

FARM AND DAIRY

AND
&
RURAL HOME

DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE

Peterboro, Ont., May 11, 1916

Dairy and Cattle
See Comm. Dec. 16
1915 of Agr.



MUTUAL CONFIDENCE.

Photo on the Farm of John Durat, Holmesville, Ont.

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Opinions Differ on Dairy Legislation

Many Dairymen Anticipate Some Difficulty in Putting the New Regulations Into Operation. Much Educational Work Needed

THE Dairy Standards Act, which during the last few weeks has occupied such a prominent place in the columns of Farm and Dairy, continues to be the most thoroughly discussed subject amongst Ontario dairymen. Factory owners, patrons and makers are all keenly interested in the manner in which the new legislation will affect their business. The chief difficulty anticipated seems to be that the makers, many of them unfamiliar with the test and most of them working to their limit at the present time, will not be in a position to assume the extra work which the enforcement of the legislation will involve. Some think that the best method would be to have the testing done by a special set of officials, although the cost of keeping up a staff of men for the purpose, might be objected to by the patrons.

Secretary Thompson's Views. With reference to the act, Mr. T. A. Thompson, secretary of the Dairy-keepers Association of Eastern Ontario, expresses himself as follows:

"With the grading of the cream and the pasteurizing of the whey, I heartily agree, but I am of the opinion that compelling cheese factories to pay for milk by butter fat test will be very popular in Eastern Ontario. It is hard to persuade the average patron that it is important to send richer milk to the factory when such a large percentage of the fat in the milk is not being incorporated in the cheese. The factories that have put in separators and are manufacturing very butter are paying good dividends.

"Our dairy experts have been preaching for years that if the milk was delivered at the factories in proper condition and the cheese made by competent makers, there would be no fat of any commercial value in the whey and that it would not pay to separate it. It will be hard to persuade patrons of cheese factories that it is necessary to send richer milk than while many of our factories are realizing from \$1,300 to \$1,600 annually from the sale of whey butter.

"If the fat that is being sent to the factories at the present time were incorporated in the cheese, there would be no cry of 'lean cheese,' nor would there be any necessity to legislate in the matter."

Views of a Hastings County Maker. Mr. Chas. A. Tompson, of Hastings County, favors the appointment of official testers, but fears that patrons might not approve of the plan. He thus states his views:

"Re the Dairy Standard Act I would say that some of our patrons have been agitating for paying by test for some time. I do not think there will be any opposition to the Act, as all have to admit that no one has any right to the other fellow's money. The only question seems to be how to get the testing accurately done. It is just possible that the gainer would be a loser if there was another set of officials to keep up. I know of some first class cheesemakers who, judging from the manner in which they keep their milk-books, I would not consider careful or accurate enough to do the testing in a satisfactory manner.

"I do not know how often the test will have to be made, but if twice a month would do I don't see why the present inspectors could not do the work. In our syndicate we are fortunate enough to have a class of makers who do not require very much guidance from an inspector, and if he could only get around to the factories often enough he could do with a little extra work without bursting a blood vessel.

"I believe it would be better for both

the maker, who is often rushed and short of help, and the patron, especially those who think they are always being beaten, if there were an official tester who did his work under oath. However, farmers feel that there are enough white shirts to be stained on the job as it is and that matter should be arranged without having another set of officials appointed."

A Workable Plan Needed First.

Joseph McGrath, 2nd Vice-president of the E.O.D.A., believes that some practicable plan should be worked out before resorting to compulsion. He writes as follows:

"I don't think there will be much opposition to the new legislation until after it is in force, as farmers are not organized in any way whereby their opinion can be given. I think there will be great dissatisfaction among patrons of factories when the 'pay by test' is in operation. If they are mistrustful of cheesemakers in weighing their milk, what will they be about cheesemakers or anybody else 'testing it,' something which is as laith to the ordinary farmer, as at present. The cent of the farmers weigh their milk now and again to keep tab on the cheesemaker, and who can say but what they are justified in doing this, not that there has been much to be said, but that it is the only way in which they can know that they are being fairly dealt with. But how are they to know how they are being used in the testing of the milk.

"For my part I don't see how the testing is going to be done, or what is going to do it satisfactorily. The Act provides a penalty for any one convicted of under-reading or over-reading a test, but the doesn't attempt to favor or discriminate against anyone he could easily add some cream or water to sample. No matter who does the testing, the cheese maker will have to take the samples and be the custodian of them. Also the taking of the samples must be carefully done. He will have to take a sample from every draft of milk as a man may often in filling up the cans, supply the cream in to one can and the poorer milk at the bottom of the can into another. The farmer will be able to see that the cheesemaker does this, but we cannot 'keep tab' any further. If the farmers of Ontario are anything like they are in this county they won't be satisfied with the testing. They keep close watch on the weights of their pork, poultry, etc., and everything else they sell.

"I am not opposed to paying by test, as it is certainly the fair thing, and the man with the low-testing herd has really no grievance. Let him get a better herd, but under existing conditions I can't see how it is going to be put in practice successfully. What could be done in case suspicion should arise regarding the accuracy of the test as made by the maker? That's a sticker. The only way to deal with that will be for every farmer to buy a Babcock tester, and learn to operate it, and protect himself the same as he does now with his scales.

"I think the man who is testing the samples should not be in a position to know who is the owner of any of them, and of course, the cheese maker would know them all. I have seen a Babcock tester in my factory for the last twenty years, but I could never get a cheese maker to use it. If I could only have the milk tested I had to do it myself. I think some plan of testing that would be practicable

(Continued on page 6.)



W's W Trade incr VOL. XX

DURING the time to spring to the Bedford farms I have Dairy. The series, is Elm K Ford—or per E of Mr. an work together perains to the that I will rem as the afternoon courteous people sides of the ho ciated with the Ford, for instar the farm he not I first heard herd Jerseys, a herd that I visit he had some cow at Marlside, N.Y. which run from test of six per ce His grand-dam a famous cow in to this one came Woodstock, Ver to a very satisfi

The milking fa farm altogether T The farm coul but it is Mr. For pose to breed all own cows and ke those that are and good pr Particular emph laid on the health herd, and its imp has been learn hard experience. Ford took over t farm in 1900, a mediately started tablish his herd 1907 all of his were slaughtered, count of tuberc Need I say that M was almost discou for the time, but he made another a and the herd has wish to have all ally grown to its p proportions. The all tuberculin teste

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FARM AND DAIRY

& RURAL HOME



We Welcome Practical Progressive Ideas

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

VOL. XXXV.

PETERBORO, ONT., MAY 11, 1916

No. 18

A Visit To Elm Cottage Farm

A Nice Herd of Jerseys Is the Main Source of Revenue.—By J. F. E. Ellis, B.S.A.

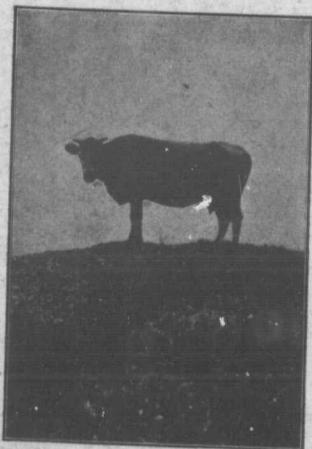
DURING the past few months I have from time to time made reference to my visit last spring to several representative farmers in the Bedford district of Quebec. Several of these farms I have already described in Farm and Dairy. The subject of this sketch, the last of the series, is Elm Cottage Farm, the property of Geo. E. Ford—or perhaps I had better say, the property of Mr. and Mrs. Ford, for in all things they work together and are equal partners in all that pertains to the farm. I have made few visits that I will remember with so much appreciation as the afternoon that I spent with these kindly, courteous people, whose family traditions on both sides of the house have been so long closely associated with the district in which they live; Mr. Ford, for instance, is the fourth of the name on the farm he now owns.

I first heard of Mr. Ford as a breeder of pure bred Jerseys, and it was primarily to see his herd that I visited Elm Cottage Farm. I found he had some good ones. The herd bull, purchased at Maridale, N.Y., comes from a herd the cows of which run from 500 to 700 lbs. of butter, with a test of six per cent. right through the entire herd. His grand-dam was old Sadie Queen of Vetro, a famous cow in her day. The sire used previous to this one came from the herd of Mr. Billings, of Woodstock, Vermont, and he improved the herd to a very satisfactory extent.

A Serious Setback.

The milking herd consists of 17 cows. On the farm altogether there were 40 registered Jerseys. The farm could readily support 35 milking cows,

but it is Mr. Ford's purpose to breed all of his own cows and keep only those that are healthy and good producers. Particular emphasis is laid on the health of the herd, and its importance has been learned by hard experience. Mr. Ford took over the old farm in 1900, and immediately started to establish his herd. In 1907 all of his cattle were slaughtered on account of tuberculosis. Need I say that Mr. Ford was almost discouraged for the time, but in 1910 he made another start, and the herd has gradually grown to its present proportions. They are all tuberculin tested, and



Striking the High Spots in Quebec. On the farm of Geo. E. Ford, Cowansville, Que.

there has not been a single reaction in the last three years.

A Jersey cow that will produce milk at a profit



Their Owner Specializes in Butter for the Montreal Market. Jerseys at Home on Elm Cottage Farm, Cowansville, Que.—Photos by an editor of Farm and Dairy.

is the cow that Mr. Ford aims at, and his will average a pound to a pound and a quarter of butter a day all through the winter months. The cows freshen in the fall whenever possible. Ensilage and roots with, of course, clover hay are the basis of the winter ration. From 2,500 to 3,000 bushels of roots are grown each year, and on the value of these Mr. Ford lays great stress, as he finds that they keep the cows in "great shape." Grain is not heavily fed, never more than from three to four quarts a day. Mainly it is bran, with cotton seed once a day and oil cake once a day. Little grain is grown on the farm. The hay is largely pure clover, the seeding being at the rate of 16 to 18 lbs. Mammoth Red to the acre. In recent years no timothy seed has been included.

Dairy Butter the Specialty.

The cream is made into butter at home and shipped to Montreal, where best prices are realized.

The farm itself is broken and irregular, the soil generally being a gravelly loam. The total area is 312 acres, with about 150 acres under crop. The nature of the farm makes it almost ideal for sheep, and Mr. Ford expects the flock to pay for the last 100 acres added to the farm.

Although Mr. Ford and his wife have not accumulated great wealth, nor achieved all of their ideals for the farm proper, they have found the time and the money to improve their home and add to the old house all modern conveniences. Thus in their home they have combined the permanence of the older builders with the conveniences and comforts of the modern. The home has a beautiful situation only a few miles from the town of Cowansville.

In the rush of seeding, especially when the season is as late as it is this year, there may be a temptation to work the land when it is too wet. This is bad for almost all soils, but on heavy soils it may do incalculable damage. Any one who has had to do with clay that has been puddled and sun baked realizes the difficulty of getting the soil back to proper tilth.

A few hours' delay may save much work later on.

All Around The Farm

Some of Our Folks Opinions on Seed Time Topics

Deep and Shallow Cultivation

S. B. Conn, Renfrew Co., Ont.

I AM to do no spring plowing. My land is a sandy loam of good depth, but with a gravel subsoil, so that it is furnished with good natural drainage. This makes it comparatively easy to work up in the spring by means of a disk harrow. The plowing is all done at the fall, and I find it much easier to get it finished now since threshing machines with blower attachments have been introduced into our neighborhood. It only takes about one-half as many men to run the machine, with the result that it is not hard to go to every threshing within a mile each way from my gate as I used to do. This saving in time makes it possible to get the fall work done in good time, so that I have everything ready to make the most speed with the spring work by using only wide implements.

Although I do not spring plow, I am a firm believer in deep spring cultivation. I aim to stir the land up just as deep as the disk harrow will stir it. For this purpose I use the double cutaway disk, which I find specially adapted for making a deep seed bed. The number of strokes depends upon the condition of the soil. After a mild winter or a wet spring the soil seems to be baked pretty solid and needs more cultivation than when the winter and spring have been dry. In a field that has been plowed out of a stiff sod there are so many roots in the soil that it makes it more difficult to work, so that the only rule that can be laid down is to continue disking until the soil is stirred to a good depth.

The object of this deep cultivation is to provide a larger feeding ground for the young plants. It is surprising and interesting to see how a plant will respond to good soil conditions. Most farmers are familiar with the way animals will respond to good feed and care. When they put one up to fatten, they generally expect to see a difference in a few days. It is just the same with a plant. They should be fed with the object of fattening them. Although I cannot see the food that these plants make use of, I know that so long as I provide lots of well pulverized soil for them to forage in they will find the food and make the most of it. I also know that if I only provide a shallow seed bed they will have more difficulty in finding sufficient food, with the result that they will be half starved out.

After disking I aim to give the land two or three strokes with the drag harrow. Besides providing a fine dust mulch for the top, the action of the harrows and the tramping of the horses helps to firm the soil and to bring it in close contact with the subsoil, so that moisture can readily pass up into the feeding ground of the plant. After the grain is beginning to show through, and especially if wet weather has left a crust on the top of the soil, I go over my field with the land roller. This destroys the crust and helps to further firm the soil, besides crushing any lumps that may be on top. Last year, instead of rolling, I tried running a harrow over a field of oats the same way as it was drilled, and this restored the soil much without hurting the oats as far as I could see. The object of all this cultivation is to provide a deep, fine, firm seed bed, with a loose mulch on top.

Enclosed you will find two diagrams showing

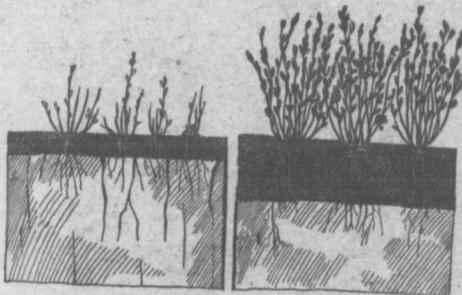
the advantage of giving the roots of plants lots of soil room to work in. The actual results in the field are quite as striking as those shown in the diagrams.

My Idea of Root Growing

J. O. Macdonald, Carleton Co., Ont.

THE best practice is to shallow plow a sod—clover sod preferred—soon after haying, or early in the fall; harrow and roll to rot the sod, and also harrow and cultivate once or twice later in the season. Late in the fall, before freezing weather, the land is again plowed, this time quite deep, and is left rough all winter.

In the spring barnyard manure, about 20 tons to the acre, is well worked into the ground, and the land kept cultivated from time to time until ready for seeding. The drills are made with an ordinary plow, about 28 inches apart, and on these freshly made drills turnip seeds—or mangels as the case may be—is sown with a drill or by hand on the freshly turned earth, and when lightly covered, is rolled with an ordinary land roller.



Showing the Effect of Thorough Tillage on Crops.

At the left the roots have no chance to spread and cannot get at the nourishment in the soil. The plants are stunted and cannot get a poor harvest, or none at all, will result. At the right the soil is well tilled, the roots can reach far into it and get the food. The plants are flourishing and large, and will give an abundant harvest.

If no fall preparation in working of the root ground has been made, the best thing to do is to plow down a heavy dressing of barnyard manure, seven inches deep, and harrow and cultivate, preferably the disk harrow, every week until ready to seed. The plowing should be done as early as possible in the spring.

Thick and Thin Seeding of Corn

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

IT will soon be time to decide whether to sow corn thick or thin this year. Referring to the notes that I took while attending the last meeting of the Ontario Experimental Union, of which I am a member, I find that it was pretty well agreed that fairly thick sowing is the best. One of the speakers referred to results of experiments conducted some years ago in Illinois, showing that with thick planting the largest amount of digestible nutrients per acre was obtained. The largest yield of ear corn was secured by planting the kernels about 12 inches apart, in rows 40 inches apart, while if fodder and not grain was desired, it was best to plant only four inches apart in the rows. Dean Henry, of "Feeds and Feeding" fame, was quoted as saying that when the stockman wished to secure the greatest amount of nutrients possible he should plant the

seed so thickly as to choke the ears to about half their natural size. If, on the other hand, his aim was to produce grain, with stover secondary, he should plant the seed grains at such distances from one another as would allow each individual corn plant to produce one or more full sized ears. No rule could be given which is applicable in all cases for guidance as to the amount of seed to be planted per acre, because this is largely determined by local conditions.

The point was emphasized that whereas with most fodder plants the crude fibre increases very rapidly as maturity advances, thus reducing the percentage of other constituents, in the corn plant the opposite is the case. The valuable carbohydrates increase at such a rate toward maturity that the percentage of other substances decrease. Consequently, corn should be pretty well matured to get the maximum amount of digestible food. It should not be planted so thickly as to retard maturity to too great an extent.

Prof. Zavits, in dealing with the matter, stated that experiments had shown that the crowding of corn together had the effect of retarding maturity. For this and other reasons, early maturing varieties should be chosen and the crowding not overdone. They should be sown in drills so as to allow them to mature well, and should be cut well on to maturity. An elaborate experiment had been conducted at the college for five years in succession in growing an early, a medium and a late variety of corn in rows 20, 36 and 43 inches apart and with plants four, eight and 12 inches apart in the rows. The largest yield per acre was attained from the thickest planting in the cultivated rows.

I may say that my experience in growing corn under field conditions confirms what was said regarding the planting of corn fairly thick in rows. Not only are maximum yields secured when the corn is sown in this way, but the labor, both of planting and summer cultivation, is greatly reduced.

Business Methods in Farming*

E. S. Archibald, B.A., B.S.A., Ottawa.

THE present is an opportune time for putting the live stock industry on a more business-like basis. I do not think that any one would deny that there is room for great improvement along this line. Even on the best of our farms there is a constant waste. Our endeavor should be to plug the leaks. The only secret of improvement in this regard is the application of more business-like methods. The present time, when the demands upon our farms are so great, seems to me to be a very opportune one for improvement in farm management and for introducing more efficient methods into our farm practice.

The fixed charges on a farm are the same whether it is run at a profit or a loss. The interest on the capital invested in farm, buildings and equipment is a constant charge against the business. These overhead or fixed charges cannot be cut down, but their relative amount can be very materially lowered by increasing the volume of business and cutting down losses. By keeping better cows and feeding them better, and by growing more and better feedstuffs from the same ground, the volume of the business can be increased. Reasonable cooperation in buying and selling and in general community work in breeding will greatly increase the income of the individual farmer without increasing the overhead

*From an address given at the Dairy Convention, Lindsay, on Mar. 6.

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Neil S.

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charges he has to meet. This increased income directly tends, therefore, to increase the profits on his business.

Successful Calf-Raising

Neil Sangster, Chateauguy Co., Que.

MORE attention should be paid to the babyhood of the cow. Many cows are ruined by being stunted when in the calf period through lack of proper feed and care which hinder their development. This is in evidence in many parts of our country. The undeveloped cow is more subject to disease, and from this class we get the great number of "boarders." The calf should be well fed, new milk at first, gradually turning to skim at about three weeks old. The calf should be kept in a growing condition so that full development at maturity may be insured. The feeder should watch carefully and see that the calf will not take scours, the

bane of the dairy cattle raiser. This is usually caused by overfeeding. Milk should be fed to the young calf three times a day. As the calf grows the skim milk ration should be increased, and after each feed of milk a small portion of meal should be given. When the heifer is six or seven months old the task becomes easier, as she then can handle and assimilate coarser foods as the digestive organs develop. From this time on she should be kept thrifty, but not fat. When the heifer should drop the first calf depends on her breed, size and development. Some claim that early breeding develops the milking propensities of the heifer. Where such is practised from 18 to 20 months should elapse before the second lactation period to allow for growth and development. The cow making a large amount of milk works as hard as any horse and must be well fed and cared for. The rearing of the calf under these conditions, along with skillful feeding and good care, will improve a very mediocre herd into a fine herd of producers.

and the after affects and promptly refused to sell, thanks to their good judgment and loyalty. The result was our man has bought all the hogs ever since, in spite of those who have been doing all they could against us. What we have done can be accomplished by others.

In order to make the details of our scheme clear I will tell just how the buyer handles the business. In the first place he has an agreement with our members as follows:

Copy of Agreement.

It is hereby agreed between the undersigned (hereinafter called the seller) and (name) farmer, of the township of (hereinafter called the buyer), as follows:

The seller agrees to sell the buyer all his marketable hogs and to deliver said hogs to the buyer in (name of place) on shipping days.

The buyer agrees to pay the seller the f.o.b. prices for hogs at time of shipment, less ten cents per hundred pounds, said hogs to be shipped from (name of place) every two weeks.

The buyer agrees to commence shipping on Monday, _____, 191_____.

The Buyer Handles the Business.

Our buyer does not travel around to find the possible number of hogs that will likely be marketed, but the owners of the hogs inform the buyer how many they have. In this way our buyer knows whether he will have to join in with the buyer at the next shipping point to make a full load, or fill up with cattle at the home station. Usually he does not accompany the shipment to Toronto, as the hogs are consigned direct to the packer. Our buyer gets quotations from the packer that can be seen by any member upon request. So far our hogs have been paid for on the f.o.b. basis and the sellers are paid cash for their hogs at time of marketing.

Our shipping experience is not of long standing and the system may be changed and improved on as circumstances necessitate a change.

The farm is a permanent investment. The most of us who buy a farm do so with intention of making farming our life work, usually on that farm. Why, then, not make all of our improvements a permanent nature. Use permanent materials, such as cement or masonry, where possible. Plan permanent fences and build good ones. It pays to figure on a future use rather than present cheapness.—Henry King, Halton Co., Ont.

Cooperative Marketing of Hogs

How Four Branches of the U.F.O. Combined Their Forces and Solved the Problem

L. SCHNURR, GREY CO., ONT.

FOR a number of years the farmers in our vicinity considered themselves overcharged by the drovers who were handling the hogs for the packing houses. We were paying a commission to two buyers at our shipping point. One of them was supposed to receive a stated salary, still he stood in for his share of commission, which they claimed was only ten cents per hundredweight. This fee the farmers would not have begrudged them had they stuck a little closer to the truth.

A few of us got together to find out if anything could be done and talked the matter over. We decided to see some of the farmers and get a man, a farmer, to do the buying for us. We didn't have a very long search to find our man, who agreed to buy all our hogs and when weighed pay for same within 10 cents per hundred weight of the average, f.o.b. price. So he agreed to be on hand the next shipping day and was Johnny-on-the-spot. Everything worked fine—the first couple of shipments. When the other fellows saw what was happening they got busy with the pork packing company at their back and outbid our man. Most of the farmers flocked to the man with the higher price, thinking they were making money, but thoughtlessly following the old "penny wise, pound foolish" system of doing business. The result was our man was forced off the market and we were again in the hands of the company's buyers, who did not care a snap for us. They got back the extra money they paid and no doubt a little interest besides, and laughed about how they had put it over the poor dupes.

Second Effort More Successful.

A year passed away. We could stand the fleecing no longer, so thought we would try it again. By this time a change had taken place. Organization had begun in December, 1914.

Through the United Farmers' Co-operative Co. and their organizer, Mr. J. J. Morrison, we have four branches of the United Farmers' of Ontario, within a radius of ten miles. As a result of this work we were in a position to govern the terms regarding the sale of our hogs. A few of us talked the matter over and decided to call a meeting of the President and Secretary of each club and our previously defeated buyer. The meeting was held at the most central place. We all met full of ginger, determined to win, and we threshed the matter out thoroughly. After the debate, a committee was appointed to draft an agreement. When the committee reported and agreement was read, with a few minor changes it was

unanimously carried. A copy was handed to all the officers of the different clubs to sign up all members and as many outsiders as we could get. We were not long in getting all the members and many outsiders as well, thus increasing the membership of the clubs. When our organizing was complete our man appeared on the market and bought 85 hogs for the first shipment. The opposing buyers secured only 14 and would have fallen short of this number had they not been previously promised.

After this, keen competition started and the old saying was used that the farmers would not stick together and that they would soon break up the organization. They immediately got busy with the telephone, horse and rig, and scoured the country with the intention of buying up all the hogs at the farmers' stables and offering higher prices, which they knew our man could not pay. They even offered as a bribe \$2.00 a hundred more when at the market. But the farmers would not bite; they remembered their first experience



Wide Implements are an important Factor in Solving the Farm Help Problem.

By increasing the number of horses driven a man's efficiency may be nearly doubled. One man, driving an 18-double-disk drill, like the one shown above, can sow from 30 to 35 acres a day. Formerly these big outfits were only seen in the West. They are becoming common, however, in Eastern Canada. This outfit was photographed on Colony Farm, B. C.

Hints on Concrete Construction

A Few Questions For "Everyman"

How old are you?
How much do you earn?
How much have you saved?
Are you a married man?
How many children have you?
Are they self-supporting or dependent?
Have you saved enough to maintain your family should you die?
Or would your home in that case be broken up?
Would your children be reared by relatives?
Is there a mortgage upon your house, your store or farm?
Could your wife "hit" that mortgage if you were not living?
Do any of these questions suggest life insurance?
Does life insurance not bring to your mind Canada's grand old Mutual Company that protects 50,000 Canadian homes?
Is there a Mutual Policy in your home?

The Mutual Life Assurance Company of Canada

Waterloo, Ontario

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Motoring is two things—a pleasure and a business. One might say it was used sixty per cent. for amusement and forty per cent. for commercial purposes. Yet no matter whether you use your car to get orders or money, your greatest economy will be the reduced cost of mishaps.

No accident ever held an automobile back what the tires were fitted to play a part in it. And no accident ever occurred but what the tires had a say in that too.

If you will drive fast,

If you will make these sudden stops,

If the city will water splash,

If rain will make muddy roads,

Why then—the possibility of sliding will always be with you, unless you figure on those elements of danger when you buy your tires. When you think of how to avoid danger in motoring you immediately think of—

DUNLOP TRACTION TREAD.

DURING the course of an illustrated lecture relating to concrete construction on the farm, the speaker was asked what proportion of farm work of this character resulted in failure. He replied that failures were exceedingly few, and that if farmers were instructed as to the use of proper aggregates, failures would become practically unknown.

The following brief instructions concerning the essentials of good concrete have been prepared for the information of farmers, who will find them convenient as reference data. If strictly observed, they will insure satisfactory results.

Aggregates to be Used in Concrete Construction.

The sand, stone, and gravel usually found upon the farms of the United States are generally suitable for concrete construction, provided the following precautions are taken:

1. These aggregates must be free from vegetable matter, dirt, or other foreign substances.

2. When using bank-run gravel, the sand must be separated from the stone or pebbles by screening through a ¼-inch screen.

3. In small concrete structures, such as drain tile, fence posts, etc., the coarse aggregate (crushed rock or gravel) should be run in size from ½ inch to ¼ inch. For larger work, such as silos, barn floors, ordinary foundations, etc., coarse aggregate should range from 1½ inches to ¼ inch.

4. The sand used should be coarse, hard, and clean, and graded from ¼ inch to fine, with the larger size predominating. Use great care in hand mixing. It is economical to buy a small machine mixer if the farmer intends to use concrete in large quantities.

Hand Mixing.

Proper methods when concrete is mixed by hand, using a two-bag batch of 1:2:4 proportions, are as follows:

1. Size of measuring box for sand should be two feet square by one foot high, this containing four cubic feet.

2. Load sand in wheelbarrows and wheel on to mixing board.

3. Fill sand-measuring box, lift box, and spread sand four inches thick over board.

4. Take two bags of cement, place contents as evenly as possible over sand.

5. Turn the sand and cement over until thoroughly mixed, so that no streaks of cement or sand appear.

6. Spread the mixture of sand and cement out evenly, place measuring box beside it, and fill twice with stone or gravel, then empty on to sand and cement mixture and mix thoroughly.

7. Add three-quarters of required amount of water slowly and evenly, at same time mixing the mass.

8. Continue mixing, adding balance of water when dry spots appear, until whole mass has been turned over three or four times. This should be sufficient. After final turning, shovel into compact-mass ready for wheeling to place.

O.A.C. Examination Results

THE results of the first, second and third year examinations at the Ontario Agricultural College for 1913-14 are as follows:

First year: Pass standing in order, except in cases marked with *, the numbers denoting the subjects in list below on which pass standing was not obtained.—Statistics, Campbell, Hart, Platt, Grant, Murgrove, Olin, Munroe, Gunn, Groland, Barber, Kimball, Oiler, Matheson, Stickle, Hardy, Bates, Hodgins, W. C. Caldwell, Hunter (*12), Mason, Shubin, Sargmore, McKay, Toole, Scouten (*13), Keenan, Goudie (*11), Way, Pearsall, R. Altlin,

Stewart, Aylesworth, Stillwell, Peters, Delamore, Higgins, Ziegler (*18), Minely (*11), Jones (*11), Crowe, Moody (*12), Simbick, Allan (*12, 20), Wadsworth, Patterson, Secord, P. N. Kara (*13), Rutter (*6, 12), Argue (*9), Anderson (*12), Jackson, Costello (*1, 13), Raymond (*2, 13), McLean, Tice (*4, 12), Cook, Mills (*10, 13), Duff (*1, 12), Wood (*8, 10), McDonald (*6, 13), Hale (*10, 12), Carr (*1, 9).

List of subjects—Eng. literature, bookkeeping, soil physics, manual training, chemistry, geology, botany, zoology, horticulture, vet. materia medica.

Second year: ("E" indicates less than 60 per cent. in English).—Cooper, Logan, Bremser, Brown, E. S. Snyder, Hempel, Ferguson, Arnold, James, Patterson, Andrew, McEwan, Malton, Wilson, Sullivan, A. W. Snyder, Newton, Lowell, James, DeLoach, C. V. Walker, Jodding, Farist, Robinson, McCulloch, Nelson, Munroe (*13), Michael, Malsey (*22), Shorey (*22), McLeod, Hoard (*12) Smith, Hamilton (*9), J. L. Walker (*12), Haskill, Finch, Lambert, Lavis, Richards (*2), Moore (*22), E. J. Shaw.

List of subjects—Electricity, phy. botany, principles of breeding, botany, Austin, Mason, Slack, Evans, Davey, Schurman, Guild, Wiggins, Murdoch, Sutton, Manton, VanEvery, Selwyn, McKillean, Clark, Martin, Keir, Waterman, Stokes, Redmond, Kellner, Fleming, Hunter, McConkey, Slinger, Merley, McCarry (except in meteorology and quantitative chemistry).

Opinions Differ on Dairy Legislation

(Continued from page 2.)

should have been worked out before making it compulsory.

"The Act compels the pasteurization of milk when it is drawn in the milk cans. That is another thing that is very hard to put in practice.

"The pasteurizer properly it must be heated to a temperature between 155 and 160 degrees, any lower or higher temperatures would do more harm than good. How can a factory owner see that the maker does this properly? No way that I know of. I tried it once and it proved a failure. In theory it seems fine, but in practice it is altogether different.

"I have studied the question of paying by test for years, and I don't know of any case in which it would give satisfaction. I am looking for lots of trouble when the Act goes into force."

Paying by Test in the States.

It may be of interest to dairymen to know what is being done in some of the States regarding payment by test at factories. We give in receipt of the following from the Dairy Dept., Wisconsin:

"I do not know of any State that requires the use of the Babcock test in paying for milk received at a cheese factory. A large percentage of the Cheddar cheese factories in Wisconsin are using the Babcock test as a means of calculating the amount due the patrons of the factory for milk, but the test is very little used for this purpose at the Swiss, Brix, and Limburger cheese factories of Wisconsin.

In New York, another good dairy state, payment by test is left optional, as will be seen by this extract from a letter received from the Experimental Station, Geneva, N.Y.:

"There is no law in this State which makes it compulsory for cheese factories to pay on the quality basis. Some factories pay on that basis, and consumers practically all pay on that basis.

KINDLY get and explain the 16- foot rule by the work of the G. E. R. York. The announcement is taken from the tin operated in practice. Pro carcasses may be half portion and eight are bers indicated. They are to go to of the beef is the cuts being. The member of the week, go share of steak to supply for cuts No. 16. bers are each. The weeks in members are are arranged of slips from thing is left to ber gets a square more convenient may rearrange instance, if a ticket has not ready in time,



Diagram 51

ments with an down the list. And the list below that might if held until advantage. The can usually advantage.

Everson

By A. S. At

EVERSON p the most p pending to ma and one th to remedy. If pulson of th or "casting do sometimes term fused with a s eversion of the the womb.

The afterbirth where the accouch majority of cases taken place tw the accident. When discovered the down and that the womi lacerated or bru No time should lessen the severer poses operation, a one-ounce dose in a quart of wa should be handle body just in from sist in the same nat may, by pl to lessen th the cow, which a to make reductio impossibility. All thoroughly with assistants do th

The 16-Share Beef Ring

KINDLY give, by means of diagram and explanation, the plan for cutting up a carcass for 16-shares beef ring, by which each patron receives weekly 2 full roasts and a steak.

The accompanying diagram, which is taken from a "Saskatchewan bulletin" entitled, "Suggested Lines of Co-operative Production," shows how a carcass may be cut up, so that each half provides eight boils, eight roasts and eight slices of steak. The numbers indicate the boils and roasts that are to go together. The other half of the beef is cut up in the same way, the cuts being numbered from 1 to 16. The member supplying the animal for the week, gets cuts No. 1 and his share of steak, while the one who is to supply for the following week gets cuts No. 16. Each week the members are each advanced one number. The weeks in which the different members are to supply the animals, are arranged by drawing a number of slips from a hat, so that everything is left to chance and each member gets a square deal. Should it become convenient for members, they may rearrange their numbers. For instance, if a man who draws No. 1 ticket has not an animal that will be ready in time, he may make arrange-

ment must be washed in a warm two per cent. solution of an effective disinfectant.

Toughening the Womb.

As the womb has now become friable, tender and readily torn, it is now important to use as a wash, some solution that will toughen it and at the same time prove healing and antiseptic. For this purpose we have found nothing so good as a solution of one ounce of sugar of lead and two ounces of tincture of opium in a quart of water. Use this freely to bathe the protruded mass and it will be found that it consolidates the surface and renders it tougher, so that handling does not so readily rupture the tissues and thus cause hemorrhage. The washed womb should now be placed in a clean sheet held at each side of the cow by an assistant and by this means raised to the vulva.

Now commence the difficult work, for the mass is very much larger than the orifice of the body and it is most difficult to reduce it or achieve its entrance. One assistant should grasp the mass with both hands close to the vulva and commence squeezing. It gently and forcing it down to the body, seeking to tuck its edges into the vaginal passage. Little by little por-

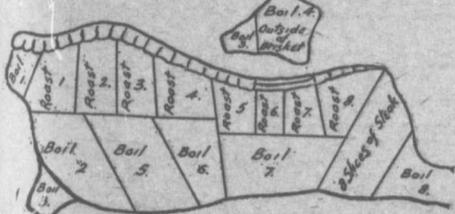


Diagram Showing How to Cut a Carcass for a 16-Share Beefing.

ments with another member further down the list who has an animal ready that might become too heavy if held until his turn later in the season. The exchange therefore is mutually advantageous.

Eversion of the Womb

By A. S. Alexander, M. D. C.

EVERSION of the womb is one of the most serious accidents happening to the cow or other animal and one that is always difficult to remedy. By eversion we mean expulsion of the womb from the body, or "casting the withers," as farmers sometimes term it. It is often confused with a simpler accident, viz., eversion of the vagina, or passage to the womb.

The afterbirth is usually attached where the accident has supervened close upon calving, but is absent in a majority of cases where calving has taken place twenty-four hours before the accident. In many instances when discovered the cow has been lying down and getting up again so that the womb has become foiled, lacerated or bruised.

No time should be lost in commencing treatment. To quiet the cow and lessen the severe straining which opposes operation, the cow may be given a one-ounce dose of chloral hydrate in a quart of warm water. A sarrinole should be buckled lightly around the body just in front of the udder to assist in the same way, and an assistant may, by pinching at the loins, help to lessen the expulsive efforts of the cow, which are often so strong as to make reduction of the accident an impossibility. After washing the hands thoroughly with soap, and having the assistants do the same, the womb womb-

tions disappear and the mass is gradually pressed inward.

When it has been possible to make a fairly large part of the mass nearest the body disappear, then the shut fist of another assistant in next applied to the free portion of the womb farthest from the body, pressing steadily forward and inward, while the other assistants patiently squeeze, press and manipulate the mass. It may suddenly telescope upon itself and disappear within the body. Follow it with the arm into the abdominal cavity to commence expulsive efforts upon the part of the cow and when she becomes more quiet the womb must be smoothed out as far as possible and the two horns of the womb straightened out and get into their proper position in the pelvis.

Lard as Antiseptic.

This done, a mass of fresh, unsalted lard may, if possible, be worked into each of the two horns and left there to act as an antiseptic, melt and collect detritus of the womb and afterbirth and flow gently outward, bringing such foreign matters from the body and at the same time protecting the animal against absorption of poisonous matters, which would otherwise enter the circulation and set up a fatal condition. A rope truss is next applied to secure retention of the womb and may be left in place for twenty-four hours. Protruded vagina to be treated in the same way, but the operation is an easy one. Another good plan is to apply a long five-inch-wide bandage spirally to the womb from its apex right up to the body. Then saturate with cold water. This drives out the blood and reduces the womb.—Farm Journal.

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can be easily seen if you will study these three pictures for a minute. They show three great big advantages of O. K. Stanchions. Just notice the construction of the lock. The wide mouth makes it easy to insert the swing bar. The catch is simple yet secure. Made of the best malleable iron and constructed on the combination spring and gravity plan. This ensures perfect service, even after years of use—one of the main reasons for the popularity of

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AGENTS

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POULTRY

Keeping the Poultry House Clean
W. G. Lentley, Wellington Co., Ont.

WE always try to keep our henhouse clean, with as few lice and mites infecting the birds as possible, but there are certain times of the year in which we think a special cleaning is necessary. The winter spring dews, after the spring mud has dried up, seems to us to be one of the best times for giving everything in the henhouse a thorough overhauling.

We begin by cleaning out every bit of litter and every speck of dust and dirt that can be removed with a broom. We also remove everything that is removable. We then treat all the cracks, chinks and joints where mites or lice can find a lodging with some thoroughgoing disinfectant. Some of the disinfectants have been influenced by the war and the prices have gone up out of sight. Others, however, are still obtainable at the old prices. We generally use zenoleum, which we heard recommended by Prof. Graham of the O.A.C., and find it to be satisfactory. When we are sure that every insect and germ has been killed by the disinfectant, we replace the roots and feeding troughs and put in new litter. The hens seem to understand what has been done and to be more attached to their home than ever.

Diarrhoea in Poultry

WHAT can I do for hens with yellow and white diarrhoea? They seem perfectly healthy and are generally laying when I notice them and in a few days they die. Sometimes the droppings are like the uncooked white of an egg with a yellow or greenish yellow center; other times there seems to be nothing but a stringy, yellow substance. They generally keep red in comb and wattles until the last couple of days. I have a cockerel affected now, the first male bird he has had it. He seems to shake his head a good deal. The disease does not attack the young chicks, just the mature birds.—C. F. H.C.

Diarrhoea is a symptom in so many diseases that it is impossible to state the exact trouble with your correspondent's hens. Yellow droppings may indicate cholera, but if this were the disease all the whole flock would have gone before this instead of one or two a year. It may also indicate tuberculosis, but without a post-mortem examination it is impossible to tell. It may be nothing but simple diarrhoea. I therefore suggest that a sick bird be sent by express, collect, to Dr. Chas. H. Higgins, Dominion Pathologist, Experimental Farm, Ottawa, and have your correspondent write a letter at the same time giving all the details of the disease.

In the meantime, clean and disinfect thoroughly the poultry houses, isolate any birds that may be not in the very best of health, and give to all in the drinking water muriatic acid at the rate of one teaspoonful to two gallons of water.—F. C. Elford, Dominion Poultry Husbandman.

Handling Young Chicks

CHICKS need no food from two to three days after hatching. They should be kept warm. During the first week the temperature should not fall below 56 degs., and during the second week it should be held up to 90 degs. When they crowd under the hover of the brooder it is a sign that they are cold. Fifty chicks are enough for one brooder. When two many are put together they sometimes pile on top of each other and some smother. When the chicks are 48 to 60 hours

THIS ACTUALLY HAPPENED



Here's positive proof of the strength of Peerless Fencing. This actually happened. We don't ask you to take our word for it. Read what the owner says. Here's his letter—

Dear Sirs: I am writing a testimonial as to the strength of your Peerless Junior Chicken Fencing. Mine is four feet high.

It turned two horses, each weighing 1400 pounds. They ran full tilt into the fencing about 2 rods from each other at the same time. The result was that they turned a somersault over the fence, alighted on their heads and necks, scratching them up some, but the fence remained intact.

Yours truly,

Joe Boothby, Surrey Center, B. C.

Think of it! A dead weight of nearly a ton and a half coming with violent force against our poultry fencing—not field fencing—and yet

Our PEELESS Junior Poultry Fencing Meid

What greater test can you ask? We build it stronger than is necessary under ordinary circumstances. We build it of Open Heart steel wire with all the impurities burned out and all the strength and toughness left in. Well galvanized. Every intersection is locked together with a Peerless Lock. Top and bottom wires of Peerless Poultry Fencing are heavy—extra strong. Consequently, fewer poles are required. Peerless fencing can't sag—can't get out of shape—can't give giving absolute satisfaction.

Catalogue giving details on request. Describes our poultry, farm and ornamental fencing, also Peerless farm gates.

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old feed them equal parts of bread crumbs and oatmeal to which add a little chicken grit. Feed four or five times a day and only what they will eat up in a few minutes. After the third day feed a good quality of chick feed. Sprinkle it in the litter, which should be made up of a thin layer of short cut alfalfa or fine cut straw. A home made chick feed can be made as follows: Cracked wheat, 25 pounds; fine screened cracked corn, 20 pounds; head oatmeal, 10 pounds; crushed peas, three pounds; millet seed, two pounds, and fine charcoal, three pounds. Keep grit, charcoal and water before them all the time.

After the first week begin giving beef scraps in small quantity. Feed sparingly at first, one ounce for 40 or 50 a day. Provide green food.

sprouted oats are best. Mangels, green clover and lettuce are also good. When on open range the grass will answer. After the chicks are two weeks old a mixture of equal parts of wheat bran and beef scraps may be kept before them all the time.

When four weeks old the following mash mixture can be fed in hoppers: equal parts of bran, cornmeal, wheat

middings and rolled oats to which add 10 per cent. of meat scraps.

When the chicks are six weeks old ground oats may be used in place of the rolled oats. At this age the chick feed can be discontinued and equal parts of wheat and cracked corn fed in its place. Keep the mash before them in hopper.

Keep a box of fine charcoal, small grit and dry bran before them all the time, and on the floor of the coop sprinkle fine sand in the cut clover and alfalfa leaves. Give them plenty of fresh water at all times. Give them water in something that only the beak of the chickens can become wet. Do not let the chicks walk in the water. Keep the coop and yards dry, because damp places prove fatal.

Many of us forget that eggs will absorb odors. They will not absorb odors as readily as milk, but at the same time, care should be taken in keeping the storage room for eggs free of strong odors.—Prof. W. R. Graham, O. A. C., Guelph, Ont.

The Seed Centre will revolutionize the seed growing industry in this county.—A. J. Craig, Carleton Co., Ont.

HORTICULTURE

Advantage of Large Seeds.

GOOD seed, better seed, and the best seed are terms which have importance in plant production. The best seed, according to investigations recently conducted at the Vermont Agricultural Experiment Station, is large seed. The results obtained with seed sorting of sundry plants are of assistance in the explanation of several points relating to the difference in industry, lack of uniformity in size, season and quality of production. Mr. M. B. Cummings, who conducted the investigation, summarizes his results as follows:

The advantages which accrue from the use of large and heavy sweet pea seeds are earlier blossoming, a larger total number of blossoms, and a larger number of blossoms of good quality, as indicated by the size of bloom and length of stem. Plants grown from large seed are heavier and bear more and longer lateral branches. Hubbard squash and sweet pumpkin respond well to seed selection. Plants grown from small seed yielded a larger

number and a greater total weight of fruit, but were, however, markedly inferior with respect to number and weight of ripe fruit. Special precautions were found to be necessary in order to avoid a mixed heritage of seed.

A Benefit to Lettuce.

The merits of large seed in lettuce are shown by a productivity of early seedlings, an increased weight of edibly matured plants, which displayed better heading-up capabilities, earliness and uniformity in filling the heads; in short, augmented earliness and quality.

Heavy spinach seed outlasts lighter seed in weight of plants, width and number of leaves, height of main stalk, and general earliness.

Parley, a biennial herb which quickly renews its top when cut back, gives not merely larger and earlier foliage, but shows greater recuperative powers when the larger seed is used.

Rabbits are one of the shortest of short-term crops, show good gain in favor of large seeds. Sorting the sizes from the same parent gives as great a contrast in germination as would be shown by that gained by a more direct perspective of the nature of the parent plants. Large seeds give a more uniform crop ready for use about one week in advance of small seed.

Large Seed—Earlier Beans. Trials with beans resulted in favor of the large seeds. The advantage accrues from the earliness of the product grown from the large seed in somewhat offset by its later germination.

In a single trial, garden peas made little or no response to size selection of seed, although a slight gain was recorded for plants from large seed if allowed to mature; but no gain was observed when harvested as green peas.

The weights and sizes of plants compared at different stages of growth show that a continuous and permanent advantage exists in favor of large seed. Plants grown from large seed possess more leaves of greater surface area, and hence have greater assimilative powers.

The place origin of small seeds in pods of different plants show a chaotic distribution. In beans 49 per cent. were found to occur in the basal end, while 18 per cent. occur in the middle of the pod. Garden peas follow a more regular distribution, for the small seeds are almost always found at the ends of the pods, with one end as prolific as the other.

How We Grow Potatoes

Alexander Lamont, Middlesex Co., Ont.

OUR soil is a sandy loam. The variety of potatoes that we grow is the Dooley. As a general rule, we follow potatoes after fall wheat, or clover. We plow the wheat stubble after harvest and give lots of cultivation. We apply the manure directly from the stalls, 20 to 25 loads to the acre and work directly into the soil. We harrow frequently during the spring and seed about May 24.

We use good, sound seed of medium size, and have each seed piece the size of a hen's egg. Our method of planting is to plow the ground and seed every third furrow, running the furrows five inches deep. We spray with Bordeaux mixture to control blight, and expect extra bushels of yield for every extra cultivation we give the crop.

We regard seed selection as most important in keeping up yields. Before the general digging we go over the field and turn out the most likely looking hills and select seed tubers from the best of these. We take notice of the plants; some are stockier and bushier than others. These are preferred, as we believe that such plants resist disease best and they can be cultivated longer.

Production and Thrift

CANADA'S CALL FOR SERVICE AT HOME

Produce More and Save More

before. Grow food for the men who are fighting for you. The Allies need all the food that you can produce. Every little helps. You are responsible for your own work. If you cannot produce as much as you would like, produce all you can. Work with the right spirit. Put fighting energy into your effort and produce now when it counts. The more you produce the more you can save. Producing and saving are war-service.

Make Your Labour Efficient

possible, help in producing something needed now. Let us not waste labour. Canada needs it all. If possible help to feed the Allies. Make your backyard a productive garden. Cultivate it with a will. Make your labour count for as much as possible.

Do Not Waste Materials

our homes. Every pound of food saved from waste is as good as a pound of increased production. The way for a nation to save is for every individual to save. France is strong to-day because of thrift in time of peace. The men and women of Great Britain are not only "doing" but are learning to "do without."

Spend Your Money Wisely

finance the war. Save your money for the next Dominion War issue. There can be no better investment.

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THE DEPARTMENT OF AGRICULTURE

THE DEPARTMENT OF FINANCE

May 11, 1916.

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Palmer's are made by right and are better than any other. We can deliver to you all the best of the world's produce. We have the best of the world's produce.

CLOVER

Govt.

No. 1 Red

" 2 Red

" 1 Alkali

" 2 Alkali

" 1 Alfalfa

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(This seed

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The Rural Publishing Company, Ltd.

PETERBORO, ONT.

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

Mail Order Competition a Help

A FEW weeks ago the publishers of farm papers in some of the central States toured their largest cities holding conferences with business men with the view of impressing them with the buying powers of the farming public and with the desirability of the Farm Press as an advertising medium. Among the addresses given was one by an enterprising merchant of a small country town. Dealing with mail-order houses, he insisted that far from being the enemy of the country merchant, they are in reality a help. He is quoted as follows:

"Whenever I see a farmer taking home a catalogue from one of the big mail-order houses I know that he will sit up under the lamp looking through the pages, finding out about the things he never knew existed—things that would make his work easier and give him more comfort and luxury. Thus his needs and wants are increased. He becomes a bigger customer. I will take my chance of selling him against the mail-order house."

There is a great deal of truth in what this merchant said. The catalogue tends to stimulate buying, but the increased demand for goods that results will not all be met by the catalogue houses. The live country merchant will get his share of the increased business. His interests are best served, not by antagonism to the mail-order business, but by taking advantage of the greater demand for the goods that he offers for sale.

Preparing for the Dairy Regulations

THE adoption of the policy of paying for milk at cheese factories on a quality basis will mark a distinct forward step in Ontario dairying. The manifest injustice of ignoring, in a product so variable in quality as milk, the factors on which its quality depends, must eventu-

ally lead to the introduction of some scheme by which milk will be paid for according to value. But dairymen, confused by the disagreements of authorities as to which was the most desirable basis for payment, have been slow to take up payment by test. This naturally led many leading dairymen to conclude that some method of promoting this reform was necessary. The result is the Dairy Standards Act, which requires the payment according to test from the beginning of next season.

Although this legislation is a distinct step forward, the fact should not be overlooked that it is a very long step. In fact, it is the most radical piece of dairy legislation ever introduced in the province. According to the statement of the Minister of Agriculture in presenting the bill for its second reading, ninety per cent. of all the milk delivered at the 1,000 cheese factories in Ontario is paid for on the pooling basis. Since payment on a quality basis has been taken up voluntarily by such a small percentage of our dairymen, it is apparent that there must be strong reasons for the lack of progress in the past, and that a large amount of apathy, as well as considerable opposition, must be overcome before the new legislation is put into operation. It is evident that between now and April 1 of next year much educational work will have to be done if the regulations are to be introduced without friction, and also, that steps must be taken to remove what have proved difficulties in the past.

Paving the Way

IN undertaking a campaign of education to prepare makers and patrons for the adoption of the new regulations, the first essential is a full understanding of the difficulties, real or imaginary, that stand in the way. For arriving at such an understanding a free discussion of the whole matter should be of great assistance. For this reason Farm and Dairy has opened its columns to such a discussion. We believe that dairymen should have a full opportunity of discussing in their recognized dairy organ a subject so vital to their interests. In this discussion the difficulties can be pointed out as well as the methods by which they may be overcome. The result should be that those concerned in introducing the new regulations will be assisted in bringing the matter to a successful issue.

In the meantime we wish to define our attitude. We are in favor of the step the government has taken, providing the great difficulties that many factory owners, makers and patrons will face in meeting the demands of the new legislation are recognized and provided for. We believe that the time has arrived when it is necessary to put the payment for milk at the factories of the province on a quality basis of more or less uniformity. We believe this can be done. Ten per cent. of the factories have adopted payment by test voluntarily. What can be done at one factory can be done at another. The question is simply that of accepting the situation and doing our best to meet the new demand. If we all do this, and the legislation goes into effect without further delay, the result will be that great good will accrue to the dairy industry of Ontario.

Attractive Home Grounds

MUCH that is written on beautifying the home surroundings is applicable only to town-plot conditions. Striving after color schemes and mass effects may be all right on a piece of land twenty-five feet square to which the owner can devote an hour or two each evening, but on the average farm a simpler plan must be followed or the land around the house given over to neglect. The farmer is too busy a man to have much time for attending to flowers, especially in the spring, when they demand extra attention.

The matter is usually left to the farm woman who, anxious though they may be to have everything attractive, outside as well as inside the house, have only limited time for gardening. The first essential in any plan for laying out the home grounds on the farm is that it require the minimum of labor.

The other day we visited a farm home, the surroundings of which seemed almost ideal from the average farmer's standpoint. Scarcely any work was needed to keep it in order. The fences and gates were in good repair, the posts were all standing up straight, and not a trace of weeds or rubbish was in sight. This in itself was enough to lend an air of attractiveness to the place. The lawn was large—nearly a quarter of an acre in extent—and had never known a lawn-mower. When the grass gets too high it is simply trimmed with a sharp scythe. Around the edge of this open space was a row of trees that need no attention. A couple of lilac bushes at the front corners of the house relieved the straight lines, and a narrow border along the veranda, in which a few hardy perennials, backed in summer by some nasturtiums that climb up the lattice work, completed the arrangement. The total time required to keep the grounds in order for a whole summer would not total half a day, but the general effect was quite as pleasing as if the most complicated plan had been followed.

Fluctuations in Hog Prices

LESS than a year and a half ago Prof. Geo. H. Day, in an address at the Guelph Winter Fair, made a strong plea with the farmers of the province not to rush out of the hog raising business. With prices around seven dollars a prospect were not encouraging. As is usually the case when prices are low, the impression seemed to be abroad that hogs would never pay again, with the result that men were selling short of breeding stock. Prof. Day saw better things ahead, however, and strongly rallied the farmers not to take advantage of the ease with which they could get out of hog raising, but to keep fully stocked up with brood sows until the market righted itself.

With prices now hovering around twelve dollars a hundred live weight, the Professor's faith has been amply justified. The placing of extensive war orders for meat on this continent has undoubtedly had much to do with carrying prices to such unheard-of levels, but it is safe to say that even under normal conditions the market would have rallied, and that at the present time hogs would have been selling well. Those who stayed with the game are now reaping their reward.

It would be well, however, not to be induced by present prices to swing over too far to hog raising. The close of the war will witness a falling off, perhaps a great falling off, in prices. There is always an element of speculation in the hog market. As a result of the rapidity with which pigs multiply and the shortness of the time which they take to reach maturity, the stock throughout the country may be quickly increased or depleted. Variations in the supply are reflected in wide price fluctuations, and the difficulty of definitely forecasting the market allows a speculative factor to enter, accompanied by an element of risk. The man who plays safe, keeps his breeding stock fairly constant, and takes high and low prices as they come, is the man who usually makes the most out of his hogs. Such a man will not be caught overstocked in a tumbling market.

The average value of the milch cows of the Dominion was \$61 in 1915, as against \$57 in the previous year. A total value of \$164,234,000 was given to the country's cows last year, an increase of ten and a half million over 1914.

CONSOLIDATION was a feature of the session, the week ending with the speaker of Richard F. Evans and his wife attending in the role of Mr. Lee. (1) Great both in enrollment of those (2) The government of the community school. This there are in present. His Ontario have not attending than ten. (3) The possess all the by from the classification, the and the qualified teacher as agriculture management training. (4) The public like the child's eye of a big away from home. (5) The acquisition of loyalty and pride becomes a concern of the community. (6) Teachers unite and are groups where emotion are easier to secure. (7) Loss of better schools is favorable condition.

School a J. K. Putnam at Ottawa, strict solidation, and on that organization." He called on teaching of some artistic art or the desire that in live towns of star-room school around it and for a male friend-ship school of sweetness in a community. A would be possible and then the subject which tent for adults could be so prepared would be main at school level. The County School Board Dealing with school authorities that this was a improvement of rural schools.

"The response in any county is on too many who We have carried ridiculous farcical other cases are ought to be stressed. This Mr. Putnam County Board of elected by the County of Ottawa schools would be as the present make progress in rural county to form county rate Consolidation supported by

Educational Authorities Favor Consolidation

Advantages of the System Emphasized Before the Ontario Educational Association.

CONSOLIDATION of rural schools was a live topic at the convention of the Ontario Educational Association, held in Toronto during the week ending April 22. The principal speaker on the subject was Inspector Richard Lees, M.A., of Peterboro, whose articles on "Consolidation in Farm and Dairy" have attracted such wide attention. The leading advantages in the system were summarized by Mr. Lees as follows:

(1) Greatly increased attendance, both in enrollment and in the percentage of those enrolled.

(2) The possibility of the development of the spirit of cooperation and community interest through the school. This is not possible where there are only a few children, as there are in many rural schools at present. Half the rural schools of Ontario have less than twenty children attending, and many have less than ten.

(3) The country school comes to possess all the advantages that follow from the establishment of graded classes, properly equipped laboratories, and the teaching, under properly qualified teachers, of such subjects as agriculture, domestic science and manual training.

(4) The pupils of the country have, like the children in town, the privilege of a high school without going away from home.

(5) The school comes to be an institution of importance, appeals to the loyalty and pride of the people and becomes a centre for the activities of the community.

(6) Teachers cease to be isolated units and are brought together in groups where mutual help and cooperation are possible, thus making it easier to secure and retain the services of better teachers under more favorable conditions.

School a Community Centre.
J. K. Putnam, Inspector of schools at Ottawa, strongly championed consolidation, and condemned "the system that wastes so much waste in education." He claimed that Consolidation schools would make possible the teaching of sewing, cooking and domestic art for country girls and lessen the desire that many of them have to live in towns or cities. A four or a six-room school with five acres of land around it and a comfortable residence for a male Principal would make possible a school which would be a source of sweetness and light for the whole community. A really good library would be possible. Literature, history and elementary science, those subjects which have a satisfying content for adolescent boys and girls, could be so presented that the children would think it worth while to remain at school as long as possible.

County School Board Superseded.
Dealing with the multiplicity of school authorities, Mr. Putnam said that this was a detriment to the improvement of rural schools.

"The responsibility for the schools in any county in Ontario is resting on too many shoulders," he continued. "We have carried local control to a ridiculous farce in some cases, and in other cases are sitting idly where it ought to be strengthened." To offset this Mr. Putnam suggested that a County Board of five men and women elected by the people or appointed by the County Council to manage the schools would be just as democratic as the present system and would make progress much easier. The natural corollary to this would be a uniform county rate.

Consolidation was also strongly advocated by Matthew Parkinson,

Editor of The Canadian Teacher, who referred to the progress that had been made in the movement in Manitoba. Whenever consolidation had been a fair trial it was a success, said Mr. Parkinson, who regretted the lack of progress in the matter so evident in Ontario and the other provinces.

Shelter Belts in Iowa

By "Schoolteacher," York Co., Ont.

LAST summer I took a trip to Iowa to visit a relative whose father left this district shortly after the civil war and settled in that state. There were many things to interest me in the county in which I was visiting, but the most striking was the plantations, or shelter belts, that surround practically every farm home. When the county was first settled it was open prairie with not a tree to be seen. This was not because trees would not grow there, but from some natural reason that nobody there seemed to understand. The district is naturally a windy one, and the first settlers, used, no doubt, to the wooded districts of the eastern states, felt the lack of natural forests. This led them to begin planting shelter belts around their buildings to protect them from the storms and winds of winter and to provide shade during the warmer months. The climate is naturally warm and moist, so that the trees grow rapidly, and now you should see that country! It looks like a park. The land is perfectly level and free from trees, except in the immediate vicinity of the buildings. Looking across the country, no buildings can be seen, but on each farm will be seen a group of trees from 40 to 60 feet high and covering from two to five acres with nothing but the windmill projecting above the treetops to indicate that it surrounds a farm home. The inhabitants, by planting these trees, have converted a treeless and barren plain into one large beauty spot. Not only do the trees afford shelter, but they are now being drawn upon to quite an extent for fuel and fence posts.

When I arrived back in Ontario I could not help contrasting the general appearance of my home county with the district that I had just visited. Here, instead of the trees being around the house and barn to provide shelter and shade, they are all at the back of the farm, where they are of the least possible value for that purpose. When the settlers came in, instead of preserving the trees around their buildings, they built in the middle of their clearings. As the bush was cleared away, the land was left more and more bare looking, and little or no effort was made to supply the deficiency by replanting, so that now many buildings are found situated on wind-swept hilltops, without any protection but that afforded by a few apple trees. Here and there a feeble attempt is being made to provide shelter by planting a row or two of trees, but only in isolated cases.

My visit to Iowa was an object lesson in the way a natural disadvantage may be turned to good account. Had the settlers of the county I visited found it covered with forest, it would likely now be as bare as the average Ontario county. Instead of this they found a treeless plain, and immediately turned their attention to providing what nature had withheld. More and more trees were planted, so that rural country is now better than in any home county in Ontario, where the forest once flourished in such profusion.

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TO appreciate the noble is a gain which can never be torn from us.
—Goethe.

God's Country and the Woman

(Continued from last week.)

THE two men gripped hands. There was something about Jean that inspired Philip's confidence, and as he returned the half-breed's greeting his eyes looked for a moment over the other's shoulder and rested on Josephine. He was astonished at the change in her. Evidently Jean had not brought her bad news. She held the pages of an open letter in her hand, and as she caught Philip's look she smiled at him with a gladness which he had not seen in her face before. She came forward quickly, and placed a hand on his arm.

"Jean's coming was a surprise," she explained. "I did not expect him for a number of days, and I dreaded what he might have to tell me. But this letter has brought me fresh cause for thankfulness, though it may enslave you a little longer to your vows of knighthood. We start for home this afternoon. Are you ready?"

"I have a little packing to do," he said, looking after Jean, who was moving towards the tent. "Twenty-seven prunes and —"

"Me," laughed Josephine. "Is it not necessary that you make room in your canoe for me?"

Philip's face flushed with pleasure. "Of course it is," he cried. "Every thing has seemed so wonderfully unreal to me that for a moment I forgot that you were my—my wife. But how about Jean? He called me M'sieur Weyman."

"He is the one other person in the world who knows who you and I know," she explained. "That, too, was necessary. Will you go and arrange your canoe now? Jean will bring you my things and exchange them for some of your dunnage." She left him to run into the tent, reappearing quickly with a thick rabbit-kn blanket and two canoes, pillovs.

"These make my nest—when I'm not out working," she said, thrusting them into Philip's arms. "I have a paddle, too. Jean says that I am as good as an Indian woman with it."

"Better, M'sieur," exclaimed Jean, who had come out of the tent. "It makes you work harder to see her. She is—what you call it—egwan-suchwin—so splendid! Out of the Cree you cannot speak it."

A tender glow filled Josephine's eyes as Jean began pulling up the pegs of the tent.

"A little later I will tell you about Jean," she whispered. "But now, go to your canoe. We will follow you in a few minutes."

He left her, knowing that she had other things to say to Jean which she did not wish him to hear. As he turned toward the canoe he noticed that she still held the open letter in her hand. There was not much for him to do when he reached his canoe. He threw out his sleeping bag and tent, and arranged Josephine's robe and pillows so that she would sit facing

him. The knowledge that she was to be with him, that they were joined in a pact which would make her his constant companion, filled him with joyous visions and anticipations. He did not stop to ask himself how long this mysterious association might last, how soon it might come to the tragic end to which she had foredoomed it. With the spirit of the adventurer who had more than once faced death with a smile, he did not believe in burning bridges ahead of him. He loved Josephine. To him this love had come as it had come to Tristan and Isolde, to



A Comfortable and Attractive Home in New Ontario.

Paola and Francesca—sudden and irresistible, but, unlike theirs, as pure as the air of the world which he breathed. That he knew nothing of her, that she had not even revealed her full name to him, did not affect the depth or sincerity of his emotion. Nor had her frank avowal that he could expect no reward destroyed his hope. The one big thought that ran through his brain now, as he arranged the canoe, was that there was room for hope, and that she had been free to accept the words he had spoken to her without dishonor to herself, if she belonged to some other man she would not have asked him to play the part of a husband. Her freedom and his right to fight for her was the one consuming fact of significance to just now. Beside that all others were trivial and unimportant, and every drop of blood in his veins was stirred by a strange excitement.

He found himself whistling again as he refolded his blankets and straightened out his tent. When he had finished this last task he turned to find Jean standing close behind him, his

dark eyes watching him closely. As he greeted the half-breed, Philip looked for Josephine.

"I am alone, M'sieur," said Jean, coming close to Philip. "I tricked her into staying behind until I could see you for a moment as we are, alone, man to man. Why it is that our Josephine has come to trust you as she likes a strange creature, I do not know."

His voice was low—it was almost soft as a woman's, but deep in his eyes Philip saw the glow of a strange, slumbering fire.

"Why is it?" he persisted. "God only knows," exclaimed Philip, the significance of the question bursting upon him for the first time. "I hadn't thought of it, Jean. Everything has happened so quickly, so strangely that there are many things I haven't thought of. It must be because—she thinks I'm a man!"

"That it is, M'sieur," replied Jean, as quietly as before. "That, and because you have come from two years in the North. I have been there. I have been there. I know that it breeds men. And our Josephine knows. I could swear that there is not one man in a million she would trust as she has put faith in you. Into your hands she has given herself, and what you do means for her life or death. And for you—"

The fire in his eyes were nearer the surface now.

"What?" asked Philip tensely. "Death—unless you play your part as a man," answered Jean. "There was neither threat nor excitement in his

canoe, and the half-breed remained to help them off.

"You will go straight across the lake," he said to Philip. "If you paddle slowly, I will catch up with you."

Philip seated himself near the stern, facing Josephine, and Jean gave the canoe a shove that sent it skimming like a sealion on the smooth surface of the lake. For a moment Philip did not dip his paddle. He looked at the girl who sat so near to him, her head bent over in pretence of seeing that all was right. The sun melting away into rich colors in the thin coils of her hair. There filled him an overwhelming desire to reach over and touch the shining braids, to feel the thrill of her warmth and sweetness, and something of this desire was in his face when she looked up at him, a look of gentle thankfulness disturbed a little by anxiety in her eyes. He had not noticed the full, wonderfully blue her eyes were until now, and soft and tender they were when free of the excitement of fear and mental strain. They were more than ever like the wild wood violets, flecked with those same little brown spots which had made him think sometimes that the flowers were full of laughter. There was something of wastefulness, of thought for him, in her eyes, and in pure joy he laughed.

"Why do you laugh?" she asked. "Because I am happy," he replied, and sent the canoe ahead with a first deep stroke. "I have never been happier in my life. I did not know that it was possible to feel as I do."

"And I am just beginning to feel my selfishness," she said. "You are making a wonderful sacrifice for me. You have nothing to gain, nothing to expect but the things that make me shudder. And I have thought of myself alone, selfishly, unreasonably. It is no fair, and yet this is the only way that it can be."

"I am satisfied," he said. "I have nothing much to sacrifice, except my life." She leaned forward, with her chin in the cup of her hands, and looked at him steadily.

"You have people?"

"None who care for me. My mother was the last. She died before I came North."

"And you have no sisters—or brothers?"

"None living."

For a moment she was silent. Then she said gently, looking into his eyes. "I wish I had known—that I had guessed—before I let you come this far. I am sorry now—sorry that I didn't send you away. You are different from other men. I had known—and you have had your suffering. And now—I must hurt you again. It wouldn't be so bad if you didn't care for me. I don't want to hurt you—because—I believe in you."

"And is that all—because you believe me?"

She did not answer. Her hands clasped at her breast, she looked beyond him to the shore they were leaving.

"You must leave me," she said then, and her voice was as pitiless as his had been. "I am beginning to see now. It all happened so suddenly that I could not think. But if you love me you must not go on. It is impossible. I would rather suffer my own fate than have you do that. When we reach the other shore you must leave me."

She was struggling to keep back her emotion, fighting to hold it within her own breast.

"You must not back," she repeated, staring into his set face. "If you do not, you will be hurt terribly, terribly!"

(Continued next week.)

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Color Scheme for Living Room

In outlining a scheme of decoration for most houses it is necessary to assume a certain exposure for the main living room in order to decide upon the color scheme in relation to the light.

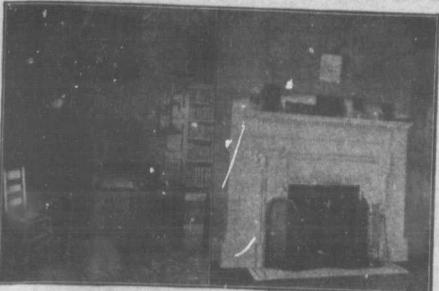
In house No. 6 this is not necessary, as it would be impossible to face this house in a direction which would not still bring an abundance of sunlight into the living room. This being the case we will be safe in choosing a cool, rather sombre color for the walls; a fawn grey would be good. Grey is a quiet, restful color that will never obtrude itself upon the attention, and makes a perfect background for other shades. The woodwork in this room should be either black flambé or silver grey, with a carpet covering the whole floor in which grey, green, black and orange are blended.

All of which makes the barebones of a very quiet and dignified room, which may easily be dull and uninteresting, if it is not wisely handled. Being very severe and colorless it will

one is used, against the kitchen wall, and the dining table between it and the front door, with the dining chairs grouped about it. A centre piece of grey crash with flowers cut from the chintz applied onto it would be pretty to use on this table between meals. The other end of the room affords space for two groups. The first would be made up of a couch in the corner facing the fireplace, with a comfortably large table beside it supporting a reading lamp and a few books. The second group would be composed of the book cases placed between the windows and the stairway, and two or three easy chairs before the fireplace.

The Correct Pictures.

For a grey room there is nothing more pleasing than good black and white prints framed with plain black wood frames. Large, beautiful prints, reproductions of famous paintings, can be procured from The Perry Picture Co., at the small cost of seventy-five cents each. Their address is Mal-



Designs for Fire Places.

require much enlivening with draperies, so a very gay chintz should be selected for the over-curtains, a gorgeous pattern in which orange, mahogany, white roses with green foliage are splashed over a black ground, for example. There is such a chintz, as a matter of fact, though it may sound like a wild dream, and it looks very splendid with grey. It may be as well to pause here to warn the reader against undertaking this color scheme unless she is prepared to use some very bright and cheerful draperies, or the result will be hopelessly depressing. In addition to the curtains the couch might well be covered with the same frivolous materials and banded with cushions in plain orange and green and mahogany red.

The furniture for this room should be of dark mission, which can often be bought quite reasonably now, with a chintz covered cushion or two in the big easy chairs. A lamp with a bronze colored bowl and an orange colored shade, and an orange colored rug to the room. If the owners of the house are fond of reading, a bookcase, full of books, with their gay bindings showing, and a prosperous dish of bulbs or a geranium in full bloom will greatly increase the charm of this color scheme.

Grouping the Furniture.

Now a word as to the arrangement of the furniture. A small room offers no problem of this kind, as the position of the various pieces is practically decided by the arrangement of doors and windows, and there is usually room for only one group, but a large room can look very disconcerting indeed if the furniture is not properly

grouped. In this living room it would be well to place the buffet, if den, Mass. U.S.A., and they will be glad to send anyone their catalogue.

And speaking of the fireplace, it may be built of red brick, with black mortar, or of grey stone, but, however it is built the mantel should be very simple and dignified. There is no place in the house of good taste for the mantel all fringed up with tiny cupboard and gimcracks.

As a small house is made to seem larger by the use of one color for all the rooms on one floor, and an economy is effected in the buying of the wall finish, the kitchen and wash-room in this house should have the same grey walls, and black or grey woodwork, with white scrim or net curtains and gay flowering plants in the windows. Upstairs the walls throughout should be painted a deep cream with ivory woodwork and mahogany or painted furniture. Furniture painted a very pale dull green would be pretty in one of these rooms, and black in another, and the wife can do this herself, the rooms can be furnished quite inexpensively.

Several makers of flat wall finishes have had clever artists design beautiful rooms for them in colors, and in these they show the whole color scheme worked out with the most perfect taste. If your local dealer has one of these portfolios and he should have one—he will be glad to let you look through it for suggestions in the decorating of your home. The outstanding feature of these rooms is the quiet simplicity of practically every one and the freedom from foolish ornament.

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Homeseeker Excursions, via Canadian Pacific, may, if they so desire, take advantage of the "Great Lakes Trip."

The Steamship "Manitoba" on which Homeseekers' tickets will be honored, on payment of \$5.00 additional to cover meals and berth, sails from Owen Sound each Wednesday during season navigation, calling at Sault Ste. Marie, Port Arthur, and Fort William, connecting at the latter port for Windsor and Western Canada.

The "All Rail" Homeseekers' Excursions are in effect each Tuesday until October 31st inclusive. Particulars from Canadian Pacific Ticket Agents or W. B. Howard, District Passenger Agent, Toronto.

habit, and the only means we know of checking it is to tie her so that she cannot reach them.

Parturition Troubles

A HEIFER very recently died in calving. She had been in the half-hearted attempts for several hours. As soon as I investigated the trouble, I discovered my error. She strained very hard, and something seemed to burst and she then passed tremendous quantity of water (urine). It was not the water bag that burst, as they were still intact when the calf came a few minutes later. The afterbirth came away all right in the night, and yet several days after she was passing little bits of decomposed matter. Should a cow be disinfectant after calving, even if she cleans all right, and if so, how should it be done?—J. Y. R.C.

You do not understand the matter. You state that the water bag was intact after the calf was born and later on state that she expelled the afterbirth during the night. What is called the "water bag" is a portion of the afterbirth, which is a complete sac enclosing the foetus. Hence the only possible way in which birth can take place without rupture of the "water bag" is when the afterbirth is expelled with the foetus and thoroughly enclosing it. This occasionally only occurs in mares, but we have never known it in cows. It certainly was the water bag that burst and the fluid was what is called "amniotic fluid." The decomposed matter that you mention was portions of the afterbirth that were retained. In such cases disinfection is good practice. It consists in introducing a warm disinfectant into the womb by an injection pump, a syringe with a long nozzle, or rubber tube and funnel.

Holding Up Milk

CAN you tell me why cows that are given good care and not roughly handled hold up their milk? Some of my heifers, as soon as they freshen, commonly give down only part of their milk, unless I feed them their grain while milking them. Others will begin in June and hold back their milk until they dry themselves up. I have trouble with different cows each year, and would like to know the cause and a remedy.—E. C. W. Shefford Co., Que.

Cows cannot voluntarily hold their milk. The muscles that control this are not voluntary ones, hence not under control of the will. The condition is due to fear or nervousness. Kind treatment and attracting the attention of the animal during milking is all that can be done. This can be done as you suggest, viz., by giving the heifer or cow something to eat during milking. Some claim that placing a sack of warm salt over the udders has the desired effect. Avoid excitement of any kind, speak gently and handle gently, and the trouble should cease.

Ringworm

I HAVE a two-year-old heifer that has itchy sores, some as large as a ten-cent piece, on her quarters. When rubbed, they bleed. Kindly explain what it is and what treatment to use.—D. G. A., Hastings Co., Ont.

The symptoms indicate ringworm, which is very contagious. Isolate the heifer and be careful not to carry the infection (which is a vegetable parasite) on hands, clothes or other ways, to healthy stock. Moisten the scales with sweet oil, remove them, and then dress twice daily, until cured, with tincture of iodine.

Milk of an Aborted Cow

I HAVE a two-year-old heifer that had her calf about one month ago. Her udder was so full that I had to milk her. I have been giving her milk to the boys, and would like to know if it is fit for human consumption. Should I, Co., Que.

The abortion had no injurious effect upon the milk.

Feed the Young Foal

By C. S. Anderson.

ARE you giving that young foal the proper care? To become a strong, sound horse when matured the foal must be well nourished and given every advantage possible.

At this time of the year mares and colts are allowed to spend at least a part of the time in the pasture. The foal should be taught to eat grain very early. By placing the feed box from which the dam eats her grain low, the foal, at about two months of age, will begin nibbling with the mother and will soon acquire a taste for the grain.

A pen built in one corner of the field made high enough to keep the mare out and allow the colt to pass under will make it possible to feed the foal grain with very little difficulty. Allow the mare in the enclosure with the foal for a few times, and it will soon learn to go in itself. Keep a liberal supply of grain, preferably oats and bran, and perhaps some cracked corn, in the feed box. To induce the dam to loiter about with the colt, have the pen near a shade tree or the salt box.

By weaning time the foal will have become thoroughly accustomed to eating grain and will wean very easily, besides being in better condition as a result of this additional feed.

Try this plan this year and you will be surprised to find a sleek, fat, well-grown colt at weaning time.



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Market Review and Forecast

TORONTO, May 8.—The late seeding this spring would ordinarily have a stimulating effect upon grain prices, but with ocean freights higher than ever and with grain rushing to the seaboard, where but few ships are available for ocean transport, and with the United States unsettled by war rumors, the stimulating effect is largely offset. Immense fleets of ships are being used for army transportation and will not be available for moving grain until wheat stocks in the old country are sufficiently depleted to make further importations immediately necessary. It is expected, however, that before the summer is over all our surplus wheat will be needed. Reports from the United States show that more wheat and corn are being sown than last year. The lateness of the spring has largely interfered with wheat sowing in Manitoba and eastern Saskatchewan. In western Saskatchewan and Alberta, however, seeding is fairly well advanced. Authorities agree that the total acreage under crop this year in Western Canada will be much below last year, and that of the grain sown a much larger proportion will be oats, barley and flax than is the case in normal years.

WHEAT.
Shipments of wheat from Fort William have been heavy throughout the week, as high as nineteen vessels clearing in one day, over half of them destined for Buffalo. Quotations at Fort William are as follows: No. 1 northern, \$1.22; No. 2, \$1.27 1/2; No. 3, \$1.19; Ontario wheat, \$1.02 (not quoted); No. 1 commercial, \$1.03 to \$1.05; No. 2, \$1.01 to \$1.03; No. 3, \$0.96 to \$1.01; feed wheat, \$0.86 to \$0.88.

COARSE GRAINS.
Coarse grains were firm, the market holding the slight advance reported last week. The following are the cash quotations: Oats, C.W., \$1.84; No. 2, \$1.84; \$1.84 to \$1.84; commercial, \$1.84 to \$1.84; American corn, No. 1, \$1.84; No. 2, \$1.84; No. 3, \$1.84; No. 4, \$1.84; No. 5, \$1.84; No. 6, \$1.84; No. 7, \$1.84; No. 8, \$1.84; No. 9, \$1.84; No. 10, \$1.84; No. 11, \$1.84; No. 12, \$1.84; No. 13, \$1.84; No. 14, \$1.84; No. 15, \$1.84; No. 16, \$1.84; No. 17, \$1.84; No. 18, \$1.84; No. 19, \$1.84; No. 20, \$1.84; No. 21, \$1.84; No. 22, \$1.84; No. 23, \$1.84; No. 24, \$1.84; No. 25, \$1.84; No. 26, \$1.84; No. 27, \$1.84; No. 28, \$1.84; No. 29, \$1.84; No. 30, \$1.84; No. 31, \$1.84; No. 32, \$1.84; No. 33, \$1.84; No. 34, \$1.84; No. 35, \$1.84; No. 36, \$1.84; No. 37, \$1.84; No. 38, \$1.84; No. 39, \$1.84; No. 40, \$1.84; No. 41, \$1.84; No. 42, \$1.84; No. 43, \$1.84; No. 44, \$1.84; No. 45, \$1.84; No. 46, \$1.84; No. 47, \$1.84; No. 48, \$1.84; No. 49, \$1.84; No. 50, \$1.84; No. 51, \$1.84; No. 52, \$1.84; No. 53, \$1.84; No. 54, \$1.84; No. 55, \$1.84; No. 56, \$1.84; No. 57, \$1.84; No. 58, \$1.84; No. 59, \$1.84; No. 60, \$1.84; No. 61, \$1.84; No. 62, \$1.84; No. 63, \$1.84; No. 64, \$1.84; No. 65, \$1.84; No. 66, \$1.84; No. 67, \$1.84; No. 68, \$1.84; No. 69, \$1.84; No. 70, \$1.84; No. 71, \$1.84; No. 72, \$1.84; No. 73, \$1.84; No. 74, \$1.84; No. 75, \$1.84; No. 76, \$1.84; No. 77, \$1.84; No. 78, \$1.84; No. 79, \$1.84; No. 80, \$1.84; No. 81, \$1.84; No. 82, \$1.84; No. 83, \$1.84; No. 84, \$1.84; No. 85, \$1.84; No. 86, \$1.84; No. 87, \$1.84; No. 88, \$1.84; No. 89, \$1.84; No. 90, \$1.84; No. 91, \$1.84; No. 92, \$1.84; No. 93, \$1.84; No. 94, \$1.84; No. 95, \$1.84; No. 96, \$1.84; No. 97, \$1.84; No. 98, \$1.84; No. 99, \$1.84; No. 100, \$1.84.

MILL FEEDS.
There is little new to report in the market for mill feeds, demand falling off as cattle get out to grass. Supplies of all lines are more plentiful, and as demand is fairly good, prices remain steady. During the week sales of bran were made as follows: shorts, \$2; middlings, \$2 to \$2 1/2; feed four bags, \$1.60 to \$1.70; Montreal quotes as follows: shorts, \$2; middlings, \$2 to \$2 1/2; feed four bags, \$1.50 to \$1.55.

HAY AND STRAW.
The market for baled hay remains firm at last week's advance in prices. All offers are promptly taken up. Dealers quote, \$20 to \$22; loose grade, \$18 to \$19; Montreal quotes as follows: baled hay, best, \$20 to \$22; loose grade, \$18 to \$19; straw, \$4.50 to \$7; Montreal quotes from \$18 to \$20, according to quality.

POTATOES AND BEANS.
There is a great scarcity of good seed potatoes, owing to the prevalence of potato rot. Prices are quoted as from \$2 to \$4 a bag, according to quality. Beans are quoted, hand-picked, \$4.50; prices, \$4.

EGGS AND POULTRY.

Special candled new-laid eggs, in cartons, are quoted 25c to 26c; new-laid, 24c to 25c.
Poultry—Live Dressed.
Old fowl, pound 18c to 20c 23c to 24c
Chickens 18c to 20c 24c to 27c
Milk-fed 10c to 20c 25c to 28c

SEEDS.

Wholesalers are selling to the country trade:
No. 1 red clover, cwt. \$25 00 to \$25 00
No. 2 do 24 00 to 25 00
No. 3 do 24 00 to 25 00
No. 1 alfalfa, cwt. 21 00 to 22 00
No. 2 do 18 00 to 19 00
No. 3 do 15 00 to 16 00
No. 1 timothy, cwt. 12 00 to 14 00
No. 2 do 10 00 to 11 00
No. 3 do 8 00 to 10 00

DAIRY PRODUCE.

Prices in England for cheese and butter are both very high, but the enormous cost of transportation and insurance under war conditions takes some of the grain of the high prices. Small quantities of old Canadian cheese arriving on the English market recently sold as high as 108s per cwt.
Creamery prints, fresh made, are quoted on this market, 20c to 22c; holds, 20c to 22c; dairy prints, 24c to 25c; bakers, 22c to 24c.

Cheese, new large, are quoted 19 1/2c to 20c; twins, 20 1/2c; triplets, 21c.

LIVE STOCK.

The feature of the week's live stock market was that hogs again reached the \$12 level. The run of cattle was large and the quality good. Odd fine animals sold as high as \$7.10, but the bulk were sold at choice butchers and changed goods to 10.50 to \$1.75, many going at the outside price. H-cows of calves were fairly liberal and the demand (or consumption) was large. A round lot of

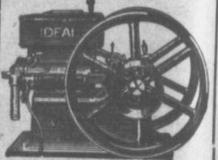


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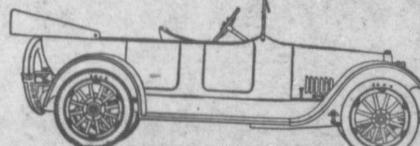
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FIVE DAUGHTERS and one son of King Urm's from dams of the famous Bara Jewel Hengerveld strain.

THREE SONS and two daughters of King Pontiac Art's Canada, whose record as a sire appears to be one of the best in Canada.

A DAUGHTER of Prince Hengerveld Pietje, one of Canada's greatest bulls.

THREE SONS of Woodcrest Sir Clyde from dam-like Nakove, DeKok #1, Lady Kornlyke Hag Apple and Beta, Missa, Kordyke.

A NUMBER OF TESTED cows in milk with big records.

Some very choice YOUNG BULLS and HEIFERS.

WOODCREST SIR CLYDE is stamping his own image on all his calves. He has blood behind him big records and large production are in demand. So secure a herd sire of this quality. Sale starts 1 o'clock. Animals may be inspected the day before the sale at A. Latham's Sale Stables, John St., Brockville, Ont. Write for catalogue to



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King Urm's—dam's record 3134 lbs. in seven days.
Three of his sisters with an average of over 21 lbs.
His sire has 41 A.L.O. daughters. One with 23,793 lbs. milk to her credit in one year.
His Grand sire has 81 A.L.O. daughters.
The BARA JEWEL HENGERVELD STRAIN:
R. J. Homer, 3rd, record 30,332 lbs. in seven days.
R. J. Homer, 2nd G, record 15 lbs. as a 2 yr. old.
R. J. Homer, 2nd A, record 25 lbs. as a 4 yr. old.
R. J. Homer, 2nd B, record 25 1/2 lbs., average test 4.95.
KING PONTIAC ART'S CANADA:
25 daughters of this bull have A.L.O. records. His sire has 160 A.L.O. daughters; one of these is a 44-lb. cow, and 13 of them have over 30-lb. records.

Just watch the records when his heifers begin to freshen. We have his blood and some of it will be sold at this sale. We live in the home of the record bulls.

G. A. GILROY Secretary of Sale Glen Buell, Ont.



lot calves sold at \$3 each.	Quotations
Heavy choice steers	\$ 8.00
Handy choice steers	7.50
Butcher's good	7.00
do medium	6.50
do common	6.00
Butcher's cows	7.75
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Bucklers, choice	8.00
do good, 700 to 800 lbs.	6.50
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Butcher's light	4.75
do common	4.50
Canners	4.00

DISPERSION SALE OF W. C. STEVENS.

ON May 12nd the entire herd of pure bred Holstein cattle belonging to Mr. W. C. Stevens, Phillipsburg, Ont., was sold at public auction. The sale and the prices realized quite satisfactory. The average for cows four years and over was 227 lbs. Heifers, two to three years, 1140 with a total average of 1122. The following is a list of the animals for which 100 or over was realized:
Cows, four years and over: Pauline Mirrie, Leitchfield, 1770, F. Stewart; Jenny Pat Pouch, DeKok #1, F. Stewart; Mercedes, Platte, Netherland; L. O. Warren, Melburytown; Gyney Queen, Black, 1400, A. C. Hardy, Brockville; Lottie Platte, Kordyke, 1160, Brown Point, Jan. Queen, Mildred Wayne, 1185, Edward Baker, Wardswooster; Loretta Allen, Kordyke, 1160, Otto Jones, Chantilly; Manner Queen, Kordyke, 1235, L. O. Warren, Netherland; Trina, 1200, A. W. Churchhill, Jones Falls; Marnette Pat Pouch, Johnson, 1185, F. Stewart; Mildred DeKok, Johnson, 1120, H. Clapp; Clara, Allen, Johnson, 1120, Stewart; Portia, Ormsby, Glad, 1160, Clifford; Thelma, Tollydy, Queen, Johnson, Kordyke, 1140, J. C. Byro, Chantilly; Anna, Stewart, 1110, H. Trotter, Chantilly; Brookdale Kordyke, Netherland, 1120, Marie, Dunn, Kordyke; Netherland Platte, Kordyke, 1220, 1216, Edward Baker; Ida, Sylvia, DeKok #1, 1185, F. Stewart; Maple Ridge, Kordyke, 1160, F. Stewart; John, Stewart, F. Stewart; Tabitha, Sylvia, DeKok, 1140, Thon, Voltaire, Pouch.

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Grandsons of "King Berla Pontiac," "Bar Apple Kordyke 8th," and others. Dams have milked from 100-lbs. a day down. Aped from 18 months to a R. M. HOLTVY. R. R. No. 4. PORT PERRY, ONT.

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Offers a few yearling Holstein heifers—Kordyke breed. Will sell right for quick sale. Apply to ALBERT MITTFLEHLDT, Port Davison Str., T.H.B., Wellandport, Ont.

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SIX BULLS 8 to 12 months from high record dams and sired by our KING PONTIAC and PIETJE (32.60 lb. dam) bulls. We are offering best younger ones from our new arrivals, and are selling fast. Several SYLVIA'S GREAT SON. No females for sale until Annual Sale, May 17th. H. LYNN, Avondale Farm, R.R. No. 3, BROCKVILLE, Ont.

AYRSHIRES

LAKESIDE AYRSHIRES

A select lot of young bulls, all ages, sired by Auchanbrain Son Foam (Imp.) 25758 (8-45), Grand Champion at both Quebec and Sherbrooke, from Record of Performance Dams. Write for catalogue.

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Manager: D. MCARTHUR, Phillipsburg, Que.

AYRSHIRE BULLS FOR SALE

Two bulls bred from Holstein Sires, owned by O. A. C. Dam of six months' bull will make a large R.O.P. Record as four-year-old. Dam of seven months' bull will make an extra large R.O.P. Record as two and one-half year old. Both will make splendid show bulls. Pedigrees guaranteed. Apply to H. R. EHRRHARDT, R. R. No. 6, GUELPH, ONT.

SILWOOD AYRSHIRES

Young bulls from R. O. P. dams. One fit for service; two December calves. All from dams with sound udders and good tests. Write for breeding and prices. J. L. STANSELL, Elgin Co., STRAFFORDVILLE, ONT.

AN AVONDALE SIRE GOES TO WEL- LAND COUNTY.

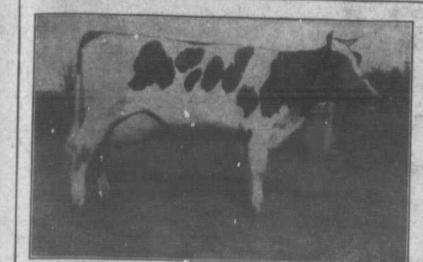
WELLSLAND County gained a young Holstein sire of great promise, when Mr. C. V. Robbins, Wellandport, Ont. purchased from Avondale Farm records of a female Hengerveld Lotties. This cow was first in the three-year-old show and reserve champion at Brandon Fair and was second in Winnipeg Exhibition in 1912. She has weighed over 1,500 lbs. in condition and as a four-year-old made 23.61 lbs. of butter in seven days. One of this young bull is King Walker, with 40 record reds, drop five years of them with very high records, including two of the best records in the semi-official herd world's records. The combination of blood in this young bull looks for him a good future and he will prove a valuable addition to Mr. Robbins' herd.

Avondale Farm 2nd Annual Sale

BROCKVILLE, ONT., WEDNESDAY, MAY 17th, at 10.30

This will be the greatest sale of high record stock ever held in Canada. THE ONLY CHANCE TO GET DIRECT MAY ECHO SYLVIA DAM. Many of the females bred to her son, "Champion Echo," who has the highest 30-day butter average in the world for dam and sire's dam—170.65 lbs.

A FEW OF THE OFFERINGS: 30 daughters of King Pontiac Arta Canada, all with official records or with record dams and grand-dams. One with 21.66 lbs. as a 29, two-year-old and with a 23-lb. dam. Three full sisters from a 23-lb. dam—one after has 20.20 at 25 mos. A fine daughter of Pietje Korndyke Queen, 26.70, sold at our last sale for \$670. She has a full sister with 23.37 as a two-year-old, and is bred to "Champion." Many others with records up to 20 lbs. and, having dams and grand-dams to 25 and 28 lbs.



A sample daughter of King Pontiac Arta Canada Pietje Korndyke Queen 2nd, whose record at 26 mos. is 23.17 lbs.

We are keeping 35 of K. P. A. Canada's daughters permanently in our herd.

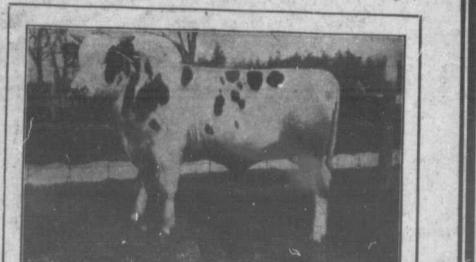
Seven beautiful daughters of Woodcrest Sir Clyde, a son of Pietje 2nd's Woodcrest Lad and Alma Clyde (33.06), all from tested dams. Two grand two-year-olds daughters of Pietje Korndyke Lad—snow cows—one in test already has 21 lbs. as a Junior.

The fine show cow, Alice Tensen—show ring winner—25.15 in 17 and 117 in 30 days—over 100 lbs. milk 1 day, and safe in calf to "Champion."

Two extra good daughters of King Segis Pontiac Duplicate—two-year-olds—and bred to a son of May Echo Sylvia and K. P. A. Canada. One has a 29-lb. dam and 28.90 grand-dam.

A fine 28.50 cow from a 20-lb. dam of exceptional blood lines all sides.

A yearling bull from a daughter of May Echo Sylvia and sired by the great 44-lb. bull. The only bull in America with both grand-dams with over 40 lbs. Average, 42.80 in 7 days, 170.65 in 30 days.



May Selma Pontiac Cornucopia at 10 mos. His sire, Spring Farm Pontiac Cornucopia, is a son of K. P. Pontiac Lass, 44.18 lbs.

A fine bull calf from Countess Segis, a 31.76-lb. daughter of King Segis.

Several young bulls from high record daughters of Prince Hengerveld Pietje, who has 21 tested daughters—four with 30 lbs., 15 over 20 lbs.—sired by herd sires.

Remember that King Pontiac Arta Canada has 32 tested daughters, and we are keeping over 30 to make records. He has two over 23 lbs., 9 over 20 lbs.

Remember that May Echo Sylvia has 41 lbs. butter in 7 days and 169.70 in 30 days, with 1,005 lbs. milk in a week—3 record all by itself in America. "Champion," her son, is in a class of his own. This will be the only chance to get his stock, as his services are not open. Sale at 10.30 sharp. Lunch on grounds. Come and see our herd.

Terms cash, or approved 4 months' notes at 3 per cent. per annum.

A. C. HARDY, Prop. Send for Catalogue Brockville, Ontario

FARMERS' CLUB

Correspondence Invited.

ONTARIO.

HASTINGS CO. ONT.
FURBER, May 1.—A good deal of wheat is being sown, farmers being encouraged by last year's crop. Meadows and pastures are looking well. Bookkeeping is beginning to interest some of our students. Our district is well adapted for this branch of agriculture. Female labor is in evidence already, as the fields in spring doing every kind of work nearly done by men, who are scarce here. Eggs are selling at 20c; butter, 25c; oats, 40c; wheat, 51. Most farmers are using formaldehyde to insect against smut and cutworms. They are encouraged by experiments made last year. Those who need seed grain can get it home, quite a relief after the years of drought. There is seed grain to spare, and much of it is being shipped out.

WATERLOO CO. ONT.

WAYTELLO, May 2.—Sowing will be on this year. A small start has been made but heavy showers last night stopped operations here. Most of us were caught a lesson last year and are treating seed grain for smut this year. Cattle are going to market at satisfactory prices. Hens are still at \$11.25, a new quality. The run of pig is quite satisfactory and a considerable quantity

of setup was made in this district. The practice of clipping wool in spring is becoming more general. The roads have been in a very bad condition this spring. Clover and tall wheat look well.

ANOTHER SPLENDID RECORD.

Queen Pontiac Ontario, in the herd of R. M. Holby, at Port Perry, has just completed her year as a 29-year-old, yielding 19,246 lbs. milk and 351 lbs. fat. Unfortunately, she carried her calf four months overtime, and in thus debarred creditable record as is a most amazing.

BROCKVILLE SALE.

Consigned by G. A. Gilrer, Glen Sault. **M. C. HARDY'S** consignment includes 11 Magadora of Avondale, a large rooey cow of great capacity. She is six years old and has a record of 23.60 lbs. butter in seven days and 125 lbs. butter and 3,920 lbs. milk in 29 days. Another six-year-old cow, Inka Sylvia 6th, has a record of 23 lbs. butter in seven days, averaging 23 lbs. milk a day. Tidy Korndyke Wayne 2nd, a nice three-year-old, will also be offered. She has a record in seven two-year-old of 18.65 lbs. butter as a 24 days 2nd, the milk in 30 days, and over 4,000 lbs. milk in two months, with a best day's yield of 89 lbs. She is a beautiful square heater of ideal type. Monk-in-Dion, another three-year-old, transmits Inka Sylvia family, and included. She will be tested before the day of the sale.

Pauline DeKok Beagman, sired by Count DeKok Pieterte Paul, and having a 30-lb. sister; and another heifer, a two-

year-old out of a 100-lb. dam, the latter in excellent condition and a dandy, will be included in Mrs. Gilroy's consignment, as will also a bull calf, one year old, sired by Mr. C. Hardy's famous bull, King Pontiac Arta Canada.

Consignment of Brown Bros.

THE famous herd of Brown Bros. is contributing over 20 animals to this sale. They are all of very choice breeding, backed up by official records. Four untested daughters of King Pontiac Arta Canada will be offered from 24 to 28 lbs. in seven days. They are all large, rooey, square cows of big capacity, and will make profitable buying. Pearl Lily Dale and Wynona Pauline DeKok, with records of 26 and 23 lbs. respectively, are two cows of big capacity worthy of note. Good breeding 'nd big records are both found in Sara Jewel Hengerveld 2nd A. She is a descendant of the first 20-lb. cow in Canada, and her dam has a record of 23.17 lbs. in seven days. She has a sister now in test, running at the rate of 23 lbs., with a very high average test. Four daughters of their famous stock bull, King Urna, and from tested dams, make another choice offering. A very old young bull, sired by King Urna, that has a record of 23 lbs. is an animal fit to head any herd. He possesses good substance, fine quality, and is fit for service. Another young bull that will make good buying is sired by King P. A. Canada from Beauty Heart 2nd A, that has a record of 23 lbs. It has a record at 24 months of 19.25. Another young bull of quality and excellent breeding is sired by King P. A. Canada, out of Sara Jewel Hengerveld 2nd A, whose record is given above, and should be looked over before buying.

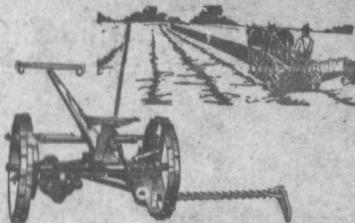
Offering of W. J. Stewart.

NATOYE MAIDA SEGIS, a very large, well-developed six, two-year-old, bull that is expected to reach the butter record, and sired by King Segis Four with a record of 784 lbs. milk, 31.15 lbs. butter in 7 days, and 2,887 lbs. milk, 146.27 lbs. butter in 29 days.

Retta DeKok Maida, another beautiful cow that has a record of 29.03 lbs. butter, 701 lbs. milk, with 110 lbs. as best day's milk, and now under test making 23 lbs. and expected to reach 30 lbs. before the sale.

An exceptionally good offering of young bulls that will make profitable herd headers. Three of them are sired by Mr. A. C. Hardy's bull, Woodcrest Sir Clyde. The dam of one is Naloye DeKok 4th, whose record appears above. The dam daughter of the famous Resopie Korndyke 6th. His dam, Lady Korndyke, is now under test, giving 75 lbs. a day, and running at the rate of 34 lbs. butter in 7 days as a 3-year-year-old. She is also a sister of Fairview Korndyke Pieterte, the only 30-lb. two-year-old in the world. Prospective buyers should note these points and look carefully over this young bull before buying. The third bull is sired by King P. A. Canada, whose dam is Retta Maida Korndyke, who has a 190 lbs. milk in a day. She is a promising heifer of very high breeding, but has not freshened since two years old.

McCormick



Are You Ready For Haying?

Are you all ready to make the most of this year's hay crop? Are your mowers, rakes, side delivery rakes and loaders all ready to do a good season's work? Look them over now while there is still time to get repairs or to get new machines before the crop is ready to cut.

If you need new machines, don't fail to call on the McCormick local agent before you buy, and see the McCormick mowers, dump rakes, side delivery rakes and loaders. There are features in McCormick haying machines that save work and make money for you. The all-steel side delivery rakes and steel-frame hay loaders are two of them. Don't fail to see them.

Don't take chances with imitation repair parts for your McCormick machines. Get the genuine. Then you are safe, because there is no difference in size, shape, or quality between McCormick repairs and the same parts on new McCormick machines.

The McCormick local agent has some specially good hay tools for you to use this year. Drop in and see him, or write to us at the nearest branch house for full information.

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By

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This is the most complete construction book yet published on the Ford Car. A high grade cloth bound book, printed on the best paper, illustrated by specially made drawings and photographs. The construction is fully treated, and operating principles made clear to everyone. Every detail is treated and explained in a non-technical yet thorough manner. Nothing is left for you to guess at. The Ford owner, with this book at hand, has an infallible guide in making every repair that may be necessary. The book is written for Ford drivers and owners, by an expert who has driven and repaired Ford cars for a number of years. The illustrated chapter on overhauling and repairing alone is worth many times the price of the book. If you own a Ford you want this book. Write us for it tonight.

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