

FARM AND DAIRY

AND
&
RURAL HOME

DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE

Peterboro, Ont., Mar. 18, 1915

Canadian Bill
Save Cent and Caid
See - Dec 18



DIRECT DISTRIBUTION

ISSUED EACH WEEK

Rural Publishing Co., Ltd., Publishers

ONE DOLLAR A YEAR

Don't Be Satisfied With
The "Just As Good" Kind

Demand
a
Simplex



One of
the
Farmers'
Best
Helpers

Remember, that all the time you save in operating "A Simplex" goes to help accomplishing something else,—increasing production,—and in these days of shortage of farm products that means money for you.

Not only does the "Simplex" do the work in less time than other machines, but it uses less of your energy, skims cleaner and is easier to clean and keep clean,—this latter point makes it a favorite with the women folks.

We know that nothing but the best can stand the test. The Simplex has stood the test. Drop us a card and we'll send you our catalogue.

Let

DOMINION CLEANSER

help you keep everything spick and span. Send a trial order.

D. Derbyshire Co., Ltd.

Head Office and Works: BROCKVILLE, ONT.

Branches: PETERBOROUGH, Ont. MONTREAL and QUEBEC, P. Q.
WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

Prince Edward County Holstein Breeders' Club

Fifty Breeders Club Five Hundred Head
The offerings are all young and sound and are backed up by the reputation Prince Edward County Breeders are making for themselves. Every visitor will be cordially treated and driven free of charge among the breeders. For information apply to the Secretary.

CLARENCE MALLORY Secy.-Treas. BLOOMFIELD, Ont.

CANADA'S GREATEST SEED HOUSE

STEELE BRIGGS SEEDS

THE BEST BY EVERY TEST

FOR SALE BY RELIABLE MERCHANTS
EVERYWHERE THROUGHOUT CANADA

The Feeding of Burkoye Hengerveld

The Details of the Ration of this 20,000 Pound Cow and some Feeding Ideas by her Owner, Mr. Joseph O'Reilly, Ennismore, Ont.

"GRAND and noble brute.—Of all the animal friends of man she is the greatest."
These words were spoken by a well known auctioneer before he commenced selling a high record Holstein cow. I often think as I feed and care for these noble animals what a great part they play in the feeding of man.

Truly a 20,000-pound cow doesn't happen, but with breeding, feeding and care we have brought them to the high standard they hold today. I believe in starting with the calf. When the dam about 12 hours, and then the calf is dropped we leave it with and four pounds of new milk, three times daily (always weighed before feeding), till the calf is four weeks old. Gradually then we increase with separated milk to 18 pounds daily; bran and whole oats (half and half) as soon as they will eat and clover hay. I never give too much at any time, and always keep the pails and mangers sweet and clean. We have no trouble with scours or

rotly she did not freshen just in time to qualify under the present R. O. P. rules, and previous to her test she received no fitting, whatever, freshening in a slim condition. She was fed on a mixture of brewers' grains and molasses, bran, cotton seed meal and linseed meal, one pound of grain mixture to three pounds milk, 75 lbs. mangolds and all the alfalfa hay she could eat in our hour. When on grass she was fed grain and milked three times daily in the stable on dry feed with out ensilage, giving 92 lbs. in one day and about 2,400 lbs. in 30 days. She was always fed and milked on time, and I believe if you want to do your cow justice you must be very particular in this respect.

In feeding large record cows you have to study every individual cow as what would suit one wouldn't at all suit the other. At the present time we are testing a cow, and it took no several weeks to discover what grain ration suited her, and before I got her to do her best. Now she is giving:



Burkoye Hengerveld, 9906, the First Four-year-old Cow in Canada to Produce over 20,000 lbs. of Milk.

Her official record for one year is 20,177 lbs. of milk and 782 lbs. of butter. How was she fed? Read the article adjoining. Her owner, Mr. Joseph O'Reilly, Ennismore, Ont., tells all about her rations.

delicate calves, and at a year old have good growthy animals with any amount of constitution.—Then when the time comes later on they are capable of consuming large quantities of feed which is so necessary to produce a 20,000-pound cow, or over, in a year.

We don't believe in breeding the buffers to freshen much before they are two years and three months old, unless they are extra large and strong, when they may freshen a little younger.

In fitting a cow for a large record we feed from 12 to 16 lbs. of a mixture of bran, ground oats and oat meal, depending on the cow and the length of time dry. Ensilage, roots and hay are the forms of roughage used. As she gradually comes to the time of freshening we cut off the grain and ensilage, increase the roots to avoid udder trouble, but air to have them freshen in as high a condition as possible. It's all in both long and short distance performances.

After the cow freshens she gets bran mashes for 24 hours, water with the chill taken off and then we start with the regular ration, increasing one-half pound a day until capacity is reached. Burkoye Hengerveld, our greatest cow, was the first four-year-old to make a record of 20,177 lbs. milk and 782 lbs. butter in Canada. Unfortun-

ately she did not freshen just in time to qualify under the present R. O. P. rules, and previous to her test she received no fitting, whatever, freshening in a slim condition. She was fed on a mixture of brewers' grains and molasses, bran, cotton seed meal and linseed meal, one pound of grain mixture to three pounds milk, 75 lbs. mangolds and all the alfalfa hay she could eat in our hour. When on grass she was fed grain and milked three times daily in the stable on dry feed with out ensilage, giving 92 lbs. in one day and about 2,400 lbs. in 30 days. She was always fed and milked on time, and I believe if you want to do your cow justice you must be very particular in this respect.

Items of Interest

G. W. Mann, Peterboro Co., Ont., is a Shorthorn man. Under an illustration of his barn, which appeared in a recent issue of Farm and Dairy, he was mentioned as a breeder of Holsteins, being confused with some of his relatives in the vicinity. As Mr. Mann has no desire to be classified among the fanciers of black and whites, we are glad to make this correction.

Where may good seed be obtained for 1915? The Canadian Seed Growers' Association have just issued a catalogue of registered and improved seed produced in 1914 and offered for sale. The Canadian Seed Growers' Association does not handle seed directly, but supplies a list of its members who have seed for sale. Copies of their catalogue may be had on application to L. H. Newman, Secretary-Treasurer, Canadian Building, Ottawa.



Trade in

Vol. XX

Beans

THE be

family of that family plants. The den bean, p and animals a century ago village of M New York st the first be grown was 1 25 or 30 ye Pea Bean. dard variety price, the be grown, such Marrow Fat. Bean grow countries of are other se now success suited to this States, lie w drift of the rule, are r and organic that a crop w the air, shou supply of pho

Beans have loamy soil, a deau Harbor out of beans. found that the clay soil, prod heaves land be fall plow loamy nature Sod land with yard manure beans. The crop may, ho ease, and if practised.

Bean grain be kept in a May in order and to retain spring, the plowing, then good condition for seed show disease. The three pecks to may take plac The ground is they are plan letting only t drill, making

gerveld

ow and some

ismore, Ont.

on just in time

rosent R. O. P.

er test she re-

ver, freshening

as was fed on a

mashed molasses

and Dissod

in mixture to

the mangolds

she could eat

grass she was

three times

did her best

dry feed with-

in one day

30 days. She

lked on time,

nt to do your

very particu-

rd cows you

vidual cow—

ouldn't at all

present time

and it took mo-

re what grain

before I got

she is giving;

FARM AND DAIRY

& RURAL HOME



We Welcome Practical Progressive Ideas



The Recognized Expound of Dairying in Canada.

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

Vol. XXXIV

FOR THE WEEK ENDING MARCH 18, 1915

No. 11

Bean Growing in Ontario is Profitable

A Practical Talk by a Practical and Successful Grower

MR. J. O. LAIRD, BLENHEIM, ONT.

THE bean is a member of the leguminosae family, and is one of a number of members of that family which are very important economic plants. The field, and to some extent the garden bean, provide nourishing food for both men and animals. Beans were first grown over half a century ago, near what is now known as the village of Morpeth. The seed was imported from New York state by Mr. Collins Handy, who grew the first beans in Ontario. The variety first grown was known as the Medium Bean, but for 25 or 30 years the staple variety has been the Pea Bean. Although the Pea Bean is the standard variety and commands the most uniform price, there are a number of fancy varieties grown, such as the Yellow Eye, Turtle Soup, and Marrow Fat.

Bean growing has been confined mostly to the counties of Kent and Elgin, but no doubt there are other sections where they could be and are now successfully grown. The sections most suited to this crop, both in Canada and United States, lie within the area covered by the glacial drift of the great ice age, the soils of which, as a rule, are rich in lime, potash, phosphoric acid, and organic materials. It is reasonable, then, that a crop which is able to gather nitrogen from the air, should do well upon soils containing a supply of phosphoric acid and potash.

The Choice of Soil

Beans have been most extensively grown on a loamy soil, and it is the section lying near Rondeau Harbor that the most money has been made out of beans. However, of late years it has been found that they will do well even on a fairly heavy clay soil, providing the land is well drained. The heaviest land that is intended for beans, should be fall plowed, but the land that is of a more loamy nature is as well not plowed until spring. Sod land with a coating of 10 or 12 loads of farmyard manure has been most frequently used for beans. The use of manure just before the bean crop may, however, continue or produce a disease, and if so, some other system should be practised.

Bean ground that has been fall plowed should be kept in a fine state of tilth during April and May in order to kill as many weeds as possible and to retain the soil moisture. If plowed in the spring, the land should be rolled soon after plowing, then disked and harrowed and kept in good condition until planting. The beans used for seed should be even in size and free from disease. The amount used for planting is from three pecks to the bushel per acre. The planting may take place between May 29th and June 15th. The ground is usually rolled before planting, and they are planted with the ordinary grain drill, letting only three tubes run in an eleven-tube drill, making the rows 28 inches apart.

Cultivation of the bean crop is, of course, very important. It is a good practice to harrow the beans before they are up. Beans germinate quickly, and under favorable conditions will be up in four or five days. The weeder is often used before the beans are large enough to cultivate. Whether the weeder is used or not, the shields on the two-horse cultivator should be raised just slightly off the ground, so the earth will cover any small weeds near the plants. The beans should be cultivated about every 10 days or after each rain. When the blossoms come out, it is best to cease cultivation, as the cultivator will knock off a great many blossoms. If the cultivation has been thorough, not much hand hoeing will be required.

Beans are usually ripe the first or second week of September. There is a bean pulling attachment which can be placed on the two-horse cultivator, which will cut two rows at once. The knives are placed V shaped, and so put the two rows into one. After pulling they are bunched up by hand in some cases, but more frequently a side delivery rake is used. This will rake three or four rows into one. The beans are left to dry for a few days and then turned over, and after another day's drying they are usually ready to take into the barn. However, a great deal depends upon the weather. If the weather is very wet, the only way to save the crop is to turn them often, for care must be taken not to draw

Well Balanced Production

Prof. C. A. Zavitz spoke words of wisdom when at the last Experimental Union meet at Guelph he advised balanced production.

Prof. Zavitz said in part as follows:

"There will be more hungry, starving people in the world in the next few years than for a long time in the past. There is a great responsibility on the producer. At the same time there is a great opportunity for the producer. Above all things let us maintain the balance of production. Let us not rush altogether to grain. The live stock of the country must be conserved as well."

"We should plan so far as possible to grow those crops that fit in best with present requirements. For instance, in Ontario this year we had a very large apple crop which could not be marketed to advantage and a glut was the result. Such crops as beans, wheat and others that furnish a large amount of food with the least amount of transportation costs are the crops that merit attention at the present time. I would mention the bean crop particularly as giving a large amount of food in concentrated form."

"Skilled labor on the farm is going to be scarce. We must study to make the most of our opportunities. For instance, there is a great deal in selecting the proper varieties. Let us start by getting the very best seed of the best crops for the occasion."

them in when damp. Each sling should be moved when it is put into the mow. It is a good plan to place a large pole across the mow so that the sling load will drop on it and be broken up, thus making it much easier to mow away. As soon as the beans are harvested, it requires but a small amount of work to make the land ready for fall wheat.

At the threshing time, we find out whether the yield has been satisfactory or not. The yield in the bean section varied greatly this year, as is usually the case, some yields being as high as 38 bushels an acre and others as low as 12 bushels an acre. The threshing is not done with an ordinary threshing, but with a machine specially constructed, having two cylinders, a slow running one and one that runs quickly. The bean straw is very good feed for cattle or sheep, and should be kept in the barn if possible.

The eastern provinces and the Canadian west have handled most of the Ontario beans for a number of years, but the price has always been influenced by the foreign beans. This year it has not been, nor will it be next year, and for that reason we should try to produce a bumper crop in 1916. The world will need them.

The market in the bean section of Ontario has been materially helped by the formation of the Kent Farmers' Produce Co. Ltd., of Blenheim, Ont. The company has been doing business for 11 years, and not only has it been a benefit to the bean market, but has been a benefit to the farmers in many other ways. In addition, it has paid a dividend of seven per cent this year.

That the supply of good beans might be increased, seed selection should be practised. Work could be continued at the college and also in the sections where beans are largely grown. Special attention should be paid to evenness of ripening, uniformity of size, and freedom from disease. We should strive to produce the largest number of pods to the stalk and the largest number of beans to the pod. The use of commercial fertilizer has not been common, but I believe it will be soon, and work along the line of fertilizer tests should be undertaken.

Trouble With Diseased Beans

The bean buyers this year have been experiencing more trouble than usual with diseased beans. The machinery in the warehouses will make primes out of six or eight pound pickers when the beans are spoiled by the wet weather, but the machinery will not take out the diseased beans. Consequently they require to be hand picked.

The acreage of beans grown in 1914 was 51,149. About one-half, or 23,148 acres, were grown in Kent. The other counties which grew a considerable amount were, Elgin 5,890 acres, and Huron 7,874 acres, while the remainder of the crop was divided among most of the other counties. In view of the fact that beans have been a good price for a number of years, and also that they are of very great food value, we should encourage every person who can to grow as large a crop as possible this coming season.

Hints for the Spring Planting Season

Formalin Destroys Oat Smut

A. P. Graham, Digby Co., N.S.

SMUT is a source of immense loss in Nova Scotia oat fields. My experience of the last half-dozen years has convinced me that this disease can be completely checked and clean grain grown on farms where previously the fields had always been smutty. My own experience has been altogether with oats. I really do not need to use formalin treatment now, but we keep on doing so as a sort of cheap insurance.

Our method of treating the seed oats with formalin is to thoroughly clean the barn floor, in which, by the way, there are no cracks through which the oats can leak into the cellar, spread out the oats several inches deep, and while one man applies a solution of one pint of formalin to 40 gallons of water with a watering can, another turns the oats with a scoop shovel so that all are thoroughly moistened. I find that about one gallon of the solution to each bushel of seed grain to be treated is the correct quantity. I always put the most active man on the farm on the scoop shovel; that isn't to escape the job myself, but is to ensure a better mixing and a thorough sousing of every grain.

When the seed grain has been properly sprinkled, it is scooped up into a pile and covered with old grain sacks and horse blankets, these to hold in the gases and make the killing of every smut spore more effectual. Next day the pile is levelled out again and turned each hour to dry the seed.

Just one final hint. I never treat seed grain with formalin when a frosty night is expected, as there would be danger of freezing and injury to the germinating power of the seed.

Selection of the Variety of Corn

Clark Hamilton, Dundas Co., Ont.

SUCCESS with corn in Eastern Ontario depends very largely on the selection of the right variety. First and foremost we must remember that the largest variety is not necessarily the best variety. We have too many varieties of corn to-day. We have a few really good varieties. Even yet, however, it is difficult to persuade some men that we cannot grow southern seed corn with desirable results in the east.

The Flint varieties are the smaller and hardier. If one can grow Dent to a fair degree of maturity, then grow it by all means.

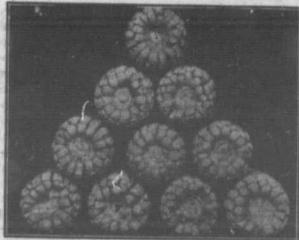
Quebec Yellow, a Flint variety, is the earliest corn that is grown. If it cannot be grown to maturity, no variety can. It is possible to plant Quebec Yellow the last of May and have it ready for feeding the first day of August. Hence this variety is fine for fall feeding where there is no left-over silage for that purpose. Ordinary White Flint grows quickly and yields well.

White Cap Yellow Dent is one of the earliest of the Dent corns. Bailey, another Dent variety, is becoming quite popular. A new variety, the Wisconsin No. 7, is now displacing the White Cap Yellow Dent. One of its principal superior features is that it is comparatively free from suckers at the

root. The Improved Learning is the variety that we ourselves have always grown. It is a heavier yielder of ensilage than the White Cap or Wisconsin No. 7.

We always buy our seed on the cob. When dealers are selling on the cob they reserve the best cobs for that trade. The inferior and rejected cobs are shelled and the seed used to cater to the trade of those who demand shelled seed. When we get a sample of seed corn cob we want one that will not twist in the hand. Cobs that twist have not been sufficiently dried out or are immature. Hence they are subject to freezing and will show a low germination.

We cannot afford to take a chance on corn seed. With this crop, when we lose our first seeding we have lost our crop for the season. We are forcing the corn crop, as it were, in this country, and second seedings are almost impos-



Splendid Covered Seed Ears.

The ideal seed corn ear is well covered over the butt and tip. Seldom, however, even in the best seed, do we find butts so well covered as in these ears, the winning ten at a recent corn show.

sible. Hence we always buy our seed in advance and test it, a few grains from each cob being subject to the test of germination. If in the germination test we do not get a strong growth, we take it as an indication of lack of vitality. Good strong germs are necessary, not merely germs that will show life under test.

Farmers are not going to produce more unless they are reasonably satisfied that they will get rid of what they produce. The big problem is not in mere production, but in more and better distribution.—Nelson Montiehl, Perth Co., Ont.

It is not the glamor of the city that steals away our young people. It is the desire to win wages and have money of their own. Offer the boy a partnership. Give the girl a partnership. Start a poultry yard or bee department for her benefit. Dr. G. C. Creelman, O.A.C., Guelph.

600 Bushels of Potatoes per Acre

D. P. Cameron, Stormont Co., Ont.

IN the summer of 1913 I took a piece of ground which was very bad with quack or couch grass. The soil was a sandy loam in fairly good condition, except for the quack. There were one and three-quarter acres in the piece, one-half acre without any trees and the balance a young orchard planted ten years. As soon as I took the oat crop off the field, I plowed about eight inches deep, then disked and harrowed, and once a week I cultivated that field until late in the fall or just before freezing up. Then I plowed the field again about nine inches deep and harrowed the ground twice to level the land so I could spread the manure on it evenly.

Through the winter of 1913 and spring of 1914 I drew the manure on the land at the rate of about 80 tons an acre. When the land was dry enough in the spring to work (about May 24th) I again plowed the field if anything deeper than before, then disked and harrowed seven times. It was then ready for planting. I planted the field with an O.K. Potato Planter in drills 28 inches apart and about 12 or 14 inches apart in the row. When they were planted five days I harrowed the ground to kill all weeds sprouting, and in five more days I harrowed the field again, or just when the potatoes were coming through the ground. In about a week, or when the potatoes were up high enough to see the rows, I went through them with the scuffler, and in five days more I went through them again, and again in another five days. I went through again in a few days more when the blossom buds were on the potatoes, and just before they began to fall down with the blight, which left the ground perfectly clean, and I never put a hoe near them at all. In a very few days the tops covered all the ground, and no more weeds made their appearance the rest of the season.

When the potato beetles made their appearance, which was only in spots in the field, I sprayed them with paris green, but I did not spray for blight, as the vines were green until frozen in the last of September. The potatoes were good enough to take three first prizes and three special prizes at the county and township fairs, and some weighed over 3 1/2 pounds. I dug the potatoes with an O.K. Potato Digger the first of October, and the yield was at the rate of over 600 bushels an acre on the half-acre without any trees and on the other one and one-quarter acres with apple trees. I dug over 500 bushels of marketable potatoes, over 800 bushels in all. All the cultivating and close-planting of potatoes has smothered out the quack, and I don't think there are a dozen roots left in the fields.

Start Fighting Weeds

By E. L. McCaskey

ONE of the worst weeds in our section is common mustard. It has been with us only a dozen years or so, but it has already infested several farms in the locality, and is still spreading rapidly. Its introduction in our neighborhood has been definitely traced to one importation of western seed grain. The farmers who used that seed grain are still regretting that they did not get busy



A Building Arrangement That is Appreciated When "Wintery Winds Do Blow."

If buildings are constructed on this plan it isn't necessary to get into an overcoat and pull your cap down over your ears when you go to the barn to feed the stock. House, drive house and barn, all in a row and all connected, is quite a common arrangement in the Maritime Provinces and New England States. Of course the arrangement has its disadvantages in case of fire. The home in the illustration is that of L. K. Ellis, Colchester Co., N.S.—Photo by an editor of Farm and Dairy.

*Notes taken by the editor of Farm and Dairy on an address by Mr. Clark Hamilton at a Farmers' Institute meeting at Ennismore, January, 1915.

and pull out year. Extern Now they find If I had a with the mu blaming mys portation of fore putting easier than grown, and noticed that seeds spre ably mentio expense we there was no in the land, it am told, will a single seas Where seed

A V

EVERY fa features from all other ago I dropped to pay a visit. one of the pic district. The Croxall farm tige was the w ing problem h relative merits p found have here I found a either in oper could be made mill or gasolin water," said m that finally de farm six years

Mr. Croxall tage of the nat his situation of which supplies ings appear some 30 feet delivery. The Croxall's farm, first things he buy a perpetual his neighbor. bargain counter

A covered ce and the water required "about piping to do th a tank which house. The ta ments. The la first flows is ju pipe conducts w cow barn, but a small part go for the waste of the water bo is automatically any patent devic

"One of the water," said Mr cold in summer do not have to at p' proper to the pipes never If "What did it I inquired."

"For the tank milkhouse, abou

and pull out those yellow-flowered weeds the first year. Extermination would then have been easy. Now they find it almost impossible.

If I had any cause for regrets in connection with the mustard in our locality, I would be blaming myself for not having given that importation of seed grain a thorough fanning before putting it into the seeder. That would be easier than pulling the plants once they had grown, and a whole lot cheaper. I have often noticed that our experts, in explaining how weed seeds spread from farm to farm, almost invariably mention seed grain first. The trouble and expense we can save ourselves if we made sure there was no weed seed in the seed that we put in the land, is past computation. Some weeds, I am told, will increase several thousand-fold in a single season.

Where seed grain is shovelled directly from the

bin into the seeder, there is frequently considerable trash, such as broken pieces of straw, burrs and so forth in the grain. This trash clogs the spouts of the seeder or drill, leaving spaces of a few feet here and there not seeded. These unseeded spaces are a double loss. I have noticed that nature does not allow any land to remain vacant, and spaces not seeded with grain always produce the most prolific crop of weeds. And there is a loss of the grain that might be grown on that space. If it were alone to get rid of the trash in seed grain, the time spent at the fanning mill would be well invested.

In selecting our seed grain we run it through three or four times at least. This thorough fanning is not only to get rid of the weed seeds, but also to get rid of the small and shrunken grain seed. Experiments conducted at Guelph and dealt with fully in their annual report, show

that large plump seed will return a yield of several bushels greater per acre than small plump seed or shrunken seed. I prefer to fan until I have the large plump seed to put in the ground, and then I can feed the small and shrunken seed. The latter may be just as valuable as the former for feed; then why not take the best for seed?

"Patriotism and Production" is a catchy phrase. I am sometimes afraid that the idea that will catch with some farmers is that it means increased grain acreage alone. I am confident that if all of the seed grain in Canada this spring were given a fanning mill selection, that the resultant increase in crop yield on the same number of acres would be more important than increased acreage. Now is the time to start the fanning mill. If this job is left until spring seeding commences, there is small chance of it being done; at least, that is my experience.

A Visit With a Pioneer Dairy Farmer of His District

Features of Interest on the Croxall Farm in Ontario Co., Ont.

BY J. R. DONALDSON

EVERY farm has its own special features which distinguish it from all other farms. A few weeks ago I dropped off at Uxbridge, Ont., to pay a visit to Mr. Stanley Croxall, one of the pioneer dairymen of that district. The special feature of the Croxall farm that attracted my attention was the way in which the watering problem had been solved. The relative merits of gasoline and wind power have been long discussed, but here I found a cheaper method than either in operation. "That gravity could be made to do the work of wind-mill or gasoline-engine in supplying water," said my host, "was the fact that finally decided me to buy this farm six years ago."

Mr. Croxall has taken full advantage of the natural opportunities that his situation offers him. The spring which supplies the water to his buildings appears on elevated ground some 30 feet higher than the point of delivery. The spring is not on Mr. Croxall's farm. As a consequence one of the first things he did on taking possession was to buy a perpetual right to the use of its water from his neighbor. The privilege was certainly on the bargain counter. He got it for \$1.

A covered cement tank was built over the spring and the water piped down to the building. It required about 1,000 feet of one-inch galvanized piping to do this. The water is delivered into a tank which occupies one side of the milk house. The tank is divided into two compartments. The larger one into which the water first flows is just the depth of a milk can. A pipe conducts water from the smaller tank to the cow barn, but as the water flows continually only a small part goes in that direction. The outlet for the waste water is on a level with the top of the water bowls in the barn, and the supply is automatically adjusted without the need of any patent device.

"One of the great advantages of this spring water," said Mr. Croxall, "is that it is always cold in summer and never freezes in winter. We do not have to muck with ice to keep the milk at the proper temperature in hot weather, and the pipes never burst during a cold snap."

"What did it cost you to install the system?" I inquired.

"For the tank at the spring, the piping and milkhouse, about \$125," was the reply. "Of



A Milk House Supplied With Water on the Gravity Plan.

The factor that decided Mr. Stanley Croxall to buy the farm he now owns in Ontario Co., Ont., was the possibility of running water carried by gravity to the milk house and farm buildings. The illustration shows the singular cement milk house. Further particulars are given in the article adjoining.

course, that represents merely the cost of the material. We did all the work ourselves. Next summer I intend to extend the system to the house. We intend building a new kitchen, or it would have been installed there before. I will switch the delivery pipe before it enters the milk house and run it to the kitchen before carrying it to the milk tank. We will then have running water always on tap."

Mr. Croxall's Farm

Springvale Farm, as it is very appropriately named, consists of 104 acres. Some 13 or 14 acres creek bottom afford excellent pasture. Mr. Croxall keeps about a head to the acre on this part of the farm during the summer. A little grain and ensilage is fed in the dry season, but pasture is the main source of food supply.

Ten or 15 acres are kept under alfalfa, and a three-year rotation applied to the rest of the farm. Manure is applied to clover sod during the winter. In spring it is plowed and planted to corn and roots. Mr. Croxall is a strong advocate of the planting method of sowing corn. He uses a marker and plants by hand. Two men can plant 10 acres in a day, and any time lost is much more than made up by ease of cultivation later in the season. This system also gives a larger percentage of ears than the more common method of sowing with a grain-drill. Oats and barley follow corn and with them is sown a mix-

ture of timothy and clover. "We sow about 15 pounds of this mixture," said Mr. Croxall. "If the clover happens to kill out, there is timothy enough for a fairly good crop."

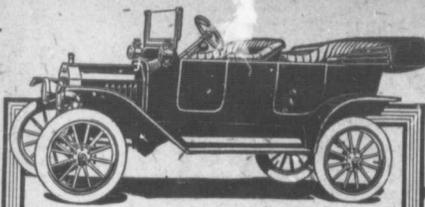
Ensilage forms the basis of the winter ration. It is fed with cut oat straw in a mixture of about two-thirds ensilage and one-third straw. The mixing is done several hours before feeding in order that the straw may become soft. "I find there is less danger of causing scours by heavy feeding when straw is mixed with the ensilage than when the latter is fed alone," explained Mr. Croxall. Hay is fed at noon and turnips immediately after milking.

"Some people will tell you that turnips cannot be fed without injuring the milk, but we always get the bonus that the Farmers' Dairy Co. gives for quality milk," said Mr. Croxall in speaking of turnips and turnip milk. "The concentrates are fed on the ensilage. A heavy milking cow receives a gallon of oat and barley chop, a gallon of bran, and a quart of oil cake."

Stable Fittings

Like many other careful feeders, Mr. Croxall has little use for the continuous manger. He uses the steel partitions, that allow of lifting to clean the manger. The swinging stanchions are the kind that can be regulated to suit the length of the animal. This aids materially in keeping the flanks of the cows clean.

Mr. Croxall is one of the pioneer dairymen of his district. He was a beef man by education and training. The turning point in his career, as in the career of many others, came when he married. His wife is a daughter of Mr. P. W. Walker, the well-known Holstein breeder of Ontario county. During his visits to Utica he was not too preoccupied to notice that dairying seemed to be a profitable business. He disposed of some of his grade Shorthorns, replaced them with Holstein grades, and commenced shipping milk to Toronto. He soon proved for himself that there was money in the milk business. Then he began to think that pure-breds would not eat any more than grades, and the difference in the value of their progeny was at least the difference between \$5 and \$50. As the Holstein grades displaced the Shorthorns, so the pure-breds succeeded the grades. Mr. Croxall is well satisfied. Both changes have proved profitable.



"MADE IN CANADA"

Ford Touring Car Price \$590

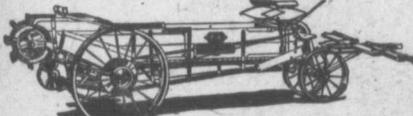
No advance in the price of the "Made in Canada" Ford will be made because of the 7 1/2% War Tariff. We as loyal Canadians will gladly absorb whatever increased duty we are forced to pay on such raw materials as cannot be obtained at home. The Ford is manufactured in Canada—not assembled in Canada.

The Ford Runabout is \$540; the Town car \$840; the Coupelet \$850; the Sedan \$1,150—all fully equipped, f. o. b. Ford, Ont. Ford buyers will share in our profits if we sell 30,000 cars between August 1, 1914 and August 1, 1915. Write Ford Factory, Ford, Ontario, for catalogue F.

Ford

THE UNIVERSAL CAR

McCormick Manure Spreaders



YOU are interested in the results you get from a spreader, rather than in the features. Still, the only safe way to be sure of getting results is to know for yourself the purpose of every feature on the machine. McCormick manure spreaders have all the important, necessary spreader features, therefore when you know McCormick spreaders you know them all. In a spreader you want a machine that will break up manure into small particles and spread it evenly, and that, finally, will last long enough to pay for itself. You don't need a spreader to haul manure in; your wagon will do that.

Spreading manure is heavy work. To begin with, manure itself is heavy. It takes both power and strength to tear it up and scatter it. Power and strength require strong wheels and trucks, a stiff frame, heavy bearings. Your spreader, then, had better be a little too heavy than a little too light. That little extra weight makes it stiff and strong, keeps the bearings in line, prevents warping and jamming of the apron, cuts out all necessary friction and wear, adds nothing to the draft of a loaded spreader, but adds years to the efficient life of the machine.

Don't wait until you are ready to buy, but begin now to study McCormick spreaders. See the machines at the place of business of the McCormick local agent who handles them. Write to us for information that will help you to get the biggest value for your spreader money.

International Harvester Company of Canada, Ltd

Hamilton, Ont.
Ottawa, Ont.

London, Ont.
Quebec, P. Q.

Montreal, Ont.
St. John, N. B.

These machines are built at Hamilton, Ont.

FARM MANAGEMENT

Buckwheat and its Culture

Jas. C. Montgomery; Perth Co., Ont.

"During the last 10 years, no other crop has increased in area to as great a percentage as buckwheat," writes Prof. C. A. Zavitz, of Guelph, in a recent annual report. From the same report I find that the number of acres in buckwheat in Ontario in 1902 was 93,324 and in 1912, 305,893. The only other crop that approached buckwheat in increase in acreage in the same time was fodder corn, and even it had to take second place to buckwheat. This increase in the acreage of buckwheat is probably due to several causes, such as its value as a smothering crop for the eradication of weeds, the lateness at which the crop can be sown in the season, and the comparative good yields of grain which can frequently be obtained from land which is naturally of fair quality. One of the beauties of the crop in my eyes is that it will grow on comparatively poor land. It seems that soil has less effect on buckwheat than does the climate. A light, well-drained soil is preferable.

I have always grown the Common Grey buckwheat, but again referring to the report by Prof. Zavitz I find that a variety of buckwheat that has been grown for a long time in the Maritime Provinces, known as Rye buckwheat, outyields the Common Grey in the experiments at Guelph. The average of eight years shows the Rye buckwheat with 35.9 bushels per acre, and the Common Grey with only 25.3. The Silver Hull, which is the second most popular variety in our section, averaged 24.2 bushels an acre. The Rye buckwheat, I understand, however, gives a flower with a decidedly yellowish tinge, and for this reason the Professor does not advocate a wholesale change from Common Grey to Rye.

I vary my seeding from two to five pecks an acre, sowing broadcast. Two pecks would be seeding enough on fertile land, while five pecks would be preferable on light soil. I harvest when the first flowers ripen their seeds, using a self rake reaper. The binder, too, may be used, but the loss of the seed in binding would be, I believe, considerable. Where my system of cutting with the reaper is followed, each little jag is allowed to dry where the reaper leaves it. If rain threatens, several jags are thrown

together. When cut with a binder, the buckles are set up exactly the same as any other grain. It may be threshed when dry.

The seeding date varies with the spring. I never put it in until I am certain that it will not be caught with the spring frosts. If seeding is left too late, on the other hand, the crop may be destroyed by early fall frosts. Buckwheat may be safely sown later on high lying than on low lying land. On the former, I have seen it sown as an after harvest crop and a good yield obtained. The chief value that I place on buckwheat is as a smothering crop.

The Preservation of Manure

G. W. Powers, Durham Co., Ont.

Where manure is allowed to accumulate in the barnyard from day to day, with no protection from rain or other storms, the nitrogen, potash and phosphoric acid will be lost to a more or less extent unless the washings are kept from draining away. The loss of nitrogen may be more readily understood by the following experiment, conducted some years ago by a practical farm chemist. A number of cattle were kept in a box stall, the manure being carried daily to a heap. These cattle yielded 10 tons of manure, containing 108 pounds of nitrogen therein. A short time afterwards this heap yielded only 7 1/2 tons of manure, containing only 64 pounds of nitrogen, a loss of two and one-half tons of manure and 44 pounds of nitrogen.

If this be taken as an average loss on every farm in Ontario, what would our total loss be in dollars and cents for one year? If this loss could be used for one year as a top dressing for oats, what would the increased production in bushels amount to? We do not know, but we do know that the extra production would be sufficient to relieve much of the suffering due to hunger in our province.

It would be impossible for us to eliminate this total loss, but we can at least do our share individually to stop this leakage by proper attention to the manure. For a small initial cost we can erect a three-sided wall made of cement, stone, or other non-porous materials in the barnyard, and keep the manure therein. It is also essential to have a floor or bottom in it, sloping back from the open side or end; this prevents all loss of liquid manure. The purpose of the open end in the wall is to make it convenient for loading. The size of

The World

This silo at Omaha, Neb., is 14 feet in diameter, is of concrete and built in the

the enclosure amount of manure the length of time the yard.

There is another "box" method of the barnyard during muddy seasons the importance of the tion we will soon appreciate; spring

Where H

A very easy mangels, in fact was described by inson of Wellin Farm and Dairy tion that would asked, and which Mr. Hutchinson, sels harvested rough manner than those pulled Hutchinson reple "I am watching carefully with out just where d about at what d expected from the date (January 12) cation whatever to start where th What little has a negligible quantity have started from of the mangels, bite out or wheel tearing a piece o broken piece w started to rot, an cined to think th a broken piece is than the upper en

Are You Goin

If so, take adv one-way second c Alberta, or if rou sired, the low ratursions in effect October 20th sho Bear in mind thar cific Railway offer equipment and th vice. The route s scenic in the wor line operating th tourist sleepers, a Winnipeg and Va eling C.F.R. you of changing depots owned and operate affording the high tency. If such a t ration, apply to f for full particulars Murphy, District Toronto.



A Four-Horse Job Satisfactorily Accomplished Without Horses.

This illustration shows one of the methods being adopted in the orchard valleys of the west to do away with the expense of maintaining horse power on high-priced land. The tractor may yet find a place in the commercial orchard for hauling such heavy implements as the double outway harrow, here seen in operation.

blader,
city the
may be

with the
oil I am
right with
is let
he trop
frost.
later on
y land.
it sown
a good
ue that
smother

nure

Ont.

to ac-
om day
m rain
potash
lost to

wash-
xy. The
readily
experi-
ngo by
number
all, the
a heap.
f man-
nitro-
wards
ons of
nds of
ne-half
of ni-

re loss
would
cents
uld be
essing
ressed
o? We
y that
suffi-
suffe-
nce.

us to
s can
ably to
ention
initial
d wall
non-
d, and
s also
om in
a side
loss of
of the
ake it
ize of



The World's Tallest Silo.

This silo at Conerville, Ohio, is 95 feet high, 14 feet in diameter. The feed chute, too, is of concrete, the structure being built in the Monoco style.

The enclosure will depend on the amount of manure to be handled and the length of time it is to remain in the yard.

There is another advantage to this "box" method of handling manure—the barnyard will be dry and clean during muddy seasons of the year. The importance of this phase of the question we will soon be in a position to appreciate; spring is approaching.

Where Mangels Rot

A very easy way of harvesting mangels, in fact the "turnip way," was described by Mr. Alfred Hutchinson of Wellington Co., Ont., in Farm and Dairy, January. A question that would very naturally be asked, and which the editor asked Mr. Hutchinson, was: "Will not mangels harvested in this somewhat rough manner decay more quickly than those pulled by hand?" Mr. Hutchinson replied as follows:

"I am watching my roots rather carefully with the object of finding out just where decay does start and about at what dates real loss may be expected from this cause. At this date (January 12) there is no indication whatever that decay is going to start where the tops were cut off. What little has started, and it is a negligible quantity so far, seems to have started from injuries to the side of the mangel, as horses taking a bite out or wheel grazing or harrows tearing a piece out. Occasionally a broken piece will be found that has started to rot, and I am a little inclined to think that the lower end of a broken piece is more apt to decay than the upper end."

Are You Going West this Spring?

If so, take advantage of the low, one-way second class Settlers' rates to certain points in Saskatchewan and Alberta, or if round trip ticket is desired, the low rate Homeseekers' Excursions in effect each Tuesday until October 20th should appeal to you. Bear in mind that the Canadian Pacific Railway offers the finest possible equipment and the fastest train service. The route is one of the most scenic in the world. It is the only line operating through standard and tourist sleepers, also dining cars to Winnipeg and Vancouver. By traveling C.P.R. you avoid the necessity of changing depots. All equipment is owned and operated by the C. P. R., affording the highest form of efficiency. If such a trip is under consideration, apply to any C. P. R. agent for full particulars, or write M. G. Murphy, District Passenger Agent, Toronto.



FARMERS

You'll Find Just What You Want
For Spring Painting, In

MARTIN-SENOUR PAINTS AND VARNISHES

"MADE IN CANADA"

Your needs have been foreseen. Dealers in your neighborhood have been supplied with the Martin-Senour line. And you have only to name your Painting Wants, to have them promptly filled.

HOUSE PAINT—Why should you waste money on impure paint, or bother with mixing lead and oil, when you can get Martin-Senour "100% Pure" Paint for all outside and inside painting? Always the same in quality, color, fineness and purity.

FLOOR PAINT—There's only one to be considered—the old reliable **SENOUR'S** Floor Paint—the kind that wears, and wears, and wears.

BARN PAINT—Martin-Senour "RED SCHOOL HOUSE" is the paint for the barn. It spreads easily—covers more surface—and holds its fresh, bright color against wear and weather.

WAGON PAINT—Keep the machines, wagons and tools fresh and bright — and protect them against rust and weather—by giving them a coat or two of Martin-Senour "Wagon and Implement" Paint.

Write us today for "Former's Color Set" and name of our nearest dealer-agent.

ADDRESS ALL ENQUIRIES TO

The MARTIN-SENOUR Co.

LIMITED

655 DROLET STREET, MONTREAL.

74



O.A.C. No. 72 OATS FOR SALE

Grown on field that won First Prize from Elton Agricultural Society. Good, clean seed, true to name. Price \$1.25 per bush, f.o.b. Woodville. Stocks free.

GEORGE MCKAGUE, WOODVILLE, P.O., Ont.

WHITE AND COLUMBIA WYANDOTTES.

LIGHT BRAHMAS, S.C. WHITE LEGHORNS

Over 30 years a breeder.

Stock and Eggs for Sale.

Michael K. Boyer, Box 23, Hammonds, N.J.

SEED CORN

FOR SALE—A quantity of choice hand selected Longfellow, White Cap Dent and Leaming. Orders solicited.

J.S. Wagh, Room 11, Scars, Block, Chatham, Ont.

The Best Built Roller

is the "Bissell," with Drums of heavy steel plate, hard in temper, riveted up close, having pressed steel heads.

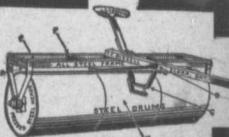
With AXLES of 2 inch solid steel revolving on solid Rolled Roller Bearings. With the FLEXIBLE CAGE in one piece, and the Roller Bearings in line on the axle.

With DRAW BRACKET under the Pole, making the Draught down low.

With the FRAME all of steel and the improved steel plate bottom.

You may be told that other Rollers are like the Bissell—but there is only one original Bissell Roller and to save our customers disappointment, we put our name on every Roller we build. Look for the name "Bissell" and write our Dept. R for catalogue.

Several styles and a variety of widths to choose from, 6 ft. up to 12 ft. Grass Seeder Attachment also furnished if required.



T. E. BISSELL CO., LTD., ELORA, ONT.

JNO. DEERE FLOW CO., LTD., 77 Jarvis St., Toronto, Selling Agents for Ontario and Quebec.

O. A. C. 72 OATS

THE LEADING VARIETY

I have sold over 1,500 bush. already. 50% have some on hand yet, pure and clean. Government Test. Not one ounce weed seed found. 92% Germination. Grown on my own farm, away from the pros and cons. Any dealer who has this quality will charge you much more. (If offered at a low price ask for Government Test.) A few will pay you well but if your land is clean, get more than you have seed to sell. Samples and prices on application.

A. FORSTER MARKHAM, ONT.

NOTE these prices for Quality Seeds

W. Pa. and Freight on all railway Quaints in Ontario and Quebec on all roads of \$2.00 and over. Allow 50c for each cwt. extra bag required.

TIMOTHY Stand, \$15.50
"Diamond" \$16.50
"Diamond" is extra.
"No. 1 for purity."
"Green" is No. 2 4.75
"Green" is No. 1 4.75

RED CLOVER (Gov. Stand.) No. 2 4.75
"Diamond" No. 1 12.50
"Diamond" No. 2 11.50
W. Pa. small standard No. 1 14.00
of Extra No. 1 at 14.00
ALFALFA CLOVER
"Sun" No. 1 13.50
"Moon" No. 2 11.75
ALFALFA CLOVER
"Ocean" No. 14.00
"Jade" No. 5 15.50
"Jade" No. 6 16.00
ALFALFA CLOVER
Ontario grown No. 1 17.00
Dakota grown No. 1 14.00
Ontario grown No. 2 15.00

Ontario Variegated 35
Lynnman's Grimm 30
and Grimm 40
SWEET CLOVER
White Blossom (unhulled) 25
White Blossom (hulled) 30
Yellow Blossom 15

SEED GRAIN
Prices for Seed Grain include bags, and Railway freight in Ontario and Quebec, if your order amounts to \$25.00 or more.

WHEAT
Marquis 2.25
Wild Goose 2.20
Red Fife 2.20
White Fife 2.20
White Husban 2.20
Emmer 2.20

BARLEY
O.A.C. No. 21 Registered 1.50
O.A.C. No. 21 1.25
Black Husban (60 lbs.) 1.60
Hackell, two-rowed 1.50

PEAS
Canadian Beauty (Fancy sample) 3.00
Early Britain 2.25
Golden Vine 2.25

OATS
O.A.C. No. 72 grown from Registered seed 1.50
Yellow Russian (Fancy sample) 1.50
American Banner, Registered 1.50
This is the best sample of Oats we have. Tests 4 lbs. to the bush. Just the thing for that field you intend to enter in the Field Competition.

Daubeney 1.25
SPRING RYE 1.25

Alberta. The highest wages were paid in British Columbia, viz., \$47.50 for males and \$31.15 for females; these averages being substantially less than in 1910, when males received \$57.40 and females \$38.

Fertilizers for Potatoes

The table herewith gives the results secured in fertilizer experiments conducted by the Ontario Agricultural and Experimental Union. Analyzing the figures, we find that the first 320 pounds of fertilizer increased the yield 21.5 bus., the second 320 pounds 11.1 bus., and the third 320 pounds 13.8 bus. The 30 tons of cow manure increased the yield 49.3 bus., or 2.5 bus. more per acre than the combination of 10 tons manure and 320 pounds fertilizer. The fertilizer used in group one was the "Royal Canadian," in Group 2 "Potato Fertilizer," and in Group 3 a complete fertilizer of nitrate of soda, muriate of potash, and super-phosphate, testing 7.9.16. Group 4 was a fertilizer testing 1.1.3.

Fertilizer and Manure.	Yield of Potatoes per acre (bus.)	
	Quantity Group 1, 2, 3, 4.	Group 4.
1. No Fertilizer	320	142.3
2. Fertilizer	320	153.9
3. Fertilizer	640	159.4
4. Fertilizer	320	150.4
5. Fertilizer	320	150.4
6. Cow Manure	30,000	194.1
	40,700	177.6
	50 tons	194.3



Cost \$17, Produced 7,025 lbs. Milk.

Just a Common Cow

Editor, Farm and Dairy.—I see by Farm and Dairy that you are to continue showing a record of 20,000 pounds cows each week. Before I see all those cows and get discouraged, I am going to send you a photo of one of my cows of the common barnyard variety. She freshened on April 21st last and milked till January 31st, and in that time, nine months and nine days, gave 7,025 pounds of milk of good quality.

This cow got no extra feed.—She was five years old last July. I bought her at two years old, just before she had her first calf, for \$17—all her owner asked for her. I consider I made a very good bargain. I am a great fancier of the Holsteins and am raising some grades now from a pure bred sire. I get a great deal of information from Farm and Dairy, and would not like to be without it.—C. N. McPhail, Wright Co., Que.

While I was one of those who believed it desirable for the Holstein-Friesian Association to cease paying for my paper, yet under no circumstances would I be a friend of Farm and Dairy, and fully appreciate your great work for the dairy cow in Canada.—F. E. Came, Rouville Co., Que.

To grade up his cows, if he is not in reach of a testing station, the dairyman should have scales and a hand tester. He should weigh each cow's milk at every milking, and keep an account of the amount of milk given and a sample for testing. At the end of a week, test the sample. Then you know just what each cow is doing.—J. P. Fletcher

"Our Length of Life Would be Greatly Prolonged"

PROF. METCHNIKOFF

"One of the world's greatest scientists has specifically stated that if, in infancy, our colons could be removed, we would be freed from the most prolific cause of human ailments, and live perhaps twice as long as now.

This is a strong statement, but not so surprising when we know that physicians are agreed that 95% of all illness is caused by accumulated waste in the colon (large intestine), that the first step a physician takes in all cases of illness is to give a medicine to remove that waste—and that probably more drugs are used for that purpose in this country to-day than for all other purposes combined.

The foods we eat and the manual labor or exercise that we fail to perform, make it impossible for Nature to act as thoroughly as she did in the past, in removing this waste, and so we are all, every one of us, affected by it.

This, and this alone, is responsible for the conditions known as "costiveness," "constipation," "auto-intoxication," "auto-infection," etc., which are all the result of accumulated waste.

You see, if the presence of this accumulation would make itself evident to us in its early stages, we would be better off, but it does not and there lies the pernicious danger of it.

For this waste is the worst of poisons, as we all know—an atom of it in the stomach would inevitably produce typhoid; and the blood constantly circulating through the colon, absorbing and is polluted by these poisons, making us physically weak and mentally dull, without ambition and the power to think and work up to our real capacity.

You know how completely a bilious attack will incapacitate you, and it is safe to say that such a complaint would be absolutely unknown if the colon were kept constantly free of accumulated waste.

Now, the reason that physicians agree that 95% of illness is due to this cause is that it weakens our powers of resistance so much as to make us receptive to any disease which may be prevalent, and permits any organic weakness we may have to gain its upper hand.

The effect of drugs is only temporary; they force Nature instead of assisting her, and the doses have to be constantly increased to be effective at all. Here is what the journal of The American Medical Association says:

"Every drug exerts a variety of actions, but only a few of the actions of any drug are of benefit in any given condition; the others are negligible or detrimental."

It may be surprising to you to know, however, that over a million Americans and Canadians have learned and are now practicing the surest and most scientific method of keeping the colon consistently clean and free from accumulated waste.

Who have proven that by an occasional Internal Bath, taking about fifteen minutes of their time, their blood is kept pure, their intellects bright, their minds clear, their bodies strong and vitally powerful, their nerves relaxed, and every part of their physical being in perfect tune, therefore, it naturally follows, in perfect health.

Perhaps you will be interested to know just what an Internal Bath really is—and while it cannot be described in detail here, it is no more like the commonly-known enemas than a vacuum cleaner is like a whisk-broom—but it uses the same medium—Nature's own cleanser and purifier—warm water.

Some years ago Dr. Charles A. Tyrrell, of New York City, was in a most serious condition—at the point of death, according to physicians who were summoned to attend him, and by the principal of Internal Bathing referred to here, and nothing else, he effected a complete recovery.

Since that time Dr. Tyrrell has specialized on Internal Bathing alone, and has devoted his entire time, study and practice to this mode of treatment.

The result of his researches, study, and practical, as well as scientific, experience on the subject, is summed up in a little book called "The What, the Why, the Way of Internal Bathing," which can be obtained without a penny of cost by simply writing to Chas. A. Tyrrell, M.D., Room 303, 280 College Street, Toronto, with a mention of having read this in Farm and Dairy.

There are many practical facts about the working of the digestive organs which everyone should know, but very few do, and inasmuch as the margin between good and ill health is inconceivably narrow, and it is apparent that so very little trouble is necessary to keep well and strong in advanced years as well as in youth, it seems as though everyone should read this treatise, which is free for the asking.

Free Premiums to Every Farm and Dairy Reader

who will place a trial order for seeds with us. Read our offer in our 1915 catalogue, which is yours for the asking. It describes the leading varieties of record yielders and

GIVES GARDENING HINTS

that will be valuable to everybody. If you are looking for seeds to increase production, write for our illustrated catalogue to-day.

DARCH AND HUNTER SEED CO., LIMITED
BOX 1285, LONDON, ONTARIO

Canadian Seed Growers' Convention

THE eleventh annual convention of the Canadian Seed Growers' Association was held in Ottawa, on March 11th and 12th. The sessions were fairly well attended. The program as usual was full of interest to those who are promoting the production of good seed for bigger and better crops.

Dr. J. W. Robertson, the president, in his opening address, discussed the work of the association under the two headings, (1) What we are now doing, and (2) What we are now doing. The aim of the association, he said, was the production of large quantities of the best strains of seed grain suited to climatic and soil conditions, for better crops on better managed farms, for better satisfied men. The association he maintained, was seeking to work harmoniously with all the other organizations in Canada of a similar nature.

Patriotism and Production
Dr. C. C. James, who is full of running over the Patriotism and Production campaign, sought to link up the association in its work with this great work of supplying food to the allies in the world conflict now going on. He thought the rank and file of the people were not taking the war seriously enough. He referred to the great sacrifice Belgium had made for us and he thought that out of gratitude farmers should not consider production from the financial side but from the patriotic side. He wanted to be able to look those boys who have gone to the front and who were fortunate enough to return, straight in the face and say "You did your duty at the front, and I tried to do my duty at home."

Experimental Farm
Prof. Grisdale addressed the meeting on "Systems of crop-raising and the production of better seed on the Dominion Experimental Farms." Prof. Grisdale claimed that the work they were attempting to do in seed improvement on the various Experi-

mental Farms was closely linked with the work of the C.S.A. They had evolved several systems of crop rotation but the one that had given the best all round results for Eastern Canada, was a short three year one, viz., clover crop followed by grain and seeded with clover, then clover.

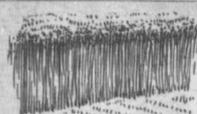
A report of the directors showed the past year to be the most prosperous of its history. The membership had greatly increased. A number of seed centres had been thoroughly organized, and some of them were selling considerable quantities of seed this year. The report of the Secretary-Treasurer, L. H. Newman, showed that over 1200 were now connected with the association as growers.

Seed Commissioner G. H. Clark, in his address on "The Work of the Dominion Seed Branch" said that in 1910, he was the nucleus, with 1500 letters to analyse; to-day the branch had a staff of 81 members and received a vote from Parliament of \$125,000. He described the work of the branch in two ways, as being 1st, purely educational, 2nd, was taken up with organization and legislation; 3rd, administration and development. The various activities of the Branch, he outlined.

Progress in Alberta
Mr. E. A. Howes of Vermilion, writing on "Seed Improvement Work in Alberta," said they were making substantial progress in Alberta. They had done considerable work in demonstrations which had proved satisfactory. He believed in standardization.

Mr. H. N. Thompson, of Regina, reported for Saskatchewan, that they had a number of live members of an association, who had produced 7,000 bus. of registered wheat, and 11,000 bus. of registered oats for sale last year. For Ontario, Prof. C. A. Zavitz sent a paper showing the popularity of good seed had been demonstrated by seed fairs and field crop competitions until that had recently completed a cooperative seed centre at St. Roseville, where the government had installed a power mill for cleaning seed and providing facilities for seed distribution. The introduction of two clover hullers through the agricultural societies had been productive of thousands of pounds of red clover seed this year. Mr. Palmer, of Scotch Lake, N.B., W. L. McFarlane, Fox Harbor, N.S., gave verbal reports for New Brunswick and Nova Scotia respectively.

Officers Elected
Dr. J. W. Robertson, secretary-president; L. H. Newman, secretary-treasurer; directors, Prof. C. A. Zavitz, Guelph, Ont.; Prof. L. S. Klinek, Vancouver, B.C.; Prof. F. J. Harrison, Sask.; Prof. John Bracken, Agricultural College, Saskatchewan; A. E. Howes, Vermilion, Alta.; Wm. Palmer, Scotch Lake, N.B.; Narcisse Savoie, St. Anne de la Pocaterie, P.Q.; Wm. McGregor, lot 16, P.E.I.; G. A. Giguault, F. W. Hodson, Miramichi, N.B.; L. McFarlane, Fox Harbor, P.N.S.; Theodore Ross, Charlottetown, P.E.I.; A. Austin, Kamloops, B.C.; C. F. Bailey, Toronto; H. N. Thompson, Regina, Sask.; E. D. Eddy, Scotch Lake, N.B.; W. P. Newton, Woodstock, N.B.; Prof. James Murray, St. Ann's, Que.; John Parks, Amherstburg, Que.; George Dow, Gilberts Plains, Man.; auditors, E. D. Eddy, Scotch Lake, Ont.; accountant, Dept. of Agriculture, Ottawa.



Well Fed

Plants get the greatest part of their feed, and their growth, from the soil. If you give the crop you sow the exact Plant-Food it requires to grow and ripen, you can count on a strong stand and a rich harvest.

Nothing can be more exact in its results than the use of the right quantity and the right brand of



Starved

If years of cropping have used up the Plant-Food in the soil, you must supply commercial Fertilizers to replace it.

Do you understand how to do this profitably?

"Bumper Crops" is just the book to show what Plant-Foods to use for each crop and how to use them, to get the best returns.

FREE if you use this coupon.



Gunns Shur-crop Fertilizer

GUNNS LIMITED, West Toronto.

I am interested in GUNNS Shur-Crop Fertilizer.

Gunns Limited West Toronto

When writing to advertisers mention Farm and Dairy.

PAGE Fence-Facts

What is a REAL Fence-Bargain?
PAGE FENCE.
Why is **PAGE FENCE** a REAL Fence-Bargain?
Because it **COSTS LEAST** to use.
Why does **PAGE FENCE** **COST LEAST** to use?
Because it **WEARS BEST.**
Lasts a **LIFETIME.**
Outwears any ordinary fence.
Why does **PAGE FENCE** **WEAR BEST?**
Because it's **ALL FILL NO. 3** wire—even the locks. Perfectly moved and correctly spaced.
Looks (the vital spots in any fence) made of No. 3 wire—strong as any other part.
Galvanizing is practically rust-proof—the finest ever used on fence.

What proves that PAGE FENCE WEARS BEST?
PAGE FENCES in many parts of Canada have been up for 20 years—and some still look good for 25 more.

Why can such HIGH-QUALITY Fence be so cheap?
Because **PAGE FENCE** is sold **DIRECT** from factory to farm.
"Selling-expense" (which boosts price without adding value) is cut to the very minimum.
The cost of the saving "selling-expense" goes to you in the form of **BETTER FENCE.**

Why do you get WHAT you want WHEN you want it from PAGE?
Because you want **SERVICE** and **PAGE FENCE** lasts a **LIFETIME.**
There's a **PAGE Factory-Branch** in every big fence centre—to ship from stock the same day your order arrives.
You don't have to wait for shipments from a factory a thousand miles away.

Why should you order from PAGE?
Because you'll get the **BEST FENCE** at the **LOWEST COST.**
You'll get a **GUARANTEE** of "Satisfaction—or your money back."
1500 shipments were made last year—and not one returned.
Because **PAGE WIRE FENCE** is **MADE IN CANADA** by the **Wire Fence Planting**, with 22 years of leadership and "reputation" behind every rod of **PAGE FENCE.**

Mail your order—with cash, check, money or express order, or bank draft—to the nearest **PAGE BRANCH.**
Freight prepaid on 50¢ or over.

Keep the **PAGE General Merchandise Catalog** handy. It will save you many dollars on all kinds of Farm and Home goods. Write for **FREE copy.**

No. of bars	Stays	Spacing	Price in Old
6	40	22 5/8", 7, 8 1/2", 9	0.24
7	40	22 5/8", 7, 7 1/2", 8	.28
7	48	22 5/8", 6 5/8", 7 1/2", 9, 10, 10	.30
8	42	22 5/8", 6, 6 5/8", 6 5/8", 6, 6	.29
8	42	16 1/2", 6, 6 5/8", 6 5/8", 6, 6	.31
8	47	22 5/8", 6, 6 5/8", 7, 8 1/2", 9	.30
8	47	16 1/2", 6, 6 5/8", 7, 8 1/2", 9	.32
9	48	22 5/8", 6, 6 5/8", 6 5/8", 6, 6	.34
9	48	16 1/2", 6, 6 5/8", 6 5/8", 6, 6	.36
9	52	22 5/8", 4, 4, 6, 5 1/2", 7, 8 1/2", 9, 9	.38
9	52	16 1/2", 4, 4, 6, 5 1/2", 7, 8 1/2", 9, 9	.38
10	48	16 1/2", 3, 3, 4, 6 1/2", 7, 7 1/2", 8, 8	.38
10	52	16 1/2", 3, 3, 4, 6 1/2", 7, 8 1/2", 9, 9	.38
11	55	16 1/2", 3, 3, 3, 4, 6 1/2", 7, 8 1/2", 9, 9	.41

SPECIAL FENCE GATES

15-bar, 48 in.	\$8.00	15-foot gate	\$10.00
20-bar, 48 in.	\$12.00	15-foot gate	\$15.00
25 lb. staples	8-10	15-foot gate	4.35
25 lb. wire	8-10	15-foot gate	4.95

Set Tools \$5.00

PAGE WIRE FENCE CO. LIMITED

Dept. 2, 1137 King St. West, Toronto.
Dept. 3, 87 Church St., Walkerville.

"PAGE FENCES WEAR BEST"

Evenness of Te
It has been occ
building it partial

POULTRY

Methods wit
Walter Wright,
of all the bro
find that poultry
profitable. To
say that it is be
try in spring.
birds of one br
mouth Rock is a
any. The f
every two or thr
ed in milk and
as the chicks be
the food, giving
over and a littl
middle of the aft
always being c
full or starve
led of fresh, cle
chicks, using al
vent loss by de
enough I start
what is the bes
growing I do not
after the mother
a chance to deve
and healthy bir
Care of Colo
When the col
shut them up (as
snow is on the
the two males I
old one is a go
breed I keep h
cockerel. The
rest.
The followin
during the w
ed to keep my
condition. Onc
in some form, s
head; if liver,
ing so that they
selves. I always
poultry, either pl
shells, or bone.
The water in t
that the litter c
into it.
Wintered
I keep all car
except salt and
feed in the morn
feed this I cover
and let it boll,
bran so that it
a teaspoonful of
quarts of this n
value. I feed al
10 hens every cr
days I feed grain
in the litter. My
scratching. My
of a little grain
quart to 10 hens
get exercise by
my hens receive a



Evenness of Temperature is Almost Necessary in a Good Incubator House
It has been secured in this house on the building it partially under ground. Notice too good ventilation is provided for.



POULTRY

Methods with a Small Flock
Walter Wright, Kenilworth Co., Ont.

Of all the branches of farming, I find that poultry is one of the most profitable. To the beginner, I would say that it is best to start with poultry in spring. Select a few good birds of one breed only. The Plymouth Rock is about as fine a breed as any. The first few days I feed every two or three hours, bread soaked in milk and squeezed dry. Then as the chicks become older, I change the food, giving a hard boiled egg at noon and a little dry oatmeal in the middle of the afternoon and forenoon, always being careful not to over-feed or starve them. I keep pans full of fresh, clean water before my chicks, using shallow dishes to prevent loss by drowning. When old enough I start to feed small grain; wheat is the best. When chicks are growing I do not allow them to ramble after the mother, thus giving them a chance to develop into strong, big and healthy birds.

Care of Fowls in Winter
When the cold weather sets in, I shut them up (as they should be when snow is on the ground). I pick out the two males I wish to keep. If the old one is a good specimen of his breed I keep him, and a healthy cockerel. Then I kill or sell all the rest.

The following is my method of feeding during the winter. It is designed to keep my hens in good laying condition. Once a week I feed meat in some form, such as liver or cow's head; if liver, hang it from the ceiling so that they cannot gorge themselves. I always have grit before my poultry, either plaster, ground dryer shells, or bone. I also have clean fresh water in the pen so situated that the litter cannot be scratched into it.

Winter Feeding
I keep all scraps from the house (except salt and fat meat), which I feed in the morning. When ready to feed this I cover it with hot water and let it boil, then put in enough bran so that it will crumble. Half a teaspoonful of red pepper to two quarts of this mixture is of great value. I feed about two quarts to 10 hens every second day. The other days I feed grain, also scatter a little grain in the litter to keep them scratching. My noon ration consists of a little grain in the litter, one quart to 10 hens, so that they will get exercise by scratching. At night my hens receive a good meal of grain

(not in the litter), so that they can go to roost with their crops full.

Dust Bath Necessary
It is also necessary, I find, to have a dust bath, in which the fowls may get rid of all vermin. One of the best is a mixture of coal ashes, road dust, and a little sulphur.

The nest is a part of the pen that needs great attention. They must be clean. They should be low down so that the hens will not need to fly to reach them. They should be in a dark place.

The roosts are very often built in a very uncomfortable place for the fowls, and this causes deformed breast bones. My own are built about two feet from the floor. Six inches under the perches is a board platform, well sprinkled with dust, to catch the droppings. This makes one of the most comfortable roosts.

With this care I find the hens lay regularly.

The Bulky Ration

R. C. Thomas, York Co., Ont.

Grains and concentrated mash are the basic foods for egg production. The hen has a small stomach, which makes a bulky ration unprofitable. In this, this is a close relation to the hog, I believe, however, that even the hen should be given some bulky foods if she is to pan out a maximum number of winter eggs.

My staples in the line of succulent green foods are cabbage and roots. Sometimes these are put up finely and fed in the mash. At other times they are hung up where the pullets can peck at them. I have even fed corn ensilage when other green foods were not available, and found it better than nothing at all.

Clover and alfalfa sweepings from the hay barn combine both nutriment and bulk as do no other feeds. My practice is to feed the clover and alfalfa leaves dry. A box is tacked to the wall of the poultry house opening on one side. The leaves are held in the box by a screen of poultry netting. The birds are not able to get into the box and scratch the leaves out, and a little goes a long way.

I know from experience that many who are not securing satisfactory results in this line of winter eggs may find that their only trouble is lack of bulk in the ration.

Zenoleum Kills Lice

Poultry pestered by Lice never thrive, do not eat so much or lay so much and are unprofitable. **ZENOLEUM KILLS LICE**, and thus allows hens to rest their bodies, get fine fat and laying lots of eggs. Poultrymen cure nearly every form of chicken disease with Zenoleum. It is the most powerful disinfectant and germicide for the inside of poultry houses, is absolutely harmless, and is not inflammable. Used in the incubator it increases the hatch. Absolutely guaranteed. You get dealer has **ZENOLEUM**, if not, send 25c. For sample—enough for 5 gallons. Medium sized tin, 50c.; large—1 1/2 lbs. tin, 75c. Poultry Life Insurance Policy sent FREE if you mention this paper.

Zenoleum is an antiseptic and germ killer. Every owner of cattle, sheep or hogs needs Zenoleum almost every day. It cures mange, lice, ticks, scabs, sores, internal and external worms, and parasites. A powerful disinfectant for barns, pens and stables; cheapest in price and strongest in germicidal power. The most reliable remedy in the hands of the Veterinary profession. Why waste money and precious time with home-made, life-endemic mixtures when you can get the standard remedy—Zenoleum!



Used and endorsed by Fifty Canadian and American Agricultural Colleges. Leading breeders and stockmen in Canada and the United States use it almost exclusively. Dealers in every town. If your dealer hasn't it, we will ship you a prepaid tin, enough for 5 gallons, for 50c. Write today for FREE Life Stock Life Insurance Policy.

ZENNER DISINFECTANT CO.
315 GARDNER ST. EAST, WINDSOR, ONT.

COTTON SEED MEAL

Guaranteed 41 per cent Protein. Cash must accompany order.
H. FRALEIGH, Box 2, FOREST, Ont.
Also dealer in Flax Seed, Linseed Meal and Poultry Foods.

FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER
FOR SALE—Stock and Eggs for hatching. Hordana, B.O. and S.O. Minorca, barred Hocks, all from our prize-winning and breed-to-day strains. Also Bred-to-day White Leghorns.—C. Day, Highgate, Ont.

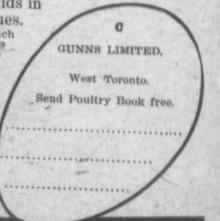


If your Hens could talk

they would ask you for Beef-Scrap. They need it in winter for two reasons:

- First—to supply the material for eggs;
 - Second—to build up their strength and vitality.
- Cooped-up hens miss nature's big meat supply—the insects and worms that abound in the fields. That is the natural source of protein, which forms over one-third of the solids in eggs and builds up body tissues.

When you feed Beef-Scrap, which is rich in protein, your hens can produce—again during the winter and spring months as naturally they do in summer. Learn how to feed your hens for greater profit from our book, "The Hen That Lays is the Hen that Pays," a complete poultry manual, sent FREE if you use the coupon.



Gunns Limited, West Toronto.
Shur-Gain Poultry Foods

WISCONSIN INCUBATOR AND BROODER BOTH \$13.00 FOR

130 Egg Incubator
130 Chick Brooder
BOTH FOR \$13.90
CASH PAID

Get ordered together you need both machines for only \$13.00 and we pay all freight and duty charges to any R. R. station in Canada. We have branch warehouses in Winnipeg, Man. and Toronto, Ont. Orders shipped from nearest warehouse to your R. R. station. Insured, self-insulating. Heavy soldered egg trays. Respectfully adapted to Canadian climate—ready to use when you get them. Ten year guarantee—90 days money back. Send in natural orders showing the high grade California Redwood lumber used—no painted or varnished material. If you will compare our machines with others, we send before you have finished reading this advertisement a complete literature and order form with no duty charges. Send for FREE catalog today, or send in your order and save 10c. **WISCONSIN INCUBATOR CO. Box 210, RAGINE, WISCONSIN, U. S. A.**



Write Us Today—Don't Delay!
RAGINE, WISCONSIN, U. S. A.

FARM AND DAIRY

AND RURAL HOME
PUBLISHED EVERY THURSDAY

SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.20 a year. For all countries, except Canada and Great Britain, add 50c for postage.
ADVERTISING IN THIS 12-cent-a-line flat, \$1.50 an inch insertion. One page 48 inches, one column 12 inches. Copy received up to Saturday preceding the following week's issue.

UNITED STATES REPRESENTATIVES
STOCKWELL'S SPECIAL AGENCY
Chicago Office—People's Ice Building.
New York Office—Truene Building.

CIRCULATION STATEMENT
The paid subscriptions to Farm and Dairy exceed 15,000. The actual circulation of each issue, including copies of the paper sent subscribers who are not slightly in arrears, and sample copies, varies from 17,000 to 18,000 copies. No subscriptions any suspended at less than the full subscription rate.
Sworn detailed statements of circulation of the paper, showing its distribution by counties and province, will be mailed free on request.

OUR GUARANTEE
We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid-in-advance subscribers, we will make good the amount of your lost advertising. No transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that the facts to be as stated. It is a condition of this contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy."
Rates shall not ply their trade at the expense of our subscribers, who are our friends, through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honest business men who advertise, nor pay the debts of honest bankrupts.

The Rural Publishing Company, Limited
PETERBORO, ONT.

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

Real Wealth

"WHAT a glorious sunset!" There was the deepest appreciation in the words of the joy that that little lady with the grey hair took in that wonderful view glowed in the eyes that were still bright in spite of the sixty years she claimed. Her husband, just in from milking, paused at her side, and he, too, faced the glowing west with appreciation of its beauties written on every line of his face. Nature's two there evidently was a constant source of inspiration and delight.

This old couple have only been moderately successful as the world counts success. But they are rich people. Yes, very rich. Their treasure lies in their appreciation of the beauty of the sunset, the sparkle of the snow-covered meadows in the pure light of the moon, the singing of the birds, and the wonderful work of creation, which it is the God-given privilege of country men and women to in some measure guide and direct. In the love that they bear each other, and in their living interest in the changing aspects of nature, these two have real wealth that millionaires cannot purchase.

The United Farmers of Ontario

THERE are many members of farmers' clubs and subordinate granges in Ontario who still do not understand the great difference that exists between the United Farmers of Ontario, which is largely an educational body, and the United Farmers' Cooperative Company, Ltd., which is a purely business concern.

For some years the feeling has been growing among many farmers in Ontario that they are suffering from exactions of the great railway and express companies, lack of capital, the operations of combines and mergers, unjust tariff discriminations, too many middlemen, the enormous increases in city land values, and other similar

causes. They are not permitted to discuss these matters in Farmers' Institute meetings. Local clubs and subordinate granges are unable to deal with them effectively alone.

Last March it was decided to endeavor to organize the farmers of Ontario so that they could discuss and deal with these matters intelligently. An organization known as the United Farmers of Ontario was formed. Any farmers' club or subordinate grange in Ontario may become affiliated with it by voting to do so and by agreeing to pay 50 cents per member to the funds of the central organization. In return for this money the central organization agrees to pay the expenses of a certain number of delegates from each of the local associations who attend an annual convention to be held each year in Toronto. The central organization also pays all the expenses of the annual convention, of sending out organizers and of general educational work. Nothing but educational work of this character is conducted by the United Farmers of Ontario. Its president is R. H. Halbert, Melancthon, Ont.

United Farmers' Cooperative Association

REALIZING that the various local branches of the United Farmers of Ontario might want to trade with each other and to buy goods on the cooperative plan, it was decided to form a company for that purpose. This company is the United Farmers' Cooperative Company, Ltd. Its headquarters are at 100 Church Street, Toronto. Its president and general manager is Anson Groh, Preston, Ont., and its secretary J. J. Morrison. It holds a charter from the Ontario Government and has a share capital, its shares being \$25 each.

Farmers' clubs or subordinate granges that desire to buy goods from this company must first become affiliated with the United Farmers of Ontario; second, they must purchase at least one \$25 share of stock in the United Farmers' Cooperative Company, Limited. They can raise the money to pay for this stock in whatever way they see fit. This money is extra to the affiliation fees they must pay to the United Farmers of Ontario. This entitles them to send a shareholder to the annual meeting of the company and to purchase goods through it.

The company has sold between \$2,000 and \$3,000 worth of stock. It has nearly 100 shareholders, of which 58 are local associations or clubs. It is doing a large and increasingly profitable business. It works in close touch with but entirely separate from the United Farmers of Ontario. In the two associations Ontario farmers have an opportunity to apply cooperative principle to educational endeavor in their business.

The Farm Garden

IT takes imagination to plant a fine garden. Lack of it is apt to result in the gardening formula of an Irish Canadian farmer of our acquaintance: Six rows of potatoes all around the outside and more potatoes filling the centre. The real garden, however, is not over-burdened with potatoes; they are more properly a field crop. The function of the farm garden is to provide green delicacies for the table, everything from asparagus, shortly after the snow goes, to the luscious, ripe tomatoes when the frosts of fall give warning of another winter approaching. In the intervening season a properly planted garden will furnish a continuous supply of radish, lettuce, green peas, string beans, early potatoes, carrots, parsnip, and in certain favored localities even watermelons and muskmelons.

Many of Our Folks with splendid gardens are free to confess that the seed catalogue has been

their guide and adviser in the planning of the kitchen garden. They find a place in their gardens for every staple vegetable listed in the catalogues. We find that the most enthusiastic gardeners among Our Folks have also a hotbed where celery, cabbage, cauliflower, tomato, and onion plants are given an early start. These folks tell us that their gardens save them in store bills anywhere from twenty to sixty dollars a year. All housewives will testify to the aid that a good garden is to an attractive table and a healthy menu. Now is the time to order the garden seeds.

What is Labor Income?

THE success of a joint stock company is measured by the size of its annual dividend. The success of a farm is more commonly judged by the labor income of its proprietor. In determining whether or not a farm is yielding a business profit, we must distinguish carefully between income and labor income. The difference can best be explained by an illustration.

A certain farm in Western Ontario is capitalized at \$10,000. The total income last year was approximately \$5,000, running expenses, including outside labor, \$800, leaving \$1,200 as the farmer's income. The ruling rate on first mortgages in the vicinity is five per cent., or \$500 on the \$10,000 investment. The farmer's labor income, therefore, is \$700.

In industrial enterprises salaries are paid to all those who work, and what is left is divided in dividends. The difficulty in determining farm profits on the corporation basis—dividends—lies in this, what is a farmer's time worth? On the other hand, it is not difficult to determine the rate that must be paid on that portion of the farm investment that is borrowed on first mortgage; and this is what the farm investment should yield. What is left, the labor income, is therefore a correct index of the success or non-success of the farmer. If the labor income, altogether apart from the income on investment, is not enough for the farmer to live on, then his farming is a failure, viewed from a business standpoint. This difference between income and labor income should be borne in mind at this season of the year when so many of us balance our books, draw up our inventories, and determine just what the year has done for us.

Farm Furrows

"I'll do it to-morrow" is responsible for late seedings, shorter crops, and trouble generally. "I'll do it to-day" may be spelled in seven letters—S-U-C-C-E-S-S.

Strong vital seed sends a crop off to a good start. What a secure, comfortable feeling is his who has tested all his seed and knows that it is right.

"The man who first brings a double disk harrow into his neighborhood is a missionary of the right kind," says J. H. Grisdale. Right. It cuts the cost of man labor right in half.

Spring work is hard on men. It is harder on horses. At seeding time, if ever, the merciful man is merciful to his beast.

Good government will come when our representatives feel that their constituents are keeping tab on their actions, and will demand an accounting. A letter now and then from "back home" has a wonderful effect in keeping the member in line with his duty.

The People Play Party Politics; the Plutocrats Plunder the Public Patrimony. A Partisan Parliament and Filiant Press Permit the Billageerish Party Politics. Pass the Peas.—Petty piece.

Over

THE brightest specialist in the horticultural experience at the kind that love to grow who would rather than to talk "farming" whose interests lie in horticulture; myself, for in these little visits that mer was out to the Ratcliffe, near the Exeter, in the county I had been speaking of farmers in Exeter and at the meeting, Mr. Ratcliffe asked me out for course I went. The between a night in the night in a real home.

On the drive of the of many problems everything from practical to political agriculture early the next morning with Mr. Ratcliffe farm. The building of life farm are of the that are characteristic sections of Huron county barn is 48 feet wide with a post of 24 feet was one of the few that we mentioned. The things made possible fork and slings," ret Ratcliffe. "It enables a post up good and high storage room for less can get any other work." "Notice that steel Ratcliffe later. "It 14 years, and I have got drop of water to cost me \$5 a square. Perhaps it is more Good shingles would to \$4 a square. The more cheaply put on the total cost was probably in favor of the shingles roof looks as good as a dual purpose shop at

Here to go

Overnight on a Huron Farm

By THE EDITOR

THE brightest spots in my editorial experience are the little visits I pay to the homes of practical, progressive, wide-awake farmers—the kind that love their occupation, who would rather farm than do anything else, and like nothing better than to talk "farming" with others whose interests lie in the same direction, myself, for instance. One of these little visits that I made last summer was out to the home of J. N. Ratcliffe, near the small town of Exeter, in the county of Huron, Ont. I had been speaking to a gathering of farmers in Exeter one June evening and at the conclusion of the meeting, Mr. Ratcliffe came forward and asked me out for the night. Of course I went. There is no choice between a night in a hotel and a night in a real home.

On the drive of three miles we talked of many problems, and covered everything from practical agriculture to political agriculture. Bright and early the next morning I was out with Mr. Ratcliffe to inspect his farm. The buildings on the Ratcliffe farm are of the substantial kind that are characteristic of the best sections of Huron county. The main barn is 48 feet wide by 85 feet long, with a post of 24 feet. The high post was one of the features of the barn that we mentioned. "That is one of the things made possible by the hay-fork and sling," remarked Mr. Ratcliffe. "It enables you to put your post up good and high and get more storage room for less money than you can get any other way."

"Notice that steel roof," said Mr. Ratcliffe later. "It has been on for 14 years, and I have never known a drop of water to come through it. It cost me \$5 a square at that time. Perhaps it is more expensive now. Good shingles would have cost \$3.25 to \$4 a square. The steel was much more cheaply put on, so that the initial cost was probably not very much in favor of the shingles, and the steel roof looks as good as ever it did." Dual purpose Shorthorns are Mr.

Ratcliffe's specialty, and he has pure bred cows in the Record of Performance that milk 50 to 60 pounds a day, and it is his intention to develop a strain of milking Shorthorn that will be as good as any of the imported ones. I myself incline to favor the more angular, bred-to-milk specimens of the recognized dairy breeds, but it is all a matter of individual preference. Mr. Ratcliffe was brought up to appreciate the smoother, beef

a hardy variety is worth propagating, and last year I grew my own alfalfa seed from the second crop. I did not get over one bushel to the acre on account of the dry year, but considering the price of alfalfa seed it was worth while."

Mr. Ratcliffe is branching out with alfalfa. This year he seeded an additional eight acres with his home-grown seed, and the catch is a splendid one. Corn is another staple crop, several acres being grown to supply the big cement silo that is one of the features of the buildings.



Substantial Buildings and Dual Purpose Cows on a Huron County Farm
Some years ago J. N. Ratcliffe was superintendent of the farm in connection with the experimental station of the State of Maine. Today he is proprietor and manager of 300 acres in Huron Co., Ont., and possesses of an ambition to develop cows that will produce both milk and beef and pass along the dual propensity to their offspring. Some of the herd here shown have already done good work in their offspring.
Record of Performance test.

—Photo by an editor of Farm and Dairy.

or dual purpose kind, and he is aiming to produce the best of the kind.

"This field has made us more money than any other on the farm," remarked Mr. Ratcliffe, stopping beside a field of alfalfa already cut. "A few years ago I was superintendent of the farm in connection with the Maine State College of Agriculture, and had a tenant on the farm. He seeded this field. We have now been cutting for five seasons and the alfalfa has been coming through the winter O.K., except in a couple of wet spots. Such

There are 250 acres of land on the farm. Originally there were only 100, but Mr. Ratcliffe, thinking he could work an additional farm with the same machinery and very little additional help, added to his acreage. The house on the second farm comes in handy as a home for the married hired man. I found that my host got along well with his help. His idea is to get a good man and then place responsibility on him: "Give him charge of the work he is at and a good man will take an interest and

do it right," as Mr. Ratcliffe expressed it."

My visit had to be cut short, as trains wait for no man, and, with a thunderstorm threatening, which caught us before we reached the station and soaked us to perfection, I concluded a pleasant visit.

The Tuberculosis Problem

Editor, Farm and Dairy.—Has not the consumer of milk some rights when it comes to cleaning a herd of tuberculosis? I read an article in the February 11th issue of Farm and Dairy dealing with tuberculosis in the herds in the neighborhood of Ottawa. That article seemed to look only on the loss to the dairymen, not on the effect of contaminated milk on consumers.

You say a great per cent. of the cattle reacted to the test, and when slaughtered showed some signs of tuberculosis, but you think not enough to affect the milk. If these cows were left in the herd, how long would it be before the disease would be enough advanced to affect the milk and then it would be too late, as the disease would have been spread, and it would mean a great deal more of a loss?

Which is worse, the loss of a few cows or a few of our children? How are you going to stamp out the great white plague if you are not willing to lose a few dollars for the cause?

Why should we farmers be forced to buy cows that have not been tested? Why should we want to sell an animal for food or milk that we do not know is sound? Why should we not all be willing to do our part in stamping out this dreadful plague? Are we willing to let tuberculosis get the hold on our herds that it has in the United States?

Only a united stand on the part of the live stock owners can make our country free from tuberculosis; and if we are not willing to act of our own free will, then the consumers should unite and force us to furnish milk and meat that is as pure and free from these dreadful germs as it is possible to produce.—L. G. Wus-sow, Langenburg, Sask.



Here is a chance
to get a silo free

Ideal Green Feed Silo PRIZE COMPETITION

Open to every Canadian Farm Owner. It costs nothing to enter.

The competition is open to any Canadian farm owner or to any member of his family living on the farm with him.

It isn't necessary to send a cent to enter this contest. There are no entrance fees. The prize will be awarded to the one who gives the most and best reasons why there should be a silo on every farm.

The "reasons" should be written plainly in pen and ink, or typewriter, on one side of the paper only, and sent to our Peterboro address, as given below.

The prize will be one of our 10 x 30 Ideal Green Feed silos, complete, with roof, having a silage capacity sufficient for 7 or 8 cows.

If the winner of the prize prefers a silo or larger size he will be given credit for the list price of a 10 x 20 silo toward the payment of a larger size silo.

Should the winner of the prize purchase an Ideal Green Feed Silo before June 1st, 1915, the date this contest closes, credit will be given him for the list price of prize silo toward payment on whatever size silo he may have ordered.

The contest will close June 1st, 1915, and no entries will be considered after that date.

Our new silo book, containing a great deal of silo and silage information, will gladly be mailed upon request.

DE LAVAL DAIRY SUPPLY CO., Ltd.

114 Park Street, Peterboro, Ont.



TRUTH is the essence of perfect thought—A. S. Wilschere.

The Child of Her Heart

BY ROSE E. PARMELE

(Concluded from last week)

"ONE can always fill her life with something," Ruth smiled. "It is the personal work we do in the world that brings the richest reward. Lacking a family to coddle I have substituted a whole congregation."

Augusta looked around for Paul who had been engaged in conversation with the missionary, and was relieved to see her husband coming down the aisle. His presence naturally changed the subject and the friends soon separated to go home. Freddie had already climbed into the phaeton and was waiting for his foster parents.

"Ruth has developed wonderfully," Augusta confided to Paul on the way home. "She has a sweeter look than she had as a girl. It has been good for her to be loved and appreciated by a whole congregation."

"Belle is as vivid as ever, isn't she?" he remarked.

"Yes, but I think she has grown rather narrow," Augusta replied, but she did not give her reason for thinking so. "Isn't the moon beautiful over that clump of trees, with the fleecy clouds above it like a veil," she exclaimed, and the conversation shifted to another channel.

In her dreams that night she was the central figure at a state convention of federated clubs and was being showered with praises and congratulations when a little figure beckoned to her from the steps of a reform school and she reluctantly took leave of her friends, saying when they would have detained her: "If it were not for Freddie—" She awoke feeling her depressed in spirit and body.

She and Paul prepared the breakfast together as they always did on Sunday morning. Freddie came down and by a perfectly angelic frame of mind and by the time the meal was finished the little blue imp that had tried to possess Augusta were completely routed. When she put the child's bonnet on his head she threw her arms about him impulsively and kissed him before allowing him to go and play.

"Does baby love mother?" she coaxed, holding him fast and gazing deep into the innocent eyes.

"Yeth, more 'an a million bushel," he lisped, returning her caress with all his small might. "I seeed and heeard a whistler a whistle at the gate so he looked up, and seeing a stranger in a carriage, called to Paul and he went out to see what was wanted. There was a broken spring, he seeed, and they went to the barn with the vehicle for repairs. It was two hours later when the stranger departed, having stayed to chat awhile after the break was mended, and Paul returned to the house."

"Where is Freddie?" asked Augusta.

"I haven't seen him. I thought he was here with you," replied Paul

"I haven't seen him since he went out after breakfast. I supposed he was at the barn with you," said Augusta, a little thrill of fear in her voice.

"He's probably about somewhere," assured Paul easily. He stepped and called "Freddie!" several times, but receiving no answer he went straight to an old unused well back

there if Freddie should suddenly return of his own sweet will.

Paul came home to report, half hoping to see the child there ahead of him, but was disappointed. Then he began a search of the cornfield across the road, while Augusta, still waited on the porch with only her dreadful apprehensions for company.

"What if Freddie had fallen in the creek and drowned? It was entirely possible, the stream being less than a quarter of a mile down the road. Or he might have gone to the pasture, where he loved to go to see the cattle, and they may have tossed or trampled him to death. Anyway, he was gone and might never return alive. The thought nearly drove her frantic.

If only she had not been cross with him the night before! If only her love for him had not seemed to waver for a time! For she knew now that it was only seeming. Her heart ached with its cry for him which was a prayer. She needed him more, oh, much more than all the honors any office in the world could confer. And she had thought the child could return nothing! "Nothing material," Paul had said with a wise smile. She was more than repaid simply in being allowed to love him, but he returned her affection with all the strength and loyalty of his baby heart.

The tears were falling fast by this time, great tears heavy with the weight of her dread, and the deep heaving sobs hurt her throat and almost choked her.

She went to the gate because in action had become unbearable, and through her tears she saw Paul turn the corner down the road, and before him on the horse sat a tiny figure. Paul was riding like the wind to bring her the good news and soon reached the little gate.

"He was buried almost to his waist in the mud down by the bridge," said Paul tensely, handing her his sticky burden, himself well plastered with the sandy clay. "I rode the whole length of the creek in the cornfield, and when I got to the fence I looked over and there he sat, so deep in the mire he could not get out. He was crying softly in a sleepy little voice, but did not seem to be frightened."

"Mother's precious baby," crooned Augusta, taking the live model in clay to her heart. "What made Freddie go away down there all alone?"

"Get pretty flowers for Muvva," lisped the child, beaming ecstatically as he handed her a small handful of dirty, wilted blossoms. "We love Muvva a million bushel. And Fahva, too," he added seriously. "He did bring me home on the horse," murmured Augusta, broadly, and her whole soul went up in a silent prayer of thanksgiving.—New England Homestead.

"My Johnnie is Over the Ocean"

Words by Alice A. Ferguson, York Co., Ont.

Tune—"My Bonnie Lies over the Ocean."

My Johnnie is over the ocean,
My Johnnie is over the sea,
My Johnnie is fighting the Germans
O, bring back my Johnnie to me.

Chorus: Bring back, bring back,
Oh, bring back my Johnnie to me.

Our soldiers who watch from the airships,
Our soldiers who guard on the sea,
Our soldiers who fight in the trenches,
Are guarding my country and me.

One night as I lay on my pillow,
One night as I tossed on my bed,
One night as my thoughts crossed the billow,
I dreamed that the Kaiser was dead.

The women of Britain are weeping,
Hearts break 'neath the Fleur de Lis,"

Ten thousands of soldiers are sleeping,
'Neath the turf, or down under the sea.

Then blow ye winds over the ocean,
Blow peace from far over the sea,
Then blow ye an end to this warfare,
And bring back my Johnnie to me.
Chorus, last line—"O bring back my Johnnie Canuck."

A Grandmother's Recipe

Take one cupful of usefulness, one cup of love for mother, another cup of love for your little brothers and sisters, a whole pound of wishes to make other people happy, and a very little teaspoonful of wishing to be happy yourself. Beat it all together and see if it does not make the nicest kind of an afternoon lunch for anybody. It should be served while fresh.

"This song was composed by Miss Alice Ferguson and sung at the meeting of the King Seat Branch of the Women's Institute at a patriotic concert held recently. It was to the great accompaniment of clearing \$155 for the Belgian Relief Fund."

One of Ontario's Beauty Spots Near to Nature's Heart.

The scene illustrated herewith immediately suggests itself as a quiet, restful country spot in its natural beauty. It is not in the secluded country, however, but is a park in the Hamlet Valley, Toronto, where the natural features have been preserved. It is just such a restful spot as this that appeals to the busy dweller who takes an occasional half holiday to enjoy its beauty. We in the country are surely blessed with what we live in such an environment all the time.

of the barn. It was still covered as usual, but he peered anxiously through a wide crack and closely scanned the dark water below. There was nothing in it to ruffle its smooth surface. It did not seem possible that a child could get into the well, but Paul had always feared he might some way.

With a breath of relief he gave his attention to other possible places—the stalls in the barn, the corncob, the haymow, but had to return to the house alone. Augusta had searched the garden and orchard, but discovering that the front gate was unfashioned felt sure that Freddie had gone out to the road. No tiny figure was visible, however, but it would be easy matter for the tall grasses or luxuriant hedges to hide him.

"I'll get on a horse and ride part way down the road. He cannot be very far from here," said Paul confidently, but his pale face belied his words.

Augusta dared not trust herself to speak, but quietly sat down on the porch step to wait. She must be

His dear, alluring ways and sweet prattle were a daily delight, and she and Paul had known a deeper happiness since Freddie's coming than ever before. A woman could all her life with philanthropic work perhaps, but not her arms. Why, it was a joy unspeakable just to feel his tired, yielding body when she rocked him to sleep. Belle was right when she said that every woman needed children. Surely it was an all-wise Providence that provided children for women to love, for without them not only a woman's life would be narrow but worse still, her heart. There were fair substitutes for most of the prized things in this world but there was nothing, absolutely nothing, that could take the place of a child in the home.

She felt that if Freddie were spared to her after this bitter lesson he would be her not only as the child sitting on the wall to warn her if she should ever become discontented again but he would be her crown of glory forever.

"As you have done it unto the least of these, ye shall do it unto the greatest." It was torture unpeakable to think of his never returning.

The Upward

Our Talents

Christ's illustration of turning his talent in the case of the lord's anger, is a well-known story, but not only made a warning to the man who had buried it altogether, and as a servant, was called to account. Though responsible to the master, the man who had not realized that it was his. Many more in real life do not realize their responsibility, as they have no one to think whether it is right or not, but they will hold them accountable that master did his best. One of the wonders of the world is the Lost River. It starts one day in the mountains, then disappears. Beyond that place it is above ground, and in its passages it is along, often causing it to fall in. Daunted by its success, it rests in such phenomena as "case-ins" and "dips" in the depths before it reappears again, fish and game are plentiful, and its spots in the head, it has been of no use in the world. It is the same way many of us have a certain



The Upward Look

Our Talents

Christ's illustration of the servant's finding his talent in the earth, and of lord's anger, is a well-known one. Not only made no use of that talent, but on his master's return he hid it altogether, and as an unprofitable servant, was cast into outer darkness.

Though responsible for that talent, had no realization of the privilege it was his. Many modern people lead a life do not realize their responsibility, as they have never taken time to think whether they have a talent or not, but they have, and will hold them accountable, just that master did his servant.

One of the wonders of the Southern States is the Lost River. Like an ordinary one it flows for miles above ground, then disappears at a certain point. Beyond that place there is no trace of it above ground, but in subterranean passages it is still winding along, often causing the ground above to fall in. Dauntless men, instead in such phenomena go down into the depths below. Where it reappears again, fish have been caught with eyes which have become red spots in the head, so long have they been of no use in the darkness. In the same way many people know they have a certain talent, but

they neglect it, until they have lost all command of it, and it is theirs no longer. It is heartbreaking to think of all the satisfaction and pleasure and joy that has been missed in the wasting of talents and the sorrow and regret that must follow.

Not only do the owners suffer, but all those whom they might have helped to life's nobler realizations.

A woman with a voice-talent sang to a shut-in. She knew not in the least what it meant to that one to carry those grand sweet notes in her own soul, and in the hours of loneliness and pain, hear them over and over again.

Thus hitherto unrealized, and however small or however great they may be, all ought to do their best with these God-given talents, and then instead of the dread "outer darkness" of failure there will be the grand "inner light" of joy in accomplishment.—I.H.N.

It is a great mistake when we get the idea that the things that make life worth living belong to our neighbors. If we can not be happy with enough to make us comfortable, we would not be contented with the wealth of the nation.

We should not forget that our families are made up of individuals, each one with their likes and dislikes, and varying dispositions. Each individual's future is to a great extent made or marred by the atmosphere of the home.

OUR HOME CLUB

Another New Member

Our new member this week is a real, live man, and we introduce him to the Club as "Bachelor Uncle." The idea expressed by "Aunt Jane" in our March 4th issue, on what constitutes a woman's work on the farm, has stirred up "Bachelor Uncle," and his opinions, to say the least, are not at all in accordance with "Aunt Jane's" ideas. We would like to hear what other members have to say on this important subject.

We are glad to welcome back Aunt Harriet. She comes to us with an interesting letter this week. We are looking forward with interest to the discussion that these letters will in all probability call forth from other Home Club members.

The Home Help Problem

A friend of mine living in a near-by city, recently inserted a small 20 cent ad. in the "Help Wanted" column of the local paper for a girl to work for her mornings. There were eleven applicants the following morning and more in the afternoon. I venture that had she been a farmer's wife she would have inserted that ad. with little chance of receiving any replies. Yet my friend did not need help one-half as much as does the average far-

mer's wife. She has all conveniences in her home, a small house, and a small family. She had no outside work to do, while many a farm woman insists on adding milking and the care of the hens and garden to her already large share of duties. Isn't it about time that we men got to the fore and helped the women to solve their help problems?

I can't agree at all with "Aunt Jane" in her ideas of what constitutes a woman's work. If I am only a bachelor and therefore poorly qualified to speak on these subjects, I believe this is fundamental that the wife was not made for work alone. She is supposed to be a chum and companion and with leisure enough and strength enough left from her home duties for her social duties in the neighborhood. If my wife (if I am so fortunate as to get one) ever has to work as hard as my mother always had, our home will never be the place of joy that I would like to have it.

No, "Aunt Jane," I don't believe in any outside work for the women folk, unless they actually take a pleasure in it and want to do it, and in that case it would be up to the man to do his share in the house at some of the harder work.

But I said it was time for the men to get to the fore. Well, here are my suggestions. Conveniences for work such as a running water system, laundry tubs, and so forth. If I can afford it, I will add electric or gasoline power to run the washing machine and wringer. Such are the ideas of a "Bachelor Uncle."



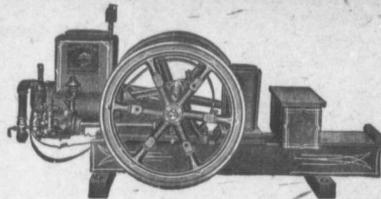
May be the dough had forgotten to rise.
 Or had risen quickly overnight and fallen again—
 To rise nevermore.
 Twas weak flour, of course.
 Meaning weak in gluten.
 But FIVE ROSES is strong, unusually strong.
 With that glutinous strength which compels it to rise to your surprised delight.
 Stays risen too.
 Being coherent, elastic.
 And the dough feels springy under your hand.
 Squeaks and cracks as you work it.
 Feel the feel of a FIVE ROSES dough.
 Note the wonderful smooth texture—soft—extropy.
 Great is the bread born of such dough—
 Your dough!
 Try this good flour.

Five Roses Flour

Not Bleached



Not Blended



The Farm Labor Problem

This is the greatest farm problem today. Governments, various organizations and the farmers themselves are all at work trying to solve it. One factor in solving it will undoubtedly be the wider use of gasoline power and an engine of highest efficiency, such as the

Renfrew Standard

It starts without cranking

This engine removes from farm life much of the drudgery that consumes hours of time and wastes tons of human energy. It stands for efficient farming. And it attracts farm labor, for where is the hired man who wouldn't prefer to work for a farmer who utilizes gasoline power?

The Government is urging farmers to produce more, but to do this requires more help. The cheapest and most efficient help for a great deal of farm labor is undoubtedly gasoline power, especially as provided by the Renfrew Standard engine. Our engine catalog gives complete particulars.

THE RENFREW MACHINERY CO., Limited

Head Office and Works - RENFREW, ONT.

Agents - Almost Everywhere in Canada

EGGS, BUTTER LIVE POULTRY

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

Egg Cases and Poultry Coops supplied free.

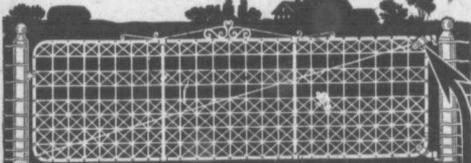
The **Wm. DAVIES Co. Ltd.**

Established 1854 **TORONTO, ONT.**

WANTED—A position as Butter Maker. One year's experience as foreman. Can give best of references. Apply to Box 256, Farm and Dairy, Peterboro, Ont.

PASTEURIZER FOR SALE

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



The Improved "Ideal" Farm and Stock Gates

Should the BRACE WIRE in an ordinary gate become slackened or broken, you know from experience that it cannot be tightened or replaced so as to make the gate as serviceable as when you bought it.

OUR PATENT HINGE-CLIP

With attached BRACE TIGHTENER overcomes this disadvantage. In "IDEAL" GATES the brace wire can be adjusted or replaced in less than ten minutes with an ordinary wrench and then you practically have a new gate. Our new Hinge Clip also carries the weight of the gate direct from the top hinge bolt, thus relieving the frame from any unnecessary strain.

OUR PATENT LATCH

is supplied with all "IDEAL" GATES. It is positive and can be opened either way. Raise the thumb latch and push the gate open; when through, swing it shut—it always locks.

These new features are all covered by patents and "IDEAL" GATES are the only gates sold in Canada with these improvements, which make the gate more serviceable and add many years to its life. A postal card will bring you our catalogue, which describes in detail the many advantages of "IDEAL" GATES.

The **McGregor Banwell Fence Company, Limited**
Walkerville - Ontario



The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this department to ask questions on matters relating to cheese making and to suggest subjects for discussion.

Notes on Experimental Work*

Prof. H. H. Dean, O.A.C., Guelph, Ont.

Experiments conducted in the dairy school at Guelph indicate that the loss of fat in the buttermilk was greater by pasteurizing sour cream at 140 degrees F. as compared with churning raw cream and less by heating to 140 degrees F. as compared with heating to 160 degrees and 180 degrees F. A "holder" pasteurizer was used for the tests. The average percentages of fat in the buttermilk were .142 from raw cream, .275 for cream pasteurized at 140 degrees, and .37 for the lots heated to 160 degrees to 180 degrees F.

In one churning where the pasteurized cream was held in the vat overnight and the temperature rose several degrees, the percentage of fat in the buttermilk was .48. This indicates that where the cream is not held for some time at a comparatively low temperature before churning, there is likely to be an excessive loss of fat in the buttermilk when such cream is churned.

Tap Opened or Closed

Experiments were conducted to find the moisture and salt in butter working with the churn tap open and closed. The average of 12 churnings gave the following results:

At 5% moisture in finished butter,	25.64	29.13
Tap open	24.46	14.31
Tap closed	24.34	14.50
At 1% salt in finished butter,	3.096	2.98
Tap open	2.59	2.21

Jacketed Vs. Milk Cans
The average temperature of six deliveries of cream in hot weather in jacketed cans was 64.5 degrees F., and in milk cans 67.5 degrees F. The average percentages of butter in the cream were practically the same in both cans.

A New Salt Test

Recently a test for the salt on butter has been brought to the attention of buttermakers known as the "Chapman Salt Test." Comparing this test with the Standard Silver Nitrate test, we found it gave results rather higher. The average of 29 tests with Silver Nitrate was 2.75 per cent. salt. The average of 29 tests made on the same lots of butter by the Chapman test was 3.26 per cent. salt in the butter.

Salt Vs. Saltless Butter
The salt butter produced an increased overrun of 4.14 per cent. as compared with making saltless butter. In 1913, the overrun was 3.5 per cent. greater on the salt butter.

Buttermilk From Cream
The average of 44 churnings, ranging in weight of cream from 160 pounds to 1,514 pounds, and in percentage of fat from 28 to 41.5, was 1.47 pounds of buttermilk per pound of butter, or 2,960 pounds per ton of butter. For each increase of one per cent. fat in the cream above 28, there was produced, on the average, 158 pounds less buttermilk per ton of butter.

Shaking Vs. Not Shaking
During the months of April, May, June, July and August, 38 deliveries of cream were placed in pint milk bottles, containing a 3.1 potassium bichromate-corrosive sublimate preservative. One sample bottle was corked and the sample bottle shaken at each time of adding fresh cream; one was corked and not shaken; one was left

*A paper read at the annual convention in St. Thomas of the Western Ontario Dairymen's Association.

95

Upward
On TRIAL

AMERICAN CREAM SEPARATOR

A milk separator to suit the general use, well made, easy to handle, heavy or light weight; for MILK, Skimmed or Cold Milk; making heavy or light cream.

ABSOLUTELY ON APPROVAL
The best of a century record, easily cleaned. Different from this picture, which illustrates our large capacity machine. **WRITE FOR CATALOGUE** to **AMERICAN SEPARATOR CO., 802 32nd St. N. Y.**

POSITION WANTED
Single, Certified Buttermaker, with 5 years' experience, wishes position. Duties to commence any time. Best of references. Write **A. O. IMLAY**, R. R. No. 4, IONA STATION, ONT.

CREAM

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

Belleville Creamery Ltd.

References: Molson's Bank, Belleville

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

Drop us a card for particulars
Guelph Creamery Co., Guelph, Ont.

CHURN FOR SALE
Six hundred pounds **SUCCESS** combined Churn for Sale. Fair condition. Price, \$50.00

Toronto Creamery Co., Ltd.
TORONTO, ONT

Peck, Kerr & McElderry
Barristers, Solicitors, etc.
415 Water St., Peterborough
E. A. Peck F. D. Kerr V. J. McElderry

GASOLINE ENGINES
1 1/2 to 20 H.P.
Stationary Mounted and Tractor

WINDMILLS
Grain Grinders, Water Hoists, Steel Saw Frames, Pumps, Tanks, Etc.

GOOLD, SHAPLEY & MUIR CO., LTD.
Burlington Winnipeg Regina Calgary

Feed Your
and you will get Big Crops

Ston Fertilizer

are rich in available Ammonia, Phosphorus, Potash. They will multiply yields on low land.

Write or call for information.

William Stone

(Established 1844)
Head Office - WOODVILLE
Branches: Ingersoll Agawa Falls

FREE—We will give you interested in stock of our 80-page illustrated food, how to build better common diseases of poultry with remedies for each, cure now in four days our Royal Purple St. Foods and Remedies, Kings Mfr. Co., London, ENGLAND.

TIDWELL'S SEED
High germination test. Grown on our own farms. TIDWELL BROS., TILBURY, ONT.

SEED CORN F.
A quantity of certified well cured; Bailey, Whelan No. 7. Prices reasonable. JOHN WALLACE

CORN THAT
Money back in it. Send for Price List. **J. O. DUKE, RUTHERFORD, N.J.**

A "Ped"
Get our Trough and

MONTREAL



Feed Your Land
and you will get Bigger and Better Crops.

Stone's Fertilizers

are rich in available Plant Foods—Ammonia, Phosphoric Acid and Potash. They will give you maximum yields at lowest cost.

Write or call for complete information.

William Stone Sons, Ltd.
(Established 45 Years)
Head Office: - WOODSTOCK, ONT.
Branches: Ingersoll and Stratford
Agents Wanted

FREE—We will give free to any person interested in stock or poultry, one of our 8-page illustrated books on how to feed, how to build hen houses; tells the common diseases of poultry and stock, with remedies for same; tells how to cure rots in four days; tells all about our Royal Purple Stock and Poultry Foods and Remedies. Write W. A. Jenkins Mfg. Co., London, Canada.

TIDELLE'S SEED CORN
High germination test. White Cap, Yellow Dent, grown on our own farm. Write TIDELLE BROS., TILBURY, ESSEX CO., ONT.

SEED CORN FOR SALE
A quantity of carefully selected and well cured; Bailey, White Cap and Wisconsin No. 7. Prices reasonable. Orders solicited. JOHN WALLACE - RUSCOMB, ONT.

CORN THAT WILL GROW
Money back if not satisfied
Send for Price List
J. O. DUKE, RUTHVEN, Ont.

open and shaken; and one left open and not shaken.

The open bottle samples, as a rule, tested much higher than the average of each delivery. The shaken, corked samples contained most mould, the uncorked samples least. The practical lesson is to cork cream-composite samples and not shake them when adding fresh samples. Out of 61 monthly composite samples of milk kept in open and closed bottles during April to September, 23 samples were alike in fat percentage at the end of a month, while the remainder with two exceptions tested from .05 to .3 higher in the open sample bottles. Composite milk samples should be kept closed.

Ice Cream Overrun

The results of five tests of ice-cream overrun from raw and pasteurized cream produced an average overrun of 57.55 per cent. and an average score of 94.5 from pasteurized cream. The raw cream produced an average overrun of 77.39 per cent; the score for quality averaged 89.75. The raw cream produced more "swell" or overrun, but the quality of the finished product was not so good as from the pasteurized cream.

Spring Cleaning Hints

With the near approach of spring, almost every household experiences the throes of the vernal cleaning time. Furniture is moved outdoors, rugs are beaten, and dinners are scanty and late.

What is good for the place where food is served and eaten is likewise doubly desirable in places where food is manufactured. Hence the wisdom of the following hints to creamerymen by a buttermaker who is a strong advocate of better and cleaner butter:

"Now is the time to prepare for the heavy June work—the 'peak' of

the creamery load. To be efficient in handling extra work a creamery must be clean and orderly.

"To clean outside the building—get rid of rubbish and ash heaps; clean up the yard; straighten the wood piles; and have distinct driveway by encouraging the growth of grass or by planting flower beds. Patrons will appreciate a combination of beauty and utility.

"To clean inside—put screens on at once to keep out the early flies; have everything in good shape to prevent accidents to men and machinery; sweep and scrub the odd corners; inspect the sewage system; and arrange things conveniently in the store room.

"Ontario creameries are increasing the quantity of output yearly. Why not start the season right and make a corresponding advance in quality score? To do this, the first thing is cleanliness, and an annual spring dirt round-up will turn out as a profitable venture."

Cheesy Points

F. Brown, Grenville Co., Ont.

Aim to have curd well formed in whey before too much acid has developed. I find that the amount of acid given at dipping point should vary according to amount of moisture contained in the curd at this stage.

Uniform temperature should be maintained and the cheese should be well matured and well pressed. Salt should be well distributed and well dissolved before pressing.

We add one-half to three-quarters per cent. of good culture starter when temperature is raised to about 70 degrees F. and do not let the temperature run too high until all the milk is in.

When writing to advertisers say you saw their advertisement in Farm and Dairy

AN OUNCE OF PREVENTION is worth a pound of cure when it comes to looking after harness.

EUREKA HARNESS OIL

Keeps leather soft and prevents cracking and the possibility of accident due to dried out traces, etc.

Dealers Everywhere

The IMPERIAL OIL COMPANY Limited

Made in Canada



ED
r. with 5
position
Best of
ION, ONT.
M
most.
ry Ltd.
Belleville
TED
series and
our Cream
Highest
ph, Ont.
SALE
CESS
Fair
.00
D., Ltd.
lderry
, etc.
borough
McElderry
GINES
rraction
S
ons, Street
ks, Ste.
CO., LTD.
Calgary

Lightning is Powerless

to affect a Building Barn or Dwelling, equipped with Pedlar's "George" or "Oshawa" Metal Shingles and connected to the ground by conductor or wires.

Pedlar's "GEORGE" Shingle

For barns and large buildings, is your best protection against fire from lightning or flying sparks. The "George" Shingle, is 24 in. x 24 in. in size, reducing time and labor in laying, and saving nails. Only 25 of these big "George" Shingles are required to cover 100 sq. ft. of surface, requiring only 75 nails.

For dwellings and smaller buildings use the "Oshawa" Shingle. This is a 16 in. x 20 in.

shingle which has all the special features of the "George" Shingle. It costs exactly the same per "square" and it takes 45 shingles to cover a roof area equal to the surface covered by 25 of the big "George" Shingles. You'll never be really satisfied until you "Pedlarize" your barns and other buildings and thus obtain permanent protection against lightning, fire and flood.

A "Pedlarized" roof will last a lifetime. MADE IN CANADA Write Now for Free Booklet.

Get our quotations on Galvanized Corrugated Iron Siding or Roofing, Corro Crimp Roofing, Sile Covers, Culverts (Riveted and Nestable), Eaves Trough and Conductor Pipe, Finials and Ornaments, Metal Ceiling, or anything in metal products. Ask for Catalogue " F. D.

THE PEDLAR PEOPLE Limited

ESTABLISHED 1861

Executive Office and Factories: OSHAWA, CANADA

MONTREAL
TORONTO
WINNIPEG

OTTAWA LONDON 11 J
CHATHAM



HOLSTEIN, FEB. 18 TO

4083, 97, 6m, fat, 27.50 lbs.

id., 2,261.7 lbs. butter, 67c.

1,025, 57, 6m, fat, 27.50 lbs.

1,041, 52.3, 2, 12 lbs. butter, 67c.

1,042, 57, 6m, fat, 27.50 lbs.

57, 9m, 22d, 21.40 lbs. but., 67c.

1,043, 57, 6m, fat, 27.50 lbs.

1,044, 57, 6m, fat, 27.50 lbs.

1,045, 57, 6m, fat, 27.50 lbs.

1,046, 57, 6m, fat, 27.50 lbs.

1,047, 57, 6m, fat, 27.50 lbs.

1,048, 57, 6m, fat, 27.50 lbs.

1,049, 57, 6m, fat, 27.50 lbs.

1,050, 57, 6m, fat, 27.50 lbs.

1,051, 57, 6m, fat, 27.50 lbs.

1,052, 57, 6m, fat, 27.50 lbs.

1,053, 57, 6m, fat, 27.50 lbs.

1,054, 57, 6m, fat, 27.50 lbs.

1,055, 57, 6m, fat, 27.50 lbs.

1,056, 57, 6m, fat, 27.50 lbs.

1,057, 57, 6m, fat, 27.50 lbs.

1,058, 57, 6m, fat, 27.50 lbs.

1,059, 57, 6m, fat, 27.50 lbs.

1,060, 57, 6m, fat, 27.50 lbs.

1,061, 57, 6m, fat, 27.50 lbs.

1,062, 57, 6m, fat, 27.50 lbs.

1,063, 57, 6m, fat, 27.50 lbs.

1,064, 57, 6m, fat, 27.50 lbs.

1,065, 57, 6m, fat, 27.50 lbs.

1,066, 57, 6m, fat, 27.50 lbs.

1,067, 57, 6m, fat, 27.50 lbs.

1,068, 57, 6m, fat, 27.50 lbs.

1,069, 57, 6m, fat, 27.50 lbs.

1,070, 57, 6m, fat, 27.50 lbs.

1,071, 57, 6m, fat, 27.50 lbs.

1,072, 57, 6m, fat, 27.50 lbs.

1,073, 57, 6m, fat, 27.50 lbs.

1,074, 57, 6m, fat, 27.50 lbs.

1,075, 57, 6m, fat, 27.50 lbs.

1,076, 57, 6m, fat, 27.50 lbs.

1,077, 57, 6m, fat, 27.50 lbs.

1,078, 57, 6m, fat, 27.50 lbs.

1,079, 57, 6m, fat, 27.50 lbs.

1,080, 57, 6m, fat, 27.50 lbs.

1,081, 57, 6m, fat, 27.50 lbs.

1,082, 57, 6m, fat, 27.50 lbs.

1,083, 57, 6m, fat, 27.50 lbs.

1,084, 57, 6m, fat, 27.50 lbs.

1,085, 57, 6m, fat, 27.50 lbs.

1,086, 57, 6m, fat, 27.50 lbs.

1,087, 57, 6m, fat, 27.50 lbs.

1,088, 57, 6m, fat, 27.50 lbs.

1,089, 57, 6m, fat, 27.50 lbs.

1,090, 57, 6m, fat, 27.50 lbs.

1,091, 57, 6m, fat, 27.50 lbs.

1,092, 57, 6m, fat, 27.50 lbs.

1,093, 57, 6m, fat, 27.50 lbs.

1,094, 57, 6m, fat, 27.50 lbs.

1,095, 57, 6m, fat, 27.50 lbs.

1,096, 57, 6m, fat, 27.50 lbs.

1,097, 57, 6m, fat, 27.50 lbs.

1,098, 57, 6m, fat, 27.50 lbs.

1,099, 57, 6m, fat, 27.50 lbs.

1,100, 57, 6m, fat, 27.50 lbs.

MARKET REVIEW AND FORECAST

WE BUILD BARN'S

Before you cut a timber investigate our plan of Barn Building. You can see what kind of barns we have built for hundreds of Farmers. Let us show you the plans. Save time, money and danger of fire. Write us about

STEEL TRUSS BARN'S

Get the complete proofs that our plan of building is what you want.

The Metal Shingle & Siding Co., Ltd., Preston

Toronto, Monday, March 15.—"Fair for year time" is the expression generally adopted by wisest men to express their opinion of business conditions. A few of the more optimistic speak of a slight improvement in general trading. This is to be expected. The feeling of spring in the air always gives rise to new impetus to business. The hope that goes with the planting of a new crop usually induces farmers to open and start the wheels of industry anew.

During the week there has been a tendency for grains to strengthen from the slight recession of the previous week. Concurrent with the new strength in grains has been a weakening of the cattle market, coming in the increasing quantities at a decrease in price. Dairy production is a little easier.

United States eggs scarce in the market there.

Poultry is quoted here as follows: Chickens, live, 11c to 12c; dressed, 10c to 11c; fowl, live, 10c to 11c; dressed, 10c to 11c; ducks, 12c to 13c; dressed, 11c to 12c; turkeys, 13c to 15c; dressed, 12c to 13c.

Potatoes are undoubtedly the cheapest food on the market, and holders would do well to take a lesson from Germany and make potatoes a larger part of his menu. It would have a material effect on prices. Ontario's in our lots are still quoted at 6c, with New Brunswick at 5c, to 6c. The real demand has improved during the week, but sales are still made at 5c to 6c a bag.

Bams are here quoted as follows: Prices, \$1.50 to \$1.55, and quoted, \$1.50 to \$1.55. At Montreal one-pound pickers on a quiescent market are quoted \$1.12, two-pound pickers, \$1.12 and three-pound pickers, \$1.12.

Quotations on Canadian butter seem to have advanced above the line of safety, and importations have developed. During the past week a car of Australian creamery butter was received in Montreal. It was a lot of 128 packages of California creamery butter, each weighing 56 lbs. Round lots of June creamery butter are quoted there at 35c and smaller lots at 36c. As a result of importations, there is a slight falling in the butter market, but stocks are too short to allow of much lower prices. On this market fresh creamery prints are quoted 36c to 38c; creamery solids, 30c to 32c; dairy prints, 36c to 38c and butters, 38c to 39c.

What will be the opening price for Canadian cheese? The report comes from Belleville that speculative bids have been made for April cheese at 45c, with no takers. It is believed that the April make will be late in the first of 1914.

Local quotations are: Heavy drafts, young and sound, \$125 to \$130; light drafts, young and sound, \$140 to \$150; light delivery horses, \$25 to \$30; drivers, \$120 to \$130; farm chunks, \$140 to \$150; serviceably sound, \$20 to \$25.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

The demand is limited to whole milk cows. Feed is too high to give to any other kind. Common to medium milkers.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

European demand seems to continue strong. (Respective of the movement of the market up or down. The discovery of the strength of this demand has placed us back on an up-time basis in spite of the continued progress of the Allies in the forcing of the frontiers. It is not considered safe to say, and they are following a cautious policy in buying. No. 1 Northern is now selling at \$1.64; No. 2, \$1.63; No. 3, \$1.60; Ontario wheat is \$1.40 to \$1.40 outside.

COARSE GRAINS
Last week coarse grains came down in sympathy with the wheat. The week they is a notable strengthening all along the line. Oats, C.V. No. 2, 67c; No. 3, 67c; No. 1 feed, 68c; Ontario oats, 60c to 62c; corn, 62c; rye, \$1.10 to \$1.20; milling barley, 80c to 85c. The Montreal market is as follows: Oats, C.V. No. 2, 67c; No. 3, 67c; extra No. 1 feed, 67c; local white, 67c to 68c; No. 2 to 68c; No. 3 to 67c; barley, feed, 78c to 79c; milling, 84c to 85c.

MILL FEEDS
Prices held firm here. Bran \$27; shorts, \$23; middlings, \$24; feed flour, \$39 to \$43. At Montreal the market is: Bran, \$27; shorts, \$23 to \$25; middlings, \$23 to \$24; molasses, \$34 to \$35.

HAY AND STRAW
Bad roads have proven detrimental to receipts and prices are firm. It is reported that the government will give no more orders for hay in Canada, but will buy in Argentina and Chile. Dealers, however, anticipate a further advance in prices before the slow crop. On this report, hay is quoted, \$12.00 to \$12.00; No. 2, \$11.50 to \$12 and No. 1, \$12.00. At Montreal No. 1 brings \$12.50 to \$25; No. 2, \$12 to \$13 and No. 3, \$12 to \$13.50.

SEEDS
Seeds are quoted in wholesale quantity on a cwt. as follows: Red clover, No. 1, \$12 to \$12; No. 2, \$12 to \$12.50; No. 3, \$12; timothy, No. 1, \$12.50 to \$13.00; No. 2, \$12.50 to \$13.00; No. 3, \$12.50 to \$13.00; No. 4, \$12.50 to \$13.00; No. 5, \$12.50 to \$13.00.

EGGS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.

RECEIPTS AND POULTRY
Receipts have more than doubled in the past week. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c. The market is steady and prices have taken a decided advance in the country. No. 1, 10c; No. 2, 9c; No. 3, 8c.



Dispersion Sale

OF ONE OF QUEBEC'S

Crack AYRSHIRE Herds

APRIL 2nd (Good Friday)

Imported and Canadian bred Ayrshires, showing Champions and R. O. P. Cows. Selling on account of dissolution of partnership. Every animal Tuberculin tested.

Don't fail to write for a Catalogue

McMILLAN & LEGGAT

Trout River, Que.

Local quotations for live stock seemed to have reached its limit last week. Price depreciations have not been appreciable, but the market now can hardly be considered steady. The price of the fact that supplies all through the week has been quite moderate. Constructively mild weather undoubtedly has something to do with the situation, as meat consumption always falls off during the summer and consumers may curtail their meat appetite a little early this year. With the chance to get cattle on the pasture and curtail the consumption of high-priced feeding stuffs, the market should steady within the next couple of months. Quotations average as follows: Cattle, 80c to 85c; hatching steers, \$7.50 to \$7.90; beef choice steers, \$7.50 to \$7.95; butcher steers, \$5.50 to \$5.95; calves, \$6.50 to \$7.00; cow, \$6.00 to \$6.50; butcher cows, \$4.50 to \$4.95; hatching cows, \$4.50 to \$4.95; feeders, \$4.50 to \$4.95; stockers, \$4.75 to \$5.00; canners and cullers, \$3.50 to \$4.75.

Notice to HOLSTEIN Buyers

We are now in a position to supply some young stock at very attractive figures. Pairs or trios not akin. Young Bulls to head your herd, or females up to three years old.

Write for our special bull offer

F. R. MALLORY — FRANKFORT, ONT.
LAWCREST FARM — LONG DISTANCE PHONE

Home Farm Holsteins

High Testing Holsteins. I am offering 3 5-7-0 old Cows with records as follows: 1 a 27-10-lb. 5-7-0 old, 1 a 22-0-lb. 5-7-0 old, fresh, and 1 a 20-28-lb. 5-7-0 old, in May. Also two 5-7-0 old, 1 a daughter of Evergreen March 1 Bull fit for service, 1 eight mo. old with a 27-35-lb. dam and Bull Calves. Satisfaction guaranteed. Write or come and see them. S. LEMON, LYNDEN, ONT.

THE LYNDEN HERD

High Testing Holsteins. I am offering 3 5-7-0 old Cows with records as follows: 1 a 27-10-lb. 5-7-0 old, 1 a 22-0-lb. 5-7-0 old, fresh, and 1 a 20-28-lb. 5-7-0 old, in May. Also two 5-7-0 old, 1 a daughter of Evergreen March 1 Bull fit for service, 1 eight mo. old with a 27-35-lb. dam and Bull Calves. Satisfaction guaranteed. Write or come and see them. S. LEMON, LYNDEN, ONT.

TRADE MARK

HOLSTEIN MILK
HEALTH VITALITY NUTRITION
MARK

THE BELLEVILLE BREEDERS' HOLSTEIN SALE

G. A. BRETHERN, Sales Manager

NORWOOD

ONTARIO

CANADA

Dairyville, Mar. 17th, 1915

Dear Mr. Brethren: Kindly mail me at once a catalogue of your April 1st Annual Sale.

We have been thinking Holsteins for some time and having noted the success attending our neighbors with stock purchased at your former Belleville sales, we have been persuaded at last that we should make a start. If we had only sold a cow and put a little money with the purchase price and bought a Holstein a few years ago, what a nice herd we would have now. However there's no use "crying over spilt milk," we will get busy, attend your sale and get started at once.

We know you will have a splendid bunch of cattle on sale, and are sure to be suited from what we know of the Belleville Holsteins. Will meet you at sale and would be pleased to have you assist us in making a selection for a foundation.

Sincerely yours
JAS. WISE

N.B.—Dairyman—be Wise and do like Wise, Buy Belleville Holsteins and make your business more profitable, interesting and enjoyable.

Maple Stock Farm

4th LUNCH OF 45 HEAD OF

**PURE-BRED
Holsteins**

ON

WEDNESDAY, APRIL 7, 1915

This is the best lot we have ever offered. Nearly all 2 and 3-year-old heifers of Abbekirk breeding (a number of their daughters of some of those good cows we sold at our last sale), either fresh or in calf to Woodland Schulling Sarcastic, 1st prize 2-year-old bull at Toronto Exhibition, 1913.

There is only one old cow in the bunch and all are sound and in prime condition, ready for the show ring.

It's your opportunity to get some good young stuff at your own price. Every animal will be sold.

Sale at 1 o'clock, under cover. Terms—Cash or 6 months at 7% on bankable paper. All trains met at Waterford on morning of sale.

Everybody is welcome. We'll try and use you well.



Catalogues will be ready last of March

COL. WELBY ALMAS, Auctioneer

WILLIAM SLAGHT, Proprietor
BEALTON, ONT.

KORGOLD IMPROVED ENGLISH YORKSHIRES

Young Sows to farrow in April and May. Young Boreas and Bows, three months old. Will book orders for younger stock.

F. J. MACALPIN, Korgold Stock Farm, GANANOQUE, ONT.



Alpha Engine Facts

Alpha Engines are reliable. Use all fuels. Are easy to start. Develop full power. Are free from vibration. Have best pulley arrangement. Have simple, reliable ignition. Are thoroughly standardized and parts are interchangeable. Strictly modern in design. Are high-class in appearance. Will fit your needs for size and equipment. Make best showing when directly compared with other engines. Are sold and backed by a Company that has a world-wide reputation for selling only high-quality machines and equipment.

An ideal engine for farm use

Eleven sizes, 2 to 28 horse-power. Each furnished in stationary, semi-portable, or portable style, and with either hopper or tank cooled cylinder.

Every farmer needs an "Alpha." Send for catalogue.

DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA

MONTREAL PETERBORO WINNIPEG VANCOUVER

And a slow market at \$40 to \$70, with choice ones at \$75 to \$100; average \$65 to \$85. Owing run at \$425 to \$575. Light lambs are demanded at \$9 to \$10.00; medium weight, \$9 to \$10.75; heavy, \$7.50 to \$8 and cul lambs, \$5.50 to \$7. Light ewes go at \$5.75 to \$7.50; sheep and bucks, \$9 to \$6; culls, \$3 to \$4.25. Some are steady, others in strength, and are quoted \$7.50 to \$7.75 f.o.b. country points.

GOOD PRICES STILL PREVAIL

Brooders who anticipate the lower prices on all kinds of dairy stock have been disappointed in their forecast. Dairy cattle both purebred and grades, are selling to-day at little or if any less than 75 months ago, except in local conditions, where there may be a shortage of food. There is no reason why dairy stock should decrease in price at the present time. Prices on dairy products have been steady if not a little higher than usual. War conditions have made the demand for these very keen. Slightly hotter prices have resulted. While this demand is new, the price of stock for the production of dairy food must remain the same. Many breeders even anticipate better prices than a number of the preceding years. Thousands of the coming year's progeny throughout Belgium and France have been slaughtered in the last few years for these countries to stock up again. Some men have even gone so far as to state that within the next year America will be shipping dairy cattle to Belgium, France and England.

Apart entirely from these causes, Canadian brooding during the past year thousands upon thousands of pounds of butter, from New Zealand to supply the needs of Western Canada. While this condition is with us, we must pay export assistance in good prices for dairy cattle—purebred or grades. Breeders and dairy farmers in Canada will do well to keep their herds well stocked up with females in order that they may take every advantage of the good prices that will maintain for at least several years. We will do well to even go farther and increase the production of our herds by securing better sire of high production to mate with our herds in the coming season. There are many opportunities of doing this through the big sales that are slated for the near future, or through the offerings of breeders whose advertisements appear in Farm and Dairy from week to week. It will pay our dairy people to keep closely in touch with these. There is no more convenient or cooling the type and breed of animal you may wish to secure.

THE SALE AT CENTRE VIEW

The complete dispersion sale of purebred and high-grade Holstein cattle by Elmer Atkinson, Edleyton, on March 12, was a decided success. As the weather was exceptionally fine, over 900 people were present, coming from all parts of Ontario. Besides the Holstein cattle offered, several implements and vehicles were also sold, the entire sale receipts amounting to \$5,200. The average price received for the 30 Holsteins was \$130. Some of the best prices were as follows:

Regal C. Pouch, \$150, Chas. Harrington, Maple; Greenwood Princess, \$200, Frank Boyle; Hagerman, \$200, Harry Tatal; \$165, Brownlee Bros.; Yellow, Charlotte Mercedes Pouch, \$170, Chas. Harrington; Charlotte Sylvia Pouch, \$175, Broerley Bros.; Pauline Fafort, \$200, Frank Boyle; Mona Queen Fafort, \$155, Edgar Watson, Pine Grove; Blossom De Kol Pouch, \$165, John Wallis, Woodbridge; Fancy Cuck, \$120, John Wilson, Maple; Fanny fat, \$170, A. W. Farr, Woodbridge; Duchess Calamity, \$180, Richard Lund, Emery; Mona Bell Calamity, \$170, Frank Boyle; Cornelia Princess, \$150, G. T. Castaner, Weston; Society Silva, \$160, Wm. Boyce, King.

Grade Holsteins sold at following prices: Snowflake \$110, Blue Belle \$107, Daisy \$100, Primrose \$125, Jewel \$110, Roostie \$105.

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FEB. 16 TO FEB. 25, 1915

(Continued from page 29)

9m. 104.4 lbs. milk, 15.5 lbs. fat, 16.50 lbs. butter. S. J. Foster.

3 Bonnie Canary Mercedes, 12007, 7y. 6m. 254.1 lbs. milk, 15.93 lbs. fat, 16.17 lbs. butter. N. H. McConkey.

2 Oesola Pouch, 10601, 6y. 10m. 154.1; 411.6 lbs. milk, 12.88 lbs. fat, 16.11 lbs. butter. Jan. Nevill.

Junior Three-Year-Old Class

1 Frolic Betsy Bobbet, 21253, 3y. 1m. 162.7 lbs. milk, 15.24 lbs. fat, 16.91 lbs. butter. T. H. Dent.

2 Cobquid Halbon Orrie Ind. 21206, 3y. 1m. 154.1; 391.3 lbs. milk, 12.24 lbs. fat, 15.30 lbs. butter. Samuel Dickie, Central Ontario, N.S.

3 Cobquid Helion Floral, 21894, 2y. 1m. 154.1; 349.3 lbs. milk, 12.6 lbs. fat, 15.77 lbs. butter. Arthur E. Dickie, Central Ontario, N.S.

4 Cobquid Asia Pouch, 23229, 3y. 1m. 142.1; 365.5 lbs. milk, 13.10 lbs. fat, 15.13 lbs. butter. Samuel Dickie.

5 Norrie Waver Mercedes, 21877, 3y. 4m. 154.1; 363.4 lbs. milk, 12.61 lbs. fat, 15.15 lbs. butter. Wm. A. De Beer.

Senior Two-Year-Old Class

1 Colantha Bower Dir., 22225, 2y. 9m. 153.1; 673.1 lbs. milk, 20.24 lbs. fat, 35.43 lbs. butter.

2 Thirly-day record, 2y. 9m. 254.1; 528.2 lbs. milk, 13.25 lbs. fat, 104.07 lbs. butter. M. H. Haley.

2 Mildred Pieterie Abbekirk, 21509, 3y. 7m. 145.1; 66 lbs. milk.

SALE DATES CLAIMED

Ontario District Holstein Breeders' Club Fourth Annual Sale, Woodstock, Mar. 23; Belleville Holstein Breeders' Club, 3rd Annual Sale, Belleville, Apr. 7.

Brookville District Holstein Club, 4th Annual Sale, Brookville, Apr. 6.

Brookville District Holstein Club, Annual Sale of 40 head of Holsteins, Brookville, May 27.

McMillan and Leggett, Dispersion Sale of Ayrshire, Devon and Jersey Cows, D. E. Sumner, Winchester, Ont., Dispersion Sale of Holsteins, Brockville, Wm. Slaght, Bealton, Ont., Holsteins, April 7.

Barn Roofing

Fire, Lightning
Rust and Storm Proof
Durable and
Ornamental

Let us know the size of any roof you are thinking of covering and we will make you an interesting offer.

Metallic Roofing Co.
Limited
MANUFACTURERS
TORONTO AND WINNIPEG

SEED CORN

Priestwining, Wisconsin No. 7, the best for the
Geo. B. West & Son, Northwood, O.H.

WANTED—Position as Buttermaker, 10 years' experience. Best references. Write Box 202, Farm and Dairy, Peterboro, O.

Burnside Ayrshire

Winners in the show ring and best test. Animals of both sexes. Importer of Canadian bred for sale.
Long distance phone in home.
R. E. W. C. 1915, 07

FANCY UTILITY BARRED ROCKS

Central Ontario's Greatest Poultry Pumping apparatus, pumps, and highest awards at Peterborough, Lindsay, Kingston, Millbrook, Port Hope.

Fine layers, often beating the best-to-day. Go in for a flock of beautiful utility birds. \$1.50 setting.

A. O. KIDD
59 Lock St. — Peterboro

Johnny-on-the-Spot

"Johnny-on-the-Spot" an alkali or et alk, will take care of any churning, separating cream, pouring, cleaning, washing, etc. Stop wasting your time and money on useless machinery. Let "Johnny-on-the-Spot" do it one of the famous Gail "Goes Like Glazy" line—high quality engine at a low price. WRITE FOR CATALOG AND FULL PARTICULARS. GAIL'S ALL SIZES

Gilson Manufacturing Co.
Limited
2310 York St., Guelph, Ontario

\$47.50



CANADIAN MILK

There is vast difference between just Holsteins Cow ordinary or three ordinary of breeding, fat and milk longer, more life than any other milk in Holsteins.
W. A. CLEMENS, ST. GEORGE

Improved
Ducks and Swans for sale.
N. J. DAVIS, L.



Don't Take
Roo

Get the kind on the "how fast" good principle, never get a poor one a good one.

NEED
PAR
ROO

is long on the in the making.

To surely make a reliable and one weather- and one

Parv is only one of them. There are preparation and packing things to be considered of roofing, and from the largest railroad buildings.

A substitute for lat ex Wall Board, in be applied directly to plaster. Made in Canada.

Booklet, "R Building"

If you do not know in your town, write for a booklet. We will be glad to make you.

BIRD
Established
160 Westbourne in All
Westhouses in All

MAPLELEAF OIL CAKE MEAL

"Is made by the old process and is guaranteed absolutely pure and unadulterated. It excels all other foods for nourishment, cheapness and marvellous value."

CANADA LINED OIL MILLS LTD.
TORONTO-MONTREAL

There is vast difference between keeping Holsteins and just keeping cows. One Good Holstein Cow will Do the Work of Two or three ordinary cows. You save in feed, housing, risk and labor. Holstein Cows milk longer, more per year, and more per lb. than any other breed. There's money for you in Holsteins.

W. A. CLEMONS, Sec'y H. F. Association
ST. GEORGE, ONT.

LARGE Improved Yorkshires

Bears and Sows from 8 weeks to 8 months old, sows in pig. Prices reasonable. Write

N. J. DAVIS - WOODSTOCK, ONT.
L. D. PHONE



Don't Take Just Any Roofing

Get the kind that is made not on the "how fast," but on the "how good" principle. Then you will never get a poor roofing when you need a good one. The ready-to-lay

NEPONBET PAROID ROOFING

is long on the roof because long in the making. It's the only way to surely make a roofing absolutely reliable and one hundred per cent. weather- and waterproof.

Paroid is only one of the Neponbet Roofings. There are others meeting every requirement and pocket-book. Granitized Shingles for pitch roofs. Products, the colored roofing, and other roofings for all kinds of buildings, from temporary sheds to the largest railroad buildings.

A substitute for laths and plaster—Neponbet Wall Board, in different finishes—may be applied directly to studding or over old plaster. Made in Canada. Sold by dealers everywhere.

Booklet, "Repairing and Building"—Free

If you do not know the Neponbet Dealer in your town, write for his name. If there is no dealer there, we have a special proposition to make you. We pay the freight.

BIRD & SON
Established 1875
100 Holmsten Building - Hamilton, Ont.
Wholesale in All the Principal Cities

OUR FARMERS' CLUB

Correspondence Invited

CALVERT CO., ONT.
BRITANNIA BAY, March 6.—There has been a very good attendance on market during the winter. Hogs \$18 to \$20; oats, \$6; pork easier, \$10 for light and \$9 for heavy. There is an outbreak of hog cholera around the city, quite a number have been destroyed. Beef remains about the same, \$2 a cwt. for fronts and \$19 for hind-
J. A. D.

HASTINGS CO., ONT.
THWICK, March 12.—We have lost most of our snow and the roads are in a very poor state. The weather remains cold and fine, with heavy frosts every night. Hogs are selling at \$7.35 a cwt. and potatoes at 50 a bag, sheep doing pretty again, doing considerable damage.—H.S.T.

WATERLOO CO., ONT.
WATERLOO, March 5.—The patriotic and production meetings held in Waterloo were very well attended. The addresses and discussions were good, but it seems farmers around here did not look very favorably toward the Government. The four weeks' effort course in Elmira closes under very pleasant circumstances by holding a banquet. During the last week the class took a trip to Toronto, visiting the Patriotic Buildings, Union Stock Yards and several packing houses and fertilizer plants. We still have

Sales Quicker Than Expected

R.R. No. 3, Gormey, Ont., Feb. 22, 1915.

Dear Sirs,—I sent you a telegram to-day informing you that I had sold all my seed oats, and therefore wished the advertisement in Farm and Dairy discontinued.

You might return the amount sent you for extra insertions and oblige.

Yours very truly,

R. F. KILNCK.

Mr. Kilnck advised us to insert his Ad. in Farm and Dairy for three issues. After two insertions, he wired us above that he had sold all. There is an extra keen demand this year for choice seed grain. Farmers will pay good prices among the 18000 readers of Farm and Dairy, there is no doubt many are who have good choice seed for sale. If you are one of these, you should have hundreds of other farmers who need you would supply them. Farm and Dairy will put you in touch with them. Sit down to-night and write us about what you have to sell.

Farm and Dairy, Peterboro, Ont.

good sleighing. The season's supply of ice has been stored.—C. H. S.

WELLINGTON CO., ONT.

ARTHUR, March 6.—We have had some March storms, but weather and roads in general are good. The miller's progress in the Dardanelles has had a tendency to lower our grain market. Oats have dropped 5c to 5c; barley, 70c; peas, \$1.50; wheat, \$1.35; buckwheat, 90c. Hogs are on time, \$7.50. Farmers are feeding at a loss, considering the high price of grain. Dealers are offering 7c for good cattle; hay is \$17, butter, 56c for best fat, eggs, 30c.
J. D. T.

WELLINGTON CO., ONT.

ELORA, March 12.—An early spring is anticipated, and should it materialize it would be a great blessing, as the ice is so severe and high in price, and to this fact may be attributed the marketing of immature and unshelled corn, some very much so, and those, as well as some of the better class, have been for sale, which shows that speculation is not the farmers' strong point. Hogs barely pay their way at the high price for grain, and being raised on the farm come nearer to giving satisfaction. There it is quite certain that the earlier in life an animal is fitted for market the less the cost per pound. The hog has the advantage in "getting there" generally before a year old. "Baby Beef" pays but by the same rule.—O. W.

MIDDLESEX CO., ONT.

APPIN, March 5.—One of the greatest problems just now before the stock and dairy farmers here is how to make a profit or break even on the feeding of soya beans. Grain is \$30, alfalfa, 12 cwt., shorts scarcely obtainable; other feeds in proportion. With a fastened cattle market profitable feeding is not easy. Those who sell light weight hogs are also penalized 50c a cwt. But let us be patriotic.—C.M.E.

A ewe will be found in this week's issue of the live stock Ad. of William Higginson, of Inkeram, Ont. From this big herd there is being offered several particularly good ones, just ready for service. In addition to these are several female granddaughters of Pontiac Korm-4780. Note the Ad. elsewhere.

Spraying Apparatus from \$6 Up

We make the world-famous SPRAMOTOR in many styles and sizes, to fit every need. If you have felt the want of a spraying outfit, you need a SPRAMOTOR—the machine that won 100 Gold Medals and First Awards all over the world.

Here's a straight, free offer that puts you under no obligation whatsoever, and will benefit you. The

Spramotor

(It isn't a SPRAMOTOR unless we made it)

catalogue is published with a valuable treatise on Crop Diseases, fully illustrated.

Write us, giving some particulars of what you own, use a spraying machine for, and we will mail this book, once, together with full details of a SPRAMOTOR best suited to your case. Don't put it off—write today.

Made in Canada. No Duty to Pay.
HEARD SPRAMOTOR CO.
2413 King St., LONDON, Can.

OUR BIG HERD BULL FOR SALE

To avoid inbreeding we are offering our big herd bull, Homestead Colantha Sir Ivedrop, grandson of Sir Field's great bull, Colantha Johanna Lad. He is big, handsome, sure and very quiet. His five nearest dams average 27.75 lbs. milk in 30 days and over 200 lbs. milk in 1 day. Weighs 2,500 lbs. Also 5 young sons of this bull from cows milking up to 80 lbs. per day. Write today for photographs and prices. **C. C. HANSON, DEXVILLE, QUE.**

Lyndale Holsteins

Will contribute to Brockville District Holstein Breeder's Consignment sale, May 6th, 25 head of A. R. O. and B. M. stock. Present offering 3 young bulls, bred by King Pontiac Arla Canada, and out of high record cows. **BROWN BROS., LYNN, ONT.**



Sawing Wood For Less Than One Cent a Cord

And in stove-wood lengths at that. Think of it! It's hardly believable. Thousands of users of Ellis Engine Wood Saw Outfits have found from experience that for strength, rigidity, durability and power they are superior to all others, regardless of price.

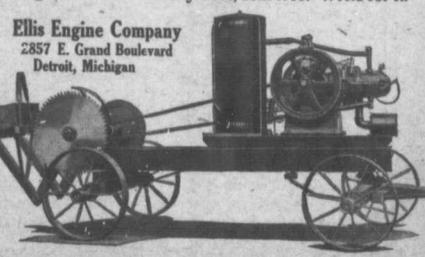
ELLIS ENGINES

This Wood Saw Outfit can be had in either stationary or portable types, equipped with Ellis upright or horizontal engines.

Ellis Engines are strongest, simplest, most powerful engines made—only three working parts. No cranking, no excessive weight, no carbonizing, less vibration, easy to operate. 14 H. P. to 18 H. P.

Our booklet, "Engine Facts," descriptive of Ellis Engines and their many uses, sent free. Write for it.

Ellis Engine Company
2857 E. Grand Boulevard
Detroit, Michigan





Sell Your Milk--Ship Your Cream

GARDINER'S CALF MEAL will produce you bigger and better calves at less cost than any other way of feeding. Ask those who use it. **GARDINER'S CALF MEAL** contains absolutely no filler or cheap by-products.

A Trial Convince--**MADE IN CANADA**--Write for Prices.
GARDINER BROS., *We Pay the Freight* Dept. E., SARNIA, ONT.

HARDY ALFALFA SEED

Grimm Alfalfa Seed Grown in Alberta. The hardest known Alfalfa. Practically no danger of winter killing with this seed. Write for our booklet on Alfalfa and prices and sample.

SOUTHERN ALBERTA LAND CO., Ltd., SUFFIELD, ALBERTA
W. A. McCREGOR, Superintendent of Farms

High Yielding SEED CORN

Buy your seed corn from the Essex County Seed Farms, Limited, and be sure of your crop.

We are growers, not dealers.

FIRST and only large farms in Canada organized for exclusive purpose of growing high yielding seed corn.

Our seed is grown from selected seed--harvested when thoroughly matured, carefully selected in the field, cured in drying-house built specially for the purpose--every ear cured separately. Tested before shipment--carefully packed in crates before shipment.

Write for Particulars

ESSEX COUNTY SEED FARMS, LIMITED

G. R. COTTRELL, Pres. AMHERSTBURG, ONT. A. McKENNEY, Supt.

SYDNEY BASIC SLAG

Our entire output of this Fertilizer for Spring, 1915, has now been sold and we cannot arrange further agencies unless for Fall delivery. Where we have no local agent we will supply farmers who wish to get an experience of Basic Slag this season with ton lots for \$20.00, delivered free at any Ontario station, cash with order.

Describe literature and all further particulars on application to

THE CROSS FERTILIZER CO., LIMITED
SYDNEY, NOVA SCOTIA



THE PAGES OF

EATON'S NEW SPRING CATALOGUE

OFFER YOU THOUSANDS OF
MONEY-SAVING VALUES

FIRST, please bear this phrase in mind, "Quality High, Price Low," for this is the ideal of EATON value. In the 300 pages of the new EATON Spring and Summer Catalogue there are thousands of values like this.

Suits, Coats, Shoes, Millinery, Furniture, Groceries, Dress Goods, Needles or Farm Machinery--no matter what it is that you wish to buy, a consideration of the values offered in this remarkable book will pay you many times over. If you really want to get full value, dollar for dollar, for the money you spend, you need this book. It should be a constantly-used buying guide in every home where right buying is appreciated.

And note this specially: Through our unsurpassed buying and manufacturing facilities we have been enabled to price many articles in this Catalogue extremely close to cost. The many values like this in our new Catalogue we have named and indicated as "Star Bargains." Get your copy of our new Catalogue, and look over these marvel values.

Every article shown in the Catalogue must be absolutely as described and illustrated. You take no risk whatever in buying the money-saving EATON Mail Order Way, because you are fully protected by the

EATON GUARANTEE

GOODS SATISFACTORY OR MONEY REFUNDED, INCLUDING SHIPPING CHARGES

READ OUR FREE DELIVERY OFFER. This great further money-saving plan is fully explained in the Catalogue.

PROMPT SERVICE.--We give immediate attention to your order, and ship it within twenty-four hours.

If you want to save money--if you want to get the most value for the money you spend--write for the EATON Catalogue, No. 114, **TO-DAY.** It represents the work of an entire season of our immense organization, of our buying offices in England, France, the United States and Canada, of our own factories producing goods for you at a saving of all middlemen's profits--all to give you an easy means of making every-day purchases for less money. Surely such an effort must mean savings for you.

And **TO-DAY--NOW** is the time to write for this free book. Address

T. EATON CO. LIMITED
TORONTO CANADA



ALL-WOOL SERGE SUIT

56-1244 This Suit shows a practical review of the latest in price-reducing to our customers manufacturing facilities. It is of fine all-Wool English fabric bought at the mill before wool advanced, thus contributing with its freedom to the low pricing of this suit. The smart 35-inch coat is lined with silk-fur satin, and shows the new belted effect slightly raised at the waist line. Buttons covered in the delicately embroidered orange muslin collar below.

The skirt is cut on the newest models, starting at the feet with extra fullness from pleats at each side, while just 1 row the coat is now the 34-inch length. Very prominent features of a fine new skirt. Skirt 34, 36, 38, 40, 42. Waist 24 to 42 collar. Colors--Black, Navy, Walrus Blue, also the new Petty (or ditto) fare shades.

ONE OF
OUR STAR
BARGAINS

10.00

We Pay the Shipping Charges on this Suit