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FARM AND DAIRY

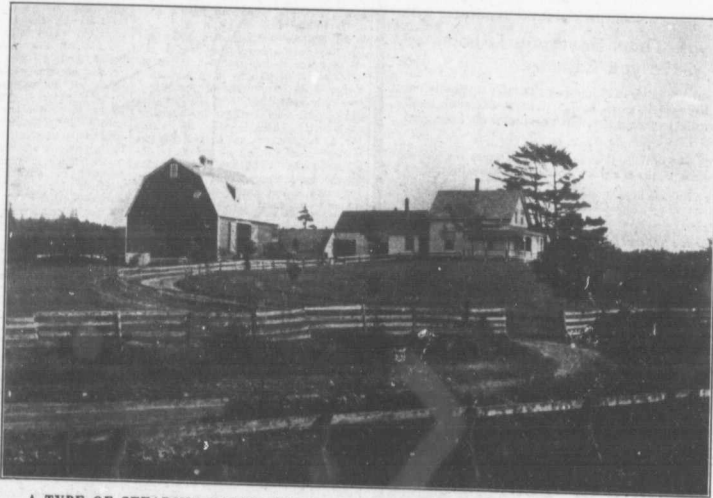
RURAL HOME

Dairy and Cold Storage
are Contents

PETERBORO, ONT.

MARCH 20

1913



A TYPE OF STEADING CONDUCIVE TO COMMUNITY INTEREST AND BETTERMENT

The ideal rural community is the one in which many are land holders and few are landless; that is, where small, well-cultivated farms, such as that of T. Stuart, Colchester Co., N.S., whose buildings are here illustrated, are the rule. The land holder will always take more interest in community betterment than will the hired man or the tenant; it is more to his interest to do so. Hence it is that in those countries where farms are small, as in Denmark for instance, that cooperative societies flourish, that roads and rural schools are of a high standard and that the country church does not languish for lack of funds or attendants.

—Photo by an editor of Farm and Dairy.

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CANADIAN COUNTRY LIFE

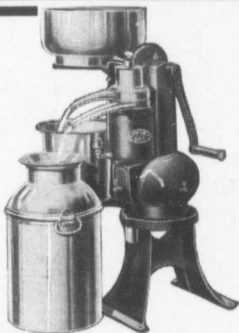
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LET THE FARMER CULTIVATE THE ACQUAINTANCE OF HIS BANKER

J. A. Macdonald, Carleton Co., Ont.

New Light on why the Farmer can not Obtain Accommodation from the Banks. A Solution Suggested. The Banking Act Discussed.

MUCH is said in the press and during the present session of the Federal Parliament, of the inability of farmers to obtain a loan or accommodation at the banks, while men in business and trade in the towns have no difficulty in this regard. It is quite true that farmers, as a class, find it difficult to obtain a loan from the bank, and when they do get it they are forced to note-discount rates, usually 8 per cent. In fact it is often as well and, usually more convenient, for the farmer to go to a broker or money-lender, and it is often to this class a farmer goes when he wants money.

There is no valid reason why a bank should not be as willing to do business with a farmer as with a merchant or dealer if as great profits are realized. True, the farmer has nothing tangible to put up in the way of security for the loan, unless he gives a chattel mortgage which would make the loan very expensive. He has no stocks or bonds to put up. He hasn't a warehouse full of grain within a block or two of the bank premises. He may have a couple hundred bushels of grain in his granary, 10 or 20 miles away, or he may have some cattle or hogs in process of fattening. But it is very difficult to see how the bank could except a check for security on a loan. There is only one course for a farmer, if he wishes to get money from a bank - get an "endorsement"; that is, get a man, known to the bank, to endorse your promissory note and come good for the amount—a most humiliating and hateful thing to be obliged to do, not to mention the feelings of the "endorser."

A POSSIBLE SOLUTION
Farmers are, as a rule, not patrons or customers of the banks. The farmer and the bank are comparative strangers to one another. Broadly speaking, the only business the average farmer ever has in the bank is to step in to take up a note given for some implement or other obligation. Strangers do not usually act in favor of each other. One does not expect anything from the other. Nor does one stranger place confidence in another. The obtaining of a loan from a bank involves confidence. Strangers can often obtain a loan from a loan-shark but at what terms? Twenty-five to 100 per cent. These men take the risk of lending money to a stranger, or to some one whom they may know of doubtful integrity. They know they are going to lose both the interest and principal of a certain per cent. if their loans, like the old credit business at the store, and protect themselves by charging enormous interest.

A bank does not do business that way. A bank does not expect to lose anything from customers and has no rate of interest and discount for all. If there is the least doubt of a loan not being paid, a bank will not lend. A bank pins its faith very largely on the business integrity of its customer. The business of that man is watched closely by the bank and if it sees breakers ahead steps are at once taken to protect itself. By such caution and watchfulness only, does a bank lose but few customers.

PROMOTE BUSINESS INTERCOURSE
Were the farmer and the bank on intimate terms. Did they regularly do business with one another, learn to know each other, and to mutually profit from each other's business association, there is no reason in the world why the business would not

imperceptibly extend to the matter of loans—small they may be at first, but gradually increasing with extended business acquaintance.

The farmer is in the savings initiative. He is the man who is to be accommodated. How shall he do it? Start a bank account in the local bank. Deposit in that bank all sums over five dollars which may come into his hands from any source, and pay all bills and amounts over one dollar—at least over five—by cheque. In this way the acquaintance will begin. The bank soon begins to know its customer and will be willing to extend its favors as time goes on. The bank, though anxious for deposits, does not mind much on the farmer's balance. If the moment comes in the savings department it pays three per cent, lends it out at eight per cent, a profit of five. On an average balance of \$100 the bank would make but \$5 in a year. Canadian banks, however, encourage farmers, tradesmen, and others, to patronize the savings department, and though the interest, three per cent., is small, it is as much as can be got at the moment. Some banks have a current account when one gets no interest on his balance at all. However, if there is much checking out by the depositor the bank has more care to have the deposit in the savings department. It would have to be in current account. This does not matter much, however, as there is no farm-economist's bank has a large balance of his credit account in the bank.

HOW TO BECOME A CUSTOMER

A man that makes all his payments by cheque and deposits all his cash as it comes in in a bank for a year or two becomes a customer. If he happens to need a loan of \$50 or \$100, the bank will accommodate him, and give him the money at eight per cent or two per cent. for three months which is very low for small sums. Banks, like merchants, are anxious to please their customers. The more farm-economists a bank has the more they will appreciate the custom of the farmers, and the more anxious will they be to accommodate them with a loan when they want it. The banks and the farmers are beginning to know each other. The cheque factory is a contributory factor. Paying, as it does, the monthly milk-check, many dairy patrons deposit the cheque in the bank. More should do so.

CHANGES IN BANK ACT

Regarding the proposed changes in the new banking act before the Canadian Parliament, whereby farmers may obtain loans in grain stored in their granaries, or on stall fed cattle in course of finishing, I am not overflowing 'with enthusiasm on this point. Should this proposed change in the act work out as a practical reform, it will be a splendid thing. The great drawback to getting money in a bank at present is the necessity of an "endorser." Nobody wants his neighbor to endorse for him if he can at all help it, and I am sure no one wants to endorse for any man, even his brother. It has happened too often that the endorser was finally forced to pay the note.

My view of the matter, is not to depend too much upon what privileges the farmer is to obtain from the provisions of the new banking act, but, on the other hand, to let the farmer cultivate the acquaintance of the bank, do business with the bank, be

(Continued on page 5.)

Issued
Each Week

FARM AND DAIRY & RURAL HOME

Only \$1.00
a Year

Vol. XXXII.

FOR WEEK ENDING MARCH 20, 1913.

No. 13

COMMERCIAL FERTILIZERS ARE REGARDED AS LABOR SAVERS

Alfred Hutchinson, Wellington Co., Ont.

A Practical and Successful Farmer who uses Commercial Fertilizers as Regularly as Barn Yard Manure. A Record of his Experiments. Mangels at 57 cents a ton.

WITH the near advent of spring, there is an annually recurring interest in the use of artificial fertilizer. Many farmers are asking, "Will it pay me to use fertilizers? If I do, what shall I use?" The first question is easy of solution, and if a little work and time is devoted to it, the answer should be positive, one way or the other. In my own case I answered the question years ago, and use artificial fertilizers as regularly as I use barnyard manure. I look upon them as one of our labor-savers, enabling me to grow a desired quantity of roots on fewer acres than I otherwise could do, and thus economizing labor in the busy summer season. The only way that a farmer can know just what results he is getting is by using the scales; that is, trying several different fertilizers or mixtures on small plots and weighing the product. By taking one crop each year he will soon get a general idea of what suits his soil best, and the work will be found exceedingly interesting. In 1911 and 1912 I have been working with mangels, and the results obtained will be found in the following tables. The size of the plots was one-eighth of an acre in every case, but for ease of comparison, I will give the application of fertilizer and the yield as per acre:

	Yield per acre.
Plot 1—No fertilizer	25 tons—1,130 lbs.
2—Nitrate Soda, 100 lbs. applied when plants were well up	25 tons—1,130 lbs.
3—Nitrate Soda, 150 lbs. applied when plants were well up	25 tons—1,130 lbs.
4—Nitrate Soda, 200 lbs. applied when plants were well up	25 tons—1,130 lbs.
5—No fertilizer	24 tons—1,130 lbs.
6—Nitrate Soda, 100 lbs. applied at seeding time	34 tons—400 lbs.
7—Nitrate Soda, 150 lbs. applied at seeding time	25 tons—1,130 lbs.
8—Nitrate Soda, 200 lbs. applied at seeding time	25 tons—1,540 lbs.

9—Common Salt, 200 lbs. 25 tons—800 lbs.
10—Common Salt, 400 lbs. 25 tons—1,200 lbs.
11—No fertilizer 24 tons—1,250 lbs.
12—Acid Phosphate, 160 lbs. applied at seeding time
Muriate Potash, 80 lbs. applied at seeding time 26 tons—1,300 lbs.
In this experiment the average yield of the three check plots was 24 tons 700 lbs. The application of 200 lbs. of common salt increased the yield over five tons per acre. The heavier application of salt was of no advantage, it not doing quite as well as the lighter dressing. In no case did the nitrate of soda pay for itself; neither did the mixture. The season of 1911 was dry and hot, but mangels did well.

READY MIXED FERTILIZERS TRIED

Up to this date I had not found any fertilizer that gave very decided results on mangels, though I have been working at them for several years; so in 1912 I tried some ready mixed materials, put up for special crops. These were tested in three different quantities per acre. Results were as follow:

	Cost	Yield per acre.
		tons. lbs.
Plot 1—Special best fertilizer, 250 lbs.	\$4.15	17 80
2—Special best fertilizer, 400 lbs.	\$11.20	16 80
3—Special best fertilizer, 1200 lbs.	\$36.90	19 550
4—Special for roots, 250 lbs.	\$ 4.15	17 720
5—Special for roots, 400 lbs.	\$11.20	24
6—Special for roots, 1200 lbs.	\$36.90	24
7—Garden & vegetable, 250 lbs.	\$ 4.15	21 240
8—Garden & vegetable, 400 lbs.	\$11.20	22 550
9—Garden & vegetable, 1200 lbs.	\$36.90	21 800
10—Common Salt, 200 lbs.	\$ 1.30	16 180
11—Nothing	13 550
12—Potash Phosphate, 250 lbs.	\$ 3.40	19 1600

The guaranteed analysis of these materials was as follows:
Best Fertilizer—Nitrogen 5%, Phosphate Acid 6%, Potash 5%—\$3 to \$3.5 a ton.
Root Fertilizer—Nitrogen 3%, Phosphate Acid 3%, Potash 6%—\$3 to \$3.5 a ton.
Vegetable Fertilizer—Nitrogen 2%, Phosphate Acid 6%, Potash 5%—\$3 to \$3.5 a ton.
Potash Phosphate 10%, Potash 6%—\$2.7 a ton.

Some rather large increases are shown, but in some cases they have been costly. Plot 5 shows an increase in yield of over 10 tons, at a cost of a little over \$1 a ton. Salt this year only increased the yield about 2 1/2 tons, nevertheless this increase was cheap, about 60c a ton. Plot 12 shows an increase of over six tons, at a cost of 57c a ton. In no case is the heavy application justified, and only in the second group is any pronounced benefit apparent for the medium weight. It is probably that in this case there were some other causes at work, and the increase may not be wholly due to the heavier dressing of fertilizer. So far as this test goes, it would appear that 250 to 300 lbs. is as much as can be applied with a maximum of profit; but it must be borne in mind that all the plots received a moderate dressing of barnyard manure. Salt does not show up so well this year as in 1911, but this may be accounted for by the difference in the seasons, 1912 being excessively wet. Mangels did not do so well as in the dryer, hotter season of 1911. The potash-phosphate, or "10-5," as we call it, I regard as a very promising combination; it was obtained especially for fall wheat, and was only put in this test at the last moment. It shows the cheapest crop increase here, and did remarkably well in other places.

In my turnip field, and also in the potato field, there was a headland on which we were unable to get any barnyard manure, owing to the softness of the ground due to excessive rainfall. On the potatoes we applied about 700 lbs. an acre of the 10-5, and the crop was far the best there of anywhere else in the field. On the turnips we put about 300 lbs. of 10-5 and 300 lbs. of acid phosphate; the resultant crop was as good or better than where the land received a dressing of 10 to 12 loads of manure and 300 lbs. of acid phosphate. I hope to give this fertilizer a more extended and accurate test the coming season.

Making
Good
on
High
Priced
Land



As seen
on a
Farm
in Grant
County
Ontario

HOW THICK SHALL WE SEED CEREAL GRAINS?

Prof. C. A. Zovitz, O. A. C., Guelph, Ont.

Some Interesting Results with Oats Secured at the Ontario Agricultural College, Showing the Effects of Thick and Thin Seeding on Yield, Lodging, Weight per Bushel and Resistance to Rust.

THE question of the amount of seed of the cereal grains to be sown for the best results has been discussed many times and in many places. Experiments have also been conducted with the object of securing information on this problem in different countries; and yet we have reached no unanimity in regard to the matter. We find, for instance, in Canada that the amount of oats that are sown per acre will vary from one to four bushels, and in Scotland the quantity frequently reaches six bushels of seed per acre. We find very strong advocates of using as small a quantity as one bushel of oats per acre, while others will argue as earnestly for the using of as high as six bushels or more per acre. The question then arises as to why there is such a difference in views of men who have had wide experience in the growing of grain upon their individual farms.

We are safe in coming to the conclusion that these variations are caused partly on account of knowledge, and partly on account of ignorance. It is undoubtedly true that the amount of seed per acre that would give the highest results under certain circumstances would not give the highest results under other conditions. There are many factors which exert an influence in determining the quantity of seed to use to give the best returns, each of these factors producing its own particular influence. The fertility of the soil, the state of cultivation, the moisture content of the soil, the variety of the crop, the method of seeding, the date of seeding, and many other factors, apparently exert their respective influence in regard to the amount of seed to be sown in order to secure the highest returns. If this be true it can readily be seen that we cannot come to a definite conclusion regarding the quantity of seed to use per acre of any class of our farm crops that would give the highest returns under all circumstances. It must be admitted that definite knowledge regarding the influence of some of the factors above referred to is very meagre. We believe as knowledge along these lines accumulates we shall be in a very much better position to know what is likely to give satisfactory results under the varying conditions in which a crop is to be grown. We believe, therefore, that any new and definite information obtainable which will throw additional light on this problem will be appreciated. I will present the preliminary results of an experiment which was started at the Ontario Agricultural College in 1909, and which has now been conducted in each of the past four years.

AN EXPERIMENT WITH STOOING

Members of this Association who are present, will remember the discussion which has recently taken place in the United States in regard to seed selection as an influence in crop production, and also the discussion that took place in Canada regarding the stooing of oats in reference to the yield of grain per acre. To glean information, especially, on these two points, an experiment has been conducted in each of four years by using both large and small seed of heavy stooing, medium stooing, and light stooing varieties of oats, and by planting the seed of

each variety in squares, one, two, three, four, six, eight and 12 inches apart. The seed was planted by hand and with very great care. Each plot was surrounded by oats of the same kind and planted in the same way. When the crops were ready to harvest the surrounding plants were removed so that the crops under experiment would not be influenced by the paths surrounding the plots. After the seed had germinated and the oat plants had appeared above the ground, notes were taken in regard to the stooing of the plants every 24 hours. Other notes in regard to height, amount of rust, strength of straw, etc., were taken at the proper time. Each plot was harvested with great care. The actual number of heads on each plot were counted. The weight of the total crop was determined, and after threshing was completed the amount of grain was subtracted from the entire crop, thus furnishing the combined weight of straw and chaff. The table published herewith gives the average results of 32 tests made by planting oats at seven different distances apart.

In an experiment of this kind it is usually considered wise to extend the experiment into extreme conditions, hence in the thickest seeding the oat grains were planted one inch apart each

but unlikely to cause the straw to become badly lodged, especially in a wet season. Even though this precaution was taken the crop lodged considerably, especially in 1912, when the weather conditions were inductive to a very large yield of straw of a succulent character.

The fourth column from the left shows that the number of heads or stools of an oat plant can be regulated largely by the thickness of seeding. When the seeds were planted one inch apart each way there was only an average of one head a plant, and when the seeds were planted 12 inches apart each way there was an average of 11 heads a plant. The number of heads a plant increased according to the increase in the distance between the plants.

THINNER SEEDING INCREASES HEADING

In the fifth column we have the comparative number of heads from equal areas of land. Where the seeds were planted one inch apart there were 144 times as many plants as on the same area of land where the seeds were planted 12 inches apart, and only about 11 times as many heads. It will, therefore, be seen that while the number of heads per acre decreases with the thinness of the seeding, that decrease is not nearly as great as the decrease in the number of seeds planted.

According to the results obtained in column six, the highest average crop was produced by the plants which were planted in the six inch squares. These plants were about five inches taller than those that were planted in the inch squares, and about one and one-half inches taller than those which were planted in the 12 inch squares. It seems apparent that where the plants were a foot apart each way the stooing was so abundant that the energy of the plant was expended in the production of stools to the sacrifice of the height to a limited extent. The results shown in the sixth column correspond, to a certain extent, with those in column five. It will be seen that the plants which lodged the most were those which were also the tallest, and were produced from the seeds which were planted six inches apart. It is interesting to notice that the very thickest seeding produced a crop which was lodged less than any of the other seedings. These results seem somewhat different from the popular conception that it is necessary to sow oats comparatively thin so as to reduce the percentage of the lodging of the grain.

MOST RUST ON THIN SEEDINGS

The average results of the per cent. of rust shown in column number eight, is also very interesting as they show a gradual increase in the amount of rust on the straw of the oats from the thickest to the thinnest seedings. The plants from the thin seeding had about three times as much rust as those from the thick seeding. The amount of rust on the plants, which were four inches apart, was about average of that of the thinnest and the thickest seedings.

The average number of days from the time that the grain was planted until the plants were matured are presented in column nine. It will be seen that there is a difference of nine days from the time that the thickly seeded plants matured until the thinly seeded plants had ripened. The increase in the stage of maturity corresponds exactly with the increase in the distance between the plants. The farther the plants were apart the later they were in ripening. It will, therefore, be observed that as the amount of seed oats

(Concluded on page 6.)

Thickness of Seeding Oats—Average Results for Four Years of Experimenting at the O. A. C.

Distance between plants.	Seed per acre. Lbs.	Seed per acre. Bus.	Heads per plant.	Per cent. of heads.	Per cent. Height lodged.	Per cent. rust.	Days to mature.	Pounds per bushel.	Yield per acre (Straw) (Bus.)	Yield per acre (Grain) (Bus.)	
1	414	12.34	1.8	100	29.4	1.6	11.8	91	25.0	1.75	28.68
2	194.0	5.66	1.1	31	27.8	11.9	15.0	93	31.4	1.58	34.85
3	66.1	1.96	1.3	17	32.6	12.8	17.8	94	33.2	1.52	41.73
4	28.0	.76	2.0	13	33.1	12.9	20.0	95	31.5	1.37	38.91
6	11.6	.34	4.2	12	35.3	35.8	25.4	97	28.6	1.40	37.42
8	6.3	.19	6.5	11	34.0	34.7	27.7	99	26.4	1.30	31.77
12	2.8	.09	11.2	9	34.9	36.1	33.2	100	23.9	1.03	21.93

way, which would require on the average a little over 12 bushels of seed per acre, and in the thinnest seeding the oat grains were planted one foot apart each way, which would require only about one-tenth of a bushel, or a little less than three pounds of seed per acre. Some of the intermediate seedings, however, approximate more closely the quantities of seed which are used in actual practice, as for instance, where the grains were planted two inches apart each way it required about three bushels of seed per acre, and where the seeds were planted three inches apart each way the amount of seed required would be about one and one-third bushels per acre. We expect to start another experiment in which several different thicknesses of seeding will be used, but the range will probably run from about one bushel to four bushels per acre.

THESE TESTS ARE ACCURATE GUIDES

The average results are worthy of very careful consideration. It is probably the first time that an experiment of this kind has been conducted in the manner here described. It should be remembered that each column represents the average of 32 distinct experiments. These experiments covered a period of four years which included an exceptionally dry season, and an exceptionally wet season. The yields of grain per acre are much lower than we usually obtain in the Experimental Grounds at Guelph. This is due to certain reasons, one reason being the unfavorable weather conditions of some of the years, and another reason being the fact that we conducted the experiment on land which would

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Quantity of Clover Seed to an Acre

T. G. Baynor, Seed Division, Ottawa

There is a great difference of opinion with many farmers as to the amount of clover seed it is necessary to sow on an acre. For instance, one farmer will tell you he has had splendid stands by sowing only four pounds an acre, while others will say that 12 pounds an acre is quite too much. Then there are a host of men



One Way of Handling the Corn Crop

who will argue that six or eight pounds an acre is a great plenty. As a matter of fact all these amounts may be plenty under certain conditions. Take the four pound advocate. He probably grows a lot of early red clover. He rarely if ever saves any of the second crop for feed, but pastures it off. He doesn't turn his stock to feed on it until the seed is forming. Before it is all pastured off there has been quite a large number of heads in which seed has formed. These seeds drop into the ground again, or are eaten by cattle, and go through in the droppings which find their way to the soil while the stock are pasturing, or in the applied stable manure. In a few years after growing clover the land seems to get quite full of the seed, and no matter when a field is re-seeded a small amount of good seed will give a good stand. It may be that the soil is rich in humus, and every good seed not only grows but the plant branches out so that the ground is covered and a good crop results with light seeding.

12 LBS. FOR 100 MTNS

The farmer, however, who stands up for 12 pounds an acre in seeding isn't far from the mark, even when he sows good vital seed. How is this, you ask? The seeds of clover are quite small and if sown evenly they should cover the ground. But did you ever figure out how many clover seeds would be sown to the square inch of ground if you applied even 12 pounds an acre? Perhaps you didn't know that there are 18,400 red clover seeds in one ounce by weight, and you had no way of finding out. There are about 18,400 red clover seeds of average size in one ounce, and this would give you 294,400 seeds in one pound, and in 12 pounds of seed sown per acre there would be 3,732,800 seeds. There are 43,560 square feet in an acre, so that for every square foot there would be 85.6 seed, or about 3.5 of a seed a square inch. So you see that unless the plants stood out a good deal they wouldn't cover the ground any too well, and this is calculating that every seed is vital, and that it gives an account of itself in the soil.

To have every seed grow there must be a fine seed bed made rich in humus and lime if possible, which would ensure plenty of moisture and plant food, so that the little clover plants could get off to a good start. Good growing weather would be necessary as well. From what has been said, it would be extravagant to say that on a poor soil or a soil in a poor state of cultivation it would require much more seed

to get a stand. Then, supposing the seed is of inferior quality, as most of the Ontario ground seed is this year, owing to the intermittent growth last season and the early frosts, surely plenty of seed and close screening will be in stand next spring to avoid disappointment in the stand next summer.

There is a further argument here for those who have to buy seed to pay the price for the best seed they can get, as it is really the cheapest seed after all.

WHY NO. 1 SEED

See what is required of No. 1 seed. It must be clean, sound, evenly graded, of good color, and contain not more than five noxious weed seeds an ounce, or 100 weed seeds of any kind an ounce. For such seed the retailer may ask from \$15 to \$16 a bushel, or 25c to 27c a pound. Compare this with No. 3 seed, which according to the wholesale price asked, will mean that the retailer will ask at least five per cent. increase on the cost, \$12 to \$13 a bushel, or from 20c to 22c a lb. In No. 3, which only has to be reasonably clean, there may be plenty of dead seed, which need not be labelled with the percentage vitality, unless it fall below 63 per cent., or two-thirds the proper standard for germination. It would appear that there will be plenty of No. 3 seed this year, both from appearance and vitality. Then supposing the maximum of weed seeds are there, 80 an ounce of noxious weeds, or 16 times as many as in No. 1, and a total of 400 of weed seeds of all kinds an ounce, which is four times what is allowed for No. 1. The spread in noxious weeds is as 1:16, and for all weeds as 1:4, but the spread in price is only about four or five cents a pound.

I leave the reader to judge which is the



This Way is Better

The two illustrations on this page show graphically two distinct methods of handling the corn crop in this country. The one depicted in the illustration above is accompanied by great loss in feeding value as well as Jeany, Oxford Co., Ont., here illustrated, shows the more economical and more up-to-date method of handling corn and a method that is ever growing in popularity—in a silo.

—Photos by an editor of Farm and Dairy.

cheaper buying and on which kind the most money is made, by the wholesaler especially. The law requires that all seeds should not only be graded but so labelled. Look out when buying that the seed is truly marked.

Keep your eyes open for opportunities to give the horses work. The time is near when they will be all the better for a little hardening now.—A. McCall, York Co., Ont.

Start Now to Get Eggs in Winter

Dr. A. A. Farewell, Ontario Co., Ont.

Now is the time to prepare for getting eggs next winter. A good winter laying hen must possess certain characteristics. She must be well developed and well fed. She must be active, with a quiet disposition, and above all have a good constitution. In order to have her well developed, she must be hatched early. She must be active, with a good constitution. We must feed her in such a manner that she will be compelled to work for her food. She will acquire a quiet disposition through the frequent handling and gentleness of the attendant.

There are three conditions essential in order to produce such a hen: Proper stock, proper housing, and proper feeding. Any two of these might exist, but without the third there would be failure. I place proper stock first, as it is the most important. It requires many years of careful, patient, and persevering breeding to produce good and profitable stock. Only eggs from the most prolific and robust hens should be used and of those that begin laying at an early age.

THE CHICK ONLY A START

But when we have our chick hatched, our work is only begun. Now comes the most important stage in the whole hen business—the rearing of the chick. The feed must be such as will produce a rapid development of both bone and muscle and also have a special affinity for the egg producing organs. Unless this feeding is properly and carefully attended to, the breeder will find himself minus that fully developed and matured pullet on which he must depend for his supply of early winter eggs.

Proper housing presents itself in two periods—before and after the pullet begins to lay. The first period begins when the chick is weaned. They should then be placed in a shed facing the south, with nothing but coarse burlap for the southern wall. This shed should be surrounded with grass and preferably in an orchard. Holes should also be made in the wall so that the chicks can pass in and out. For my own part, I have this opening fitted with a trap door in such a manner that the hen opens it in the morning. It then remains open until closed by the attendant at night. This ensures the chicks a maximum amount of fresh air and free range, which are the two things requisite for the development of a strong, healthy chick.

LABOR SAVING FEED METHODS

The feed is placed in the hoppers and the water in an automatically regulated tank, and are replenished once a week. The chicks remain in these quarters until the first of October, when they are moved to their winter quarters, placing only 25 in a pen. Then the feeding for egg production begins.

These houses are also provided with open fronts, but the roosting apartment is somewhat warmer. Care should be taken at all times that the hens are plentifully supplied with fresh air; fresh air is the secret of success in the hen business. These winter quarters must be provided with runaways. I have a runaway on both the south and north sides, and they are plowed every alternate year, so that the hens are on fresh ground each year.

WAR ON VERMIN

The hens and houses must be kept perfectly clean. I use pyrethrum powder for hens and coal oil for the houses, applying the oil with a sprayer or brush. These houses are not frost-proof. In fact, the drinking water would freeze solid were it not removed every night. The idea that hens must be kept warm in order to produce eggs is a rule of past ages.

I now come to feeding, which many people
(Concluded on page 2.)



"The car of the hour" it has been many seasons! But it's more than that now. It stands alone—"the universal car." Nothing but a wonderful merit could have created so enormous a demand for it. Better get yours today.

There are more than 220,000 Fords on the world's highway—the best possible testimony to their unexcelled worth. Prices—runabout \$675—touring car \$750—town car \$1000—with all equipment, f.o.b. Walkerville, Ont. Get particulars from Ford Motor Company of Canada, Limited, Walkerville, Ontario, Canada.



An Unsolicited Testimonial

A CLEAR-EYED young farmer stepped up to a manure spreader demonstrator at the 1912 Chicago Live Stock Exposition and, pointing to one of the spreaders in the exhibit said:

"I own one of these machines. It is the strongest spreader I ever had on my farm, and I've had a number of different machines. I honestly believe that if I filled that spreader with soft coal it would spread the stuff for me. I wouldn't trade it for any spreader I ever owned or saw."

This unsolicited recommendation from a man who had used an I H C spreader, and therefore knew what it would do, carried weight with his hearers. They might have doubted whether an I H C manure spreader would spread soft coal—but there was no doubt in their minds that an I H C spreader had spread manure to this man's entire satisfaction. This is a typical case showing what users think about

I H C Manure Spreaders

Corn King and Cloverleaf

I H C manure spreaders are made in many sizes, running from small, narrow machines for orchard and vineyard spreading to machines of capacity for large farms. They are made with either endless or reverse aprons as you prefer.

The rear axle is placed well under the box, where it carries over 70 per cent of the load, insuring plenty of tractive power at all times. Beaters are of large diameter to prevent winding. The teeth that cut and pulverize the manure are square and chisel pointed. The apron drive controls the load, insuring even spreading whether the machine is working up or down hill, or on the level. I H C spreaders have a rear axle differential, enabling them to spread evenly when turning corners.

The local agents handling these machines will show you all their good points, and will help you decide on the one that will do your work best. Get literature and full information from them, or, write the nearest branch house.

International Harvester Company of Canada, Ltd

BRANCH HOUSES

At Brandon, Calgary, Edmonton, Estevan, Hamilton, Lethbridge, London, Montreal, St. Paul, Toronto, Ottawa, Quebec, Regina, Saskatoon, St. John, Winnipeg, Yorkton



Sawdust in Horse Stables

Broadly speaking, it may be said that in bedding down horses with sawdust a little over a hundredweight will serve a horse standing in a stall for a week. When a horse is quartered in a loose box a correspondingly larger quantity per week will be required. Of course, when the supply is very plentiful, more than the above mentioned weekly amount can with advantage be used, and a deeper bed be put down, thus rendering the latter all the more comfortable for the horse; one hundredweight per week may be looked upon as being the minimum quantity of sawdust which is necessary in order to keep a horse comfortably bedded down, but if a larger quantity is available, so much the better.

When sawdust is used as litter in a stable, the best method of management to adopt in regard to the keeping clean and renewal of the bedding is as follows: First thing in the morning, after the stable is opened, all droppings, as well as all wet portions of the bedding, should be removed with the stable shovel and manure sloop, the holes which are made being subsequently filled up with fresh sawdust. The bedding should then be levelled, and this is best done by raking it over with a rake; but, failing the latter, the levelling must be done as best it may be with the stable fork. During the daytime all droppings should be removed as often as possible, and in the evening wet portions of the litter should again be removed and replaced with fresh sawdust, and the whole properly levelled down. In this way sawdust bedding can easily be kept in good order and perfectly sweet and clean for a considerable time.

DRYNESS FIRST ESSENTIAL

At frequent intervals—say once every seven or 10 days—the whole of the sawdust should be removed or piled up in a corner of the stall, so that the floor may air properly, and get dry if it is wet. So long as sawdust remains dry it can be continued to be used, but, once it is saturated with urine, it is no longer serviceable. In using sawdust for bedding down purposes, the floor of the stall or loose box should be covered with it to a depth of, at any rate, four inches, that being the minimum depth which the bed ought to have if a horse is to lie comfortably on it, but by preference it should be made an inch or two deeper than that.

It is most important, when sawdust is used, that it should be perfectly dry, otherwise it is unsuitable for use in the stable, damp sawdust both being unwholesome and not possessing much absorptive capacity. Sawdust which is obtained from unseasoned and green wood is unsuitable for use as bedding material in the stable, because it is not properly dry, and therefore deficient in absorptive power. One great drawback connected with sawdust is that it makes a bit manure. It decomposes but very slowly in the ground, and it takes a long time ere it gets thoroughly incorporated with the soil. For this reason farmers look askance at manure made from sawdust, and do not care about using it. The only way to dispose of it is to give it away.—H. F., in the London Live Stock Journal.

The Joy of Agriculture

No other occupation opens so wide a field for the profitable and agreeable combination of labor with cultivated thought as agriculture. I know nothing so pleasant to the mind as the discovery of anything that is at once new and valuable, meaning that so lightened and sweetened toil as the hopeful pursuit of such discovery. And

Calves Without Milk

BLATCHFORD'S CALF MEAL

The Complete MILK Substitute
The result of over 10 years experience with calf raisers. As rich as new milk at less than half the cost. Makes rapid growth, Stops scouring. Three calves can be raised on it. See Bulletin "How to Raise Calves Cheaply and Successfully Without Milk" by sending a postcard to:



STEELE, BRIGGS SEED CO., Ltd.
Toronto, Ont.

FOR SALE SEED CORN THAT WILL GROW

Sold for Prices
P. D. CAMPBELL,
AMHERSTBURG, ESSEX CO., ONT.

Seed Corn for Sale

High germination test. White Cap, Yellow Dent. Grown on our own farm. Write

TISDELL BROS.,
TILBURY, ONT. ESSEX CO.



THE MARK OF QUALITY. Write for booklet on line of interest to you.
THE WILLIAM DAVIES CO., LTD.
Commercial Part, Dept.
West Toronto, Ontario



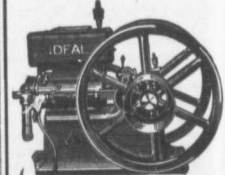
Lump Rock Salt, \$10 for ten tons, f.o.b. Toronto
Toronto Salt Works, 128 Adelaide St. G.
G. J. CLIFF, Manager Toronto, Ont.

Have You Anything for Sale?

Once a month or sometimes oftener you have a buyer come along and ask you this question: "You cannot afford to depend on the chance buyers coming along. I will pay you to go out to seek the market. This you can do to your great advantage through advertising. Tell over 15,000 possible buyers of what you have for sale through advertising in Farm and Dairy."

GASOLINE ENGINES

11 to 80 H.P.
Stationary Mounted and Tractor



WINDMILLS

Grain Grinders, Water Pumps, Steel Saw Frames, Pumps, Tanks, Etc.
GOOLD, SHAPLEY & MUIR CO., LTD.
Bramford Winnipeg Calgary

GRANGE NOTES

Elgin County Grange meets in the Court House in the afternoon of March 19th. The officers for 1913 will be elected. Dominion Grange reports by Frank Baimard. Grange will be given, also addresses on agricultural subjects by Messrs. Buchanan, Edwards and Porter, representatives for the Unities of Elgin, Essex and Lambton.

Mr. Alex. Anderson, on whose farm hydro-electric power is working, has been invited to explain its use and benefits.

The ex-Grangers, who by reason of failing health and other causes, have left their farms and are now residing in St. Thomas, are discussing the advisability of forming a Grange in the City for social and educational purposes, also to help by their experience any objects brought forward for the welfare of the agricultural classes. Several homes have been offered in which to hold the meetings, and it is likely that each family will have the meeting in turn. County Magistrate Hunt wishes the organization meeting at his house. The membership will be limited to retired farmers, their wives and daughters.

The following is clipped from the St. Thomas Times:

"At a meeting of Forest Rose Grange Monday evening, March 3rd, a report of the Dominion Grange meetings held in Toronto in January, was given by the local secretary, and a stirring debate was given on the subject. 'Resolved, that company ownership of land is more beneficial than individual ownership.' The affirmative was taken by J. Chapman and G. Curtis, and the negative by W. Pranglen and L. Monroe. The affirmative endeavored to prove that large companies could work to better advantage with less comparative outlay for machinery and tools, and with a greater eye to a paying dividend. The negative tried to prove that individuals on a small holding of their own could get more out of life in satisfaction and dividends than could the larger organizations. The decision was given in favor of the negative.

It was decided to have a photograph taken of the officers of Forest Rose at the time of the County Grange meeting to be held in St. Thomas, on March 19th.

The Middlemarch Grange at its last meeting decided to hold a Corn and Seed Show in the Grange Hall next autumn, and a committee was appointed to wait upon the Southwood Township Council regarding a grant, namely, Messrs. Herbert, Pether, Gordon Suford and Selathiel Curtis.

That the Grange helps all other organizations, especially the Farmers' Institute, is shown by the fact that the first week in March the representatives of several counties visited Yarmouth and Southwood with lantern slides illustrating the best methods of raising poultry, and other interesting matter and delivering very helpful addresses. At Middlemarch, where a grange has been in being over 30 years, the hall was opened to the doors, many hands were joined, and a good programme was given by local talent, which was given the next night, where a fine flourishing grange has been allowed to lapse, there were only five people, including the reporter. Lesson: organize or re-organize, and keep in touch with your neighbors on agricultural subjects all the year round and not depend on one or two meetings a year of the Farmers' Institute.

The County Grange of Dufferin is making arrangements for a regular campaign in that county, and a number of new granges are expected as the result.

The father and originator of the Grange died in Washington in January at the age of 86, Mr. Oliver H. Kelley. For some years a pension of \$1000 has been granted him by the National Grange as a small recognition of his services in the cause. The University of Wisconsin has sent a testimonial to his family. His life and influence will be felt for all

time in every line of agricultural pursuit, and should be an inspiration to every one to do what he or she can in the interests of mankind.

The secretary of the Dominion Grange, J. J. Morrison, visited Northumberland County, and a new grange was organized at Roseneath, with 25 charter members. Officers elected: Master, Walter Lean; Overseer, Robt. Mouncey; Sec.-Treas., Clarence Varcoe; Lecturer, Robert Campbell; Chaplain, W. J. Varcoe; Steward, Charles Sherwin; Asst. Steward, A. Halstead; Gatekeeper, W. Brown.

Bro. Morrison has also been working in Prince Edward county, and Oxford, with good results, enthusiastic old members and bringing new ones into the Grange.

W. C. Good, Master of the Dominion Grange, spoke at Cardinal, Dundas Co., Ont., on the aims and object of the Grange. Mr. Good traced the Grange right from its foundation to its position today. He outlined the stand the Grange takes on such questions as direct legislation, taxation and the protective tariff and on militarism. As might be expected many

This is our 47th Year

Here's the "LOUDEN" Line again

- Saving Time
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- Saving Money



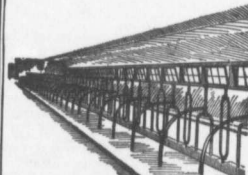
The Louden Balance Grap.



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Louden Barn Door Hanger

That is the object of the Louden Farm Equipments:

- Doing long jobs for you quickly.
- Doing hard work for you in an easy way.
- Costing you one dollar where you would otherwise spend two.

If you are going to build this Spring—if you are going to make farming easier this year—or if you want to cut down expenses, you should get the new Louden Catalogue and learn about these modern aids to better farming.

You will find Louden Equipments on the Best Farms in the Land

Everywhere, where only **THE BEST** is good enough, Louden goods are selected. Government Experimental Farms, Agricultural Colleges, and so on, are equipped with Louden fittings. The best Dairy Stables where sanitation and the well being of the Cow is the chief consideration, is where you will find Louden Sanitary Steel Stalls and Tubular Steel Stanchions.

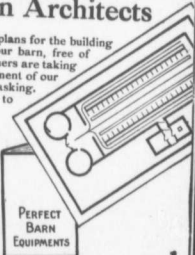
We are also pioneers and inventors of Hay Carriers, Forks, Slings, Barn Door Hangers, and a general line of FARMERS' HARDWARE.

Our Expert Barn Architects

will give you advice and plans for the building or re-arrangement of your barn, free of charge. Hundreds of farmers are taking advantage of this Department of our service. It is free for the asking. Tell us what you're going to build.

Write for this Free Book "Perfect Barn Equipment"

It doesn't call upon you to lay out a cent, but it makes a handy book of advice and reference, when you want Equipment or Farmers' Hardware.



PERFECT BARN EQUIPMENT

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DEPT. 12 GUELPH, ONT.

Potash for all Crops. On all Soils.

FARMERS, who may be considering the purchase of Fertilizer materials for this season's use, are invited to communicate with us and we shall send them Free of any charge a representative selection from the following instructive, illustrated Bulletins:

- FARMER'S Companion
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Valuable Pamphlets, containing expert up-to-date information on this important subject.

Send us 5 or more names and addresses of your neighbor farmers and we shall send you a colored wall placard.

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10,000 Readers of this paper to show Farm & Dairy to their friends and neighbors. They will work for a really representative in your locality. Liberal pay in cash.

PURE BRED (IMP) YORKSHIRES

Both sexes, 6 months old. Selling fast to make room for more. Apply GORDON LENEY, 10 YEARS, ONT.

BOOKS

Now that the long evenings are here plan to improve your time by reading. Get a Book Catalogue Free from FARM AND DAIRY All Books at Lower Prices

SPRAYERS

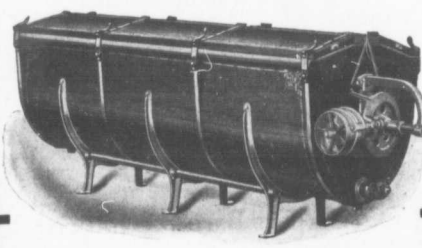
For large or small orchards, market gardens, potato fields, grain, meadows, lawns, house and garden work, public places, vineyards, nurseries, etc. Cleaning, cold water spraying, etc. See our literature.

IRON AGE \$4 to \$400

They are the best pumps, no matter how large you can build them. Ask your dealer to show you our "Spraying" circular. We will send you a free full line potato machines, garden tools, etc.

The Williams & Watson Co. Limited
41 Campbell Ave., Toronto, Ont.

Improve the FLAVOR and the KEEPING QUALITIES of your Butter.



Simply placing sweet cream into a churn after separating without first "Preparing" the cream does not produce the best butter.

All cream should be ripened thoroughly, before churning. The Quality of the butter depends on this ripening, as to texture, flavor and keeping quality.

Butter made from Ripened cream has a greatly improved flavor, keeps fresh much longer and has a firm, solid texture.

The "Beaver" Cream Ripener accomplishes the process perfectly and economically. Your customers will notice the improvement in your butter. They will wonder at that delicious taste, and the marvellous keeping qualities. You will obtain a higher price for your product and it will gain popularity, meaning more profit for yourself.

Hundreds of Butter Makers have installed the "Beaver" Ripener, and we have received letters of recommendation from many of them. Write to-day. We will send you full particulars by return mail. Address:

W. A. DRUMMOND & CO.,

(Creamery and Dairy Supplies.)
King Street, E., Toronto, Ont.

of his hearers did not agree fully with Mr. Good, but they all gave him credit for having made a most forcible and telling address, and the meeting concluded with a hearty vote of thanks to the speaker of the evening.

Society's Claim

(Nebraska Farmer)

Certain it is that in considering the use of land, and the most profitable size of farms, the fortunes of individuals should not be allowed to obscure the claims of society. For the greatest profit to individual farmers, 600 acres might be the best size of farm, the most profitable farm unit, while for the people of the country as a whole division of the land into farms of this size might be a very bad thing, indeed.

A passenger car train may spread himself and his baggage over two or more seats when the car is not crowded, and thus secure the maximum of comfort and profit from his trip; but as the car fills up with other passengers, for their comfort and well-being he must get his baggage out of the way and take his feet down from the seat in front. As population increases the best use of land dictates that it be made to produce the greatest amount of food and clothing material per acre, instead of the greatest amount per man working upon it. This is a point that farm management experts have not generally considered. Whether the best use of the land from the standpoint of the whole people means small farms or large farms does not yet appear clearly, although we suspect that it means relatively small farms.

Let the Farmer Cultivate the Acquaintance of His Banker

(Continued from inside cover page.)
come a regular customer, and this only can be done by depositing all the cash received for farm produce in the bank, and paying it out by cheque. Instead of depositing unused money in the government savings bank, deposit it in your local bank, and when you want a loan you stand a fair chance of getting it from your own bank.

Correction.—An error and several oversights were permitted in the advertisement of Geo. Keith & Sons, Seedsmen, at 124 King St., Toronto, in Farm and Dairy last week. Prices were admitted in three sections of their advertisement, Mr. Keith not having placed these in his copy and the omission was not noticed until too late to put them in. Keith's Best Diamond Brand Timothy No. 1, Gov. Standard, should have been quoted. Note Mr. Keith's Best Ocean Brand Alyse No. 1, Gov. Standard, \$18 a bush, (very little of this grade to be got); Keith's Near Best Sea Brand Alyse, No. 2, Gov. Standard, \$15 a bush, in agreement with Keith's Near Best Crescent Brand Timothy, (the comment was made: "Clean enough for form," "This should have read: "Clean enough for any farm.") Note Mr. Keith's this week, and bear in mind the wisdom of ordering your seed early, avoiding the rush, and ensuring satisfaction.

The whip is poor medicine for a frightened horse.

HOW THICK SHALL WE SEED CEREAL GRAINS?

(Continued from page 2)

per acre is increased, the stage of maturity of the crop is hastened.

The average results presented in column 10, although not as regular throughout as some of the other columns, are nevertheless just as interesting. It will be observed that the heaviest average weight per measured bushel was obtained from the three crop which was sown in the three inch squares, and from this seeding there was a gradual decrease in weight per bushel as either the thickest or thinnest seeding is approached. The lightest oats were produced from the thinnest seeding. It will be seen that a heavier weight of oats per bushel was obtained where one and one-third bushels of oats were sown. Although the weight per measured bushel even in the highest average is less than the standard it must be remembered that at least two out of the four years in which this experiment was conducted the weatherable for the production of oats of high quality in Ontario.

The combined yield of the straw and the chaff is presented in the eleventh column. These average results show us that for a large straw production it is necessary to sow oats comparatively thick. Even the oats which was sown with oats at the rate of 12 bushels gave a greater yield of straw than the land which was sown with oats at the rate of three bushels per acre. With only a slight exception there is a gradual decrease in the yield of straw and chaff per acre from the thickest to the thinnest seedings. It is interesting to note, however, that three pounds of hay produced more than one-half the rate of straw obtained from 414 pounds of oats as seed per acre.

In the last column which may be considered as the most important of all, we find that the greatest yield of grain per acre was obtained from the oats which were sown three inches apart each way. From this yield

there is a gradual decrease in yield per acre to both the thickest and the thinnest sowings. It is very interesting to note that the yield from three pecks per acre was four bushels greater than that from the crop obtained from sowing three bushels per acre. The results are presented favor rather than seeding as against thick seeding in the production of oats. Particular attention should be drawn to the fact that in the experiment as here conducted, one and one-third bushels of seed per acre, when placed in the land very evenly, gave a greater yield of oats per acre, which weighed more per measured bushel, than that obtained from either three or four bushels of seed per acre. The results presented in this table are very suggestive, especially as forming a basis of other experiments which are to follow. In another year or two we expect to present the results of this, and other experiments which we have under way, in a more detailed manner. When this material is submitted we believe it will add a considerable amount of valuable information in regard to both the selection of seed, and the sowing properties of oats as they relate to crop production in addition to the information furnished in regard to the thickness of seeding of this most important crop.

Single Fare for Easter via Canadian Pacific Railway

Return tickets will be issued at Single Fare between all stations in Canada, Port Arthur and east, also to Niagara Falls and Buffalo, N. Y., Detroit and Sault Ste. Marie, Mich. Good going March 20, 21, 22, 23, and 24. Return limit, March 26, 1913. This is an excellent opportunity for a trip at moderate expense, the return limit being exceptionally long for an event of this nature. Full particulars from any C.P.R. agent. See that your tickets read via C.P.R.

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how vast and varied a field is agriculture for such discovery. Every blade of grass is a study; and to produce two where there was but one is both a profit and a pleasure. And not grass alone, but seeds and seasons, hedges, ditches and fences, draining, droughts and irrigation, plowing, hoeing and harrowing, reaping, mowing and threshing, saving crops, pests of crops, diseases of crops, and what will prevent or cure them, implements, utensils and machines, their relative merits and how to improve them, hogs, horses and cattle, sheep, goats and poultry, trees, shrubs, fruits, plants and flowers, the thousand things of which these are specimens, each a world of study within himself.—Abraham Lincoln.

264 Page Book on Silos and Silage

1913 copyrighted edition just off the press. Most complete work on this subject published. Used as text book by many Agricultural Colleges. Gives the facts about Modern Silage Methods—tells just what you want to know, 264 pages—indexed—over 45 illustrations, a vast amount of useful information boiled down for the practical farmer. Tells "How to Make Silage"—"How to Feed Silage"—"How to Build Silos"—"Silage System and Soil Fertility"—"Concrete or Cement Silos." All about "Summer Silos" and the Use of Silage in Beef Production. Ninth Edition now ready. Send for your copy at once. Enclose 10c in coin and mention this paper.

10c

Silver Manufacturing Co., Salem, Ohio

Seed, Grain and Potatoes

Siberian Oats, clean and pure, 70c per bus. No. 21 barley, from hand selected seed, absolutely pure, \$1.25 per bus. Empiro Barley, Delaware and Satisfaction Potatoes, all from selected registered seed, \$2 per bag. Cash with order, bags free. A. HUTCHINSON, MOUNT PLEASANT, ONT.

Corn That Will Grow

Money back if not satisfied

Send for Price List

J. O. DUKE, RUTHVEN, ONT.

SPECIAL PRICES ON QUANTITIES

O. A. C. No. 21 BARLEY, choice plump—most carefully threshed and not scoured. Ten bushel lots, 85 cents. Best cotton bags 25 cents extra. Write early and be sure of supply.

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Well DRILLING MACHINES

Over 10 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on skids. With engines or horse powers. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog. WILLIAMS BROS., ITHACA, N. Y.

To Make A 1 Syrup

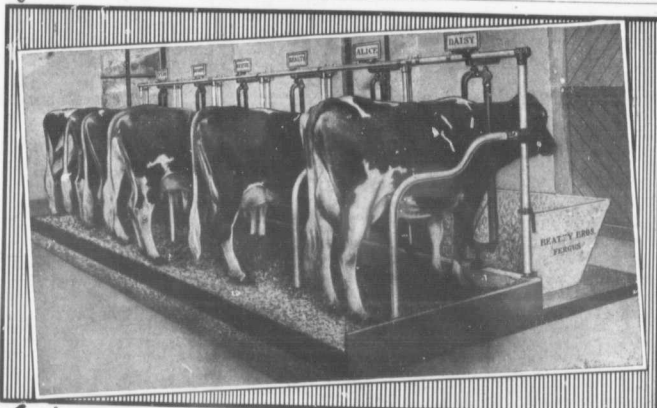
Mr. J. H. Grimm, of Montreal, is offering \$800 in prizes for the best maple syrup and sugar that is entered in the competition now being conducted by the Grimm Manufacturing Company. This competition is designed to educate both producers and consumers to what good maple products really are. The higher the quality of the product entered the better Mr. Grimm will like it. He gives the following directions to prospective competitors:

"We have a large number of customers who are making a second and third-class syrup with the Champion Evaporator, who should make a first-class article. They have the right evaporator if they will only operate it in the right manner.

"Our interests are mutual, and we desire to assist them in every way towards a better market for their syrup and sugar, and the only way to accomplish this is for them to help themselves by improving the quality of their output. They can easily do this, accomplished if they will follow out the suggestions which we will endeavor to outline in a few words as possible how to make a high-grade syrup. (1) Cleanliness and quick evaporation, good dry fuel, and a determination on their part to produce a high-grade syrup, will bring the best results.

"(2) If they will bear in mind that sap is white like water, and the main object is to heat the sap to 219 degrees, or to weigh 13 lbs. 3 oz. to imperial gallon (net or standard weight)—keeping it as near the color of the sap as possible.

"(3) To make a quality of a high-quality will require: First, that the sap is prime; and in operating the evaporator to obtain the very best syrup that can be made, it must be operated shallow. This means that syrup will be drawn at short intervals, say at every 10 or fifteen minutes. We will illustrate as follows: If you are operating on a certain quality of sap and running your syrup off once an hour, you will be making a syrup that is red or dark in color, and you would be removing from the evaporator quite a fair-sized batch; but supposing that you operated the evaporator so as to remove the syrup once every half hour you would have syrup of a lighter color and would be making a little more syrup than you did with the former plan. Now, if you can successfully take the syrup off the evaporator every 15 minutes instead of half hour you will make still a lighter article of syrup, and will make more syrup than by either of the former methods. Further, if you will cut your time down for drawing off your syrup to every 10 minutes you will still be making a lighter color of syrup from the sap, and will be making a syrup that will have a fine delicate flavor and that will be eligible to compete for the prizes offered by us."



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Dom. Exp. Fm.....St. Boniface, Man.	Dept. of Agr.....Victoria, B.C.	Dept. of Agr.....Fredericton, N.B.	Agr. Exp. Sta. Hestonsgrove, Fin.
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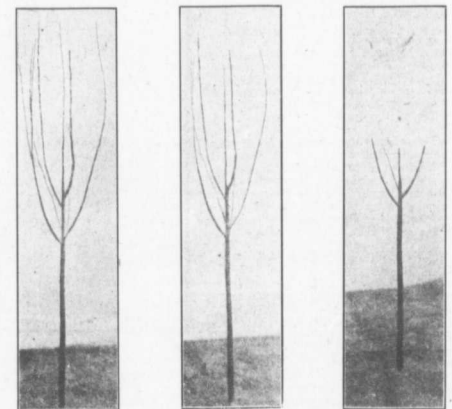
Winnipeg



HORTICULTURE

Pruning Maxims

1. Start the tree right.
2. Do not cut out large limbs.
3. Keep your tools sharp.
4. Never prune in frosty weather.
5. Frost-bitten wounds are slow to heal.
6. Never leave stubs in cutting off limbs.
7. Prune annually, but never heavily.
8. Wounds heal most rapidly in the spring.
9. Heavy pruning conduces to wood growth.
10. Never use a hatchet for removing suckers.



Two Methods of Pruning—Which is Yours?

To the left may be seen a young tree as it is on its arrival from the nursery. In the centre is depicted the ordinary but insufficient pruning, while on the right is a tree properly pruned. In tree planting we would do well to remember that in removing the tree from the nursery row many of the feeding rootlets were moved. The tree is not then able to sustain as large a head as formerly, and severe pruning is necessary to reduce the strain on the roots.

11. Avoid injuring the cambium in any way.
12. Don't leave your pruning to the hired man.
13. The more you understand trees the better you will prune them.
14. A severe heading-back will renew the tops of old peach trees.
15. In transplanting be careful of the root hairs.
16. In transplanting cut back top and root.
17. Do not head trees so low as to interfere with cultivation.
18. Drastic pruning strikes at the vitality of the tree.
19. Do not start all main limbs at the same height.
20. Keep the tree free of suckers.
21. Summer pruning induces fruitfulness.
22. Thorn wounds are generally fatal.
23. Paint over the large wounds.
24. Trees are delicate structures and require careful handling.
25. A heavy pruning is always followed by a heavy growth of suckers.
26. Never slit the bark, bore holes, or drive nails into trees.
27. Never allow stock to prune your trees.
28. Unpruned orchards are not money makers.
29. The orchard is not a profitable source of firewood.
30. Blackberries and black raspberries should always be tipped back in summer.

31. Prune gooseberries and currants by the renewal of rotation system.—Western Farmer.

New Soluble Sulphur Spray

It appears that the new spray in the form of a dry soluble sulphur which is this year being placed upon the market will prove altogether popular with fruit growers and will eventually replace the old lime-sulphur which must be shipped out in liquid concentrated form. The sulphur in the new product when dissolved in water is said to be in the same form, poly-sulphides, etc., as is the sulphur in the lime-sulphur spray solution which has been used during the past several years. The dry product may readily be stored anywhere and is shipped at a greatly lesser cost for transportation and for package.

While in Burlington recently talking to Mr. M. C. Smith, the manager of the Niagara Brand Spray Company, we were shown samples of this new soluble sulphur, which is their exclusive product. One sample that had been dissolved in water to nearly the limit that the water would hold in solution gave a test of 44 degrees on the Beaume Hydrometer. It might be made even stronger. One and a half pounds of this dry soluble sulphur to a barrel of 40 gallons of water is sufficient to make the strength advisable for summer spraying. Ten pounds to 40 gallons is used for winter spraying or before the leaves begin to appear.

There is not a sufficiency of the dry soluble sulphur available this year to take care of the demand. It is not as yet being made in Canada, but Mr. Smith is bringing in two car loads, which he has already sold, from the New York State plant of his company. Some 40 car loads of this new product is being turned out over there this season.

The Wentworth Fruit Growers Association started with 20 members two years ago. For that year they handled 4,400 barrels of apples. Last year with an increase of 10 members they handled over 14,000 barrels of apples. They say that last year was a poor year in the apple business. It was just as good a year to me as any year.—J. Dixon, Apple Buyer, Wentworth Co., Ont.

POULTRY YARD

A Wise Man's Plan

The wise man said one summer day: "Now eggs are cheap, for all hens are laying!"
 And so I'll buy a million eggs
 Of these absurdly low-priced eggs.
 And store them till the blizzards come,
 When hen fruit works are out of plumb,
 And then I'll bring them from my store,
 And clear a ton of wealth or more."

And so he leased a building tall,
 And filled it up from wall to wall
 With oodles of refreshing eggs;
 In crates, in boxes, and in kegs;
 And then he waited for the time
 Of shrieking gales and snow and rime,
 And planned a trip to Rome and Cork,
 With sundry nights off in New York.

The winter came along full soon,
 But 'twas a running mate to June;
 The whizzing tempest didn't bliz;
 The raging blizzard failed to whiz;
 The hens were sure the month was May,
 And each laid seven eggs a day.

The man of eggs soon went insane,
 Which shows that human plans are vain;
 It also seems good evidence
 That hens have mighty little sense.
 —Walt Mason.

Number of Hens to Male

By "Broadacres."

It does not matter where we go much difference of opinion is bound to exist on the right number of hens to give to each cockerel. We must not forget that a great deal depends on the situation of the poultry-farm. In exposed places or, perhaps, in cases where no scratching-sheds are provided, and the birds are exposed to all the winds that blow, then a considerably less number of hens should be mated than where the breeding-stock receive every attention and are housed on the most up-to-date lines. Personally, I am convinced there is no hard-and-fast rule which can be laid down that would properly answer the above question.

Sometimes I have seen pens of non-sitting varieties of hens twenty or as high as thirty hens running with one cockerel. These birds have been allowed compli to liberty, perhaps, in a fairly sheltered place, and the number of strong, healthy eggs has been far in excess of other breeding-pens on the same farm with, perhaps, half the number of hens used.

With all general-purpose fowls, such as Orpingtons, Rocks, Wyandottes, and Favories, it is necessary to mate them very carefully—it would be most foolish to risk twenty hens to a male bird of this kind. I have seen some pens of Orpingtons, Livds of tremendous size, yet for breeding purposes they were almost worthless. Their owners have become disgusted, and have given up the variety simply because the eggs could not be depended upon for hatching purposes. Here, again, the novice must be guarded against big cockerels. It is a mistake to think if we want large birds, size and type generally come from the female side, and this should be borne in mind.

FEWER HENS IN WINTER

It is everywhere admitted that in the cold winter months far less hens should be given to cockerel. I have

sometimes heard it stated that during winter perhaps only ten hens in a large flock are laying, and those will be the only ones that should receive attention from the male bird. Still, this method is not always successful, and a man who tries mating quite a lot of birds in the early part of the year, even though he may use a vigorous male, is running grave risks.

I will now endeavor to give an estimate of the right number of hens to give to each male bird according to the time of year and the broods chosen. In December, January, and February, six or eight hens will be quite sufficient to mate to an active cockerel in any of the general-purpose varieties. Although few non-sitting breeds will be used for hatching purposes, as many as ten hens can be given by those who are desirous of having early chickens. In the months of March, April, and May, 15 hens will be the highest number to give to general-purpose cockerels, and 20 in non-sitting varieties when allowed free range. If the birds are confined, then a less number must be given.

Start Now to Get Eggs in Winter

(Continued from page 8.)

I think the most important, I am not one of those. Unless the stock is strong, active, and well developed, no amount of scientific feeding will produce profitable results. We divide feeding into two periods—before and after the pullet begins to lay. During the first period the great object to be attained is a rapid development and vigorous constitution. Exercise is a great promoter of both. But exercise if carried too far becomes work, and overwork is not conducive to either development or vigor. Farmers' hens only average 60 eggs per year because they are compelled to work all day and wander all over the farm in the effort to get enough food to keep them alive. Consequently they do not retain their vitality and have no reserve left to produce eggs.

FEED IN FIRST PERIOD

During the first period in which the chicks are on free range, some hoppers are filled with whole grain. I use wheat, oats, and buckwheat, but never mix the grains. Other hoppers are filled with dry mash, composed of bran, ground oats, buckwheat, middlings, and sufficient protein. For the latter, I prefer sour milk, and when that is short I add ground green bone or oil cake meal equal in quantity with nutritive value to that of bran.

When the chicks go into the winter quarters, the whole grain is scattered in the straw at nights when the attendant goes through to clean up. The mash is fed at noon, and I wet it with sour milk and double the amount of protein. At night they are given all the whole grain they will eat. When milk is plentiful, I give the hens a pint of milk to drink. I would as soon try to raise a baby without milk as a chicken. Each pen has a three-apartment hopper containing grit, oyster shell, and charcoal. I also keep a number of cabbages and keep one hanging in the house all the time.

If that does not afford sufficient green food, I pulverize alfalfa hay and mix that in their mash. At all times and stages I feed all the hens will eat. There is no danger of getting your hens too fat, provided you are feeding a balanced ration. A hen makes no attempt to produce an egg until she has taken sufficient food for her own sustenance and the egg is formed from the surplus. If she gets a surplus she has got to lay, because she cannot help herself.

Don't neglect a shady nook for poultry to rest in during the day.

Perfect Health
 For your run-down stock. Horses, cattle, sheep and pigs in poor condition are never profitable, but are carried at a loss. No animal can work steadily, grow rapidly, produce heavily, bear vigorous young, unless he eats heartily and thoroughly digests the food. For other words, the organs of digestion and circulation must be kept strong and active if profits are to be secured.
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 is the unequalled stock tonic and conditioner. The only preparation that has a record of forty years' successful use by leading stock owners.
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 Be prepared for accidents. Keep on hand for immediate use a supply of
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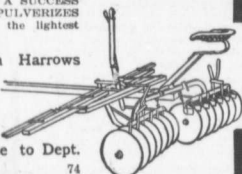
Do the gangs on your Harrow crowd together and raise out of the ground if it is hard? They won't do this on the "Bissell." The "Bissell" is so designed that THE GANGS CAN'T CROWD OR BUMP together no matter how hard the ground may be.

Tough soil won't stick the "Bissell." It stays right down to its work and pulverizes the ground thoroughly.

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will HAVE PROOF that it is a SUCCESS ON HARD LAND—THAT IT PULVERIZES THE BEST—and that it is the lightest draught.

Post yourself fully on Harrows before buying. We put our name on every Harrow so that you will know it is genuine. Ask your local dealer, or write to Dept. R for free Catalogue.



T. E. Bissell Company, Limited, Elora, Ont.

Our Veterinary Adviser

RETENTION OF AFTERBIRTH.—We have a cow that has not thrown off her afterbirth for the past two years. Could you tell us what we could feed her to assist her in this way? We are feeding her twice daily, one sheaf and a half of corn daily, and straw and chop on top of the roots. This cow is due to calf soon and we would like advice in this matter.—Wm. L. Waterloo Co., Ont.

This condition occurs under all conditions, and no satisfactory reasons can be given. While good care, comfortable quarters, and laxative food tend to avert it, even this food fails in many cases. When a cow has not expelled the afterbirth in at most 48 hours after calving, it should be removed by hand, as neither medicines nor food have any effect. The operator should be as careful as possible not to remove any of the little lumps (called cyledons) that are attached to the womb. Be careful to remove all the membranes and then flush out the womb with a warm one per cent. solution of creolin or zenoleum. It is better to get a veterinarian or some person who has had experience to operate, as if an amateur attempts it, unless there be someone on hand to give instructions and examine to see that it has all been removed, it is probable he will not be successful.

CHRONIC LAMINITIS.—What is good for a horse that has bad hoofs? He was driven badly, came in wet, was given water right away and then his oats. From then his hoofs started to rot. It is now three years since they started and the horse can hardly stand. What can be done?—E. Waterloo Co., Ont.

The horse suffered from acute laminitis (founder) which might have been expected from the way he was used. Prompt and proper treatment would probably have resulted in recovery, but the trouble has become chronic and a complete cure cannot be effected. The symptoms may be lessened and the horse rendered of some use for slow work, by repeatedly blistering the coronet and giving a few months' rest. Get a blister made of two drams each of biniodide of mercury and cantharides mixed with two ounces vaseline. Clip the hair off for two inches high all around the hoofs, tie so that he cannot bite the parts. Rub with the blister once daily for two days. On the third day apply sweet oil and turn in chest stall. Oil every day until the scale comes off, then tie up and rest again and after this lister every four weeks so long as you can give him rest. Before you commence to work him get him shod with bar shoes giving good frog pressure and when not on grass keep the feet soft by applying, or better, by poulticing, soaking, swabs or other means.

The curry comb should be used as frequently in the cow stable as on the horses.

A definite set hour for milking and feeding is worth hundreds of pounds of feed in the course of a winter.

The nervous cow is preferred to a stolid one. She will give more milk and is just as easy to handle—provided you go about it in the right way.

The curry comb supplemented by stiff brush are worth lots of good feed in the cow stable. The main requisite is a man with grit and patience to use them.

Have a place for everything and everything in its place. Right off, do you know where the stable shovel and the manure fork are at this present moment.

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BARNS BURNED IN DIFFERENT SECTIONS OF THE COUNTRY.

Farmer's Loss Live Stock and Crops
—Fishing Mill at Niagara Falls and Large Stock of Lumber Destroyed—Other Fires.

(Special Despatch to The Globe.)
Lindsay, Ont., Feb. 15.—A more than ordinary electric storm, doing considerable damage, passed over this section this morning at about 1 o'clock in the rural districts. Several barns have been destroyed by fire from lightning. Among others the following have been reported: The barn of Nicholas Wood, containing the season's stock of hogs, and horses, and a large lot of hams, crop and horse bedding, was destroyed by lightning. The dwelling house and barn of the Lank of the township of Verulam are reported destroyed, but as electricity have been reported. In the...

British Columbia Dairying

As seen by Prof. Hugh G. Van Pelt, "What do you think of our country?" is the first question the enterprising newspaper reporter asks of the distinguished visitor. And all visitors "distinguished" have expressed their opinions. We are still interested in the opinions of each new visitor. When a distinguished United States professor, and one of the greatest dairy authorities in the world, visits one of our dairy districts we dairymen are at once interested in his opinions of us, our methods and so forth. Such a man, Prof. Hugh G. Van Pelt, recently visited the annual meeting of the British Columbia Dairymen's Association. He tells something of his impressions of our western province in a recent issue of Kimball's Dairy Farmer. Here British Columbia farmers will have an opportunity to see themselves and their country as another has seen them, and we reproduce Professor Van Pelt's impressions in full.

"British Columbia is an interesting country. It promises to be one of the wealthiest and best agricultural provinces of Canada. It is a large territory including Vancouver and other adjacent islands. Its equable area eight times the State of Wisconsin. In the past its wealth has come largely from its mines, fisheries and forests. These are still industries of great importance. The rapidity with which the cities of Victoria, Vancouver, New Westminster and others are growing, together with the increase

of rural population, is making the problem of feeding the people a momentous one. Much of the land owing to its mountainous character is fitted only for grazing purposes and largely because of this, the fertile valleys in which the climate is moderated and equalized by the ocean currents, are the more valuable.

A FALSE IMPRESSION CORRECTED

"One of our citizens thinking of Canada has visions of cheap lands but not after he has visited British Columbia, for there stump lands sell for \$100 per acre and it costs an equal amount to clear them. Improved farms sell for from \$300 to \$1,000 per acre, according to their location. This necessitates most intelligent farming to make a profit. Practical farmers who live there believe the prices too high. They attribute them to the real estate men who have subdivided farms into five and 10 acre lots and sold them to city farmers and to these they have pictured the advantages and profit of the simple life insured by keeping cows, chickens and pigs and by raising fruit and vegetables. Many have succeeded on these little farms by applying practical methods and by fortunately securing land well located and otherwise adapted to the purpose. As a rule, however, it is the Chinaman or Hindoo who makes the real success under such conditions. They demonstrate by methods of economy that the American farmer should have at least 40 acres to succeed well.

WHY DAIRYING IS ADOPTED

"Much fruit and garden truck is raised but those interested in agricultural affairs know well that any system of farming which takes fertility from the soil and returns nothing can not continue long. They have therefore been looking about for some phase of agriculture equally profitable that will maintain the richness of their lands. Thinking men have learned that dairying supplemented with hog and pig raising is the solution of the problem. It is not hard to prove this truth to the farmer either, for in the cities eggs sell from 40 to 60c per dozen, hogs for 11c per pound and all milk being produced at this time is utilized for the city milk supply, netting the farmer 60c per pound for butter-fat.

Furthermore, owing to climate conditions, it costs little more to produce these commodities than it does in the corn belt as peas and oats, roots, vetches, clovers and barley, the foods cows, hogs and chickens should have, yield abundantly. So far little success has been attained in raising alfalfa because of the greatness of the rain fall which measures 60 inches annually in many parts of the province. This also makes it difficult to save the first crop of clover and together with cold nights hinders the maturing of the corn plant so that as yet little silage has been made. There are those, however, who are experimenting on varieties of corn that will mature sufficiently for silage and it is only a few years until British Columbia will have many silos.

COWS FROM \$100 TO \$1200

"Good cows are scarce and in great demand, as they are in nearly all localities. Grade dairy cows sell readily for \$100 and upwards while pure bred cows have already exceeded the \$1,200 mark. Like the western coast of the United States, the climate and soil conditions seem especially adapted to dairying and when the country becomes stocked with good foundation herds the dairy industry will advance rapidly and great records will be common. City folks will welcome the day, for now much of the butter they eat is imported from Australia. The sessions of the convention were therefore alive with enthusiasm."

They Cost Less



"Clay" Gates

STRONGEST and best farm gate made. 30,000 sold in 1912. Can't sag, bend or break. Can be raised as shown. Good for Winter and Summer. Send for illustrated price list.

The CANADIAN GATE CO. Ltd.
29 MORRIS ST., GUELPH, ONT.

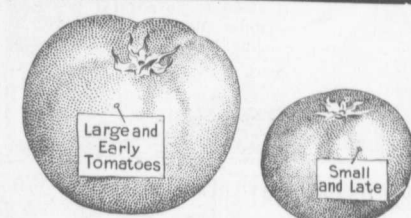
Thorough-bred Vison Corn

Wisconsin No. 1 White Dent, hand selected, \$2.00 per bush.

THOS. TOTTEN,
ESSEX CO., WOODSLEE, ONT.

FOR SALE

Second-hand Milk Vans and Agitators complete, in first-class condition. Also Gang Presses and 14-inch Tubs. For prices and particulars, apply Box 1025, FARM AND DAIRY, PETERBORO, ONT.



Large and Early Tomatoes

Small and Late

Progressive Jones Says :

"The Early Tomato Gets The Fat Price"

THEREFORE, we want the early tomato. I've just been reading a letter from F. G. Bridge of St. James Park, near London, Ont., who has had great success in growing early tomatoes. He says: "The

Harab FERTILIZERS

I purchased have done all claimed for them and more. Where I put Harab on Tomatoes, the fruit is larger and ripening early and where I did not use the Fertilizer the fruit is very small and going to be late.

You can have just as great success with your tomatoes as Mr. Bridge, and scores of others, if you enrich your soil with Harab Fertilizers. Harab No. 12 contains just tomato plant food and push it to early maturity, increasing and improving the fruit as well.

My experience has shown that, while stable manures supply the humus to hold the moisture in the ground, they need the assistance of richer, well-balanced fertilizers to produce the biggest yield and to bring the tomatoes to early maturity. Mr. W. A. Thrasher of Saratoga states that he picked tomatoes ten days earlier from a plot treated with Harab Fertilizer than from an adjoining plot treated with stable manure.

I find from experience that soil fertilized with manure produces a large growth of vine, and while the vines may be loaded the fruit is undeveloped and ripens late, development moderate, while the fruit is more plentiful, larger and ripens earlier.

Using the proper fertilizers means the early ripening of your tomatoes—and other vegetables—and the fat price for them. There are 14 different Harab Fertilizers, each one the best for its particular purpose. The Harab Abattoir have published a guide book, showing the correct fertilizers for all kinds of vegetables, fruits, acid crops, berries, flowers and lawns. I strongly advise you to write for a copy.



Send for the fat price;

Progressive Jones

The Harris Abattoir Co., Limited, Toronto

Homeseekers', Settlers' and Colonist Excursion to the West

Those taking advantage of above Excursions should bear in mind the many exclusive features offered by the Canadian Pacific Railway in connection with a trip to the West. It is the only all-Canadian route. Only line operating through trains to Western Canada. No change of depots. Only line operating through standard and tourist sleepers to Winnipeg and Vancouver. All equipment is owned and operated by Canadian Pacific Railway, affording the highest form of efficiency.

Homeseekers' rates will be in effect each Tuesday, March 3rd to October 25th inclusive, and round-trip second-class tickets will be issued via Canadian Pacific Railway from Ontario points at very low rates—for example, Winnipeg and return \$35, Edmonton and return \$43, and other points in proportion. Return limit, two months.

Each Tuesday during March and April, the Canadian Pacific will run Settlers' Excursion trains to Winnipeg and West, for the accommodation of Settlers travelling with live stock and effects. A colonist car will be attached to the settlers' effects train. This car will leave Toronto on regular train at 10.20 p.m., arriving at West Toronto it will be attached to settlers' effects train as mentioned above.

For those not travelling with stock and effects, special Colonist cars will be attached to regular train leaving Toronto at 10.20 p.m. and run through to Winnipeg without change. No charge is made for accommodation in Colonist cars.

Tourist sleeping cars are also operated on regular train leaving Toronto 10.20 p.m.

One-way Colonist Rates to Vancouver, Victoria, Seattle, Wash., Spokane, Wash., Portland, Ore., Nelson, B.C., Los Angeles, Cal., San Diego, Cal., San Francisco, Cal., etc., will be in effect daily March 15th to April 15th inclusive.

Full particulars from any C.P.R. Agent, or write M. G. Murphy, District Passenger Agent, Toronto.

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BIRTH—We
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Natco Everlasting Silo

need no insurance—because it is permanent. It cannot burn; will not blow over; lasts a lifetime.

Built of Hollow Vitriified Clay Blocks

The most lasting material known. Blocks are air tight and moisture proof. They are glazed and keep silage sweet and palatable. No hoops to tighten; no staves to paint. Never smells or absorbs. Attractive in appearance—a silo that will improve the looks of your farm.

Any Mason Can Build a Natco Everlasting Silo

Once up — it will last a lifetime without needing repairs.

We have a 60 page illustrated book on silos and silage. Every stock owner should have it for its valuable feeding information. It contains articles by prominent writers, including Prof. Hugh G. Van Polk. Sent FREE on request. Ask for catalog #.

**NATIONAL FIRE PROOF-
ING COMPANY OF
CANADA, Limited**
TORONTO
CANADA



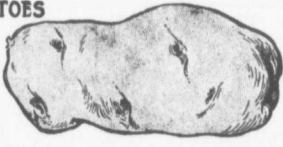
"FARM DAVIES' WAY"

Learn how by writing us for this special booklet
THE WILLIAM DAVIES CO., LTD.
West Toronto Ontario

Fertilizers

Lowest prices given on best grades of commercial fertilizers. Complete fertilizers, Nitrate of Soda, Potash, Superphosphates, etc. Write us of your needs and ask for prices.
CRAMPEY & KELLY, DOVERCOURT RD., TORONTO, ONT.

MONEY IN POTATOES



\$128⁰⁰ an acre Clear

Yes Sir! We can show you how to make it in potatoes, over and above the cost of seed, fertilizer, labor, marketing and your own time.

With the market price \$1.00 a bag—and better, it's worth while going in strong for potatoes and getting every last bushel the ground will yield.

We can show you how to grow 240 bushels to the acre: how to get a double crop from the same outlay of labor and seed.

A lot of potato-growing experience is boiled down and plainly told in "Money in Potatoes." We have culled out the frills that a practical farmer has no time to read. The book is complete, but brief and to the point. See the list of subjects it covers. From this book you can see how other men have got the best results. You can grow and handle bumper crops of potatoes and take the long price.

List of Subjects Covered by this Book.

- Best Soil for Potatoes; Potatoes Help the Land; Preparing Soil; Fertilizing; Time to Plant; Selecting Seed, Cutting Seed; Depth to Plant; distance between hills; crop cultivation; Fighting bugs & blights; Spraying mixture; Harvesting; Storing; Secure your free copy today.

Clip the Big Crop Coupon to-day.



BIG CROP COUPON

I am using the following machines for potato raising:

The Canadian Potato Machinery Co., Limited
Gait, Ontario

As a Potato Grower I would like a free copy of your book, "Money in Potatoes."

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

The C. S. G. A. Convention

The ninth annual convention of the Canadian Seed Growers' Association, held at Ottawa recently, more resembled a gathering of seed experts than of seed growers. The secretary of the association, Mr. L. H. Newman, was especially desirous that farmers generally should attend the annual convention, but the lack of interest shown by the growers in the annual meeting, is not indicative of a lack of interest in the work of the association. In his annual report as secretary, Mr. L. H. Newman stated that applications for membership received during 1912 number 118 as compared with 50 during 1911. This makes a total of 454 farmers now working in cooperation with the association. The amount of registered seed catalogued for sale in this year's price list is 470,715 lbs., a falling off of about 5,000 lbs. from the previous year. The amount of improved seed listed shows a more serious falling off, 185,182 lbs. as compared with 362,240 lbs. a year ago. This decrease Mr. Newman attributed entirely to the bad season of 1912, which ruined a large quantity of grains for seeding purposes. He reported that 5,000 copies of his price list had been distributed throughout Canada.

The work of the Association should be extended. Mr. Newman stated that he is continually receiving applications for large lots of seed and with the members as widely scattered as they now are, it is impossible to fill those orders. Even in small lots the production of the members does not begin to meet the demand. "We therefore recommend," said Mr. Newman, "that definite work be undertaken towards meeting the above situation by establishing seed centres or districts in which a number of the best farmers will be encouraged to join the association and take up in a business-like way the growing of registered seed in quantities. In this connection it is recommended that the 'Illustration Farmers' of the Conservation Commission be especially encouraged to take up this work and to make seed growing for their locality a feature of their farms."

LET PROVINCES COOPERATE

A resolution was passed by the board of the association authorizing the executive to interview the various provinces and obtain their views as to full cooperation by them in the general work of encouraging the growing of registered seed within their respective borders. The board also recommended that the provincial departments follow the principle of organizing cooperative associations for the growing, purchase and sale of seed as a means of assisting persons interested to secure high class seed. Mr. G. R. Ray, who represents the C. S. G. A. in Eastern Ontario, saw hope for the future in applications that he had received from several of the district representatives of the Ontario Department of Agriculture for supplies of pedigreed seed for distribution to public school scholars, who would plant it in their seed plots. Speaking for Western Ontario, W. J. Lenoir said that much of the success of the corn growers in his constituency was due to localization. In the West there are as many members of the association working in corn as in all the other crops together. He noted a gratifying increase in membership, mentioning particularly the Bruce Peninsula where 25 men will this year carry on seed work in peas and potatoes whereas previously it was not one member from that section.

GREAT VARIATIONS IN COMMERCIAL SEED. E. D. Eddy, B. S. A., of the Seed Branch at Ottawa, summarized the results of two years' work in testing

**"BROWNS
TREES"**

**BROWNS NURSERIES,
WELLAND COUNTY, ONT.**

**Government Standard
SEEDS**

We buy most of our seeds directly from farmers here who grow them. Reclean them twice. Our guarantee is that if seeds do not satisfy on arrival you may ship them back at our expense.

SILVER MINE OATS, 60c bushel
SIBERIAN OATS, 60c bushel
BANNER OATS, 60c bushel
O. G. No. 21 BARLEY, 90c bushel
GOLDEN VINE PEAS, \$2.50 bushel
ALFALFA, imported, \$12.00 bushel
RED CLOVER, \$15.00
ALSIKE, \$15.00
TIMOTHY, \$3.00

Bags, extra cotton 25c, jute 10c. Ask for samples Cash to accompany order.

**The Caledonia Milling Co.
CALEDONIA, ONT., LTD.**

SYNOPSIS OF DOMINION LAND REGULATIONS

Any person who is the sole holder of a family or any male over 18 years old, may homestead a quarter section of available Dominion land in Manitoba, Saskatchewan, or Alberta. The applicant must appear in person at the Dominion Lands Agency or Sub-Agency for the district. Entry by proxy may be made at any agency on certain conditions by father, mother, son, daughter, brother, or sister of intending homesteader.

Duties—Six months residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 50 acres solely owned and occupied by him or by his father, mother, son, daughter, brother, or sister.

In certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price, \$1.00 per acre.

Duties—Must reside upon the homestead or pre-empt six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption may enter for a purchased homestead in certain districts. Price, \$30 per acre. **Duties**—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$200.

W. W. OBEY.

Deputy of the Minister of the Interior: E. D. Unpublished publication of this advertisement will not be paid for.

field root seeds of commerce to prove genuineness of stock. Mr. Eddy did not consider that the work had been carried on long enough to justify them in making public their results. Their experiments, however, showed remarkable variation between seed of the same variety as sold by different seedsmen. It would also seem that one strain may be sold under several names, and that in one package of seed there may be several varieties. The most striking variations have been with mangel and sugar mangel seed. In one test of the Red

A Winter Dairyman's Testimony

Thos. Malcolm, Bruce Co., Ont.

If cows are given anything like a chance they would produce \$70 worth of butter in the season, besides raising a calf each, and a large quantity of the skim milk goes to the hogs. Our own herd of 30 cows and nine of them heifers, averaged \$70 for butter alone last year. Two of these cows were striped. We raised 28 calves. All these calves received whole milk for 10 days, then gradually adding skim milk, until at the end of six

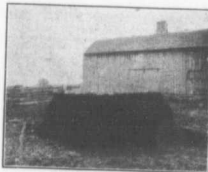


A Good Style of Handling Manure, but Capable of Abuse

Dropping the manure in the field in piles so small that it freezes right through and spreading as soon in the spring as the manure thaws is a fairly good practice. Too often, however, the manure is not spread until most of its value has been leached out, and the result is an uneven crop, showing a vigorous crop where the manure was and scanty growth elsewhere.

Globe variety only 20 per cent. of the seed produced true to name. In one test with the Yellow Globe only seven per cent. of the roots were of the Globe type and the balance were intermediate to long. As a class Mr. Eddy found that the Long Reds seemed to be the most uniform and best fixed type of mangel. With turnips there was less abuse of variety names. All of this indicates the necessity of further work along the same line.

An address of great practical value was that presented by Prof. C. A. Zavitz on "Thickness of Seeding in Cereal Grains." This address is given in full on page three of Farm and Dairy this week. An address given by Mr. G. H. Clark, Dominion Seed



Preserving Manure Out of Doors

When it is not convenient to haul the manure directly to the field from the stable, the pile should be tramped compactly and made at least six feet high with the sides as straight as possible. The illustration shows a model manure rack.

Commissioner on "Method of Improving the Seed Supply of Field Roots and Vegetable Crops in Canada," will also be given fully in a later issue.

A scheme to encourage the smaller stock breeders to exhibit was adopted by the Central Canada Fair directors at the annual meeting recently. The Fair Association will pay freight charges, from the last point of shipment, on all live stock coming to Ottawa's 1913 Exhibition from points in the Provinces of Ontario and Quebec. In some instances, the freight will be from some other Fair, and in others from the home of the exhibitor. The animals will also be conveyed home, without charge to the owner. A feature of the Dominion Exhibition in Ottawa last year was the payment of freight rates up to a 100 mile radius of Ottawa. The experience was very gratifying. Hence the extension of the policy.

weeks they were getting all skim milk and eating some oats. This meant that we fed considerably over one cow's milk to the calves for the whole season.

We have not done much selecting of our cows yet and there are some of them which bring down the average. A number of them, if taken separately, would run nearer \$125 than \$70; and yet these cows could be fed considerable more grain and raise the average \$10 to \$20 per cow. The fact that in all the years we have been dairying we have never had one case of milk fever, shows that we do not force the cows. About 70 per cent. of these cows freshen in October, November and December, and the one who has done the winter. What one has done another can do if he tries.

MOST MONEY IN WINTER

The staple articles sold were: Butter, cattle, hogs. The two banner months for butter were February and March. The account shows that \$300 worth of butter were made each of these months. I consider this not too bad for zero weather and snow storms, and not too bad a job either; I consider it a stage in advance of cutting wood in a bus. I should have mentioned that we pastured all our cattle on the place last year. The number of horned cattle at present is 100, all bred and born on the place except one. The bulk of the dairying that has been practiced here in the past, that is milking cows six or seven months in the summer when dairy products are cheapest, and giving the cows a hayload all winter when butter is the highest in price, is no good.

Then there is the hired man problem. We are daily confronted with the excuse people are making, who are giving up farming because they cannot obtain hired help. This is only an excuse and nothing more; the trouble is with themselves and work with the hired help. Give a man help as good wages in the year, and give him as good wages in the winter as summer, and you will have no trouble; here we are always able to get a man when we want one; and if you and all hands help clean and light, you will have no trouble. Nothing fills the bill for giving work all the year round like winter dairying. In fact the pleasantest hour's work in the day are the night and morning milking hours, especially in the winter.

Amatite ROOFING

Why Practical Men Demand Amatite



ROOFING that needs paint every two years can't hold the market against Amatite—which needs no paint whatever.

Practical men know the great advantage of a roof that needs no painting. They know what a nuisance the painting is. They know how much it costs. They know how liable they are to neg-

lect to paint their roofs at the proper time.

Painted roofings are waterproof only where the paint is. Amatite is waterproof all the way through.

Amatite is sold in the usual convenient rolls of 110 square feet with a smooth lap where the mineral surface is omitted, so as to secure a tight joint. Nails and cement are packed in the center of each roll.

Free sample and booklet on request to nearest office.

THE PATERSON MFG. CO., Limited

MONTREAL TORONTO WINDSOR VANCOUVER ST. JOHN, N. B. HALIFAX, N. S.

Reap The Benefits of Available Plant Food



In a favorable season crops will make enormous gains if they are given the available plant food necessary to support them. No soil contains enough available plant food for a bumper crop, or enough to prevent an unprofitable crop in a bad season. A good fertilizer increases the yield and the profit, but the plant food should be in forms available to the growing needs of the crop.

The A. A. C. Co.'s Fertilizers are manufactured from the best materials, and special factory treatment makes them highly available.

Wherever you live, we can reach you with the right fertilizer, the right service and the right price. Write today for a copy of "Plant Food," a practical hand book on fertility. No advertising in it; sent without cost, while this edition lasts.

Agents wanted in unoccupied territory. Liberal terms and goods that sell. It pays to sell our fertilizers as well as use them. Ask for agency proposition.

The American Agricultural Chemical Co.

Makers of brands with fifty years of quality and results behind them.
70 Lyman St., Buffalo, N.Y.
P.O. Box 814-F, Detroit Mich.

Cockshutt Beaver Plows

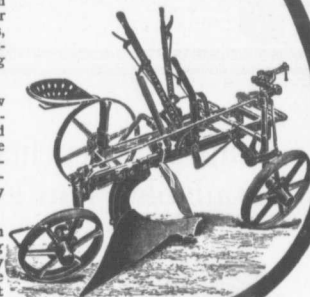
IN GANG AND
SULKY STYLES

THIS line is for general purpose plowing. Both plows have a strong, all-steel frame, with easily-operated and convenient hand levers. Each frame is carried on a large land-wheel and on front and rear furrow wheels, which have dust-proof, self-oiling bearings.

Both furrow wheels are connected to and controlled by the pole. This arrangement results in easy guidance.

Bottoms, with knife or rolling colter, for any kind of soil, are supplied to meet the needs of each buyer.

THE "Beaver" Plows are prime favorites. They have remarkable features. They meet general farming needs perfectly. Get the "Cockshutt" Catalogue for full details.



Write to-day for full particulars and Catalogue detailing "Beaver" Plows. It comes for a postcard. Write to-day.

COCKSHUTT PLOW CO. LIMITED
BRANTFORD, WINNIPEG
For Sale in Eastern Ontario and Eastern Canada by
THE FROST & WOOD COMPANY LIMITED
Montreal, SMITHS FALLS, St. John, N.B.

Agents Wanted

Man wanted in every dairy district to collect renewals and get new subscriptions. Hustlers needed who will cover the district thoroughly by spring. State occupation and if can work entire or spare time.

FARM AND DAIRY, Peterboro

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER

FOR SALE—Iron Pipe, Pulleys, Belting, Rails, Chain Wire Fencing, Iron Posts, etc., all sizes, very cheap. Send for list, stating what you want.—The Imperial Waste and Metal Co. Dept. F. D., Queen Street, Montreal.

BBBBS CALF MEAL

CREAM EQUIVALENT FOR RAISING CALVES AND YOUNG PIGS
CONTAINS A MUCH HIGHER PERCENTAGE OF REAL VALUE THAN OTHERS
SOLD BY LEADING MERCHANTS, OR DIRECT FROM **W. RENNIE CO. LIMITED**
TORONTO • MONTREAL • WINNIPEG • VANCOUVER

Ament the Retail Milk Trade

What price do retailers get for milk in the different towns and cities and how much a pound of butter fat in cream? What price can one afford to pay for feed to produce 100 lbs. of milk and have 10 per cent. on this investment?—A. J. McV., Middlesex, Co., Ont.

The price of milk and cream varies very widely in different towns and cities. The retail price of milk varies from five cents a quart delivered at the customers door in some of our smaller towns to nine cents a quart in our cities; and for certified milk considerably higher is paid. Milk at five cents a quart is equivalent to \$2 a cwt. and at nine cents, \$3.60 a cwt.

Cream is not retailed on its butter fat basis, but by the quart, the price varying from 25 to 60 cents a quart according to the locality in which it is sold. Cream testing 22 per cent. will retail at 80 to 60 cents a quart, or 50 cents to \$1.08 a lb. butter fat.

It would be quite impossible to state how much one could afford to pay for feed to produce 100 lbs. of milk and have 10 per cent. on the investment. So many varying factors would enter into this calculation that the price that might leave one man 10 per cent. on his investment would mean a loss to another man. The efficiency of the management, the value of the plant, the distance to market, the quality of the cows, and the ability of the feeder would all have their effect on the dividends. In fact, under average conditions, we doubt if it is possible for a man to buy all of the feed that will be eaten by his cows, retail the milk to the customer's door with all the expense that it involves and make 10 per cent. on his investment. We would need very full information to answer the latter part of this enquiry at all satisfactorily.

Our Legal Adviser

COST OF REGISTERING DEED—What does it cost to register a deed in real estate in Ontario?—J. G., Peterboro Co., Ont.

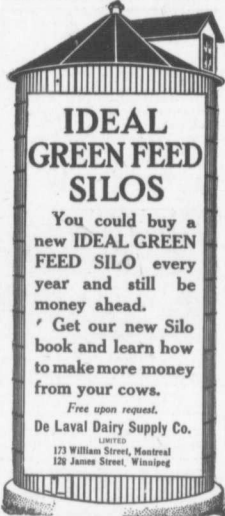
The charge for registering a deed of land in Ontario is \$1.40. This is the fee for registering any deed of ordinary length, but in case the deed exceeds 700 words there is an additional charge of 15 cents for every 100 words up to 1,400 words, with an additional charge of 10 cents for every 100 words over 1,400.

TREES ON BOUNDARY—I notified my neighbor to remove all his branches that hung over the line fence that shaded my property and only removed a part of the lower ones. What steps would I have to take to have him remove the rest of them?—J. E.

If neighbor will not remove his branches after request on your part you cut them yourself doing so without necessity. You had better see a lawyer before doing so.

LIABILITY IN MUTUAL INSURANCE COMPANY—Can an insurance company, doing business on the premium note system, having failed as did the Farmers' Bank, collect more than the face value of the premium note? Are the policyholders insured in the company considered part of the company? Are the policyholders liable in case of failure of company to any liabilities of the said company?—J. E. V.

A Mutual Fire Insurance Company can collect in case of failure the face value of the premium notes given by any of the parties having insurance with the company; and if there is any stock in addition subscribed for in the company it can also be collected if not paid. All policyholders are liable for the amount of their premium notes, and if they have subscribed for stock or render themselves liable in any other way they will be liable to the extent of their liability.



IDEAL GREEN FEED SILOS

You could buy a new IDEAL GREEN FEED SILO every year and still be money ahead. Get our new Silo book and learn how to make more money from your cows.

Free upon request.
De Laval Dairy Supply Co.
LONDON
173 William Street, Montreal
128 James Street, West

Married Man Wanted

For general farm work. Must be good milker. House supplied. Wages good to right man.—Apply to
W. J. COX, Box 715, Peterboro, Ont.

FERTILIZERS

For information regarding 15 kinds of mixed and unmixt fertilizers of the highest grade write
THE WILLIAM DAVIES CO., LTD.
West Toronto Ontario



BUILD CONCRETE SILOS

Any size with the London Adjustable Silo Curve. Send for Catalog. We manufacture a complete line of Concrete Machinery. Tell us your requirements—Apply to
Machinery Co., Limited
Dept. H, London, Ont.
Largest Manufacturers of concrete machinery in Canada.



Free Farrier Book Given Away

What would you give to know how to cure anyone of your horses, or cows, when it is sick without having to call in the Horse Doctor?

It would save you many dollars. It would sometimes mean saving the life of one of your valuable horses or cows, which might otherwise die while you are crying for the farrier.

You can learn how to treat and cure all the diseases of Horses, Cattle, Sheep, Swine and Poultry from

Gleasons' Veterinary and Horse Taming Book

It contains 650 pages, illustrated, gives all the medicines, doses and remedies just what you want to know even if you do call in your Horse Doctor.

Paper bound edition given free for one New subscription that you will send us for Farm and Dairy, and 10 cents extra to cover cost of mailing. Handsome cloth bound edition, on fine quality paper, 35 cents additional. Get the New subscriber and send promptly. Only a limited number of these valuable books are available.
FARM AND DAIRY, PETERBORO, ONT.

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APICULTURE

The Possibilities of Bees
Chas. Blake, Frontenac Co., Ont.

It is now time to think about ordering supplies and lumber, with which to make hives for our bees in the spring and I have been wondering if Farm and Dairy readers are prepared for the spring work. While

small fruits and do much better than many who are working in cities and receiving a salary which enables them to pay their board and buy clothes and not too many of them at that. Even if you cannot make \$2 a hen or \$3 to \$10 a head of bees, others have and you will not find the job overcrowded. Bees and hens are profitable if one starts right and they are properly cared for.

To illustrate what can be done with bees I will give an instance of where a young man last year, who

A Good Living with Little Land made possible with Bees

In Ontario there are men making incomes running into the thousands on a quarter of an acre to an acre of land. This is made possible through bees. The bee yard Notice the portable extracting house to the right.

passing through Kingston recently I had the pleasure of meeting the beekeepers of Frontenac who, I am glad to say, have formed a County Association, which should be a great help to those just starting in beekeeping. Mr. Morley Pettitt of Guelph spoke in the Court House on "Hives," a subject worth looking into. When one is just starting in beekeeping, or already has bees that are not in standard hives, such advice as we received that day is just what is needed. It need not cost a great sum to have bees in the best of hives, as any young man who knows something of the use of carpenter's tools can make good hives, but it would be much safer to order a complete hive of the Langstroth style as a guide that one may be sure of having all

had seven box hives but did not understand them although he had kept bees all his life, went to a friend for help. His friend advised him to start with standard hives and visited him several times during the season and helped him to care for them. He extracted 600 lbs. of fine white honey and increased his hives to 13 and had them all in good order in the fall. This young man had all ways taken up some of his swarms for his own use and did not always get every fall to get enough honey for that. You may be sure he is looking forward to the coming season in hope of another and better crop for 1913 as he now has six of his old box hives for stock and seven in standard hives to work for honey. This young man is not the only one who has bees that do not pay the taxes but give lots of work in the swarming season and little else. But this is because they are not understood or cared for at the right time.

Bee Notes

D. Anquith, Middlesex Co., Ont.

I see by Farm and Dairy, February 27th, that this winter has been a remarkably easy one on bees wintered out of doors. That may be right in some instances, but conditions alter cases. The beekeepers who take care of their bees are never alarmed whether it is cold or mild winter. But they are all very anxious about the clovers. Mostly all of the large beekeepers would rather have a severe winter, with lots of snow, than a winter like the one through which we are now passing.

Beekeepers who did not feed their bees well last fall will have to watch very closely towards spring for the bees are likely to consume more stores this winter than usual, on account of the mild winter.

Over 500 short course students were recently in attendance at a school in Prince Edward Island to learn how to pack apples in boxes.

At the last meeting of the Experimental Union, Prof. E. J. Zavits was asked if it would pay to set out a walnut grove. He answered, "I would not like to discourage planting on a small scale. Both nuts and wood are good. But as a financial investment for wood alone, I do not believe that it would be a success."

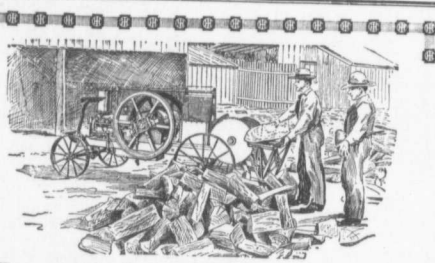
Queen Cells

This frame on which are 10 queen cells, shows the success of Mr. Chas. Blake, Frontenac Co., Ont. in his first attempt at queen rearing by the Dimes method.

measurements the same. A well-nailed box corner hive will stand a great number of years if well painted, but no man who has not the use of a power saw can make the frames nearly as good as those put out by the bee supply manufacturers.

INTEREST ON THE FARM

Mr. Pettitt also gave an illustrated address on "Bees in Quebec Medical Laboratory," which was much enjoyed. It is surprising to note how little the people know about bees and beekeeping even on the farm. If the young people of the farm would take the trouble and time to study some of the things that they see every day, such as bees or hens, we would not have so many trying to find something to do "in town." If they had a chance to see both sides of such things as I have, they would be able to appreciate what grand chances they have on the farm. Even the farm girls can keep bees and hens, or grow



Buy an Engine with Reserve Power

FARM power needs are seldom the same for any two days together. You never can tell when extra power will be needed. For this reason it is best to buy an engine a little larger than you ordinarily need. The engine with ten to twenty per cent of reserve power will often save enough to pay for itself just by its capacity for carrying you through emergencies.

I H C Oil and Gas Engines

are large for their rated capacity. They are designed to run at the lowest possible speed to develop their power because that increases the durability of the engine. A speed changing mechanism enables you to vary the speed at will. Any I H C engine will develop from ten to twenty per cent more than its rated horse power. You can use it to run your feed grinder, pump, grindstone, repair shop tools, cream separator or any farm machine to which power can be applied. I H C engines are built vertical, horizontal, stationary, portable, skidded, air cooled—in 1 to 50-horse power sizes. They operate on gas, gasoline, kerosene, naphtha, distillate or alcohol. I H C tractors in sizes from 12 to 60-horse power. See the I H C local agent. Get catalogues from him, or, address the nearest branch house.

International Harvester Company of Canada, Ltd

BRANCH HOUSES
At Brandon, Calgary, Edmonton, Estevan, Hamilton, Lehighville, London, Montreal, N. Battleford, Ottawa, Quebec, Regina, Saskatoon, St. John, Winnipeg, Yorkton.



A RIDGE OR A FURROW can both be cultivated at the same time and at the same depth with the PETER HAMILTON ELASTIC CULTIVATOR, because more pressure can be applied to the Gang Sections of Teeth in the furrow, and less pressure to the teeth on the ridge, and the adjustment can be made in a jiffy, without loosening any nuts or bolts.

THE WHIFFLE TREES are attached in line with the sections. The draft is light, and there is no chafing of the horses' necks.

THE SECTIONS are made out of heavy extra stiff steel, and will not bend, and the teeth are reinforced with an exceptionally good helper, and will stand all kinds of rough usage.

For "RESULTS" buy a Peter Hamilton Cultivator. It means Dollars in your pocket.

The Peter Hamilton Co., Limited
Peterborough, Ont.

Sold by THE JOHN DEERE PLOW COMPANY DEALERS

FARM AND DAIRY

AND RURAL HOME

Published by the Rural Publishing Company, Limited.



1. **FARM AND DAIRY** is published every Thursday, 15 is the registered organ of the British Columbia, Eastern and Western Dairy, and Bedford District, Quebec, Dairy-men's Associations, and of the Canadian Holstein Cattle Breeders' Association.

2. **SUBSCRIPTION PRICE, \$1.00 a year.** Great Britain, £1.00 a year. For all other countries, except Canada and Great Britain, add 50c for postage. Notices of the expiration of subscriptions are sent to all subscribers, who then continue to receive the paper until they send notice of discontinuation. No subscription is continued for more than one year after date of expiration. A year's subscription fee for a club of two new subscribers.

3. **REMITTANCES** should be made by Post Office or Bank Order or Registered Letter. Postage stamps accepted for amounts less than \$1.00. On all checks add 20 cents for exchange fee, required at the bank.

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

5. **ADVERTISING RATES** quoted on application. Copy received up to the Friday preceding the following week's issue.

6. **WE INVITE FARMERS** to write us on all agricultural topics. We are always pleased to receive practical articles.

CIRCULATION STATEMENT
The paid subscriptions to Farm and Dairy exceed those of any other circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 16,150 to 17,300 copies. No subscriptions are accepted at less than the full subscription rates.

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

OUR GUARANTEE
We guarantee that every advertiser in this issue is reliable. We are able to do this because the entire columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our subscribers, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a month 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." All disputes shall be decided by arbitration 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.

COMMUNITY LIVE STOCK ADVERTISING

A sound and tangible argument in favor of community breeding manifests itself in the great advantage to be had when advertising. You will have noted and read the ads. of the Oxford Breeders' Club in this and recent issues of Farm and Dairy. You will also have read those of the individual consignors to the sale. How greatly this advertising has impressed you! Consider one man working alone, or the same number of men each with a different breed and not united; what could they accomplish in the way of carrying to you an impression and get you to act as the Oxford breeders these last few weeks have done?

It is the same with the Belleville Breeders' Club. They have been organized for a somewhat longer time. You can already anticipate what they

will have at their great forthcoming sale, April 2. They are attracting your favorable attention in Farm and Dairy and elsewhere in a manner that no one man working alone and in a community by himself would be likely to do.

More and more the "community breeding" idea is catching on. And it is well for the advancement of live stock and the general welfare of the community adopting and working out the principle. And advertising is but one feature in the way of benefit that flows from community breeding. Before there is any need for advertising, community effort is of advantage in securing good stock, in the purchasing and interchange of the best sires to maintain the high quality of that stock and in getting sufficient stock to make the advertising worth while and profitable.

THE WORST RENTING SYSTEM

"On country roads at this season 'you meet creaking waggon's piled 'high with household goods, crates 'of chickens, and the smaller implements of the farm, while behind 'trail the larger implements and the 'family cow. On top of the load is 'a renter and his family. It is the 'time when farm leases expire.'"

Thus does the "Nebraska Farmer" describe a scene made common by the bad system of renting farms that is practised in both the United States and in Canada. There are few farms either in the United States or in Canada that are held on more than a one-year lease. In many cases the owner of the farm is looking for an opportunity to sell and does not wish to tie his farm up for a term of years. In all cases farm owners who rent wish to get the full benefit of increasing land values, and this they think they could not do if the rental were fixed to extend over a term of eight or ten years. Hence we have the one-year lease, which is positively the worst system of leasing in the world.

This system of short leasing is a strong incentive to the tenant to skin the land for all it will stand. He does not dare to apply fertilizers or to make improvements. If he did the farm owner at the time of re-adjustment would have an excellent opportunity to shove up his rent. He has no guarantee that he may not be asked to leave altogether at the end of the year and give to the following tenant or purchaser the full benefit of his industry.

But the worst results of our one year leasing system lie in the deadening effect that it has on the social life of the community. The tenant, not being permanently attached to any one community, takes little interest in its social institutions. He is not an enthusiastic church supporter. The only interest he takes in roads is to cut expenses down to a minimum. He is not likely to be active in the formation of any co-operative organization because he may not long be able to participate in its advantages. And can we blame him?

We in Canada have not yet experienced to such an extent as they have in some sections of the United States the depressing effect of tenancy on rural activities; most of our farmers work their own farms. But we believe that the time is not far distant when we will have in this country the same conditions that now prevail in the corn belt states of the United States.

We believe it is an inevitable law of nature that, as land values increase, so does the proportion of tenants. In the State of Maine, where land is very cheap—about fourteen dollars an acre—eighty-seven per cent. of the farmers own their own farms. In Illinois, where farm lands are worth two hundred dollars an acre, some townships have as high as sixty-seven per cent. of tenant farmers. In European countries, where land values, in proportion to their natural productiveness, are even higher than they are here, the proportion of tenants is still greater. In some cases all of the farms are in the hands of tenants. We in Canada have no reason to expect that the tenant evil will not develop in this country as it has in every other country.

If we would avoid the evils of the tenant system, lack of community activity and a system of farming that more resembles mining than agriculture, we must get away from the short time lease and adopt a system of leases extending from eight to ten years, so that the tenant may have more incentive to improve his farm and the community in which he lives. Long leases are to the best interest of the tenant, of the community in which he lives, and, in the long run, the land owner will profit as well from the long lease system.

CORPORATION "CHECK"

A Chicago packing concern, the Swift Company, have recently advanced just about the cheekiest suggestion of which we have heard in some time. In their annual report, this company draws attention to the ever growing scarcity of meat products for city consumption. They tell us that in 1911 over eight million calves were slaughtered in the United States. Their argument is that if legislation could be invoked to compel every farmer in the United States to retain his heifer calves until they were three years old and all their calves until they had reached a suitable marketing age, the breeding stock of the country would soon be replenished and there would be a plentiful supply of meat products on the market.

Could anyone imagine a more barefaced, brazen attempt at interference in the farmer's business than is this suggestion of the Swift Company? The suggestion was so ridiculous that we did not suppose that anyone would pay any attention to it. But so not. Apparently the Swift Company is not the only corporation endowed with a most plentiful supply of "cheek." The Canadian packers,

too, it would seem, would like to make the farmer run his business according to their ideas, and some of them have warmly seconded the Swift suggestion. Two leading dairy papers published in Toronto have also spoken approvingly of this suggestion interferred.

Fortunately, the agricultural vote is of too much importance on election day for any government to sanction such legislation as the Swift Company has proposed. We mention this incident only to show how little the farmer's interests would be considered did the corporations get absolute control of our government. We would also suggest that if the farmers could make as great profits on rearing cattle as the packing companies make in butchering them, there would be few calves slaughtered.

Two factors seriously hinder the progress of the cooperative movement in this country. In the first

place we have no suitable cooperative

Cooperation. To hasten suitable cooperative legislation dealing

with the formation of cooperative societies and in the second

place our provincial governments have not taken the steps that they might to spread abroad among

our people a fuller knowledge of cooperation, its principles and how to apply them. In both of these connections we may learn a lesson from

the State of Wisconsin, which has already passed a series of laws to facilitate the cooperative organization

of the farmer's business, and has also incorporated the state University add to its economic faculty

a new Professorship, which is to specialize in cooperation and marketing. It is proposed at a later

date to extend the teaching of cooperation to the public schools of the state. Provincial legislators in

all of our Canadian provinces would do well to look into this legislation recently adopted in Wisconsin.

Why 16 Cents a Pound?

(Montreal Witness)

A parcel may be mailed from Vancouver to Newfoundland for 15 cents a pound, though if the same parcel were only to be carried from Pictou to Halifax the rate would be 10 cents. Still worse, a parcel may be mailed in Vancouver for Bermuda, and the sender will only have to pay 12 cents a pound postage, while were he mailing the same package to a friend at New Westminster ten miles away or anywhere in his own country, to provide for intercommunication within which the post office specially exists, and for the rates within which his own government has its own way and where that government might be expected to give him the most favorable rate possible, he would have to pay 16 cents. Still again the Vancouver man can mail his package for 12 cents a pound to any place in Great Britain or the Leeward Islands for 12 cents, while to mail it to the address across the street from his office a very benevolent Canadian Government will charge him 16 cents.

Some will reply that these are special rates for binding in the empire for the purpose of binding it together. Does that explain why it costs less to post a package to England than to

Newfoundland, a near neighbor whose good will we most especially desire to cultivate? It certainly does not explain how our benevolent government has done the kindness of allowing us to mail parcels to Mexico for 12 cents, while they demand every cent of 10 cents a pound to carry parcels between Montreal and Lachine, between persons who are both paying taxes for its support.

AD. TALK
LXX.

You have probably considered the marked difference there is between dairy farmers and just ordinary farmers.

A tremendous business is being done by the Dairy farmer over and above the average farmer. It is even much greater with the breeders of pure-bred dairy cattle. Their sales of pure-bred cattle over and above the enviable income received from the products of the dairy and of the dairy farm are immense.

An especially big business is being done in pure bred stock by the breeders of Holstein cattle. You see this reflected in the live stock advertising columns of Farm and Dairy.

It is self-evident that farmer people, who are doing a business such as "Our People" are doing, are live and responsive prospects for you to reach and do business with through your advertising.

As to the extent of your business a recent census which we have taken shows "Our People" to have FARMS, WHICH THEY OWN, averaging in value \$9,000 to \$12,000, many being over \$25,000 and on up to figures so big that we would not ask you to believe them without seeing the original evidence which we have in our office for you, from one out of every 25 of all "Our People." They enjoy incomes exceeding on the average \$2,000 each annually. Our Holstein breeders have incomes from \$3,000 to \$5,000 and a way above!

Thus you see "OUR PEOPLE" HAVE THE "COBALT." Holstein breeders advertise in Farm and Dairy in preference to other farm papers—not so much alone because we support them and foster their interests, but because they realize that it is a breeder who has been educated up to the value of pure bred Holsteins and other pure bred dairy stock who will buy and pay the price the stock is worth, and such people are the readers of Farm and Dairy.

Put this in your pipe and smoke it, Brother! Then you'll surely favor Farm and Dairy even more and more in future.

There is nothing else like it as a "quality" proposition,—and then you know something about our service and our guarantee and our general policy, which has brought Farm and Dairy to be known as—

"A Paper Farmers Swear By"

Stable Rules

By the Boston Work-Horse Parade Association.

1. The best order in feeding is: Water, hay, water again, grain.
2. Never give grain to a tired horse. Let him rest and nibble hay for an hour or two first. Grain in the manger before the horse comes in looks bad.

3. Water the horses as often as possible; but let the horse that comes in hot drink a few swallows only.

4. A'ways water the horse after he has eaten his hay at night. This is important not only for his comfort, but for his health.

5. Do not forget to salt the horse once a week; or, better yet, keep salt always before him.

6. Give a bran mash Saturday night or Sunday noon; and on Wednesday night also, if work is slack. After a long day in very cold or wet weather, a hot mash, half bran and half oats, with a tablespoonful of ginger, will do the horse good.

7. Keep a good, deep, dry bed under the horse while he is in the stable, for on Sundays especially. The more he lies down, the longer his legs and feet will last.

8. In order to do well, the horse must be kept warm. Give him a blanket on cool nights in late summer or early fall, and an extra blanket on an extra cold night in winter.

9. In cold rains do not tie up the horse's tail. The long tail prevents the water from running down the inside of his legs, and keeps off a current of air from his body.
10. Take off the harness, collar and all, when the horse comes in to feed. He will rest better without it.

11. Never put a horse up dirty or muddy for the night. At least brush his legs and belly, and straighten his hair.

12. In hot weather, and in all weathers if the horse is hot, sponge his eyes, nose, dock, the harness marks, and the inside of his hind-quarters when he first comes in.

13. When the horse comes in wet with rain, first scrape him, then blanket him, and rub his head, neck, loins and legs. If the weather is cold put on an extra blanket in 20 minutes. Change the wet blanket when the horse dries. Do not wash the legs. Rub them dry, or bandage loosely with thick bandages. It is far more important to have the legs warm and dry than clean.

14. Examine the horse's feet when he comes in, and wash them if he does not wear pads. If a horse in the city is not shod in front with pads, tar and oakum, which is the best way, it is absolutely necessary to keep his feet soft by packing them, or by wrapping a wet piece of old blanket or carpet around the foot, or by applying some hoof dressing, inside and out, at least three times a week.

15. Speak gently to the horse, and do not swear or yell at him. He is a gentleman by instinct, and should be treated as such. The stable is the horse's home, and it is your privilege to make it a happy one.

The by-products in a great many industries result in a great deal of money. It ought to be so in the apple business. Why not have a co-operative evaporator, even as we now have co-operative creameries, cheese factories, and co-operative apple growers' associations, etc.? I have known evaporated apples to be carried over for several years and then be sold at handsome profit. J. L. Dixon, Apple Buyer, Wentworth Co., Ont.

DE LAVAL
CREAM SEPARATORS

Are in a Class by Themselves

They cost but a little more than the cheapest, while they save twice as much and last five times as long as other separators.



They save their cost every six months over gravity setting systems and every year over other separators, while they may be bought for cash or on such liberal terms that they actually pay for themselves.

Every assertion thus briefly made is subject to demonstrative proof to your own satisfaction by the nearest DE LAVAL local agent, or by writing to the Company direct.

Why then, in the name of simple common sense, should anyone who has use for a Cream Separator go without one, buy other than a DE LAVAL, or continue the use of an inferior separator?

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

We Give a Free Trial

of the Domo Cream Separator. Think of it. We send this high grade, easy-turning machine on approval, freight prepaid, to test at our expense. We take all the risk. Prices, from \$10 and upwards, about half what you pay for others, and you can be the judge of its merit.

Write today for Circular "D," which gives full particulars of our trial offer, with Prices, and easy terms of payment. It's FREE.

DOMO SEPARATOR CO.
BRIGHTON, Ont. ST. HYACINTHE, Que.

Livingston's
Cake and Meal

have from 1/5 to 1/4 more real flesh-forming food-value than other feeds. This has been proved by actual tests on the Livingston Farm. From the very first they fatten the cattle and better the milk.

Made by skilled experts, with every up-to-date manufacturing aid to help them—by the Old Patent Process, which cooks the food, insuring its keeping for any length of time and making it more easy to digest.

Neither too soft (which means waste), nor too hard (which hinders digestion)—the animal gets the full strength of each particle. Suppose you try them at once—they both

Save and Make
Money

Talk to your dealer, to-day, about Livingston's Cake and Meal—or write us direct. Address: The Dominion Lined Oil Co., Limited, Baden, Toronto, Montreal, and Owen Sound.



THE Easter glory dawns for all of every race and creed,
And every soul is thrilled with joy,
Since Christ is risen indeed.—*Elizabeth Hardy.*

Rose of Old Harpeth

By M^{rs} MARIA THOMPSON DAVIES

Copyright, 1912, The Bobbs-Merrill Company

(Continued from last week)

"TO think that would be worth all the loneliness," answered Rose Mary gently. "Things were very hard for me the first year I had to come back from college. I used to sit here by the hour and watch Providence Road wind away over the Ridge and nothing ever seemed to come or go for me. But that was only for a little while, and now I never get the time to breathe between the things that happen along Providence Road for me to attend to. I came back to Sweetbrier like an empty crock, with just dregs of disappointment at the bottom, and now I'm all ready every morning to have five gallons of lovely folks-happening poured into a two-and-a-half-gallon capacity. I wish I were twins or twice as much me."

"Why, you have never told me before, Rose Mary, that you belong to the new-woman persuasion, with a college hall-mark and suffragist leanings. I have made the mistake of putting you in the home-guard brigade and classing you fifty years behind your times. Don't tell me you have an M. A. I can't stand it to-night."

"No, I haven't got one," answered Rose Mary with both a smile and a longing in her voice. "I came home in the winter of my junior year. My father was one of the Harpeth Valley boys who went out under the roof where his fathers had fought off the Indians, and he brought poor little motherless me to live with the aunts and Uncle Tucker. They loved me and cared for me just as they did Uncle Tucker's son, who was motherless, too, and a few years after he went out into the world to seek the fortune he felt so sure of, I was given my chance at college. In my senior year his tragedy came and I hurried back to find Uncle Tucker old and broken with the horror of it, and with the place practically sold to avoid open disgrace. His son died that year and left—left—some day I will tell you the rest of it. I might have gone back into the world and made a success of things and helped them in that way from a distance—but what they needed was—was me. And so I sat here many sun-set hours of loneliness and looked along Providence Road until—until I think the Master must have passed this way and left me His peace, though my mortal eyes didn't see Him. And now there lies my home nest swung in a bowler of blossoms full of the old sweetie birds, the boy, the cat, puppy babies, pester chickens and—and I'm going to take a large, grey, prowling night-bird back and tuck him away for fear

his cheeks will look hollow in the morning. I'm the mother bird, and while I know He watches with me all through the night, sometimes I sing in the dark because I and my nesties are close to Him and I'm not the least bit afraid."



"I Hope You Feel Easy in Your Mind Now"

CHAPTER IV.

MOONLIGHT AND APPLE-BLOW.

"I hope you feel easy in your mind, child, now you've put this whole garden to bed and tucked 'em under cover, heads and all," said Uncle Tucker, as he spread the last bit of old sacking down over the end of the row of little sprouting bean vines. "When I look at the garden I'm half scared to go in the house to bed for fear I haven't got a quail to my joints."

"Now, honey sweet, you know better than that," answered Rose Mary as she rose from weighting down

the end of a frilled white petticoat with a huge clod of earth and stretched it so as to cover quite two yards of the green shoots. "I haven't taken a thing of yours but two shirts and one of your last summer seersucker coats. I'm going to mend the split up the back in it for the wash Monday. Aunt Amanda lent me two aprons and a sack and a petticoat for the peony bushes, and Aunt Viney gave me this shawl and three chemises that cover all the pink. I've taken all the tablecloths for the early peas, and Stonie's shirts each one of them, have covered a lot of the poet's narcissus. All the rest of the things are my own clothes, and I've still got a clean dress for to-morrow. If I can just cover everything to-night, I won't be afraid of the frost any more. You don't want all the lovely little green things to die, do you, and not have any snaps or peas or peonies at all?"

"Oh, fly-away!" answered Uncle Tucker as he tucked in the last end of a non-descript frill over a group of tiny cabbage plants, "there's not even a smack of frost in the air! It's all in your mind."

"Well, a mind ought to be sensitive about covering up its friends from frost hurts," answered Rose Mary propitiously as she took a

"Tenting up the garden sass ag'in, Miss Rose Mary?"

"No, we're jest giving all the household duties a monogram instead of a sunning, Cal," answered Uncle Tucker with a chuckle as he came over to the wall beside the visitor. "What's the word along the Road?" "Gid Newsome have sent the notes as he'll be here Sa'day night to lay off and plow up this here dram or no-dram question for Sweetbrier folks, so as to tote our will up to the state house for our next election. As a state senator, we can depend on Gid to expend some and have notice taken of this district, if for nothin', but his corn-silk voice and white necktie. It must be no less'n a pound of taller a week to keep them shoes and top hat of his'n so slick. I should judge his courting to be kinder like soft soap and molasses, Miss Rose Mary." And Mr. Rucker's smile was of the saddest as he handed this bit of gentle banter over the wall to Rose Mary, who had come over to stand beside Uncle Tucker in the end of the row.

"It's wonderful how devoted Mr. Newsome is to all his friends," answered Rose Mary with a blush. "He sent me three copies of the Book of Hours, and one of each of yours he had them printed last week, and I was just going over to take you and Mrs. Rucker one as soon as I got the time to—"

"Johannes-jump-ups, Miss Rose Mary, don't you never do nothing like that to me!" exclaimed Mr. Rucker with a very fire of desperation lighting his thin face. "If Miss Rucker was to see one verse of that there poetry I would have to plough the whole creek-bottom cornfield just to pacify her. I've done almost persuaded her to hire Bob Nickols to do it with his two teams and young Bob, on account of a sciatica in my left side that ploughing don't do no kind of good to. I have took at least two bottles of her sarsaparilla and sorghum water and have had Granney put a plaster as big and loud-smelling as a mill swamp on my back jest to git that matter of the cornfield fixed up and here you most go and stir up the ruckus again with the poor little 'Trees in the Breeze' poem that Gid took and had printed unbeknownst to me. Please, man, burn them papers!"

"Oh, I wouldn't tell her for the world if you don't want me to, Mr. Rucker!" exclaimed Rose Mary in distress. "But I am sure she would be proud of—"

"No, it looks like women don't take to poetry for a husband; they prefers the hefting of a hoe and plough handles. It's hard on Miss Rucker that I ain't got no constitution to work with, and I feel it right to keep all my soul-squirrings and seed outen her sight. The other night as I was a-putting Petie to bed, while she and Bob was at the front gate a-trying to trade on that there ploughing, a mighty sweet little verse come to me about—'The little shoes in mother's hand, and the tears was in my eyes so thick 'cause I didn't have nobody to say 'em to, that one dropped down on Petie and made him think I was a-going to wash his face, and such another ruckus as she had to come in to, as mad as hops! If I feel like outen the garden for my new necktie to try and make up to her for—"

"Aw, Mr. Rucker, M-8-8-8-Rucker, come home to get ready for supper," came in a loud, jovial voice that carried across the street like the tootin of a drum. The old man the Rucker home sat in a clump of sugar maples just opposite the Briers, and was square, solid and unadorned of

(Continued on page 22.)

The Upward Look

Good Measure

Give and it shall be given unto you; good measure, pressed down, and shaken together, and running over, shall men give unto your bosom. For with the same measure that ye mete withal it shall be measured to you again.—Luke 6:38.

If we were to go into a grocer's to purchase some sugar and he gave us good measure, then pressed it down and filled again to overflowing we would certainly think we were getting full value indeed. But how many of us always give good measure, no matter in what way it may be? Are not the majority of us, in our Christian work especially, more likely to give light measure than pressed down and running over? We sometimes hear it said that those who profess to be Christians are not as prone to be generous as those who do not make any profession of Christianity whatever. And we believe in some cases this is true. Our Lord seems to point out that this is too often the case in his parable of the Good Samaritan. The priest and Levite, who professed to be very sanctimonious, paid no attention to the wounded man, while the Samaritan, who was considered worse than a heathen, gave assistance freely without hope of reward.

The most of us are quite willing to give our time and substance towards some object from which we expect something in return, but it is when we have an opportunity to do something for others that means self-sacrifice on our part and nothing (so it appears to us) in return, that we are tempted to give light measure. But we are told if we give good measure, in like manner will it be returned to us. Although we may not see the fruits of our labors, yet in some manner it will be measured to us again.

We cite an instance of where good measure was given: A man was once asked how it was that he had such luck in raising potatoes, for those he sold were good to the bottom of the bag. He replied that in picking over potatoes, if he was tempted to fill up with poor ones, he always turned the transaction round, and looked at it from the buyer's point of view. "If I think," he said, "that the man or woman who buys the potatoes will say when they go to cook them, 'I should think any farmer would be ashamed to sell such cattle to eat. I'm none the worse off, and somebody is a little better off and a little happier because I try to do the square thing.'" Is this not a noble example of one carrying out the Golden Rule and one from which all of us can take a lesson in giving good measure?

Over and above all ways in which we may give good measure to those

around us, we should ever keep before us the thought of giving good measure to God. For did He not show his great love for us by giving Himself to die on the cross; and in return for such unmeasured love should we not give him our best—"pressed down and shaken together, and running over"—R.M.M.

The Story of Owen Kildare

Young man:

If you think you have not had a fair chance in life, read this brief sketch of the rise of Owen Kildare of New York City.

Think of it! This young man at 30 years of age was unable to read or write. To-day he supports himself by writing.

Kildare was a member of a tough Bowery gang. He was rough, uncouth, ignorant. He had been orphaned at the age of seven years and cast into the streets. Living the precarious life of a bootblack and newsboy, he slept in doorways, alleys, in barrels. He had but one ambition. He dearly loved a fight, and wanted to be a prize fighter. For several years he made his living as a saloon bouncer.

Can any good come out of the Bowery?

Yes. At 30 years of age Kildare came into contact with a gentle girl, who was a school teacher—a sweet, affectionate, wise young woman, pure as a pearl. The association

changed the whole current of his life. The young woman helped Kildare to the rudiments of an education. As he studied his ideals of life were changed. He had a hard struggle to let go of the old wide ways. Finally he got employment in the circulation department of a newspaper. He studied every spare moment.

One could well wish, in reading the story of Owen Kildare, that he might have married his Mamie Rose, the girl with whom he fell in love and who wrought so great a change in him. But fate was unkind—or was it unkind?—and his idol died.

To make a long story short: Owen Kildare began to write stories, submitting them to the editor of the newspaper where he worked for criticism. He persevered until his sketches possessed value. They were heart to heart stories from real life. Owen Kildare was well known in journalistic circles. In newspaper parlance his stories of slum life are esteemed "good stuff."

Young man:

Fate is feminine. She is capricious. If you are afraid of her, you would better not woo her. She will turn you down.

But—

If you will look her boldly in the face and smile at her, she will smile back at you and shower her gifts upon you.—Western Farmer.



Always the cookbook says: "Sift Your Flour."

No lumps, you see. *Aerates* the flour, making it lighter.

Put FIVE ROSES in your sifter.

Never soft and sticky—never lumpy, musty, woolly.

Never coarse.

Milled superfine from *Manitoba's* grandest wheat.

Fine, granular, very dry.

Nothing remains in the sifter—FIVE ROSES is free, heavy.

And your bread is more porous, more yielding, more appetizing.

And more Digestible.

Because the particles are finer, easier to get at by the stomach juices.

Use this very fine flour—*superfine*. FIVE ROSES.

Five Roses Flour

Not Bleached



Not Blended

Farm Help

Farm Laborers will again be brought out this year by our Immigration Department.

Also Boys and Domestic Servants

We are making a special effort this year to country districts. We have a large class of immigrants. We seek desirable places for them.

Apply early for application form to
The Salvation Army Immigration Dept.
Albert Street, - - TORONTO, Ont.

The Call of the North

Do you know of the many advantages that New Ontario, with its Millions of Fertile Acres, offers to the prospective settler? Do you know that these rich agricultural lands, obtainable free and a nominal cost, are already producing grain and vegetables second to none in the world?

For literature descriptive of this great territory, and for information as to terms, homestead regulations, settlers' rates, etc., write to

H. A. MACDONELL,
Director of Colonization,
Parliament Buildings,
Toronto, Ontario

THE REAL CURE FOR CONSTIPATION TABLETS

No, this does not consist of some special or new form of drug, because drugs are not a permanent cure for Constipation. The real cure for Constipation is something that will appeal at once to your common sense, because this cure consists simply of pure sterilized water.

The sufferer from Constipation usually realizes the danger of his affliction because from Constipation arises the vast number of more serious diseases brought about by the retention and promotion of germ life in the system, in turn caused by our failure to get rid of this waste.

Such a sufferer has probably tried all kinds of drugs, and his experience is enough to prove that drugs form only a temporary relief and require constant use to constantly increasing doses to be at all efficacious. The sufferer greatly aided to his illness by eating a slave to this drug habit.

How much simpler and easier is this method of Dr. Charles A. Tyrrell, inventor of the J. B. L. Caudex—an appliance now endorsed by physicians everywhere, and used by over 30,000 people. With this system of the internal hose you dispense with drugs entirely and you secure a perfectly natural treatment that brings about immediate relief and gradually attains a sure and permanent cure.

Hundreds of people have enthusiastically endorsed this treatment as Mr. E. Nighwander, of Green River, Ont., who writes: "For years I have been troubled with Constipation, also in the bowels, and piles, which all the money and doctors only seemed to relieve temporarily. The J. B. L. Caudex has completely cured these troubles, and I feel it a duty I owe to my fellow-men to refer to the Caudex, in the very highest terms. No amount of money could estimate the value it has been to me. No home should be without a CAUDEX."

Write for Dr. Charles A. Tyrrell's book "Why Man Needs the J. B. L. Caudex Efficient." We will gladly send you this free if you will address Dr. Charles A. Tyrrell, Room 214, 229 College St., Toronto

Rose of Old Harpeth

(Continued from page 20.)

wine or flower. A row of bright tin buckets hung along the picket fence that separated the yard from the store enclosure, and rain-barrels sat under the two front gutters with staid practicality, contrast to the usual relegation of such store-houses of the rainfall to the back of the house and the planting of ferns and water plants under the front sprouts, as with the custom from the beginning of time in Sweetbrier. Mrs. Rucker in a clean print dress and with glossy and uncompromisingly smoothed hair stood at the newly whitewashed front gate. "Send him on home, Rose Mary, or grass'll grow in his tracks and yours, too, if he can hold you long enough," she added by way of badinage.

"I'm a-coming, Sally, right on the minute," answered the poet-by-stealth, and he hurried across the street with hungry alacrity. The honking of a cow and a cawing of a hen, and the breath of his shoulders and long muscular limbs decidedly suggested success at the anvil or field furrow. He made a jocular pass at playing his arm through the un-compromising waist-line of his portly wife, and when warned off by an only half-impatient shove he contented himself by winding one of her white apron strings around one of his long fingers as they leaned together over the gate for further parley with the Alloways across the road.

"When did you get back, Mrs. Rucker?" asked Rose Mary interestedly, as she rested her arms on the wall and Uncle Tucker planted himself beside her, having brushed one of the long brim shoes to make room for them both.

"About two hours ago," answered Mrs. Rucker. "I found everybody in fine shape up at Providence, and 'tis' Mayberry sent me Tom, your new quincy medicine that Tom wrote back to her from New York just day before yesterday. I made a good trade in hours for it, and gave you myself and Bob Nickles too. Mr. Petway had a half-barrel of flour in his store here willing to let go cheap, and I bought it for us and you all at the usual price, and you can even up to that timely seed with the flour, Mr. Tucker, and I'm just a-going to give a measure to the Potests as a compliment to that new Potet bait, which is the seventh month to feed on them eight-five acres. I've set yeast for ourn and your rolls for to-morrow, tell your Aunt Mandy, Rose Mary, and I brought the late Mr. Christian Advocate for your Aunt Viney that she lost last month. Mis' Mayberry don't keep her, but spreads 'em around, so was glad to let me have this one, and she says she'd be fore I had got my bonnet-strings untied. Yes, Cal, I'm a-going on in to give you your supper, for I expect I'll find the children's and Granny's stomachs and backbones growing together if I don't hurry. That's one thing Mr. Satterwhite said in his last illness, he never had to wait—yes, I'm coming, Granny, and with the exception of the late Mr. Satterwhite still unfinished Mrs. Rucker hurried up the front path at the best of a high, querulous old voice issuing from the front window."

"Well, I don't know about it, no finer woman live along Providence Road than Sallie Rucker, Marthy Mayberry, and Selina Lue Lovell down at the Bluff not excepted, to say nothing of the late Mr. Satterwhite standing right here in the midst of my own sweet potato vines," said Uncle Tucker reflectively as he glanced at the retreating figure of his sturdy neighbor, which was followed by that

of the lean and hungry poet.
"Yes, she's wonderful," answered Rose Mary enthusiastically, "but— but I wish she had just a little sympathy for— for poetry. If a husband brought little spindles under his shoulders it's a kind thing for his wife not to pick them right out alive, isn't it? When I get a husband—"

"When you get a husband, Rose Mary, I hope I'll help his shoulders over a plough-line the number of hours allotted for a man's work and then fly poetry kites off times and only when the wind is right," answered Uncle Tucker with a quizzical smile in his big eyes and a quirk at the corner of his mouth.

"But I'm going always to admire the Kites anyway, even if they don't

THE command, be diligent in business, fervent in spirit, serving the Lord; or ever, be zealous right in our homes. It is the steady, every day diligence, doing each day the work of that day that tells.

fly," answered Rose Mary with the teasing lift of her long lashes up at him. "Maybe I'll help his shoulders right in our homes. It is the steady, every day diligence, doing each day the work of that day that tells."

"Yes, child," answered Uncle Tucker as he looked into the dark eyes level with his own with a sudden tenderness, "and you never fail to start off all kites in your neighborhood. When I took you as a bundle of nothing outen Brother John's arms nearly thirty years ago this spring just a perky encouraging little smile in your blue eyes started my kite that was a trailing way like and I sailed mostly by your wind ever since—especially these last few years. Don't let the breeze give out on me yet, child."

"I'll never will, old sweetie," answered Rose Mary, and she rubbed Uncle Tucker's lean old hand in hers and rubbed her cheek against the sleeve of his rough farm coat. "Is the interest of the mortgage ready for this quarter?" she asked quietly in a most a whisper, as if afraid to disturb some listening ear with a private matter.

"It licks more than a hundred," answered Uncle Tucker in just as quiet a voice, in which a note of pain sounded plainly. "And this is not the first time I have fallen behind with Newsome, either. The repairs on the Van and the food chopper for the barn have cost a good deal, and the coal bill was large this winter. Sometimes, Rose Mary, I—I am afraid to look forward to the Van for it, and you'll be fore I would be different and I could pay the debt, but I am afraid—I it wasn't for your aunt, looks like you and I could let it go and make our way down the valley and the world beyond the Ridge, but they are older than us and we must keep their share as long as we can for 'em. Maybe in a few years—Newsome won't press me, I'm a-sure of it. Do you think you can help me hold on for 'em? I don't matter."

"We'll never let it go, Uncle Tucker, never," answered Rose Mary passionately, as she pressed her cheek closer to his arm. "I don't know why I know, but we are going to have it as long as they—and you, you need it—and I'm going to die for myself, but the world will be laughing sob as she shook two tears out of her lashes and looked up at him with adorning stars in her eyes.

(Continued next week)
When a lamp has stood long enough to get hot it should be moved with very great care.

Capable Old Country Domestic

Parties arriving about February 18th and 28th

APPLY NOW
The Guild, 71 Drummond St., Montreal and 47 Pembroke St., - Toronto

Wash a Tub of Clothes in Three Minutes

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Here are a few of the exclusive features to be found only in the Fisher-Ford Rapid Vacuum Washer

It is the only Washer that has been approved and recommended by the Good Housekeeping Institute. It is the only Washer that has a valve, which is absolutely necessary in order to create a perfect vacuum, and supply the compressed air, which forces the hot suds through the fabric.

It is the lightest and strongest machine made. It is guaranteed to last a life time. It can be used in any boiler, tub or pail, equally well.

It has been awarded prizes in Washing Competitions over \$50.00 washing machines. It will wash the heaviest Hudson Bay Blankets in three minutes. It will wash the finest lingerie perfectly in three minutes. It will wash a tub of anything washable in three minutes. It will save you hours of needless toil. It will save many dollars a year by washing all of the clothes. It can be operated by a child as easily as an adult. It is easy to wash with this machine as it is to wash a pot of potatoes. It will thoroughly rinse a whole family washing in 30 seconds. It will do everything we claim for it or we will return every cent of your money.

After you own one of these Washers the hardest part of your washing will be hanging out the clothes.

If for ANY reason you are not entirely satisfied with the Fisher-Ford Vacuum Washer we will gladly return your money.

We are not taking any chances because we know that not a single washer will be returned. YOU are not taking any chances, because if you will not do all we say, you will not get your money back.

The regular price of the Fisher-Ford Vacuum Washer is \$15.00, but in order to encourage you to buy one of these Washers we will accept the value of this coupon same as a \$1.00 dollar bill.



Send this coupon out and send it to us with \$2.50, and we will send you the Fisher-Ford Vacuum Washer, with all the accessories, fully packed, and we will pay the express charge paid to any address.

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Proven in
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OUR 3rd ANNUAL CONSIGNMENT SALE, APRIL 2nd, 1913

Again we offer the public at auction, Holsteins from Belleville's noted breeders. Note the particulars of these cattle, then ask yourself "Where has there ever been offered before their equal?" We have always sold a champion at each preceding sale. We have three champions in sale this year.

Two cows in sale have each averaged 100 lbs. milk in one day, 22,000 lbs. milk in one year. A splendid feature of our sale will be the opportunity given the buying public to also buy young daughters of each of these cows.

¶ Did you ever hear of a sale anywhere in which was offered an 104 lbs.-a-day cow with a dam that has milked 108 lbs. in one day at 12 years, and two daughters that at one year and 11 months, and two years, two months, have milked 74.8 lbs. and 76 lbs. respectively?

¶ The fact that in the Belleville District we have such cows that are owned, and have been bred and developed in the Belleville District, makes our great offering possible.

¶ The champions belong to Belleville. We raise them here.

¶ In our sale there will be a cow for everybody—the champions for the big fellows, the moderate-priced cows, all rent-paying, mortgage-lifting individuals that it will pay anyone to buy.

¶ A point for you to remember is that we are standing right back of the most enviable reputation which we have built up at previous annual sales we have conducted. Our cattle will always do us credit, and where can you get anything to equal the stock from the great Belleville Herd Sires?

Full particulars of breeding, individual consignments, etc., given in catalogue. WRITE AT ONCE FOR YOUR COPY, and learn all about the really superior excellence of the cattle we are offering. Write to the Secretary,

F. R. MALLORY, Secretary of Sale FRANKFORD, ONT.

N.B.—The animals you get at our sale are animals with a "future" to supplement the already attractive records and backing of our greatest. When you buy from our breeders you buy from men who are actually breeding and developing the record makers AND WITHAL THEY ARE GOOD ADVERTISERS. This will all accrue to your advantage during the years to come.

A Feature of the Sale will be

May Echo Verbelle

The only cow in Canada (possibly in the world) to milk 104 lbs. in 1 day; with an 108-lb. 12-yr.-old dam, and 2 daughters at 1 yr, 11 months and 2 yrs. 2 months, respectively, milking 74.8 and 76 lbs. milk in 24 hours!

Her dam is May Echo, 31.34 lbs. butter in 7 days; 23,707 lbs. milk, 1,042 lbs. butter in 1 year. Record of Performance—Canadian Champion and

Champion Butter Cow of the World at 12 Years

She will be Sold at

Belleville Consignment Sale, April 2

Get a copy of catalogue and study up the great breeding back of this cow. Her sire's dam, Verbelle 4th won first as a 2-yr.-old in the dairy test at Guelph. Her daughters—May Echo Sylvia, at 1 yr. 11 months, made 74.8 lbs. milk in 1 day, 21.06 lbs. butter in 7 days, 17,680 lbs. milk in 1 year, R.O.P.; Lawncrest May Echo Posch, at 2 yrs. 2 mos., 17.56 lbs. butter in 7 days, 14,600 lbs. milk in 1 year.

This cow combines in the highest degree the essentials of a great cow—breeding and type and production both of milk and butter—and through her progeny, more milk and butter!

Six others in my consignment are of my high class breeding, excellent individuals. See them listed in the Catalogue.

This stock I am consigning will do well for you even as it is doing for me. It is the right type, the breeding is right, the individuals I guarantee to be absolutely right, and you will get the price at the sale. Come to the sale and get this stock. It will always pay you handsomely.

F. R. MALLORY, FRANKFORD, ONT.

"Greatest View" Holsteins

From the natural Increase of my great herd I am consigning 13 head (all young) 9 females and 4 yearling bulls to the great



**Belleville
Consignment Sale**

In my consignment are included five 2-year-old and one 4-year-old heifer out of our great IMPORTED BULL, Karel Joseph, whose sire was A REPEATED CHAMPION at the N. Y. State Fair, and FROM THE HIGHEST RECORD COWS IN HOLLAND.

The dam of our bull was a daughter of the great De Kol 2nd's Butter Boy's 3rd, whose son sired the world's phenomenal yearly Record Cows Banostine Belle De Kol, Highlawn Hartog De Kol, and Daisy Grace De Kol, whose combined yearly Butter exceed those of any other three cows in the world.

The progeny of Karel Joseph are very uniform, possessing splendidly shaped udders, well-placed teats, and altogether pleasing appearance.

This bunch of sisters should prove an Attractive Buy

All of these cattle are but the natural increase of my big herd. The individuals throughout the whole consignment are very uniform, and of that correct type and breeding to produce big records of milk and butter.

Send for catalogue to F. R. Mallory, Frankford, Ont., Secretary of Belleville Consignment Sale, and study up the individual breeding and note full particulars of the individuals I am consigning.

Archibald Parks, Napanee, Ont.

N.B.—I have three good service bulls for private sale. Write me personally for particulars and prices. They are the right kind—19 cows in my herd average 56 lbs. a day and there are only 5 mature cows in the lot!

YEARLY RECORD OF PERFORMANCE TESTS OF HOLSTEINS.

1 Luncie Jane Fench, 7502, at 5y; milk 1977.3 lbs.; fat 567.6 lbs., equal to 734.64 lb. butter. Owner H. F. Patterson, Alford Junction, Ont.

1 Kelly Marling 3rd Doko, 5671, at 4y; milk 1931.6 lbs.; fat 582.04 lbs., equal to 727.80 lb. butter. Owner W. F. Fred Bell, Britannia Heights, Ont.

1 Camille Ormsby, 2901, at 5y; 2994.1 milk 1245.1 lbs.; fat 445.92 lbs., equal to 1562.5 lbs. butter. Owner W. Fred Bell, Britannia Heights, Ont.

1 Buffalo Girl Bette, 1561, at 5y; 2714.7 milk 1553.7 lbs.; fat 563.6 lbs., equal to 1747.5 lbs. butter. Owner Tom Tig Wood, Woodstock, Ont.

1 Alia Fench Maid, 3745, at 1y; 3341.2 milk 1247.4 lbs.; fat 471.7 lbs., equal to 592.39 lbs. butter. Owner W. Fred Bell, Britannia Heights, Ont.

11.3131.1 milk 1029.1 lbs.; fat 323.8 lbs., equal to 1215.1 lbs. butter. Owner Monro & Lawson, Thorold, Ont.

12.1964.1 milk 1077.6 lbs.; fat 304.97 lbs.; equal to 1381.2 lbs. butter. Owner Monro & Lawson, Thorold, Ont.

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TRADE MARK Ploughs - Wilkinson U.S.S. Soft Centre Steel Moldboards, High Temperature Guaranteed to clean in any soil...

A Year Old Bull, closely related to May Echo, will sell or exchange for another bull. Now ready for service, nicely marked, about half white.

SEED COW FOR SALE Seed Cows that will grow. White Cap, Dailey and Early Leaming. Satisfaction Guaranteed.

Holstein Breeders Jessie Dea De Kol is a show cow of unusual merit, and is bred to flock out right for Toronto; she is in my possession.

"Little Wireless Phones" For those who that will come you to HEAR

FOR SALE AND WANTED ADVERTISING WANTED-By the first of April, a Man, with one or two years experience, to work in Culloden Cheese Factory.

NOTICE For Holstein Men You are familiar with the famous DE KOL PLUS, the champion Record of Performance bull for 1910.

At the BELLEVILLE SALE These cattle have all been TUBER-CULIN TESTED and a certificate will be furnished with each animal.

11 Mos. High-calves Holstein Bull From King Segis Walker, his average record of 29.77 lbs. per day.

Females All Ages For Sale Also Bull's son, bred by son of King Segis W. A. PATTERSON, BRANTFORD, ONT.

CHOICE HOLSTEIN BULL CALF Very large, strong, nicely marked calf. Born March 5, 1913. His dam has an official record of 24.32 lbs. butter and 621 lbs. milk in 7 days.

FOR SALE AND WANTED ADVERTISING WANTED-By the first of April, a Man, with one or two years experience, to work in Culloden Cheese Factory.

A MOTH EXTERMINATOR For \$25c Post Only \$25c Paid For sale by Leading Drugstore, or sent by mail, postage paid, on receipt of 25 c.

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KEITH'S SEED OATS - Good yielders, pure. Bags Free. per bus. Registered Best Grade 75 Abundance 70 White Cluster 75 Danbroyer, No. 3 sample 75 Danbroyer, No. 2 sample 75 Danbroyer, No. 1 sample 75 These Danbroyer oats are all free from noxious weed seeds. They are graded on the percentage of starch they contain. per bus. Barton's Black Victor 1.00 Black Tartarian 75

KEITH'S SEED BARLEY per bus. O. A. C. No. 2 Registered 1.50 O. A. C. No. 21, our best sample 1.50 O. A. C. No. 21, our best 1.00 KEITH'S SEED WHEAT per bus. Marquis 1.25 Wild Goose, best 1.40 Wild Goose, good sample 1.15 Red Fife, very fancy 1.40 Red Fife, good sample 1.40

KEITH'S SEED CORN If you are anxious to get the best, see our catalogue. We will give you satisfaction.

KEITH'S SEED POTATOES, per bag. Early Ohio 1.25 Early Eureka 1.00 Early Cobblers 1.00 Empire State 1.75 Delaware 1.50

SWEDE TURNIP SEEDS. Add 5c per lb. if wanted by mail. Prize-taker, per lb., 30c; 5 lbs. or over at 25c. Scottish Champion, per lb., 25c; 5 lbs. or over at 18c. Elephant or Jumbo, per lb., 20c; 5 lbs. or over at 15c. New Century, lb., 20c; 5 lbs. or over at 15c.

GEO. KEITH & SONS, 124 King St. East, Toronto Seed Merchants since 1866

HOLSTEIN TESTS, FEB. 14-15

1. Midnight Gem DeKok, 1265, at 7y. 2m. 10d.; milk 300.5 lbs.; fat 23.0 lbs., equal to 26.9 lbs. butter. Owner Jas. G. Currie, Ingersoll, Ont. 2. Johnnie DeKok, 1582, at 8y. 9m. 24d.; milk 499.1 lbs.; fat 54.9 lbs., equal to 54.0 lbs. butter. Owner Allison Brown, Cheshamville, Ont. 3. Gracinda A. DeKok, 7058, at 7y. 4m. 8d.; milk 427.9 lbs.; fat 17.38 lbs., equal to 21.14 lbs. butter. Owner A. C. Hardy, Brockville, Ont. 4. Topsey DeKok, 6448, at 5y. 11m. 14d.; milk 523.5 lbs.; fat 17.47 lbs., equal to 21.81 lbs. butter.

Fourteen-day record at 5y. 11m. 14d.; milk 1020.1 lbs.; fat 34.09 lbs., equal to 42.62 lbs. butter. Owner W. C. Prouse, Tillamook, Ont. 5. Greenish Butter Girl, 7219, at 6y. 7m. 24d.; milk 427.9 lbs.; fat 17.38 lbs., equal to 21.14 lbs. butter. Owner M. J. McKay, Grants Corners, Ont. 6. Black Beauty DeKok, 6581, at 6y. 11m. 24d.; milk 531.7 lbs.; fat 16.88 lbs., equal to 21.21 lbs. butter. Fourteen-day record at 6y. 11m. 24d.; milk 1020.9 lbs.; fat 34.08 lbs., equal to 42.62 lbs. butter. Owner W. C. Prouse, Tillamook, Ont. 7. Inka Mercedes Poch, 7376, at 7y. 2m. 15d.; milk 473.0 lbs.; fat 16.79 lbs., equal to 20.39 lbs. butter. Owner A. Dunn, Ingersoll, Ont. 8. Tevilla O. A. C., 8096, at 5y. 11m. 8d.; milk 604.8 lbs.; fat 16.38 lbs., equal to 20.47 lbs. butter.

Fourteen-day record, at 5y. 11m. 8d.; milk 1047.4 lbs.; fat 31.25 lbs., equal to 20.79 lbs. butter. Owner A. C. Hardy, Brockville, Ont. 9. Fanny Keyes, 9379, at 5y. 6m. 15d.; milk 452.3 lbs.; fat 15.95 lbs., equal to 19.36 lbs. butter. Owner A. Dunn, Ingersoll, Ont. 10. Lady Pauline Agnes DeKok, 14829, at 6y. 8m. 24d.; milk 427.7 lbs.; fat 15.95 lbs., equal to 19.36 lbs. butter. Owner M. J. McKay, Grants Corners, Ont. 11. Merilee Wyniewski, 6208, at 6y. 11m. 15d.; milk 534.4 lbs.; fat 16.70 lbs., equal to 19.63 lbs. butter. Owner M. J. McKay, Grants Corners, Ont. 12. Pieterie Ploos, 9871, at 7y. 7m. 25d.; milk 429.0 lbs.; fat 15.75 lbs., equal to 19.16 lbs. butter. Owner A. Dunn, Ingersoll, Ont. 13. Calamity DeKok, 6288, 22247, at 4y. 9m. 19d.; milk 367.3 lbs.; fat 15.25 lbs., equal to 19.06 lbs. butter. Owner Lawrence Farms, Brantford, Ont. 14. Aene Raddie Pauline, 6492, at 6y. 9m. 15d.; milk 461.7 lbs.; fat 14.93 lbs., equal to 18.61 lbs. butter.

Fourteen-day record at 6y. 9m. 15d.; milk 920.9 lbs.; fat 27.16 lbs., equal to 18.61 lbs. butter. Owner A. C. Hallman, Brantford, Ont. 15. Ontario Maid, 7590, at 11y. 6m. 14d.; milk 487.4 lbs.; fat 14.94 lbs., equal to 18.50 lbs. butter. Owner H. W. Walker, Union, Ont. 16. Jennina Poch, 6, 697, at 7y. 6m. 24d.; milk 429.0 lbs.; fat 15.75 lbs., equal to 19.16 lbs. butter. Owner W. C. Prouse, Tillamook, Ont. 17. Wayne Olney Clothide, 22249, at 4y. 10m. 0d.; milk 468.2 lbs.; fat 15.30 lbs., equal to 19.12 lbs. butter. Owner Lawrence Farms, Brantford, Ont. 18. Incoo Pride Calamity, 10069, at 4y. 9m. 15d.; milk 463.3 lbs.; fat 14.55 lbs., equal to 18.14 lbs. butter. Owner W. C. Prouse, Tillamook, Ont. 19. A. M. Keyes, 9296, at 4y. 9m. 6d.; milk 364.3 lbs.; fat 11.55 lbs., equal to 14.44 lbs. butter. Owner Lawrence Farms, Brantford, Ont.

Junior Four-Year-Old Class. 1. Highland Ladoga Ormsby, 15566, at 3y. 9m. 33d.; milk 294.1 lbs.; fat 20.64 lbs., equal to 25.81 lbs. butter. Owner Jas. G. Currie, Ingersoll, Ont. 2. Lulu Poch, 808, 16509, at 3y. 7m. 6d.; milk 391.5 lbs.; fat 14.30 lbs., equal to 17.83 lbs. butter. 3. Price of Myrder, 11679, at 3y. 10m. 15d.; milk 420.6 lbs.; fat 14.30 lbs., equal to 17.33 lbs. butter. Fourteen-day record, at 3y. 10m. 15d.; milk 815.3 lbs.; fat 26.50 lbs., equal to 32.25 lbs. butter. Owner Boy Nevill, Brantford, Ont. 4. Pussie Gretqui Hengerveld, 14466, at 3y. 8m. 15d.; milk 395.5 lbs.; fat 15.85 lbs., equal to 16.58 lbs. butter. Owner J. W. Ingersoll, Ont. 5. Minnie Hengerveld Poch, 15624, at 3y. 7m. 15d.; milk 347.9 lbs.; fat 15.04 lbs., equal to 16.55 lbs. butter.

Fourteen-day record, at 3y. 7m. 15d.; milk 703.0 lbs.; fat 22.10 lbs., equal to 32.60 lbs. butter. Owner A. C. Hallman, Brantford, Ont. 6. Nellie Pieterze Hartog DeKok, 22246, at 3y. 5m. 27d.; milk 439.5 lbs.; fat 15.52 lbs., equal to 20.40 lbs. butter. Owner Lawrence Farms, Brantford, Ont. 7. Grace DeKok Abbecker, 14103, at 3y. 8m. 24d.; milk 352.4 lbs.; fat 12.29 lbs., equal to 15.35 lbs. butter. Owner L. A. Prouse, Ingersoll, Ont. 8. Princess Zeeman Poch, 15383, at 3y. 9m. 30d.; milk 322.4 lbs.; fat 12.13 lbs., equal to 14.88 lbs. butter. Owner L. A. Prouse, Ingersoll, Ont. 9. Everett, Villa Nova, Ont. 10. Gretqui Poch, 12271, at 3y. 11m. 24d.; milk 345.8 lbs.; fat 11.14 lbs., equal to 13.91 lbs. butter. Owner A. Dunn, Ingersoll, Ont.

Junior Three-Year-Old Class. 1. Lettie Hengerveld DeKok, 15261, at 3y. 5m. 14d.; milk 399.1 lbs.; fat 15.55 lbs., equal to 19.46 lbs. butter. Owner Brown Bros, Lynn, Ont. 2. Johanna Hengerveld, 15098, at 3y. 2m. 21d.; milk 453.6 lbs.; fat 14.44 lbs., equal to 18.06 lbs. butter. Owner A. Dunn, Ingersoll, Ont. 3. Flora Staple, 12020, at 3y. 4m. 11d.; milk 379.7 lbs.; fat 15.05 lbs., equal to 17.50 lbs. butter. Owner Wm. B. Mason, Tyrrell, Ont.

Junior Two-Year-Old Class. 1. Bette Ormsby Maid, 14520, at 2y. 9m. 7d.; milk 355.2 lbs.; fat 14.95 lbs., equal to 17.50 lbs. butter. Owner J. W. Stowart, Lynn, Ont. 2. Inagar Maid, 16099, at 2y. 7m. 15d.; milk 329.0 lbs.; fat 14.30 lbs., equal to 14.23 lbs. butter. Owner R. A. Inksetter, Copestown, Ont. 3. Fanny Keyes, 9379, at 2y. 9m. 29d.; milk 320.1 lbs.; fat 11.34 lbs., equal to 13.91 lbs. butter. Owner H. W. Walker, Union, Ont. 4. Mary Ann DeKok, 15071, at 2y. 9m. 14d.; milk 410.7 lbs.; fat 13.41 lbs., equal to 15.29 lbs. butter. Owner W. C. Prouse, Tillamook, Ont. 5. Fafortie Tohee, 16292, at 2y. 11m. 18d.; milk 340.0 lbs.; fat 11.35 lbs., equal to 14.09 lbs. butter. Owner J. W. Stowart, Lynn, Ont. 6. Beauty Kordyke Mark, 16941, at 2y. 6m. 6d.; milk 296.4 lbs.; fat 10.43 lbs., equal to 13.04 lbs. butter. Owner W. M. Brown, Lynn, Ont. 7. Beauty Temora, 15713, at 2y. 8m. 5d.; milk 340.7 lbs.; fat 10.19 lbs., equal to 12.81 lbs. butter. Owner J. W. Stowart, Lynn, Ont. 8. Lulu Poch, 15389, at 2y. 6m. 11d.; milk 286.6 lbs.; fat 10.11 lbs., equal to 12.64 lbs. butter. Owner Lawrence Farms, Brantford, Ont. 9. Dolly Staple, 15710, at 2y. 9m. 24d.; milk 317.7 lbs.; fat 9.71 lbs., equal to 12.14 lbs. butter. Owner Walker H. Mason, Tyrrell, Ont. 10. Beauty Kordyke, 16465, at 2y. 6m. 6d.; milk 330.4 lbs.; fat 9.31 lbs., equal to 11.04 lbs. butter. Owner Lawrence Farms, Brantford, Ont. 11. Marion Kordyke, 16929, at 2y. 8m. 8d.; milk 276.9 lbs.; fat 9.05 lbs., equal to 10.43 lbs. butter. Owner Jas. G. Currie, Ingersoll, Ont.

Junior Two-Year-Old Class. 1. Lyndale Pietie Abbecker, 17493, at 2y. 5m. 26d.; milk 365.5 lbs.; fat 12.13 lbs., equal to 14.41 lbs. butter. Owner Allison Brown, Cheshamville, Ont. 2. Ardelia DeKok Temora, 15700, at 2y. 4m. 15d.; milk 341.7 lbs.; fat 11.55 lbs., equal to 14.92 lbs. butter. Owner Wm. B. Mason, Tyrrell, Ont. 3. Calamity Hengerveld 2nd, 16297, at 2y. 6m. 15d.; milk 271.8 lbs.; fat 11.51 lbs., equal to 14.29 lbs. butter. Owner W. C. Prouse, Tillamook, Ont. 4. Bessie Abbecker Marcona, 17090, at 2y. 8m. 24d.; milk 353.1 lbs.; fat 11.05 lbs., equal to 13.90 lbs. butter. Owner L. A. Prouse, Ingersoll, Ont. 5. Ploome Hengerveld, 16563, at 2y. 11m. 25d.; milk 304.5 lbs.; fat 11.04 lbs., equal to 12.64 lbs. butter. Owner J. W. Stowart, Ingersoll, Ont. 6. Lakhovon Countess Grace, 16720, at 2y. 2m. 29d.; milk 315 lbs.; fat 10.42 lbs., equal to 13.01 lbs. butter. Owner Lawrence Farms, Brantford, Ont. 7. Calamity Duchess Hengerveld, 15326, at 2y. 11m. 17d.; milk 324.6 lbs.; fat 11.74 lbs., equal to 14.01 lbs. butter. Owner W. C. Prouse, Tillamook, Ont. 8. Bell Lee 2nd, 2199, at 2y. 6m. 7d.; milk 269.2 lbs.; fat 10.29 lbs., equal to 12.99 lbs. butter. Owner Jas. G. Currie, Ingersoll, Ont. 9. Inka DeKok Pieterze 4th A, 16940, at 2y. 8m. 24d.; milk 295.9 lbs.; fat 9.66 lbs., equal to 12.10 lbs. butter. Owner Wm. B. Mason, Cheshamville, Ont. 10. Inka Mercedes Tebbe 2nd, 16208, at 2y. 11m. 14d.; milk 381.9 lbs.; fat 11.55 lbs., equal to 12.39 lbs. butter. Owner A. Dunn, Ingersoll, Ont. 11. Pieterze DeKok Clothide 2nd, 15093, at 2y. 9m. 25d.; milk 320.7 lbs.; fat 9.73 lbs., equal to 12.14 lbs. butter. Owner Jas. Nevill, Str. Brantford, Ont. 12. Jennie Mutual Veevan, 14641, at 2y. 11m. 5d.; milk 282.0 lbs.; fat 9.66 lbs., equal to 10.62 lbs. butter. Owner A. C. Hardy, Brockville, Ont.-W. A. Clemens.

Maple Grove, Crescent Ridge and Welcome Stock Farms OFFERINGS OF HOLSTEINS

At the great Oxford District Breeders' Club Commemorative Sale to be held at Woodstock, March 25th, 1913, consists of Sir Cromwell, one of our best bred herd sires combining the exceedingly high butter-fat testing Duchess Ormsby blood, (all over 5%) and the equally famous Ormsby and long distance milkmaid Ormsley blood. The cows are all large, straight, typical specimens of the breed, all are officially tested and have very creditable records from over 20 lbs. for 2-year-olds to 22 lbs. The younger ones are bred to the great King Lyona Hengerveld, whose 17 near female ancestors have records of over 30 to 47.7 lbs. and 5 of them over 100 lbs. milk a day.

Such offerings are rare at a sale where you can get them at your own price catalogue (for which apply to G. B. Bennett, Woodstock), will tell you all about them.

H. BOLLEKT, TAVISTOCK, Ont.

You Can Sell

Your pure bred cattle in any surplus stock you have, by advertising in this column of the Dominion Dairy.

We take you next upwards of 17,000 possible buyers, at cost, very small to you for this great service - only \$1.00 per inch.

Send your advertisement to-day for next issue.

Farm and Dairy, Peterboro, Ont.

FAIRVIEW FARMS HERD

Offers Sons of PONTIAC KORNEDYK, ready for service in the near future or younger, some and daughter of SIR JOHANNA CANTALTA GLADI, whose three first daughters to be officially tested average better than 30 pounds each as junior 2-year-olds, and some of BAG APTON KORNEDYK and SIR APTON KORNEDYK STELL, the greatest bred KORNEDYK bull in the world. Write me for anything that you want in Brantford-Elvelton.

E. H. DOLLAR, HEUVELTON, NEW YORK (Near Preston, Ont.)

Holsteins-by Auction

You can't buy any daughters of our 3055, A. R. O-bred herd sire, but you can buy a son of V. B. H. (7516), his grand sire have 30 lb. daughters, and his grand dam made a world's record. 27 lbs. when 3 years old, and has a daughter, make 32 lbs. in 7 days. Dan. Susy DeWit about 18 lbs. at 2 years of age. In R. of P. Another way to get the blood is to buy an R. of P. or an R. of M. with a son to them or, pending before from Record Dams, and bred to a son of V. B. H. (7516), whose dam made 21 lbs. at 3 years old. 8 lbs. to grand daughter of Ianthe Jewel Mochlidge 3rd, the 3060 cow.

At the Sale at Woodstock

On the 26th of March. The looks of this one, straight tall will suit the eye of any one. The Graefeland Farm Consignment.

ELIAS RUBY, Tavistock, Ont.

Do You Want To Get Results

Good Luck BRAND Dairy Feeding Feed, Cal Meal, Baby Chick Feed, Poultry Mash, Scratch Feed and Great ones are giving excellent results. Good quality, reasonable prices. Write us.

CRAMPSEY & KELLY, Dovercourt Road Toronto, Ont.

To The Big Consignment Sale of

PURE BRED HOLSTEINS

To be held in the

City of Woodstock, March 25th, 1913

By the Oxford District Holstein Breeders' Club

Evergreen Stock Farm Will Contribute



10 Head of its best Young Stuff

(9 Females and 1 Male)

Six 3-year-old Cows, milking and in calf;
One 2-year-old Cow, milking and in calf;
One Yearling, fourteen months old; One
Heifer Calf, six months old; One 2-year-old Bull



These are all Record of Merit Cattle, two of them daughters of Madam Posch Pauline, champion milking 4-year-old of Canada. Milk, 7 d., 660 lbs., butter, 26.73 lbs.; milk, 30 d., 2,752 lbs., butter 108.45 lbs.; two of them 2nd and 3rd prize heifers in dairy test, Guelph, 1912, two of them 2nd and 3rd prize heifers in dairy test, Ottawa, 1913. Also the 1st prize three-year-old cow at London, 1912, and winner of milk test at Woodstock, in heifer class, 1912, and her heifer calf by a splendid sire from the famous Arfmann, N. Y., herd.

We guarantee these Cattle to be absolutely right every way

We believe that no breeder of Holsteins has ever consigned 10 Head of more promising cattle than these

We don't expect to receive what these cattle are actually worth, but know that a satisfied customer is the best "ad." any breeder can have

Secure a Catalogue from H. G. Benfield, Woodstock, Ont., and attend this sale, which promises to be the cleanest and best conducted Consignment Sale ever held in Canada

A. E. HULET, - - NORWICH, ONT.

Oxford County's Best Holsteins

AT PUBLIC AUCTION



65

Some of the Best Breeders of Holsteins in far-famed Oxford County, Ont., and Cattle from some of the best and most noted herds—in-cluding H. Bollert, Bollert and Leuszler, A. E. Hulet, P. D. Ede, Jas. Rettie, and others), will combine to make probably the best sale ever held in Canada, for Holstein Cattle, the Sale to be under the auspices of

65



THE OXFORD COUNTY HOLSTEIN BREEDERS' CLUB, on
TUESDAY, MARCH 25th, 1913

Every man in this sale is laying out to do his best to boom our Club and make his stock known as exceedingly high class through this sale. They are contributing of their best. Many of the cattle are much better than most breeders would care to risk selling at auction.

PRACTICALLY ALL FEMALES—IN VALUE UP TO \$700 A HEAD

The breeding of this stock is of the choicest imported and Canadian-bred strains. Mostly all tested stock. Our sale will afford you the opportunity of buying Holstein females from great herds. They will go absolutely at your own price.

Amongst the contributors are: H. G. Benfield, Woodstock; H. Bollert, Tavistock; Bollert & Leuszler, Tavistock; P. L. Dunkin, Norwich; P. D. Ede & W. Sallal, Oxford Centre; A. E. Hulet, Norwich; Martin Melbywell, Oxford Centre; Jas. Rettie, Norwich; Elias Ruby, Tavistock; A. Walker, Norwich, and others. Signed Transfers for each animal will be in Secretary's hands before sale day. All must be sold to highest bidder. No reserve.

Sale is being conducted under strictest of rules and penalties. Everything is right. Much of the stuff is show stock of known and proven capacity at record work. Many of the cows and heifers are such as you could only with difficulty get a prize on ordinarily at the breeders' own day of sale. Some of the cattle should realize as high as \$700 a head on the day of sale.

Catalogue gives full particulars and pedigrees

Write at once for your copy

An Editor of Farm and Dairy, who inspected most of this stock the last week in February, pronounced it to be superior to his most sanguine expectations of it. The stock will set a new mark higher up most difficult for succeeding sales to surpass. All stock must be choice specimens, with udders right. Our inspection is rigid. Cattle are guaranteed.

PLAN TO COME

SALE AT WOODSTOCK

CATALOGUES AND PARTICULARS FROM

H. G. BENFIELD, Woodstock, Ont.

Secretary of Sale

P. D. EDE, Oxford Centre

President of Association

Important Credit Auction Sale

18 PURE BRED of Holsteins

Having sold the farm, I will offer my entire herd of 18 head

On March 28th, 1913

"Sunnyside Farm," Boston, Ont.

A chance to get good foundation stock at your own price. Catalogues sent on application.

M. C. R. and C. P. R. trains met at Waterford, morning of sale.

FRANK M. JOHNSTON, Proprietor Boston Ont.

JNO. A. HARRIS, Clerk COL. W. ALMAS JAS. DUNLOP, Auctioneers



OUR FARMERS' CLUB

Correspondence Invited

PRINCE EDWARD ISLAND KING CO. P. E. I. LOWER MONTAGUE, March 3.—We are having very fine warm weather here now; just enough snow for good roads. The mud has been hauled dry. The seed falls are being held this month and no poultry shows. Eggs are plentiful \$30; butter scarce at 27c; milk, \$1.40; oinkale, \$1.50; pork, 11.50; beef, 8c to 9c live weight.—G. A.

QUEBEC RICHMOND CO. QUE. DANVILLE, March 11.—Since March came in like a lion, we have had plenty of snow and no rain. A lot of teaming is being done, as there was not much chance the first part of the winter. Cattle are looking well on plenty of feed. Pork is selling for \$15, dried, and eggs have taken a slight rise again to 30c; butter, 35c.—M. D. B.

ONTARIO HARTINGS CO. ONT. CHAPMAN, March 12.—We have enjoyed pleasant winter weather, with good snow for some time, but the snow is now melting fast. A great deal of ice covers the fields and farmers are anxious regarding their meadows and fall grain. Young pigs for feeding are in good demand, and sell for high prices. Hay sells for \$12; oats, 85c; potatoes, \$1 a bag and butter, 35c.—H. B.

PETERBORO CO. ONT. PETERBORO, March 12.—A meeting of the Board of Directors of the West Peterboro Farmers' Institute was held at the City Council room, and the members agreed to change for holding the annual meeting, Mr. C. E. Moore, the president, was in the chair, and there were also present Messrs. T. H. Graham, John Brown, T. H. Mann, J. W. Mann, A. H. Garbutt, H. C. Garbutt and Wm. Collins, secretary. After some resolutions regarding the occasion, etc., it was decided to hold the annual meeting at the home of Mr. T. H. Graham, which kindly offered the occasion, situated on Lot No. 6, of the 4th line of Smith, on Wednesday, June 25th, commencing at 7 p.m. The thanks of the board was tendered to Mr. Graham for his kind offer. On motion, it was decided to not ask from the Department any speakers for the occasion.—Berwin.

WATERLOO CO. ONT. WATERLOO, March 12.—The last two weeks we have had quite a bit of snow and fine sleighing, but it is fast disappearing. A number of Farmers' Institute meetings are being held throughout the district this week. The winter has been very moderate, with the result that eggs are more plentiful than other years. They sell at 35c to 25c; butter, 30c to 30c; potatoes, \$1.25 a bag; wheat, 85c; timothy hay, \$14. Young pigs are scarce and selling for \$4.50 to \$5 a piece for pigs five to six weeks old.—Oxford Co. ONT.

NORWICH, March 10.—After a week of splendid sleighing and weather as low as six below zero, we had a thaw with some rain yesterday. So many dairy cows have been sold out of the district that they are very scarce. The Borden Condenser Co. have definitely decided to erect a large plant at Norwich. Six acres joining the west farm has been purchased for a site, and a contract let for drawing 500 loads of gravel. Bran, \$20; shorts, \$22; oinkale, \$32; wheat, \$1.40; oinkale, \$1.50; potatoes, \$1 a bag; live hogs, 9.10c.—J. McK.

NORFOLK CO. ONT. ERIE VIEW, March 9.—The weather is still with most, excellent sleighing. Farmers are busy hauling saw logs and cord wood to ship at 85 a cord. Hogs are shipped at 85 a cwt. The late fall of snow has made business brisk. Some farmers are thinking of moving, but not to make maple syrup. Stock has come through so far in good condition. Feed is plentiful. Butter, 35c; eggs, 27c; oinkale, and oyster suppers are the order of the day.—P. B.

BRUCE CO. ONT. CLUNY, March 7.—We are having very stormy weather. The auction sales are the special attraction. They are well attended, cattle going high. Sheep are selling up to \$12 each. The hay market is quiet. Some that was brought and pressed in the fall is in the barns yet. The horse market is quiet. Some dealers have their stables full and no profitable outlet as yet. The clover mills report a good average yield of seed, especially alkale. Hogs are very scarce.—J. Mack.

MIDDLESEX CO. ONT. APPIN, March 3.—The annual spring trek to the West has begun, and as a consequence the horse market is beginning to show some activity though some what steadier as yet than former years. Many of those who have wintered here and are returning West to be ready for spring work. Prices are \$10 up. A premium of \$25 is paid for mares.

HOLSTEINS

Lilac Holstein Farm

Offers young Cows and Yearlings at moderate prices.

W. F. STURGEON, Bellamy Sta., C.P.R. Glen Buell, Ont. Brockville, G.T.R.

CAMPBELLTOWN HOLSTEINS

A few sons of Korndyke Veeman Pontiac for sale. Also a number of Cows and Heifers bred to him. Call on Tillsonburg if you want to buy Holsteins and I will see that you get them. Farm, North Broadway, Tillsonburg.

R. J. KELLY, TILLSONBURG, ONT.

Concentrates (Lined Oil-cake Meal, Good Lamb Meal, Cotton Seed Meal, Gluten Feed, etc.) Write for price on quantity you want. GRANSEY & KELLY, Severn St., Toronto, Ont.

GLENDALE HOLSTEINS

Entire crop of Pure-bred Holstein Bull Cows and a limited number of Heifers, whose three nearest direct sires were May Echo Sylvia, over 8 lbs butter in 7 days. M. M. at 1 year 11 months (world's record), Lulu Keyes, in 9.30 lbs. in 8.30 as a senior two-year-old (world's record), and Daisy Testing Fed. Bran, Shorts, etc. Carloaders small lots. Prices, F. O. B. Write for quantity and see price including freight. Write for price on quantity you want.

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

ELMDALE DAIRY HOLSTEINS

A few Females for sale. Calves, Yearlings or Cows, 50 head to select from. Most of the young stock sired by Palatin Grubbs and 1/2 yearling sired by Palatin Grubbs and Highland Calamity Colamba (12.50).

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

Registered Holsteins FOR SALE!

To make room I offer for sale 15 Heifers, due to freshen in March and April. They are coming 3 years old and are carrying their 2nd calf, after a son of a 29 lb. 5 oz. bull.

R. CONNELL R. No. 2, SPENCERVILLE Grenville Co., Ont.

LAKESIDE DAIRY AND STOCK FARM

Present offering, Bull Calves from Record of Performance

dams; also a few females.

W. F. BELL, BRITANNIA HEIGHTS, ONT. Ottawa Hill, Phons.

CLOVERLEA HERD OFFERS

Two cows for sale. Princess Adrienne, better record last year, 15.39 lbs. milk, 444 lbs. fat. Test 1.92. Dolly Gray, born 1902, semi-official last year, 2374 lbs. milk, 46 lbs. fat. Test 3.56. Both due to calve in April, and in calf to Sir Bag Apple Korndyke, a double grandson of Pontiac Korndyke. First check for \$200 takes the pair. John J. Yannahill, Whites Station, Que.

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

Lyndale Holsteins

Offers 3 Young Bulls, at for service, sired by "Prince Hengervold Patsy" and "King Pontiac Arts, Canada." Good individuals nicely colored. The records of their 3 nearest dams average over 27 lbs. butter each in 7 days. Females, any age.

BROWN BROS., LYND.

CATTLE AND SHEEP LABELS

Sign	Price 50¢ per Tag
Cattle	750 \$1.00
Light Cattle	600 \$1.00
Sheep	500 \$1.00

No postage or duty to pay. Cattle size with name and address and number. Sheep any size with name and numbers. Get your neighbors to order with you and get better price. Circular and sample free. F. G. JAMES, BOWMANVILLE, ONT.

"Last Call" for Oxford Sale Jas. Rettie's Consignment

DEAR FRIENDS: You will be mighty glad in the years to come that you attended the Oxford Breeders' Club Sale at Woodstock, on TUESDAY, MARCH 25th. You can get the right cattle at this sale to go ahead with and build a big success with Holsteins. Of course you'll set the price, absolutely yourselves since there cannot possibly be any reserve whatever. My own consignment of 5 young tested cows are such as I am proud to have go out as coming from my herd. Look them up in the herd book: They are: Canary Butter Girl, Jessie Posh, Olive Schulting 3rd, and her daughter Olive Mercena, and Elmore 2nd. Just such cows as will make money for you as they have for me. Be at the sale sure and watch for the individuals in my consignment. Yours truly,

JAS. RETTIE, Norwich, Ont.

Surplus Stock All Sold

The bull recently advertised is sold, and I am now booking orders for bull calves coming, all from A.R.O. cows, from 17 lbs. as junior two-year-olds to 30 lbs., mature cows.

I have got so much good stuff here that I cannot begin to tell you about it all. Our latest is a 30-lb. three reater, best day's milk 88 lbs., and five lbs. butter. Another is a 35-lb. cow.

First time you come to Toronto bear in mind that I invite you to come out to The Manor Farm and inspect my stock. Farm is easy of access from North Toronto on Metropolitan Electric Line. I can show you some things right up to date in the way of stable and dairy equipment, and I have in my stables upwards of 100 Holsteins for you to choose from.

Get a hold of your pen and paper and write me to-night about the Holsteins you are wanting. If I cannot supply you I can tell you where some good stuff is.

GORDON S. GOODERHAM The Manor Farm, - Bedford Park, Ont.

HOLSTEINS

INKERMAN DAIRY FARM

Offers 10 HEIFERS, rising 1 yr. old, 10 HEIFERS, rising 2 yrs. & Bull, rising 1 yr. old, sired by son of...

LAKEVIEW HOLSTEINS

We are now testing some of the daughters of Count Hengerveld Payne De Kol, and they are running from 12 1/2 lbs with first calf to 20 lbs with second calf...

Purebred Registered HOLSTEIN CATTLE The Greatest Breed for FREE UNBATED BOOKS Holstein Friesian Assoc., Box 146 Baltimore Vt.

LYNDEN HERD

High Testing HOLSTEINS For Sale

Bulls, fit for service, one a son of Spotted Lady De Kol 27.35, and all sired by a son of Lela Glezer, 25.77. Also Bull...

Ourvilla Holstein Herd

Only one son of Dutchland Colantha, Sir Abbecker left. Spook quick if you want him. A dandy from a 25.20 b 4 year old. Write for pedigree and price.

RIVERVIEW HERD

9 Young Bulls, from 2 to 12 months, sired by King Isabella, Warder, whose sister, 3 nearest officially tested dams, a daughter of his dam, and two sisters of his sire average for the eight 23.84 the best B. O. M. and B. O. P. Que.

YOUNG COWS AND HEIFERS HOLSTEINS of different ages

Safe in calf to a son of the great bull De Kol the Ind's Boy the 2nd. Also Yearling Heifers, and Heifer and Bull Calves for spring delivery. Write for prices.

Avondale Stock Farm A. C. HARDY, PROPRIETOR. CHERD SIRE

Prince Hengerveld Platje, 2236 (20.587). Sire, Fletch 2nd Woodcock Lad, Dam, Princess Hengerveld De Kol, A. B. O. 23.42. Highest record daughter of Hengerveld De Kol...

"PROOF OF THE PUDDING"

Stanford, March 18, 1913 Mr. R. F. Hicks... I am full of praise this night at six o'clock, in fine shape. The bull cost arrived last night at six o'clock, in fine shape. I am more than satisfied with him, was very much surprised at his size and if I can only see him doing as well as he is now he will be beyond any expectations...

GOSSIP FROM MANOR FARM.

In a recent letter from the Manor Farm, Mr. Gooderham informs us that a sister of Inka Sylvia DeKol-Inka that a sister of Inka Sylvia DeKol-Inka that a sister of Inka Sylvia DeKol-Inka that a sister of Inka Sylvia DeKol-Inka...

MR. TANNAMILL'S OFFERING.

Editor, Farm and Dairy.—The two cows are offering in our ad are the low-down deep-bodied kind, and as straight as a string. We are offering them for sale because we have too many for our pasture. They have been in our herd for years and we could not find a fine stock from both of them. Note the per cent. of fat, 3.55. Both of them are in calf to Sir Leo Apple Korrdyke, without dam, has always tested over 4 per cent. in official tests. 2000 grand-dam was the famous 80.00 cow, the famous Reg Apple and his grand sire is Pontiac Korrdyke. The calves are now asking for worth half the price as an asking for them. John J. Tannamill, Whites Station, Que.

Volume One of the Canadian Holsteins in handy form. Just to hand, gives and better production of Holstein-Friesian cows that have been tested in the Record of Merit and Record of Performance of the Holstein-Friesian Association since 1910 to Sept. 30, 1912. The classification of record cows under their sire and under their dams affords the clearest information regarding the families which are uniformly great producers and cannot help but prove of great assistance to all scientific breeders. This handy book who breeds Holstein-Friesian cattle.

AYRSHIRES IN R. O. P.

(Continued from last week) White Rose, 26.64, Hon. W. Owens, 2.573 lbs. milk, 200.50 lbs. fat, 3.97 per cent. fat. Miss Flora of Marley, 25.54, H. W. Vandervoort, Huntingdon, B. O. 4.607.25 lbs. milk, 384.29 lbs. fat, 3.53 per cent. fat. Edith of Springfield, 31.304, A. S. Turner & Son, Noyokman's Corners, Ont., 7.585.05 lbs. milk, 221.29 lbs. fat, 3.70 per cent. fat. New Year, 25.57, Woodmire, Rothsay, Ont., 7.261.75 lbs. milk, 356.79 lbs. fat, 4.94 per cent. fat. 2-Year-Old Class Primrose of Bangor's 2nd, 32.705, Woodmire Bros., 6.509.75 lbs. milk, 370.29 lbs. fat, 4.4 per cent. fat. Heather Rose of Hickory Hill, 33.978, N. Dymott, 6.336.4 lbs. milk, 327.99 lbs. fat, 4.91 per cent. fat. Annie of Monte Bello, 31.287, Hon. W. Owens, 6.009.5 lbs. milk, 298.47 lbs. fat, 3.72 per cent. fat. Springhill Miss Owens, 35.53, H. W. Vandervoort, 7.955.5 lbs. milk, 367.47 lbs. fat, 3.37 per cent. fat. Ruth of Monte Bello, 31.858, Hon. W. Owens, 7.730 lbs. milk, 308.9 lbs. fat, 3.99 per cent. fat. Pearl Stone Marigold of Springfield, 25.53, J. G. Thompson, 7.544.25 lbs. milk, 288.89 lbs. fat, 3.67 per cent. fat. Loch Fergus Bogdan, 22.172, J. A. Pringle, Huntingdon, Que., 7.294.5 lbs. milk, 224.32 lbs. fat, 4.02 per cent. fat. Barchelsie King, 22.172, Robert McHardy, Russell, Ont., 7.151.5 lbs. milk, 285.64 lbs. fat, 3.99 per cent. fat. Beauty of Craigville, 30.710, A. S. Turner & Son, 6.515.16 lbs. milk, 271.50 lbs. fat, 4.30 per cent. fat. Bessie 20th of Neidpath, 32.129, W. W. Ballantyne, Strathroy, Ont., 6.531.5 lbs. milk, 302.25 lbs. fat, 4.57 per cent. fat. Annie May, 35.08, H. C. Hamill, Box Grove, Ont., 6.574.78 lbs. milk, 285.06 lbs. fat, 4.39 per cent. fat. Lady 2nd, 32.976, A. S. Turner & Son, 6.322.65 lbs. milk, 266.69 lbs. fat, 4.19 per cent. fat. Talip of Craigville, 30.712, H. C. Hamill, 6.538 lbs. milk, 259.34 lbs. fat, 4.09 per cent. fat. Meg of Oakland, 22.123, George Stokes, Tweed, Ont., 6.000 lbs. milk, 251.23 lbs. fat, 4.19 per cent. fat. W. P. STEPHEN, Secretary.

Auction Sale Without Reserve



Registered and High Grade Holsteins

At the residence of John S. Rutherford, Tullochgorum, Chateaugay Co., Que., 1 mile east of McCaig's Corners

Tuesday, March 25th, 1913

19; Head Registered. 21 Head Grade

The foregoing stock are from such sires as Canadian Netherlands (1873), Minto De Kol (2430), whose dam was Lady Colantha De Kol (2655); Senator De Kol (3812), whose dam was Maudie De Kol (3683), won the champion milk test at Ottawa, 1912; also holds the world's record in public milk test. ALL BRED BY NEIL SANGSTER.

Stock Bull Senator Lad De Kol, 4 yrs. old (8913), will be sold at the sale; is a grandson of Maudie De Kol, and on the dam side a grandson of Lady Colantha De Kol.

Sale without reserve, at One o'clock p.m. Will meet morning trains at Bryson's Station. TERMS; TEN MONTHS CREDIT. Catalogues sent on application.

JOHN S. RUTHERFORD

Tullochgorum, - - - Quebec (ANDREW PHILIPS, Auctioneer)

Important Auction Sale

OF 40 Holsteins Pure Bred Cattle



The Maple Stock Farm will offer for sale at their Barns, Bealton, Ont.

WEDNESDAY, April 2nd 1913

As I have purchased the entire herd of the estate of I. G. WYCKOFF, I will offer the whole herd, except calves and yearlings, 32 HEIFERS AND COWS, EITHER FRESH OR IN CALF, bred to the herd bull of this herd, Sir Diotine Paul Posch, which is getting fine strong vigorous calves, with the best of quality. This fine sire, which is two years old, rising and will make a 2200-lb. bull. He is as quiet as a cow. Seven Yearling Bulls, nearly all from Record of Merit Dams, making this herd of cattle are of the large, broad, deep-bodied cows—the with this herd is sired by Prince Abbecker Pauline, a son of Tidy Abbecker, official record 37.27 lbs. of Butter in 7 days. He has 2 sisters with 28 lbs. each of butter in 7 days. Never before have we been able to offer such a choice lot of the right kind. Don't miss this opportunity of getting good foundation stock to start or to improve your herd.

Catalogues will be ready by March 25th, be sure and send and get the breeding of these cattle will be met at Waterford and taken back for evening train. Lunch at noon for those coming a distance. Sale held under interest at six per cent. or time up to six months on approved notes, with interest at six per cent.

WM. SLAGHT, Prop.

BEALTON - - - ONTARIO COL. WELBY ALMAS, Auctioneer As we have done without everything will be sold straight. Sale at 1 o'clock sharp.

THE GATE THAT SERVES YOU BEST



THE PEERLESS

Braced Like a Steel Bridge

JUST as the engineer strengthens the points of strain in a big, mighty bridge, so we have designed braces, stronger than was necessary, to make our gates stiff and rigid. They can't sag—they can't twist—they are a great improvement over gates made the old way.

Peerless Gates

are made of first-class material. Frame work of 1 1/2 inch steel tubing electrically welded together. Peerless pipe braced gates are all filled with heavy No. 9 Open Hearth galvanized steel wire—built for strength and durability—weather proof and stock proof.

Send for free catalog. Ask about our farm and poultry fencing, also our ornamental fence and gates. Agents nearly everywhere. Agents wanted in open territory.



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Winnipeg, Man. Hamilton, Ont.

FARMERS!
Why Not Buy an Acme Drain Tile Machine and Make Your Own tile?

The easiest running and most practical hand power tile machine made. A boy can operate it, as well as a man can. No pulleys or miter jacks required. The greatest money maker on the market. For catalogue and price list, write to
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Dept. C. Napawee, Ont.

Turn idle hours into concrete fence posts

EVERY farmer finds himself now and then with a few idle hours in which both himself and his help must look for "odd jobs" to keep them busy. Use these hours to make concrete fence posts. You can make a few at a time, storing them until needed. Then when you want a fence in the new field, your posts—everlasting, concrete posts—are all ready to use. The making of fence posts is only one of scores of every-day uses for concrete on the farm described in the book,

"What The Farmer Can Do With Concrete"

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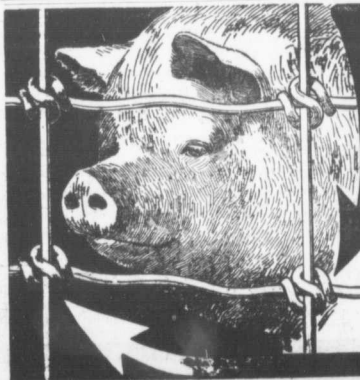
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WHEN you buy cement, remember that the farmers of Canada have found that "Canada" Cement is best. Look for the label on every bag and barrel.

In-Foal Mares INSURANCE

OF ALL the losses owners are liable to, none can be less prevented or modified in any manner whatsoever than loss by foaling. Notwithstanding the best care and attention, although a mare may have foaled many times successfully, she is always a cause of worry and anxiety to the owner through the fear of foaling by death the often very high cash value of the foal, not to mention service fee, care and expenses incurred for no avail. **Why risk such loss** when a payment of the amount of the RISK by insuring, only risking thereby the loss of the Premium if the mare foals alright. We issue 30 days, 6 months and 12 months policies with or without cover on foal.

Write for address of nearest agent. All kinds of live stock insurance transacted.
Head Office: THE GENERAL ANIMALS INSURANCE CO. OF CANADA, 71a St. James St., Montreal, Que.



INVEST IN "IDEAL" FENCE

Money used in the purchase of "Ideal" Fence is not spent—it is invested. When you invest a dollar in "Ideal" Fence you get a dollar's worth. You get full value for your money because "Ideal" Fence is made exactly as represented and described in our catalogue and all our advertisements. When we say "Ideal" Fence is made of No. 9 gauge wire (which is one hundred and forty-four one-thousandths of an inch in diameter), it is full size No. 9; if anything it will average over full size.

When we say the uprights or stays on "Ideal" Fence are 1 1/2 inches apart, they are 1 1/2 inches, not 1 1/4 or 1 3/4 inches, and the same with 22 inch spacing.

A fence can be greatly cheapened by using under-gauged wire or having the stays farther apart than advertised. From top to bottom "Ideal" Fence is all the same, made of large gauge, No. 9, evenly galvanized hard steel wire—no small or soft wires—all are full size, true to gauge, tough

and hard. The reason that there are more snakes of "Ideal" Fence sold in Canada annually than any other snake is not due to salesmanship or advertising, but it is due to the merit of the fence itself, to the quality of material and workmanship that enters into it, to the protection it affords, to the service it renders and to our many satisfied customers all over the Dominion. Do not experiment in buying fence; it will not pay you. If you buy "Ideal" you are absolutely sure of getting a fence exactly as represented. We invite you to compare "Ideal" Fence with any and every other make on the market. Compare the size of wire; compare the weight to the rod of fence; study the quality of workmanship; test it—test it in the severest way you can think of, and you will find "Ideal" to be superior in every way. Do not spend money in buying fence—invest it in "Ideal".

A postal card will bring you the "Ideal" catalogue which shows many different styles of fence—style for every purpose; also our complete Run of Field and Stock Gains Lawn Fence as all fences supplies.

The McGregor Banwell Fence Co., Limited, Walkerville, Ont.