

Issued Each Week Only One Dollar a Year

VOL. XXIX.

NUMBER 15.

FARM AND DAIRY

AND

RURAL HOME

Dairy and Cattle Division
Commissioner

PETERBORO, ONT.

APRIL 14, 1910.



AYRSHIRES IN NEW ZEALAND, CHEESE FROM WHICH COUNTRY COMPETES WITH OURS.

Ayrshires are a popular dairy breed in New Zealand. One of its fine herds is here shown. Good stock and fertile soil has enabled this country to gain its present standing in the great market of the world. New Zealand cheese is practically the only cheese of its kind imported into Great Britain in competition with Canadian. During the past year, we heard much of this New Zealand competition. Dairy Commissioner Rudlick assures us that its significance, however, has been unduly exaggerated, and that the total increase from New Zealand is not nearly as large as the decrease in Canadian shipments. While this is true, it behooves Canadians to see that the competition is met with the best quality of goods.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

NEVER OUT OF BALANCE

The Self-Balancing Bowl

in the SIMPLEX Separator comes the greatest we've ever seen previously met with in cream separators, namely: the liability of the bowl to get out of balance. If a bowl be ever so slightly out of balance it will not separate cleanly. This has been proved again and again by actual test. Remember that when you lose part of the cream you are losing money. Nor is this the only loss when a bowl is out of balance. A great deal of extra wear and tear is thrown upon it, thus greatly shortening its life, as well as lessening its usefulness.

No trouble of this kind ever occurs when the new SIMPLEX Separator is used with the Self-Balancing Bowl. It is made with a system of bearings so that it will run evenly and quietly, even if out of mechanical balance. A weight several times greater than what would throw an ordinary bowl out of balance, will not in the least affect the smooth running of a SIMPLEX Self-Balancing Bowl. In fact, a SIMPLEX Self-Balancing Bowl



Cannot Get Out of Balance

You do not want to make any mistakes when you buy a cream separator. You want one that will get all the cream ALL THE TIME. This machine is the SIMPLEX Link Blade Machine with the Self-Balancing Bowl. It does not commence to cause you trouble after you have used it a short time. Instead of that it improves with use. Have one sent to you for a free trial and be convinced.

Free Illustrated Booklet. Write for It.

D. Derbyshire & Company

Head Office and Works: BROCKVILLE, ONT.

Branches: PETERBOROUGH, ONT. MONTREAL AND QUEBEC, P. Q.

WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

THE "BT" STANCHION IS ALWAYS CHOSEN

When Its Many Advantages Are Known



It is made in five sizes and of heavy "G" Bar. The lock and trip are made of heavy malleable. It can be easily opened with one hand and is the only stanchion that can be opened no matter what pressure the animal is putting against it. It is supplied for use with wood or steel construction. It will pay you to let us tell you about "BT" Steel Stalls and Stanchions and what we can do for you.

Write us to-day

We also build Litter Carrier and Hay Carrier Coods

BEATTY BROS., FERGUS ONT.

It is desirable to mention the name of this publication when writing to advertisers

Swamp or Muck Soils

Of late years considerable attention has been given to the study of swamp or muck soils, including their chemical composition, manurial treatment, reclamation and permanent improvement. In the Province of Ontario alone there are thousands of acres of such soils, many of them valueless and abandoned, others yet unreclaimed, large areas under cultivation but yielding poor crops, whilst others again are some of the richest and most productive soils. The economic importance of this question will, therefore, be clearly recognized when we remember that according to the Report of the Ontario Agricultural Commission appointed in 1881 "to enquire into the Agricultural resources of the Province of Ontario, the progress and condition of agriculture therein, and matters connected therewith," almost every township is reported to have some such land, the estimated acreage varying from a few hundred to forty thousand or more. In the aggregate, there must have been hundreds of thousands of these swamps.

Owners of such land will be interested in Bulletin 178 of the Ontario Agricultural College, since it deals with the Character and Treatment of Swamp or Muck Soils. The bulletin is prepared by Prof. W. P. Gamble and A. E. Slater. A brief summary

1. As a whole, most swamp soils can be made to be some of our most fertile lands, if properly drained and cultivated.
2. That potash and phosphoric acid are usually more or less deficient, and that the soils readily respond to an application of commercial fertilizers.
3. All attempts at the cultivation of peaty soils begin with drainage.
4. Certain crops are particularly well adapted for growing on these soils, while others do so well.

cusages and UNPRODUCTIVENESS. The following suggestions may be of value as briefly summarizing much that has been dealt with in the bulletin:

1. A deficiency of potash (K₂O) and of available phosphoric acid (P₂O₅), both of which frequently need to be applied in the form of commercial fertilizers.
2. An absence of nitrifying germs which act on the inert nitrogen present in the organic matter and convert it into nitrate, a form readily assimilated by plants. The application of farmyard manure or garden loam is needed in this case, together with frequent cultivation.
3. A water-logged condition owing to the permanent water table being too near the surface, and thus checking root development, and preventing aeration of the soil. Lower the water table by efficient drainage.
4. A dry loose condition of the soil which results in lack of moisture through inability to raise water by capillarity. This condition frequently results from too rapid draining and subsequently the complete drying out of deep areas of muck. Gradual draining is desirable.
5. The laying of tile in the muck itself, which results in imperfect aeration of the soil, owing to the inability of the water to penetrate into the drain through the pores of the tile.
6. Acidity, owing to the presence of an excess of organic acids. This condition is not common with Ontario muck soils. Liming is the remedy.
7. The presence of injurious plant poisons in the soil, as the lower oxides of iron. Frequent cultivation and exposure of the material to the air results in oxidation and removes the evil.
8. An undecomposed condition of the soil and the presence of much woody fibre and thus a general coarseness of the soil particles. Drying out is apt to result. Frequent cultivation and the application of farmyard manure has a beneficial action, hastening decomposition.

9. The lodging of grain and a light and poorly filled ear, due to the excess of nitrogen over mineral constituents. An application of potash and phosphoric acid is beneficial.

Spring Days in the Apiary

James Steer, Victoria Co., Ont. On account of the early season most of the beekeepers have succeeded in getting their bees on summer stands. It looks as if they had come through the winter in good shape. The bees commenced to gather pollen from the soft maples about the 25th of March, just about one month earlier than last year.

If the beekeeper is sure his bees have sufficient stores to keep them going until fruit bloom comes, he should tuck everything about the hive as tightly. Make their entrances small. Keep an eye for robbers for the first few days after being set out. Then leave them alone till warm weather comes. If some hives are short of stores, a frame of honey can be laid on the top of the frame on its flat, or good candy made from granulated sugar will carry the bees through nicely.

Jersey Cattle Milk Records

The Jersey Cattle club at their annual meeting in February appointed Messrs. Duncan and Reid to take action in regard to having the cost of feed taken into consideration in the dairy tests at the winter fairs. The Ayrshire Cattle Breeders' Association recently decided to petition the fair boards to have the cost of feed recorded not only during the three days of the test but for three days before as well, making six days in all. It was decided at the recent meeting of Jersey breeders to endorse the request of the Ayrshire Breeders' Association. The matter will be laid before the directors of the Guelph, Ottawa and Amherst Winter Fair Boards.

Sec'y Reid at the meeting in Toronto two weeks ago reported that some exceptionally fine records had been made in the Government test, the Columbia of Performance, by British Jersey breeders. Jerseys are particularly strong that province, its breeders having more than double the number of cows entered in the Record of Performance test than has been entered by Ontario breeders. Mr. W. P. Bull pointed out that much of the British Columbia stock had been purchased in the East.

The records made by British Columbia cattle that have for some time been accepted by the Government are for cows owned by A. H. Menzies & Son of Pender Island, and are as follows: Cow, Liss of Pender, 697, age at commencement of test, 2 yrs., 25 days; 5674 lbs. of milk, 314.15 lbs. fat; average per cent of fat, 5.53; number of days in milk, 352; production required for registration, 5568.75 lbs. milk, 220.5 lbs. fat.

Cow, Lady Rose of Pender, 699, age at commencement of test, 2 yrs., 288 days; 8014 lbs. milk; 427.34 lbs. fat; average per cent of fat, 5.33; number of days in milk, 352; production required for registration, 6278 lbs. milk, 249 lbs. fat.

Cow, "Lady Buttercup of Pender," age at commencement of test, 2 yrs., 224 days; 8016 lbs. milk; 449.70 lbs. fat; average per cent of fat, 5.61; number of days in milk, 352; production required for registration, 6143.5 lbs. milk, 243.7 lbs. fat.

Remedy for Scours.—I read in an agricultural paper that a cure for scours in calves can be stopped by giving a call a tablespoonful of wood root mixed with one egg into a paste. I have since tried this remedy on a couple of calves with pronounced success.—D. Duncan, York Co., Ont.

FARM AND DAIRY & RURAL HOME

Issued
Each Week

Only \$1.00
a Year

Vol. XXIX.

FOR WEEK ENDING APRIL 14, 1910.

No. 15

A BRIEF STUDY OF COW CHARACTERISTICS

George Rice, Oxford Co., Ont.

The Conclusions of an Expert, Gained from Close Observations of the Cow While at Work—The Results of an Interesting Experiment.

Animals and birds have habits and traits peculiar to their nature. Some of these can be developed but we cannot graft on something altogether foreign to their nature. The rooster likes to strut about and crow. (In that respect he is not unlike the human tribe). The drake

likes to go for a quiet swim if there is water to be had. If these would change this procedure it would at least be interesting. Much of the trouble that people make for themselves is because they want to do something not according to what nature intended. This is all too true of dairy cows. It has often been mentioned that some people have better success with one class of stock than with another. This is because they take more interest in



Mr. Geo. Rice

that stock and study its traits.

To illustrate, I have been fairly successful with cattle and some other stock but I never had any success with hens. I never had time to pay much attention to their wants and although like other people who share twice a week and wash on the other days and look as pleasant as possible, her ladyship, the hen had no use for me. Never an egg will the hen lay in winter, unless she is cared for right.

A STUDY OF HENS

Having more time at my disposal and possessing a tooth for hen fruit, I have this past winter been following the practice of men that get eggs in winter. I haven't much faith in the methods of those who tell how to get winter eggs but do not get any themselves. In this as in other things, an ounce of successful practice is worth a ton of theories. Some theories are like a horse with the spring halt. They look all right, but have a decided limp when in action.

After following closely and faithfully the methods of successful winter egg producers, I gathered the fruits (hen fruit) of my endeavor and I find that the way to the egg basket is via her ladyship's gizzard. It is astonishing what she can put into her gizzard. It is just the same in handling cows for winter milk production. The more closely we study and follow her natural bent, the greater our success.

A DAY WITH A COW

Let us follow a cow through a day's work. What shall we give her first? Water? No. She won't drink, that is not her way. She wants feed first. Give her a little hay. She relishes that and whilst you milk she will be happy and contented. Then give her a good feed of ensilage with some meal on it. How she enjoys it! Next course will be some sugar mangels. Surely with all this succulent food, she will not want any water. But try her and see how mistaken you are in your theory.

She just does want water after she eats her fill and not later, because she wants to get at work on this food and turn it into something that will eventually fill the milk pail. She cannot get to work until she has all the material, and water is essential. Now perhaps she lies down or it may be she stands up; anyway you think she is at rest. You are quite wrong. Contradictory as it may seem, a cow works the hardest when she is apparently doing nothing. Watch her now whilst she is chewing her cud. She does this not for enjoyment alone; she has all the coarse food to work up into a finer product, the finest product mankind can obtain and a product used by most of us from the cradle to the grave.

"Milk for men, milk for ladies,
Milk that is good for little babies."

Watch her now. We know what she has consumed in food and water, but there is another element necessary to the elaboration of this product we call milk. If the stable is not very warm and even if it is, we will see, though not quite

Most Practical Information

The second annual Dairy Number of Farm and Dairy is a dandy. The information it contains is of a most practical nature. This issue alone is worth several times the subscription price for a year. I would not think of doing without Farm and Dairy.—T. R. James, Middlesex Co., Ont.

so plainly, the cow throwing off great clouds of "steam," we will call it. When she has "steam" up she is at full work. How much does she throw off! We are not particular what becomes of it so long as it gets away as it is used up; what is left is of no use to the cow. We are more concerned as to what is to take its place. We cannot see the air she breathes in but we can judge of its volume by what she is expelling and she must take in as much as that.

THE VALUE OF PURE AIR

It makes all the difference in the world whether or not this air is pure, because the purer the air she breathes, the more of these elements it contains that are so necessary to digest the food. It is really through the working of the lungs that the cow derives sustenance from her food. This is a point that cannot be too strongly emphasized. Air to the cow is like the draft to a fire under a boiler. The elements derived from the air make the fire burn better and there is better combustion. At a town waterworks, they built a higher and bigger chimney to get a better draft and they were then able to obtain much more heat from the same quantity of coal. The case is even stronger and more aids with a cow.

Pure air aids digestion. It oxidizes the blood. It makes the blood purer and circulation more vigorous. It feeds and stimulates the nerves, and

good dairy cows have a good deal of "nerve". A cow must have pure air if she is to do the best work she is capable of and be up to her capacity in other respects. A cow breathes in the most air when she is quiet and remasticating her food. She has no air receptacles in which to store up air, like food in her stomach. She cannot retain the air in her lungs for very long, so it is essential that she have good air all the time. There is little use turning a cow out to "get some fresh air" if it is cold. We have got to have the air inside during our winters.

EXERCISE UNNECESSARY

It seems a little strange that a cow more than any other animal can do without exercise. Really she works harder standing and digesting her food than a horse would do plowing. Cows when producing heavily will often sweat while standing perfectly still. It is well known that when cows have to go too far to pasture, they do not do so well. A cow carries much weight in various stages of digestion (about 10 lbs.) and she was never intended for a churn.

We see therefore that the essentials to milk production are food, water and air. The last two are quite as important as the first. Essential as they are, they do not receive the attention that their importance demands. A cow invariably wants drink after eating. What about after the night meal? What are her chances to satisfy the demand of her nature? If she has to go without water for 12 hours or more, then the milk yield must suffer and her whole digestive system be thrown out of gear as it were.

I only milked three cows this last winter, but I gave them as good care as I could. I was punctual to the minute with the feed and water. If they wanted for anything, all they had to do was to wink and they had it and as a result they were punctual with the milk, giving me enough to net \$20 a month each.

THE DIFFERENCE

I had to go away on three different occasions. I left a man in charge to attend them. I told him exactly what to feed. Next day however, the cows were down on their yield. This happened twice. The third time, I was away. I went to the stable at 9 p.m. and gave the cows, two pails of water each. The yield was all right the next day. I have not put in the water basins yet but have seen that the cows get water after they have all the feed they want. The man was in a hurry to get away as soon as the six o'clock bell rang. They would not drink before feeding and did not get a chance after. The result was, no water, no milk, not only the next day but for some time after.

The shrinkage of the milk yield as the milk period advances is due more to the lack of care in supplying water and pure air than to the advancement of the lactation time. These cows, though fresh in September are now giving as much per day as they did in October when I brought them home and they have not been out of the stable once since the 20th of October. If they got out, they would run a mile they are feeling so good, but more about this little experiment later.

The Farm Nursery*

Norman M. Ross, Tree Planting Division,
Indiana Head, Sash.

Certain varieties of the hardy trees, most suitable for the planting of shelter belts, can be just as easily raised on the farm as a crop of garden peas or corn, and undoubtedly at much less expense than if purchased as one or two-year-old seedlings. These should be, in connection with every farmer's garden, a small nursery patch devoted to the growing of such hardy trees as maple and ash, and cutting stock of cottonwoods, willows or Russian poplars. There would be little difficulty in obtaining the necessary seed, provided orders were sent in to the seedsman or nurseryman during the summer, so that they could make preparations for getting a sufficient quantity collected. A pound of maple or ash seed, if sown in suitable soil, would produce considerably over 1,000 seedlings, and would take up very little room in the garden. A few hundred cuttings of willow, Russian poplar and cottonwood, would not occupy much room either and could be made to produce annually as much stock as the average farmer could conveniently plant each spring.

The farm nursery, adapted to the needs of an average prairie farm would be very simple; the area of ground occupied very small, and the labor to obtain good results very little. My idea of the stock in such a nursery patch would be about as follows:

A 50-foot row of one year maple seedlings. A 50-foot row of one year ash seedlings. Another 150-foot row of two year ash seedlings, 100 feet of willow cuttings set one foot apart, 50 feet of cottonwood cuttings and 50 feet of Russian poplar cuttings.

POSSIBILITIES OF THE NURSERY.

Such a nursery would easily supply 1,000 seedlings and as many cuttings each year, or more than enough stock to plant half an acre of shelter belt. It would be necessary to sow each year about one pound of maple and one pound of ash seed to keep up a supply of seedlings. The willows and poplars would be cut down to the ground each spring and the shoots made into cuttings.

The ground for this work should be prepared in the same manner as for vegetables and if possible sheltered from the strong winds. As a temporary shelter, sunflowers are very effective. If the heads are cut off in the fall and the stalks left standing, they will collect plenty of snow which would prove of the greatest benefit to young seedlings during winter and early spring.

The ash seed should always be sown in the fall, and the maple might best be put in early in May, as the seedlings are not then so liable to damage from spring frosts and the high spring winds. The seed is sown thickly in drills about an inch or an inch and a half deep.

So far I have only mentioned such varieties as any farmer can raise without the least difficulty. We find, however, that many men have a special liking for this sort of work, and these might very easily propagate a few ornamental shrubs such as Caragana and Tartarian honeysuckle, which are easily raised from seed.

We get numerous applications from farmers for spruce and pine seed, and in some cases these might be successfully raised in the farm nursery, though such cases would be exceptional, as considerable special care is required to raise a good stand of evergreen seedlings. Besides, the growth is so slow that the average man would become discouraged long before the plants were large enough to set out, so that on the whole the growing of this class of stock cannot be recommended as suitable for the farm nursery.

Evergreens, however, are most desirable for prairie planting, but there are not many farmers who will be willing to go to the expense of purchasing a thousand or more spruce or pine suitable for windbreak purposes, at prices quoted in the general catalogues. If nurserymen would supply two-year-old seedlings, these could then be given a place in the farm nursery where they could be lined out for a couple of seasons, and then set out in the permanent situation.

EVERGREENS

I do not know whether evergreen seedlings grown in Canada can be purchased in any quantity. I do not remember having ever seen them quoted in nursery catalogues; but in a catalogue recently received from D. Hill of Dundee, Illinois, two-year Scotch pine seedlings are quoted at \$6 per 1,000 and white spruce at a slightly higher figure. Seedlings of this age are, of course, only a few inches high, and would, as before stated, need to be transplanted to nursery rows for two seasons when they would probably be from 10 inches to one foot high; but there is no reason why a farmer with ordinary care should not successfully carry 1,000 or so of these plants in his nursery patch. If planted four inches in the row, with rows eight inches apart, a bed six feet by about forty would be all the ground needed for 1,000 transplants and would entail but little labor. Though it is not likely that very many farmers will do this, still it is a very practical way in which anyone can get evergreens at a comparatively reasonable cost, and in sufficient numbers to make their planting worth while.

If the farmers who are interested in tree culture will only grow for themselves some of the common varieties suited for windbreak planting along the lines I have indicated, many of them will be spared the disappointment which I am confident numbers are going to experience in the near future, when they realize the importance of tree planting, and then find that after planning making all their plans and preparations for planting, they cannot obtain the necessary nursery stock.

Cement Floors in Cow Byres

J. H. Caldwell, Carleton Co., Ont.

Where cow stables are cemented right up to the manger, there is constant trouble saving the knees of the cattle and in keeping bedding under them. We have until recently used wood as flooring, but when installing cement in our cow byre I decided to leave a trench four inches deep and 20 inches wide where the front feet of the cows would come. This trench we filled with blue clay, which soon packed very solid. It acts as one of the best aids in keeping bedding under the fore feet and in saving the cows from sore knees.

With this equipment in the stalls this past winter, we have had no trouble, nor do we anticipate any from the causes mentioned above. The men who put in the cement work were very loath to do as I requested, as they had never seen the like before. The plan now has the approval of all who have seen it, and no money would induce me to have this trench filled with cement, which, however, could easily be done at any time if one so desired.

Another advantage of the clay is that it is warmer than cement and it would appear that cement will ere long be universally in cow byres. Those intending to put in cement floors under their cattle should certainly give consideration to this point of having clay under the front feet of the cattle.

There is no other crop that can be grown that will produce as large a quantity of nutritious food for dairy cows, as the corn crop properly harvested and preserved in the form of ensilage. J. H. Coatsworth, Essex Co., Ont.

Dairying for Profit*

N. P. Hull, Michigan, U.S.A.

There are three things that we must keep in view in dairying: 1st, good cows; 2nd, plenty of good feed; 3rd, proper care. If we are going in for dairying we should aim to get the most possible out of it.

Every man who is on a farm should aim at two things: 1st, to sell as much as possible off his farm at the highest possible prices; 2nd, to increase the fertility of his land each year so that the following year he will be able to sell larger crops at still better prices. Will dairying do this? For my part I have found it the most profitable branch of farming, year in and year out, that I have ever followed.

The feed fed to a steer which sells at 10 cents a lb., if fed to a dairy cow would produce 20 to 30 cents a lb. in butter. There is more labor in dairying but the net profits are greater.

Hogs may be fed for six months and may prove profitable and may not. You seldom tell. Do you know of any line of farming that will bring in such steady and profitable returns and as regularly as the dairy cow? The old hen comes the nearest to doing so of anything I know.

A farmer I met in Michigan had bred up a herd in which the poorest cow produced over 10,000 lbs. of milk a year and the best cow over 14,000 lbs. This man sent his milk to a cheese factory and netted \$100.14 from each cow on the average for his milk. His calves sold at an average of \$59 each, so that his cows netted him \$219 each, at a feed cost of \$55 per cow.

A REMARKABLE DIFFERENCE.

At one of our factories in Michigan we had two farmers living not over a mile apart. The cows of one produced milk which netted him, on an average, \$22 a cow or less than it cost him to feed them, so that for every dollar's worth of feed he fed his cows they returned him only 76 cents each in milk. The cows of the second man produced enough milk to average \$79.00 each at the factory. These cows returned their owner \$1.95 for every dollar's worth of feed they consumed. The first man was nothing more than a cow keeper. The second man was what I like to call a farmer.

When I started dairying, my cows, when they consumed \$30 worth of feed in a year, yielded me an average profit of \$10. When, however, I had developed them so that they consumed \$40 worth of feed each in a year their product sold for \$80 per cow and the average profit per cow was \$40. Thus I made as much in one year as formerly I had made in four.

Feed a variety of feeds. Cows enjoy a change of feed just as much as we do. Feed palatable food. Keep the cows in good health and comfortable. Much of the tuberculosis that we hear so much about is due to cows being kept in dark, poorly ventilated barns. The sun's rays are death to the tuberculosis germ.

Any man who can afford to keep a cow can afford to buy enough building paper to make his window sash to put in enough windows to ensure the stable being well lighted. And, if he cannot do anything else he can at least knock out a few small holes in the sides of the stable and fasten some muslin over them to furnish ventilation. This is by no means an ideal system of ventilation but it is far ahead of none. These little things are of vital importance as regards their influence on the health and comfort of the cows and there is no animal on the farm that will return as much profit in return for good care as will the dairy cow.

*An outline of an address delivered at the last convention of the Western Ontario Dairywomen's Association-Dairyman's Association and Master of the Michigan State Grange.

*A portion of a paper read at the convention of the Western Horticultural Society, held at Winnipeg in western provinces. Although it was prepared especially for the region mentioned, the principles and methods mentioned may be applied with equal advantage on farms in the east.

Alfalfa the Greatest of Crops*

R. H. Harding, Middlesex Co., Ont.

There is not another variety of fodder that is being kept before the minds of farmers by the agricultural press and Farmers' Institute lecturers as alfalfa. Yet we find that a very small proportion of farmers are growing it. Why? I don't know until it is that we are a slow class of people to make new ventures. But be that as it may—the area devoted to alfalfa is bound to increase. It is one of the most valuable crops that a Canadian farmer can produce.



Mr. R. H. Harding

Alfalfa will produce two or three cuttings each season and continue to do so for several years when on suitable soil and it will leave the soil in better condition than it was before being seeded. It will at the same time supply the most nutritious fodder for all classes of live stock, especially dairy cows and sheep, that can be grown.

Alfalfa will grow upon any land that is not waterlogged within 18 or 20 inches of the surface; in other words it will likely prove a failure on low lying land that requires underdraining. Some tell us that alfalfa will stop up tile drains. I have had it growing to perfection over a tile drain for several years and with no apparent ill effects. We have been growing alfalfa for about 10 years. Our farm is slightly rolling and is of three different varieties of soil; black loam surface with clay sub-soil, medium clay surface with heavy clay sub-soil and clay loam with gravel subsoil, no gravel being within three feet of the surface. I have not as yet grown alfalfa on this latter soil but I have a piece prepared for seeding this spring and I feel satisfied it will flourish there. Of the other two soils we have had the greatest returns on the heavier clay, especially upon a part of the field that slopes slightly to the southeast. It is not underdrained. Upon this three acres we grew about five tons per acre in 1928; somewhat less last season owing to the effect the extreme drought had on the 3rd cutting.

The land for alfalfa requires closer attention in preparation than is necessary for any other crop for the reason that it is likely to remain untouched with the plow for several years and if blue grass is natural in the soil as it is in mine it will gradually creep in and crowd the alfalfa out. Hence the necessity of cleaning it out thoroughly before seeding. Blue grass is the only enemy of alfalfa that I have to contend with; Canada thistles and all such weeds will disappear completely in alfalfa.

We seed practically all of our spring seeding to clovers but at the same time we aim to seed about four acres to alfalfa each year. Our plan is to plow up a red clover seed as soon after the clover is taken off as possible; say about July 20th or earlier. After plowing we disc the ground a few times then put on the spring toothed cultivator at least once a week, or whenever the field is dry, right up to the fall. This works all grass roots, etc., to the surface to be killed with the sun, wind and frost. It practically summer follows the ground as well and the spring tooth cultivator leaves the ground ridged so that in most cases a couple of strokes of the cultivator in the spring (one each way) is sufficient to make a nice mellow seed bed.

I use the best seed that can be got. I sow it at the rate of 15 lbs. an acre, in front of the drill tubes. I sow it along with five pecks of barley an acre, obtaining therefrom about 30 to 40 bush-

els of barley an acre. We have never failed yet to secure a splendid catch of alfalfa, I have heard Institute lecturers and others advocate sowing alfalfa without a nurse crop. I place considerable value however, upon the barley stubble as I have found that it holds the snow longer in the spring as well as shelters the clover from the parching winds. It has been advocated to sow 20 to 25 lbs. of seed per acre. That depends largely upon the fertility of the soil and the condition of the seed bed.

I am often asked the question, is alfalfa good for pasture? My answer is that I prefer to cut and cure it for feed rather than risk having it trampled and cropped off so closely that it is liable to be killed. Alfalfa is too valuable a crop for one to take such chances.

I would urge every farmer to try some alfalfa, even though it be not more than an acre at the outset. Send to the O.A.C., Guelph, for Nitro-Culture and treat the seed with it. This treatment will only take a few minutes and will be of untold benefit where alfalfa or sweet clover has not already been in the soil. Fall directions for using are sent with the culture and the seed can be treated with very little time or trouble. I would also urge that it be sowed in front of the drill tubes. There are several reasons for this: 1st, it is then sure to all be covered and none of it too deep; 2nd, if sown behind the drill a great

Spring Management of Bees

F. M. J., Norfolk Co., Ont.

This is the critical season for bees. A great many losses are common through early spring, and they result mostly through neglect. Many take their bees out of the cellar, where they have wintered, and set them in their summer quarters without the slightest protection from the chilly winds. Under such conditions it is very common to lose the queen. The hive is generally too large for the small force of bees to keep warm and clean, and if exposed to the chilly winds of spring it is impossible for breeding to be carried on only in a limited manner in the centre of the cluster. Much may be done to enable them to keep warm by protecting them from the wind.

The inside temperature of the hive should be nearly equal to that of an egg incubator. Hence, one can readily see the need of protection, because the bees alone have to keep the hive warm by their own natural heat, which they can do only by consuming large quantities of honey.

It is bad policy to be opening hives in the spring. One thorough examination as soon as winter is over should suffice. A good plan for saving weak colonies in the spring is as follows: When examining the bees on taking them from their winter quarters pick out and mark all the

weak ones, also the strongest ones; then all the colonies that have a patch of brood in them about the size of your hand. Set all such on top of a strong colony with a queen excluder between them, closing up entrances to the weak colony, except through the excluder.

There may be some colonies that are very weak, having only a queen and perhaps a handful of bees and no brood. In this case take a rack of brood with its adhering bees from the strong colony, but be sure not to take their queen. Then put

the queen of the weak colony on this comb with the strange bees and put it into the weak hive. On the following day set them on top of the strong colony, where you got the brood, with the queen excluder between. This all should be accomplished without disturbing either colony. Leave them in this way together for three or four weeks, then separate and you will have two good colonies. In a great many cases the top colony may be found the stronger and with more honey, on account of the tendency to store above.

The feeding of a little sugar syrup will greatly stimulate breeding. This syrup is made from equal parts of sugar and water and should be fed lukewarm. Great care should be exercised in feeding lest robbing is started. It is best to feed towards evening, so the feed is disposed of during night, and the odor will have passed off before morning.

A little thoughtful attention will often save the weakling, which, with proper management, will handsomely reward before fall.

We may sow the best of seed, but if the soil is undrained, or otherwise unsuitable for the production of good seed, our work will be in vain. With good seed properly sown in soil well prepared great results may be obtained in the improvement of our crops by selection.—C. Nickolson, W. Wellington Co., Ont.



Cutting a Supply of Fuel on a First Prize Ontario Farm*

The illustration shows Mr. E. Terrill, of Northumberland Co., Ont., and some of his men at work on their wood pile. Mr. Terrill's fine buildings may be seen in the background. This farm won first prize in the Dairy Farms Competition for District No. 2.

deal of the seed is likely to fall into the tubes and be buried so deeply that it will never germinate; 3rd, if seed is treated with Nitro-Culture and sown behind the drill, the sun and wind is liable to destroy the effects of the bacteria before it is covered by the harrow.

Prevent Joint Ill and Scours

J. H. Caldwell, Carleton Co., Ont.

This disease of colts known as Joint-ill carries off thousands of colts annually. There is a similar trouble in calves, that of scours. Both of these come from infection through the navel just after birth.

All of these losses can be averted by washing the colts and calves as soon as possible over and around the navel cord with a 10 per cent. solution of carbolic acid.

Before taking this precaution, I lost several head, especially calves which generally died with scours in a few days after birth. Since practising preventive measures we have lost none.

I know of no case in which the old adage of an ounce of prevention is better than a pound of cure is more clearly exemplified than in such treatment. Try it and be convinced.

We need a revivalist among our farmers to arouse them to the value of co-operative selling.—W. L. Smith, York Co., Ont.

*This article is another of the series now running in Farm and Dairy. Each prize winner in the Dairy Farms Contest will contribute three essays on various features of their farm practice. Speak to your neighbors about these articles. They will appreciate them, too.

Build Concrete Silos

Any size with the London Adjustable Silo. Best Silos have a very short life, as the silos from the corn sets the steel, and they soon rust out. There is always a large amount of waste outside around the edges caused by freezing. A CONCRETE SILO never built will last for ages. Cost less to build than steel silos, and there is absolutely no waste of corn. Thousands of farmers testify to the merits of concrete silos. See our Catalogue. We manufacture a complete line of Concrete Machinery. Tell us your requirements.

LONDON CONCRETE MACHINERY CO., LTD., 19 Markers St., London, Ontario.
 Largest manufacturers of Concrete Machinery in Canada.
 Manitoba Branch: W. H. Agents for Nova Scotia; Agents for British Colum.
 Registrar, Agent, 25, Geo. B. Oland & Co., 25 bl. A. G. Brown & Co.
 Prince St., Winnipeg. Bedford Row, Halifax, 1942 Westminster Ave
 Man. Vancouver, B. C.

BIG DISPERSION SALE

65 Head, All Good Ones

11 Registered Holsteins, 54 Registered Ayrshires

WILL BE HELD AT

DALMENY, ONT., TUESDAY, APRIL 19

COMMENCING AT ONE O'CLOCK, SHARP

This offering includes many of the best animals I have been able to breed in my several years experience.

The Holsteins are an all round good lot, rich in quality and breeding, and splendid milk producers. Among the matrons are Camilla A. Abbecker, and two of her daughters. The youngsters are a very promising lot.

The Ayrshire herd, headed by Abbecker Rover Imported, 2786, are a worthy lot. Included in the herd are many outstanding individuals of high class breeding. The yearlings and calves are the best lot we have ever bred.

It matters little whether it is a bull you want or a cow you want. Conveyance will be made in this sale, and will be given an opportunity to buy them at your own price, as every animal must be sold.

In the event of inclement weather, sale will be held under cover. For catalogue and further information, apply to R. B. Faith, editor of the Ottawa Valley Journal, or the proprietor.

THOS. IRVING, Auctioneer

JOHN CAMPBELL, Dalmeny, Ont.

Will End Your Roofing Troubles



If you will write to-day for a free sample of "Amate" the end of your roofing troubles is in sight. After you have submitted it to every test that you can think of, you will be prepared to order it not only for your new buildings, but for your old roofs as well. You will find that it is cheaper to cover them with Amate than to continue painting and repairing them.

We make a strong point of our "Free Sample" offer because the smallest sample of Amate speaks for itself. It is more convincing than yards of talk.

There are all kinds of ready roofings on the market—so-called "rubber roofings," so-called "guarantee roofings," so-called "sand surface roofings."

The "rubber" roofings are no more made of rubber than a cow is made of saw-dust. The "guarantees" that are promiscuously handed out with many brands are

hedged around with so many provisos that it will take three lawyers to dissect them and find out what they are all about. The "sand surface" has little or no protective value.

The point to remember is that all of these roofings have to be painted every year or two to keep them tight. In other words, it is the paint that protects, and not the roofing. If a man will sit down and figure out exactly what this paint costs, he will find that it is more than the roofing itself. Amate, on the other hand, has a surface of real mineral matter, and we sell the goods on the broad statement that you need never coat or paint this roofing.

You can lay Amate on a roof and then forget all about your roofing troubles. No painting, no coating, no worry. The man who puts Amate on his buildings is insured against leaks and trouble for many years.

Free Sample

If you have any doubts about the matter and want to investigate our claims, send for sample and booklet to-day. The sample tells its own story; the booklet is written for practical men. It is straight from the shoulder.

Address our nearest office.

THE PATerson MANUFACTURING COMPANY, LTD.
 TORONTO MONTREAL WINNIPEG VANCOUVER

It is desirable to mention the name of this publication when writing to advertisers

The Feeders' Corner

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

Potatoes as Feed for Swine

Our salesmen coming in during the week report that potatoes are very plentiful and selling at extremely low prices throughout the country. We know that in Ireland a considerable amount of these are fed, cooked, to the pigs, and we fancy with good result. Will you kindly advise us of any data of experiments made with potatoes as a food for pigs, and if so, we shall be very glad if you will let us have the figures.—F. W. F., Limited, Wentworth Co., Ont.

Prof. W. A. Henry in his book "Feeds and Feeding," makes the following comparison of grain vs. boiled potatoes: (These figures are taken from Danish pig feeding experiments.)

"Three series of experiments were made to test the comparative value of cooked potatoes with grain, when both were fed in connection with skim milk or whey. Four pounds of cooked potatoes were fed against one pound of potatoes and the gains made were practically the same. Four pounds of boiled potato should thus be considered equal to one pound of grain in pig feeding. The quality of the pork produced from potato feeding was good and did not differ appreciably from that of lots differently fed."

At the Wisconsin station, Professor Henry himself conducted trials with cooked potatoes mixed with uncooked corn meal fed in opposition to uncooked corn meal only in fattening pigs. The potatoes were cooked in as little water as possible, it being found that they were relished when so prepared.

After cooking, the potatoes were mashed in the kettle and corn meal added, the whole forming a thick mush. In the first trial, there were three pigs in each lot, there were two in the second, the trials lasting 42 days. Combining the first and second trials, the results are summarized as follows: 440 pounds of corn meal produced 100 pounds of gain; 262 pounds of corn meal with 786 pounds of cooked potatoes produced 100 pounds of gain. From this we find that 786 pounds of cooked potatoes when fed with corn meal effected a saving of 178 pounds of corn meal; to save 100 pounds of corn meal would therefore require 441 pounds of potatoes.

Potatoes vs. Bran 22

Which is the best to feed to milking cows—potatoes at 22c a bushel, or bran at \$22 a ton?—J. W. McC., Dundas Co., Ont.

Re potatoes, I would say that at 20 cents a bushel they are cheap feed if fed in moderation. Bran at \$22 is, however likely to be the more satisfactory and profitable under average conditions. The feeding of the two together in moderation will give best results.—J.H.G.

Rations for Dairy Cows

Prof. C. H. Eckles of the Missouri Agricultural College says the following rations supply the necessary material to produce milk economically. If the cow will not give a good flow of milk in the early part of the milking period and when fed a liberal amount of one of these rations, it indicates she is not adapted by nature to be used as a dairy cow and should be disposed of.

The amounts given are considered about right for the cow giving from 20 to 25 pounds of milk a day. For heavy-milking cows these rations would have to be increased, especially in the grain, and for light-milking cows the grain should be decreased. In making up these rations it is designed that the cow be given all the

roughage she will eat and sufficient amount of grain to furnish the proper amount of digestible material. It is not designed that these rations should be sufficient or best adapted for cows that are being fed for making records, where a very maximum production is desired regardless of expense:

Clover hay, 20 lbs.; corn, 5 to 6 lbs.; bran or oats, 3 to 5 lbs.

Alfalfa hay, 15 to 20 lbs.; corn, 8 to 12 lbs.

Clover hay, 20 lbs.; corn-and-cob meal, 6 to 9 lbs.; gluten or cottonseed meal, 2 lbs.

Corn silage, 10 lbs.; clover hay, 12 lbs.; corn, 5 lbs.; bran, 4 lbs.

Alfalfa hay, 15 lbs.; corn-fodder, 10 lbs.; corn, 7 to 9 lbs.; bran, 2 lbs.; corn silage, 20 lbs.; alfalfa hay, 15 lbs.; corn, 8 to 10 lbs.

Fall Feed for Steers

What would you suggest to sow as a fall pasture to turn steers on, just before putting in for feeding in fall? Would raise and every other spot in a wheat stubble get around for cows to be of any use?—M. C. Halton Co., Ont.

Rape would be the best crop to sow for fall pasturing of steers preparatory to coming on winter feed. I would be rather afraid of sowing on the wheat stubble unless it were well cultivated before feeding.—J.H.G.

Feed for Cows Under Official Test

I am about to do some official testing, and would be pleased if you would give me a well balanced ration that would give good results. The cows are strong and in fairly good condition, some are two year olds and some are aged cows. Some of the tests are for seven days and some for one year.

I have good corn ensilage (rich in corn) red clover hay, not very good quality, bran oats and hay mixed and ground, beet meal.

What mixtures of grain would you recommend for summer feeding before corn is ready and what quantity per acre? For a fat cheese district and our cows fresh about this time of the year up to June.—M. C. C. Dundas Co., Ont.

As a ration for the 7 day test, I would suggest the following:—Corn silage, 40 lbs.; potatoes, 15 to 20 lbs.; fed alone; clover hay (cut) 5 lbs.; clover hay (long) 5 lbs.; meal mixture one lb. for each two and a half lbs. milk.

Meal mixture:—Oats and barley 100 lbs., bran, 200 lbs., oil-cake meal 100 lbs., sugar beet meal, 100 lbs.

For the long or year test, I would suggest:—Corn silage 40 lbs. or more; potatoes 10 to 15 lbs.; straw (cut) 3 to 5 lbs.; clover hay (long) 5 lbs.; meal mixture, 1 lb. to 1 or 3½ lbs. milk.

Meal mixture:—Oats and barley, 200 lbs., bran, 300 lbs., oil-cake meal, 100 lbs., sugar beet meal, 100 lbs.

As soiling crops to grow for summer feeding I would suggest mixture, 100 lbs. oats, 40 lbs. peas, (small variety) 30 lbs. vetches an acre. Sow at intervals to extend the feeding period. Sow a small area of an early variety of corn as North Dakota White Flint, or Longfellow and sow early.—J.H.G.

The manure should be removed from the stable at least twice a day. The cheapest plan is to have it drawn to the field at once, but it may be carried by means of a litter carrier into a convenient manure shed. If the stable has a basement beneath, it is most easily cleaned by dropping the manure down through a trap door in the gutter.—G. H. Blair, Carleton Co., Ont.

I am glad that Farm and Dairy is taking up this matter of scales vs. pipettes, as it is a matter that patrons have received a great deal of injustice in the matter of testing cream.—F. A. Keyes, Huron Co., Ont.

FARM MANAGEMENT

Crop Management Queries

Would it be any use to sow barley among mammoth clover, which is rather thin, the land being quite clean, and could be narrowed up. I have a piece of well plowed rowed up. I want a piece of soil plowed too much. What crop would be best to sow for fodder? Would it do to sow millet in drills as I want to clean the land?—N., Simcoe, Ont.

I do not think that sowing barley on clover field in question would be a good plan. Would suggest rather that you pasture till about June 1st, then narrow well and sow millet, narrowing again and rolling after sowing millet. If inconvenient to pasture then a mixture of oats, peas, barley and vetches, equal parts by weight, sown very thickly and well harrowed and rolled after seeding might be expected to do fairly well and furnish some good feed.

If not absolutely necessary to hoe land in question it would probably give best results if sown to oats peas, barley and vetches mixture mentioned above, sown four bushels an acre.

You would not get very good results in the way of quantity from sowing millet in rows although it would grow well. Probably sorghum would give best results as a hood crop and one that would make hay. Sow in rows two feet apart. Cut early and you might possibly get two crops. It is hard to cure as hay but it makes good ensilage.—J.H.G.

Criticism of Dairy Farm Plans

We are at present engaged in dairying in a small way, but wish like to enlarge a little. We have 50 acres of good land, all cleared and cultivated on which we live, and known as the home farm. Then we have 150 acres hay and pasture land one and a half miles from the home farm. We are at present driving cows to the pasture at day time, for night we have a field on the home farm. We are keeping about 15 cows. We have pasture land enough to carry 30 head of pasture farm, but an afraid we could not find pasture enough on the home farm for the night feed for so many.

We have been thinking of the following plans and would like to have your opinion as to which you would advise as to labour, etc.

First, pasturing cows on pasture farm during day time, soiling for night feed, which would require extra man, silo, etc.

Second—Pasturing and milking on pasture farm, May 24th to November 1st, feed extra man and cow shed.

Third—Have 15 cows drop calves during March. Pastured on pasture farm during day, brought to home farm to milk, soiled for night feed. Other cows drop calves during November and December.

Pasture on pasture farm during summer, require silo, no extra man. What diameter silo would you advise for 30 cows, for seven months and 15 cows soiling for five months, or would it be better to build two silos, one for winter feeding and one smaller for summer feeding?

We would prefer No. 3 plan ourselves as it would divide the work during the year and give skim milk for feeding calves and pigs.—W. K., Perth Co., Ont.

Of the three plans proposed I would say that either the first or third would prove more satisfactory than the second. If you have a sure market for your milk or cream, both winter and summer, then I would say that having your cows freshening from October 1st to April 1st, the larger proportion coming in the month of October, November and December would be the best plan. In this way your work in summer in the barns would be a good deal lighter than in winter, as quite a number of the cows would go dry in July, August and September and so might be left continuously on the 150 acre farm.

I believe, by constructing two silos, the one 15 feet in diameter for summer use and the other 15 feet in diameter for winter use, each 30 feet

high, you would have room for an ample supply of forage of a succulent nature. You will find it advisable even in summer to feed some cut straw or long hay along with the silage.

Do not make the mistake of building your silo too small.—J. H. Grisdale, Agriculturist, C.E.F., Ottawa, Ont.

Details of a Round Cement Silo

What proportions of cement and gravel do you advise for building silos? How much cement and how many yards of gravel would be needed for a silo 14 x 36? For a silo of this size what thickness of wall is recommended at the base and what at the top? Any other information relative to this matter would be thankfully received.—E. T., Northumberland Co., Ont.

Concrete silos are usually built of very coarse material and of a proportion



Cement Silos are Becoming Popular

The illustration shows one of the many round cement silos that have been erected in recent years. In Prince Edward Co., Ont. This particular silo is on the farm owned by Allan McDonald. Photo by an Editor of Farm and Dairy.

tion 1 to 10. We advise making them a proportion 1 to 8 as we find most people make them poor enough without being told.

A silo 14 x 35 ft., will take 42 yards of gravel and 36 barrels of cement. The concrete should be poured into the moulds very wet. If this is done a large quantity of stone can be added which is simply pressed down into the wet concrete and every yard of stone that is used will save one yard of gravel and one barrel of cement. It is customary to use 10 yards of stone in a silo, this size which will reduce the cement by 10 barrels, making it 26 barrels of cement.

It is customary to make a wall for this size of silo one foot thick at the base and five inches at the top. This silo should have a base two feet wide and six inches thick, unless the foundations are on very hard clay. In this case the foundations would not require to be so wide. It is always well to start a silo below the frost line. The silo should be floored with concrete about four inches thick; this floor being put on a level with the top of base foundation.—London Concrete Machinery Co., Limited—Henry Peacock, Manager.

I am much pleased with the pure bred Yorkshire pig sent me by Farm and Dairy and which was bred by John Shemilt of Cedar Dale, Ontario. It is a fine premium to win for such little trouble. I am greatly taken with Farm and Dairy. We always look forward to its coming.—James Barclay, Grenville Co., Ont.

This 5-Ton Scale Is Easy To Buy—

You need not club with your neighbors to equip your farm with the scale you need—the CHATHAM Pitless Scale. You can afford to buy **You Have Comes Ready For Use** it yourself. It will save you **No Bothers** more than its cost in one **No Bothers** season. Up to five tons it will weigh accurately all you buy or sell. You can erect it ready to use in a morning.

No Pit To Dig No Extras To Buy



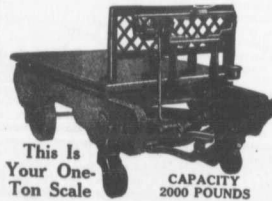
Your CHATHAM Pitless Scale will be YOUR Scale that you can take with you when you move. You can always get for it what you paid for it. And you need no skilled help to set up the CHATHAM—it comes to you complete, with plain directions. Built wholly of heavy steel. Nothing to rust, decay or go wrong. Government guarantees its absolute accuracy. Tested before it leaves the factory. Warranted fully.

This Is The Complete Scale

Bear in mind that you have no hard work to do in setting up a CHATHAM. It is all solid steel, stands on its own feet above ground,—no pit to dig, no fussy preparation needed before you use it. Comes to you so you can be weighing on it in a few hours after you get it. No skilled mechanic necessary at all.

Special Compound Beam — No Extra Cost

This season we include our new Compound Beam with each CHATHAM Pitless Scale without adding a cent to the price of it. You can find no bigger bargain; yet the price is 'way down low. In sections where we have agents we offer special long-time credit terms to those who would rather try the Scale before they pay for it. Write us and ask for full details.



This Is Your One-Ton Scale

CAPACITY 2000 POUNDS

Handy to move about as a wheelbarrow, yet accurately weighs up to a full 2,000 pounds. Swivelled pole and front wheels let you turn it short through alleys and around corners. Strong and staunch, too, like all scales we build.

You'll Never Wear It Out

Main frame is one solid and very heavy casting. Levers are special heavy and strong, so they won't spring under excessive strains. Bearings align themselves, because pivot rests on bearing loop—tilt the scale and it will still weigh right. And the price is very small!

I personally vouch for every statement this advertisement makes, and I further guarantee that my Chatham Pitless Scale is the biggest scale value you can buy for money in this or any other country. Write me about it and I will see that this is proved to your complete satisfaction. Write now.

MANSON CAMPBELL
President

WRITE US AND ASK FOR DETAILS

MANSON CAMPBELL CO. LTD.

CHATHAM - ONTARIO

HORTICULTURE

Vegetables for Home Use

Prof. W. S. Blair, Macdonald College.

Seedsmen advertise the numberless varieties of vegetables, each of which have desirable characteristics. The following sorts possess merits equal to any: Beans—Early Red Valentine, Stringless Green Pol, Wardwell's Wax and Davis' Wax.
Carrots—Chantenay and Nantes.
Cauliflower—Selected early Erfurt.
Cabbage—Early Jersey Wakefield; medium, Succession; late, Roundhead.
Celery—Paris Golden Yellow, self-balancing.

Corn—Early, Early Cory; second early, Crosby; medium, Golden Bantam; late, Country Gentleman.
Cucumber—White Spine.
Citron—Colorado Preserving.
Egg Plant—New York Improved.
Kohlrabi—Purple Vienna.
Lettuce—Grand Rapids, open head, and Unrivaled, cabbage head.
Musk melon—Paul Rose, Hackensack and Montreal Nutmeg.
Watermelon—Cold Early.
Onion—Large Red, Wethersfield, Yellow Globe Danvers and Australian Brown.

Parasip—Selected Hollow Crown.
Parsley—Double Moss Curled.
Peppers—Bull Nose and Golden Dawn.

Peas—Early, Alaska; second early, Thos. Laxton or Gradus; medium, Admiral Dewey; late, Stratagem.
Potatoes—Early, Irish Cobbler; late, Green Mountain, Carmen No. 1 and Vermont Gold Coin.
Pumpkin—Calhoun.

Radish—French Breakfast and Icicle.

Salsify—Mammoth, Sandwich Island.

Spinach—Victoria.

Squash—Vegetable Marrow and Hubbard.

Sweed Turnips—Favorite.
Tomatoes—Earliana and Early Jewel.
Turnip—Golden Ball.
Asparagus—Argenteuil.

Ontario Horticultural Exhibition

The annual meeting of the officers of Ontario Horticultural Exhibition was held in Toronto on March 30. The treasurer, Mr. J. H. Dunlop of Toronto reported that the last exhibition had been a success financially and that there was a balance of \$90 on hand. It was decided to hold the next exhibition in the St. Lawrence Arena, Toronto, during the week of November 14, 1910.

The prize list will include \$1,225 in prizes for fruit, \$1,500 for flowers and \$425 for vegetables and \$900 for honey, a total of \$3,450.

The election of officers resulted as follows: President, H. R. Frankland, Toronto; 1st vice-pres., Mr. W. Course of Streetsville; 2nd vice-pres., Mr. Thos. Manton of Eglinton; sec., P. W. Hodgetts, of Toronto; and treas., J. H. Dunlop of Toronto.

The executive committee consists of the officers and Messrs. R. W. King, E. F. Collins, H. G. Sibbald, W. Jay and T. Delworth. The chairman and secretary for the various committees were appointed as follows: Floral, chairman, W. Jay; sec., E. F. Collins; Honey, chairman, H. G. Sibbald, sec., P. W. Hodgetts; Fruit, chairman, W. H. Bunting; sec., P. W.

SEED CORN

Twenty-one leading varieties of seed corn. All guaranteed to grow. Buy directly from the grower. Nearly fifty years' experience. Send for seed catalogues.

M. A. JONES
RUTHVEN, ESSEX CO., ONT.

Hodgetts; Vegetables, chairman: T. Delworth and sec., F. F. Reeves. The chairman of the sub-committees will be members of the executive committee.

The Ontario Horticultural Association and the Niagara Peninsula Fruit Growers' Association were given the right to elect two representatives each as directors of the Ontario Horticultural Exhibition. It is expected the annual convention of the Ontario Women's Institute will be held in Toronto next fall at the time of the Ontario Horticultural Exhibition. The secretary was instructed to write to Mr. G. A. Putnam, Supt. of Women's Institutes and invite the Women's Institute to arrange for an exhibition of preserved fruit, vegetables and other similar exhibits at the exhibition.

Profits in Potatoes

At the convention of the Western Horticultural Society held at Winnipeg in February an address was given by S. R. Henderson of Kildonan, Man., on "Potato Growing." Mr. Henderson pointed out that even at the low yield of 125 bushels an acre, given as official returns for the average yield of the province, potatoes at

One Copy Worth a Dollar

One of my neighbors sent my name to Farm and Dairy as a new subscriber, and the first copy that I received was worth more to me than the price paid for the full year. I can not say too many of your most valuable paper.—Andrew Morden, Kent Co., Ont.

35 cents a bushel were a paying crop. He emphasized the necessity for the use of good seed, good cultivation and good land and estimated the profits on one acre as follows:

Seed, 20 bus. @ 50c.....	\$10.00
Plowing.....	2.50
Harrowing.....	2.00
Hilling.....	2.00
Hoeing.....	1.00
Digging.....	5.00
Marketing.....	16.00

Yield, 250 bus. @ 35c.....	\$87.50
Less cost of production.....	42.50
Profit for one acre.....	\$45.00

Fertilizers for Strawberries

W. T. Macoun, *Central experimental station, Ottawa*

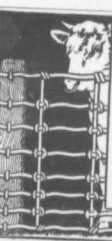
The best fertilizer for strawberries is well-rotted barnyard manure, which should be used in large quantities. There need be little fear of using too much—30 tons of well-rotted manure per acre being the maximum. It may be applied early in the spring before planting and thoroughly incorporated with the soil or it may be so as to get the soil clean and in the best condition for the strawberry plants. Fresh manure is not as satisfactory as rotted, for it may make the soil too loose, causing it to dry out quicker and make the conditions bad for newly-set plants. On heavy soils, fresh manure may be used with better results than on lighter soils, but as there are likely to be many weeds grow if green manure is used, rotted manure is preferable even on heavier soils. If fresh manure is used it will be better mixed with the soil by planting time if it is applied in the previous autumn.

Wood ashes are very useful for a top-dressing and from 50 to 100 bushels per acre may be applied broadcast early in the spring when the land

is being harrowed, the larger quantity being used for land which is poor in potash. An application of even twenty-five bushels per acre should give beneficial results.

If barnyard manure cannot be obtained easily, nitrogen and humus may be added to the soil by ploughing under clover, peas or some other leguminous crop; potash, by using muriate of potash, if wood ashes cannot be obtained; phosphoric acid, by the use of ground bone, at the rate of from 200 to 300 pounds per acre before planting. Nitrate of soda is also useful for furnishing nitrogen unless it can be obtained in a cheaper form, by the use of barnyard manure or leguminous crops. An application of 100 to 150 pounds of nitrate of soda broadcast just before the flowers open in the spring, is sometimes desirable if the plants are not making vigorous growth.—Extract from Bulletin No. 62.

Have you forgotten to renew your subscription to Farm and Dairy?



The fence that's strong all through

Every wire in our heavy farm fence is No. 9 hard steel, with uniform strength and lasting qualities in each strand. A fence with any small or soft wire in it is short lived. A chain is no stronger than the weakest link. Then more than double the endurance of other makes.

Peerless the fence that saves expense

The PEERLESS does not cost anything to keep—there are no repair bills—it is not affected by changes of temperature. The horizontal wires being crimped makes anti-stretch, is always tight—no shocks or cracks. It is made of high grade steel, galvanized, ornamental fencing and race. Write for Free Book, a sample of PEERLESS Fence and a simple method of testing any make of fence.

THE DANWELL HOEIE WIRE FENCE CO., LTD., Box 11, Hamilton, Ont., WINDSOR, MAN.

RENNIE'S SEEDS
THE FINEST IN THE LAND

SOME NEW THINGS FOR 1910

Big Crags Acker, 55c. Redfoot Tomato, 10c.
Sparkle Bachelors, 50c. May King Lettuce, 10c.
Sponsor Giant Sweet Peas, 30c.
Lemon Kid Cucum, 5c.

The 6 packets for 55c. postpaid.

Order from your dealer, or direct from
WM. RENNIE CO., LIMITED

TORONTO
ALSO MONTREAL-WINNIPEG-VANCOUVER
WRITE OUR NEAREST ADDRESS

SCHOOL fires are much more frequent than necessary, and so costly in life and money that no precaution which will prevent them is too expensive. "Classik" Embossed Steel Ceilings and Walls afford the cheapest means of fire-proofing any building. Sanitary too. Invisible dust-proof seams in which no dirt or germs can rest. Last forever without cracking, falling or becoming discolored. Hundreds of beautiful, classic designs to choose from. Pleasant school rooms make work easier and solve half the truant problem. Catalog "A" showing designs suitable for schools, churches, residences, etc., free on request.

**The Galt Art Metal Co., Ltd, Galt, Ont.
WINNIPEG-DUNN BROS.**

Galt "Classik" Ceilings
Agents wanted in some localities

POULTRY YARD

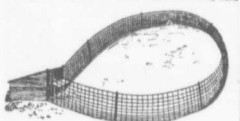
Age Limit of Hatching Eggs

How long do you consider it safe to keep eggs for hatching? Where only a few hens are kept as breeders it takes quite a time to get enough for the incubator. What is the best way to keep them?—A. D. Peterson Co., Ont.

If hatching eggs containing a good strong germ are kept fairly dry, and turned occasionally, in a room between 55 and 60 degrees, they should keep from two to three weeks. The longer they are kept, however, the poorer the results that might be expected. They should not be kept in an open basket but in a covered receptacle.—F.C.E.

Anxious about Off Colored Eggs

Are eggs from any one brood of thoroughbred hens of one color? I have paid a high price for eggs, sold for pure bred White Wyandottes, and some of them are of a rich brown, some light brown, and



Portable Fencing for Chickens Runs

The above shows a very convenient means of yarding in chickens on temporary runs, some pure white. They are also of different sizes and of somewhat different shapes. Does this show they are not pure bred? An early reply will greatly oblige.—G. H. Laird, Oxford Co., Ont.

The color and shape of individual eggs is not always an indication of the brood. Your eggs may have come from a pure brood of White Wyandottes. The fact that some of them are white and some of them brown does not prove anything, though certain breeds have a general definite color in their eggs. There are some breeds that give a good many individual eggs which might be called off-color and the Wyandottes are known to be very irregular in their egg coloring.

The only way to get rid of the undesirable color, white, in this breed is not to use white eggs for setting purposes. This in time would get rid of the hens that laid these off-colored eggs.—F. C. E.

Elm Grove Poultry Farm

Guaranteed Fertile Eggs for sale from the following breeds: Rose Comb Brown Leghorns, Silver Greys, Bockings, Light Brahma, Barred Rocks, Marching Friesons, Turkeys, Kambden Game, Rouen Ducks.

Send for Catalogue
J. N. RUTHERFORD, Box 62, Caledon E., Ont.
Member of the Leghorn Club of Canada
Telephone 7 on 8

WINDMILLS

Turns five foot apart and double braced

Grain Grinders
Pumps
Tanks
Gas and Gasoline
Engines
Concrete Mixers

Write for Catalogue
GOULD, SHAPLEY &
MUIR CO., LIMITED
BRANTFORD, CANADA
BRANCH OFFICE
WINNIPEG, MAN.



The Egg Eating Habit

C. G. Golding, *East, Ass., Sask.*
The oft-repeated cry, "Why do our hens eat their eggs?" is common at this time of year. Replies are given by eminent experts generally advising more activity for the hens, variety of rations, oyster shell and grit, dark nests, etc. All these things, of course, are essentials and if never lacking, the habit will diminish, if ever acquired. Still, why do hens eat eggs? Let us see.

It will be noted that the habit is seldom prevalent among a flock of hens on free range during the summer, and this fact may lead to the theory that close quarters and idleness may be the cause. And indeed it is, in a sense; it is a contributing cause. But in a few hens kept in a large stall will learn the habit and, getting only what feed they can dig out of the litter and manure, can hardly be called slothfully idle, and yet it is well known that such hens are among the worst offenders. They may be overfat then. This is true, but overfat hens do not lay at all.

Let us now examine the eggshell. During the summer and fall hens are on free range, the shell is quite hard and a person feels that he may handle that egg without fear of putting his finger through it. But when a hen crushes the shell in the winter, Eggs are even laid without any shell.

The material that makes the shell so hard is lime. It is also one of the hardest materials to feed a hen in sufficient quantity when once she becomes short of it. She won't drink water containing lime, if you scatter it on the floor in the hope that she will pick it up; you will still get soft eggs, if you get any.

There is one method, however, which we discovered some years ago and have never known to fail. Feed it in boiled grain. Just about a tablespoonful to a pail of grain, boiled with the grain, and fed with it, and in one or two weeks you will get eggs with hard shells on and little specks of lime all over the shell and never an egg will be eaten unless some hardened sinner still persists, in which case you had better stop.

An ounce of prevention is most surely better than a pound of cure, and if you keep your birds active, feed roots, animal food and a little grain and keep a hopper of oyster shells and grit always handy, there will be very little trouble with hens eating eggs. If the shells should get a little thin, a boiled feed with lime once a week is the remedy.

Cause of Infertile Eggs

In some cases the cause of infertile eggs can be traced to the male bird not getting sufficient food. In his care for the hens and his gallantry to them, he allows them to eat the grain, and if the supply is short he has to go on short rations. Again, the fault may lie in the size of the breeding pen. There may be too few and there may be too many hens in the pen.

If the male is a very active fellow, and he be allowed too few hens, he will so harass them, and they so determined to fight off his advances that the eggs will be poorly fertilized. On the other hand, if the number of hens is too many, and the male not active, he will be unable to give them the proper attention. It is necessary to study the condition of the male bird in mating.—R. L. Leeds Co., Ont.

As a rule matured fowls' eggs hatch better than pullets and produce healthier and better chicks.

Better by a pair of birds and pay a good price and get something good than to pay the same price for half a dozen and get birds not of good quality.

THE IDEAL GREEN FEED SILO



Save your Hay
Decrease Grain Bills
Produce More Milk
Save More Money

With one of our Silos you can do it. Thousands in use. Built in all sizes, and shipped complete. Send for Free Catalog.

CANADIAN DAIRY SUPPLY CO. LIMITED MONTREAL

MY BIRDS won over five hundred first prizes at eleven shows. Barred and White Rocks, White and Brown Leghorns, Black and Spangled Hamburgs, Buff Orpingtons, Black Javas, White Crested Black Poland, White and Silver Laced Wyandottes, Rose and Single Comb It. I. Eggs, two pens of each breed, No. 1, \$2.00; No. 2, \$1.00 per 15 eggs; Black Orpington, Houdans, Light Brahmas, Partridge and Buff Cochin, Silver Penciled and Columbia Wyandottes, Buff Rocks, Blue Andalusians, Anconas, Golden Seal Bantams, one pen, only \$2.00 for 15 eggs. F. W. Krouse, Guelph, Ont.

\$6.00 A HUNDRED

Buys the finest White Leghorn eggs for setting. Original utility birds from OVERTISS BROS.

LUCK DUNSTAN, Crystal Beach

Bruce's Giant Yellow Intermediate Mangel



This grand Mangel, which we introduced in 1891 is without a doubt the favorite with all cattle men at the farm. The large size of the roots, their uniformity, handsome shape, bright smooth, yellow skin, flesh of the most solid texture, nutritious and splendid keeping qualities, make it one of the most valuable introductions of recent years. While in point of size they will not equal the best of long varieties, yet in the yield per acre richness they far exceed the best long varieties, added to which they are much more easily harvested, about half of their weight being above the ground. We have kept our stock fully up to the original high standard and it will pay the grower to procure our grand strain of this unequalled variety. 1/4 lb. 10c; 1/2 lb. 15c; 1 lb. 25c. Postage extra. 50 lb. to Canadian points, and 15c to United States and Newfoundlands.

FREE—Our 104 page illustrated catalogue of vegetable, flower and farm seeds, bulbs, plants, poultry supplies, implements, etc. Send for it.

Established 60 Years.

JOHN A. BRUCE & CO., LIMITED
HAMILTON, ONTARIO

The Tireless Accurate Iron Hand

You can operate the Aspinwall No. 3 Potato Planter without the assistance of another man. The Aspinwall No. 3 not only saves you the extra man's pay, but also plants one-third faster than machines requiring two men. The hand that handles the seed on the Aspinwall No. 3 is the iron hand. Unlike the human hand, it never gets tired. It drops 25 per cent. good seed. You can use different sizes of seed and vary the distance of planting without requiring change of pickers. No other planter can compare with it in accuracy or handle as large a range of seed.

Send for our catalog M1. We are largest manufacturers of potato machinery in the world, and we can give you valuable facts on profitable potato culture.

The Aspinwall Mfg. Co. Aspinwall, No. 3 Potato Planter

Jackson, Mich., and Guelph, Can.

It is desirable to mention the name of this publication when writing to advertisers

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD CASH WITH ORDER

BEES.—Wanted, several colonies of bees. J. R. Black, Harwood, Ont.

CHEESE AND BUTTER MAKER wants position. Eight years experience. Graduate of Experimental School. State wages paid and outfit.—Address Box 329, Owen Sound, Ont.

WANTED—Cheese makers the coming season to sell subscriptions to Farm and Dairy, Peterboro, Ont.—Good cash commission for each subscription taken. Write Circulation Manager, Farm and Dairy, Peterboro, Ont., for sample copies for your paper use. Samples sent free on application.

WANTED

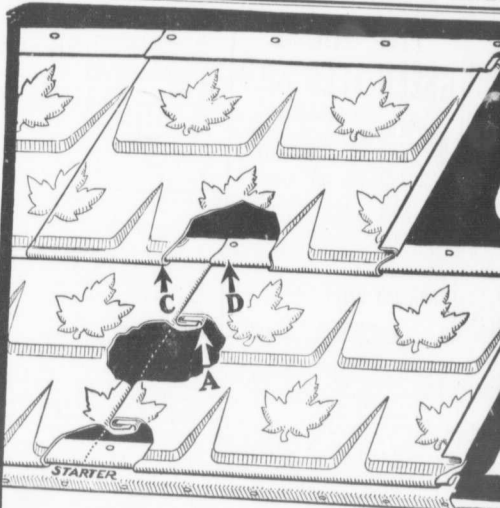
Persons to grow mushrooms for us. Small waste space in yard, garden or farm can be made productive from \$15 to \$25 per week. Write for illustrated booklet and full particulars.

MONTREAL SUPPLY CO., MONTREAL

EGGS GIVEN AWAY in return for new subscriptions. Send us the names of a standard variety of fowl, given away in return for two new subscriptions to Farm and Dairy, Peterboro, Ont.—Write to Circulation Manager, Farm and Dairy, Peterboro, Ont.

GOLDEN SEAL.—Money invested in golden seal is a good investment. Good sized roots, \$1.5 per 100. Large sized roots, \$3 per 100.—W. N. Long, Florence, Ky.

BARGAINS.—Famous Prize of Ontario strain of Rose Comb Rhode Island Reds, White and Partridge Wyandottes, are prize winners; record breaking layers; large, strong, vigorous, quick growers; circular free; eggs, special bargain; price only \$1.00 per setting; special quantity prices; satisfaction guaranteed. Pride of Ontario Poultry Yards, Collingville, Ont.



Note the Safe-Lock Construction of **PRESTON SAFE-LOCK SHINGLES**

Safe-Locked on All Four Sides

Don't make the mistake of thinking that all makes of metal shingles are very much alike. There is a vast difference between PRESTON Safe-Lock Shingles and others.

Unlike other Shingles, PRESTON Shingles do not merely slip or slide together. Instead, they are SAFE-LOCKED on all FOUR sides. The picture above shows how.

Look at ARROW A. See how the sides of the shingles hook over each other. This is on the principle of the "sailor's grip." It is utterly impossible for shingles locked in this way to pull apart. The heavier the strain, the firmer the grip.

Twice as Strong

The top lock of PRESTON Shingles is TWICE as strong as our wonderfully secure side lock. It consists of three thicknesses of sheet steel—see ARROW B.

The top of the shingle is where the greatest strain falls. Yet the top lock of most other metal shingles isn't as strong as the side lock of ours.

ARROW C shows how the shingles above hook over and lock securely to row below.

Nailing Is Protected.

ARROW D shows the method of nailing together the top locks of two adjoining shingles. The top lock of the right hand shingle overlaps the one on the left. The nail goes through both shingles.

All nails on the flange of the top-lock are covered by the shingles on the row above. Thus all nails are protected from exposure to the weather. They cannot rust or work loose. They are there for keeps.

So strong are our locks that there has not yet been a gale

powerful enough to rip off a roof covered with PRESTON Safe-Lock Shingles. The terrific wind storm that swept over Ontario on April 8, 1909 ripped off scores of wooden, metal and prepared roofings. Yet not one of these metal roofs was a PRESTON Safe-Lock roof.

Gale-proof Shingles

So close do PRESTON shingles lay to the sheeting and so secure are the Safe-Locks that even if some of the shingles were not nailed the roof would be solid end wind-tight.

It is utterly impossible to get PRESTON Shingles off the roof in any other way than by removing the nails one by one and unlocking each shingle separately. When you put PRESTON Shingles on your roof they are on to stay.

Snow-proof, too

No snow can be driven up PRESTON side locks and on to the sheeting below. The fold of our top lock closes right down over the end of the side lock. No rain or snow can be forced past this fold of sheet steel, unless you drill a hole through it first.

Just how easy it is for snow or rain to be driven up the side joints of other shingles you can readily see for yourself.

Simply fasten the sides of two ordinary shingles together. Then hold the shingles up and look through the joint. You can see daylight through it. That means there is an unobstructed passage through which rain or snow can be driven by the force of the wind.

Make the same test with PRESTON Shingles. You cannot see daylight through our side joints. That means the ends of our side locks are closed securely against wind and weather.

Generous Folds

The folds of PRESTON Safe-Locks are of such generous size that there is room and to spare for expansion and contraction due to excessive heat and cold.

Even the shrinking of the wood sheeting or the heavy strain due to the settling of the building is not sufficient to make any difference to our safe-locks, whereas other shingles will pull apart and leave spaces for leaks.

Patented Construction

You understand now why PRESTON Safe-Lock Shingles are so different in construction from other metal shingles. They will always be different and better, too. We were the originators of the interlocking Shingles. The patents we hold prevent others from making as good a shingle.

British Government Specifications

It is a well known fact that the British Government is the most particular buyer in the world. Ordinary metal shingles could not pass their Acid Test for galvanizing. This test is more severe on the galvanizing than twenty years of Canadian weather. Yet PRESTON shingles will easily pass this test.

PRESTON Shingles are made and galvanized according to British Government Specifications.

Twice the Service

Shingles galvanized according to these specifications are good for twice the service of shingles galvanized in the ordinary way.

Metal Shingle and Siding Co.

Head Office, Dover Street Factory, Preston, Ont.
Branch Office and Factory, Montreal.

Limited

1

Lightning Guarantee, Free

We have been making PRESTON Safe-Lock Shingles for eleven years. In all that time we have never heard of lightning damaging a building roofed with PRESTON Shingles.

So positive are we that a roof of PRESTON Shingles is lightning-proof that we give you a lightning guarantee free. This proves to you our unlimited confidence in the lightning-proof quality of PRESTON Shingles.

Most Quickly Laid.

As PRESTON Shingles are cut accurately to size, and the locks carefully made, they lock together quickly.

A man and a helper can lay 10 squares of PRESTON Safe-Lock Shingles in a day, whereas 5 or 6 squares would be a good average with ordinary metal shingles. If you have a large surface to roof that saving of time and labor means a good deal to you.

Booklet Reward

We have just issued a new booklet, "Truth About Roofing." We should charge something for this, as it contains information of real value to anyone who has a building to roof. But we will send it FREE as a reward to all who cut out, fill in and mail the coupon to us. Just you mail it today, or you'll forget it.

Please send me your new booklet, "Truth About Roofing." I am interested in roofing and would like complete information about PRESTON Shingles, British Government Specifications and Free Lightning Guarantee.

Name _____
P.O. Address _____
County _____ Prov. _____

Prospects for Dairying in 1910

A summary of the conditions prevailing as regards feed supply, number of cows and the prospects for the dairy season, which is now opening, as compiled from a large number of special Farm and Dairy correspondents located in the prominent so-called dairy sections of Ontario, was given in Farm and Dairy last week. From these reports it would appear that prospects for the dairy season of 1910 are exceedingly bright. There seems to be no shortage of feed. Spring is opening up several weeks earlier than last year and everyone seems confident in their expectations for one of the best seasons that it is possible to have.

While such are the conditions prevailing in the dairy sections of Ontario, the prospects are perhaps not so favorable for Quebec. Serious shortage in feed supplies during the past two years has caused many farmers to reduce their herds. Quebec farmers until recently have relied solely on pastures for summer feeds and hay and straw for winter fodder. Recent experiences of short supplies of these fodders, however, have caused many to turn to corn and the silo. The abundant corn crop of last year did much to relieve the situation, and it will be the means of many more turning to this great crop as a source of feed for 1910.

Brief extracts from Ontario and Quebec correspondents, other than those given last week, follow: L. Tennant, Brant Co., Ont.—“The number of cows will slightly exceed that of a year ago. Fresh cows are in great demand and bring high prices at sales. The feed supply will be sufficient. Present indications point to an early season. After the experi-

dairy cows above that of a year ago. Farmers are trying to obtain an increased production without making any addition to their herds. There is a good market here for dairy products during the summer season, but it is not so good in winter. We would be greatly benefited by the operation of more creameries, and these factories. There is plenty of feed for dairy cattle.”

Frank Webster, Victoria Co., Ont.—“Ours is not what one might call a dairy district, although we have several factories and creameries.



A Most Serviceable and Sanitary Milk Stand

The illustration shows a combined ice house and milk stand, the type of which is becoming popular throughout Eastern Ontario. The stock bull, “Count Eric of Meadowlark,” stands in the foreground. Photo taken on Mr. H. C. Emerson’s farm, Hastings Co., Ont.

They draw their supplies from a large radius of cows will number about the same all last year. Feed is holding out very well.”

R. C. Cleugh, Northumberland Co., Ont.—“Feed supplies are holding out well, and there will be plenty until pastures are ready. There are good prospects for dairying this coming season. Cows will number less than a year ago.”

H. S. Tucker, Hastings Co., Ont.—“Prospects for the dairy industry in 1910 are encouraging. Cattle have wintered well, and there is a noticeable absence of sickness in herds. The supply of feed is sufficient for local needs and will last out safely until pastures are ready.”

W. F. Stephen, Huntingdon Co., Que.—“Last fall a lot of old cows were sold as canners. As many heifers if not more are ready to take their place. We have a larger percentage of cows ranging from four to eight years of age than ever before. We have a sufficiency of roughage, though we are short of concentrates. Thousands of new silos were erected last fall and the large corn crop saved in the silo accounts for our abundance of roughage. Prospects for dairying were never better. Milk in Montreal from May 1 to Sept. 30 will realize \$1.50 a cwt., which after deducting freight, 30 cents a cwt., leaves the producer \$1.20 net. The condensory offers \$1 a cwt. for five months commencing May 1. Dairy-men look for a favorable season.”

M. D. Buchanan, Richmond Co., Que.—“Spring is at least two weeks earlier than usual. Feed is plentiful, though high in price. There will be abundance to winter out the cattle until pastures are ready.”

Herbert Coates, Compton Co., Que.—“It would appear as if there will not be as many dairy cattle this year as a year ago. The last two seasons have been dry and feed short, consequently farmers sold off a lot of their stock. Spring promises to come early; and we need an early spring in order to help out on the feed question.”

Hugh McFadden, Sherbrooke Co., Que.—“The outlook for dairying in this section of the Eastern Townships

is not as bright as we could wish. Serious shortage in the hay crop last year caused many farmers to sell off much of their stock, including cows. The mild winter and the exceptionally early spring makes the feed question not as serious as it was anticipated. The situation as regards stock, feed and dairy products is creating a healthy tendency amongst farmers to raise more feed in the shape of grain and fodder corn.”

C. A. Westover, Missisquoi Co., Que.—“All things considered, the prospects for dairying this coming season are very good. Dairy products are in good demand and at good prices. Large numbers of dairy cattle were sold last fall owing to the shortage of fodder caused by drought during the summer. Cattle were sold off probably to the extent of 10 per cent. This reduction in herds, however, did not hinder the sale of large quantities of hay and grain which were brought in by the carload and sold at high prices. Some are still short of feed, but the majority have sufficient to last until pastures are ready. Some dairymen last year made provision for shortage of feed by deoting a larger area to corn. Many, however, depended upon their hay and straw, with the result that their cows have been poorly fed all winter.”

If we would succeed in producing sheep at a profit we must place better fitted mutton on the market than in the past and by the excellence of our product compel those who are looking for good, nutritious food to recognize lamb and mutton as it long has been recognized in England, the finest and most healthy of all meats.—Geo. L. Telfer, Brant Co., Ont.

Have you forgotten to renew your subscription to Farm and Dairy?

Sound as a Dollar



That's the only way you can afford to keep them, because any lameness means less work and less profit to you.

Spavin, Splint, Curb, Sweeney, Ringbone, Swelling or Lameness need not prevent your horses from working. Simply use Kendall's Spavin Cure.

It works while the horse works—takes away the pain—reduces swellings—makes the joints sound and strong—leaves no scars or white hairs because it does not blister.

Kendall's Spavin Cure

has been the horseman's standby for 40 years and is used all over the world.

Burns, Ont. Sept. 10th 1909. “I have used Kendall's Spavin Cure and it cures **Old Shaver Gass**”

WILLIAM H. DODD. Keep your horses sound as a dollar. Get Kendall's today and you will have it tomorrow if needed. \$1 a bottle—6 for \$5.

When you buy, ask for free copy of our book “A Treatise On The Horse” or write us

Dr. B. J. KENDALL CO., Emsbury Falls, Vt.



A Type that Should be Discouraged

This milk house has convenience alone as a recommendation. It opens directly into the horse stable. —Photo snapped by an Editor of Farm and Dairy.

ences of the last few years, efforts will be made to a larger extent to supply green feed in case we have short pastures. Some new silos are to be built this summer. Those who have silos are well satisfied with them.”

J. E. Jewson, Welland Co., Ont.—“There may be an increase of from five to ten per cent in the number of

PREPARE NOW TO MAKE EVERY MINUTE COUNT AT HARVEST TIME

FOR you must make every minute count then to be sure of getting the full profit from your acres. Smooth, rapid, uninterrupted work is a necessity when the grain is ripe for cutting. Every delay due to a slow, inefficient broken-down machine will rob you of a part of the reward you have a perfect right to expect.

You have used great care in preparing the ground—sowing the seed—caring for it while it is growing.

Don't, through lack of foresight now, run any risk of making valueless at harvest time the hours of labor spent in preparing for it.

Be prepared to get all the crop with a McCormick.

Your grain may be tangled or down. It does not matter, a McCormick Binder will pick it up quickly and bind it in the best possible shape.

The McCormick Binder is made to meet the requirements of the Canadian farmer. It does so as no other machine does. It has stood the test of time. Its light draft, strength and uniform good work will permit you to save all your grain with the least labor on your part.

The McCormick line embraces a large number of other machines just as valuable as the binder, such as drills, tillage implements, gasoline engines, cream separators, wagons, hay presses, manure spreaders and motor vehicles.

Every McCormick machine is the superior product of expert designers and skilled workmen. Look over your machines today. See what you need to properly handle the harvest this year. Then call on a local dealer or write direct for further information. Take the step now that will insure your getting all the profit from your harvest.

CANADIAN BRANCHES—International Harvester Company of America at Brandon, Calgary, Edmonton, Hamilton, London, Montreal, Ottawa, Regina, Saskatoon, St. John, Winnipeg, Yorkton.

INTERNATIONAL HARVESTER COMPANY OF AMERICA CHICAGO U.S.A. (Incorporated)



chine is the superior product of expert designers and skilled workmen. Look over your machines today. See what you need to properly handle the harvest this year. Then call on a local dealer or write direct for further information. Take the step now that will insure your getting all the profit from your harvest.

chine is the superior product of expert designers and skilled workmen. Look over your machines today. See what you need to properly handle the harvest this year. Then call on a local dealer or write direct for further information. Take the step now that will insure your getting all the profit from your harvest.

chine is the superior product of expert designers and skilled workmen. Look over your machines today. See what you need to properly handle the harvest this year. Then call on a local dealer or write direct for further information. Take the step now that will insure your getting all the profit from your harvest.

chine is the superior product of expert designers and skilled workmen. Look over your machines today. See what you need to properly handle the harvest this year. Then call on a local dealer or write direct for further information. Take the step now that will insure your getting all the profit from your harvest.

chine is the superior product of expert designers and skilled workmen. Look over your machines today. See what you need to properly handle the harvest this year. Then call on a local dealer or write direct for further information. Take the step now that will insure your getting all the profit from your harvest.

chine is the superior product of expert designers and skilled workmen. Look over your machines today. See what you need to properly handle the harvest this year. Then call on a local dealer or write direct for further information. Take the step now that will insure your getting all the profit from your harvest.

chine is the superior product of expert designers and skilled workmen. Look over your machines today. See what you need to properly handle the harvest this year. Then call on a local dealer or write direct for further information. Take the step now that will insure your getting all the profit from your harvest.

chine is the superior product of expert designers and skilled workmen. Look over your machines today. See what you need to properly handle the harvest this year. Then call on a local dealer or write direct for further information. Take the step now that will insure your getting all the profit from your harvest.

BLACK WATCH

The Name of

Black Watch

On a Tag on a Plug of Black Chewing Tobacco

Stands for Quality.

2273

McCormick

THE

McCormick

FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



1. FARM AND DAIRY is published every Thursday. It is the official organ of the British Columbia, Manitoba, Eastern and Western Ontario, and Bedford District, Quebec, Dairymen's Associations, and of the Canadian Holstein, Ayrshire, and Jersey Cattle Breeders' Associations.

2. SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Great Britain, \$1.25 a year. For all countries, except Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

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

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

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

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

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed \$250,000. The actual circulation per each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 9,000 to 10,000 copies. No subscriber's subscription rate is less than the full rate. Thus our mailing lists do not contain any dead circulation.

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

OUR PROTECTIVE POLICY

We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertiser's reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have cause to believe that any advertiser is unreliable, we should we find reason to believe that any of our advertisers are unreliable, even to the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose them through the columns of the paper. Thus we will not only protect our readers, but our reputable advertisers as well. All that is necessary to entitle you to the benefits of our Protective Policy, is to include in all your letters to advertisers the words, "I am your ad. in Farm and Dairy." Complaints for reason for dissatisfaction has been found.

FARM AND DAIRY

PETERBORO, ONT.

A BIG MAN AND A LARGE SALARY

The salaries paid in Canada to our agricultural authorities are far too small. For this reason it is going to be impossible to secure a capable president of Macdonald College unless a large salary, one of at least five or six thousand dollars a year is paid. There are any number of men who would be glad to accept the position for far less salary but such men are not the kind who are likely to make the success of Macdonald College that the best interests of the country require.

The president of Macdonald College must be a man of strong personality, capable of ruling such a large institution, firmly and harmoniously, while being at the same time enterprising, progressive and holding the respect of not only the members of his staff but of the farmers of the country as well. Until such a man can be found for Macdonald College, the work of that

institution will be seriously crippled. A strong man must be secured and he must be paid a suitable salary. It is fortunate that Sir. Wm. Macdonald's experience in business must have shown him how essential it is that men who hold important executive positions must be capable and well paid.

BRIGHT PROSPECTS FOR THE FARM

The number of food animals in the United States has decreased five million since 1901. The number of consumers has increased 12 million in the same time. These figures are the result of the analysis by the Bureau of Statistics of the Department of Commerce and Labor, of the census estimates of population, and the Department of Agriculture's estimates of food animals in the years 1901 and 1910. The term "food animals" includes in this instance all cattle, sheep and swine in the United States as estimated by the Department of Agriculture. The term "consumers" includes all the population as estimated by the census.

The total number of cattle in the United States on January 1st, 1901, according to figures of the Department of Agriculture was 62½ million; sheep 59½ million, and swine, 57 million. For January 1st, 1910, the estimate was, cattle, 69 million; sheep, 57½ million and swine 47½ million, a total of 174 million, a decrease of five million in the aggregate of the three groups of food animals. The census estimated the population of United States on June 1st, 1901, at 77,647,000 and on June 1st, 1910, at 89,912,000, an increase of a little more than 12,000,000 in the population while the number of food animals was declining about 5,000,000.

In the meantime, the total value of the food animals in the country has increased despite the reduction in number. The estimated increase in the aggregate value of food animals is 22 per cent. while the total number was declining a little less than three per cent. the increase in the average farm value per animal of the entire number of food animals being 25½ per cent.

Prices of grain show advances also. The quoted price of corn in the New York market in the first week of January, 1901, was, according to figures of the Bureau of Statistics, 45½ cents a bushel and in the first week of January, 1910, 71½ cents a bushel, an advance of 56 per cent; of oats in January, 1901, 28½ cents a bushel and in January, 1910, 49½ cents, an advance of 75 per cent; of wheat, in the first week of January, 1901, 81 cents a bushel and in January, 1910, \$1.30 a bushel, an advance of 60½ per cent.

With such conditions ruling in the Republic to the south, there can be little danger but that high prices for farm produce will continue to prevail for several years. Those who recognize the situation, and have the necessary foresight to plan accordingly, are the ones who will profit from the high prices made possible by these economic conditions.

THE ISSUE MUST BE FORCED

Some 300 municipalities in Ontario recently petitioned the Ontario Government for power to assess improved values at a lower rate than unimproved values. The object of these petitions to the Government was to have it made possible for them to encourage farmers and others to improve their lands and homes instead of increasing their taxes when such improvements are made. The desired system of taxation is in force throughout Australia and is giving general satisfaction. It has also proved successful in portions of the United States.

Premier Whitney turned the petitions down with an intimation that the municipalities did not understand what they were petitioning for. The probabilities are that the municipalities understood the situation a good deal better than Premier Whitney does. The officers of the councils presenting these petitions are closer to the people, on the question of municipal taxation, than is Premier Whitney. They know what their constituents want. Premier Whitney evidently does not.

This question is one of too great importance to be allowed to drop at this stage. The issue must be pushed. The agitation for the desired change in the basis of taxation must be continued. Nothing more unfair than our present system of taxation can well be imagined. The Government must be shown that the change desired is absolutely necessary and that it must be granted.

IMPORTANT WORK THAT IS NEGLECTED

As part evidence of the fact that the resignation of Dr. James W. Robertson proved a serious blow to the Dominion Department of Agriculture, we drew attention recently to the fact that some time after Dr. Robertson's resignation, the Poultry Division of the Dominion Department of Agriculture was abolished. One reason given for this procedure was that the work of the Poultry Division was duplicated to some extent by the Poultry Branch of the Dominion Experimental Farm. Of the two, the latter might have been done away with the more readily inasmuch as the work of experimental farms properly belongs to the provinces and not to the Dominion Government. The provinces have experimental farms of their own on which extensive experiments in the handling of poultry, are conducted. The larger questions of trade, however, are being left undealt with by the provinces as they cannot handle them to advantage. This work properly belongs to the Dominion Government and it is not being touched.

As an example of what could be undertaken, we might note that practically nothing is being done to increase our export trade in poultry. Denmark has made a great success of its poultry trade through combining the poultry and the dairy interests. Eggs and poultry are collected through the creameries, packed and graded in

uniform manner and exported to the British market. One of the largest wholesale and retail commission houses in Canada has expressed its willingness to Farm and Dairy to pay an advance of two cents a dozen over the regular market price for all eggs handled in this way by Canadian creameries.

Our export and home trade in poultry might rapidly be increased by hundreds of thousands of dollars each year were our Dominion Government to take up and push this matter. Nothing has been done by the Dominion Government and nothing seems likely to be done as things are at present. As soon as a capable Deputy Minister of Agriculture can be secured; a man who knows what the country needs and with the ability and enterprise to see that its needs are filled, the Dominion Department of Agriculture will speedily become of much greater value to the farmers of Canada.

PAY ATTENTION TO LABELS ON SEED

When buying seeds, we should always look for the information concerning certain weed seeds, which, if present in any quantity at all, should go with seeds that are offered for sale. These labels apply to 15 noxious weed seeds. These weed seeds appear mostly in seed grain. Two of them, viz., ragweed and wild mustard may be present in alfalfa and red clover so that a label is required.

Some of the seeds besides the two just mentioned and about which information should be given are wild oats, purple cockle, cow cockle, perennial sow thistle, ergot of rye, field bindweed—and what should be looked for in any seed coming from the prairie provinces, ball mustard, hare's ear mustard and pennycress.

Some of the wholesale houses protect themselves by putting on the labels. Some of the dealers however, neglect to do this as they find that farmers will not buy such seed when labelled. Inspectors are insisting on the label being present.

Credit Where Due

(The Pacific Homestead, Salem, Ore.)

It is credit justice to say that much of the credit for the successful meetings of the British Columbia Dairy-men's and Live Stock Associations is due to Ronald W. Hodson, secretary and treasurer of both the associations. Mr. Hodson is also the Live Stock and Dairy Commissioner of the province and it is our judgment that a great deal of the energy, enthusiasm and progress that we find along dairy and live stock lines in British Columbia, is due to the energetic work of Mr. Hodson. British Columbia is fortunate in having such a man to fill this position.

In conclusion we warn the dairymen of Oregon and Washington that unless they look well to their methods, there is grave danger of their brother dairymen of British Columbia excelling them, not only in manufacturing production but also in the class of their stock. One thing more; these Canadians certainly do know how to en-

tain their guests. The time spent attending the meetings of their associations was enjoyed more by me than any other like time in my life.

PUBLISHER'S DESK

We feel proud of last week's issue of Farm and Dairy, our second annual Special Dairy Number. Did you look it over carefully? If so, did you notice the high standing of practically every contributor? While some agricultural papers have printed larger issues, we do not believe that there has ever been published in the Dominion a stronger number for its size. Aside altogether from the illustrations, which were high class, the contributors were almost all well known agricultural authorities and their articles were short, seasonal, instructive and interesting. The contributors included the following prominent men: Mr. A. C. Rowson of London, England, the head of a firm which handles millions of dollars' worth of butter and cheese every year and who are probably the largest dealers in cheese and butter in the world; J. H. Grisdale of the Experimental Farm, Ottawa, possibly the greatest all-round agricultural authority we have in Canada; Dr. H. G. Reed, a noted expert judge and lecturer in the Ontario Veterinary College; G. A. Brodren, the first prize farmer in Peterboro County; John H. Scott, the president of the Western Ontario Dairymen's Association; J. A. Ruddick, Dominion Dairy Commissioner, who contributed an especially interesting article; L. H. Newman, the secretary of the Canadian Seed Growers' Association; Chas. F. Whitley, who is in charge of the cow testing work for the Dominion Government; Anson Groh, a prize winning farmer in our Prize Farms Competition who, the judge reported, has accomplished wonders in increasing the fertility of his farm, and who wrote on that subject; S. J. Foster, the owner of the cow which has just beaten all Canadian records for milk and butter production; Henry Glendinning, the well known institute speaker and the president of the Eastern Ontario Dairymen's Association; Dr. C. A. Pablow of Ithaca, N. Y., a Canadian who is now recognized as one of the greatest dairy authorities on the continent, and who is the author of several standard works on dairying; J. H. Caldwell, a prize winning farmer in District No. 1; J. C. Chapin, Assistant Dominion Dairy Commissioner; M. H. Gardner, the Superintendent of the American Advanced Registry; Principal M. Cunningham of the Nova Scotia College of Agriculture; W. A. Wilson, Superintendent of Dairying, for Saskatchewan; J. F. Singleton, Creamery Inspector for Eastern Ontario; H. E. Van Norman, Prof. of Dairy Husbandry for the Pennsylvania State College; Prof. H. A. Surface, State Zoologist of Harrisburg, Pa., as well as a number of other contributors who, while possibly not so widely known, are recognized authorities on the subjects with which they deal.

When we see men of such prominence contributing articles to Farm and Dairy, it can mean only one thing and that is that Farm and Dairy is recognized as a medium of influence that reaches the farmers and dairymen of the country. Sometimes we feel that our readers do not fully realize what a mine of useful information we give them through the columns of Farm and Dairy in the course of a year and all at the price of only \$1.00. This price does not cover the cost of the paper and press work. Our last issue alone was worth \$1 to any farmer who will read it carefully and profit by the suggestions which it contains. If you like Farm and Dairy, we hope that you will tell your friends,

about it and urge them to become readers like yourself.

Dairying in Prince Edward Island

Theodore Ross, Sec. for Agriculture.
The story of the dairy industry in Prince Edward Island is becoming more pleasant to tell. The co-operative factory system dates from 1892. Prior to that several factories had been in operation, but the total output of cheese for 1894 was valued at only \$8,448. The following year, however, Prof. James W. Robertson, now Dr. Robertson, Dairy Commissioner of Canada, induced the farmers in the vicinity of New Perth to build a factory on the co-operative plan. He followed up his idea with such enthusiasm and energy that in the year 1899 there were 47 cheese and butter factories in operation, with a total output of sixty million pounds of milk, valued at \$570,000.00.

The reaction which inevitably follows such rapid development then set in, and was attended by the low price of cheese and an unfavorable season, so that by 1905 the total amount of milk received at the factories and creameries was only about twenty-eight million pounds.

The tide had reached its ebb. During the next three years, however, the increase amounted to only six and a half millions, but a solid foundation was being laid for the future, and in the year 1910, 45,364,000 pounds of milk, valued at \$523,644.60, was received at the factories and creameries. This great increase was due in part to a better season, but more largely to the influences that were at work. In the past the education of the farmer had not kept pace with the building and equipping of factories, and the increase in the price of grain led to its being shipped, instead of being fed to dairy cattle.

DAIRY EDUCATION.

The Federal and Provincial Departments of Agriculture now came to the rescue. Dairy meetings were held in every section of the Province, at which the care and feeding of cattle were the topics proposed for discussion. Experienced lecturers pointed out that milk can only be made from the food the cow eats over and above what is required for her maintenance, and the more she eats in excess of this amount the cheaper will be the production of milk.

But much as the dairy industry in this Province owes to lecturers and instructors, it owes far more to those few men scattered here and there throughout the Province, whose faith in the possibilities of dairying never faltered, who believed that the best way of marketing the raw materials produced on their farms was through the medium of the dairy cow, and who undertook to carry on their business on business principles. They persisted in feeding instead of shipping their oats in spite of the predictions of their neighbours and friends that they would lose their farms, etc., etc., and so successful have they been, and such an effect is their success having on those around them, that the time is not far off when Prince Edward Island will be the "Denmark of America" in more than a name.

INCREASED PRODUCTION PER COW.

A consideration of the increased production during the last year will help to make this more apparent. According to the census returns for June, 1909, the number of milch cows in this Province has increased only about four per cent. during the last year. The amount of milk received at the factories has increased 40 per cent., so that the increase in the total production is about 25 per cent., which increase must be attributed very largely to an increased production per cow. In 1905 the average milch cow in the Province gave less than 2,000 pounds of milk per annum, last year she gave upwards of



THE DANGER LINE

Avoid High-Speeded,
Quick-Wearing,
Cheaply-Constructed,
Imitation Cream Separators

**DE LAVAL
Cream
Separators**

PELL
SEPARATOR
SAFETY

THE DE LAVAL SEPARATOR CO.

175-177 William St.

MONTREAL

WINNIPEG

VANCOUVER

**Free Setting of
Eggs**

A SETTING of Pure Bred Eggs of any standard variety, will be sent free to any one who sends Farm and Dairy two NEW yearly subscriptions at \$1 each. Now is your chance to secure first class eggs for little work and no money. Why not get the young folks interested? Tell them of this offer. Let them start in the poultry business. Two subscriptions, only, will secure the necessary start. Write

CIRCULATION MANAGER,

FARM AND DAIRY

PETERBORO, ONT.

Have You Any Hard Milkers?

Do not neglect a cow that shows signs of becoming a hard milker. You can't buy a cow or obstructed Teats, Udder Troubles, Hard Warts, etc. Here is a very complete and inexpensive Veterinary Course that every farmer and dairyman should have on hand when emergency arises. The

DRUMMOND HARD MILKER OUTFIT

consists of a Test History, Teat Opener, Milk Tube, Teat Expander and a supply of Antiseptic Soap, all fitted in a neat, compact case. Everything you need to remedy obstructions and cause free milking. This outfit is especially useful after calving and is especially useful after calving with each case. Price for a complete set, \$3.00. Order to-day and let us send you our large Catalogue of dairy supplies—free

W. A. Drummond & Co.
177 King St. E.
Toronto 3



EASTAKE STEEL SHINGLES

WRITE FOR PRICES
METALLIC ROOFING CO.
LIM. T. CO.
TORONTO, CANADA.



Anti-Trust Prices Freight Prepaid To You—No Duty on FARM and TOWN Telephones and Switchboards

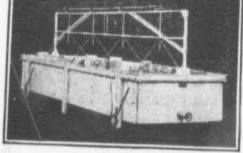
Poles, Wire, Brackets, Insulators, Tools, Lighting Arresters, Ground Rods, Batteries, Insulated Wire, and everything necessary.

NO CHARGE for our experts' letters of advice, drawings, explanations, instructions, billings in any form, or for making plans. This is a good but economical way and at a profit. We have our own technical staff, just how to build, and we are the largest, exclusive and the only bona-fide Independent Telephone and Switchboard makers in Canada or the only British.

Our Telephones are extensively used in Canada, England, France and by the U. S. Government. We are in Canada, England, France and by the U. S. Government. We are in Canada, England, France and by the U. S. Government. We are in Canada, England, France and by the U. S. Government.

Our great illustrated book on the Telephone sent Free to anyone writing us about it. We have new telephone lines or systems being talked of or organized.

We have a splendid money-making proposition for good agents.
The Dominion Telephone Mfg. Co., Ltd. Dept. D. Waterford, Ont., Canada.



PERFECT STEEL CHEESE VAT

Our 100 Steel Vat is going to be just a little better than ever before. Can't improve much over last year—it was a dandy. The tin lining in this year's vat will be 20 gauge—the heaviest ever used—a gauge heavier than your local tinmith uses. The outside frame will be all galvanized, and then painted, making it absolutely rust-proof. It will interest you.

Patented August 14, 1909
Write for new catalogue with prices reduced.
THE STEEL TROUGH AND MACHINE CO., Limited
TWEED, ONT.

3,000 pounds, and it has not taken the farmer long to find out that almost the whole of the increased production per cow is just that much increased profit for him.

But the whole of the increase is not due to the better care and feeding of the cattle. Quite a number of farmers milk of each cow in their herds for the purpose of getting rid of the least profitable ones, and it is expected that by June, 1910, there will be upwards of 400 dairyman members of cow testing associations in this Province.

PRIZES TO STIMULATE PRODUCTION.
To further encourage the production of milk, the Department of Agriculture is this year offering through the Dairymen's Association \$240 in cash prizes to the patrons of cheese factories and creameries supplying the largest amount of milk and butter fat per cow in herds of five or more. It is also intended that prizes shall be offered for the largest amount of milk and butter fat produced per acre of land under cultivation.

One question that always comes in for discussion at the annual meetings of the shareholders and patrons of the factories is the cost of the hauling of the milk. Within the last few years it has risen from seven cents a hundred to almost 11 cents. That amount will, however, soon be reduced again. The increased production of milk will load on short routes possible, and full milk haulers means cheaper hauling. It is quite possible, too, that the introduction of hand saw tractors will be a factor in overcoming the difficulty. At any rate a great number have been sold during the last two years.

Our dairy products are reported by our buyers to be of first quality, and the next few years will witness a great increase in quantity. We have a natural advantage, such as few other countries possess, and when the intelligence of our people shall have been definitely directed to the production of butter and cheese, it would require a man of large experience to predict the output.

The greatest weakness of the creamery business to-day, is the condition of the cream as received. The cream for the most part is too thin, and most of it is sour, which latter is due largely to the lack of cooling.—J. F. Singleton, Kingston Dairy School.

Creamery Department

Butter makers are invited to send contributions to the department, to ask questions and suggest subjects for discussion. Address letters to Creamery Department.

The Difference Shown Up

F. A. Keyes, Huron Co., Ont.

It has been known for some time that there is a certain amount of injustice done to patrons by creameries in making their monthly tests. I have found from experience that an 18 c.c. pipette will not deliver 18 grams of cream the greater will be the difference in the test.

I could give plenty of examples in this connection but shall take time for one only. Last week I had a sample of cream which tested 32 per cent. by weight, but 18 c.c. of the same cream tested only 30.2 per cent. It is easily seen that this man would be unfairly dealt with were the pipette used, and the difference would be much.

Furthermore, we have air bubbles contained with the cream. These air bubbles occupy a certain amount of space in the pipette, but do not count for anything when the sample is weighed. In this very thin cream we find rather more than 18 c.c. pipette will deliver being so much skim milk in the sample. We must come to the conclusion that creameries using the pipette are discouraging rather than encouraging patrons to send rich cream.

How are the patrons going to receive justice for rich cream? We must either have some form of legislation on the matter or else the patrons must unite and demand that creamery owners based on weights adopt a uniform method for testing cream.

The Babcock test is based on weights. When we use a measure of cream we do not know that this measure will not deliver the correct amount? It is as easy as as quick to weigh the samples as it is to measure them. Our instructors and a number of factory owners and makers are urging the patrons to send a richer cream and yet the testing in a number of our factories is done in such a way as to put a premium on their cream. The only remedy I can see for this is for every man will be enabled to pay each pipette for the exact amount of butter-fat he sends.

Quebec Government to Supervise Butter and Cheese Makers

An important Government measure of the Quebec legislature relates to inspection of butter and cheese factories, which are to be brought more under Government control.

It is provided that every proprietor of butter and cheese factories must register his name in the office of the Minister of Agriculture. Following are important clauses of the bill:

"On and after the 1st day of January, 1912, no person, company, society or corporation shall carry on a butter factory, or cheese factory, or factory for the manufacture of condensed or powdered milk in a building or establishment not entered in the register mentioned in article 303E, without having previously obtained from the Minister permission to carry on such business and such permission shall not be granted except on a report produced and signed by an inspector.

"Such permission may be refused if the factory is badly built, badly equipped or unhealthy upon the report of an inspector approved by the board of directors or the executive committee of the Dairy Association of the Province of Quebec, after notice by registered letter to the interested parties.

"Upon the report of an inspector that a butter factory or cheese factory or factory for the manufacture of condensed or powdered milk, is not in a satisfactory sanitary condition or is not properly built or equipped for the manufacture of dairy products, the Minister may order the proprietor or manager thereof to close the same until the inspector is satisfied that it has been made satisfactorily healthy, and that it is properly built and equipped for manufacture of dairy products.

On and after the 1st day of January, 1912, no person shall act as head butter maker or head cheese maker in a butter factory or cheese factory without a certificate of competence from the St. Hyacinthe Dairy School.

In lieu of the above certificate, a special permit may be granted, at any time by the Minister on the recommendation of an inspector, to any person having the necessary competence and experience.

Dairying in Saskatchewan

W. A. Wilson, Supt. of Dairying.

All the creameries that are under government supervision are working on sound business principles and particular attention, will this season, be given to quality. Special instructions will be given creamery patrons, details of which are not yet completed. Four points however, will be emphasized, cleanliness; low temperature; 35 per cent. cream, and more frequent delivery.

A series of 38 institute meetings has just been completed, most of which were conducted in districts adjacent to existing creameries. The average attendance at these meetings was 32. This, in view of the fact that 31 out of the 38 were held at country school houses, presents a very commendable record. The value of the meetings is indicated more by the discussion than by the attendance.

Individual cow testing has for the last few years been receiving some attention. It is not thought that present conditions warrant any rapid extension but the importance of the work will be kept more prominently before our farmers with a view of impressing the necessity of knowing the financial returns produced by each cow in the herd. Arrangements are being in the course of preparation for supplying districts not yet in a position to support a creamery, because of the sparse settlement. Centralization of creamery work along the various lines of railway will take first place in our programme.

There is little doubt but that creamery patrons are more directly interested and desirous of obtaining information which will enable them to improve their methods, than are farmers who make butter at home and deliver it to the local merchants. The sympathy of the latter is being enlisted and from a standpoint many of them have been led to signify their willingness to solicit patronage for the existing creameries as they prefer handling their own butter.

The assistance which the government extends in paying export charges on cream shipments has had a splendid effect. Unhealthy development has been retarded and existing creameries are finding a greatly increased business. The government is charging one quarter of a pound of butter fat on the creamer under their supervision. It is thought this small charge will be sufficient to cover any outlay on transportation costs and the spirit of co-operation is promoted.

WANTED—Helper for creamery to commence June 1st. Apply stating age and experience. Southworth Bros., Harwood, Ont.

FOR SALE—Box churns and Mason worker. First class condition; just the thing for some one putting in why butter plant. Southworth Bros., Harwood, Ont.

Cheese Department

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

An Importer Reviews the Cheese Question

Herbertson & Hamilton, Glasgow.

The past season has not been a favorable one to the importers in the Canadian cheese trade, prices having been uniformly too high compared with those ruling for Home produce. The condition both of the cheese and boxes on arrival here has been satisfactory, and about the proper care has been taken in the handling during transit. We have, however, had some complaints of quality, the most serious being regarding the keeping properties of the June make. In many cases, these cheese showed a tendency to mite badly, and go damp both on top and bottom. This is not an isolated experience, and has caused loss not only in Glasgow, but shipments both to Leith and Hull have developed similar faults.

MAKERS EVIDENTLY WERE TEMPTED

In the summer made goods, we had complaints of openness of texture and brittleness in cutting, and the September and October makes in not a few cases, showed a pastiness and lack of flavor which compared unfavorably with the previous season's make. Possibly climatic conditions in Canada had something to do with the irregularities we complain of, but we are afraid that at least in some cases, the blame must be laid on the shoulders of the factorymen. The keen competition for patronage, and the effort to take as large a quantity of cheese as possible out of a given amount of milk, have we are afraid, in some cases at least, tempted makers to put quantity before quality.

We are pleased to note an improvement in the marking of the weights on the boxes, and hope by another season

the old pencil method will have been entirely superseded by the stencil.

We desire again to urge very strongly, that every cheese should be legibly dated when made, and until this is done, the business will never be on a satisfactory footing.

ILLEGITIMATE BUSINESS

This past season, dealers who do only a legitimate week to week trade, have been very considerably handicapped by speculators selling in April and May, June made cheese for July shipment; and again in July, selling September made for October shipment, at prices shillings below what legitimate traders could possibly offer at. The result has been seriously to interfere with business, and while we are not in a position to absolutely prove the statement, we have no the slightest doubt that many of the cheese shipped on these speculative contracts, were neither June's nor September's. Legally dated cheese was correctly and legibly dated when made, this illegitimate system of business would be rendered so dangerous that the game would not be worth the candle.

This matter closely concerns the factorymen and farmers, because if the firms on this side who make the weekly output of factories at market prices, are to be brought into regular and long revenue manipulations through the speculative trade of the market, it is clearly that the trade will eventually fall into the hands of the speculative interests, and the makers in Canada will be placed at a very serious disadvantage in consequence.

An Act to Provide for Tested Glassware

An Act to provide for the testing of glassware used in connection with milk tests has been introduced by the Hon. Sydney Fisher and has passed the House of Commons, but has not yet passed the Senate. Dairy Commissioner Ruddick pressed for this legislation, not only because it had been asked for by the dairymen, but also because he has found during the last year or two a large percentage of inaccurately graduated milk test bottles and pipettes. One cream test bottle showed an inaccuracy of 10 per cent. on the scale and many milk test bottles showed inaccuracies of 4 and 6 per cent. The principal clauses of the Act follow:

Every test bottle, pipette and measuring glass used in connection with the testing of milk or cream shall be tested for accuracy of measurement and accuracy of the per cent. scale marked thereon, by such persons and at such places as are designated by the Governor-in-Council, and if found to be accurate shall be ineffably regulated in the manner provided by the Act.

No other test bottle, pipette or measuring glass shall be so marked, nor shall any unauthorized person mark any test bottle, pipette or measuring glass used in connection with the testing of milk or cream in any manner which would indicate that it is accurate in accordance with this Act or with any regulation made thereunder.

No person shall sell or offer to sell any test bottle, pipette, or measuring glass used in connection with the testing of milk or cream unless it has been so tested and marked accurate.

No person shall use any test bottle, pipette or measuring glass in connection with the testing of milk or cream, if such testing is for the purpose of determining the value or the relative value of the said milk or cream, unless such test bottle, pipette, or measuring glass has been tested and marked accurate as provided by this Act.

Nothing in this Act shall apply to bottles or measures used in connection with the Babcock milk test for the measuring of sulphuric acid.

The Governor-in-Council may make regulations for the operation and en-

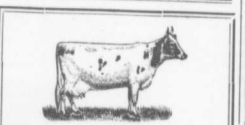
forcement of this Act, and may, by such regulations, establish fees for the verification of the apparatus therein referred to and also provide for the imposition of penalties not exceeding ten dollars for each offence against this Act or against any regulation made thereunder.

Such regulations shall be in force from the date of their publication in *The Canada Gazette*, or from such other date as is specified in the proclamation in that behalf.

This Act shall come into force by proclamation of the Governor-in-Council.

To the makers I would say that you are doing much, but you can do much more, and I am sure you will all agree with me when I say that we have not been of the greatest usefulness unless we have left the business in better condition than when we took hold of it, unless the people have been better both morally, mentally and financially because we have been in it.—Dr. C. A. Publow, Ithaca, N. Y.

Send Farm and Dairy a list of the patrons of your factory and we will gladly send them sample copies gratis.



Every Dairy AND Poultry Farm

Should have a supply of DR. WILLIAMS' FLY AND INSECT DESTROYER. It kills Lice on cattle, Hogs, etc., Vermin in Poultry Houses, and is one of the best Germicides. A protection against the dreaded Foot and Mouth Disease. A remedy for preventing Abortion in Cows. Read what T. W. Purvie, Elmbridge Jersey Stock Farm, Lisbon, N.Y., says: "I used very much pleased to say that I have not had another case of abortion in my herd since using this preparation, and recommend it as a germicide to all dairymen who are troubled with Abortion in their herds."

Destroys all Fly Pests. Patented—Sold only under a RED LABEL which is registered at Ottawa and Washington. Unaffected by heat or frost.

F. WILLIAMS CO. Montreal, Ont. Madrid, N.Y. Sold by Dealers Everywhere. AGENTS WANTED.

CHOKER HIM On Facts

When you get tired hearing agents or makers of common cream separators excuse the needless disks or other contraptions they use, just choke them on facts that disprove their claims.

If contraptions were necessary, how do Sharples Dairy Tubulars, which have none, produce twice the skimming force, skim faster and several times cleaner than common separators? Why do Tubulars probably replace more common separators than any one maker of such machines sells? Why do Tubular sales easily exceed even if not all, others combined? Why is the manufacture of Tubulars one of Canada's leading industries? These facts are invincible proofs that Tubulars are The World's Best.



THE SHARPLES SEPARATOR CO. Toronto, Ont. Winnipeg, Man.

Purity Salt

is the best on the market. Why? BECAUSE it makes richer and tastier butter. It does not cake or harden, being in perfect crystal form. It dissolves quickly. It works in evenly, needs LESS, and draws a larger margin of profit for the dairyman.

THE WESTERN SALT CO., LIMITED "DEPT. A." MOORETOWN ONTARIO

Seldom See

a big knee like this, but your horse may have a bunch or bruise on his Ankle, Hock, Side, Knee or Throat.

ABSORBINE

will clean them off without laying the horse by. No blister, no hair cure. \$2.00 per bottle (bottle of 4). Book \$3 free. A BOTTLE IN THE MAIL for mailing, St. Gotter, Wess, Brulles, Various Vets, Various, Old Horse, Always Pain, Book free. W. C. THUR, P.O., 122 Temple St., Springfield, Mass.

ATRANS Ltd., Montreal, Quebec, Canada.

As handsome as the best iron fence at less than the cost of cheap wood

Here's a neat, strong, durable fence that will add to the appearance of the handsome city lawn and is cheap enough, close enough and strong enough for the farm. The

Peerless Lawn Fence

is made of heavy No. 9 steel spring wire, so it can never warp or bend, is galvanized and coated with white enamel paint. No investment you can make will add so much to the appearance of your property.

THE BANWELL HOXIE WIRE FENCE CO., LTD., DEPT. H., HAMILTON, ONT., WINNIPEG, MAN.

PERFECT EQUIPMENTS FOR BARN
The Loudon Junior and the Loudon Hay Carriers
are the best and most reliable Carriers manufactured in Canada. Note in the Loudon Junior Carrier how compact it is and see how the wide opening insures the safe loading of the Fork Pulp and Hay. We make 13 different Hay Carriers. For particulars re prices etc., write to
LOUDON MACHINERY CO., Guelph, Ont.
MANUFACTURERS OF Hay Tools and other Barn and Stable Fittings

OUR STICKNEY GASOLINE ENGINE
is simpler than any other on the market. You can learn to run it
IN 10 MINUTES
Won't easily get out of kilter. **POWER IS GUARANTEED** Our Booklet No. 37 is full of information.
ONTARIO WIND ENGINE AND PUMP CO.
TORONTO, ONT.



HOUSEKEEPING is the expression of a woman's mind. homemaking is the expression of her soul.

The Bell Strike

By Lellin M. Ellefson
(Concluded from last week)

HE had at last come to the point of trying a man with a cue; but when Silas caught him testing the temperature of the frying-pan in typical Oriental fashion; and the noisy difference of opinion; and the Chinaman, somewhat disturbed, his almond shaped eyes throwing back disgusted glances, went trotting down the path, muttering, "Melican man damfool."

After a final threatening kick, Silas sat down on a porch to cool off. He mopped the perspiration from his red face and assured himself grimly that he was a deacon of the church and believed in foreign missions; but he'd be dummed if he was going to give all he made to the heathens—and board 'em besides.

As he thought about the strenuous work of the past three weeks, and the money he had paid out for help, his eyes bulged wildly and his beard grew stiffer and stiffer as his mouth clinched together tighter and tighter with indignation. Finally he jumped up with an angry snort.

"If I warn't a deacon I'd swear!" In desperation Silas had written to his sister-in-law asking her to come to visit, but not explaining the state of affairs.

"If only I can get Marthy here, I'll show 'em!" he consoled himself. "She's got sense, Marthy has, and will help a man that's pestered by sich'er family o' dum digits."

He was anxiously looking for a letter, hoping she would set a date for her arrival; so now when he heard a wagon rumble up to the gate he peered eagerly down the path with the hope some neighbor had brought his mail. But a shout of joy escaped him as he recognized the substantial form of the woman climbing over the wagon wheel.

"Marthy Bell!" he cried, hurrying glad to see you!" "Jig me if I ain't glad to see you!"

"Howdy, Silas," Martha returned, straightening her bonnet and brushing off the streak of dust the wagon wheel had printed on her black alpaca dress before holding out her hand to Silas. "I got your letter and I started right off. Air Mary or the children sick?"

Silas straightened up and answered stiffly:

"Guess they're well; they ain't her home."

"Fer land's sake, Silas, what's the matter with you?" Martha cried in surprise, as she took her first good look at him. "You look like a mad turkey gobbler that's been figtint'."

Silas hastily put his hand to his bristly red hair and tried to smooth down its indignant uprising. He was startled to find his forehead wet with blood oozing from a scratch the China-

man had given him as a farewell token. His shirt was torn in several places, showing the red flannel under-wear he wore, winter and summer, as a scarecrow for rheumatism. The black satin necktie he considered an



"I'd be ashamed to look an honest, well-meanin' pig in the face. Good bye. I'm going to join the strikers."

outward symbol daily due—collar or no collar—his office as deacon of the church was sprawling like the arms of a Dutch windmill under one ear; this happening to be one of the days there was no collar to restrain its religious liberty. His face grew redder, if possible, under the astonished gaze from Martha's eyes. He hemmed and hawed as they went up the steps and he brought out a chair for her.

"This beats me!" Martha said, sitting down with a tired thud. "You look an' act sort of lunny, Silas Bell. An' I never heard of Mary bein' away from home 'cept to meetin's Sundays. Where air they?"

"Well, Marthy," Silas began slowly, taking time between words to take a chew of tobacco, "we air havin' a little family trouble and they're—"

"My stars!" Martha gasped. "Fer land's sake, what kind of trouble?"

"Now Marthy," Silas spoke in a wheedling tone, "you're my brother's wifder an' I allers thought'er heap o' your managin', an' I know you'll

see this er—or trouble as I do; Mary an' the children think I ain't give 'em enough gow-gaws an' they're gone on er—er strike."

"A what?" Martha squealed. "Er strike," Silas repeated, looking foolish. "You know what er strike is don't you, Marthy?"

"Yes," Martha said. "But, my stars, I never heard o' that disease takin' a whole family before."

"Nuther did I," Silas agreed quickly, thinking he read sympathy in her amazed face. "Course it's ridiculous, an'," his lips tightened, "mighty dum hard on me."

Martha's keen eyes searched his stubborn face a few minutes before she spoke.

"What do they want?" she asked directly.

"They left er—er bill," Silas stammered.

"Fer land's sake!" Martha persisted. "Let me see it."

Being so desperate for sympathy, Silas did not pause to think that he was about to expose the skeleton in the family closet, but hurried into the house and brought out the notice. While Martha was fishing her glasses from her handbag he fastened the card-board against the house.

"Read it!" he cried, indignantly. "It's the biggest lot er dum foolishness you ever hear tell on!"

Martha's face was a study as she slowly read. When she reached the

shamed look and Silas answered suddenly: "Mary made nice rag dolls."

"Hub!" "Now see here, Marthy," he said querulously, "you ain't er goin' to turn 'gainst me, air you? I think it's er dum mean way fer 'em ter treat me."

"Lord help your persimmons of a soul, Silas Bell!" Martha exploded. "My stars! If I'd been in Mary's place I'd helped 'em save the hide of a stein 'nough to save the hide of a flea's back—if you could ketch it, Silas Bell," Martha began, looking over the top of her glasses; "but I've been dum before you was a sneak-in' thief!"

"Why, Marthy!" gasped Mr. Bell. "You needn't Marthy me, Silas Bell; you're goin' to hear the truth about yourself fer once."

Martha's face settled into firm lines, showing she had the courage of her convictions.

"You jes' set right down in that chair," she went on firmly, "an' listen 'til I git done."

Mr. Bell was too surprised to rebel, so sank down in the chair limply.

"If I allowed you was most stein 'nough to save the hide of a flea's back—if you could ketch it, Silas Bell," Martha began, looking over the top of her glasses; "but I've been dum before you was a sneak-in' thief!"

"Marthy!"

"I said a sneakin' thief!" Martha repeated, her plump hand coming down with a firm thud on the arm of her chair. "That's what a man is when he keeps what belongs to others jes' because he can an' knows he won't be put in gaol for it! That's you, Silas, Mary an' the children has worked like slaves fer you an' pears like,"

pointing at the card scornfully, "they beg for starvation rations an' had to beg fer 'em at that."

"Marthy,—"

"Keep still! I ain't done yet," Martha cut him off. "Tairn't as if you was a poor man, Silas Bell. Look at them big fields o' grain; all the land in sight most is yours; an' look at them big herds o' cattle stuffin' themselves with clover 'til they're most burstin'! Seems if some men air a heap better to their stock than they air to their own flesh and blood kin."

Mr. Bell opened his mouth to speak but was silenced by Martha jumping to her feet and shaking her finger in unaccustomed rage before his blinking eyes.

"You don't deserve sich a wife as Mary, nor sich children; nuther; they'd treated you right if they'd left you years ago an' gone to work where the hours were shorter an' the pay better—an' surer. A nice man you air land you ever owned was bought with a deacon o' the church an' posin' as a good religious man! What kind of religion have you got that don't teach you to take care of an' appreciate them the good Lord sends you?"

Martha paused a moment to get her breath but Mr. Bell had at last been stunned into silence. He just kept blinking at the threatening finger before her face.

"An' I'll me this, Silas Bell," she demanded sternly. "When'd you be if it hadn't been fer Marthy? You was poor as Jol's turkey when she married you; an' the first piece o' land you ever owned was bought with the money Mary's father gave her. An' now seems if she can't git 'nough moon-ey out o' you to buy herself decent clothes—let alone feathers and finix that's rightly hers, an' none o' your business, if she was a 'em."

Martha straightened up and tied her bonnet strings with such a jerk that the posies stood up like bristles. "I guess I'm done, Silas," she said, going down the steps, but pausing a moment to add:

"My stars! If I was you I'd be 'shamed to look an honest, well-meanin' pig in the face. Think about it for a while, Silas Bell. Good-by, I'm going to join the strikers."

She waddled down the path with her head high in the air, never look-

end, she leaned back in her chair and laughed until her fat body shook like a jelly fish, and the tears ran down her cheeks.

Silas stood pulling his beard and chewing his tobacco with quick, vicious snaps. He looked at Martha reproachfully when she gave way to mirth; but her laughter was so hearty and contagious that finally a sheepish grin stole over his face.

"Dum hard on a man, ain't it?" he asked plaintively.

Martha sat up with a sudden jerk; her laughter died so quickly that a big tear, half-way down her nose, halted in confusion.

"My stars! Hard on a man!" she cried sharply, shaking her finger at the card. "Is it true, Silas Bell, that you wouldn't buy that baby a doll?"

Stunned by this sudden change Silas stared at her stupidly, the grin frozen to his face.

"Fer land's sake man! What air you grinnin' like an idgit fer? It ain't nuthin' funny."

The grin slowly changed to a half-

ing back at the poor man she had reduced to a state of collapse.

He gazed after her until she finally disappeared into the woods, leading down to the water. Then he roused himself and threw his old straw hat over the porch railing at the hens, who seemed to his imagination to be taunting him in mockery.

"Thief—thief—sneak! thief!"
The camp of the strikers was thrown into confusion early the next morning by Ted turning handspinders from one end of the tent to the other, and yelling for everybody to come out and see the sight. Not knowing what might have happened, they all rushed out in various stages of their toilet.

Martha rolled out of bed in excitement, hastily tied on her bedworn apron and, as fast as her bare feet could carry her over the pebbly beach, followed the others to the water's edge. On the other side, fastened between two trees, there was a big sheet painted in glaring black letters:

COOPERA-HUN FER ALL
COM HUM!
SILAS BELL.

The American Farmer's Wife

(Continued from last week)

About twelve years ago a number of women in Ontario appreciated the value of the work of the Teachers' Institutes and of the Farmers' Institutes, practically said to the Government, "Why cannot the farmer's wife also have some system of study arranged for her? If it is of value for the farmer to understand a balanced ration for his cow, why is it not of equal importance for his wife to understand a balanced ration for her family? Are not the children of more value than the cows? Does not the future of agriculture in our country depend upon the physical, mental and moral condition of our boys and girls? Does not this condition depend largely upon the wisdom and intelligence of the mother? We need help. Will you give it?"

In answer to that plea, the Government established Women's Institutes. Ontario is divided into districts, each with its district officers. These officers are responsible for all branch institutes organized in their districts. The Government gives financial aid to each institute organized. A certain number of meetings must be held through the year, and a certain average attendance be maintained, in order to receive this financial aid. The Government also provides the speakers for their annual institute. The success of this work will be understood when it is stated that it began with one meeting, attended by a few women; and the Ontario official report of 1908-09 gives 91 electoral districts, with branches established at 502 points, and a membership of 13,550. The attendance for 1908-1909 was over 100,000.

This work, in different forms, has been adopted not only in Canada, but in several of the States at the request of the women of the country. It brings to the farmer's wife the same elements of interest that make the women's clubs of the cities of so much educational value. Everything that is of value to the home is welcomed on its programme: Training of Children in Home and School; Woman's Work from a Broad Viewpoint; Personal and Household Hygiene; Responsibilities of Mothers; Best Literature for the Home; General Improvement of Rural Conditions; Chemistry of the Kitchen; Domestic Art; Flower Culture; Poultry Raising, and so on. As most of the topics are of equal interest to the women of city or village, it inspires a co-operation that is of mutual benefit. The chief value lies in the interchange of

thought—the exchange of experiences. The woman who has succeeded can help her sisters by telling how.

In her desire for intelligent suggestions in home-making, the farmer's wife differs not a whit from the wife of the village or city man. Women everywhere were never more eager for self-improvement than to-day. Their needs vary according to the type of woman and her environment. The Woman's Institute strives to meet those needs as presented.

And women need other women. No man can view life from a woman's viewpoint, any more than a woman can from a man's viewpoint. The best man in the world will not understand a woman's problems as well another woman.

The work of the Woman's Institutes has been to bring women together in order to solve some of the problems that all are meeting. Some are very homely problems and difficult, and often a great deal hinges upon their correct solution.

I remember at one meeting a paper was read on the artistic decoration of the home, and especial stress was laid upon having a dainty table. It was written by a woman whose home colors run when wet.

"But," asked one woman, "how can I have a 'dainty' table? I have ten in the family—four children, four hired men most of the time and my husband and myself. The hired men are generally foreigners, hopelessly untidy. It is all I can do to get them to wash their hands and faces and to comb their hair before they come to the table. To be plain, they don't smell good; they have no table manners (not that can be seen!), and yet

The Kind We Like to Get

"It is my sincere wish that Farm and Dairy may be enabled to carry on to continued success the vast improvement that has marked its rapid growth of past years. Farm and Dairy is indeed giving a great stimulus to rural life, and an uplifting influence on agricultural conditions."—Fred C. Ward, York Co., Ont.

my children have to eat with them and will imitate their ways. I cannot set a separate table and get through with my other work. We have to eat together. How can I manage to have their 'dainty table'? They soil the tablecloth and wipe their mouths on their sleeves, and I'm—well, I'm just discouraged. I tried furnishing them with napkins, but I would have to give them fresh ones at each meal in order to keep decently clean. That meant

more washing than I can do, so it was out of the question." And the speaker's eyes filled with tears, for this was one of her unsolvable problems.

"Well, sister, I'll tell you how I manage," smilingly answered a bright-faced woman. "In the first place I put a wash-stand covered with white oil-cloth, with pitcher and bowl and tin slop-jar, out in the back entry. I hung up a mirror, brushes, combs and nail-cleaner (I bought them at the ten-cent counter), a small broom, a towel, a shoe-brush, a long roller and a big piece of soap. Then I said to the men, 'This is your dressing room. You must make yourselves tidy before coming to the table. In the house I make the rules, and if you do not comply with them I shall fine you five cents for each transgression, and deduct it from your wages.'"

"It worked like a charm. I used paper napkins—one can buy a wonderful supply for five cents. I placed one under each plate, besides the one for their use. These I burned when soiled. By managing in this way, I could use a table-cloth quite a while, and it looked very pretty. Sometimes I bought napkins with a colored border, but plain white is preferable, as the colors run when wet."

"I use a red table-cloth and red napkins," said another. "I find that saves a deal of washing."
"I realize that this question of the table is of more importance than we sometimes think," remarked a gentle voice. "We hope to send our boy through college, and I know that a boy who has not had careful training in table manners is woefully handicapped. My brother is a college man, and he says that every boy's ambition is to be asked to join a college fraternity."

"Making money has not been our main aim. We have wanted a home for our children, as well as for ourselves. Knowing full well what Mrs. Begg's support has been to me, it is only right that on an occasion of this kind, she should get credit for all that she has been and done for me."

A Wife Who is Appreciated

Not often does a wife have such public testimony borne to her worth before her friends, as fell to the lot of Mrs. Victor Begg, of Moose Creek, Ont., recently. Mrs. Begg's husband succeeded last year in winning the first prize offered for the best dairy farm in Ontario east of Kingston, in the prize farms competition held by the Farm and Dairy.

With Mr. Begg now has a splendid farm, well cared for and most drained, good farm buildings and a comfortable farm home, these conditions were not always the same. Some 34 years ago, when Mr. Begg moved on to the farm it was nearly all brush and swamp. At that time he was poor. To-day he is well to do. At the public presentation of prizes held recently in Moose Creek, Mrs. Begg was called to the platform to receive the prize jointly with her husband. Mr. Begg took advantage of the opportunity to thereupon testify to the worth of Mrs. Begg by telling some of the hard struggles that he had encountered since the time they first moved into their little log cabin, including a description of their wedding day, when he had threshed until noon, getting married in the afternoon.

"The credit for my success," said Mr. Begg, "belongs equally as much to Mrs. Begg as to myself. She has stood beside me throughout the years. We entered our humble log home together. When help disappointed me, Mrs. Begg was always ready with her assistance. When things went wrong and I felt downcast Mrs. Begg was ready to cheer me with her sympathy. When death came and took some of our little ones, we bore our sorrows together. Together we have built our home."

"Wanted here to know
Mr. Begg described how, when he found that he had won the first prize, he had rushed home to tell Mrs. Begg the news. "When I got the letter from Farm and Dairy," said Mr. Begg, "telling me that our farm had won the first prize, in district Number 1, I was so afraid that the news would leak out before I could get home and tell Mrs. Begg, that I rushed out of the Post Office, jumped into the cutter and started for home as fast as

FOR ADOPTION

THE CHILDREN'S AID SOCIETY

OF ST. THOMAS, ONT., has for adoption the two little girls (sisters) whose picture is shown here. They are fine, healthy, well trained children, of a good family. A. is aged six years and B. is aged three years.

Address applications, with names of Minister and two other responsible persons for reference, to

W. J. SHAW, Secretary,
City Hall, ST. THOMAS, ONT.



I could go. When I got home and found that Mrs. Begg was not in, I almost went crazy before she got back so that I could tell her. My daughter, who was in the joy, did not know what had happened to me, when she heard the noise I made."

The Upward Look

According to our Faith

And Elisha prayed and said, I pray thee, open his eyes, that he may see. And the Lord opened the eyes of the young man; and he saw; and, behold, the mountain was full of horses and chariots of fire round about Elisha.—2 Kings 6, 17.

What most of us need is that we may have our eyes opened, just as did the young man in our text, so that we will be able to see that God's love and power are all around us, watching over us, helping us, protecting us, dwelling in us just as we dwell with Elisha. Our God is the everlasting God that changeth not. He is the same God who helped Elisha and He will help us just as He helped Elisha if we will approach Him with the same faith and love and humility.

For several weeks past, an effort has been made to show in this department that God is anxious to give us every good gift just as soon as we establish the right connection with Him. Last week we showed that God is the source of all love, all power, all wisdom, all peace, all joy. That just in proportion as we have these elements in our lives they have been derived from God, even although we may not be conscious of it. The whole universe is governed by God's great laws. The sun, the moon and the stars operate according to his decrees. Day follows summer to winter, winter to summer and all we can do is play our little part in this great setting and just in so far as we lift up our eyes and recognize that God is in it all and behind it all do we enter into closer communion with God. And in just as the degree that we come into this realization and connect ourselves with God who is this Infinite Source of power do we make it possible for these higher powers, to work, and manifest through us.

Were we to enter a large factory and see a workman laboriously operating a machine by his foot or hand when he might, by simply reaching up and attaching a belt from his machine to a shafting overhead, derive power from some great engine furnishing power for the whole works, we would consider him a foolish man, doing. We are trying to shape and direct our own lives without paying any attention to the great laws of Nature, of God, that are operating all around us. We fail to even recognize them.

In the words of Ralph Trine: "We can keep closed to this divine inflow, through these higher forces, through ignorance, as most of us do, and thus hinder or even prevent their manifesting themselves through us. Or we can intentionally close ourselves to their operation, thus deprive the ourselves of the powers which, are the rightful heirs. On the other hand, we can come into, so vital a realization of the oneness of our being, with this Infinite Life, and can open ourselves so fully to the incoming of this divine inflow, and so to the operations and powers that we can indeed feel and in truth become what we may call, God-men."

And what is a God-man? One in whom the power of God are manifesting, though yet a man. No one can set limitations to a man or a woman

of this type; for the only limitations he or she can have are those set by the self. The great majority of people and stunted lives simply by virtue of the fact that they do not realize the larger life which they are heirs. real self is one with the life of God. Through its ignorance it has never yet opened itself to the divine inflow, and so has never made itself a channel through which the infinite powers and forces can manifest.

"When we know ourselves merely as men, we live accordingly and have merely the powers of men. When we come into the realization of the fact that we are God-men, then again we live accordingly and have the powers of God men."

"With all our things are possible," and just as we open our lives and allow God to enter and take possession of us so do we derive the power we need to drive out whatever is unpleasant in our lives and to live a life of peace and joy and power.—I.H.N.

Two Bright Girls

We are glad to publish in another column of this issue, an advertisement from the St. Thomas' Children's Shelter, including also a photograph of two bright girls, who are looking for a home. These girls are to be placed in a home, preferably in the place to which they are to be sent, or home, would do us to write to the address given in the advertisement.

The work of the different Shelters in Ontario has been written of here and Dairy, and commends itself to our readers all over the Province. We are gratified to receive word from the Superintendent at St. Thomas, that the Farm and Dairy was of great assistance to that Shelter last year, in placing many children in good homes. We trust that some one of Farm and Dairy readers will take it upon themselves to find a place in their hearts and homes for these two dear little girls. May we hear from whoever is fortunate enough to get the girls.

How to Make a Lawn

After a lawn is well started there comes the question of keeping it in condition. Other crops are not only fertilized, but the ground is kept constant stirred by repeated workings. You can't work the lawn as you do other crops, so be generous in giving it the necessary fertilizer. If the lawn has been thoroughly enriched, before the lawn was made the autumn following, a top much of well rotted manure should be put on. This not only keeps the roots of the young grass in proper condition but supplies food for the coming spring.

MOWING THE LAWN

As to mowing, a lawn sown in the fall seldom has to be mowed before the next spring or summer. Then the grass should be cut as soon as it has attained a height of three or four inches and the cut grass left on the lawn to act as a mulch for the roots. After the grass has begun to grow freely it may be cut once every ten days or so. During the first season the grass will not be rooted very firmly and the pulling of the knives of the lawn mower will not help things along. If it is possible use a scythe. The grass will then not be cut too close, but if a lawn mower is the only way, be careful to see that the knives are set high and keep the grass about two inches high all the season. During the hot weather stop mowing and use a roller.

All new lawns need rolling frequently to make the roots take firm hold, and the better the roller the better. The texture of the turf on a lawn make as described will improve for the

first four years of its existence. As the Kentucky blue grass grows and crowds out the other kinds the surface will become more and more beautifully uniform and firm under tread. To keep it in condition it should have moved sufficiently often to keep the grass under two or three inches and should be rolled early in the spring and again in the autumn. Lawns should not be moved after the middle of September.

To Bathe the Baby

Cut two strips of wood one by one and one-half inches and long enough to reach across the bath tub. Then cut two similar strips about two feet

in length, and screw to the under side of the cross strips so that they fit inside the tub. Place an ordinary baby's bath tub on a piece of half-inch rubber hose over the end of the faucet in the large tub. Bore a half-inch hole in the small tub along the lower edge at the foot, and cut a wooden plug to fit; in this way the tub can be easily filled and emptied. By attaching a small and sprinkling tap to the free end of the hose, the baby can be given a shower bath. This simple arrangement will be found very convenient, as the mother can bath the baby without constant stooping and without being compelled to carry water.

To Clean Mirrors

A soft rag (linen is preferable), damp with pure alcohol, or brandy, apply to mirror and rub the soiled spots until they are clear. Take a soft rag or tissue-paper and polish the mirror until it glistens.

To Remove Ink from Wash Goods

Melt a piece of tallow, and plunge the ink spot in the hot fat, then wash the article, and all traces of the ink will be gone. If the article is colored or will not wash, drop melted wax on the spot, let it harden, then remove with a knife. The ink will be soaked up by the wax. If a shadow of wax or stain remains, put a piece of blotting paper over the place and press with a hot iron.

I recently secured a club of eight new subscribers to Farm and Dairy and receive as a premium a fine hanging lamp with which I am very much pleased. I desire to thank Farm and Dairy for this premium. Everyone who has seen it says it is a fine prize for so little work.—Mary Cummings, Russell Co., Ont.

Follow this advice.

Quaker Oats is the best of all foods; it is also the cheapest. When such men as Prof. Fisher of Yale University and Sir James Crichton Browne, LL.D.-F.R.S. of London spend the best parts of their lives in studying the great question of the nourishing and strengthening qualities of different foods, it is certain that their advice is absolutely safe to follow.

Professor Fisher found in his experiments for testing the strength and endurance of athletes that the meat eaters were exhausted long before the men who were fed on such food as Quaker Oats. The powers of endurance of the non-meat eaters were about eight times those of the meat eaters.

Sir James Crichton Browne says—eat more oatmeal, eat plenty of it and eat it frequently.

The Sewing Room

Patterns 10 each. Order by number and size. If for children, give age; for adults, give bust measure for waists, and waist measure for skirts. Address all orders to the Pattern Department.

ROUND YOKE NEGLIGEE 6983

The negligee that is made slightly low at the neck and with short sleeves is desirable on a warm day, and this model is essentially dainty and attractive. In the back view the same garment is shown with fine neck cut right and finished with a standing collar and with plain sleeves, and treated in such a way it becomes an entirely different garment, yet the one pattern includes the both styles.

Material required for medium size is 2 1/2 yds. 24, 3 1/2 yds. 32, or 2 1/2 yds. 44 in.

The pattern is cut for a 34, 36, 38, 40 and 42 in. bust, and will be mailed on receipt of 10 cts.

SEVEN GORED SKIRT WITH TUCK ON EACH GORE 6984

The skirt that tends to give a slender effect to the figure is a favorite. This model includes one plait at each seam, and these give just the becoming fullness. It is a seven gored model, which is always a fitting one, and will be found appropriate for gowns, suits and separate skirts.

Material required for medium size is 9 1/2 yds. 24 or 27, 8 1/2 yds. 32 or 36, or 7 1/2 yds. 44 in. wide. The width of the skirt at the lower edge is 3 1/2 yds.

The pattern is cut in sizes for 22, 24, 26, 28, 30 and 32 in. bust, and will be mailed on receipt of 10 cts.

SWEATH PETTICOAT WITH ADJUSTABLE FLOUNCE 6985

Petticoats made with separate adjustable flounces are among the latest. This is made with a fine gored upper portion, and allows a choice of flounces of two widths.

Material required for medium size is 4 yds. 36, or 2 yds. 44 in. wide; the wide flounce will require 4 yds. of embroidery 16 in. wide, the narrow flounce 4 yds. 10 in. wide, or 2 1/2 yds. material 21 or 24, 1 1/2 yds. 36, 1 yd. 44 in. wide to make as shown in the back view.

The pattern is cut for a 22, 24, 26, 28, 30 and 32 inch waist, and will be mailed on receipt of 10 cts.

CLOSED DART FITTED DRAWERS 6977

Drawers are an absolute necessity, and loose about the knees are preferred by the greater number of women. This model can be finished with an underfacings at the upper edges, with bands as liked.

Material required for medium size is 2 1/2 yds. 36 or 38 yds. 44 in. wide with 4 yds. of insertion, 8 1/2 yds. of edging, 3 yds. of embroidery gathered frills, 5 yds. of banding for the pattern is cut for a 22, 24, 26, 28, 30 and 32 inch waist, and will be mailed on receipt of 10 cts.

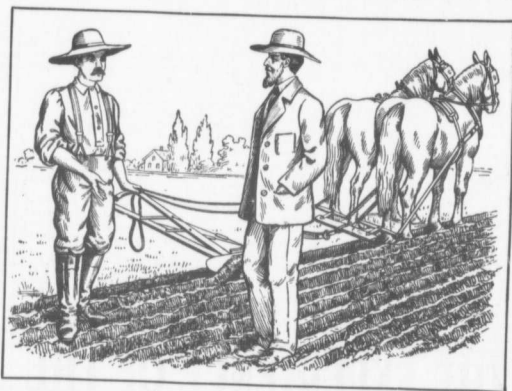


EATON'S CATALOGUE

SENT FREE UPON REQUEST

DO YOU USE AN EATON PLOW ?

Mark how clean a furrow the EATON plow cuts.



Just try the handles and see how easy it is to hold.

Notice how well it breaks up the soil and buries the stubble.

There is none of the strain upon the arms and the tiresome wobbling.

The above statements express the prevailing idea amongst farm neighbors who use EATON Plows—then you save money on the price also.

SEE OUR FARM IMPLEMENT PAGES IN THE SPRING CATALOGUE

With the settled purpose of offering only the best to our customers, we have searched the country over to find implements of tried reputation; we have listened to the arguments of manufacturers as they presented the merits of their machines. Our expert buyer has examined the machines at work and in the making; many months have been spent in gathering information regarding the different makes and styles. The makes we have chosen appeal to us as the implements most fitted to give satisfaction to the user, considered from every standpoint. That they are up to specifications any one who buys an EATON implement will be able to testify.

This Catalogue Saves Double Money on Your Purchases

Turning to the Big Catalogue you'll be impressed with the extensive display of clothing, furniture and other household goods that you are in need of every day. A close scrutiny of the prices and a moment's consideration of what you have been paying for goods oftentimes not so good, will convince you that you will save money on the purchase price and obtain a longer service from the article; that is, you make a double saving—one on the price and another on the long wear.

Please do not idly look this book over, but note carefully the styles; observe the clear and distinct illustrations; read the accurate descriptions; study the low prices and end up by making out a list of the things you want just now and send it with the money to us. You have no reason to hesitate, because we guarantee that the goods will satisfy you or you may return them for your money in full and we will pay all transportation charges both ways.

The farm machinery and implement pages will interest you because of the unusually low prices for reliable goods. Take notice of the price prepaid to your nearest railway station, and count up the dollars and cents you save buying from us.



WRITE FOR OUR BOOK CATALOGUE

THE T. EATON CO LIMITED TORONTO CANADA

WRITE FOR OUR GROCERY CATALOGUE

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the official organ of The Canadian Holstein-Friesian Association, all of whose members are readers of the paper. Members of the Association are invited to send for items of interest to Holstein breeders for publication in this column.

HOLSTEIN-FRIESIAN OFFICIAL RECORDS FOR FEBRUARY, 1910

Hilda's De Kol Princess (3015) at 9 yrs. 5 months and 19 days of age, 18.52 lbs. butter fat, equivalent to 23.16 lbs. butter; 621.66 lbs. milk. Owned by H. F. Patterson, Alford Junction, Ont.

Jemima Wayne Johanna (5556) at 5 yrs. 10 mos. and 1 day of age, 16.94 lbs. butter fat, equivalent to 21.05 lbs. butter; 555.7 lbs. milk. Owned by M. L. Haley, Springfield, Ont.

Bessie Spink's Last Beauty (5559) at 5 yrs. 8 mos. and 16 days of age, 10.06 lbs. butter fat, equivalent to 20.08 lbs. butter; 501.68 lbs. milk. Owned by Chris. Edmondson, Brantford, Ont.

Lady May B. (5485), at 8 yrs., 6 mos. and 25 days of age, 15.88 lbs. butter fat, equivalent to 19.98 lbs. butter; 507 lbs. milk. Owned by W. P. Allison, Chester, Ont.

Ida's Bessie (5519), at 11 yrs., 8 mos. and 7 days of age, 15.40 lbs. butter fat, equivalent to 19.25 lbs. butter; 525.95 lbs. milk. Owned by W. H. Cherry, Garnet, Ont.

Grace Wayne (5547), at 8 yrs., 9 mos. and 24 days of age, 15.12 lbs. butter fat, equivalent to 18.90 lbs. butter; 482 lbs. milk.

Thirty day test, at 8 yrs., 9 mos. and 24 days of age, 50.74 lbs. butter fat, equivalent to 37.82 lbs. butter; 372.4 lbs. milk. Owned by E. F. Oeler, Bronte, Ont.

Alberta (2852), at 10 yrs., 7 mos. and 24 days of age, 14.18 lbs. butter fat, equivalent to 18.69 lbs. butter; 328.8 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

Wendy Balinda (3622), at 9 yrs., 1 mo. and 17 days of age, 13.62 lbs. butter fat, equivalent to 18.27 lbs. butter; 315.5 lbs. milk. Owned by Fred Abbott, Harriestville, Ont.

Blizzard (3047), at 8 yrs., 7 mos. and 24 days of age, 14.23 lbs. butter fat, equivalent to 17.85 lbs. butter; 378.97 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

Ocell Wayne (4648), at 6 yrs., 5 mos. and 13 days of age, 13.75 lbs. butter fat, equivalent to 17.18 lbs. butter; 453.4 lbs. milk. Thirty day test at 6 yrs., 8 mos. and 15 days of age, 55.03 lbs. butter fat, equivalent to 70.03 lbs. butter; 1085 lbs. milk. Owned by Lakeview Farm, Bronte, Ont.

Abbecker Tryntje (3196), at 9 yrs., 8 mos. and 17 days of age, 13.69 lbs. butter fat, equivalent to 17.11 lbs. butter; 441.55 lbs. milk. Owned by A. H. Teeple, Currie's, Ont.

Molloy Shann (4544), at 12 yrs., 11 mos. and 14 days of age, 13.10 lbs. butter fat, equivalent to 16.38 lbs. butter; 380.3 lbs. milk. Owned by Fred Abbott, Harriestville, Ont.

Wendy Balinda (3622), at 9 yrs., 1 mo. and 17 days of age, 13.62 lbs. butter fat, equivalent to 18.27 lbs. butter; 315.5 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

Winnie B. Calamy Posch (7223), at 8 yrs., 2 mos. and 5 days of age, 14.7 lbs. butter fat, equivalent to 17.96 lbs. butter; 378 lbs. milk. Owned by Lakeview Farm, Bronte, Ont.

Molloy Shann (4544), at 12 yrs., 11 mos. and 14 days of age, 13.10 lbs. butter fat, equivalent to 16.38 lbs. butter; 380.3 lbs. milk. Owned by Fred Abbott, Harriestville, Ont.

Wendy Balinda (3622), at 9 yrs., 1 mo. and 17 days of age, 13.62 lbs. butter fat, equivalent to 18.27 lbs. butter; 315.5 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

Winnie B. Calamy Posch (7223), at 8 yrs., 2 mos. and 5 days of age, 14.7 lbs. butter fat, equivalent to 17.96 lbs. butter; 378 lbs. milk. Owned by Lakeview Farm, Bronte, Ont.

Aaggie Cornelia Posch (7501), at 3 yrs., 8 mos. and 29 days of age, 17.31 lbs. butter fat, equivalent to 22.42 lbs. butter; 519 lbs. milk. Owned by M. L. Haley, Springfield, Ont.

Duchess Christmas Gift (7278), at 3 yrs. 11 mos., 18 days of age, 14.79 lbs. of butter fat, equivalent to 18.48 lbs. butter; 391.13 lbs. milk. Owned by Walburn Rivers, Folds's, Ont.

Belle Abbecker Mechtildis (9479) at 3 yrs. 9 mos. and 13 days of age, 13.45 lbs. butter fat, equivalent to 16.81 lbs. butter; 377.7 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

Princess Maggie Keyes (6451), at 3 yrs., 11 mos. and 15 days of age, 13.43 lbs. butter fat, equivalent to 16.78 lbs. butter; 368.1 lbs. milk. Owned by George W. Anderson, Rossmore, Ont.

Aaggie of Riverside 2nd (7242), at 3 yrs., 7 mos. and 11 days of age, 12.74 lbs. butter fat, equivalent to 15.92 lbs. butter; 389.6 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

Mollie Keyes Countess (6822), at 3 yrs., 10 mos. and 24 days of age, 10.70 lbs. butter fat, equivalent to 13.57 lbs. butter; 290.7 lbs. milk. Owned by George W. Anderson, Rossmore, Ont.

Pansy of Iskerman (6943), at 3 yrs., 8 mos. and 29 days of age, 10.05 lbs. butter fat, equivalent to 12.57 lbs. butter; 299 lbs. milk. Owned by Parnham Allison, Chesherville, Ont.

Fairy Pafort Merceon (8097), at 2 yrs., 9 mos. and 22 days of age, 12.70 lbs. butter fat, equivalent to 15.88 lbs. butter; 350.2 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

May Belle Pauline (11286), at 2 yrs., 9 mos. of age, 12.53 lbs. butter fat, equivalent to 15.65 lbs. butter; 341.56 lbs. milk. Owned by P. J. Salley, Lachine Rapids, Ontario.

Lakeview Rattler (11354), at 2 yrs., 1 mo. and 2 days of age, 12.39 lbs. butter fat, equivalent to 15.48 lbs. butter; 421 lbs. milk. Owned by Lakeview Farm, Bronte, Ont.

De Kol Triumph (9284), at 1 yr., 11 mos. and 25 days of age, 12.20 lbs. butter fat, equivalent to 15.26 lbs. butter; 351.3 lbs. milk. Owned by George W. Anderson, Rossmore, Ont.

Cornelia Bontje De Kol (9394) at 2 yrs., 9 mos. and 15 days of age, 12.19 lbs. but-

BICKMORE'S GALL CURE

Be sure and work the horse

No salve in the world cures so many of the worst Bickmore's Gall Cure is a standard remedy. Cures galls, sores, cuts, wounds, grease heak, everywhere by local dealers who are directed to refund you money if it fails. Send direct for trial package, enclosing 2c. postage.

Wingate Chemical Company, Ltd., 44, St. James St., Montreal, Can.

ter fat, equivalent to 17.73 lbs. butter; 325.7 lbs. milk. Owned by Fred Abbott, Harriestville, Ont.

Calamy Posch Wayne 2nd (16272), at 2 yrs. 1 mo. and 21 days of age, 11.03 lbs. butter fat, equivalent to 13.79 lbs. butter; 310.59 lbs. milk. Owned by Walburn Rivers, Folds's, Ont.

Beryl Wayne Rhoda (7116), at 2 yrs., 8 mos. and 22 days of age, 10.68 lbs. of butter fat, equivalent to 13.60 lbs. butter; 227 lbs. milk. Owned by Parnham Allison, Chesherville, Ont.

Homewood Queen (9382) at 2 yrs., and 17 days of age, 10.43 lbs. of butter fat, equivalent to 13.64 lbs. butter; 234.4 lbs. milk. Owned by M. L. Haley, Springfield, Ont.

Mary's Pieterje (10243), at 1 yr., 11 mos. and 25 days of age, 10.39 lbs. of butter fat, equivalent to 12.99 lbs. butter; 256.1 lbs. milk. Owned by Fred Abbott, Harriestville, Ont.

Merceon Artalissa (9987) at 2 yrs., 1 mo. of age, 10.15 lbs. butter fat, equivalent to 12.99 lbs. butter; 275.05 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

Nellie Posch (9990), at 1 yr., 10 mos. 29 days of age, 10.00 lbs. butter fat, equivalent to 12.50 lbs. butter; 252.2 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

Jantje Mechtildis Jue (8262) at 2 yrs., 12 days of age, 9.45 lbs. butter fat, equivalent to 11.81 lbs. butter; 252.9 lbs. milk. Owned by M. H. Haley, Springfield, Ont.

Edler Triumph (9288), at 1 yr., 11 mos. 27 days of age, 8.75 lbs. butter fat, equivalent to 10.98 lbs. butter; 3.57 lbs. milk. Owned by Geo. W. Anderson, Rossmore, Ont.

Homestead Perilla (9153) at 2 yrs., 5 mos. 5 days of age, 8.19 lbs. butter fat, equivalent to 10.23 lbs. butter; 221 lbs. milk. Owned by Cohoe Bros., New Durham, Ont.

G. W. CLEMONS.

GOSSIP

The foremost farmers of the country have discovered and provided themselves with the only safe, sure, quick remedy to Bickmore's Gall Cure. Invaluable and convenient; it cures while the horse works. Satisfactory—the hair grows in again of the original color. For quickly healing cows' sore, chafed or fly-bitten teats it is certainly has no equal. Try it for harness or saddle galls, chafe, rope burns, scratches, sore shins, etc. Absolutely guaranteed to heal if money cheerfully refunded by your dealer. Ask your dealer for it or send 5c postage for free sample and Bickmore's Horse Book's free too. A practical, valuable horse book every horse owner should have. Address: Warrick Chemical Co., Ltd., Canadian Distributors, 804 Notre Dame St., W., Montreal, Canada.

John Campbell of Dalmeny, Ont., has billed his big dispersion sale for Tuesday, April 19th, when he will sell 65 head of Holstein and Yorkshire cattle. Along with this sale is included a chestnut driving mare six years old, two half-bred mares three years, one horse rising five years, one Clyde colt, one rubber-tired buggy, one auto seat, one horse, one set single harness, five Yorkshire broods, one quantity of hay. The Holstein and Yorkshire milk is all registered. All strains will be met at Osoosie Station on day of sale. Should the weather be inclement it will be held under cover. The sale will begin at 1 o'clock sharp.

The record book I received from Farm and Dairy as a premium for one new subscription has arrived. It is just fine. It is a manual for many useful items and suggestions in Farm and Dairy. Every farmer should take it.—H. Lawrence, Huron Co., Ont.

THE EXPERIENCE OF THE MANUFACTURERS OF THE IHC BRAND OF SISAL-STANDARD SISAL MANILA OR PURE MANILA TWINE

THE time has come to order your binder twine for the 1910 harvest. Twine dealers are placing orders for their season's stocks and the mills are running. Now is the time for you to decide the vest will depend on the uninterrupted work of your binder, for no binder can work well if you use a cheap grade of binder twine.

It is our aim to supply every farmer who uses IHC twine good through the 1910 harvest season and ours are the same. We have much more at stake than merely selling twine. Your interests and ours are the same.

We know that the raw materials from which IHC twines are spun have the quantity and quality of fibre that insure greater strength than is found in any other twine. They are evenly spun—smooth running—do not tangle in the twine box—work well in the knooter, insuring perfect binding and perfect tying. They insure your being able to work your binder through the entire harvest season with the greatest speed and economy and are therefore practical profit insurance.

Those who buy cheap twine will certainly have trouble—delays due to tangles, knots and breaks will mean the loss of valuable time—and every delay at harvest time will cut down your profits. There is a sure way to avoid this. Let the experience of the past be your guide in purchasing your twine. The verdict of the majority of the farmers of this country is a safe guide. Their decision should have more weight with you than the statement of any twine manufacturer. These farmers know. They have the same problems confronting them that you have. They have no axe to grind. They do not sell twine. They are only interested in results.

IHC Brand of Sisal-Standard Sisal Manila or Pure Manila

Are the twines used by the majority of the farmers of this country. They have been proved to give the best results. Eighty-five to 90 per cent of the twine used in the twine box—insuring perfect binding and perfect tying. Its only equal is the really high grade Manila twines such as bear the IHC trade-mark.

Your interests and ours are identical on this twine proposition. We have more at stake than selling twine. We are vitally interested in the successful operation of hundreds of thousands of binders. On their successful operation depends our success—and we cannot operate successfully with poor twine. On their successful made can. For this reason we have given the twine problem careful study. When we say "Stick to Sisal or IHC Brand of Sisal-Standard" twine, we mean it. We know how much you will need. If you want more facts on binder twine, write the International Harvester Company at nearest branch house for information.

CANADIAN BRANCHES—Brandon, Calgary, Edmonton, Hamilton, London, Montreal, Ottawa, Regina, Saskatoon, St. John, Winnipeg, Yorkton.

International Harvester Company of America Chicago U.S.A.
(Incorporated)

IHC LINE

MARKET REVIEW AND FORECAST

Toronto, Monday, April 11th, 1910.—The heavy loadings of emigrants from British ports to Canada, is not likely to have the effect of materially easing the labor stringency in Ontario. Most of the incoming workers are bound for the farther West, and what few are left remain in the province will hardly offset the number that are going and have already gone to make their homes in the Northwestern Provinces and British Columbia. The outlook is a most serious one for the farmers. There is nothing of note to be chronicled in the world of finance. The early advent of floods, and city markets have consequently not been overclouded with country produce. Prices are fairly high in most lines and likely to remain so. Call money rules at 5 to 7½ per cent.

WHEAT

There has been a sharp decline in the price of wheat on the Chicago market since our last quotations, and May wheat is quoted at \$1.07; and September wheat at \$1.05. There is a general expectation for the publication of the Washington government's April report of the crop, and until its coming, there is a general hesitancy on the part of speculators. The European markets are for the most part affected with the same bearish feeling. Heavy shipments are still reported from the Argentine about 2,000,000 bush, having been shipped to foreign ports last week. Local dealers are quoting No. 1, Northern, \$1.15; No. 2, \$1.11 a bush, on track, lake ports, and \$1.10 on the bush, respectively, all rail. No. 2, mixed winter wheat, \$1.07 to \$1.08 on bush.

On the farmers' market fall wheat is quoted at \$1.07 to \$1.08 and goose wheat, \$1.04 to \$1.05 a bush. In Montreal there is not much doing in the grain market, dealers for the most part waiting for the arrival of fresh shipments.

COARSE GRAINS

Grains remain steady in price, but the demand for all kinds is dull. Local dealers quote as follows: No. 1, white, No. 3, 40c on track, lake ports; No. 2, 41c; white, 50c; No. 3, 36c, outside; peas, 80c; 79c; 68c; No. 2, 65c; No. 3, 60c; corn, American yellow, 56c; No. 2, 55c; Canadian, 52c a bush; barley, No. 2, 53c; No. 3, 50c to 47c, outside.

On the farmers' market, oats are quoted at 41c to 45c; peas, 77c; 76c; buckwheat, 56c; barley, 55c a bush. In Montreal the market is also very quiet and wholesalers quote as follows: Oat, 53c; buckwheat, 56c; corn, 60c to 72c; barley, 55c to 58c a bush, according to quality.

HAY AND STRAW

It was fortunate for some farmers that the mild weather has driven early in their eagerness to take advantage of the high prices, many of them got rid of more hay and straw than was advisable from a truly economical standpoint, and but for the providential early spring they would have been put to sore straits. Prices are unchanged from last week, with the exception of No. 1 timothy is quoted at \$14 to \$15 and straw at \$7.50 to \$8 a ton. On the farmers' market, choice timothy sells at \$10 to \$13, clover hay, \$15 to \$16 and straw, buckwheat, \$14 loose, \$8.50 to \$9 a ton. In Montreal, timothy is fairly good and No. 1 timothy is quoted at \$14 to \$15 and straw, mixed hay, \$12 to \$12.50 a ton. Baled straw is quoted at \$5 to \$5.50 a ton on track.

MILL FEEDS

Local dealers quote Manitoba bran, \$22 to 23 and shorts, \$24 a ton on track; Ontario bran, \$23; and shorts, \$24 on track; Toronto. In Montreal, Manitoba bran is quoted at \$20 to \$21 a ton, in bags; shorts, \$22 to \$23 a ton, in bags; Ontario bran, \$22 a ton, in bags; shorts, \$23 a ton.

EGGS AND POULTRY

There have been heavy receipts of fresh eggs but owing to the high cost of meat prices have been met with a fairly good level—local dealers quote them at 20c a dozen in case lots. On the farmers' market, from 24c to 25c is asked for new laid eggs.

Similar conditions prevail in Montreal as in Toronto. There are heavy receipts but an active demand exists and prices are high as in Toronto, viz., 20c a dozen for strictly new laid.

Quotations for poultry are purely nominal. On the farmers' market turkeys are quoted at 18c to 20c; ducks, 15c to 16c; geese,

15c to 16c; foul, 9c to 11c; and chickens, 15c to 18c a lb.

HIDES.

Prices for hides are as follows: No. 1 steer and cowhides, 11½c to 12c a lb; calfskins, 13c to 15c; horsehides, \$3; sheepskins, \$1 to \$1.25; tallow, 5½c to 6c a lb.

The Montreal market is active with prices as follows: No. 1, steers and cows, 11½c; calfskins, 15c to 16c; and sheepskin, \$1.10 to \$1.15.

SEEDS

Seed prices have not materially varied from last week's quotations. Local dealers are selling choice red clover at \$10 to \$11 a bush; No. 2, \$8.50 to \$9; alsike, \$6.50 to \$7, according to quality; alfalfa, \$13 to \$14; No. 2, \$10.50 to \$11; timothy, \$2.50 to \$3 a bush, according to quality; Montreal dealers are paying \$5 to \$6; 75c; alfalfa, \$7.50 to \$8.50, and timothy, \$1.50 to \$2.10 a bush, according to quality.

MAPLE SYRUP.

The demand for maple syrup is steady at the wholesale prices reported last week, viz., \$1 to \$1.10 a gallon. In Montreal the price is unchanged, wholesalers purchasing at 6c to 6½c a lb.

DAIRY PRODUCTS

Prices still rule high in regard to butter, and will continue to do so until the creameries commence their season's work. Local quotations are as follows: Creamery prints, 32c to 33c; lb; dairy prints, 23c to 24c; separator, 20c to 25c and ordinary quality, 20c to 22c a lb. Montreal dealers quote the following prices: Creamery prints, 23c to 25c; and choice western dairy, at 22c to 23c a lb. On Toronto farmers' market, choice dairy butter is selling at 23c to 30c, and ordinary quality at 20c to 23c a lb. On the Toronto market cheese is very high in price, 15c a lb. being quoted for large and 13½c a lb. for twins.

In Montreal, 12½c a lb. is quoted for white cheese and 12½c to 13½c a lb. for colored.

POTATOES AND BEANS

There is not much variation in the price of potatoes in the local market, and supplies continue to be very heavy. The outstanding feature, however, is the demand for superior grades from quarters outside of Ontario. Quotations in general are at 40c to 45c a bush in car lots and 35c to 40c out of store. On the farmers' market, potatoes are selling at 60c to 70c a bag.

Montreal prices show a slightly lower tendency. Green Mountains are quoted at 40c to 42½c a bag on track in Montreal. Beans still continue high in price, being quoted at \$3 to \$2.10 a bushel for primes and \$2.15 to \$2.10 for three pound pickers. In Montreal primes are quoted at \$1.90 to \$1.92 a bushel and the demand is light.

HORSE MARKET

There is a general enquiry for horses all over Canada and the United States, and the supply in most places has been found by no means equal to the demand. Prices in Canada are not as high as those that rule across the border, where choice draft horses are being eagerly sought (these high enough to prove attractive to those who are fortunate enough to possess them) for sale. On the Toronto market, heavy draft horses are selling at \$250 to \$300; agricultural horses, \$140 to \$225; express horses, \$100 to \$225; drivers, \$110 to \$250; and serviceably sound horses, \$40 to \$80. There still continue to be heavy shipments to the Northwest.

LIVE STOCK

The price of live hogs looks as if it had reached high water mark and was receding slowly. This tendency has shown itself during the past week in both the United States and Canada. There has been a drop of at least 50c a cwt. in Montreal, and in Toronto of from 15c to 20c a cwt. In Buffalo and Chicago prices are distinctly lower. In the former place prime hogs are quoted at \$11.50 to \$11.35, and at the latter \$10.80 to \$10.55 a cwt. On the Toronto market hog legs are quoted at \$9.50 a cwt. f.o.b. country points, and \$10 weighed off cars at Toronto.

Although hogs are somewhat lower in price, the situation has not changed in the matter of calf. Across the border especially, there is a feeling of widespread concern at the high cost of meat and paragraphs have been busy with all sorts of explanations of the market scarcity and consequent increase in price of beef. The most simple one is the statement that although the population has increased by leaps and bounds, the number of cattle has actually decreased by about ten million head within the last ten years. In the Northwest provinces of Canada, there has been a serious decline in the raising of cattle owing to the influx of settlers having curtailed the grazing range by the large breeders. Receipts at the Union Stock Yards have been heavy and excellent prices have been realized. Following are the quotations:—Cattle—Exporting steers, \$10 to \$11; \$4.75 to \$5.50; heifers, \$5.50 to \$6.50; bulls, \$4.50 to \$5.50.

Calves—Cattle: Choice steers, \$6.50 to

\$6.90; cows, \$5 to \$6; bulls, \$4.50 to \$5; canners, \$1.50 to \$2.50; calves, \$4 to \$7.50 a cwt. Steers: Choice steers, \$4.75 to \$6; ordinary, \$3.50 to \$4.

Milch cows: Choice, \$45 to \$60; medium, \$25 to \$40; springers, \$40 to \$55 to \$60.

Sheep: Prime \$5 to \$6; bucks, \$5 to \$7.75; lambs, \$6.50 to \$8. The Trade Bulletin's London correspondent cables as follows:—The market for live hogs is weaker and lower, Canadian bacon being quoted 3c lower at 68c to 73c.

PETERBORO HOG MARKET.

Peterboro, Monday, April 11th.—Danish hogs delivered on English markets last week totalled 30,000. The demand for bacon in the Old Country is very poor, the market being down two shillings. The delivery of "The market is heavier." The George Matthews Co. quote the following prices for this week's shipments: f.o.b. country points, \$9.15 a cwt.; weighed off cars, \$9.65 a cwt.; delivered at abattoir, \$9.25 a cwt.

MONTRÉAL HOG MARKET

Montreal, Saturday, April 9th.—The market this week for live hogs has weakened under the increased offerings and prices have declined steadily since the beginning of the week, the top price paid at the end of the week was \$11.50 a cwt. for selected lots weighed off cars, a decline of from 60c to 65c a cwt. since the beginning of the week.

The market for dressed hogs was fairly firm, with a good trade passing, quotations ranging from \$14 to \$14.50 a cwt. for fresh-killed abattoir stock.

EXPORT BUTTER AND CHEESE

Montreal, Saturday, April 9th.—The market for butter has been firmly maintained throughout the week with holders strong and disposed to sell sparingly in anticipation of still higher prices before the advent of new creamery in large quantities. Dressed hogs have been still further re-quoted this week, and the bulk of the butter remaining unsold is controlled by two or three of the largest dealers, all of whom look for a marked advance in prices before the end of the month. The stocks of butter are so small in the various warehouses that it is doubtful if the total exceeds 10.

RUN IT YOURSELF.

You can quickly learn to run steam engines by studying our new book. Save the expense of hiring an engineer. Book recently revised to 254 pages. Illustrated. Endorsed by engine manufacturers and leading engineers. Price, \$1.00. Windsor Supply Co., Windsor, Ont.

PHIBEE—Our large catalogue "Engineers' Bargains"

2400 INSTANTANEOUS PICTURES OF DAN PATCH 1:55

ABSOLUTELY FREE POSTAGE PAID

If you are a Farmer, Stockman or Poultry Raiser and correctly answer, in your postal card or letter reply, the specified questions, THIS IS THE LATEST SENSATION AND GREATEST THRILLER IN THE GREAT MOVING PICTURE ART. It is a New Invention that you can carry in your pocket and show your friends instantly, by the first successful moving picture taken of a World Champion Horse in his wonderful 2400 INSTANTANEOUS PICTURES OF DAN PATCH and every picture shows the King of all Horse Creation as plainly as if you stood on the track and actually saw Dan Patch 1:55 in one of his thrilling performances. For a full mile, 2400 distinct pictures take every stride of Dan Patch in his record-breaking run. You can see his magnificent stride to reach the wire, you can see his driver dismount and look at his magnificent stride with his tremendous stride of 29 feet. You can see his thrilling finish and you can follow him up the track before the madly cheering multitude. As a study of horse motion it is better than the actual speed of Dan Patch. It is the most realistic and the most thrilling ever presented to the public. It does not need a light. It is clearly to show instantly either one or a hundred times and creates a new machine. It does not need a curtain and THIS MOVING PICTURE WILL BE PAID TO YOU ABSOLUTELY FREE, WITH POSTAGE PREPAID, IF YOU ARE A FARMER, STOCKMAN OR POULTRY RAISER, AND CORRECTLY ANSWER THE THREE QUESTIONS.

YOU MUST ANSWER THESE 3 QUESTIONS IF YOU WANT THE MOVING PICTURES FREE

1. How many times did you see the Moving Picture Offer? 2nd. How many head each of Horses, Cattle, Sheep, Hogs and Poultry do you own? 3rd. How many acres of land do you own or how many acres of land do you rent?

Unless you correct and honestly answer the three questions you will not receive the pictures.

IF YOU ARE NOT A STOCKOWNER AND WANT THE MOVING PICTURES SEND ME 25 CENTS. If you send me Twenty-Five Cents in silver or stamps even if you do not own any stock, I will send you the largest stock food catalogue in the West free of charge.

Address: **B. B. SAVAGE, Proprietor of INTERNATIONAL STOCK FOOD CO., TORONTO, CAN.**

Largest Stock Food Cakes in the West
 Cash Capital Paid in \$3,000,000

HOLSTENS

BULLS! BULLS! BULLS!

A less than half their value for the next 30 days. Write

GORDON H. MANHARD MANHARD, ONT., Leeds Co.

SPECIAL OFFERING

Bull, 1 year old. Dam Jessie Hewande Poch, R. of P. 15,349 O.S. His full sister's record is 100 lbs. in 64; his milk in 1 day, 15.65 lbs. butter in 7 days, 62.77 lbs. in 30 days. Price, \$110 for immediate sale.

EDMUND LIDLAW & SON Aymer West, Ont. Box 254

SUNNYDALE

Offers 2 sons of Pieterje Hengerveld Count De Kol, the champion bull of the breed, the only one that has two daughters that have made officially over 32 lbs. butter in 7 days. Book your orders now for calves to be born February and March from good official record dams in our Helena farm.

A. D. FOSTER, Bloomfield, Ont. Hallowell Station E-5-10

LAKEVIEW HOLSTENS

Count Hengerveld Fayne De Kol heads the herd. His sire, Pieterje Hengerveld Count De Kol, is the sire of the world's champion milk cow, the Kol Creamelle, 119 lbs. milk in one day, and 10,077 lbs. in 100 days. His dam, Grace Fayne 2nd, has 25.30 lbs. butter in 7 days, and is the dam of Grace Fayne 2nd's Homestead, the world's champion butter cow, over 32 lbs. butter in 7 days. Bull calves for sale.

E. F. OSLER, Bronto, Ont.

GLENSPRINGS HOLSTENS

Several fine young bull calves from A. R. O. and R. F. Cows now on hand. One or two YOUNG HEIFERS from good milking strains, also. Buyers will do well to order bull calves for next year.

Will also sell one or two good COWS at a reasonable price. Speak quick. Price according to value as producers. (E-7-31-10)

E. B. MALLORY, Frankford, Ont.

RIVERVIEW HERD

FOR SALE, 5 Bull Calves, sired by Sir Angrie Beets Segis, son of King Segis, world's greatest 5 year old sire, dam Angie Lily Pieterje Palm, champion J.R. 4 year old—25 lbs. butter 7 days. Dam of calves a 20 lb. 2 year old, and 23 lb. 4 year old. Price reasonable considering breeding.

P. J. SALLEY

THE SUMMER HILL HEAD OF HOLSTENS

Is making some wonderful Records. This year it has produced the champion Canadian bred butter cow for 7 days record, 25 1/2 lbs., also the champion 2 year old of Canada, for ready production. We have some younger ones than promise to be just as good. We offer for quick sale fine heifers, all in calf to an imported bull.

Come and make your selections AT ONCE. Prices are right and everything guaranteed just as represented. Trains met at the station. Write.

D. C. FLATT & SON, Millgrove, Ont R. D. No. 2 E.T.F. Farm Phone, No. 9471 Hamilton.

HOLSTENS

WINNERS IN THE RING

Gold Medal Herd at Ottawa Fair and

WINNERS AT THE PAIL

See Our A.R.O. Records Just think the well want. They combine CONFORMATION,

and PRODUCTION

Bull and Heifer Calves for Sale from Our Winners

"LES CHENAUX FARMS"

Vaudreuil, Que. Dr. Harwood, Prop. D. Boden, Mgr

HOLSTENS

FOR SALE—Cornelia's Poch, five times 1st prize bull at Toronto and London Fairs; also five of his sons, all from records of merit cows. Also females of all ages. E-4-23-10

THOS. HARTLEY Downsvle, Ont

LYNDEN HOLSTENS

Herd headed by Korndyke Teak No. 589. 2nd prize, 25 1/2 yearling bull, dam Lulu Glaser No. 125, 25 1/2 yearling bull, dam 46,375 lbs. fat, 260 days, 3.70 per cent. fat. Also bull calves and female all ages.

E-4-21-10 SAMUEL LYNDEN, Ont.

HILL-CREST HOLSTENS

Bull calves fit to head any herd for sale. Sired by "Pontiac Hermes" and "Sara Jewel Hengerveld's Son." Dams are grand young cows, with good udders and are from one of two months old and will be delivered at your station. Also two young service bulls, one out of a 72 lbs. per day dam.

G. A. BRETHERN, Norwood, Ont.

LYNDALE HOLSTENS

We are now offering for sale a 13 month old son of "Count De Kol (Fretzer) Palm" out of a 20 lb. dam; also a son of Sara Hengerveld Korndyke, from an 18 lb. cow. Both choice individuals, fit for service.

BROWN SROB, LYN, ONT.

NORTH STAR HOLSTENS FOR SALE

Bulls ready for service, out of high testing dams. One of the highest tested bulls De Kol, a son of Sara Jewel Hengerveld, the highest tested, (30.38), highest priced ever in Canada. Also 100 lb. females in calf to same bull. E.T.F.

J. W. STEWART, Lyn, Ont.

FOR SALE

No. 1—\$120.00. Dot's Sultan (5974) calving April 11, 1907. Victor Teak No. 3461. Dan, Madam Dot's 2nd Princess Pauline De Kol, 3700. 609 lbs. butter in one year; average fat, 3.52.

No. 2—\$75.00. Lord Kalmor of Ormstown 8527. Calved May 4, 1909. Sir, Inferno 2322. Dam Audrey 1119; 19 lbs. butter in seven days.

No. 3—\$60.00. Prince Pericles 8243. Calved March 10, 1909. Heifer of Ormstown, 4769. Dam, Rosa Tennes, 7430. Value, \$48.00. Price. Two bull calves, 10 weeks old.

NEIL SANGSTER, Ormstown, - - - - - Quebec

HOLSTEIN BULLS

Ready for service, all vice fine, individuals from big producing cows.

R. F. HICKS - - - - - Ontario

Newtonbrook, - - - - - Ontario

AYRSHIRES

AYRSHIRE BULL CALVES

BARGAIN SALE FOR THIRTY DAYS. All right good ones, from one week to one month old, from just as good giving ance cows and others just as good giving 54 lbs. and upwards per day on dry feed, guaranteed. This is the best buying chance at reduced prices. Also two young bulls fit for service.

J.A.S. BEGG, Box 58, St. Thomas, Ont

SPRINGHILL AYRSHIRES

Imported and home bred stock of all ages for sale. Stock shown at all great sales at all the leading fairs.

ROBT. HUNTER & SONS Naville, Ont. E-7-3-10

FOR SALE—AYRSHIRE BULLS

From one month to two years old; all bred from large, good milking stock. Also Yorkshires also. Apply to

DANIEL WATT OR TO HON. W. OWENS, Manager, Proprietor, 8-9-10 Riverside Farm, Montebello, Que.

BURNISIDE AYRSHIRES

Having disposed of my 1909 importation, I intend leaving about March 1st, for another lot. I have a number of bulls through quarantine by first week of June. Orders entrusted to me will be carefully attended to. We have a few young bulls fit for service, on hand, of choice breeding and females of all ages. Choice stock. Write for particulars. Phone, etc. R. R. NESS, E-4-10-10 Burnside Stock Farm, Howick, Que.

000 packages, and but a very small proportion of this is for sale, the bulk of the stock being retained for the requirements of the customers of the various local dealers. Prices paid in a wholesale way this week to 30 a lb., the way from 25 to a lb. strictly to the lower prices prevailing for a few lots of held butter that were not strictly finest in quality, choice lots fetching as high as 28 a lb. From our quotations all the way from 30 to 32 a lb., according to quality, the top prices being paid for several fancy lots that have arrived this week from the large factories in the Eastern Townships. The receipts are still very light, and will likely continue so for some time owing to the big demand for cream from the United States. The large American centres are contracting the output of the creameries along the border at the equivalent of one cent a pound over the price paid here for butter. The cheese market continues featureless owing to the fact that the factories are only beginning to open up, and receipts in Montreal are practically nil. The stock of old cheese is exhaustively nil. The output of two or three thousand colored lying

about in the cold storages in various parts of the country, any for which there is no demand. The market on the other side is very firm, with prices well maintained.

GOSSIP

GLENN HOLL STEIN SALE The dispersion sale of Holstein-Friesian cattle, owned by G. A. Gilroy, Glen Buell, Ont., held on Thursday last, piled up additional proof of the popularity of Holstein. Some excellent specimens were realized. Dr. L. De L. Harwood, Montreal, whose farm is at Vaudreuil, paid \$150 for Inka De Kol, the other side is also bought several others at high prices. W. F. Elliott, Coleman, Ont., took the three year old bull Oakland Sir Maids at \$400. He, with Dr. Harwood, constituted the two largest buyers. The complete list of cattle and prices followed:

- Oakland Sir Maids, W. F. Elliott, Coleman, Ont. \$400
Inka 2nd, consigned by G. A. Gilroy, Dr. Deant, Athens 375
Inka Sylvia 3rd, consigned by G. A. Gilroy, John Stewart, Plum Hollow 70
Eric Bell Sylvia De Kol, consigned by G. A. Gilroy, John P. Bowers, Gem Tenneson De Kol, consigned by C. J. Gilroy, Henry Graham, Lyn, Ont. 75
Sylvia De Kol Maids, W. F. Elliott, Coleman, Ont. 365
Inka Sylvia De Kol, W. F. Elliott, Coleman, Ont. 170
Inka De Kol, consigned by Dr. Harwood, Montreal, Que. 110
Rhoda De Kol, C. J. Gilroy, Glen Buell, Ontario, Ont. 130
Her calf, A. C. Hardy, Bronto, Ont. 90
Ortie De Kol, C. J. Gilroy, Glen Buell, Ont. 145
Inka 2nd, consigned by C. J. Gilroy, Glen Buell, Ont. 50
Clintonia Geache Segis, W. F. Elliott, Coleman, Ont. 250
Clintonia Hartog De Kol 3rd, C. J. Caskey, Madoc, Ont. 320
Ronney Belle 2nd, Dr. Harwood, Montreal, Que. 355
Lettie 2nd, W. C. Stevens, Philippsville, Ont. 135
Pierette Hengerveld, consigned by J. Stewart, Bronto, Ont. 55
Korndyke De Kol Hengerveld, consigned by J. Stewart, Bronto, Ont. 140
Pauline De Kol, Bergama, G. M. McGrover, Hamilton, N. Y. 115
Pieterje Wayne De Kol, Sam Hollingsworth, Athens, Ont. 85
Her heifer calf, W. C. Stevens, Philippsville, Ont. 85
Lady Pieterje Beryl, E. C. Pondry, Erie, Ont. 135
Muttie Friend Nicol, G. H. Wilmott, Athens, Ont. 100
Nancy Lee De Kol, Sam Hollingsworth, Athens, Ont. 75
Sally Marling, Thomas Davidson, Springvalley, Ont. 150
Pieterje Korndyke Witfof, consigned by J. Stewart, G. H. Wilmott, Erie, Ont. 125
Inka Sylvia De Kol, S. Hollingsworth, Bronto, Ont. 80
Lettie Hengerveld De Kol, S. Hollingsworth, Bronto, Ont. 100
Inka Sylvia 5th Frontier, A. C. Hardy, Bronto, Ont. 185
Coral De Kol Frontier, Dr. Harwood, Montreal, Que. 250
Poch Beets Segis, Dr. Harwood, Montreal, Que. 105

CRUMB'S IMPROVED WARRIERS

Prof. F. G. Halyar of Mt. Herman School, Mt. Herman, Mass., writes: "We could not get along without Warrier Stanchions." WALLACE B. CRUMB, Box 21, Forestville, Conn.

Dr. Bell's Veterinary Medical Wonder cures inflammation of lungs, bronchitis and the cough variety. Agents wanted in every county. Write for a free trial bottle. This offer only good for 60 days. Limited to one bottle. DR. BELL, V.B., Kingston, Ont.

MISCELLANEOUS

TANWORTH AND BERSHIRE SWINE—Boars and sows for sale. J. W. Todd, Cornith, Ont. Maple Leaf Stock Farm, E.T.F.

AYRSHIRES

"La Bois de la Roche's" Stock Farm Here are kept the choicest strains of AYRSHIRES, imported and home bred. YORKSHIRES of the best blood. WHITE WYANDOTTES and BARRED ROCKS. HON. L. J. FORGET, J. A. BIREAU, Proprietor Manager Ste. Anne de Bellevue, Que. E-5-10-10

STADACONA FARM

Show a Record for 1909 At Three Rivers, Quebec's Provincial Exhibition, at Sherbrooke, Canada's Great Eastern Show, at Ottawa, the Dominion's large Central Fair, at Barton, Vermont, under five different judges. WYANDOTTES, FIRST PRIZES THAN ALL OTHER EXHIBITORS IN CANADA. Cattle of both sexes and all ages for sale at very reasonable prices. 0-8-9-10

GUS. LANGELIER

Stadacona Farm, Cap Rouge, Que.

AYRSHIRES

Ayrshires of the right stamp for production combined with good type and quality. Write for prices. 0-12-20-10

R. M. HOWDEN, St. Louis Station, Que.

FOR SALE AYRSHIRE BULLS

One twelve months a winner in any company. Three Angus calves, all from imported sire and from a sowing dam. For full particulars apply to

JAMES BODEN, Isaleigh Grange Farm, Danville, Que.

CHEERY BANK STOCK FARM

FOR SALE—Bull calves, sired by North Milkman, the champion bull of Canada. One weaned and a number sired by Morton Mains Quebeck, Junior Champion of Toronto, 1908, and by North Milkman, a grand sire, heifer and yearling Doak 3rd. Also females, any age, a good milkmaid. Also females, any age. Satisfaction guaranteed. Nothing but the best, is our motto. Write for particulars. P. D. McARTHUR, North Georgetown, Howick Station 0-5-10-10 Que.

I am enclosing \$1 for my renewal to Farm and Dairy for another year. Farm and Dairy is just splendid—G. A. Easton, Nipissing District, Ontario.

Over Fifty Per Cent.

of the purchasers at the dispersion sale of Mr. J. A. Caskey of Madoc, on March 25th, are subscribers and readers of Farm and Dairy. This sale was advertised in Farm and Dairy. It pays to advertise in Farm and Dairy.

OUR FARMERS' CLUB
Contributions Invited.

QUEBEC

SHERBROOKE CO. QUE.

LENNOXVILLE—Many farmers sold off part of their stock, including cows, last fall on account of the serious shortage in the hay crop in certain sections, and also because of the great damage done to grain crops by grasshoppers, and the result is a shortage of cattle of all kinds for the present year. The Government cow testing scheme has not proved very popular here. Perhaps one of the chief troubles lies in the fact that there are few dairymen around and thus the importance of testing does not appeal to them so strongly. The situation as regards pork has not improved much. Undoubtedly a large crop of pigs will be raised this year but the dearth is so great that it will take more than one crop to restore to the normal level. Other farm and dairy products continue to bring good prices, with the exception of potatoes, which are very cheap and abundant. Hundreds of bushels were sold out this spring especially as all kinds of mill feeds are so high—H. M.

RICHMOND CO. QUE.

DANVILLE—A many more cattle were sold last winter than usual. The farmers took advantage of the high prices paid for beef, pork and milch cows. Beef brought from 70 to 75 cents, 150 to 155, dressed; new milch cows, \$50 to \$60 and far cream supply at 40c; butter, 23c. The eggs are plentiful and selling for 20c a dozen—D. E. J.

COMPTON CO. QUE.

COMPTON CENTRE—Dairying is carried on quite extensively, most of the larger farmers keeping from 10 to 30 cows. A lot of the grass was killed out last summer. It promises to be an early spring, and it will be a great help to the farmers if it is, that will help them out on the feed question—H. C.

ONTARIO

GLENGARRY CO. ONT.

ST. ELMO—If the present early spring conditions prevail, there will be an abundant supply of cattle feed. There has been little frost in the ground and there has been a good cover of snow during the winter season. High prices are being paid for milch cows. At present there are 24 cows, 24 grade cows (Holstein) were sold at an average of \$66—W. E. McK.

HASTINGS CO. ONT.

SIDNEY CROSSING—Pastures have wintered well and hay-land looks green. Fall wheat generally is looking fine, even low spots are green and nice; clover is all. Frost is all out of the ground and farmers are planting. Some are seeding on light land, and if the present weather continues everyone will be at it soon. Timothy hay sells for \$15 a ton; straw, \$7; oats, 4c; barley, 60c; peas, 50c; bran, 82c a ton—J. K.

HALIBURTON CO. ONT.

KINCOURT—Three weeks ago there was three feet of snow on the level, with cold, zero weather. Now the snow has melted. The roads are dry. Cattle have come through the winter well. Cows are selling at sales and privately at high prices, and are the highest in years. Horses are up to the top notch; buyers are coming in and have changed hands at \$9 and \$12 a ton, and three year olds find ready sale at \$150. There is not enough horses to supply the local demands. The lumbermen have started to drive the logs down the lakes and rivers, the earliest on record—S. T.

NORTHUMBERLAND CO. ONT.

WOOLEE—Fall grain and clover look very promising. Farmers are rolling meadows and picking off few stones. Some are beginning to plow and there are a few pieces of ground sown where conditions are favorable. We ought to have a good chance to have quite a number, which are chores done during this summer, which have been crowded out from year to year by recent backward springs—K. T.

WELLAND CO. ONT.

STONE QUARRY—While it seems to be a general opinion here that the dairy cow is the greatest source of revenue on the farm, it is not likely that there will be any great increase in the number of

cows kept until a larger and more permanent market is secured. There are indications that farmers are realizing that they have got to make their cattle bring larger returns. And while the majority prefer Shorthorns, they are wanting cows which will give a good return in milk, and so by degrees the milk flow will be increased. During the summer season there is an unlimited demand for milk, owing to the large number of Americans. Such a market is very inviting and excellent results are realized; but the season is comparatively short—from three to four months. Hence, those who supply the market must, at the close of the season dispose of their produce the best way they can, and often receive an inferior price. Others prefer to have regular customers, and receive a uniform price. However, a larger market is hoped for in the near future, as American capital is continually being invested along the Canadian shore. There is not a cheese factory to be found here, and only one or two creameries. If dairy cows would soon be increased and the success of the factory would be assured—J. E. J.

WESTWORTH CO. ONT.

THROY—Spring is over, and the farmers are started in seeding. Most of the ground is in fine shape. Wheat looks very well; most of the clover came through the winter well, and is scarce in some places, but with the early spring in some places, will have early pasture. Hogs sold for \$22 last week, but are a little slack this week—G. H. E.

BRANT CO. ONT.

FALKLAND—Shorthorn, or Shorthorn grades, are the most common here. A few purebred dairy breeds in the hands of a few farmers are preferred. The major milk flow, they also state that the male cow will be of a type suitable for a large class of beef purposes. Quite a number of the best of the Princeton creameries, the best prefer making their milk, and selling locally. There are indications that the price for hogs will have got to make their price larger returns; and while the majority prefer Shorthorns, they are wanting cows which will give a good return in milk; and so by degrees, perhaps, the milk flow will be increased—T. F.

WELLINGTON CO. ONT.

METZ—Some farmers on early land have commenced seeding. The wheat is looking very good and is beginning to get quite green. Farmers are busy at different jobs, some felling and limbing, some cutting wood and some working in the sugar bush. Cattle are very scarce as are also hogs. The price for hogs having gone as high as \$10.19. The supply of feed seems quite plentiful—R. H. S.

WATERLOO CO. ONT.

WATERLOO—Food cows are hard to find and are high in price. As a rule, we butter on the farm or either make or cry operated in St. James—C. H. S.

OXFORD CO. ONT.

GOLSPIE—Feed is plentiful in this section, quite a few are selling hay but it is not so plentiful. Some are busy trimming their apple trees. Apples are selling at \$6 a bushel for most of the season. Farmers will feed stock regular ration for a month or six weeks longer. A great many horses have the hay, but all seem to survive. Some farmers call it Horse Asthma—B.

MIDDLESEX CO. ONT.

WHITE OAK—Mr. James McDougall, a practical farmer in Middlesex Co., while discussing dairy matters with your correspondent, has pointed out that the way we have been trying to improve the herd is by increasing the capacity of our cows. My grand-children started with a bunch of well developed grade cows. My father improved these, as time went on. And now for one year, by weeding out the poorer ones, and replacing them by heifers from the best cows, I have a herd of pure bred. I have brought our present herd up to nearly the ideal milking standard. Our cows have size, are easy to manage and quickly respond to extra

LIVE HOGS

We are buyers each week of Live Hogs at market prices. For delivery at our Packing House in Peterborough, we will pay equal to Toronto market prices. If you cannot deliver to our Packing House, kindly write us and we will instruct our buyer at your nearest railroad station, to call on you.

THIS WEEK'S PRICES FOR HOGS DELIVERED AT FACTORY
\$9.25 a Cwt.
FOR HOGS WEIGHING 180 TO 220 LBS.
THE GEO. MATTHEWS CO., LIMITED
PETERBOROUGH, - HULL, - BRANTFORD

WE have also had a Polled Angus cow for 10 years, and are surprised at her good milking qualities. We had always two heifers from the Polled Angus cow, which we consider good. We'll try them to see if they'll equal their mother.—J. E. O.

LAMBTON CO. ONT.

WYOMING—Since 1871, until nine years ago, about three-fifths of the county was known as "The Swamp." This fine country became well settled and drained about 1900. Then the Lambton Creamery Company was started by gathering cream at different skimming stations throughout the country, which increased the number of cows to a great extent. Cheese began to rise in price, and the older factories began to do more business each year. Some of the leading men of this district began to think we had better have a factory, so the Wyoming Cheese and butter factory was started. Many cows were shipped in but the loss of the building last fall caused some to sell their cows. Now a new and better building is going up—K. N. A.

BRUCE CO. ONT.

HEPWORTH—We are having one of the earliest springs for a number of years. A large here has 15 acres of potatoes planted. He planted them on March 25th. Land is in excellent shape for working. Some grain is sown. Fall wheat looks well. It has been a poor year for maple syrup. Nearly everyone is planting some corn. There are very few silos here as yet. A good many farmers are talking of building silos this year. Cows are selling at a high price; at auction sales they are sold at from \$40 to \$50 each; horses are also selling at high prices—J. K. L.

MANITOBA

MARQUETTE CO. MAN.

KELLOE—The weather has been spring-like since the first week in March, scarcely freezing at all in nights. Farmers have been working hard for the last two weeks (date of writing, April 4th). We have had thunder and lightning and plenty of rain recently. The winter wheat has been sown. Stock has wintered unusually well, as the winter has been mild all through. Prices for milch cows and horses are particularly good, cows selling at \$40 to \$50, a piece, and ordinary sound general purpose horses at \$250 and \$300 each. Live hogs are worth about a lb. The snow went off so quickly this year that most of the farmers are short of wood and the bulk of the oats is still to be marketed yet—L. N.

PEEL FARMERS RECEIVE THEIR PRIZES.

The prizes won in district No. 2 by residents of Peel county, in Farm and Dairy's recent dairy farms competition, were presented at a meeting held at Churchillville on the evening of March 26th. The gathering was held under the auspices of the Farmers' Club and proved most successful. Mr. L. J. O. Hall, of Brampton, acted as chairman. Peel County is one of only three counties in the province that won three prizes last year in this competition. The first prize, won by Mr. and Mrs. D. J. McClure of Churchillville, was presented by H. B. Cowan, Editor of the Chief of Farm and Dairy. The fifth prize, won by Mr. and Mrs. F. Hutton of Brampton, was presented by E. A. Charters, M. L. A., Editor of the Farmer and Conservator. The prize won by Messrs. L. J. Hall &

Son of Churchillville was presented by J. D. McGregor of Halton. The programme included recitations by Prof. S. J. Brown of Meadowdale and songs by Master Hutton and Miss Orr. Wm. Coose of Streetsville was one of the speakers. After the programme had been completed, the ladies served refreshments. It was outstanding during the evening that several of the prizes would probably be entered in the next competition and the Peel county may be expected to make a splendid showing.

WELL DRILLING PAYS—An ordinary machine can easily and successfully operate any one of the well-drilling machines manufactured by Williams Bros. of Ithaca, N. Y. These machines are the best made. Over 100 sizes and styles, each simple, strong, compact and durable, especially adapted for rapid and successful drilling of either deep or shallow wells in every kind of soil or rock. Well-drilling pays big profits—small capital required. Williams Bros.' machines are most economical. Send for illustrated catalogue. Williams Bros., Ithaca, N. Y.

NORTHERN ONTARIO

The Forest and Mineral Wealth of Northern Ontario has attracted many people from all parts of the civilized world.

One-ninth of the world's reported output of Silver in 1908 was taken from mines in Northern Ontario.

New discoveries of undoubted richness are being constantly reported from sections far distant from the far-named Cobalt. Yet a more certain reward is insured to the Settler who acquires for himself

100 ACRES OF THE RICH AGRICULTURAL LANDS

now open for settlement and made accessible through the construction of Railways and Colonization Roads.

THE FERTILITY OF THE SOIL IS UNSURPASSED

The Timber is in demand at a rising price. Mining, Railway and Colonization Road construction, Logging, etc., afford work in abundance to maintain on their farms continuously. Also provide a market for farm products at prices never realized anywhere. For information as to the T. M. C. Co., or the G. T. P. Transcontinental Colonization Agency, in the southern part of Manitoba, and 800 miles nearer the seaboard.

That the experimental stage is past is clearly demonstrated. The country is being taken up with Settlers from many of the other Provinces, the United States and Europe.

For Information as to Terms of Sale, Homestead Regulations and for Special Colonization Agents and Settlers and Settlers' Effects, write to:

D. SUTHERLAND
The Director of Colonization
PARLIAMENT BUILDING, TORONTO
HON. J. S. DUFF
Minister of Agriculture

This Beaver Gang will Reduce Your Plowing Expenses 40c. on Every Dollar Plows Better-Quicker-Easier

WHY use two ordinary walking plows, pay two skilled men and keep four horses working hard, when there's a better way?

Simply hire any lad who can drive, hitch up three horses to this Beaver Gang and tell the boy to go ahead.

He needn't be an expert—the plow is so simple and easy to operate.

And this gang plow will make better furrows, plow quicker and save you nearly half your plowing expense, than if you use two ordinary walking plows. Read



Beaver Gang.

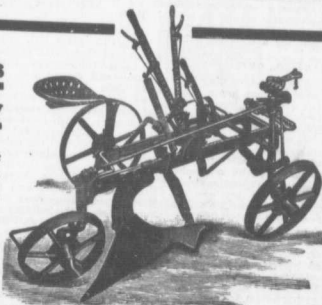
Beaver Gang No. 1—Wheels of this Gang are always under control of driver, and this, combined with our straightener device, enables the operator to keep an absolutely straight furrow. The cushion spring on land wheel axle arm, takes the strain off the wheel when striking obstructions in rough work. The high beam ensures good clearance. This plow is also built with adjustable beams, which can be set for wide or narrow work.

Our new lifting spring for furrow wheel makes it possible to raise the plow without effort. The land wheel is extra large, making the plow run steady and easy. Can be supplied with wide or narrow bottoms, knife colters, shares, tripletrees and wrench. We can't recommend this plow too strongly to farmers who want

good work done quickly and cheaply—the great demand we have for this Beaver Gang is sufficient proof of its efficiency.

This Plow Draws as Light as an Ordinary Walking Plow

This Beaver Sulky has all the features of the Beaver Gang. The beam for carrying the plow is made of extra heavy high carbon steel, making it a perfect plow for hard work. The wheels are absolutely dust proof, are always under the control of the driver, and are so arranged that the plow will automatically adjust itself to the

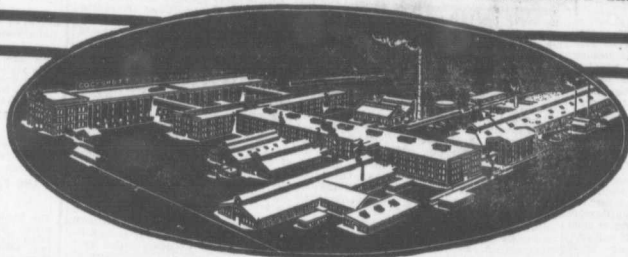


Beaver Sulky.

Does Better Work — Ensures Rest for Driver

unevenness of the ground. The land wheel is extra large—a great advantage in operating the plow. The plow can be easily raised by means of our new lever and spring lift and bottoms can be supplied to suit any soil. This is without question the lightest draft sulky plow made and we know it will give full satisfaction under all conditions.

Great
Plant where
above Plows
are made.



Our Agent
will gladly
show you
these Plows.

Have a Cockshutt Catalogue in Your Home

A CATALOGUE of Cockshutt implements will show you at a glance, the best and latest there is in farming tools. It will show you how to farm right—farm profitably—how to get the most out of your land at the least cost—how to get it better and easier.

From plowing time to harvest there is a Cockshutt implement for your every need. And when you buy an implement bearing the "Cockshutt" name you can depend upon it that the materials are the best, the workmanship perfect and the price reasonable.

We make plows, harrows, drills, cultivators, etc., etc., suitable for all conditions—and we urge every farmer—from the man who has only a few acres to the one who can count his acres by the thousands—to write for our Catalogue to-day, for we feel confident that there are no finer implements made in the world than those turned out at our great plant at Brantford. A postcard will bring our Catalogue to you by return mail.

COCKSHUTT PLOW COMPANY LIMITED **BRANTFORD**