

FARM AND DAIRY

AND
&
RURAL HOME

DEVOTED TO
BETTER FARMING

Peterboro, Ont., Mar. 25, 1915

Dairy and Cattle Shows
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Canadian Bkx



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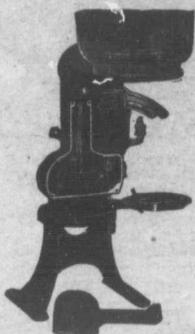
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OUT APRIL 8th

will introduce this great Production Year. The great stimulus given to agriculture will necessitate a wider equipment for our big dairy farmers. Dairy men realize this. They need the best you can produce.

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Advertising Department

FARM AND DAIRY PETERBORO, ONT.

The Feeding of Countess Carrie Mercedes

And Some General Notes on Feeding, by Mr. Samuel Lemon, Lynden, Ont.

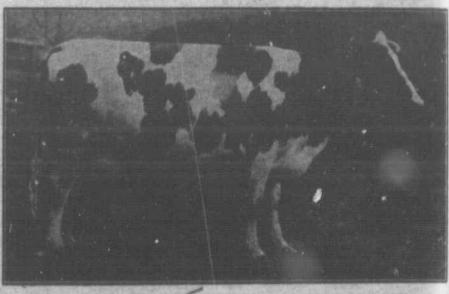
COUNTRESS Carrie Mercedes calved on January 21st, 1913. On the 22nd she was taken down with milk fever, and was given the oxygen gas treatment. She recovered nicely, and we started her on her yearly work on the 23rd. I believe that if a cow has milk fever and is taken in time and comes around all right, that she will do better work afterwards than she ever did before. We worked Carrie up gradually until she was getting 30 pounds of meal a day; by that time she was milking from 70 to 75 pounds a day. The meal was composed of three pounds of oat cake, seven pounds of bran, and 10 pounds of chop, the chop being four parts oats and one part barley. When she was being run six or seven weeks, we started feeding gluten feed, changing the gluten for the chop, reducing the chop as we added on gluten, until she was getting five pounds of gluten a day. By that time she was averaging three pounds of milk more a day. The gluten was worth about the same

if they will take it. Our heifers are nearly as large as cows when they are two years old, and we have them fresh when they are two years to two years and three months old. We always try to milk them a full year the first year.

Influencing Sex of Calves

"Bull" luck is a variety of luck practically every breeder of pure bred cattle wishes to avoid; hence the widespread interest in every theory of sex control. Writing in a recent issue of the New England Homestead, Dr. Raymond Pearl, of the Maine Experiment Station, tells of some investigations into sex control in his state as follows:

"One of the primary purposes for which the cooperative cattle breeding record plan was undertaken in Maine was to get comprehensive statistics to show whether any definite effect on the proportion of male and female calves born could be observed when service occurred at different times in



She is One of the Few With 20,000 Pounds to Her Credit.

Countess Carrie Mercedes (No. 8139), owned by S. Lemon & Son, Lynden, Ont., made her great record of 20,000 lbs. of milk in one year when she was nine years old. Have you a cow that will do as well with the same feed? What has fed her consistently is told in detail by Mr. Lemon in an article adjoining.

price as the chop. She was fed 40 to 45 pounds of ensilage a day and 60 pounds of feeding sugar beets and what hay she would clean up nicely.

She was fed in this manner until she went to grass. Then she received mostly rolled oats and bran. She did not seem to care for the other feeds then. She got about 15 pounds of meal a day, that being all she would clean up nicely. If she would eat any hay we gave it to her until we had green corn but she would not, when she was given an armful twice a day. As soon as we fill the silos we start feeding it.

She was in better condition when she finished the hay than when she started. She was milked three times a day for the full year. If we are milking three times a day we feed the calves three times, starting them with 14 or 15 pounds a day, and when they are one month old they get about 18 pounds a day. At eight weeks we start to give skim milk, and in two weeks more they are getting all skim milk, being fed only twice a day. We never give any grain of any kind in the milk.

When they are three or four weeks old we start to give them a handful of meal, bran and rolled oats and a little oat cake; also a handful of ensilage and some clover hay or alfalfa as soon as they will eat it. We sell cream, so have lots of skim milk for the calves, and give it to them until they are one and one-half years old.

the heat period. Work at the station some years ago indicated that when service occurred very early in the heat there was likely to be born a larger proportion of heifer calves, and when service occurred very late in heat there was likely to be born a larger proportion of bull calves.

Early Service For Female Calves

"The results we have secured to date have been very gratifying. Exact records show that when service was given early in heat, there resulted 20 heifer calves, as against 160 bull calves. On the other hand, when service was late in heat, there were 62 heifer calves and 97 bull calves. When the service was in the middle of heat, the difference was not so pronounced, as shown by 69 heifer calves and 79 bull calves.

"From this work it seems clear that there is a very striking difference in the result according to whether service is early or late in heat. The difference is already beyond the bounds of probability of accidental occurrence. It is proposed, however, to continue the cooperative breeding record scheme for two or three, or possibly more, years until a sufficiently large number of records has accumulated to make the conclusion beyond doubt."

It is well to plan your work before you do it, but some folks have a habit of planning so long that they never do it.



We Welcome

Trade Increases

Vol. XXXIV

Methods Th

THERE is said to be the Dominion the straining point in the limiting to the limit farmer is not ask increase his output, us will do a little to much in the ag 1,000,000 farmers it probably 100,000,000 each one of us w bushel more grain of a ton more hay few more bushels thousand pounds m what it would mean fit the Mother Cou materially.

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Spread Manure

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We Welcome Practical Progressive Ideas

FARM AND DAIRY

& RURAL HOME



The Recognized Exponent of Dairying in Canada.

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

Vol. XXXIV

FOR THE WEEK ENDING MARCH 25, 1915

No. 12

Greater Production from Canadian Farms

Methods That Will Increase Crop Yields Described by Canada's Foremost Farmer, Mr. J. H. Grisdale

THERE is scarcely a farmer in the Dominion who is working to the straining point. There is not a farmer in the Dominion producing to the limit. Each Canadian farmer is not asked to greatly increase his output, but if each one of us will do a little bit it will amount to much in the aggregate. There are 1,000,000 farmers in Canada farming probably 100,000,000 acres of land. If each one of us would produce one bushel more grain per acre, a quarter of a ton more hay from the acre, a few more bushels of potatoes, a few thousand pounds more of milk, think what it would mean. It would benefit the Mother Country and help us materially.

It pays to do our best on each crop each year. The man who grows the hood crop well, and it is the key crop of the rotation, is the man who gets his farm into such shape that he cannot avoid getting heavy crops in succeeding years. If we have a good hoe crop this year we will have a good grain crop on the same land next year. If we seed the grain to grass we will have a good hay crop the third year. A good hoe crop ensures good crops all through the rotation.

Spread Manure Now

If we haven't done anything yet towards the crops of next season, now is the time to get busy and apply the manure this winter. The man who leaves the manure in small piles in the field is making a mistake. He who leaves the manure in the barnyard is making a still greater mistake. The best rule is to spread it directly. If spread on soil it will start the grass to rapid growth in the spring. This growth may then be turned over with a shallow furrow, four to five inches, and rolled at once to secure rapid decomposition.

On average land spring plowing is to be preferred for the corn crop, and I would always put corn on sod land. Don't follow corn on grain stubble. If the grain has been seeded on sod land, fertility has been wasted. Sod land contains so much vegetable matter that, with manure added, we can't avoid getting a good crop of corn. But with grain the growth goes largely to straw. On very heavy land, on the other hand, fall plowing will give good results.

I would emphasize the importance of rolling at once on spring plowing. By this I do not mean rolling as soon as we have plowed a 10-acre



Good Plowing is the First Step to Greater Production.

Farmers of York Co., Ont., where this illustration was secured, have a provincial reputation as good plowmen and good farmers. They, like all the other farmers of Canada, will aim to produce a little more this year than in other years. If all will produce a little more the aggregate increase will be enormous.

field. Stop plowing each day at four o'clock and roll the land turned that day. This will ensure rapid decomposition of the vegetable matter, which will give a large amount of readily available plant food to start off the corn crop. This rapid decomposition, too, generates heat, and we have, as it were, a hotbed, or its partial equivalent, under the corn. I would use the disc harrow immediately after rolling to prevent evaporation.

Tieth That Satisfies

When the land is plowed, rolled and harrowed, work for ideal tieth. Do not cease efforts until the land is so thoroughly prepared that no one could take exception to it. Be your own most severe critic. If necessary, roll again and disc until the land is so mellow that the horse does not sink more with one foot than the other all the way down the field.

I do not hold a brief for any company, but I must say a good word for a comparatively new implement, the double disc harrow. It will enable us to prepare land for at least half the cost

as compared with the single disk. We tried this implement out on three different fields at Ottawa. On one we used the large disk and the cost of working an acre was 90 cts. On another we used the small disk harrow, and the cost was 70 cts. On the third field we used the double disk harrow, and the cost was 45 cts. an acre. Three or four horses are needed to pull this implement. Two cannot handle it. This is a point to which we need to pay more attention. Instead of having a man to a team of two horses, let us have one man to four horses and apply labor on this principle to all farm operations so far as possible. The final implement to use in preparing the seed bed for corn is the spiked tooth harrow. If getting a new harrow this year, get a tilting tooth harrow.

The Seed and Seeding

In the actual planting operation we have found that three feet apart in hills, or in drills three and one-half feet apart, is a good planting distance. Get the seed corn on the cob and keep it on the cob until ready to use it. The extensive corn grower may need to shell earlier, but the average farmer, growing corn for ensilage, can shell all the seed that he will need in two or three hours. I would cut both ends off of an ear to get rid of the gubbins corn; it is of low germinating power and every miss in the corn field means a loss. We want to have every hill growing three or four stalks and every square yard of space working. Sow as soon as the land is ready and keep in the best condition.

We can't prevent too much rain from coming, nor can we ensure a sufficient quantity of moisture from the sky, but so far as possible we should conserve the moisture that we have in the soil. In no season do we get enough moisture in the form of rain to raise a good crop. The effect of moisture conservation has been demonstrated wonderfully on our prairies, where good crops have been raised with practically no rain. We in the east are now becoming more and more seized of the wisdom of moisture conservation. We lose moisture by improper handling of the soil when working in the spring and by evaporation throughout the season.

Warm Solt by Harrowing

As the corn is coming up I would go over the field with a slant tooth harrow. This harrowing

kills millions of germinating weed seeds, but its principal value is to warm the soil. Here again we have an experiment to report. One portion of a field at Ottawa was harrowed; another was not. One day later the temperature of the soil in the harrowed field was 10 degrees higher than where the harrows had not been used. The explanation is that where a dust mulch has not been created by harrowing, the moisture comes to the surface by capillary action, and is evaporated. Much heat is necessary to change the liquid to gas, hence the soil is cooled. With corn we must remember that it is not a native of this country, and heat is an important element in its success. When the corn is up harrow it again, and when the rows can be seen clearly, start the cultivator and keep it going until you can't see the horse in the field.

It is good practice in the fall to disk the corn field and then turn the rows of corn stubble out with the plow, exposing the roots to the weather. Of course, a shallow furrow would be cut under the stubble. In the spring, when the land is worked up for grain, the corn stubble will not be found to interfere seriously with the planting of the grain crop, and we have had no trouble from having it mixed with the straw at harvest. The same principles apply in preparing the soil for grain as for corn. Work it up until you have a fine, mellow seed bed. We use banner oats, as we have found that from this variety we get from five to 10 bushels more per acre than from any other variety we have tried. We use nothing but good seed.

We sow grass seed at the same time as we sow the grain, and we always sow grass seed with grain. No man should attempt to grow two crops of grain in succession. After corn, land is in the best shape for grain, and after one crop of grain it is in the best shape for grass.

The quantity of grass seed to use is a disputed point. I am convinced most farmers use too little. On our demonstration farms throughout Canada we agreed to pay the farmers for the extra quantities of seed they were to use on our recommendation. The results in favor of the heavier seeding were so extraordinary that these farmers themselves have taken to sowing an extra amount of seed, and their neighbors are following their example. At Ottawa we have been experimenting with the heavier seeding for 25 years. We would recommend seeding under Ottawa conditions eight to 10 pounds of timothy, six to eight pounds of red clover, two to three pounds of alsike, and five to six pounds of alfalfa per acre; about 25 pounds altogether. The resultant increase will much more than pay the extra cost of seeding. If we spend \$1.50 for extra seed, I am confident that the extra crop will be worth \$5 or more. On low bottom land I would not add alfalfa, but under other conditions I heartily recommend the alfalfa seeding. The results the first year may not be great, but the next time seeding comes around the alfalfa will make a good growth. At Ottawa our hay crop from this seeding is worth \$3 to \$5 more per ton for feed than hay from straight timothy and red clover with smaller quantities

of seed used; enough to pay for the extra seed. A final word. Don't think that because 10 tons of manure to an acre is good that 25 tons is that much better. Moderate applications frequently applied are preferable to heavy applications at long intervals. Our plan at Ottawa is 12 to 15 tons per acre every three years.

[Note.—This article is a synopsis of an address by Mr. Grisdale at a recent Patriotism and Production Conference in Peterboro, Ont.]

The Beef Cattle Outlook*

John Gardhouse, York Co., Ont.

THE world over, there has been a great shortage of good beef cattle. In the last eight years the supply on the primary markets of the United States has decreased by one and one-half million head. Then consider the effect of the war. In Europe many of the breeding herds may have to be slaughtered. This will tend to still further accentuate the beef cattle famine.

What of the home situation? I find that in Canada in the last 11 months, registrations have increased some 26 or 27 per cent. Breeders are paying more attention to producing good purebred cattle. They are safe in so doing. Population here is likely to increase very rapidly with the conclusion of war.



*"Sap's Runnin'" and the Pure Syrup Will Find a Fair Market.

This scene will recall pleasant memories to thousands. It is the sap boiling house of Mr. Nathan Payne and his two sons, Norman and Rufus, in Peterboro Ont. This year, for the first time, pure maple products will not have to compete on the market with adulterated products going under the name of "maple." Recent legislation should materially improve the market for pure syrup and sugar.

Market conditions at present are not very satisfactory. The outbreak of war, the widely prevailing financial stringency, the dry season, the high prices of feed, and the United States embargo which lasted for a time, have all contributed to a chaotic state of the market. The high price of feed in particular has been responsible for the rushing to market of many immature, unfinished cattle. The same factor has accounted for the marketing of breeding cattle as well as market cattle. It is a pity if this should take place on an extensive scale. Farmers will be wise not to sacrifice now the stock that will be of great benefit to them later on. The population of Canada and United States in 50 years will be enormous. This will mean a great demand for beef of all kinds.

It is an important thing in periods of national stress to shoulder a gun and go to the front. It is equally important that those of us who are left behind should put our shoulder to the wheel and produce all the food we can. To the pure-bred breeder I would say, Ontario should be the breeding ground for the rest of Canada. We are the oldest province, the herds

*Synopsis of an address at the Guelph Winter Fair, December, 1914.

are established. We should be able to produce all the good breeding stock the other provinces require.

The Scales and Babcock Test

James P. Jeffrey, Carleton Co., Ont.

I HAVE just finished my first year of weighing the milk from my herd. I am so well satisfied with the results that I would like to see more people trying it out. Why should not Farm and Dairy advocate the weighing of milk more extensively.

My herd is a very ordinary one, having one cow that produced 8,240 pounds of milk on very ordinary feed in 10 months. The cow that I consider the best grade in the herd produced 8,000 pounds of milk in seven months and a half. Then I have another cow which I considered a good one that freshened and was bred again about the same time as my 8,000 pound cow. By feeding them on the same feed they had an equal chance to prove their good qualities. The scales, however, showed the latter cow to be the meanest one in the bunch, only producing 5,600 pounds of milk, which at the average price per hundred from the cheese factory last season would make a difference between the two of—well, the price of an ordinary cow ten years ago.

I intend giving some of my cows a year's test, feeding them better, and will watch the result shown by Mr. Scales at the end of the year. I think the scales and Babcock test are the only ways in which to prove a cow's worth.

When Should the Heifer Freshen?

AT one time it was generally believed that the milking qualities of a heifer were strengthened by having her freshen at an early age. Of late years this theory has been questioned by practical dairymen. While travelling through the Belleville district, a representative of Farm and Dairy found considerable difference in the practice of various breeders in this regard.

The majority of men interviewed disliked having their heifers freshen until they were about 30 months of age. Among these were Mr. E. B. Mallory, whose herd of fine large cows proves that the heifers were not robbed of their growth. Mr. H. K. Denyes and Mr. Eagleson, Mr. Wm. Stewart and Mr. Alex. Hume, the well-known Ayrshire breeders, do not object to their cows reaching the age of three years before freshening. In their opinion the milking qualities are not impaired and the size is benefited. On the other hand, Mr. Nelson has his heifers freshen at about two years, and does not find any ill effects from early breeding. Of course, his calves are brought along rapidly. Mr. Wm. Honey also has his heifers freshen at an early age. It may reduce the size a little, but not the productive ability, he maintains.

Mr. A. D. Foster, of Prince Edward county, is opposed to the practice of early breeding. There is more immediate money in having the heifer drop her calf when two years old than in allowing it to come in six months later. But there is no doubt the former system interferes with growth. Mr. Foster's neighbors, Mr. Ed. Purteile and Mr. Sen Leavens, differ in their methods, the former seeing no ill effect from early breeding.

Large, strong cows are being developed under both methods. But it would appear that the tendency is towards later breeding. The treatment of the calf and the size at time of breeding is of as much importance as the age.

The most successful farmers are those who keep their sons and daughters on the farm and give them all an interest in the farm, a partnership interest, if you please.—Dr. G. C. Creelman, O.A.C., Guelph.

THE splendid College, O. college by Prof. H. revealed to the shire Cattle Breeding of a recent following the animal held at Montreal the stock judging an hour Prof. B. the herd brought tion. The herd is comprises some 30 Holsteins, as well of milking Shorthorn Canadian cattle.

In his remarks cattle breeders, emphasized the point was made at the large records. the animals for competition is considered even. Nevertheless, every herd is expected to stand of production ensure a good milk of feed. Heifers, are not bred too reasonable rest be record of the herd's Canadians, and month milking per 3.8 per cent.

Prof. Barton As regards the he stated that his aim average 10,000 pound a calf each year. ing the goal, for 1 Ayrshire cows and aged 9,386 pounds of average test of 5.5 butter fat. The high one of practically 1.

Prof. Barton first ants lead in the he side Luskly Cavallie a noted prize winning as a youngste ed into a bull of gra He has retained his and dairy type. M announced that the bull had completed days before of less than 17,000 pound The size of this bull tion at the Chicago looked just about fit He is three years of

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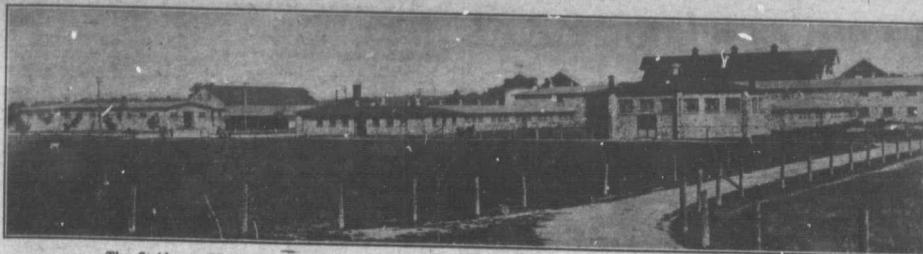
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The Stables at Macdonald Are Fire Proof. In Front is the Circular Judging Pavilion. Storage Barns in the Rear.

Dairy Cattle Breeding at Macdonald College

THE splendid work being done at Macdonald College, Quebec, in the breeding of dairy cattle by Prof. H. Barton and his assistants was revealed to the members of the Canadian Ayrshire Cattle Breeders' Association on the occasion of a recent visit to the college on the day following the annual meeting of the association held at Montreal. The members were taken to the stock judging room, where for upwards of an hour Prof. Barton had animals belonging to the herd brought out for inspection. The herd is a large one. It comprises some 65 Ayrshires and 38 Holsteins, as well as a number of milking Shorthorns and French-Canadian cattle.

In his remarks to the visiting cattle breeders, Prof. Barton emphasized the point that no attempt was made at the college to obtain large records. The breeding of the animals for constitutional vigor is considered even more important. Nevertheless, every animal in the herd is expected to reach a standard of production which should ensure a good margin of profit above the cost of feed. Heifers, more particularly Ayrshires, are not bred too young, and cows are allowed a reasonable rest between milking periods. The record of the herd of 65 milking animals of all ages, including Ayrshires, Holsteins, French-Canadians, and milking Shorthorns, for a ten-month milking period is 8,673 pounds, testing 3.8 per cent.

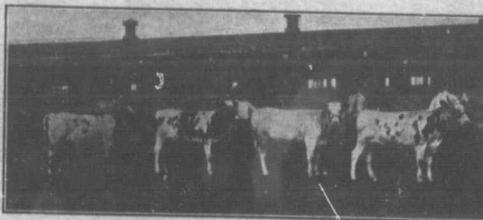
Prof. Barton's Ideal Production

As regards the herd of Ayrshires, Prof. Barton stated that his aim is to obtain a herd that will average 10,000 pounds of milk a year and drop a calf each year. They are reaching the goal, for last year the 30 Ayrshire cows and heifers averaged 9,356 pounds of milk, with an average test of 3.8 per cent. of butter fat. The highest record was one of practically 13,000 pounds.

Prof. Barton first had his assistants lead in the herd bull, "Burnside Lucky Cavalier." This bull, a noted prize winner in the showing as a youngster, has developed into a bull of grand proportions. He has retained his true Ayrshire and dairy type. Mr. R. R. Ness announced that the dam of this bull had completed a record a few days before of only a few pounds less than 17,000 pounds in the year. The sire of this bull was a champion at the Chicago Dairy Show. Lucky Cavalier looked just about fit for the show ring as he was. He is three years old. The last time he was on

the scales he weighed 1,760 pounds.

There were next led out five mature Ayrshire cows, five three-year-old heifers that had dropped their second calves, five heifers that had dropped their first calves last fall when they were nearly three years of age, and five Canadian-bred heifers, all sired by the former herd bull, "Robin Adair." The impression made as these animals were led in and out of the ring was a most favorable one. The uniformity of type throughout



Ayrshire Heifers of Macdonald College Breeding.

was so pronounced as to show that Prof. Barton had an ideal in mind, and that he has been breeding it so closely and consistently. Without exception the animals showed great constitution, vigor and splendid milking capacity. They were straight in the back, deep, and carried exceptionally fine udders. It would be a difficult matter to obtain a more uniform lot of cattle in one herd anywhere.

In the first class of Ayrshire cows was included "Pearl's Robin 2nd of St. Annes, record 12,798 pounds milk; Maude 2nd of St. Annes, 11,505 pounds; May Robin of St. Annes, 11,478



Calves at Pasture. Four Breeds are Represented Here.

pounds; Primrose 2nd of St. Annes, 11,160 pounds; and Bluebell Robin of St. Annes, 8,861 pounds.

After seeing these animals the breeders present agreed with John McKee, of Norwich, and Secretary Stephen, of Huntingdon, when they stated that Prof. Barton was doing more for Ayrshire cattle at Macdonald College than was being done at any other college on the continent. Prof. Barton is now working to find the cost of producing milk from the different animals in the college herd, and in due time expects to have some important results to announce, that will throw more light on production cost.

Among the Ayrshires deserving special mention was a heifer with a record of over 10,000 pounds, a heifer imported from Sweden, and a couple of three-year-olds that were giving over 40 pounds of milk a day, having been fresh since last fall. Seven lusty, thrifty senior heifer calves, all by "Robin Adair," showed that this bull had proved himself a valuable sire while in the college herd. He died recently. Two fine senior bull calves received considerable attention.

The older of the two weighed 600 pounds and the younger 535 pounds.

Some Fine Holsteins

A nine-year-old Holstein bull with 17 officially tested daughters, and a young Holstein bull from Dr. Harwood's herd, and out of a dam that gave 14,000 pounds of milk in six months, were favorably commented upon, as was a grand type of the milking Shorthorn bull.

Four Holstein cows were led out. They were fine large animals, and had records last year ranging from 9,993 pounds to 14,450 pounds of milk in a year. One had a record of 88 pounds of milk in a day, and another of 106 lbs. in a day. One animal during one lactation period had given almost 20,000 pounds of milk. Prof. Barton stated that he expected to still further strengthen the Holstein herd. He does not stick so hard for type in Holsteins as in Ayrshires, but always looks for good individuals just the same.

Five fine Holstein heifers were also produced. He breeds Holstein heifers a little younger than the Ayrshires.

Five type, thrifty, milking Shorthorns were produced. They filled the eye most satisfactorily. One cow, 14 years of age, had a record of over 18,000 pounds of milk in a year. Two much younger animals had records of over 7,000 pounds each. They combined the beef and dairy type to an unusual

John Deere Implements



The Spreader with the Beater on the Axle

The John Deere Spreader

The beater—the business part of a spreader—and all its driving parts are mounted on the rear axle. That is why the John Deere is the simplest, easiest running and most efficient manure spreader.

Here is what the beater on the axle means to you:

- 1st.—No clutches to give trouble.
- 2nd.—No chains to break or get out of line.
- 3rd.—Less than half the parts,

heretofore used on the simplest spreader—some two hundred parts are done away with.

4th.—Manure not thrown on the axle—straw cannot wind around it.

5th.—You get big drive wheels and a low-down spreader, without stub axles—traction and strength.

6th.—Drive wheels back out of the way when loading—you see where you place each forkful.

7th.—Only hip high—easy to load.

John Deere One-Way Plow

The plow with the auto foot makes this feature insure uniform plowing on hillsides or level land and in irregular fields. All widths obtained under all such conditions. Turns root of all side strain.

Auto foot adjustable to engage a slight foot pressure swings frame and moves plow as desired.

A real power lift plow. Slight pressure of foot causes lug to engage in ratchet in the hub and forward movement of horse raises the bottom.

High lift—plow easily transported over rough roads. Easily backed and turned.

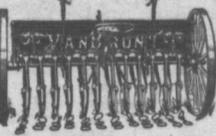
Wide harrow bar permits use of wide or narrow cutting bottoms and prevents plow from tipping on hillsides.

Van Brunt Single Disc Grain Drill

No Seed Wasted—All the Field Bowed. Van Brunt Drills have an adjustable gate force feed which compels an even, continuous flow of seed from each seed cup without bunching or clogging the feed. It cannot choke up.

The seed beats the dirt. Individually adjustable pressure springs can be made to force discs to cut furrows of even depth. Seed is conducted from hopper to furrow opener by metal tubes and there protected from dirt until it reaches bottom of furrow. All the grain is up and ready for harvest at the same time.

Van Brunt Drills do not clog up, even in trawky soil, mud or gumbo. Spring steel scrapers keep discs absolutely clean. Disc bearings guaranteed to last lifetime of drill.



Crane and/or attachment can be furnished for any Van Brunt Drill. It will blow broadcast or drill, as desired.

The Accurate "Natural Drop" Corn Planter

The John Deere No. 999 plants 2, 3 or 4 kernels as desired. You merely shift a force lever. Quick change biting to drilling, and also in varying drilling distances. It corn plants all have 16 cells. Accurate, because surface of hopper bottom and openings to seed cells are oblique or sloping. Kernels naturally fall toward and fill

cells rapidly. Better than any other method because more accurate. Endowed gear case; oil tight seal proof. Gears all always in mesh and not under severe strain. As perfect a driving mechanism as that used on automobiles. Easily detachable runners, simplified check-beds, disc marker without ropes and overheads, red are also improvements you will appreciate.



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Four tools set down his efficiency. Use good judgment by buying from a man who has an established reputation for high quality implements—your nearest John Deere Dealer. Write us for free book, "Better Farm Implements and How to Use Them."

John Deere Plow Co. of Welland, Limited
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CORN THAT WILL GROW

Money back if not satisfied.

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COTTON SEED MEAL

Guaranteed 41 per cent Protein. Cash must accompany order.

H. FRALEIGH, Box 2, FOREST, Ont. Also dealer in Fly Seed, Linseed Meal and Phosphatic Foods.

FARM MANAGEMENT

What About Potash?

Potash fertilizers will be scarce. Germany had practically a world's monopoly on this fertilizer, and their supply has been shut off. What can we do about it? Speaking on this subject at Guelph recently, Prof. R. Harcourt said:

"Common sandy soils will carry as much as 12,000 pounds of potash per acre plow depth. Many sands are richer than clays in potash. Mangels will remove 900 pounds of potash per acre if both roots and top are taken off the land. A crop of oats will remove 40 pounds of potash from the soil. These amounts are small compared with the natural quantity of potash in the soil."

"What we want then are methods of cultivation that will bring potash already in the soil into solution. To this end we want abundance of or-

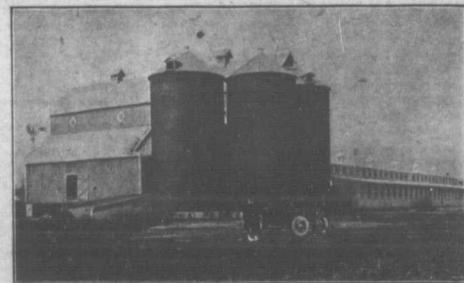
handing is all that is required. Not much can be said in favor of Plan Two, as the spots under where the heaps were, are about the only places which show much benefit, and these places are too rich, which makes a very uneven crop.

Plan Three, although making more labor, is sure to give the best results. In a large heap the mixture does not dry out and can be left without water until one is ready to use it. Another thing in favor of the large heap is that the manure of the different animals is all mixed together, and makes a better balanced plant food than applying them separately.

We need not say much about Plan Four, as that way of handling manure is only practiced by those who place no value on it.

1914 Driest Year on Record

The Ontario Agricultural College reports that the crop year of 1914 was the driest on record in Ontario! The precipitation from harvest 1913 to harvest 1914 lacked 84 inches by the



No Short Rations Here in Either Summer or Winter.

These three silos, on the farm of the Ottawa Dairy Company, are all 20 feet in diameter by 2 feet high. This Company and thousands of farmers with experience, testify that corn is the most dependable farm crop and the silo the best place in which to house it.

ganic matter and of lime, the first to hold moisture and the latter to correct acidity. If we have a soil answering these requirements, we will not suffer because of the lack of potash fertilizer."

Four Methods with Manure

Alex. F. Scott, Stornont Co., Ont. So many ways of handling manure are advanced that one who has not had experience would be at a loss to know which would be the safest to adopt to get the best returns. Some advocate the handling of manure direct from the stable to the field and spreading it at once, both summer and winter. More again practice putting it in small heaps in the field to spreading in the spring. Others again put their manure in large heaps convenient to where they intend to use it. Others still cling to the old way of leaving it piled up around the barn, or scattered about the yard to leach with the drip of the eaves and have the best part of it carried off in the ditches. I will comment briefly, from my experience, on the four different plans.

Direct Distribution Not Favored Plan One can be commended when the ground is bare; if there is snow on the ground it should be discontinued. If spread on the snow, the next snow comes, the manure is sandwiched between two layers, the ground underneath is frozen solid, and when the spring thaws come and melt the snow, the best part of the manure is leached out and carried away before the ground is thawed enough to absorb it. The only thing to be said in favor of this method is that one

up to the average. This is a shortage of almost 20 per cent. The College has often stated that tile drainage was effective in a dry season as well as in a wet one, and last year it was able to prove this in a most practical way. Since 1913 the College has been installing Practical Drainage Demonstration Plots in parts of the province where little or no drainage has been done. The plan is to drain half of a field, leaving the other half undrained for comparison. Both parts are sowed to the same kind of grain, and the crop from each part threshed separately. Nine plots were drained prior to 1914. The average of the nine fields showed that at market prices at threshing time the drained half produced \$14.13 more per acre than the undrained half, and that in the driest year on record. In an average season the average increase due to drainage is over \$30 per acre, and in a wet season over \$40.

For a number of years the Agricultural College has been making drainage surveys for farmers free of charge, except for travelling expenses. This offer is again renewed. Farmers having drainage difficulties may secure assistance by writing the Department of Physics, O.A.C., Guelph, for information and regular application forms.

Varieties of Corn to Grow

Send Branch, Ottawa An investigation conducted by the Seed Branch shows that about sixty so-called varieties of corn are grown for ensilage in Ontario and Quebec, and many farmers do not know what variety they are planting. Late var-

Feed Your
and you will get

Sto
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are rich in avail-
—Ammonia, Phos-
Potash. They work
many yields at in-
formation.

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LIGHT BRAHMAS, 3
Over 28 years
Black and S
Michael R. Boyer, Br

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Grown on field that
Eldon Agriculture
seed, true to name. P
Woodville, Bucks
GEORGE MCKAGUE,
Guelph, Ont.

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our 50-page illustrat
feed, how to build
common diseases of
with remedies for
cure roop in four
our Royal Purp
Foods and Remedie
Miss M. O., London

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High germination test.
Best Grown on Field
TISDELLE BROS., TILBUN

SEED CORN
A quantity of our
well sorted; Bailey,
Seed No. 7. Prices
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Grain Grinders, Wash
New Frames, Pump
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Feed Your Land
and you will get **Bigger and Better**
Crops.

Stone's Fertilizers

are rich in available Plant Foods
—Ammonia, Phosphoric Acid and
Potash. They will give you maxi-
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crop, ripe to name. Price \$1.00 per bus. F.O.B.
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FREE—We will give free to any person
interested in stock or poultry, one of
our 40-page illustrated books on how to
feed, how to build hen houses; tells the
common disease of poultry and stock,
with remedies for same; tells how to
cure rosp in four days; tells all about
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Foods and Remedies. Write W. A. Jen-
kins Mfg. Co., London, Canada.

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A quantity of carefully selected and
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FIELD FARM

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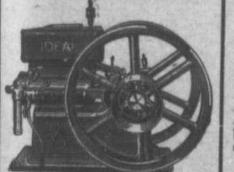
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eties are being used in districts where
they will not mature one year in five
to the glazing of the grain, which is
the necessary condition to make sweet
ensilage. Some ordinary feed corn
imported from the Central and Sou-
thern States is used for seed. Most
of this is of a late variety entirely un-
suited to Canadian conditions, and is
often injured by heating.

The following recommended varie-
ties of corn are arranged in order of
their maturity: Quebec Yellow, Long-
ford, Sandford or North Dakota,
Compton's Early, Golden Glow, Early
White Cap, Wisconsin No. 7. In se-
lecting varieties for our Northern dis-
tricts, later-maturing, heavier-yielding
varieties may be planted on a warm,
sandy soil than on a cold, clayey one.
The proper maturity is essential to
high quality ensilage, and this should
be aimed at, even although an in-
creased acreage is needed to give
the desired quantity.

Building Up a Farm

Would you suggest a system for build-
ing up a run down farm? Most of our
farmers here plow and plant the first
year and seed down with barley and
oats the next year. Their object is to get the
land back to farming as soon as possible.
Hence a 10-acre farm will only keep
from 10 to 12 cows and a team and even
then buy a lot of hay and straw. It is
buying commercial fertilizer—G. E. O.,
Blainville, Que.

Building up a run down farm in-
volves the keeping of enough live
stock to consume practically all of
the raw products produced on the
farm, the careful conservation of the
supply of farmyard manure and the
following of a short systematic rota-
tion of crops in the fields. Where this
system is followed completely, almost
any farm may be built up to a high
point of productivity in the course of
a few years.

The live stock that it would be ad-
visable to keep will depend on mar-
keting conditions. Good dairy cows
and cream shipping afford the ideal
basis for farm building.

We would suggest a four-year rota-
tion. First year hood crop, followed
with grain seeded down, one year
clover, one year pasture and then hood
crop again. Where it can be grown
to a reasonable stage of maturity,
corn is the best hood crop. One point
we would emphasize: that the seeding
be a fairly heavy one, including 10 or
12 lbs. of red clover at least. The
clover will then be of a fine quality
and greater feeding value.

The rotation too must be varied to
suit local conditions. A farm on
which there is great amount of
rough pasture which cannot be
brought under the plow and a com-
paratively small proportion of arable
land, is better suited to a three than
a four-year rotation. Place under
the arable land under the three-year
rotation and omit the year of pasture.

In building up a run down farm, as
a rule it is not possible at first to
bring all of the farm under the short
rotation. In this case we would ad-
vise that as much of the farm as
possible be placed under the short
rotation and additional fields be added
as the live stock and the productivity
of the farm increase.

Will it pay to buy commercial fer-
tilizer? On some farms, yes; on
others, no. Where potatoes are grown
as a money crop, fertilizers can almost
always be used to a profit. Whether
or not they would be profitable on or-
dinary field crops must be determined
by experience and then first on a
small scale.

I took in from 15 cows
(\$68.25 apiece) and a six. They
picked their own living from May 8th
to October 1st. My cream went to
the butter factory in the summer
months and Montreal in winter.—E.
W. Taylor, Bromo Co., Que.

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sold Canada-wide**

It would be impossible to find a community in Canada,
however remote, that has not heard of FROST FENCE,
and few where FROST FENCE is not used. Canada leads
the world in many particulars, and is certainly not behind in
the matter of wire fence, with the famous FROST FENCE
works located right in her borders.

The new slogan "Buy Goods Made-in-Canada" is having a splendid
effect upon this country's industrial situation. It applies with particular
force to Frost Fence because not only is Frost Fence Made-in-Canada, but
the wire from which it is made is of Canadian manufacture too, which is more
than can be said of the majority of other wire products.

THEREFORE, whether you buy on the basis of greatest quality or
upon the grounds of good Canadian patriotism, your choice should be

Frost Fence First

WE MAKE OUR OWN WIRE. For one thing, it helps to keep Cana-
dian workers employed. During the year passed we paid \$50,000 to those
workmen who made our wire. This stayed in Canada. Other firms go to
the United States for their wire. Then again, it's the only sure way we
know of to get the quality we insist upon for FROST FENCE.

With extra quality wire as a starter, we are putting out today a fence
second to none in the world—an article that we gladly and proudly label as
"Made-in-Canada" from start to finish.

Write for our fence catalogue. If you can't get FROST
FENCE, get in touch with us. We may not be an agent
in your locality.

Frost Wire Fence Co., Limited, Hamilton, Ont.

be cared for with practically the same labor that is required to care for each of the smaller flocks. There is one water basin to fill instead of five, one grain hopper to fill instead of five, one set of pests to look through for eggs instead of five, and so on through all the operations in connection with poultry husbandry.—F. E. E.

Organization Work Progressing

The United Farmers' Movement in Ontario is adding to its membership with every passing week. Secretary

J. J. Morrison has recently succeeded in organizing several new branches of the movement in Prince Edward county. Two very successful meetings were recently held at Rednersville and Massacaga. Both places voted to take stock in the United Farmers' Cooperative Company, Limited, and to join in their influence with the United Farmers of Ontario.

Still later Mr. Morrison visited Cherry Valley. Although organization was not completed in the one evening, the work was left in the hands of a strong committee, Messrs. Carman Metcalf, W. T. Bell, E. Williams, T. Strain, W. Scott, and W. W. Hawkins. At Cherry Valley another meeting is to be held on April 7, to be addressed by W. W. Anderson, Reeve of Ameliasburg and Mr. Jas.

While in the county Mr. Morrison took advantage of an opportunity to address the county council. He brought out a lively discussion on rural conditions, and was delighted to find that the general sentiment of the council was strongly in sympathy of the aims and objects of the United Farmers. Mr. W. W. Anderson introduced Mr. Morrison to the council.

One of the real good meetings of the series was held at Hillier on March 18. An additional branch of the United Farmers of Ontario was formed, with the following officers: President, W. D. Beall; vice-president, W. L. Waif; secretary-treasurer, Percy Wilson; directors, Fred McNaair, W. J. Ready, J. Palmer, John Hillis, and Thos. Alexander.

Organization work is one of the most important features in the successful launching of a new movement such as the Ontario Farmers' Movement. Good work has been done by Mr. Morrison and his assistants in the past few months, and from now on the commercial end of the United Farmers' Movement will be pushed more strongly than ever before. In the inauguration of the selling and the face of tremendous opposition must be one of difficulty, but the leaders of the movement are confident of their ultimate success.

Items of Interest

Four cooperative experiments in apiculture will be conducted by the Ontario Agricultural and Experimental Union in 1915. Beekeepers should write Mr. Morley Pettit, Provincial Apiarist, Guelph, for full information regarding these experiments.

The Ontario Agricultural and Experimental Union will conduct 30 different cooperative experiments in Ontario during the coming season. They are prepared to distribute into every township of Ontario material of high quality for these experiments with grain, fodder crops, roots, grasses, clovers, and alfalfa. Farm and Dairy readers who are interested in better crops and better methods of producing crops should apply to Prof. C. A. Zavitz, O. A. C., Guelph, for fuller information on these experiments.

St. Andrews by the Sea

Nature has done much for St. Andrews. No prettier place can be visited by the tourist or the summer vacationist. It is the most popular of Canadian seaside resorts, and it is now chosen by large numbers of summer visitors from New York and Boston who desire to get away from the overcrowded resorts of the United States.

There are excellent sea bathing facilities at half a dozen places in the neighborhood. The Canadian Pacific has rebuilt the large Algonquin Hotel, while the "Inn" affords accommodation for those who desire the quietness of cottage life.



Here are fed for egg-laying can't find time to loaf. Give them the material that produces eggs, and they will keep on laying. That material is protein.

Grains alone do not supply enough of it. Feed Beef-Scrap in the right proportions and the ration will contain the proteins needed for big egg production.

An instructive book—32 pages—full to the covers with information on poultry raising, will be sent FREE if you mention this paper. Ask for "The Hen that Lays is the Hen that Pays."

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Hatching Eggs, \$1.00 per 15.
Hatchling stock shipped.
Golden Acres Poultry Farm, Roseton, Que. Alfred Chaplin, Prop., J. Reardon, Poultryman.

SAFETY FIRST SEED CORN
Get the Habit
Buy your seed from the Potter Farm and be sure of a good crop. Every ear guaranteed or money refunded.
Wis. No. 7 Write for Circular **White Cap**
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GUARANTEED AS TO VARIETY AND GERMINATION
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Lowest price for Pure Asphalt Roofing ever offered in Canada.
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Order your baby chicks now from our splendid laying strain of **SINGLE COMB WHITE LEG-HORNS**
UTILITY POULTRY FARM
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SEED CORN
Pricing Wisconsin No. 7, the best for the soil.
Geo. B. West & Sons, Northwood, R.I.B.S.
Tonight **FARM WHEN YOU WILL**
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Send for **FREE 1915 Catalogue**, 70 pages of *Bicycles, Sunrises, and Repair Material*. You can buy your supplies from us at Wholesale Prices.
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NOTE these prices for Quality Seeds
We pay railway freight in Ontario and Quebec on all orders over \$3.00 or more. Allow 25c. on each cotton bag required.
TIMOTHY 5 and 1/2 bus. "Diamond" No. 1 \$5.50 "Greenest" in extra No. 1 for purity \$2.47 1/2
RED CLOVER (Gov. Brand) "Sun" No. 1 12.00 "Moon" No. 3 11.50 We have a small quantity of Extra "Moon" **MAMMOTH CLOVER** "LITTLE CLOVER" No. 3 11.75 "Dusky" No. 1 14.00 "Sun" No. 3 12.50 "Lake" No. 3 10.00 **ALFALFA CLOVER** Ontario grown No. 1 17.00 Dakota grown No. 1 14.00 Ontario grown No. 3 15.00 per 1/2
Ontario Variegated 35
Lepman's Grimm 50
Grimm 40
SWEET CLOVER White blossom (hulled) 25 White blossom (unhulled) 30 Yellow blossom 15
Prices for Seed Grain include bags, and Railway freight in Ontario and Quebec if your order amounts to \$25.00 or more.
WHEAT Per bus. Marquis 22.50 Wild Goose 2.20 and Frye 2.20 White Frye 3.30 White Mammoth 2.20 Emmer 1.50
Per bus. **CORN** for ensilage (70 lbs.) shelled (100 lbs.) Golden No. 7 1.50 Bailey 1.40 Imp. Leaming 1.40 Longfield 1.40 White Cap Y. Dent 1.50 1.40 North Dakota 1.75 1.65 Compton's Early 1.75 1.65 Broken bushel orders **Good Corn** add 10c extra for each broken lot. **OATS** Per bus. O.A.C. No. 72, grown from registered seed 1.60 Yellow Mammoth (sample) 1.50 Marquis Banner, registered 1.50
This is the best sample of Oats we have. Take it to the bush. Just the thing for that field you intend to enter in the Field Competition.
Dumplings 1.25 **SPRING RYE** 1.75

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GEO KEITH & SONS
PRANKING ST. EAST
TORONTO ONTARIO

SEEDS
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On THURSDAY, APRIL 1st
AT BELLEVILLE

In recent issues of this Journal we have drawn your attention to the merits of the Holstein as a breed of superior dairy cattle. Their popularity among thinking dairymen is the strongest evidence we can offer in support of the claim that for all purposes as a **DAIRY COW SHE REIGNS SUPREME.**

BUT

While it is generally admitted that there is no breed of cattle that show such uniformly high production.

STILL

EVERY Holstein cow is **NOT** a large and economical producer. **SOME** families have shown unmistakably their outstanding superiority as producers over many others of the breed. To gain **PLEASURE** and **PROFIT** and avoid **DISAPPOINTMENT**

By All Means Buy the Progeny of Great Producers!

Here AGAIN---DON'T BE FOOLED!!!

If buying a DeKol, a Korndyke, a May Echo, etc., see that the individual claiming to be of such family has enough of the blood of these illustrious producers to be reasonably certain of its dominating the blood, inherited from ancestors of inferior ability. In other



words, let it be a DeKol, etc., in more than name.

"No matter how optimistic, success cannot reasonably be expected in the breeding of pure-bred cattle by the application of the principle 'That the puppy dog's tail will calmly wag the dog!'"

Here the BELLEVILLE Sales Excel!

When we speak of offering animals of the blood of the great 100 lb. cows of the Belleville District, we mean something worth while—25, 50, or even 100 per cent. of the blood of the greatest. "Like begets like, or better." "100 lb. cows from 100 lb. ancestors is the only safe rule to success."

We can **SELL** them, because we **Breed** them.

There are more 100 lb. bulls to the square inch in the Belleville district than in any similar area under the sun. We invite comparison.

The Catalogues are out! Some Things They Tell!

- A Service Bull—a beauty. Dam, a 116 lb. cow, with a R.O.P. official record of 23,807 lbs. milk, 1,037.5 lbs. butter in one year, sire—a brother to May Echo, 108 lb., with 23,707 lbs. milk, 1,042 butter in 1 yr. Look here breeders—this is some bull! Individually as good as his backing.
- Several sons and daughters of Inka Sylvia Beets Posch. Why you know him. He sired May Echo Sylvia, the 118.5 lb. 4 year old, and a host of other good ones. Look them up.
- Grand-daughters ("We are seven") of "Hengerveld DeKol," the only bull in the world with 74 officially tested daughters over 20 lbs. The sisters of these in one herd have milked up to 72.5 a day as 2 year olds, and two now in test in heifer form running between 80 and 90 (one a jr. 3 year old).
- Pontiac Korndyke—represented in this sale by some excellent gr.-daughters.
- Plus Burke—the splendid transmitting son of DeKol Plus, 106 lbs. a day (former Canadian champion), has some excellent sons and daughters.
- Velstra Triumph, (the 100 lb. sire). King Walker Francy 3rd's Admiral Ormsby, Count Segis Walker Pieterje (sire of a 88 lb. 2 year old). May Echo Verbelte, and several other good ones. All have representatives in the 1915 April Sale.

THEN REMEMBER:—

Many of the females are **BRED** to the great bulls above mentioned, and others, including a son of the great \$25,000 sire Rag Apple Korndyke 8th, out of a cow with a 100 lb. sister, and a 30 lb. gr.-dam. But say, we must stop. Get a Catalogue and read them up for yourself. But pin this in your hat and follow: it on April 1st,---

BELLEVILLE--is--the--Place--to--Buy--REAL--Holsteins

Cheap Rates on all Railroads.

Sale 12.30 sharp at Kyle House Stables.

JAS. A. CASKEY, Madoc
President of Club

F. R. MALLORY, Frankford
Secretary of Club

G. A. BRETHEN, Norwood
Sale Manager



The Sanitor

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MILES TWO COWS IN 4 MINUTE
Simple, Reliable, Easily started, works on Natural Hand Power or electric, Hand Power Machine of 100 lbs. Write today for Illustrated BROWN ENGINEERING 415 KING ST. W.

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and Making the F

Each of these books is less than a dollar.

We will send you one for one new subscription

FARM AND

Peterboro, O

WANTED

Manager for stock farm, man, able to take entire understanding handling men, etc. etc. Would want on at once. Give full particulars—family, salary, letter. Permanent position. Apply. BROCK

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Of a better quality in greater quantities

"MADE LEAF" of Milk

Contains over 33 p. c. Protein over 25 p. c. Fat

Write for free sample and price THE CANADA LIQUOR OIL MILLS, Toronto and Montreal

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AND RURAL HOME
PUBLISHED EVERY THURSDAY

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CIRCULATION STATEMENT

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

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

OUR GUARANTEE

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

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

The Rural Publishing Company, Limited
PETERBORO, ONT.

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

A Serious Taxation Defect

THE decision of the Ontario Government to raise a portion of its revenue by a direct tax of one mill on the dollar on all assessed property in the province, is a step in the right direction. Indirect taxes, whether levied through a tariff or on big public service corporations, are always wasteful and lead to extravagance on the part of government officials and indifference on the part of the people who in the long run may bear the cost of this inefficiency and extravagance. Ontario's new taxation, however, cannot be fully commended. One serious deficiency in the scheme of a tax of one mill on the dollar has been brought to the attention of the government by the Tax Reform League. We take the following from an open letter sent to the members of the Ontario Legislature by this League:

"Another and serious defect in the proposed tax is the fact that it, being levied upon the basis of the assessment made by each municipality, will be unfairly apportioned. For it is a notorious fact that every municipality is a law unto itself as to its basis of valuations.

"According to the report made to the Special Committee of the Legislature, by the Dominion Grange, on Dec. 19, 1912, assessments of improvements varied from twelve and one-half per cent. to one hundred per cent. of their value, and assessments of land from thirty-three and one-third to one hundred per cent.

It is evident, therefore, without some system of equalization of assessments that the places assessing at full value will pay twice as much tax as those which only assess at one-half. Experience shows that the poorer the municipality the more nearly the assessments approach the full value, and the more wealthy the municipality the lower the percentage is the assessed value.

"For example, the township of Carlow in Hastings Co., Ont., assesses land and improvements at one hundred per cent. of their value, while the township of Sarawak assess on a basis of only forty per cent. so that the tax will come with double force on those least able to bear it."

The League suggests that the basis of taxation be changed to a per capita tax to be levied

according to population on land values only. In this way those places whose basis of assessment is low, will have to pay a higher rate, while those with a higher assessment will pay a lower mill rate. In this way, the taxation would be more nearly proportioned to the wealth of the community than could be gotten by any other method. Both the criticism and the suggestion should be well considered by the Legislature.

Help Cheaper (?)

WAGES have fallen. Thousands are out of work in our big cities, hundreds in small towns, and dozens in manufacturing villages. Surely farm help will be cheaper! Reports from the Statistics Branch at Ottawa indicate that already the rural wage standard has begun to fall a little. But will help really be lower priced than in previous years? City wage earners may be glad to take a job on the farm until conditions improve in town, and may perhaps work for a few dollars a month less than the trained agricultural laborer. But can the city man do as much work, dollar for dollar, as the competent hired man who has stayed by his in years past? We believe that in most cases the competent man will be the cheaper laborer at the higher wage which he has a perfect right to demand.

There is one class of city workman who will

The Tide Cityward. Why?

The campaign of educational work carried on under the auspices of our various departments of agriculture with such assiduity for the last 30 years has done much good; but it has been powerless to stem the tide cityward. It has failed to meet the needs of the situation. It is good so far as it goes, but it does not go far enough. It touches only the products of wealth, and ignores the question of distribution. Without equitable distribution production will fall off. No man will sow where he cannot reap, unless he is enslaved and all things considered, the rewards of other occupations are greater than those of farming, farmers will drift to other callings, and agriculture will suffer. This is the penalty which nature imposes for a transgression of her laws, and there is no way to avoid it.—W. C. Good, B.A., Brant Co., Ont.

make good as a farm land,—the one possessed of an earnest desire to get back to the land. Such a man will be anxious to learn in order that he may some day run a farm of his own. We know of several men of this class who have gone back to the farm as hired men, and have made good. The ordinary wage earner, however, who desires only to tide himself over until he may again secure a job in town, is not worth anything like the rate of wages that prevail for competent farm hands.

And Bread, Too

MEN cannot live on bread alone; they need meat, milk, cheese, butter and so forth. But man's main dependence always has been and always will be on the great cereals,—wheat, oats and rice. We wonder what the world would do if we farmers as a mass were suddenly to adopt the advice of at least nine out of ten of our agricultural advisors and decide to feed on the farm everything grown on the farm and market only finished products. The cost of living is high enough now to the city-working man; under the new dispensation he would find living impossible. The mere fact that grain provides five times as much human food as it will make when turned into animal products, is enough in itself to show the necessity of the cereals in their unfinished form in the feeding of the race.

In the past new lands have supplied a large

percentage of the wheat demanded by commerce, and the older lands have been enabled to specialize more in animal production. New lands, however, are now becoming filled up. The farming of the future must be a combination of forage crops and grains with live stock to consume forage and grain by-products. Fertilization will be accomplished by the use of legumes and commercial fertilizers. The problem of the future generation of farmers is to learn to use commercial fertilizers intelligently and devise rotations including grain for sale, forage for live stock and legumes to feed the soil. When agriculture finally adjusts itself more grain will be grown the world over than is now the case—because of the fine tilth and greater fertility of the soil, and we will have the live stock in addition. It is also reasonably certain that a large proportion of the cattle under this future dispensation will be of the dairy kind. Wheat must come before meat, because, food value considered, it can be produced more economically. It is this same factor, economy of production, that will place dairy products ahead of meat.

First Things First

IN an address at the National Dairy Show, Secretary Houston, of the United States Department of Agriculture, is reported as saying:

"The greatest undeveloped resource of any community is its people, and if we devoted more attention to the people, we should be relieved of much of our concern for the conservation and development of our natural resources."

The great truth embodied in this utterance is not yet half understood by the officials of our Departments of Agriculture or even by the men on the land. When Farm and Dairy was first published the whole field of agricultural journalism was supposed to be the encouragement of crop and live stock production. The advice of all agricultural papers in that day could be summed up in "raise more stock to grow more crops to feed more stock to buy more land to grow more crops," and so on ad infinitum. Year by year, however, the idea has strengthened that these things are not of the first importance. They are but means to an end, and the end is "life more abundant." The day is not far distant when the wealth of every rural community will be measured by the intelligence and happiness of its people, not by its production of natural or manufactured products.

Farm Furrows

Seed testing and cow testing are a winning pair. The first increases the crops; the latter makes their feeding more profitable.

A short tempered man generally drives a short tempered horse. Another case of bad associations corrupting good winners.

Every city has its water supply tested regularly. Investigations to date indicate the wisdom of following the same practice in regard to the "perfectly pure" water of the farm well. Appearances are sometimes deceiving.

Says Farm, Stock and Home: "The silo is conducive to beastly happiness." He who climbed into the silo this winter instead of going through the huffard to the shock field, will probably add that a silo is conducive to manly comfort.

If we are continually grumbling about the hard lot of the farmer we need not be surprised if our boys hike off to the city. They are merely taking us at our word.

Why not pass along your ideas. Our offer is still open; six months renewal to your subscription to Farm and Dairy for a practical letter on a practical farm subject, the letter to be at least 300 words in length.

Farmers V

AT the meeting and Production in Lindsay, Ontario, Laidley, of Ontario, Emily Farmers' Club on behalf of the effect a reply to Government an experiment speakers to increase their report of the paper and Dairy, with should publish makes it impossible but herewith we report that Mr. J. frequent the paper. The most significant paper, in our opinion that it shows that the Emily Farmers' Club importance of economic factors which they relate to the farmers' clubs are the same problem spoke in part as follows:

gentlemen.—We have listened with your appeal on behalf of production. We believe policy worthy of pursued until the efficiency has been attained. You that the agriculture of the Dominion see the results upon them, and opportunity to rise as our responsibility, selves as men worth who to represent the

We also believe the best interests, is self service to the making his own own welfare. For a bushels instead of me, but here and question vital to every farmer in the past year two bushels instead of doubling production for increased efficiency and had marked it ten which has been the past ten years, as a whole, be better financially? We say no better off. Let further. While there has failed to bring as fit to the farmers, it great wave of prosperity has swept over shore to shore, and the wheels and spindles manufacturing centres has created employment portation companies, great commercial centers through the distribution increased production of perity, wealth and luxury by the farmers' everybody is enjoying the farmer them what is driving our ters to the cities and our national existence.

Equity and justice. In view of the fact justified in saying that and all the education we have failed, and always have adopted a system that was given special compensation to the land. Until this cultivators are justified stitutes and all agriculture as a mere ghost behind us raise the curtain we turn animated and great world forces: manufacturing, and co-

Farmers Views on Greater Production

At the meeting of the Patriotic and Production campaign held in Lindsay recently, Mr. J. L. Laidley, of Oshawa, representing the Emily Farmers' Club, read a paper on behalf of the club, which was in effect a reply to the action of the Government as expressed by the Government speakers in urging farmers to increase their production. A full report of the paper was sent to Farm and Dairy, with a request that we should publish it. Lack of space makes it impossible for us to do so, but herewith we publish its essential features. The local papers reported that Mr. Laidley's remarks were frequently heartily applauded. The most significant feature of this paper, in our opinion, lies in the fact that it shows that the members of the Emily Farmers' Club are awakening to the importance of social and economic factors in our national life as they relate to the farmer. Many other farmers' clubs are beginning to discuss the same problems, Mr. Laidley speaks in part as follows:

The Farmers' Class.—We as agriculturists have listened with keen interest to your appeal on behalf of increased production. We perceive it to be a policy worthy of being vigorously pursued until the highest possible efficiency has been attained. We assure you that the agriculturists of the Dominion see the responsibility resting upon them, and accept it as an opportunity to rise as a man, assume our responsibility, and acquit ourselves as men worthy of the industry which we represent. We also believe that the agriculturist, individually, working for his own selfish interests, is not rendering his best service to the state or best promoting his own moral and spiritual welfare. For me to produce two bushels instead of one would benefit me, but here and now I submit a question vital to every agriculturist. If every farmer in the Dominion during the past ten years had produced two bushels instead of one, thereby doubling production, necessarily calling for increased effort and expense, and had marketed it under the system which has been in vogue during the past ten years, would the farmers as a whole, be better or worse off financially? We say that they would be no better off. Let us go a step further. While increased production has failed to bring any increased profit to the farmers, it has created a great wave of prosperity. As this wave has swept over Canada from shore to shore, it has set in motion the wheels and spindles in the great manufacturing centres, which in turn has created employment for the transportation companies, and for all the great commercial centres of the world through the distribution of the increased production of our farms. Prosperity, wealth and luxuries are created by the farmers' industry, and everybody is enjoying this prosperity except farmers themselves. This is what is driving our sons and daughters to the cities and undermining our national existence.

Equity and Justice Needed.—In view of the facts stated, we are justified in saying that the institute and all the educational campaigns have failed, and always will fail, until we adopt a system of equity and justice that will give adequate financial compensation to the people on the land. Until this is granted agriculturists are justified in viewing institutes and all agricultural education as a mere ghost behind a veil. When we raise the curtain we see the phantom animated and actuated by three great world forces: The political, manufacturing, and commercial inter-

ests. These are systematically united and are working harmoniously together for the promotion of national prosperity, but utterly ignoring their duty toward us and our industry. We ask you, gentlemen, to appeal to the Government to enact laws to further our interests and protect us from the injustices we are being subjected to.

The Price of Hogs.—Let us view some things of the past and present. Does the price received for hogs since 10th October last warrant us to increase production? And in all due respect we ask Mr. J. W. Flavelle if any manufactured article hung so weak in the balance to-day, would there not be a prompt demand for curtailment of the output of that article? Then, in a parallel case, why does he call to farmers for increased production?

Permit us to ask if it would not be impossible to invent a new make of separator without infringing on the rights of the separators on the market? Would it not also be impossible to buy these rights without first signing an agreement not to cut prices on the separators? Is not this the reason that farmers are paying from \$75 to \$90 for a machine which, we think, would yield a fair profit to the manufacturer at \$25 f.o.b. at the factory? Do not interfere with the manufacturer, but keep on howling increased production along the lines of dairying.

Showing "Respect" For Farmers.—We believe that J. W. Flavelle, as a member of the Manufacturers' Association, is aware that there is to be held in Toronto in the near future a World's Conference of the Chambers of Trade and Commerce, attended by delegates representing art, sciences, natural resources, and the manufacturing and commercial industries of the world. The Canadian Council of Agriculturists, representing the organized farmers of Canada, applied to the Secretary of the Chambers of Trade and Commerce in London, England, asking for the privilege of sending a representative to this proposed conference in Toronto. We received a curt refusal. So the United Farmers of Canada are to be represented by the Right Honorable Sir John A. Macdonald. We take it for granted that this refusal is their way of showing their respect for the farmers.

Where Otities Score.—We are all aware of the vast multitude of unemployed to be fed this winter in the cities and towns. We are also aware that free books are provided for many of the city schools; and we also know that manufacturers and wholesalers add a percentage to the selling price of every article which they handle to cover or meet what they call uncontrollable expense. Consequently, the result is every time we buy a commodity that comes from a wholesaler or factory, we are helping to pay for public conveniences in cities to provide their children with free books, and worst of all, feed a vast multitude of unemployed either too proud or too lazy to work on our farms to-day. This is not all. These manufacturers and wholesalers set the price for our products and fix it so low that after we have paid the heavy toll which they levy upon us to provide conveniences for them, there is nothing left to provide necessary equipment and conveniences on our farms and homes. Then they bark at people for leaving the farm for the city. We ask them, we have much to learn and we are anxious to learn, but we propose that a few of the agricultural expert theorists read a farm in our neighborhood and practice what they preach, under the difficulties which the majority of farmers are laboring to-day, and then give us an annual financial statement.



The survival of the fittest

TRIED in the furnace of competition and subjected to the test of years of practical use on nearly 2,000,000 farms the world over, the De Laval has proved its overwhelming superiority to all other cream separators.

Twenty years ago there were as many makes of factory as of farm separators, but for the past ten years the De Laval has had this field almost to itself, 98 per cent of the cream-separators in use by creamerymen and market milk dealers to-day being of the De Laval make.

It has taken the inexperienced farmer a little longer to sort the true from the untrue, the wheat from the chaff, in the maze of confictory catalog and local dealer separator claims, but year by year the ever-increasing proportion of farm separator buyers is reaching the same conclusion as the creameryman—that the De Laval is the only cream separator that can afford to buy or use.

Many other cream separators have come into the limelight of publicity for a few short months or a few short years, claiming to be "as good as" or "cheaper" than the De Laval, but their users have sooner or later found them lacking in some one respect or another, and even where a few have seemingly done well their users have come to learn that the De Laval was a still better machine.

The unit or the less fit cannot possibly survive for long in separators or anything else. Think of all the separators you used to see advertised so extravagantly in your favorite farm papers. Where are they now? Why do you seldom, if at all, see their names mentioned? Simply because the fittest must survive and the others must fall out of the race.

The De Laval has triumphed over all other separators, and its supremacy is now almost as firmly established in farm as in factory separators because its separating system, design and construction are essentially different from and superior to other separators.

A De Laval catalog to be had for the asking explains and illustrates these differences. A De Laval machine, to be had on test or trial from the nearest local De Laval agent, does no better still. If you don't know the nearest local agent, simply write the nearest De Laval main office as below.

De Laval Dairy Supply Co., Ltd.
MONTREAL PETERBORO WINNIPEG VANCOUVER
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

Say

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

OUR FARM HOMES



If you are acquainted with Happiness, introduce him to your neighbor.—E. Brooks.

Mother's Holiday

By Fanny E. Shepherd

MRS. HALL was busily engaged laying the breakfast table, while Dollie, her eldest daughter, stirred the oatmeal vigorously.

"Move those potatoes, Dollie. I can smell them burning, dear," remarked her mother, looking anxiously toward the stove. "Why don't those boys come and Dad too? He should be here by now. They said they would not be late because of my going away; and there's the butter not packed yet; and—"

"Never mind, Mother," laughed Dollie. "There's plenty of time. The train doesn't go till dinner-time, and the poultry are all packed away. You won't enjoy yourself a bit, if you start off so tired. I'll make you a cup of tea, while we're waiting. Don't you worry; never know them to be late yet." And she bustled around, while Mrs. Hall dropped into a rocking chair and rested her already tired hands in her lap, watching the boys as they trooped out from the barn. There were four of them, followed by their father with the milk pails. No wonder the little mother was proud of them—great wavy fellows, always ready to do a kindness for a neighbor, adoring their mother and teasing their sister, and generally making such a noise that, as Mrs. Hall said, "You could hardly see to think" at meal times.

"Oh Jimmy goah, Ma!" groaned Bob, the youngest of them. "Are you really going to leave us to the tender mercies of that girl? You'll sure find us all dead and buried when you come back. Why she couldn't fry a pancake to save her life," and he lopped on to the sofa, shedding imaginary tears.

"I'll pancake you," said Dollie indignantly. "Why I've been practicing it week; haven't I, Ma? Here she made a grab at a handful of his hair, but Bob was too quick for her. Adroitly placing a chair between them, he ran to the other side of the table.

"Ah; you can't even boil the potatoes without forgetting to put salt to them," he teased; "and you know and I'll make us out of eggs, sugar and milk in our tea, and it never tastes so nice that way."

"Sure I will," was the quick reply. "If you only waited on yourself a little more at meal times, mother would have time to eat more herself; wouldn't you, Mummie?"

Mrs. Hall beamed lovingly on them all as they seated themselves noisily at the table.

"You know I like nothing better than waiting on you all," she smiled, putting an extra spoonful of sugar in Bob's tea and a little extra cream into father's. "But it will be a nice change to go away just a few days."

"Few days indeed! If you come home in less than a fortnight I shall

think you can't trust me with the housekeeping," and Dollie tossed her pretty head.

"I don't believe you'll go at all, Ma," remarked Will, the eldest boy. "Dad may get you as far as the station, but I shall never believe you're really gone until he comes back with-out you. Why, who would be able to—tuck us up in bed?" Dollie won't, I'm sure."

"You bet she won't," was a quick response. "And now the s— you get out of the house (to p— gently) the sooner we can clear up."

They went clattering off, and soon Mrs. Hall and Dollie had washed the dishes and cleared up the room. The

Tree Embowered; Therefore Beautiful. The Home of Jas. P. Trernay, Huron Co., Ont.

better was packed and put in the de-mo-crat, with the eggs and two cases of poultry, for it was close on Thank-giving and Mrs. Hall was going to combine business with pleasure. A new pair of glasses was an absolute necessity, so it had been decided that a trip to the nearest city would be a nice change for Mother, and give Dollie a chance to air her housekeep-ing abilities.

"Now then, Mother, I think you are quite ready," remarked Dollie. "You look very sweet in that new dress I made you, though say it as shouldn't," giving her Mother a good hug. "I think you look nice, than anybody's mother, and don't you worry about anything. I'll feed the chickens and the calves—or at least see that somebody else does—and try and not kill the boys with my cooking; and be sure and wear your best things every day, won't you?"

Mother thought almost guiltily of the rather shabby but "comfy" slip-pers she had slipped into her grip while her capable daughter wasn't looking, and assured her she would mentally after breakfast anyway. A glance out of the window showed Mr. Hall hitching up Nancy and Fanny, the two quietest horses on the farm

and the only ones Mrs. Hall would sit behind at any time.

Hasty goodbyes were said and off they started. They only lived about four miles from the station, so ar-rived there in good time.

"Half an hour to wait, Mother," laughed Mr. Hall. "I told you you'd be too early." And so your heart hasn't failed you yet. I never really thought you would get even so far away from us all."

"Oh you go on, John. I'm going to have a honeymoon all to myself and enjoy it too, at least as much as I possibly can without you," and she squeezed his arm lovingly. "I don't care if it's an hour too early; I'd better be than than five minutes too late. Are you sure that the butter is not in the sun?" and she got up and sniffed it. She never could get it. "Rain! They never can get it, and won't begin now unless somebody sets a firecracker off under their heels. Here she comes, Mother," and he picked up her grip.

There was the usual bustle as the train puffed in. Mrs. Hall insisted on seeing her poultry in before she got in herself. Then there was a close clasp of her husband's hand and she was off.

There was something oddly familiar in the motion of the train as Mrs. Hall leaned back in the seat tired by a little excited.

"Only Fanny," she said to herself; "it is six years since I have been in a train, and in all that time never more than ten miles away from home. Only one night away from home, and

that was when I sat up with Mrs. Smith when her little baby died. Ah, well, I never minded; and I am so glad none of them ever knew how badly I wanted to get away from it all sometimes."

She was one of those tall, angular women, not so strong as some, but one of those kind who can keep plodding on, day after day, year in and year out, never tiring and never getting any rapier from the daily grind—one of our typical pioneer women, of whom there are many in the West, who have stood shoulder to shoulder with their men folk and helped make the West what it is to-day.

It was several hours before she reached her destination, and it was beginning to get dusk as the train glided into the station. She gathered her belongings hastily, and in another minute or two found herself on the platform. Spring her precious poultry hampers being hung out from the side of the train, she scuttled along, and, seating herself firmly on them, awaited developments. Some-how she was beginning to feel just a little nervous and there were such a lot of people around, all going to and fro. Perhaps some one would offer to help her in a minute. She almost wished Dad was with her. He

always knew what to do. She had never been so far away from him ever since she left England.

Here she pulled herself up with a jerk. "This would never do. How the boys would laugh and tease her if she ever told them she had felt like this." So she took her courage in both hands, and, asking the first man she met who looked like a porter, she was soon directed what to do, and found herself outside the station in the street.

It seemed very strange to be walking on a real pavement again, but it was nice too, and her spirits rose, as she once more rubbed shoulders with the crowd of busy goings. She entered the way to the Young Women's Christian Association. Dollie had told her to be sure and go there first of all, and so if she could have a room there. And of course Dollie never all about anything; for had she not had two winters in Winnipeg, staying with friends who did their best to make her feel at home, and she had and have a good time. She easily found her way, and mounting the broad steps found herself in the large hall.

In the parlors adjoining women of all ages sat around waiting for the supper-bell. It looked so homelike to the tired woman. A pretty girl with long fair hair braided up and a large tabby cat lazily licking her kitten reminded her of her own home. And there was actually an open fireplace with logs burning merrily. Somehow it almost made her ache to look around, it was so English—so, well like home.

"I'll supper-bell rang and there was a stir. Most of them walked leisurely towards the large dining hall. A motherly looking woman, seeing her hesitate, invited her along and seated her at one of the tables where she could have a view of the room and other diners.

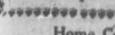
"Strange, aren't you?" she en-quired; and Mrs. Hall nodded.

"Well so was when I first came here, but you'll soon get used to it." They scanned the menu to-gether. "You see you can have just what you like here and pay accordingly," she continued. "I'm real hungry to-night. Here comes the waitress." Here followed a parley as to what they would and would not have, and Mrs. Hall leaned back in her chair and took mental notes. The quiet, refined air of most of the women was what struck her most, and the subdued hum of conversation, so different from the noisy meal-times at the farm, where everybody seemed to be talking at once and gen-erally at the wrong time and in the wrong voice. Yes, Dollie was right. Those bare walls, plainly colored, did look ever so much better than they would come to be, with the colored wall paper and a lot of pictures; and yet, so widely right not to have took pic-tures on the table, a never-ending source of argument between Bob and Dollie; and, yes, she felt as if she could pay-able napkins and take home. They did improve the look of the table and wouldn't cost very much.

"You looking at that girl's dress over there?" inquired her com-panion. "Isn't it a frigate the way they dress nowadays? See that tall girl with the red hair? Carrotty I call it, but she's all right. She's a stenog-rapher, and that little bit of thing in the white dress; no, not her, the other one; she's a school teacher. Sings beautiful, she do. And that tall, skinny woman over there must be forty if she's a day, for all her dressing-up young. She's the cleverest one in the room; can speak four or five languages (my husband always says she's a very good speak-er); has travelled all over the world; invested all her money in the oil boom; stone broke now."

(Continued next week)

The Upwa



Home Co

"Finally, he ye all ing compassion ont as brethren, be pliff —I Peter this is, u "Though this is, u our wedding, ever d and low-spirited and say it, cross, won't talk to him and c're afraid he gets tired. He doesn't seem to children?" This was by one friend to ano- Poor father, poor d'read! No matter w anxieties, what the man had no justifi- doid like that over was a very harmful for himself, destroy peace and happiness spare writes of "er jaundice by being pe really doing himself

TODAY IS NOT

There has ever t this vast inheritance all these things, and accomplish tomorrow's future? I wonder if there has ever a day there has ever a day for tomorrow! Sele

one cannot but think portant aspect, that and spiritual.

Children are consi-dered to be the first ones here, and are punished, but come home at night. "I'm cross, let every- my way," and every- one wishes the sun- could be judiciously a his case, if it would on a realization of what t He would never driv- a stranger or friend- the members of his o- though he loves them father can.

If at times a Victo- be taken to enable hi- self speak and a snap- he looks, a transfor- wrought.

Without thoughtf- and love, one and a- another, the home can spot on earth that Father meant it to be

Good Work of the Institute

Geo. A. Putnam, Su- The influence of the stitute in an education- felt in every district, much where they have ing courses, and stud- was, as where they h- or improved public brought high-class ent- lecturers to the village- tions it is possible to ge- terial from legal labo- stitutes excel in gettin- tion of every special- person in the district- tions it is possible to ge- monstrations in hort- tures, etc. Several I- taken advantage of the- tion lectures, and a f- through the legal lab- form technical classes fo- It has been gratify-

The Upward Look

Home Courtesy

"Finally, be ye all of one mind, having compassion one for another; love as brethren, be pitiful, be courteous." — 1 Peter iii., 8.

"Though this is the anniversary of our wedding day, Jack is so depressed and low-spirited and yet I hate to say it, cross, won't you come in and talk to him and cheer him up. I am afraid he gets tired of hearing me. He doesn't seem to enjoy even the children?" This was the request made by one friend to another.

Poor father, poor mother, poor children! No matter what the business anxieties, what the provocations, that man had no justification for casting a cloud like that over that home. It was a very harmful mental attitude for himself, destroying much of the peace and happiness of life. Shakespeare writes of "creeping into the jaundice by being peevish. As he is really doing himself physical harm,

in the face of the present hard time, the Institute contributions to philanthropic causes have increased. Grants to hospitals, children's shelters, old people's homes, the travellers' aid, and general relief work have not been neglected, even when the demand for the Red Cross and patriotic societies was so pressing. Perhaps the chief improvements which have always been very popular with the Institutes will receive less attention, although during the past year they have been as enthusiastic as ever in building sidewalks, improving public halls, paying for street lamps and drinking fountains, planting trees in parks, distributing flower bulbs, etc. One Institute last year gave a prize of a ten-dollar lawn mower for the best kept lawn in the town. Another way in which several Institutes have been doing a much needed work, and one which we hope will not be neglected, is the care and beautifying of country cemeteries.

It is almost impossible to outline the scope of the various lines of work undertaken and carried out successfully by the different branches of this organization. In one town, the special

TODAY

TODAY is not the best day that ever will be; it is only the best day there has ever been. It is the helr of countless yesterdays, and from this vast inheritance each may take what he will. Tomorrow will inherit all these things, and the accomplishments of today as well. What you will accomplish tomorrow depends upon the way you take today. "In yourself lies your future"; tomorrow must be built today. And, remember, today is the best day there has ever been. So what high hopes we are warranted in holding for tomorrow! Selected

one cannot but think of the more important aspect, that of the mental and spiritual.

Children are considered naughty when they are peevish and fretful, and are punished, but a man can come home at night with an air of "I'm cross, let everyone keep out of my way," and everyone does. One often wishes that summary punishment could be judiciously administered in his case, if it would only bring him to a realization of what he is really like. He would never dream of speaking to a stranger, or friend, as he does to the members of his own family, although he loves them as much as a father can.

If at times a Victor record could be taken to enable him to hear himself speak and a snap-shot to see how he looks, a transformation might be wrought.

Without thoughtfulness, courtesy and love, one and all towards one another, the home cannot be the joy spot on earth that our Heavenly Father meant it to be.—I. H. N.

Good Work of the Women's Institute

Geo. A. Putnam, Superintendent
The influence of the Women's Institute in an educational way is being felt in every district, perhaps not so much where they have taken up reading courses and study of literary works, as where they have established or improved public libraries, or brought high-class entertainments and lectures to the village. In most sections it is possible to get excellent material from local talent, and the Institutes excel in getting the cooperation of every specialist or professional person in the district. Especially has this been helpful in getting demonstrations in horticulture, bee-culture, etc. Several Institutes have taken advantage of the university extension lectures, and a few have worked through the local school board to form technical classes for the people. It has been gratifying to note that

feature is a neighborly and uplifting attention to the foreigners. In a few Institutes, where most of the members are farmers' wives, cooperative egg circles have been formed. Several Institutes have a specialty of helping with the fall fairs, and of holding Institute fairs to encourage various lines of domestic art and to raise money for philanthropic causes. In some places this winter, the Institutes have found all they could do to take care of the needy families in their own locality, and no work could be more important than this. The special lines of work to undertake are left to the best judgment of the individual societies, and they have proved this year, as never before, the high ideals and the stamina of their organization.

Work Table Satisfactory Height

A woman four feet 10 inches in height will find 33 1/2 inches a satisfactory working surface height for kitchen tables, etc., says a correspondence study instructor in home economics of the University of Wisconsin Extension division. Above this, an addition of half an inch in table height for each inch of increase in human stature will usually be about right.

Low sinks, tables, ironing boards, etc., are responsible for many tired aching backs. By a little thought in purchasing, these pieces of furniture may be of such a height that an upright position may be maintained while the housekeeper is working at them. In any case it is well by some means to adopt all kitchen furniture to the height of the user.

Tables that are too low can be raised an inch or more by castors. Failing that, it will be worth the money to lengthen the table legs. The sink can be raised by lengthening the waste pipe and raising the faucets. But a simple and effective device is to raise the dish pan by setting it on an inverted pan.

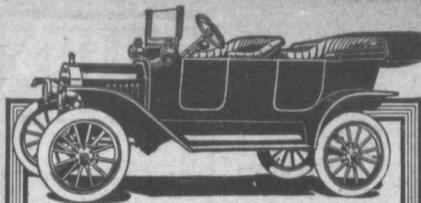
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The real, original vacuum washer. The washer that will wash anything—shirts, bands, dirty cuffs, collars, anything in three minutes. That is what the RAPID does. For a short time only, we will send the RAPID post-free, must send this advertisement along with the dollar. Don't miss this chance—it won't be repeated. Send \$1.00 to-day with this ad. If not satisfactory, your money will be returned.
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To secure this set, you need only take a couple of afternoons, drive around to a number of your friends, and explain the situation to them, and we are sure that at the end of your second afternoon you will have the twelve subscribers.
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THE COOK'S CORNER

Conducted by LILLIAN CRUMMY

A Variety of Oatmeal Breakfast Dishes

Oatmeal as a cereal is unexcelled, as it is nutritious, and very easily digested if it is properly cooked.



Opinions differ as to correct methods of making oatmeal porridge. Some think it requires about 15 or 20 minutes' boiling, others let it simply come to a boil, etc.; but according to medical authority this is wholly inadvisable, and will produce dyspepsia. It is said that cereals are seldom over-cooked but rather the reverse—under-cooked. It behooves us, therefore, to do our duty to ourselves and others by following the advice of physicians who say that oatmeal should be cooked at least three hours, but more preferably five hours. It should be cooked the evening before in a double boiler, or at least over boiling water, then in the morning it simply needs reheating. Below are a few recipes for the preparation of the Scotchman's breakfast food.

Roll'd Oatmeal Porridge—No. 1.
Take two cups rolled oats and add to one quart boiling water to which has been added one teaspoon salt. Boil in double boiler for five hours. Serve with cream and you have an ideal winter food as it is heat producing. Some prefer it served with butter and sugar.

Roll'd Oatmeal Porridge—No. 2.
Make porridge according to above directions, add nuts and raisins. Serve with cream and sugar. This also makes an excellent dessert for dinner.

Porridge can also be made thick, let cool in a mold; then slice and fry in butter or fresh gravy and serve

with syrup. This is a favorite dish with some.

Oatmeal Gruel
Have ready in a saucepan one heaping tablespoon of oatmeal with two tablespoons cold water, add salt and stir oatmeal with boiling water. Let it boil slowly one hour at least. The gruel can be sweetened to taste. It can also be made with milk instead of water. If too thick it can be thinned with milk after it is cooked. Long slow boiling is essential to success with gruels. If this quantity is too small, double proportions.

Oatmeal Blanc Manger
One pint boiling water with a tiny pinch of salt. Sprinkle into it by degrees half a teacupful of oatmeal. Let boil three-quarters of an hour, stirring occasionally with a fork. When done, add sugar to taste and the juice of half a lemon if it is liked. Have an egg well beaten and pour the boiling mass on it, beating with a fork until thoroughly mixed. Return to saucepan and let it just come to the boil. Pour into a mould wet with cold water. When cold turn out and serve surrounded with whipped cream.

Breakfast Cereal Cakes
Add two beaten eggs, one-third cup flour, and one-quarter teaspoon salt to three cups cold cooked porridge. Mix well. Put three tablespoons butter in a frying pan and when hot, drop the mixture by small spoonfuls into the pan. Cook carefully until brown, then turn and brown the other side. Serve hot with sugar or syrup for breakfast.

Oatmeal Pudding
Two cups rolled oats, two cups sour milk, one cup raisins, one tablespoon butter, a very little sugar, pinch of salt, one teaspoon soda. Steam two and a half hours or more. Serve with cream or sauce.

Do It the Easy Way

Mrs. Arthur McIntosh, Ontario Co.,

Two neighbors on either side of us represent two extreme types in their ideas of home beautification. Both of them use trees, shrubbery and flowers in beautifying their lawns, but they use them in a different way.

The first home down the road is a blaze of color the whole summer through. The shrubbery is not in evidence so extensive is the use made of gorgeous flowers, geraniums, foliage plants, gladioli, salvia and so forth. The house itself is surrounded with these plants of glowing color. There are borders on the lawn of the same plants, there are big beds in the centre of the lawn. It is not very often you find a farm family that is willing to spend as much time or as much money on home beautification as these neighbors do.

Our first neighbor up the road has an entirely different idea. He has a few flowers here and there, but depends on permanent shrubs and trees to beautify his home. Around the base of the house are a variety of shrubs which look very beautiful in June and have nothing to attract but their green foliage during the rest of the season. The lawn is bordered with shrubbery and back of the shrubbery are trees. The first neighbor to whom I have referred is not very strong on trees. He says that plants do not grow well in the shade.

Both of our neighbors are satisfied with their methods of beautifying the home. We have made our choice, and are adopting the latter. The gorgeous method of our first neighbor appealed to us when we first moved here, but gorgeous appeals are not lasting. There is something about the quiet permanent beauty of green foliage that stays with one longer.

Another consideration is the amount of work necessary in caring for

(Continued on page 17)

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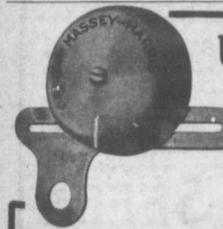
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1258

The merchants have
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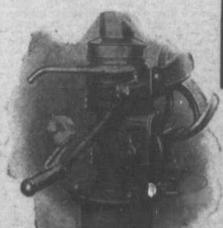
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Plain and Practical Designs on New Lines

Do it the Easy Way

(Continued from page 16)

Plain and Dairy patterns shown in these columns are especially designed for Farm and Dairy's *Woman Folk*. They can be relied upon to be the latest and most modern patterns of the paper pattern. When sending Farm and Dairy your order please be careful to state both the name of the pattern and the name of the publisher. Price of all patterns is *One Dollar*, no cash. Address all orders to *Publications Dept., Farm and Dairy, Publishers, Col.*



plants. The shrubbery may cost more the first year, but thereafter there is no expense and we note that neighbor No. 1 requires at least 10 times as much labor to care for his lawn and flowers as it takes neighbor No. 2 to care for his lawn and shrubbery.

We like flowers as well as shrubbery, however, and we will have a few scattered here and there throughout our shrubbery borders, also little touches of color but not too obtrusive. This method of beautifying the home is the easy way and, we believe, the best way.

The Spring Sewing

"Aunt Fanny," *Petersboro Co., Ont.*

What beautifully mild, spring-like days we have had recently! I venture to say many of us have realized for the first time that spring is fast approaching, and we are led to think somewhat seriously of the spring sewing. And lucky is the woman who plans to have all her sewing completed before the busy work of gardening, house cleaning and other spring duties sets in.

To many home dressmakers this spring sewing may be a sort of job, bear in that the same garments are made from year to year from the same old patterns and with the same kinds of material. How many begin this task by getting out the box of old patterns that have been used for years, from which to cut the undergarments and other plain clothes? And how about materials? Some conscientious women always make their aprons and dresses from checked gingham, dark blue print, or other heavy cotton material.

I am always on the watch for new ideas in patterns, even for the simple garments. A new pattern does not represent much outlay, or often one can exchange patterns with a neighbor. By having a new style to follow, the sewing will be a much more pleasant task than if one uses an old pattern so worn that one can hardly cut a garment from it. Pattern manufacturers are showing more and more one-piece garments, for the little ones especially, and why should we not have the very simplest and most convenient styles to follow and reduce work to a minimum.

Then let us get away from the old standbys of checked gingham and dark prints. It is monotonous to wear the same old things from year to year when so many new materials are now being used. The great popularity of crepe materials is a boon to the busy woman, but it is one that the woman on the farm has been slower to accept than her city sisters. Crepe garments wash easily, dry quickly, do not require ironing and are very attractive in appearance. And there is no reason why we who live in the country should not be as neatly dressed as our city sisters. If you are dressed attractively and up-to-date we have more respect for ourselves, and command greater respect from others.

Why not, when planning the spring sewing this year, aim to introduce some new styles and materials, and see if the results are not favorable.

When washing granite, porcelain or aluminum ware it should never be scraped. While it may not chip the first time, it is bound to be injured before long. A better way is to soak in a weak solution of soda and water. In fact soda is good for cleaning all greasy dishes.

Sometimes when we are in a hurry to fill the salt or pepper shaker, we cannot find the little funnel which which to fill them. A good substitute is to cut off the corner of an envelope, then cut off the tip of the corner and proceed to fill the shaker.

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one pint
one bushel
with salt
and water.
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Return
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17)

The merchants have now had their spring openings, and we may feel safe in saying that the spring and summer fashions have been formally launched. While as in the usual case, there are some very extreme styles, there are also many simpler and shorter skirts in going to receive their full, although the long and moderately narrow skirt was one of the latest styles Duane Fashion has given us for some time. The hats of the spring are to be very much like those of the winter season as far as size is concerned, both large and small being shown, the latter of course being for more dressy occasions. The trimmings are flowery and ribbon, the small flowers possessing more prominence than the larger ones.

1251-Lady's "Overall" Apron: It will not be a great while until house-cleaning is to have our work aprons, and hence dresses all ready for business. The style shows herewith might be used as a dress, although it is dubbed an "overall" apron. The buttons and buttonholes on the left front make the trimming of this garment very simple. Size 34, 34 to 44 inches bust measure.

1252-Girl's Overblouse Dress: This new and graceful model is made with a fairly snug waist and an overblouse effect. The belt and collar also make an attractive finish. The sleeves may be made either long or elbow length. This dress would be pretty if designed from serge, cashmere or even some wash material. Four sizes: 4, 10, 14 and 18 years.

1260-Lady's Coat Suit: The knee coat is being shown quite extensively this spring, sunny having little vents set in as in the illustration herewith. This style has the decidedly loose, flowing effect. The skirt is quite full, fairly short with pinna on each side of the front and back gone. This style calls for two patterns, the first for such, and requires about 7 1/2 yards of material for a medium size. The coat is cut in sizes from 34 to 44 inches bust measure and the skirt in sizes from 22 to 32 inches waist measure.

1254-Lady's and Misses Overdress: The skirt fitted and effect is being shown quite freely and the style here illustrated is a good model. If preferred a crushed gingham might be added with the ends hanging down either in the back or front. As noted in this style, sleeves or present wearing are long and collars high in back with 4" shaped opening at the throat. Seven sizes: 34, 36 and 38 years for misses, and 42, 44, 46 and 48 inches bust measure for ladies.

1243-Girl's Overblouse Dress: A jaunty style for the growing girl and summer season, and would be very pretty made from brown serge with black or tan braid for trimming. This dress has a decidedly new overblouse effect and the skirt is nicely side pleated. Cut in four sizes: 4, 10, 14 and 18 years.

We are receiving a goodly number of orders for our new spring and summer catalogue, and our readers will do well to send an extra set for it when ordering their patterns. We are not distributing the Home Dressmaker this spring, as our larger catalogue is much more comprehensive, containing over 400 designs.

95
Upward
ON TRIAL



AMERICAN CREAM SEPARATOR

A new invention, to meet the demand of a new, well made, easy running, perfect churning separator for SKIM, Ultra-cream or cold milk; makes heavy or light cream. **ABSOLUTELY ON APPROVAL.** The local dealer is a money saving device. Different from this separator, which illustrates our latest capacity machines. **Write for literature.** **WINDFEST, TORONTO, ONT., 434 ST. MARY'S E. Whistler** your daily to large or small, write for literature free. **Address: AMERICAN SEPARATOR CO., BOX 3295, Bismarck, N. T.**

**Better Butter—
Bigger Profits!**



If you wish your butter to be smooth and uniform, use the

**“BRITISH”
Butter Worker**

Adopted by the best dairies in Gt. Britain and Canada. Makes the butter firm—even-constant all through. Results in better butter and bigger profit!

Sold by dealers everywhere.
These sizes—14, 16, 19, 24, and 26 in. wide.

MAXWELL, LTD., St. Mary's, Ont. 4

Variations in Cream Tests
C. H. ECCLES, MISSOURI EXPERIMENTAL STATION

One of the most common causes for dissatisfaction in better cream is the variation in the test. A farmer naturally thinks when the cream is from the same cows, fed the same ration, milked by the same man, and when the same separator is used, that the test or per cent. of fat in the cream should remain the same. When sudden variations occur in the test he feels that the test is incorrect. The true errors are often made in making the test, especially in taking the samples, but variations constantly occur in cream tests that are not due to this cause but to conditions under which the milk is separated. It is impossible to run a separator under farm conditions without having variations in the test of the cream occur and in fact if the cream buyer should always give the same cream test, it would be more suspicious of dishonesty than when it varies slightly. Our experiments indicate the following to be the common causes of these variations:

1. Variations in the speed of the separator.
2. Variation in temperature of milk separated.
3. Rate the milk flows into the machine.
4. Amount of water or skim milk used in flushing out the bowl.
5. Change in the richness of the milk separated.
6. Adjustment of the cream screw.

Speed

Change in the speed of the separator is the most common cause of variations in the per cent. of fat in cream. The greater the speed of the separator, the smaller the amount of cream and the higher the per cent. of fat. A separator when run at three-quarters of the regular speed may deliver cream testing as much as 10 per cent. less fat than when the same machine is run at the regular speed. When run at the lower speed, a larger quantity of cream is secured and it always tests lower. A variation in speed has a much greater effect upon some machines than upon others. Speed also makes a much greater variation in the test of the cream when the separator is set to deliver thick cream than is found when thin cream is separated. If the separator is adjusted to deliver cream testing 25 per cent. at regular speed, the test will perhaps not be more than 20 per cent. less if the machine be irregular speed, while if the cream screw be so adjusted that the machine run at full speed delivers cream testing 40 per cent., at the three-quarter speed the test may be from seven to eight per cent. less. This variation due to speed is not caused by a difference in the amount of fat remaining in the skim milk, but by the proportion of the whole that is taken out as cream and as skim milk. In other words, at a lower speed more skim milk goes into the cream.

Cutaway
BUSH AND
does work no other
It cuts down bushes
and does all kinds of
It is big and strong
It has an extra
sell CUTAWAY (CLAR
at once for low cat
THE CUTAWAY
Maker of the original C.L.A.
(in MAIN STREET)
Weight 600 pounds
24-inch depth
Jergel sharp

CREAM

We say least and pay most.
Money talks.
Let ours talk to you.
Write NOW.

Belleville Creamery Ltd.
References: Molson's Bank, Belleville

CREAM WANTED

Patrons of Summer Creameries and Cheese Factories, we want your Cream during the winter months. Highest prices paid for good cream.

Drop us a card for details
Gulph Creamery Co., Gulph, Ont.

WANTED—Position as Buttermaker; 8 years' experience. Best references. Write Box 80, Farm and Dairy, Peterboro, Ont.

Richness of Milk Separated

The per cent. of fat in the milk separated has a marked effect on the per cent. of fat in the cream. It is an common impression that more cream is obtained from milk rich in fat than from that poor in fat, but such is not the case. The richness of the milk separated affects the quality, practically the same amount is obtained whether the milk has a high or low per cent. of fat. It is a well-known fact that the milk of one cow may vary in butter fat from one day to another due to weather or excitement, and as the cow advances in the period of lactation the richness of the milk increases. A number of lower cream test. These variations in the richness of the milk alone are sufficient to cause variations in the test of cream that will attract attention.

STERILIZER

One 300-Gallon Wizard or Pasteurizer, copper condition. Will sell at Box No. 452, Farm and D

EGGS, B LIVE PO

Bill your shipments to rise up by postal and rest promptly.
Egg Cases and Poultry
The **DAV**
Established 1854 TO

WANTED

Our prices have shown a steady advance for good quality

CREAM

We are prepared to meet any competition. You should write us.

Toronto Creamery Co., Ltd.
Church St., TORONTO, Ont.

SITUATION WANTED—Assistant Cheesemaker, 3 years' experience, wants position. Good references. Apply Box 52, Farm and Dairy, Peterboro, Ont.

EXPERIENCED YOUNG MAN wants position in cheese factory as second man. Write Box 618, Farm and Dairy, Peterboro, Ont.

BUTTERMAKER wants position as manager or first in up-to-date creamery. Seven years' experience. Apply stating wages and list to Box 1460, Farm and Dairy, Peterboro, Ont.

Variations in Cream Tests

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Write for literature
Bicycle, with all accessories
We have
any address
We will
I will
DO NOT
Our
ONE OF
and calling
to you
We
HYSLON
Dept. 4 TO

**International Harvester
Cream Separators**



“AFTER you put in a cream separator and once experience the relief it gives and the work it saves, you will never go back to the old way of handling milk and cream.” So says a farmer's wife who has managed a farm dairy for over twenty years, and who now has an IHC cream separator.

IHC cream separators—Dairymaid, Lily, or Primrose—fill the bill completely. They turn easily. They skim closely—leaving barely a drop of cream in a gallon of milk. They need few adjustments and none that a farmer or his wife cannot easily make. They have the large, low supply can; the strong frame with open sanitary base; the quiet, easy-running gears tiled by an efficient splash system; and the clean, class appearance which make IHC separators such favorites wherever they are used.

IHC separators can be furnished with pulley equipment for the use of power. Belted to a small IHC engine, or to a line shaft, they give out the very best cream separating outfit it is possible to buy.

An IHC cream separator gives you the most cream, saves you the most work and lasts the longest time. See the IHC local agent who handles either Dairymaid, Lily or Primrose cream separators, or write to us for full information.

International Harvester Company of Canada, Ltd.
Hamilton, Ont. London, Ont. Montreal, Ont.
Ottawa, Ont. Quebec, P. Q. St. John, N. B.

Flushing the Bowl

One of the most common causes of variation in the test of cream from the farm separator is a variation in the amount of water or skim milk used for flushing out the cream at the end of the run. It is apparent that a small quantity of cream is separated, a marked difference in the richness of the cream may be made by a change in the amount of water or skim milk used. It is an easy matter to vary a pint or more in the water or skim milk used, and this alone may easily change the per cent. of fat in the cream from 2 to 5 per cent.

Adjustment of Cream Screw

The per cent. of fat in the cream may be readily changed, as is well known, by adjusting the cream screw. The cream screw, however, is not changed very frequently, and it is not the common cause of the variations in the test which constantly occur and

Government

No. 1 Red Clover
No. 2 Red Clover
No. 1 Alsike Clover
No. 2 Alsike Clover
No. 1 Alfalfa (No. 1)
No. 2 Timothy
(Canada No. 1 for purity)
No. 3 Timothy

Terms cash with extra, at 25c each bushels each of Manitoba over we pay the guarantee seeds ship back out or

Ask for samples

TODD & SPOFFORD
Seed Merchants
STOUFFVILLE

Cutaway CLARK

BUSH AND BOG PLOW
does work no other machine can do.

It cuts down bushes, demolishes bog, and does all kinds of plowing and digging. It is big and strong and withstands twisting strain. Ask your dealer about it. If he doesn't sell CUTAWAY (CLARK) implements, write us at once for free catalog. There are no substitutes.

THE CUTAWAY HARROW COMPANY
Makers of the original CLARK disk harrow and plow
90 MAIN STREET HIGANAN, CONN.

Weight 660 pounds Four-horse hitch
24-inch disks Dust-proof hand-wood bearings
forged sharp wood bearings



PASTEURIZER FOR SALE

One 300-Gallon Wizard Cream Ripener or Pasteurizer, copper-covered, in good condition. Will sell at Bargain. Apply Box No. 452, Farm and Dairy, Peterboro, Ont.

EGGS, BUTTER LIVE POULTRY

Bill your shipments to us by freight. Advice us by postal and we will attend to the rest promptly.

Egg Cases and Poultry Coops supplied free.

The DAVIES Co. Ltd.
Wm. Established 1854 TORONTO, ONT.

RIDER AGENTS WANTED



with all latest improvements. We ship an approval to any address in Canada, without any deposit and allow 14 days to return. If you do not like your one of our best riding after using bicycle, we will refund you your money. **DO NOT BUY a bicycle, lamp, or sundries at any price until you get our latest eye-floored catalogue and see all our special prices. ONE CENT in all will cost you nothing.** Write us a postal and catalogue with full particulars will be sent you. Free Postpaid, no return mail. Our new wheel is now in motion.
HYSLOP BROTHERS, Limited
Dept. 4 TORONTO, Canada

Clover Seeds

Government Standard

No. 1 Red Clover	per bus.	\$18.00
No. 2 Red Clover		12.00
No. 1 Alsike Clover		12.00
No. 2 Alsike Clover		11.00
No. 1 Alfalfa (Northern)		12.00
No. 2 Timothy		4.75
(Grades No. 1 for purity and germination)		
No. 3 Timothy		\$4.25

Terms cash with order. Bags extra, at 25c each. On all orders east of Manitoba of \$25 or over we pay the freight. We guarantee seeds to satisfy or ship back at our expense.

Ask for samples if necessary.
TODD & COOK
Seed Merchants
STOUFFVILLE - ONTARIO

which causes so much friction between the buyer and seller of cream. Testing Cream on the Farm

While the farmer selling cream must expect to experience reasonable variations in the per cent. of fat in the cream sold, he is also entitled to have his cream tested accurately and carefully by a man who thoroughly understands how it should be done, and who has the proper appliances at hand. There is no reason why the farmer should not satisfy himself regarding his test. It is an easy matter for any farmer to test cream approximately correctly, while it would not be easy for him to make a test sufficiently accurate, to serve as a basis for buying or selling without purchasing a small scale which might be a greater expense than he would care to bear. The fastest, by use of an ordinary Babcock testing machine and by measuring the sample of cream into the test bottle with the same pipette as is used for measuring milk can make a test of his cream that will serve to satisfy him regarding the accuracy of the test he is receiving from the cream buyer.

Feed Does Not Affect Test of Cream

It seems reasonable to expect that the richness of milk could be influenced by the character of the feed given the animal. However, it has been thoroughly proved that for all practical purposes it is impossible. The richness of a cow's milk depends upon inheritance and can no more be changed permanently by the feed than can the color of her hair. If the milk cannot be changed in richness by the feed, it is clearly impossible for cream to be influenced in this way.—Circular No. 37.

Progress at Scotsburn Creamery

The annual meeting of the Scotsburn Creamery Co. Ltd., Scotsburn, N.S., was held on March 10th, and was the most encouraging yet held. The business of the year amounted to 278,000 pounds of butter, of a value of about \$74,000; of this amount over \$68,000 was paid for cream. The creamery was again improved and enlarged during the year, a new septic tank put in, and a new system of cold storage of a capacity of 1,200 boxes of butter and a separate room for printing butter, etc. Prospects for the coming year are for a still greater increase, and the probabilities are that the creamery will be making over 1,000,000 pounds a year inside of five years more.

The Dairy Record Centre in connection with the creamery is doing a good work, and is being more appreciated by the patrons every year.

Dairy Cattle Breeding at Macdonald College

(Continued from page 5)
extent, and were a credit to the college.

French Canadians
Some French-Canadian heifers, one as a two-year-old with a record of over 10,000 pounds of milk in a year, and a little later a nice bunch of heifer calves, showed that this breed also was well represented in the herd. The heifers of this breed also are bred somewhat earlier than the Ayrshires.

Three steers, one a Shorthorn and two Angus grades, showed to good advantage. The Shorthorn, two years old last September, weighed 1,500 pounds. They were a nice lot.

Four pure-bred Shorthorn calves raced around the ring like thorough-breds. They were the milking type, and a promising lot.

Macdonald College is to be congratulated on the fine work it is doing in its live stock department.

Roofing Prices Advance

April 15th

So great is the number of Canadian farmers that have been placing their orders for sheet metal building materials under our cooperative plan, that we only have a limited tonnage left, which we can sell at these special prices. We are, however, advising our customers that we will accept all orders placed up to April 15th at the low price we are offering.

Remember, April 15th, three weeks from to-day, will be the last day upon which we will accept orders at our special price, and if you contemplate the erection of any new buildings or re-roofing your Barn, Write us at Once, and send us rough sketch of the work you propose doing, that we may submit you figures, showing the economy and saving that can be made by the use of our line of Sarnia better building materials, which include:

Corrugated Iron, Barn Shingles, "Art Kratt" House Shingles, Metal Sidings, V-Cripped Roofing, Eave Trough, Conductor Pipe, Valleys, Skylights, Ventilators, Tanks, etc.

\$25.00 to \$50.00
Saved Every Farmer

WE guarantee the galvanized iron used in the manufacture of Sarnia metal products to be equal to that of any iron used by any manufacturer in Canada, in the manufacture of similar lines of roofing products, which they are selling to the farmer, at the time of this advertisement, at an advance of 25 to 50 per cent. above the prices we are quoting. Please remember that all Sarnia-Metal Products are made from galvanized Iron of a quality specified by the organized farmers themselves.

A Vital Question

If approached by another company or its agent in an endeavor to sell you Corrugated Iron, etc., simply ask them what they would supply you the same material for, if it were not for the Sarnia Metal Products Co., and its cooperative plan.

We want your order whether it amounts to \$5.00 or \$500. All we ask is an opportunity of filling one order for you, that our products may prove themselves equal to the claims we have made for them.

Write us at once for special literature and any information you may require

The Sarnia Metal Products Company

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SARNIA - CANADA

