value of \$30,806. In summer, egg circle members received one to three cents a dozen more than prevailing prices, and in winter from four to 12 cents.

Professor W. R. Graham emphasized the necessity of having all farm products not only of high quality, but of uniform quality. To secure this uniformity, and the extra price that the superior article should get, cooperation in selling is essential, and Prof. Graham told the audience of the things that cooperation was doing for the farmers of Great Britain and Denmark as seen by him when on a trip to Europe this summer. The speaker stated it as his belief that no country in the world is as admirably adapted to poultry husbandry as Canada, and that if the people in the older countries can make a profit out of poultry our returns should be much larger still. A fuller report of the address will be given in a later issue of Farm and Dairy.

CLUB MEMBERS TESTIFY.
Three practical farmers, Mr. Pardue of Grey county, Mr. Wm. Manson of Waterloo county, and Mr. F. A. Emberson of Muskoka, told of the success that the Farmers' Club movement is meeting with in their respective counties, and of the good work accomplished. Mr. Manson made particular reference to a telephone company that has been organized and to a freight siding that they induced the C. P. R. to lay for them. The information (Concluded on page 17)

AD. TALK
LIV.

Have you noticed the advertisements of cotton seed meal now running in Farm and Dairy for Messrs. ALLEN & SIRETT, Feed Brokers, of Toronto, Ont.?

There is something about these advertisements worth studying.

These ads. are not all that one could wish for in the way of effective typographical display. They could be improved with some art work.

But, they are strong in that they carry a very real message. They pulsate with the breath of real salesmanship.

They are built on a rock foundation of service. An air of sterling Honesty pervades them.

Notice if you will how they are designed to ATTRACT ATTENTION. The cut of the package, and again of the Brand, catch the eye. The headlines are well chosen; these lead you into the text and awaken your interest.

If you have cattle to feed, or other stock, and know the value of Protein—that element which makes milk and builds flesh—then you are by these ads. INTERESTED, CONVINCED and soon STIRRED TO ACTION.

These ads. of Messrs. ALLEN & SIRETT would be better of more space. They are much too cramped. They contain too much copy for the space allowed; hence they are not as easily read as they might be.

But notwithstanding these handicaps these ads. are PULLING THE BUSINESS! After the very first insertion had gotten in by a part of its work Farm and Dairy's "Hired Man" on calling on these men in Toronto last week was greeted with: "Man, you have A GREAT PAPER!"

Enquiries to hand gave promise of much good business,—enough in fact to carry the ads. for many weeks on the profits accruing.

For these results, so rapid and so satisfactory, we must thank in a measure the commodity advertised. It can be used to advantage by Our People, the Dairy farmers. We must thank the real sales stuff in the text of the ads. Then due credit must be given THE GREAT CONFIDENCE OUR READERS HAVE IN FARM AND DAIRY ADVERTISEMENTS.

They know that an ad. in Farm and Dairy must be O. K. in every way else it would not be in Farm and Dairy,—

"A Paper Farmers Swear By!"

DE LAIVAI
CREAM
SEPARATORS

USED EXCLUSIVELY BY
98% OF THE WORLD'S
CREAMERIES.

The only separator that is good enough for the creamery equally the best cream separator for the farmer to buy.

De Laivai Dairy Supply Co., Ltd.
Montreal Winnipeg

NEWVERMIFUGE

The best and most effective remedy for bots and other worms in horses. (Guaranteed by the Farmers' Home Remedy Co., under the Pure Food and Drugs Act, June 30, 1906, Serial No. 31571.) It is guaranteed to kill and bring from the body dead in from 12 to 24 hours all pin worms and bots.

It is absolutely harmless and can be given to mares in foal before the eighth month. Practical horse owners have written us Newvermifuge has removed between 500 and 600 bots and worms from a single horse. An animal whose stomach is full of worms cannot get fat or keep healthy. Send your order to-day. Beware of imitations. Capsules, \$1.25; 12 capsules, \$1.00. Farmers' Home Remedy Co., Dept. A.S., 272 - 7th St., Milwaukee, Wisconsin.

CALVES RAISE THEM WITHOUT MILK
Booklet Free.
Steel, Briggs Seed Co., Ltd., Toronto, Ont.

GET THE BEST! IT PAYS!
ELLIOTT
Business College

Cor. Yonge and Alexander Sts. TORONTO, Ont.
Is well known as the right place for superior business and shorthand education. Positions worth \$100 and \$150 regularly filled by us.
Write for Catalogue.

MAIL CONTRACT

SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa until Noon, on Friday, the 27th December, 1912, for the conveyance of His Majesty's Mails on a proposed Contract for four years, six times per week, over Rural Mail Route No. 3 from Peterboro (Ontario), to commence at the Postmaster General's pleasure.

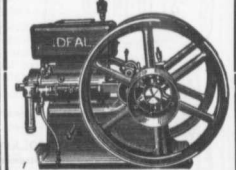
Printed notice containing further information as to conditions of proposed Contract, may be seen and blank forms of Tenders may be obtained at the Post Office of Peterboro and at the Post Office of the Post Office Inspector at Kingston.

G. C. ANDERSON,
Superintendent.

Post Office Department,
Mail Service Branch,
Ottawa, December 19, 1912.

GASOLINE ENGINES

14 to 80 H. P.
Stationary Mounted and Tractor



WINDMILLS
Grain Elevators, Water Boxes, Steel Saw Frames, Pumps, Tanks, Etc.
GOOLD, SHAPLEY & MUIR CO., LTD
Brantford Winnipeg Calgary

Gains \$27 More For You In A Year



MANY cream separators do not skim closer than .10 per cent. In other words they lose 1 lb. or more of butter fat in every 1,000 pounds of milk skimmed. Now, the

Standard

cream separator skims to .01. It loses but 1 lb. of butter fat in 10,000 pounds of milk skimmed. This difference in skimming may not look very large on paper. But at the end of the year it amounts to \$27 with a herd of 30 cows. Just think of it! Every year the STANDARD will make \$27 more for you than will the ordinary cream separator. The amount of this gain is not guessed at by us. We have the figures to show you, the correctness of which are certified by one of Canada's leading dairy experts. You may have to pay a little more for the STANDARD than for other machines, but the STANDARD will soon make up the difference by its closer skimming. Its records at dairy schools and agricultural colleges show that it is indeed a remarkable separator—a separator that is affected very little by adverse conditions, and therefore especially suitable for Canadian requirements.

Free Booklet
Write for it. It shows tests of the Standard under various conditions, and gives the figures referred to above proving the Standard's gain over others to be \$27.00 per year. Also get catalogue explaining construction of the standard in detail.

The Renrew Machinery Co., Limited

Head Office and Works, Renrew, Ont.
Sales Branches—Winnipeg, Man., Sussex, N.B.

14

YOUNG MEN WANTED to learn VETERINARY profession. Catalogues free. Grand Rapids Veterinary College, Dep. 16, Grand Rapids, Mich.

CREAM WANTED.

We furnish free cans and pay express charges. Our cheques are issued every fifteen days and are cashed at par anywhere. If you live in Ontario and milk cows you will not ship your cream to the best market? Write for fuller particulars.

TORONTO CREAMERY CO., LIMITED, TORONTO, ONT.

WANTED

Cheese Makers and Dairymen to sell our specialties in high-grade Nursery Stock during the Fall and Winter months. High cost commission paid. Exclusive territory reserved. Big demand for fruit trees spring planting. Start now at the right moment. For particulars, write

STONE & WELLINGTON
The Fonthill Nurseries, Toronto

Creamery Department

Butter makers are invited to send contributions to this department, to ask questions on matters relating to making and to suggest subjects for discussion. Address letters to Creamery Department.

A Big Paying Investment

A good cream separator is one of the best paying investments on any farm where three or more cows are kept. If you have been skimming your milk from pans, cans or crocks, you will be surprised to find how much more, fine, smooth, rich cream you can get by using a hand separator. In the cold winter months, while the milk yield is smaller, the butter fat is the more valuable and harder to separate from the skim milk than it is in the summer. For these reasons you really need a separator as much, if not more, in winter than in summer, and between this time and next spring the extra cream you will save goes a long way toward paying for the best separator you can buy.

Then think of having the fresh, warm skim milk to feed the growing pigs, calves and chickens. When you add a handful of oil meal to take the place of the butter fat which has been removed, warm skim milk from the separator makes an ideal winter feed. The woman will appreciate the separator when the cold days come. The skimming can be done so much easier, and the separator washed in less than half the time. It comes to gather the cream in the old way. And the creamery man likes separator cream.

The Way We Tend Today

The agitation for purer foods and more cleanly methods of living generally, has already reached the creamery, and the demand for purer, less extent it has reached the creamery man. The next step is to carry the gospel of cleanliness, and, if necessary, restriction, to the dairy home of the producer. Discussing the tendency of the times in the dairy world, "Chicago Dairy Produce" speaks the following words of wisdom:

"There is one thing that can be set down as an absolute certainty and that is that the time is not far distant when no poor or undergrade cream will be received at our creameries; and this state of affairs is just as sure to come as that the sun rises and sets.

"It is contrary to all business and economic principles to produce an inferior food product of any kind. Think of the utter absurdity of a farmer raising a cow from a calf at an expense of from \$20 to \$30, then milk that cow for six months, and besides the expense of barns and milk and cream utensils, and produce a product of an inferior nature that will only sell at a price several cents below the market value it should have and this because some one somewhere through ignorance or neglect, failed to give the raw material the proper care and attention.

WISDOM FOR IMPROVEMENT

"It is hard to conceive of a more wasteful and unbusinesslike procedure than this; and it is even worse when we come to consider that during certain seasons of the year the majority of the butter coming to our markets is of this character. The facts are that the producers in this great country are not having done for their ways in many respects, and the self-knowledge of these facts is what is going to force them to produce nothing in the way of milk or cream excepting that which will furnish a fine finished product.

"Another great reason for this coming changed condition, and it may

be the main reason, is the growing demand for better sanitation in all of the manufacturing of our food products, and especially butter; or in other words, the continually growing demand for more healthful products. There is to-day a sweeping demand over all this country for a better quality of milk. It is not a demand for a richer milk or for any particular kind of milk excepting a pure clean, sanitary and consequently healthful milk.

THE CONSUMER WILL WIN

"The demand is insistent and will accept no compromise. The consumer stands on his rights in this matter, and he, in the end, will win out. This is only the preliminary struggle and will extend to the butter product as soon as the fight for a perfect milk supply is won.

Take, for instance, the changed feeling on the part of the consuming public towards the common house fly. A few years ago, and a very long time, indeed, the fly, while regarded as a nuisance, was not thought of in the light of its dangerous nature; but to-day it has almost, if not quite, become a pest. It is now to fly in the milk, cream or butter at any stage of its manufacture.

"These are the trend of events that lead us to say that the time is

A Friend We Appreciate

The people in this community as well as myself consider Farm and Dairy a valuable periodical and a liberal education for the money. I can assure you that I will encourage my best endeavours to extend Farm and Dairy amongst my patrons. — H. J. Gardner, Van Winkle, B.C.

not far distant when nothing but a pure, wholesome and sanitary product in the shape of milk, cream or butter, will be brought to our creameries, or offered to the consumer. It is a cry that does not produce this may not be allowed to run."

Salt and Moisture Retained by Butter

Prof. H. H. Dean, O. A. C., Guelph
In order to ascertain the effects of having the butter in different sized granules at the time of adding the salt, and also to note the effects of different methods of working and draining on the percentage of moisture and salt retained by the finished butter, 17 experiments were made as follows:

RESULTS OF EXPERIMENTS

1. The butter churned to the size of wheat and corn granules retained more moisture and less salt, as compared with similar butters churned to the size of apples.
2. Salt applied in wet form, (two pounds of water to five pounds of salt) caused a higher percentage of both moisture and salt to be retained in the finished butter.
3. In the case of a churning of 25 lbs. butter, 100 lbs. of which was removed from a large churn to a smaller one, salted at the rate of five per cent., and worked at once, the finished butter contained 13 per cent. moisture and 4.2 per cent. salt. A lot of 100 lbs. removed after draining for three quarters of an hour, then salted and worked, contained more moisture, and practically the same percentage of salt as in the previous lot. The remaining 90 lbs., after draining for one hour, then salted and worked, contained practically the same percentage of moisture as did the first lot, but had nearly one per cent. less salt. These results are somewhat contradictory. Further tests are needed before drawing conclusions.—O. A. C. Report.

Cheese

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

Effects of

These experiments were made to determine the effects of the various parts of the cheese on the quality of the milk. The results show that the cheese made from the best milk was of the highest quality.

During the month of April, 1912, the A's made 17 per cent. fat and 2.24 per cent. casein. The B's made 16 per cent. fat and 2.14 per cent. casein. The C's made 15 per cent. fat and 2.04 per cent. casein. The D's made 14 per cent. fat and 1.94 per cent. casein.

The milk was aged for 177 days, milled with salt, and then pressed. The A's and B's were made from the best milk, and the C's and D's were made from the poorest milk. The results show that the cheese made from the best milk was of the highest quality.

The A's were made from the best milk, and the B's were made from the second best milk. The C's were made from the third best milk, and the D's were made from the poorest milk. The results show that the cheese made from the best milk was of the highest quality.

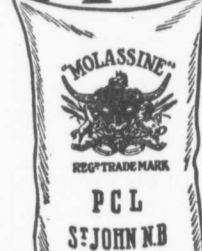
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MOLASSINE MEAL



Watch a horse when he is eating his oats—note how he slobbers—bolts a lot—and spills a lot—also a large proportion is undigested.

Take a couple of handfuls of MOLASSINE MEAL and mix with the oats at the next feeding time—reducing the odds by the amount of MOLASSINE MEAL added—then watch him eat—note how he masticates each mouthful and with what evident enjoyment.

Every particle of nutriment is obtained from all its feed—that's why it will cost you less for feed and you get better work out of your horses, if you feed them regularly with Genuine MOLASSINE MEAL (Made in England).

Prevents colic and eradicates worms.
Get the genuine made in England. Ask your dealer, or write us direct for full information.

THE MOLASSINE CO., LTD., LONDON, ENGLAND
Distributors for Canada—L. C. PRIME CO., LIMITED
St. John, N.B. 402 Board of Trade Bldg., Montreal. Pacific Bldg., Toronto



Cheese Department

Makers are invited to send contributions to this department, to questions on matters relating to cheese making and to suggest subjects for discussion. Address letters to The Cheese Maker's Department.

Effects of Acids at Dipping

Prof. H. H. Dean, O. A. C., Guelph. These experiments are a continuation of the work done last year, in which we found a greater yield of cheese by "dipping" the curds sweeter; also less loss of fat in the whey, but the quality of the cheese did not seem to be affected very much by the range of acid as used in the tests.

During the season from April 18th to April 23rd, 1911, eleven experiments were made relating to this question, for which were used 13,884 lbs. milk testing an average of 3.59 per cent. fat and 2.24 per cent. casein. One lot designated A, was dipped with an average of .177 per cent. acid; curds were milled with .697 per cent. acid and salted with .976 per cent. acid for the A lots and .962 per cent. as the average for the B lots. The average percentage of fat in the whey from the A lots was .15; from the B lots .18. So far as we could tell by making tests of the whey there did not appear to be much difference in the losses of casein in the whey, although the Hart Casein test is not very satisfactory for ascertaining losses of casein in whey.

The total weight of cheese, one month old, from the A lots dipped with the higher acid, was 629.82 lbs., while the B lots weighed 632.76 lbs., a difference on 6,942 lbs. milk of 2.9 lbs. more cheese in favor of dipping comparatively sweeter. The percentage of shrinkage in one month was 2.5 for the A lots and 2.2 for the B lots.

The following table brings out some of the main points in the experiments.

	Lbs. cheese per 1,000 lbs. milk
A. (High acid at dipping)	90.72
B. (Low acid at dipping)	91.14

Lbs. milk to make 1 lb. cheese.	Percentage of moisture in		Green cheese.	Curd	Even cheese.	1 mo. old.
	Close.	Even.				
A. 11.02	49.16	35.01	34.83			
B. 10.39	49.46	35.18	35.36			

Averaging the scores of the cheese in there was not that difference in quality which might have been expected.

Flavor.	Close.		Color.	Texture.	Total.
	(15)	(10)			
A. 36.95	14.15	14.050	36.775	91.025	
B. 36.10	14.15	14.176	17.087	91.513	

CONCLUSION

1. The difference in the yield of cheese per 1,000 lbs. milk was not so great as last year, which was 733 lbs., while this year it was but 42 lbs. Both years' results emphasize the need of dipping with less than .2 per cent. acid, in order to have "a good average," or to reduce the number of pounds of milk required to make one pound of cheese.

2. The percentages of fat and casein in the whey were slightly greater from the higher acid lots, but the difference was not very great. However, the tests commonly used for determining the losses of fat and casein in whey are not altogether satisfactory, and it is well not to lay too much stress on this point.

3. As was the case last year, the cheese made from the curds dipped comparatively "sweeter" were slightly better in quality, but the difference was not very marked. Both years the difference was represented by a total score of less than half a point in 100. In both years' results indicate a slightly higher moisture content in

the curd and cheese from the lots dipped with less acid, indicating that the development of acid tends to expel moisture which corresponds with practical experience on this point, as it is generally conceded that high acid at dipping tends to produce "bony" cheese.

Farmers' Institute and Farmers' Clubs Hold Joint Convention

(Continued from page 15)

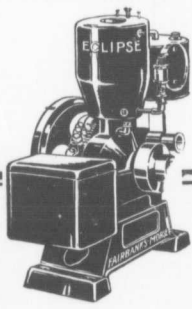
ence that the Farmers' Club may field was well illustrated by Mr. Purdus, when he told of how their club of 61 members had secured a continuation school in Chatsworth thus enabling them to keep their children at home when they reached high school age. At present they are endeavor-

ing to secure a traction ditcher. Hon. J. S. Duff, Minister of Agriculture, who attended one of the sessions, made particular mention of certain attacks that had been made on farmers as being responsible for the high cost of living. Mr. Duff drew the applause of the audience by remarking that if farmers were getting rich so fast, it might be well for their critics to take up farming also and get their share of the "haul." The rest of the sessions was devoted to discussing Institute finances and ways and means of increasing the usefulness of the organization.

MR. HANNA ON COOPERATION. On Wednesday there was a joint meeting of the various societies convened in Toronto, at which Hon. Mr. Hanna placed the question of cooperative marketing before the delegates

as concisely as anyone could desire. Lambton county, he said, produced 50,000 barrels of apples this year. Thirty-five thousand barrels went to market; 15,000 barrels went to waste. The first were marketed through cooperative associations. The second the growers attempted to market themselves. One small association did not sell a barrel of apples for less than \$3. Apple growers, not in the associations, either failed to sell at all or accepted as low as 50 cents a barrel for their fruit. Such is the benefit that the fruit grower and the farmer may reap by cooperative effort.

Five dollars, ten, or even one hundred are not here or there when it comes to retaining a good maker at a factory.—R. W. Ward, Dairy Instructor, Peterboro Co. Ont.



This Fairbanks-Morse Farm Engine Free—

to the farmer who suggests the greatest number of practical uses for it on his farm—or any other farm.

IT will pump water, saw wood, make electricity, grind feed, cut ensilage, shell corn, pull stumps, run a churn and separator and washing machine and operate a spray-pump.

What else will it do? The engine is offered as a prize for the most complete answer.

This contest is open to every farmer in Canada. You do not have to own an engine, or to buy anything from us, to enter it. There is no entry fee or other condition. All you have to do is to tell us what you could do with the engine if you had it on your farm. We're writing a book—"Uses For a Farm Engine."

Its purpose is to show how our engines can be used to save labor and increase profits. We will do this by describing as many practical uses as possible. We know already of many different uses for the engine, but we feel sure that you can tell us of others. So we're asking you to help us get information for the book.

We'll give this engine to the farmer who gives us the greatest number of practical suggestions.

Mr. C. B. Alardyce, Editor of "The Family Herald and Weekly Star," will act as judge and award the prize.

Now think what you would do with the engine if you had it on your farm. Think of every possible way in which you could use it to do work that now takes the time of expensive hired help. Think how it could make your wife's work easier. Then sit down and write us.

We have listed above, some of the uses we know about. You ought to be able to think of many others. As soon as all replies to this advertisement are received, we'll go ahead with the book, and will send one of the first

copies to every farmer who enters the contest. Your answer must be mailed not later than Dec. 15, when the contest closes. The engine will be shipped to the winner as soon as possible thereafter, so that he will have it in time to use all winter.

Do not bother about the form of your answer—we want ideas, and practical suggestions, not pretty writing. When your letter is written, cut out the number 1 seal in the corner of this advertisement and pin it to your answer.

Address—Farm Engine Booklet Editor

The Canadian Fairbanks-Morse Co., Limited

444 ST. JAMES STREET, MONTREAL

Remember the Contest Closes December Fifteenth





THE fountain of beauty is the heart, and every generous thought illustrates the walls of your chamber.—Smiles.

Women's Institute Convention, the Biggest, Brightest and Best Ever

TO MAKE brighter the everyday life of the homemaker? Such is the object of the Women's Institute of Ontario, as defined by Mrs. L. C. Burns, who presided at the eleventh annual convention held in Toronto last week.

The institute work, since mere cooking lessons and exchange of recipes makes it its object to advance the interests of our country, and make our homes the best places on earth. The most profitable features of the work, said Mrs. Burns, are its mutual helpfulness, its exchange of ideas, and the pleasant, social and ready and willing spirit to do neighborly service that it inculcates.

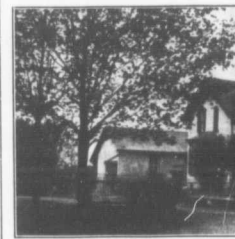
Mrs. Torrington, of Toronto, gave the delegates a hearty welcome, creating a homelike atmosphere. Mrs. Torrington suggested that important work for the institute to undertake would be the care of the feeble-minded, stopping the circulation of obscene post cards and objectionable literature, and the formation of local councils where there is none. Surely the speaker thought, was admirably suited to the institute. Woman was in the past, and is now, the greatest factor for good, providing she has been trained to use her influence, and trained not only in domestic service, but also in mind, soul and body.

Miss M. V. Powell, of Whitby, replied to the address of welcome, taking as her keynote, the forward movement of the work of the institute. At the outset the institute workers had doubts as to its success, but not today. Woman's interest has been too long confined to the home, with its cramped effect. Today woman's interests and scope are growing wider, and naturally this is as it should be. Miss Powell thought that the women should take an interest in politics, whether they wanted the franchise or not. Our lives are but a reflex of the home atmosphere. It is, therefore, necessary that the women be ideal, for it is the responsibility of the home-makers of Ontario to mould the great minds and noble characters of the future.

THE SUPERINTENDENT'S REPORT

In his annual report, Superintendent George A. Putnam outlined the work of the institute and its branches and told of the progress that has been made. He said that in the country, girls' surroundings must be bright, interesting and helpful. More wholesome amusements, profitable entertainments, libraries, cheap amusements, good roads and up-to-date improvements all around, will accomplish this. The farm must be modern if it is going to interest the younger generation. He emphasized that the practical must be given first, that the practical if the women are to be successful; dietetics and hygiene are more valuable to a mother of a growing family than musical accomplish-

ments. If we have the practical, it is bound to bring greater efficiency, which means greater prosperity along all lines. Mr. Putnam didn't know of any other organization in which there is more liberal, broad-mindedness and charity than in the Women's institute, and advised the women not to engage in local gossip, as



Evergreens Around the Home are Appreciated in the Winter Months

The brighter colored and more showy leaves of the broad-leaved trees may be more attractive than the pine and spruce while warm weather lasts. But with winter comes a new appreciation of the latter. They stay right with us through the months of cold and snow, affording protection from wintry blasts and giving to the farm home a comfortable, cozy appearance. Notice this effect in connection with the home of P. D. Eide, Oxford Co., Ont., here illustrated.

—Photo by an editor of Farm and Dairy.

it had a degrading effect. Speaking of the work done, he quoted the demonstration lecture courses on cooking, sewing and home nursing, and the information that has been spread regarding labor-saving devices for the home. Travelling libraries and school gardens have been a great success, and the institute had proved an effective medium of publicity on such matters as tuberculosis, neglected and dependent children, health problems and social reform.

Others who took part in the morning program were Mrs. Watts, the visiting delegate from Vancouver, and a number of representatives of different branches who reported on the work of their branch for the past year. These reports were very encouraging, and showed the wonderful progress which has been made in the work since the initiation of the institute. The morning session closed with an explanation by Mr. Case of the Hydro-Electric Commission, of the use of electric household appliances.

At the afternoon session, Miss A. Hutton, of Parkhill, gave a report of the Child Welfare Committee, and introduced the following resolution, which was carried: "That the Legislature be memorialized to provide institutions for the care of the feeble-minded in Ontario, and that the municipalities of the Province be required to pay for the maintenance of their wards up to the age of 21 years, if necessary, after which they shall become wards of the Government."

Dr. A. Backus, of Aylmer, Ont., then gave an excellent address in her own bright way on the physical development of the child, starting at the very commencement with the health of its parents, and of its parents' parents, and explaining its needs at different stages of growth. After the necessity of being born right, came the necessity of being fed properly, that is, by nature's method, the need of exercise even for the young babe, who should be allowed freedom to kick and move about, and learn early the need of plenty of sunshine, light and an abundance of good, pure, fresh air. She went on and pointed out the defects of the majority of the present day schools, and the injury which they are doing to the growing child. The mothers were advised to educate their girls in household science and in the proper care of children, so that girls would not be allowed to enter the greatest of professions—motherhood—knowing nothing about the profession and how vitally important it is.

Chancellor A. L. McCrimmon, of McMaster University, traced the mental development of the child. Nothing, he said, can be added to the mind of a child but the mind must be trained. He showed how the de-

velopment of the mind of a child is a gradual process right from the cradle. One way in which the mind can be developed perfectly is by getting the child to get clear and perfect observations of ordinary facts in life. It is absolutely necessary to get the child to express his perceptions of things, either in drawing, writing or orally. In doing this we are building the mental as well.

At the close of the afternoon session a number of the mothers present were invited to go up to the University to tea, after which there was an interesting and informal talk. Two or three suggestions were made along the line of providing suitable recreation for the country mothers. One institute referred to has secured a cottage down at the lake shore, which will be furnished by the women jointly. A matron will be hired to look after the cottage. This will enable three or four of the ladies to go away together and enjoy their holidays, to obtain a good rest from their household duties. A rest such as this is what more farm women need.

MAKE 30,000 THE STANDARD

In the closing reports of the district and branch associations were presented, after which Mr. Putnam urged the members present to make as their aim for 1913 a membership of 30,000. Mr. J. J. Kelso, of Toronto, spoke on "Neglected and Dependent Children," his address taking the

A Reward of Merit

A pleasing incident in connection with the joint meeting of the various agricultural societies concerned, took place last week, was the presentation to G. A. Putnam, Superintendent of Farmers' and Women's Institutes in Ontario, of a handsome gold watch and fob, by Mr. Anson Groh and Mr. Gros. Two Institute workers, made the presentation. Mr. Putnam has rendered 28 years of agricultural education in Ontario, and well merits the appreciation and esteem in which he is held by his fellow Institute workers.

form of a series of pictures showing children "before and after" they were taken over by the Children's Aid Society.

Among those who shared in Friday's programme were the Misses Grey and Hughes, who went into detail, explaining to the students the various courses and systematic study in home cooking, sewing, darning and mending, the care and use of the sewing machine and the interest and fitting of garments. These speakers pointed out that it is wise to engage young girls in these lines of household work, not to give them something so simple that they will become disinterested nor get anything too difficult. The teacher, they said, will have to use tact and sound judgment when teaching the young so as to know just what will hold their interest. Were girls taught scientific cooking in high school, most insurance companies and healthier families in the next generation.

A very interesting talk was given by Mr. Alex. Mills, of Toronto, on "Women and Business Methods." He stated that the average man would rather have a good dinner than that his wife should speak Greek. A woman should take a deep interest in her husband and his work. She should assume a joint partnership with him, and jointly they should decide when and how the money may be spent. The husband, as head of the house, should make a regular allowance to the wife. She should keep a regular simple account of the amounts received and when and how payments are made. The children should also be given a regular allowance to teach them economy and to give discretion in the handling of money.

(Continued next week)

Fruit in Alberta.

(Concluded from page 6)

bush, and swamp or vine berry. Three kinds of cherries—choke cherries, pin cherries, and the buffalo berry. There are also wild strawberries, huckleberries, blueberries, gooseberries, much the same as ordinary cultivated ones, strawberries, dewberries, huckleberries, and a number of other wild fruits that grow along the mountains and foothills that I cannot name.

While I hope for only moderate success in apple growing at present, I can say from experience that we can grow many kinds of small fruits to perfection and with less annoyance from diseases and insects than are met with in many places that are considered very successful in that line. We are raising the Downing and Snyder raspberries, besides some wild ones that do well under cultivation; currants, red, white, and black; gooseberries, the Downing; and the 30,000. Mr. J. Dunlop, of the Senate, we can do on our farm others can do if they do their part properly.

The Upward Look

Our Hearts Like Gardens

He also that receiveth seed among the thorns is he that heareth the word; and the care of the world, and the deceitfulness of riches choke the word and he becometh unfruitful. — St. Matth. 13:22.

It is such a simple rule of nature which requires the woman who would have a beautiful garden, or the man who would have a productive farm, to wage a determined and unceasing warfare against weeds, we accept the necessity for so doing as a matter of course. And yet how few of us cultivate our gardens or farms as we should. There seem to be so many things to do, just when we should be preventing the weeds from getting a start they obtain it in spite of us, and then how hard it is to overtake them. Only a few days' neglect is sufficient sometimes to give the weeds an advantage that our hardest efforts afterwards seem unable to overcome.

Praying is fighting weeds—the weeds of our hearts. There are all kinds of these weeds. They are all pernicious. There are the weeds of ill-temper, pride, selfishness, avarice, prostration, lack of charity, lack of faith, love of pleasure, and numerous others. We all know them, but we do not fight them as we should.

There is only one method by which the weeds in our hearts can be overcome. To endeavor to eradicate them by means of our own strength of will is to invite repeated defeat. Such a struggle is as helpless as would be the effort to keep down the weeds of the farm without the use of implements. They grow faster than we could overtake them. We must seek the aid of a greater power than our own. This aid may be obtained in only one way—by prayer.

Every time we seek God earnestly in prayer and ask for power to know and do His will, His love shines into our hearts. It lights up the dark corners of our minds and reveals to us unworthy thoughts and aspirations of which we have not been conscious. Thus we are led to see how our neighbor, Satan, for he is ever beside us, has been sowing seeds in our hearts while we have not been conscious of it. And like the weeds of the farm these weeds of the mind and heart require only a little neglect to enable them to take root and spring into life. Daily prayer is the means God has provided by means of which we can purify our minds of these weeds, and thereby prevent them from springing up and making our lives unfruitful.

But there is something more that we need to do. Just as we now realize that if we are to keep our land free from weeds we must sow good seeds, we must need to allow only pure and elevating thoughts to enter our minds. This is why we should

read God's word regularly and earnestly. This will be absorb more and more of His spirit and be enabled to walk uprightly in His sight. Then will His words abide in us and we in Him, and all things will become possible unto us.—I. H. N.

Social Life on the Farm

The wife on the farm sometimes becomes nervous when it is announced there will be a guest from the city, thinking of the contrast between the farm home and the friend's city home, says a writer in Western Farm. It is the pleasant hostess who is true to her surroundings and is not found trying to imitate others who pleases visitors.

When city people visit the country home they want and need the country air, the welcome that has the true country ring, and not the affected city fashions and customs. Social enjoyments does not depend, as many think, upon artificial accessories.

MATTER OF DUTY

There is nothing better as a promoter of sociability in the country than the old-fashioned visiting, when it was considered proper to come early and bring your work. Women in the country should make it a matter of duty to continue social relations. A day set aside for entertaining their friends will serve to keep them young and ambitious. The true social life is found in inviting the entire family,

the wife, the husband, and the children. No matter how busy the farmer and his wife may be, taking time for such sociability will mentally stimulate them and physically rest them. We all know that a family becomes cross, narrow, and prejudiced when they continue to live year after year, meeting no one outside the family.

It is not necessary to set elaborate tables, and in making this effort many women exhaust their strength and are in no condition to meet their friends. This spoils the visit for the guest knows she has caused a disturbance.

SET AN EXAMPLE

Practical women should set the example of simplicity in this hospitality, for more satisfaction is derived from frequent gatherings than from a few elaborate affairs.

You may not be strong, and you may have to work hard and economize, but do not drop out of the lives of your friends. The farm wife who makes her home the centre of a pleasant, unpretentious social life, is indeed a benefactor to humanity.

Milk and butter should be kept entirely away from other articles of food, as they absorb odors and flavors so rapidly they soon become unfit for use.

If we have no failing ourselves, we should not take so much pleasure in finding out those of others.



Dainty, Disappearing Doughnuts.
Devoured near as fast as you make 'em.

Golden—tooth-teasing—able-bodied nuts of dough.

Made from dough that *Tastes Like Nuts*, you know.

Use **FIVE ROSES** flour.

Get that *individual toothsome*ness of *Manitoba* wheat kernels.

Doughnuts with a *Palate-Pleasing Personality*.

See 'em bob up in the rich deep fat—swelling, soft-textured.

A hole entirely circled with *Light Digestible Food*.

Fat without being *fat*—for **FIVE ROSES** is the sturdy *glutinous* flour that *resists fat* absorption.

Just enough to *brown* deliciously, to *crisp* quickly.

No greasiness, heaviness, sogginess.

Filling a vacant place so pleasantly with never an *outraged* stomach.

Like these make **YOURS**.

Use **FIVE ROSES**.

Five Roses Flour

Not Bleached



Not Blended

For Educational Purposes

By Alice Pringle

(Continued from last week)

"Now, father," said she, "Uncle James gave me that money, not so much because he wanted me to spend it on myself, I think, as because he wanted me to decide how it should be spent. And I have decided that it shall be spent on the education of the whole family. This is about the way the items will read," and she wrote for a few minutes and handed the paper to her father.

- And her father read:
- Family carriage and harness, \$250.00
 - Organ 100.00
 - Encyclopedia 75.00
 - Dictionary 12.00
 - Daily papers 10.00
 - Magazines 8.00
 - Lamp 5.00
 - Music lessons for Amy 20.00
 - Art square (carpet) 20.00

"Why, child?" said he, "there's nothing about education here—just a lot of luxuries and extravagances."

"Oh, father, don't say that!" cried Connie. "I heard you and Uncle Nathan talking about the sermon your minister preached the Sunday liberal education to hear such a man preach week after week for a few years. I have heard people say," she continued with fine enthusiasm, "that the minister at Grantville is a fine preacher and a good man, and I know it will do us all good to hear him preach every Sunday. I can remember before the church was moved to Grantville, when we used to go often, that mother did not look so tired and discouraged as she does now. And we are going to try it, father."

Her eyes shone like stars and her cheeks were prettily flushed. Mrs. Potter sat silently wiping her

eyes with the corner of her apron, and a sudden memory seemed to tug at the corners of his mouth as Mr. Potter said: "That's so, Connie, we ought to go to church; there's education in it, and more, too."

"But I don't know," he continued, presently, "whether your Uncle James' idea would allow us to buy an organ or not."

"I'm sure it would, father, for when I heard Cousin Josie play, and the others stand round her and sing, I could just feel the education and the uplift of it. And Amy will learn so easily. It will be just delightful."

And so it was settled.

"I really don't see what a lamp and an art square have to do with an education, though," said Mr. Potter.

"Well, it is this way," explained Connie. "We always sit in the kitchen because the carpet in the living room is old and thin, and it takes too much time to sweep it often. But if we have an art square we can paint the floor round the sides of the room and it will be easily cleaned, and an art square will be easy to take up and shake, and we can come in whenever we want to and use the organ and books."

"Then a good lamp, it seems to me, has the effect of sunshine, and I've heard you say a calf or a pig will die if kept out of sunshine, and to develop the mind or heart of a person he must be kept in pleasant surroundings. I don't know that I have made it very plain, but I would like to get the lamp, father." Her voice held a note of entreaty.

"I know the daily paper is a great thing, Connie," said Mr. Potter, "but I hardly think we can manage that."

"Oh yes, we can," said Connie; "I have it all studied out. You know the man who drives the mail back

from Grantville across the divide goes past our gate every day. You remember his little boy was taken sick last summer and he left him here for a few days. He has been so anxious to do something for us ever since, and I asked him to-day if he could bring our mail from town and put it in a box at the gate as he goes along. He seemed so glad to do it, so that is settled," joyously; "and you will get your paper every day, father, the same as though you lived in the city."

Finally it was settled that Connie should spend the money to suit herself.

"But, remember, child, you are cutting yourself out of an education," said Mr. Potter.

"I'll never grieve about that, father," said Connie; "the benefit we'll all get will far outweigh the loss of book learning for me. Besides, I am not sure about losing the education. I had a talk with auntie, and she knows of people who would be willing to pay a good price for fine home-made products and jellies, such as mother knows how to make—and I have a plan, but it will have to wait awhile. We must all learn to use the material we have at hand."

And they did learn, and life took on a new meaning and a brighter hue.

"If your Uncle James could look in on us," said Mr. Potter, one evening a few months later, as he laid down his paper to listen to a new song which the young people were practicing; "I think he would be satisfied."

"Oh, but we're only beginning, father," cried Connie. "Mother has decided to join the Grantville Chautauqua Circle."

Mrs. Potter looked at her husband with an apologetic smile. "I was reading the other day in the encyclopedia," said she, "that Queen Vic-

toria began the study of a new language after she was seventy; so I thought I have done so little in the way of study all my life that I would like to try a little, if it is late in the day."

"You're just right, mother, it will do you good," said Mr. Potter. "Why, I do believe you'll look younger now, when I come to think of it. Oh, there's not a bit of doubt, Connie, but you have spent your uncle's money for educational purposes."

Hints for November

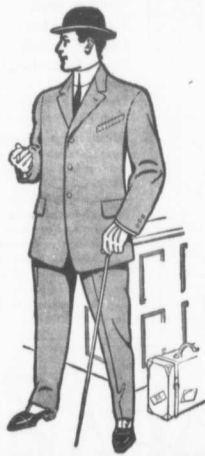
The time for packing away the summer clothing is at hand. Be sure that it is clean. If white clothes are packed away when even slightly soiled, they become yellow before spring.

When packing the summer clothes lay aside all which are too much worn for further use. Give the small girl or boy the scissors and let them cut off buttons and bands and cut out those pieces which might be used in case of sickness. Wrap the large pieces on one bundle and the small ones in another. Put the remaining bits in the ragbag. It is a great comfort to know where one may find nice, smooth clean bits of cotton cloth when needed. Let the little helpers have the rag money, and they will take greater pleasure in helping.

If possible do all necessary repairing of summer garments before packing them for the winter. There is usually as much time in the fall as in the spring. The good pieces which may be cut out of worn-out knitted underwear make excellent cloths for cleaning, and are much handier and better than if the ragged garment is used whole or in part.

An application of camphor will remove white spots caused by heat on the varnish of furniture.

Clothes Make the Man



—or at least give him a good start over his fellow-worker.
 Dress never meant so much in life as it does now.

All Successful Men are careful to be well dressed

And hundreds of these successful men buy their clothes from Catesby in London—because

They can buy better clothes direct from London for half of what the same quality goods would cost them in Canada.

The reason is that they buy on the successful Catesby "made-to-measure" plan.

READ THIS UNCONDITIONAL FREE OFFER

Send us your name and address, and we will mail you absolutely free of cost, a package containing 72 patterns of the finest West of England and Yorkshire suitings and overcoats which you ever saw.

With the patterns will come a booklet telling you all about the remarkably successful Catesby system of "made-to-measure" clothing.

Read it, and you'll understand why hundreds of shrewd, well-dressed Canadians buy their clothes direct from London, and save half of what they would otherwise have to pay their local tailor.

DON'T PUT THIS MATTER OFF—you'll soon be needing a suit or an overcoat. Send now, while the thought is in your mind. Remember, every price quoted in the booklet includes the payment of all carriage and duty charges by us. And that every suit and every overcoat is guaranteed to give absolute satisfaction.

Your order will be shipped five days after we receive it in London.

Address our nearest Canadian Office.

The "BURLINGTON" English Model

This shows the most popular style of suit worn by well dressed men in England. Prices are as follows: **\$16.50, \$18.50, \$21.00.** Duty free and Carriage Paid Right to your Door.

CATESBY'S LTD. 119 W. Wellington St., Toronto
 Dept. Coronation Building, Montreal
 "N." 160 Princess St. - Winnipeg
 Or write direct to CATESBY'S Ltd, Tottenham Court Road, London, England

HERE'S A GREAT TEST:

When you get your patterns, take one to your local tailor. Ask him what he will charge you to make a suit of such an important cloth. Then compare his price with that asked by Catesby!

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A Message to Girls

The Women's Imperial Health Association of Great Britain has among other good things, issued a leaflet called "Message to the Girls of Great Britain." These can well be thought over and dwelt upon by girls in this part of the Empire. They are as follows:

1. The future of our country is in your hands.
2. Look your best by all means, but be your best also; the first attracts to begin with, but the second produces the more lasting results.
3. You must obey the laws of hygiene, respecting fresh air, exercise, good food, cleanliness, and suitable clothing. A healthy girlhood is the best foundation for a happy life.
4. You must know about cooking, and domestic economy.
5. You must learn the feeding and caring for children; this knowledge does not come by instinct as many suppose.
6. Remember that home-making is the most dignified and important profession in the world.
7. Attend if you can "continuation classes" in personal and domestic hygiene, including a knowledge of the fundamental facts of life. You can be innocent without being ignorant.
8. Practice housekeeping and domestic hygiene in your own home; remember that a good daughter makes the best wife.
9. Choose the best companions and read the best book you can find.
10. Accept only the best men as your husbands, paying much attention to their character as to their personal appearance.

THE COOK'S CORNER

Recipes for publication are requested, inquiries regarding cooking, recipes, etc., gladly answered upon request, to the *Household Editor*, Farm and Dairy, Peterboro, Ont.

Egless Fruit Cake: Take one cup butter, one cup sugar, two cups of buttermilk (not sour milk), one cup raisins, one cup currants, five cups flour, two teaspoons soda, one teaspoon each cinnamon, cloves and nutmeg. This recipe will be found very good in winter, when eggs are scarce.

Hot Corn Meal Gems: Cream one tablespoon butter and one tablespoon sugar and yolks of two eggs and mix well, put in the flour and corn meal, one teaspoon salt and two teaspoons baking powder. Add this to eggs, mix half cup sweet milk. Fold in whites of eggs and bake 30 minutes. This makes 24 small gems.

Graham Pudding:—One and one-half cups graham or whole wheat flour, one-half cup molasses, one-fourth cup butter, one-half cup sour milk, one egg, one even teaspoon each of soda and salt, one cup coarsely chopped raisins, spice to taste. Steam three hours. Serve with cream and sugar or a lot of sweet sauce.

Chopped Pickle:—Chop one peck of green tomatoes; one-half peck of ripe tomatoes; one dozen each of large red peppers, green peppers, and cucumbers; one-half dozen onions and four heads of cabbage. Sprinkle with salt and let stand overnight. Squeeze out as dry as possible in the morning; add onions and celery seeds to the mass with four pounds of sugar and one gallon of vinegar. Boil one-half hour or a little less.

Orange Pudding:—Peel and cut five good oranges into thin slices, taking out all seeds; put over

them a coffee cup of fine white sugar. Let a pint of milk get boiling hot, by setting in hot water; add the yolks of three eggs well beaten, one tablespoon of corn starch made smooth in a little cold milk; stir all the time, and as soon as thickened pour it over the fruit. Beat the whites to a stiff froth, add a tablespoon of sugar, and spread it over the top of frosting; set in oven a minute to lardon. Can be eaten hot, but is best cold.

Celery Sauce.—Two quarts celery, six large onions, four tablespoons

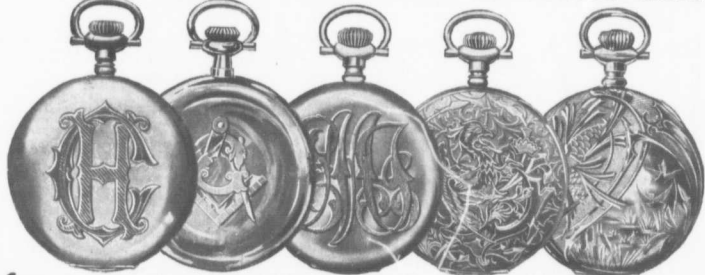
mustard seed, nine tablespoons ground mustard, three tablespoons flour, three and a half cups white sugar, five cups vinegar, half tablespoon turmeric. Chop fine, salt and simmer two hours slowly.

Spiced Pears.—Wash one-half peck of seckel pears, prick with a fork and cook in boiling water, to cover, until soft. Take out carefully, put in a stone jar and pour over the following syrup: Mix one pound of white sugar, one and one-half cupfuls of vinegar, and one and one-half tablespoons,

each, of whole cloves and stick cinnamon, broken in pieces. Bring to boiling-point and let simmer three minutes. Cover jar and let stand two days. Drain off syrup, bring to the boiling-point, let simmer three minutes and pour over fruit; repeat. In the jar keep a muslin bag, in which are tied two tablespoons, each, of whole cloves and stick cinnamon.

For molasses cake of every description use a tablespoonful of vinegar to every batch. It will greatly improve both the flavor and the color.

The Most Exquisite New Ideas in Watch Cases



(Take your choice of these superb new style watches sent without a cent down—on approval (Payable at \$2.50 a Month)

The Movement.—In connection with our sweeping fighting on trust methods we have selected our finest highest grade watch for a special offer direct to the people. **Material:** The best that money can buy. **Workmen:** World renowned experts in their line.

The Jewels: 19 finest grade selected genuine imported rubies and sapphires, absolutely flawless. (It is well understood in the railroad business that 19 jewels is the proper number for maximum efficiency.)

Factory Fitted and factory tested. Fitted right at the factory into the case made for that watch—and re-fitted after fitting. No looseness or wearing of the parts. No rattle or jar.

Adjustment adjusted to temperature, isochronism and position. The most rigid tests.

Since the \$1,000 Challenge was made to the giant factories four years ago, why have they not answered? Why have not these factories produced a watch equal to the Burlington? And this challenge did not ask our competitors to produce a watch better than the Burlington, NO. If they should produce a watch equal to the Burlington we should be the losers. Our \$1,000 still lies in the bank for competitors to cover.

No Money Down

We ship the watch on approval, prepaid (your choice of ladies' or gentlemen's open face or hunting case). You risk absolutely nothing—you pay nothing—not one cent unless you want the great offer after seeing and thoroughly inspecting the watch.

Burlington Watch Co. 289 Carlton St., Dept. 7678 WINNIPEG, CANADA

A Bomb for the Watch Trust

The Burlington Offer.—Our startling and smashing direct offer is overwhelming the watch trust. The superb Burlington Special at the anti-trust rock-bottom price—the same price that even the wholesale jeweler must pay—is paralyzing competition. Such a smashing and overwhelming offer has never before been heard of in the entire history of the watch industry. Just think of it! You may secure one of these superb time-pieces—a watch of the very latest model, the popular new thin design, adjusted to the second—19 jewels—the most perfect product of the most expert watch manufacturers in the world, at the rock-bottom price, direct from us—the identical price that even the wholesale jeweler must pay. And you may pay this rock-bottom price at the rate of \$2.50 a month. Yes—only \$2.50 a month—and it is time you are carrying this most superb time-piece. No wonder competition is paralyzed. No wonder everyone says that this is the greatest watch offer of the age.

The Fight on the Trust Is Explained in This Great Watch Book

This wonderful new watch book, it is free and prepaid. No obligations whatever. It will tell you about our gigantic fight against the trust and trust methods. It will tell you of quiet agreements which the giant factories have with dealers which enable them to uphold prices. That is the reason why we say that the great watch factories are a trust. And because there have existed and exist everywhere which enable them to control trade and to uphold prices. It is not an illegal trust but the methods are similar to those of the public and to uphold prices. We want you to get this watch book at once. Find out the inside facts of the watch industry. The book will also tell you the superb Burlington Special and how it is manufactured for a small, moderate price. It also contains information on the approval, at the rock-bottom price, on terms of \$2.50 a month. Be obligations on you.



FREE WATCH BOOK COUPON
BURLINGTON WATCH CO. 289 Carlton Street
Dept. 7678, Winnipeg, Canada
Please send me at once, free and prepaid one of your new watch books explaining about the anti-trust fight and giving the inside facts about the watch industry. Also give full particulars of how I may obtain a fully adjusted 19 jewel anti-trust watch, the Burlington Special, on approval, at the rock-bottom price, on terms of \$2.50 a month. Be obligations on me.

Name _____
Address _____
GZR

HOLSTEINS

Forest Ridge Holsteins

A few sons of King Sigs Pieterie for sale from tested dams. Priced right considering quality.
Also a few Heifers bred to him for sale. Write us for what you want, or better, come and see them. Anything we own is for sale.
I. H. LIPSITT, STAFFORDVILLE, ONT.
Elgin Co.

HOLSTEINS

No matter what your needs in Holsteins may be, see RUSSELL, the live Holstein man.

He is always prepared to furnish anything in Holsteins.

Write, or come and inspect

T. H. RUSSELL Geneva, Ohio, U.S.A.

RIVERVIEW HERD

Offers Bull Calif. dam 15.50 lbs. Jr. 2-year-old dam a 15 lb. cow and 6 dam a 22 lb. cow. Sire King Imbela Walker whom dam and her daughter, dam and 6 dam of his sire average for the four 30.7 each. Also a few A. B. O. cows.
P. J. SALLEY - LACHINE RAPIDS, QUE.

Holsteins

stronger now than ever at **FERNDALE STOCK FARM**

Bulls from 1 to 8 mo. old, all sired by **Kornydke King Schillard**, who dam and 9 more dams made 20 lbs. butter in 7 days.
We have over 50 head of grade Holstein heifers 18 mo. old, all supposed to be bred. They are nicely marked, large and in good condition.
Persons wanting a card should inspect this bunch before looking elsewhere.

CYLEDADLES - We have 30 head to choose from. Come and see them!

Fierherd Bros.
Bell Phone, C.P.R. Station
PORT ELGIN, ONT.

GLENDALE HOLSTEINS

Entire crop of Pure-bred Holstein Bull Calves and a limited number of Heifers, whose three near-sires have sired **May Echo Sylvia**, over 21 lbs. butter in 7 days. R. O. M. at 1 year 1 month (world's record).
Also **King Kovee**, 1 3/4 lbs. in R. O. P. at a year two-year-old (world's record), and **Jewel Pat Poach De Koi** 29 lbs. butter at 4 years (world's record). Prices reasonable. All correspondence promptly answered.

WM. A. SHAW, BOX 31, FOXBORO, ONT.

Avondale Farm

HOLSTEINS, CLYDEDALES, YORKSHIRES AND DORSETS

A. C. Hardy - Prop.

To make room for daughters of Prince Heineveld Pietje we are offering a few females, bred to the greatest bred bull in Canada, also a few extra good yearling rams.

Address all correspondence to:

H. LORNE LOGAN, Manager
Brookville, Ont.

May Echo

Has Made 31.34 lbs. butter in 7 days and 79.6 lbs. milk in official work.

Her son, Sir Echo, also several Bull Calves of rich breeding, etc. for sale. Write for full descriptions, or better, come and inspect.

We also offer **Cyledadles**, 3 four-year-old stallions, 15 mares and a few fillies - all individuals of popular breeding.

Also **Hackneys**, two stallions, 3 years old and one mare, 4 years old.

We will be pleased to answer your enquiry as to breeding, description and price.
ALLISON STOCK FARM
W.P. Allison Chesterville, Ont.

MARKET REVIEW AND FORECAST

Toronto, Monday, Nov. 18.—Wholesalers generally report that trade is in a healthier condition than at this time last year. There is a demand for winter goods, and the volume shows a satisfactory increase.
Speculation in rice in trade circles as to what Woodrow Wilson would do as to the tariff. Pres. Wilson has already called a meeting for next April, and has made it clear that the chief business will be an immediate reduction in the tariff. Changes in almost any line will have an effect on Canadian trade, and the reduction in the United States tariff on food stuffs will have a big influence on the produce trade of Canada.

Money is hard to get, so much of it being in use in Western Canada. The ruling quotation for call loans is 6 per cent.

WHEAT

Wheat operators fear that the markets of the world are in danger of rearing an over supply. The American crop is a bumper one, and the crop in Argentina on which export trade is dependent will also yield well. Three weeks ago wheat in Toronto ruled at \$1. No. 1 Northern is now at 75¢. Other quotations are: No. 2, 90-13¢; No. 3, 88-13¢; feed wheat, 67¢ to 70¢.

Ontario wheat is in fairly good demand for blending purposes at 90¢ to 70¢ for the best grades, and at 70¢ to 70¢ for the poor grades.

COARSE GRAINS

The new corn crop has all its influence in price, and quotations have dropped

signs 2½ to 3½. Cold storage eggs are selling readily at 25¢ to 26¢. The retail price is 45¢ to 55¢.

Receipts of eggs at Montreal are slack and straight receipts are being sent away for their own use. Sets are quoted at 30¢ to 30 1/2¢; storage eggs, 27¢ to 27 1/2¢.

Quotations on dressed poultry are as follows: Live chickens, 10¢ to 11¢; fowl, 8¢ to 10¢; ducks, 12¢ to 13¢; turkeys, 15¢ to 17¢; geese, 9¢ to 10¢; dressed poultry, 2¢ to 2¢ higher; dressed turkeys, 23¢ to 24¢. On the Farmers' Market spring chickens retail at 12¢ to 20¢; fowl, 14¢ to 15¢; geese, 15¢ to 17¢; ducks, 20¢ to 23¢ and turkeys, 25¢ to 30¢.

POTATOES AND BEANS

Potato receipts have been of a better quality, but reports of rot are prevalent. Quotations are the same: 50¢ in car lots and \$1 out of stock. At Montreal there is a good demand for potatoes at 75¢ to 75 1/2¢ a bag in car lots.

Beans locally are quoted at \$2.90 to \$3 for primes and \$3.10 for hand picked.

LYNDALE HOLSTEINS

We are now offering 2 Bulls, nine months old, one from a daughter of Sara Jewel Newgrove, bred. A. B. O. 20-29. His 2 nearest dams, including his dam at 2 years, average over 27 lbs. butter each twice that amount. The other is from a grand daughter of De Koi 2nd's Butter Boy 2nd. His 3 nearest dams average over 27½ lbs. each. We also offer females of any age.

BROWN BROS. - - - LYN, ONT.

HOLSTEINS

WILLOW BANK HOLSTEINS

A Daughter of Pontiac Herms (5442)

and out of Imported Dam. Born April 19th, 1909. Large, straight and nicely marked. In calf to a good son of Count Hengerveld Elyse De Koi 1777.

Also a number of young Bulls. One nearly ready for service, whose grand sire are Johannes Blue 4th, Lord Gibe and Tidy Abbeherk's Mercena Poach (4391). Price low.

COLLIER V. ROBBINS, RIVERBEND, ONT.
Fenwick Station, H. B. B.

ELMDALE DAIRY HOLSTEINS

A few Females for sale. Calves, Yearlings or Cows. 50 head to choose from. Most of the young stuff sired by Paladin Ormsby 17515. Service bulls, Paladin Ormsby and Highland Calumity Galatinia (12,425).

FRED CARR, BOX 115, ST. THOMAS, ONT.

Korndyke Pieterie Paul

No. 8418, is offered for sale, Sire, Maggie Echo De Koi's Korndyke No. 3048; dam, Helena Pieterie Pauline No. 4741, record of 17,550 lbs. of milk, 607 lbs. butter in 14 months. She is sired by Heifer King Pieterie, 22 lbs. butter in 7 days at 2 years old.

His sire's dam is sister to May Echo, 32 1/2 lbs. butter in 7 days. He has combined the breeding of Pontiac Korndyke. He was two years old in February, 1912, and has twice that amount. Is a very large, low set fellow, with a good skin with the cattle all around him. Very sure.

GEO. MOORE & SON, Protton Station, Ont.

Notice: After 1st of October, 1912 kindly address all correspondence to **VAUDREUIL, QUEBEC**, instead of Manhard, Ont., where I will be in a better position to furnish my customers with No. 1 Holsteins.

Gordon H. Manhard - Vaudreuil, P. Q.

FAIRVIEW FARMS HERD

Offers a splendid son of Hag Apple Korndyke, the young bull we recently sold for \$5,000.00, and out of a sound daughter of Pontiac Korndyke (record made at 4 years).

Calf is six months old, nicely marked and straight as a string, and I will sell him. Write me for more money.

E. H. DOLLAR, Heuvelton, New York (Near CROSBY)

Holsteins Over 4% Fat

I have established on my farm at Oshawa, Ont., a herd of Holstein Cattle of the richest blood obtainable. My object is to breed a strain of Holsteins, which shall be unbeatable and all shall give milk 4 per cent or over in fat content.

Present offering for sale Bull Calf, grandson of King Sigs and Pontiac Pat, the World's Champion Butter Cow.

A. A. FAREWELL - - - OSHAWA, ONT.

OWL BRAND COTTON SEED MEAL

is the most economical feed you can buy. It is very high in Protein—guaranteed over 4.6 per cent protein—three times more protein than wheat bran.

It Makes Cows Give More Milk

Owl Brand Cotton Seed Meal takes the place of tonics and high-priced stock foods; it increases the appetite and acts as a food at the same time.

OUR FREE SERVICE TO YOU

Write us about the feeds you have and we will have our feed specialist select for you the best compound ration it will pay you to feed. This service is free to you.

General feeding instructions for cotton seed meal and valuable books of information sent free on request. Good for Horses, Cattle, Sheep and Pigs. Makes Hens Lay.

Demand Owl Brand! It is the best. Should your dealer not have it, from Toronto, We have a distributing point near you.

The manure value per ton of Owl Brand Cotton Seed Meal you feed is \$35.86. Let us tell you all about this side of feeding. Write to-night for samples and further information.

ALLEN & SIRETT FEED BROKERS, Pacific Bldg. TORONTO - - - ONTARIO
Canadian Agents for F. W. Hodge & Co., Memphis, Tenn.

Personal

Would you like to have a picture of your best cow in Farm and Dairy's great Breeders' Number out Dec. 5, in time to be distributed at Guelph Winter Fair?

Would you like to us to publish a photo of some animal you have for sale?

Write to us to-night about the matter. We will print over 15,000, and mail them all out for you. This is worth your while. First come first served!

somewhat. Western oats are a little scarce. Quotations are as follows: Oats, C. W. No. 2, 42-1/2¢; No. 3, 41-1/2¢; No. 1 feed, 41¢; Ontario No. 2, 38¢ to 38¢ outside; 42¢ to 43¢ on track here; corn, 50¢ to 55¢; peas, \$1.10 to \$1.15; buckwheat, 52¢ to 55¢ and dry 42¢ to 45¢. Montreal quotations are: corn, 65¢ to 66¢; oats, C. W. No. 2, 46-1/2¢; extra No. 1, 45-1/2¢ to 46¢; local oats, 42¢ to 43¢; peas, \$2.45; barley, making 85¢ to 85¢; buckwheat, 50¢ to 60¢ and dry 75¢ to 80¢.

MILL STUFFS

Quotations are easier, but the market seems easier. Local quotations are: Manitoba bran, 82¢ to 83¢ a ton; shorts, 82¢ to 83¢ a ton in bags; Toronto; Ontario bran, 82¢ to 83¢; Ontario shorts, 82¢ to 83¢ a ton in bags. In Montreal the market is active and bran is quoted at 83¢, shorts, 87¢ a ton in bags.

RAY AND STRAW

Hay, both wholesale and retail, is meeting with a steady demand at prevailing prices. The volume being received at this point is not supposed to represent the amount there is for sale in the country. Farmers seem unwilling to accept lower prices than last year, but it will be propped up to hold for prices that prevailed in this time last year. Quotations are as follows: No. 1, \$14; No. 2, \$9 to \$11; No. 3, \$8 to \$9; baled straw, \$10 to \$10.50. Hay retails on the market at \$19 to \$20; clover and mixed hay, \$17 to \$16; straw, bundled, \$14 to \$17; and dry straw, \$18 to \$19. The market at Montreal is firmer, due to the shortage of hay. Quotations are: No. 1, \$14.50 to \$15; No. 2, \$12.50 to \$14; No. 3, \$11 to \$11.50.

EGGS AND POULTRY

Prices for fresh eggs are again up to the level where only rich people buy them, being quoted wholesale at 40¢ to 45¢ for strictly new-laid and for fresh

DOLLAR'S HOLSTEINS IN CANADA
Having such stock as Mr. E. H. Dollar, of Heuvelton, N.Y., whose story is given on page three of Farm and Dairy this week, it is not to be wondered at that a number of Canada's leading Holstein breeders have been anxious to make purchases from Mr. Dollar's herd. Among those who have done so are Mr. A. C. Barry, of Brockville, who in January, 1911, paid Mr. Dollar \$2,000 for what Mr. Dollar then considered to be the best three-year-old daughter Pontac Korndyke had ever sired. She had a record of 25.51 lbs. of butter. Colonel Farewell, of Ottawa, has paid Mr. Dollar \$4,000 for her head. Two of these were daughters of Pontac Korndyke, and two were daughters of Rag Apple Korndyke. Mr. Dollar

same cow that produced Pontac Lady Korndyke. His breeding combines that of the three greatest Holstein strains known, the Korndyke, Johanna and Hengerveld De Kol.

Other Canadian buyers of good stock from Mr. Dollar include J. W. McCormick, of Morewood; Benj. Kells, of Sunbury; Howard Mackley, of Williamsburg; J. Taylor & Sons, of Scotland; H. J. Mansfield, of Sunbury and G. A. Babcock, of Harrowsmith, Ont.

WINTER FAIR JUDGES

The Judges for the Winter Fair, which opens at Guelph on Monday, December 9th, and the classes upon which they will place the awards are as follows:
Clydesdales and Shires—George Charlton,

The Pride of a Wentworth County Government Herd
One of the cows of which they are particularly proud is the Hamilton Asylum Farm in Fortiella Johanna Rue, 8329, the pure-bred Holstein here illustrated. From Dec. 9th, 1910, to May 15th, 1911, she produced 6,499.7 lbs. of milk, an average of 63.5 lbs., or over 13 quarts of milk a day. Photo by an editor of Farm and Dairy.

has heard that one of these has since produced 107 lbs. of milk in a day. One of the best bulls out of this herd ever to reach Canada was Sir Korndyke Boon, purchased by A. C. Hallman, of Breslau. He was sired by Pontac Korndyke and is out of Fairview Korndyke Boon, with a record as a junior four-year-old of 32.17 lbs. of butter in seven days and an average per cent of fat of 4.96. Mr. Dollar expects here to make a 37 or 38 lb. record this year. She has a 30-day record as a junior four-year-old of 130.5 lbs. of butter. Besides his grand brooding this bull is an exceptionally good individual.

Another fine bull was sold to J. W. Richardson, of Cabotville. He was sired by the Johanna bull, and is out of the

Southern Farm Facts

Land at \$10 an acre up
Alabama makes 4 to 6 tons per acre. Corn 60 to 100 bu. All hay crops yield heavily. Beef and Pork produced at 10 to 4 cents per lb.—Animals pay \$100 to \$200 an acre. Truck crops \$100 to \$200; other yields in proportion.

THE SOUTHERN RAILWAY
Mobile and Ohio R.R. or, 5c to 7c. This will help you find a home in this land of opportunity. Booklets and other facts—free. W. V. RICHARDS, General Passenger Agent, Room 50 Washington, D. C.

GRAND TRUNK RAILWAY SYSTEM

Winter Tours to California, Colorado, Mexico and Pacific Coast Points
The Grand Trunk Railway is the most direct route from all points East through Canada via Chicago.

FEATURES

Double Track, Fast Service, Finest Food, Modern Equipment, Unexcelled Dining Car Service. All elements of safety and comfort

TO THE SUNNY SOUTH

No more desirable route than via Grand Trunk to Detroit, thence via Cleveland to Jacksonville, Palm Beach, Nassau, etc. Round trip tickets, giving choice of all the best routes, together with full information and reservations, may be obtained from nearest Grand Trunk Agent, or write A. E. Duff, D.P.A., Toronto, Ont.

Sell Your Surplus Stock

Why keep your surplus pure-bred stock any longer? He is eating up your profits.

Now is the time to sell it. Your advertisement placed in Farm and Dairy's live stock column, will tell more than 10,000 possible buyers of what you have for sale.

Fix up your ad, to-night. Send it to Farm and Dairy by first mail, and it will be in time for next issue. This satisfactory way of making sales should pay you well. Costs you only \$1.00 per inch for space you receive.

Delay is costly. Act now. Order your ad to be in several issues, and in our great Live Stock Number, Dec. 5th.

Cousins, Harrison; (reserve) Prof. O. E. Day, Guelph; Shropshire, H. Gibson, Delaware; (reserve) W. H. Beattie, Wilton, Groe. Short wool grade—H. E. Gibson, Delaware; W. H. Beattie, Wilton Grove. Long wool grades—John Rawlings, Forest; James Douglas, Caledonia. South Downs, Dorsets, Hampshire and Suffolks—W. H. Beattie, Wilton Grove.
Berkshires—J. Dolson, Norval Station; (reserve) T. A. Cox, Brantford. Yorkshire and Tamworths—D. C. Platt, Millgrove, Bacon, hope, Prof. F. E. Day, Guelph. Chester white, any other breed, grade or cross—F. H. Hood, Guelph. Dressed carcasses—Wm. Jones, Zenda.
Dairy test—Prof. H. H. Dean, Guelph. Seeds—Prof. A. C. Zavitz, Guelph.

In order to increase the advertising value of the Fair to exhibitors and to make the exhibit of greater educational value to visitors, it was decided to offer three special prizes for fowl, turkeys, geese and ducks as follows: Best collection, second best collection, third best collection. Collections are to consist of five or more birds shown. In addition to the ribbons there will be a cash prize for the best bird in each class.

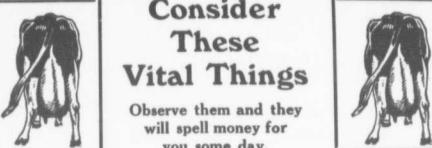
1000 PERCHERONS
Stallions and Mares
WANTED IN ONTARIO

I have sold nearly all I brought over this summer and am leaving for France the 22nd of this month for another shipment of Percherons, stallions and mares. They will arrive at my barn, Weston, Ontario, about December 1st. Will have an exhibit at Guelph Jan Stock Show. Price will be in reach of everyone that wants a good stallion or a big brood mare, and terms to suit. Write for particulars, or better, come. No trouble to show what I have. Visitors always welcome. Address:

J. B. HOGATE
West Toronto, Ont.
Barns at Weston, Ont.

Consider These Vital Things

Observe them and they will spell money for you some day.



It will profit you most when you buy Holsteins to get a strain of Holsteins that is popular and well known.

There is a great reason for the popularity of Holsteins in general. There is a greater reason for the great popularity of several individual strains of Holsteins.

The popularity of a given strain of Holsteins is due to the records of production of milk and butter fat of individual cows in that particular strain.

I believe the very best strain of Holsteins to day are of the **KORNDYKE** breeding. Old Pontac Korndyke himself commands a service fee of \$500. His illustrious son the great "King of the Pontiacs" is not available for service at any price other than a half interest in the stock he gets.

Much of the stock I have is of this Korndyke strain. My young stock is mainly sired by my bull:

Prince Hengerveld of the Pontiacs

He is a son of "King of the Pontiacs." He has gotten me some very fine stock.

I am offering some of his get for sale. When you buy this stock you will be getting Holsteins that are sure to be right—Holsteins that you will find it easy to sell, because of the great popularity of this strain of Holsteins.

Whenever you are buying Holsteins it is well to consider the records being made by cattle in the herd from which you get your Holsteins. Also have an eye to the advertising being done by the breeder from whom you buy. This will all bear profit to you in a very short time when you will have Holsteins to sell.

Remember, I invite you to come and see my Holsteins, or write. I have over 100 for you to choose from.

THE MANOR FARM GORDON S. GODERHAM
Bedford Park - Ontario

CATTLE TAGS. Sheep and hog tags, metal ones without tags, name, address and numbers. Save time and trouble; avoid losses. Write for free circular and sample. F. G. James, Howmanville, Ont.

Purebred Registered **HOLSTEIN CATTLE** AND FOR FREE ILLUSTRATED BOOKLET Holstein Friesian Assn., Box 146 Battleboro Vt

BREEDER'S DIRECTORY

Cards under this head inserted at the rate of \$4.00 a line per year. No card accepted under two lines nor for less than six months, or 25 insertions during twelve months.

YORKSHIRE PIGS, all ages, either sex. Choice young boars, fit for service. Also Sows of all ages bred and heavy with pig—H. C. Renfeld, Woodstock, Ontario.

HAMPSHIRE PIGS—Canadian Champion herd. Boar herd headers. Bows, three months and under.—Hastings Dross, P. Whitely, Ont.

FOR SALE—2 Sons of King Fayne Regis (Clithird, from B. O. P. Cane. Also three Clyde Fitties and 3 Stallions. Yearlings.—E. Holby, Manchester, Ont.

FOR TANKWORTH SWINE—write John W. Todd, Corinth, Ont., R.F.D. No. 1.

SPACE right here costs you only \$4 a reading line a year. Take us weekly to 15,000 possible buyers. Can you afford to be out? "Then come in! Write Farm and Dairy to-day about it.

CLYDESDALES, Imp. Stallions and Fillies. Fresh importations always on hand. Every mare guaranteed in foal.—J. J. Sample, Waverton, Ont. and Laverne, Minn., U.S.A.

The Secret of the Success



of the SHARPLES MECHANICAL MILKER
 One Man
 45 Cows
 One Hour

The secret of the success of the Sharple's Mechanical Milk Separator is the construction of the patented "TEA CUP." It is the one feature that marks the difference between any other separator of milking machines—the feature that insures complete sanitation in the operation and makes the Separator like the most practical and profitable part of your dairy equipment. Read this letter from the owners of one of the highest priced dairy cows in the world, who says: "My Lady Practice Separator is the best separator I ever saw in this farm."
 Write for FREE Catalog, No. 10090

The Tea Cup with the Upward Squeeze
 Separates from the milk quickly, gently and without the usual a little drip or dribble. It moves material faster, coagulation or swollen tests. It insures pressure in every part of the separator after each drawing. It motions and agitates the animal and makes her give down her milk, increasing the milk yield with the Sharple's Milk one man can milk 45 cows in one hour.

Write for FREE Catalog, No. 10090
 For name and price of each of the illustrated models of available. Inform us also the number of cows you have and we will advise you the nearest dealer from whom you can secure an installed one. Write for catalog today.

The Sharple's Separator Co.
 TORONTO, ONT. WINNIPEG, MAN.

EGGS, BUTTER and POULTRY

For best results ship your live Poultry as, also your Dressed Poultry, Fresh Butter and New Laid Eggs. Egg cases and poultry crates supplied.

PROMPT RETURNS
 Established 1854
 The **DAVIES Co.**
 Wm. DAVIES Co. Ltd.
 Toronto, Ont.

WANTED
 10,000 Readers of this paper to order Farm & Dairy Supplies. Steady work for a real representative your locality. Liberal pay in cash.
 FARM & DAIRY PETERBORO, ONT.



Cow Profits

Cow comfort and cow sanitation result in more cow profits, and this alone should induce any farmer or dairyman to install our Louden's Stalls and Stanchions. They allow free passage of light and air in a system and ensure perfect sanitation and ventilation—a result impossible with an wooden equipment.

Louden's Stalls and Stanchions
 are actually cheaper than wood. Louden Stalls of heavy tubular steel with malleable hinges, have no flat surfaces for dust to accumulate and no rough or sharp corners and are built to last. Louden's Stanchions give cows the greatest possible comfort and freedom, yet lock them perfectly lined up. Latched easily opened or closed with gloved hand in a system and ensure perfect sanitation and ventilation—a result impossible with an wooden equipment.

Louden's Barn Equipments
 include Feed and Litter Carriers, Hay Bins and Louden's Bird-Proof Barn Door Hangers. Send for complete catalogue.

It is cheaper to put **LOUDEN QUALITY** into your barn at first than to experiment with inferior equipment.

Write today for our Catalogue of modern labor and money-saving equipment.

LOUDEN MACHINERY CO.
 Dept. 72 GUELPH, ONT.

AN INTERESTING GOOD ROADS REPORT

A valuable contribution to the "Good Roads" movement, now spreading so rapidly throughout Canada, is the "Annual Report on Highway Improvement" for 1911, issued by the Department of Public Works of the Province of Ontario. This report treats of the subject in considerable detail, describing the best methods of road construction in Canada and the United States.

Until the advent of the automobiles, the principal types of the roads were dirt, gravel, macadam and telford, but it soon became apparent that none of these would stand the wear and tear of automobile traffic for any length of time. It thus became necessary to try some new form of construction. This led to experimentation with various different materials, among them being concrete.

Quite a number of concrete highways have been built in the last few years. Like all new materials, the early experiments were not a complete success. This was due principally to the lack of experience in handling the material for this purpose, and at first there were many different ways of building the roads as there were roads themselves. But in the light of the experience gained by these pioneers, several forms of construction have survived.

At the last meeting of the Association of American Portland Cement Manufacturers recently held in Chicago, a number of papers were read by leading highway engineers throughout the United States, including Logan Waller Page, Director of Public Works, Department of Agriculture, Washington, D.C.; Edward N. Hines, Chief Commissioner, Wayne Co., Mich., which county has probably built more concrete roads than any other in the world; and Charles E. Engineer, Fond du Lac, Wisconsin, and others.

After making various comparisons between different roads, the report of Mr. Page concluded his remarks as follows: "From the comparisons made above between Portland cement concrete and plain macadam and bituminous macadam, it is evident that we may be practically assured that the Portland cement concrete road is far better able to meet the changing traffic conditions than either of the other surfaces. From our knowledge of Portland cement concrete, we can design a road surface of this material to meet practically any requirement."

The following is extracted from Mr. Hines' talk: "Any community that wants a good road, a road that is cheaper even for a short time under fairly heavy traffic than any other good road, a road that is inexpensively maintained, a road that is sanitary and dustless, a road that is not slippery, a road that offers good traction for any type of vehicle 365 days in the year, a road that in the long run, say 15, 20 years and longer, is the cheapest of all good roads, should investigate the merits of concrete."

Mr. McCullough, in the course of his remarks, said: "I am satisfied that Fond du Lac with her 8 1/2 miles of cement pavement, averaging less than \$1.50 a square yard, will get good value for every dollar expended. If in the course of 10 years, it becomes necessary, I see nothing to interfere with our putting a bituminous wearing surface on these roads."

In Canada, the Ontario report, above referred to, under the subject of Concrete Roads, contains the following: "Attention has recently been drawn to concrete pavements which have been treated with a surface painting of tar over which a thin layer of fine gravel is spread, just sufficient to be saturated and held by the tar."

"In appearance these pavements resemble sheet asphalt, the tar and sand coating overcoming the glare and reflection on bare concrete. The sand fills the expansion joints and depressions, serving as a wearing surface. The expansion joints disappear from view, and the sand chip at the corners. The tar and sand coating deadens the noise of traffic, makes the pavements impervious to moisture. If cracks appear they are painted with tar and sand so that they do not crumble under traffic. The treatment, in short, overcomes the more objectionable feature of the concrete pavement."

"Concrete pavements as heretofore laid in Ontario have cost about \$1.5 a square yard. The tar treatment has cost about two cents a square yard, and the treatment has been found to last for two years, making the cost of tarring and sanding one cent per square yard per annum. If further experience proves the success of this treatment, it should be useful for the small towns and villages in paving their main streets, and would be exceedingly effective for main highways radiating from large cities."

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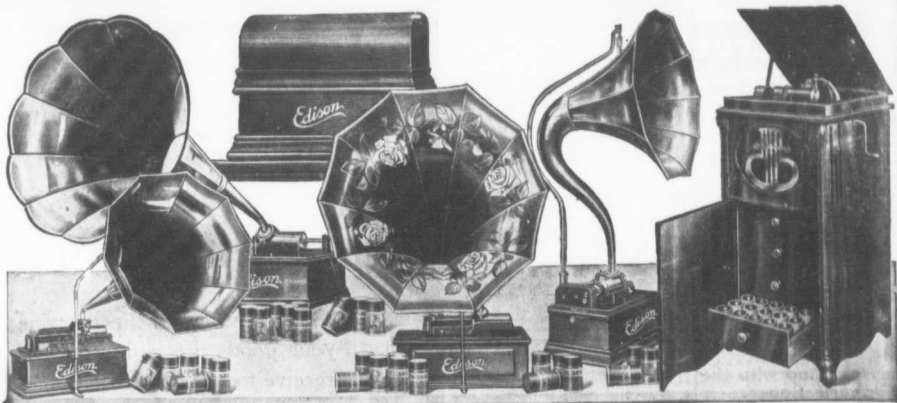
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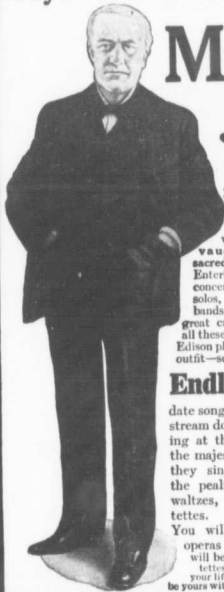
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