

Issued Each Week - Only One Dollar a Year

VOL. XXIX.

NUMBER 17.

FARM AND DAIRY

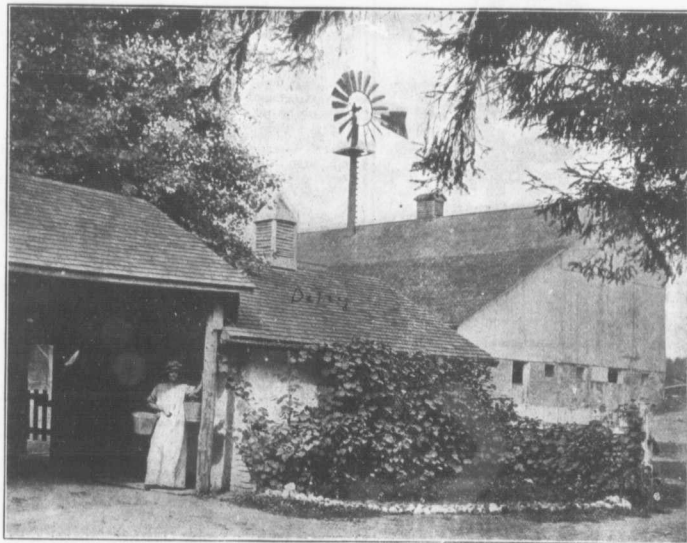
AND

RURAL HOME

Dairy and Cold Storage
Commissioner DeLoe

PETERBORO, ONT.

APRIL 28,



FARM BUILDINGS SHOWING SEPARATE MILK HOUSE REASONABLE DISTANCE FROM STABLE

If there is one thing above another that is needed on the average dairy farm it is a more attractive and sanitary place in which to keep the milk, the separator and the dairy utensils. Conditions approaching the ideal are shown in the above illustration, which appeared in the report of the Ontario Milk Commission, and the subject of which is the home of Jos. H. Marshall, ex-M.P., near London, Ont.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

What Do You Know About Cream Separators?

Do You Know that every important mechanical device has its imitators?

Do You Know that the Simplex Link-Blade Separator has its imitators?

Do You Know that the Simplex is the only separator having the self-centering bearings?

There is considerable you ought to know about separators, and the better you know

The Simplex Link-Blade Separator



the better you like it. The better you know some separators the less you like them. The best way to know a SIMPLEX is to have one sent on trial; you will like it so well you won't want to part with it. There are thousands of satisfied SIMPLEX users in all parts of the world, which should convince you that The Simplex Link-Blade is still in the lead.

Send to-day for our new illustrated booklet: it's free for the asking.

D. Derbyshire & Company

Head Office and Works: BROCKVILLE, ONT.

Branches: PETERBOROUGH, ONT. MONREAL and QUEBEC, P. Q.

WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

THE "BT" STANCHION IS ALWAYS CHOSEN

When Its Many Advantages Are Known



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

We also build Latte Carrier and Hay Carrier Goods

BEATTY BROS., FERGUS ONT.

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

Successful Co-operative Bacon Curing

In view of the unsuccessful attempt made a few years ago to operate co-operative bacon curing plants in this country it is interesting to note the main factors that have made for the success of co-operative bacon curing on the part of the Danes. These factors are dealt with in the following extract from the report of the Swine Commission.

Most Canadians to any extent interested in bacon production are more or less familiar with the Danish system of co-operative curing. The subject has been discussed and written about a great deal during the past few years. The Commission visited a number of the Danish co-operative curing factories and learned as much as possible of the system on which they are conducted.

The co-operative curing of bacon in Denmark dates back to 1887, when the farmers found their live pigs shut out of Germany, which had been the chief market. There were at the time a number of private curing factories. But pig raisers felt they were not getting full value for their stock and seeing the success that had already attended co-operative butter making, it required only the initiative of a few strong men to set swine slaughtering, curing and marketing on a profitable basis. Established on a sound basis and governed by workable regulations, the first factory succeeded and others were started until inside of three years ten such organizations were in operation. This number year by year was added to until it has reached 36 besides 24 private packing houses scattered over the little country, so close, indeed, in many cases that 90 per cent of the hogs killed are brought in by waggon.

THE MOVEMENT DISCOURAGED.

For a number of years it is claimed proprietary owners sought by various means to discourage the co-operative movement, but the foresight, persistence and stability of the Danish farmer prevented even a halt in its progress until it soon was able to dominate the situation. The private concerns are gradually being reduced in favor of the others, and it is only because of their generous policy that they can get hogs. They not only have to pay a slightly higher price than the quotations of the co-operative associations, but they have to bring their hogs longer distances. Whereas a co-operative factory seldom has to bring more than 10 per cent. of its stock by rail, a proprietary factory frequently gets 50 per cent. by train and those from districts in which the farmers have not yet joined a co-operative association. The associations have a foothold in practically all districts where hogs are raised in considerable numbers, the total membership being about 100,000.

Two main factors have been responsible for the success of co-operative packing associations from the first. No capital had to be supplied by the shareholders, and each pledged his entire output of fat hogs to the co-operative association.

On the joint guarantees of shareholders the banks provide the necessary money for the erection and equipment of the factory and working capital. The working fund is increased in the beginning by holding back a small part of the value of the hogs slaughtered. When this has reached an amount sufficient to carry on the work the capital sum provided by the bank is reduced year by year. As a rule the principal is paid off at a rate of one per cent. each year, in twenty to thirty years. The following is a usual form of guarantee:

We the undersigned hereby pledge ourselves to deliver to the above named factory which it is proposed to establish all the pigs of weights between 150 and 300 lbs. which we may produce for sale. Such pigs will be delivered on conditions dictated

by the shareholders of the society, and that we shall receive such amount in payment of such delivered swine as may be realized for them by the factory less preliminary expenses incurred in the organization of the society and the annual contribution on loan for building and plant payable during a period of about 25 years together with current working expenses.

PENALTIES PROVIDED.

The guarantee is graduated according to the number of acres owned by each member respectively. Ownership of 25 acres or less is sufficient for a guarantee of about \$14, between 25 and 250 acres, \$25; and for larger amounts \$28 for each 250 acres. The guarantee of one member in no case exceeds \$135. It is a fundamental principle that each guarantor is a partner in the ownership of the whole property of the factory in proportion to the amount of his respective guarantee. The penalty for violation of the agreement to deliver all marketable pigs to the co-operative factory is \$2.70 per pig sold to any other concern or person. The further penalty of expulsion from the Association may also be exacted.

Shareholders who live within six miles of the factory as a rule deliver their pigs from, but those living at a greater distance deliver to the nearest railway station, and the association pays the freight from there to the factory. In some associations a bonus of about seven cents a hog is granted the shareholders who deliver their own pigs. The packing plant agrees to accept every sound hog delivered. The pigs when delivered are unloaded into a small car and a metal tag put in the ear of each for identification. If the owner so desires the pigs may be weighed alive. Immediately after being dressed they are weighed and classified. An advance covering a portion of the value, based on the current quotations and the class to which the carcass belongs, is made at once. About one-quarter of a cent a pound is withheld until the end of the year, when the final premium is paid on the basis of weight of pork delivered during the year.

A Profitable Feeding Trial

G. H. Hutton, Supt. Exp. Farm, Lacombe, Alta.

On March 30 the first bunch of cattle fed at the Lacombe Experimental Farm were marketed. They were purchased by the G. Y. Griffin Co. and shipped to Edmonton. The price paid was 5¢; cents a pound with 5% shrink at Lacombe. So far as is known, this is the highest price ever paid in Alberta for March delivery. The price, however, was justified by the average dressed weight shown, the average being 61%. These cattle were bought in December at the cost of 3,658 cents and the average weight weighed in was 1,130 pounds.

Shorthorn, Hereford, and Galloway blood were represented in the bunch which were fed in a corral with shed on the west. This shed was not used by the cattle to any great extent. Prairie hay, timothy hay, frosted wheat, larley and oat screenings constituted the ration. Hay was kept in racks at all times and salt and water was always available. A tank heater was used to prevent the formation of ice on the water in cold weather. The grain was fed ground, in long troughs twice daily and was almost straight wheat, as the oats and barley constituted not more than 5% of the grain ration. At the start they were fed three pounds a head per day and were gradually increased until during the last of February the maximum consumption of grain was reached. At this time they were consuming daily 16½ pounds of grain.

The total time necessary to attend to the lot was 222 hours for the 169 days the cattle were on feed, this including hauling hay, some of which was hauled a distance of three miles.

(Continued on page 11)

Issued
Each Week

FARM AND DAIRY & RURAL HOME

Only \$1.00
a Year

Vol. XXIX.

FOR WEEK ENDING APRIL 28, 1910.

No. 17

THE APPROVED PRACTICE IN MANGEL AND BEET CULTURE

George Rice, Oxford Co., Ont.

Mangels and Other Roots Fill a Particular Place in Rations for Dairy Cows—Ensilage Cannot Take Their Place Entirely—How to Secure Quick Germination of the Seed

SINCE the advent of the silo there is a disposition on the part of many farmers to give up the growing of roots. Ensilage is better to preserve for the largest part of the feeding season, and it can be kept over for summer feeding. But to those who are producing winter milk, mangels, or cow beets, or sugar mangels are of great value. In fact, the roots are better for making milk than is silage.

Most dairymen engaged in making large records like to have the roots. A large breeder of dairy cattle living in New York state wrote me last winter asking if I knew where he could get a carload of mangels, or cow beets. Now, to ship them so far, haul them to the car and then from the car, not to mention other work and duty added, it would make them come very much more expensive than roots are to the farmer who grows his own. And yet farmers who can grow roots to perfection don't seem to realize the advantage of them.

ROOTS AND CORN.

One-half an acre of good corn and one-quarter of an acre of roots will grow more feed than an animal can eat in a season; it will provide sufficient ensilage for 300 days and roots for 200 days. Add to this straw that has been well preserved, and we have the basis of a mighty cheap ration, either for milk or beef. In fact, this feed grown on three-quarters of an acre and fed along with the straw is a better ration than 75 per cent. of the stock in the country gets.

Turnips, I consider to be of equal value, to mangels, but there is a danger of tainting the milk when they are fed improperly. Since it must be acknowledged that many people are careless, and as the mangels or sugar beets can be grown as easily, it is well to avoid any danger from turnip taint.

MANGELS FOR EARLY FEEDING.

I like to grow some mangels for early feeding in the fall. Mangels are softer than the sugar mangels or beets, and cattle learn to eat them whole more readily. I consider pulping roots, when there is silage on which to feed the feed, as so much waste time. Most people can find enough to do on the farm without doing useless work.

The long red mangels are great croppers, but the yellow intermediate will yield about the same, and on account of their shape they do not break

up so much in harvesting. The sugar mangels or beets are the best to grow. They keep better and are harder, do not break and are a little higher feeding value. The yield is quite satisfactory, and they are easy to harvest—unlike the sugar beet grown for the sugar factories, they stand well out of the ground.

RICH SOIL REQUIRED.

The soil cannot be too rich for mangels or beets. For these it is best to manure the land well the fall before. However, good crops can be grown from spring prepared ground. Manure heavily with well rotted manure, or with manure containing not too much straw, as that has a tendency



A Well Lighted, Well Ventilated, Well Drained Eastern Ontario Stable

The cow stables in which is produced the milk that supplies the City of Ottawa, came in for most favorable mention in the report of the Ontario Milk Commission. The dairies that supply Ottawa are sanitation. Note the abundance of windows provided, also the outlet chutes and the inlet apertures of the ventilation system of the stable illustrated.

to make the soil too dry. Plow as early as possible and keep the soil well worked in order to get it mellow and to start as many of the weed seeds as possible so they will not bother so much later.

SOW MANGELS ON THE FLAT.

Some prefer to sow their mangels on ridges. I have grown them of late years on the flat and have sown the seed with the grain drill, using every fifth hole; that puts the rows 35 inches apart, which is close enough.

From four to six pounds of seed is usually sown; four pounds is quite enough if sown evenly, but it is better to have them too thick than too thin. Some sow their mangels as early as May 1st; but I think labor will be well spent if the seed is not sown until after the 15th of May, and in the meantime the ground is kept worked up and gotten in very nice mellow condition. The seed, then,

comes up quicker and the weeds do not get such a start.

SOAK THE SEED.

In order to hasten germination it is a good idea to soak the seed. First put the seed in a grain bag and pound it on the floor by swinging the bag as one would a mallet. The seeds from striking the floor and one another will wear off the roughness and permit of them being sown more evenly. Blow out the dust after pounding and put the seed to soak. Make the soil quite wet and drain off any surplus water not taken up in six or eight hours. Keep the seed in a fairly warm place; stir it occasionally so that the top seeds will not become too dry, and then after a couple of days the seed should be about dry enough outside to sow well. They will still be soaked on the inside. If not dry enough to sow well, then dust-plaster or sifted ashes on the seed and mix together. When prepared in this way mangel seed will come up very quickly and thus not let the weeds get the start, in which case the mangels can be thinned out much more easily.

THIN WHILE SMALL.

Mangels should not be allowed to get too large before thinning, as they mat together. Taken at the right time, they can be thinned as easily as turnips, and without using the fingers. They should be thinned 12 to 16 inches apart; the richer the ground the thinner they should be left, as they will grow larger on the rich soil. Some like to leave them 18 inches apart.

It pays to have rich, well-fitted soil for mangels or sugar beets, as it saves labor and in harvesting it is no more work to lift a big mangel than a little one, and mangels should be large enough to pile up like stove wood. Then you have an

immense lot of good feed off a small amount of ground.

It is a discouraging feature to have so many roadside curs in the country. Not only the hounds, which are kept by the genteel sport, but the mongrels kept usually by men in towns and villages who scarcely keep their families well can sport one or more curs. These curs in the autumn get hungry for blood of some kind and too frequently satisfy it with the blood of some farmer's nice flock of sheep. This flock is thus injured to the extent that they never do so well again. But even under such handicaps as the many dogs that are around, some of our farmers are doing well with sheep. A few sheep can be kept to advantage and will prove profitable on almost every farm.—T. S. Raynor, Ottawa, Ont.

The Pure Bred Sire—His Value*

How many of you have dairy herds that will average more butter fat per cow than your father's herd did, or perhaps than did your grandfather's herd? Have you made any improvement upon your father's methods of handling his dairy herd? Are you taking any steps to insure the heifer calves you are raising being better milk and butter producers than their dams? If you are using a "scrub" or a "beef bred" sire and hoping to have a herd of profitable dairy cows, your results will certainly not be very gratifying.

The task of building up a profitable dairy herd must begin with the sire. Without a pure bred sire, with the ability to get calves economically, all other efforts to improve your dairy herd must fail. The skillful breeder of any class of live stock realizes the importance of having a properly selected sire to head his herd. The average dairyman, however, gives this important subject little thought and makes use of a scrub sire because of the idea that it is cheaper to do so, or because his father got along all right with a scrub sire and he, himself, has not given the matter much thought. The scrub sire and the unprofitable cow go hand in hand in retarding dairy progress; where you find one you generally find the other. It is not necessary that every farmer have pure bred cows of a dairy breed in order to have a profitable dairy herd for high grades are just as efficient producers.

The following shows very distinctly the rapidity with which the qualities of the sire accumulate in the high grade:

Generation.	Blood.	Percent. Improved.	Percent. Unimproved.
1	1/2	50.	50.
2	3/4	75.	25.
3	7-8	87.5	12.5
4	15-16	93.75	6.25
5	31-32	96.87	3.12
6	63-64	98.43	1.56

This shows very well the truth of the often heard statement, "The sire is one-half the herd." It does not mean, however, that the same sire must be used throughout the six generations. This illustration is true whether or not a change in the sire is made. With the properly selected pure bred sire used on the common cows found in the average herd, the improvement will be much more rapid and the sire will be a great deal more than one-half the herd. His being pure bred gives him greater power to stamp his characteristics upon the offspring than can the grade cow.

Up-to-date dairymen are beginning to realize the value of pure bred sires in increasing the production of the herd and decreasing the cost of producing butter fat. Do not be afraid to pay a good prize for a pure bred sire to head your herd and never buy a sire because the cost in dollars and cents is low, for you will surely realize some day that his actual cost was indeed very great. If he is a sire that will produce daughters that have milking qualities developed to a high degree, the cost should be of secondary importance.

Valuable information as to the importance of the sire in improving or injuring the productive capacity of the herd can be had from a study of the dairy records of the State Agricultural College of Missouri.

By comparing 10 daughters of a sire with their dams, it was determined to what an extent these daughters were influenced by their sire, that is, whether or not they were superior producers to their dams. It was found that 10 daughters of one sire average 216 pounds of butter fat yearly; while their dams average 234 pounds yearly. It can readily be seen that this bull decreased the average production of the daughters 18 pounds under that of their dams. With another sire that was used there was no decrease or increase, the

*This article is part of an information circular sent out by the Blue Valley Creamery Co. to its patrons.

herd being at a standstill. Another sire which was used increased the average production of 10 daughters 110 pounds of butter fat per cow over that of their dams. This 110 pounds of butter fat at an average price of 25 cents a pound, would make \$27.50 that each daughter earned in excess of the earnings of her dam. Counting on the same basis 30 cows milked six years, we have \$4,950 worth of butter fat produced by the daughters in excess of that produced by the dams. You can readily see what the great value of this bull would have been had he been owned by a small association of neighboring patrons. He would have been cheap at \$1,000, while the other two bulls mentioned would have been expensive at \$10.00 because they left the herd in a worse condition than they found it. There is no question but that many farmers are lowering the productive capacity of their herds every generation on account of their paying no attention to the selection of sires.

Investigations carried on in some Indiana herds by the Indiana Experiment Station showed that herds in which pure bred sires were used were producing butter fat an average of 3 1/2 cents cheaper than herds which were ungraded. While the average profit per year from the ungraded herd was \$19.62 a cow, that of the graded herd was \$36.04 a cow. On an average the graded herd produced 64 pounds of butter fat per cow more than the ungraded herd. There is no question but that the purchase of a pure bred sire would be one of the best investments our patrons could make.

Hints for the Amateur Beekeeper

D. Anquish, Middlesex Co., Ont.

It is to every beekeeper's interest to look after his bees and to see that they have sufficient stores to carry them through until fruit bloom. Bees need quite a lot of stores from now on for brood rearing. The queen starts to lay eggs in March and her energy is increased according to the amount of stores that there is in the hive. The more eggs the queen is induced to lay, just so many more bees there will be in the hive when honey harvest arrives.

Since all the old bees, or the ones that were in the hive during winter, die off before June or before the clover honey harvest comes, it behooves every beekeeper to have all the young bees possible to take their place; and not to be satisfied at that but have a great many more.

I have kept bees for a great many years and have had my failures, also successes, and I know nearly where the trouble lies. Beekeeping is not like a great many other pursuits. You cannot see into the beehive every day and see how everything is coming on the same as you may into a poultry house or cow or horse stable, and the bees cannot let you know when they want more feed. We have had a fine winter for bees; it was steady and we had a few nice days early, during which the bees were able to have a flight. The season has been very encouraging, especially to the beekeeper that had his bees well packed on summer stands. I packed away into winter quarters last fall 240 colonies all on summer stands. They are all alive and in fine shape and with abundance of stores to carry them through. I always look out for that in the fall.

See to it that you have everything in readiness for the honey harvest when it comes, for if you don't, it may slip by without you getting very much honey and then the only satisfaction you will have is to resolve that you will not be caught that way again—poor satisfaction.

The corn crop works into a rotation very conveniently, as a cleaning crop. It furnishes all the advantages of a summer fallow and at the same time yields a harvest that exceeds in value that of almost any other farm crop that can be grown in Ontario.—J. H. Coatsworth, Essex Co., Ont.

The Culture of Alsike Clover

Wm. F. Hardy, Victoria Co., Ont.

From experience gained from growing alsike for seed for about 20 years, I assure Farm and Dairy readers that to be a successful alsike grower a great many things must be learned from experience and from experimenting with the particular kind of soil with which one has to deal. The time of sowing and the way to prepare the seed bed differs but little from the approved way of seeding down to the common red clover. As soon as the land is dry enough to work mellow in the spring, thoroughly cultivate and harrow so as to have a fine seed bed.

We always sow the seed with some kind of grain, either wheat, barley or oats, using the grass-seed sower such as is attached to any common drill. After drilling, give the land one stroke with the harrows to cover all seed, and leave the soil as level as possible. I also try to get the land rolled before the seed germinates, otherwise the crushed earth would smother the small plants.

Opinions differ widely regarding the quantity of seed to sow per acre. I have known as little as three and as much as 10 pounds to be sown per acre. With our land, which is a strong clay loam, with a naturally well drained subsoil, I have found about six pounds per acre to give the best results. One must aim to have the plants thick enough to pretty well cover the ground. The object is to have the plants stand up well when they head out to blossom on the following spring instead of spreading over the ground and growing straw instead of seed.

After the grain crop is harvested where the seed is sown, I would advise keeping the stock from pasturing on it in the fall. The young plants need to get a good growth and the stubble should be left standing, since it proves a valuable protection during winter.

The growing and harvesting of alsike differs very materially from red clover. Red clover is usually cut the first time about June 20, and then left for seed at a second cutting. But alsike should never be treated this way. We keep everything off of it in the spring and study to have the seed mature as early as possible, as the early seed is generally the best. Alsike should be ready to cut at about the time of the last of haying, or about the same time as the early fall wheat. Experience mixed well with common sense and close study of the crop will teach you best when to cut and how to handle it after it is cut. It is easy to grow a good crop of alsike and then lose half the seed before you get it into the barn.

Cultivation of the Corn Crop

E. B. Tole, Kent Co., Ont.

Our corn is generally planted on stable ground, or ground that produced a grain crop the previous year. Our soil is a rich loam, neither sandy nor heavy clay; it sells readily at \$100 an acre, so we must grow a good crop to make it profitable.

We cover our corn ground in the spring with coarse barnyard manure. This is plowed under about seven inches deep in the beginning of May. We roll the land and let it stand for a few days. Then we thoroughly cultivate it both ways and roll again and cultivate it again and harrow it till the surface is quite fine. We generally mark the field both ways with a horse marker, making the hills about three feet nine inches apart. We plant with a hand planter, putting the corn in about two inches deep. We like to plant from May 24th to the 26th, as the ground is then in a warm state to start the corn.

As soon as the corn begins to show we run a light weeder—something like a horse rake—over the field, perhaps two or three times, to check the small weeds that are starting and to keep the land loose. When the corn is up about four inches high, we start to cultivate it with either a single or a double horse cultivator. A mar and horse

should go over four acres, twice to each row, in one day. We cultivate it both ways, then in a week or 10 days, according to the weather, we go over it again in the same manner and we continue to cultivate it every 10 days as long as we can get through it; the more we cultivate it the better the crop. We generally cultivate quite deep, three to four inches, until the corn is a foot high or more. We do not use a hoe very much, but do most of the work with the cultivator, being careful to go close to the hills when the corn and weeds are small. Then after the corn gets up three feet high or more very few weeds will start.

We are always careful to plant only one kind of corn, as corn is a plant that mixes readily. We have planted the same kind of corn for the last 19 years and have only once had less than 100 bushels of ears to the acre; we have had as much as 140 bushels to the acre. The White Flint corn is the kind we have planted each year. We are careful to select for our seed corn only well matured ears that are well filled and thoroughly ripened.

Some Details of Corn Culture
Thos. C. Warwick, Kent Co., Ont.

The first thing essential for a good corn crop is rich, well drained land; then good pure seed. The field I selected last year and on which I grew prize winning seed was a black clay loam thoroughly under drained. It was spring plowed

An Object Lesson From Dairy Records
J. C. Fullick, Oxford Co., Ont.

The only way to tell whether or not a cow is paying is to keep records. Records show what might be done if we would weed out the poorer cows of the herd. There are some poor ones in every herd. I disposed of three last winter.

My herd consists of 14 cows; 11 are over four and three under four years old. They are all fed alike while in the stable, so I cannot tell what they might do individually if they were fed to their full capacity, as some will consume more food than others.

In winter when my cows are not milking, they are fed cut corn and straw mixed with about 25 pounds of roots. When they come in again, hay and meal is given. Through the summer months, in the past I have been depending on pasture, but I find that I must make a change and supply other food of some kind.

A DIFFERENCE OF 3,293 LBS. MILK.

The following are some figures in connection with my herd showing what they did last year:
Average of herd 6,704 lbs. milk
Best cow in herd 8,260 " "
Poorest cow in herd 4,967 " "
Average of butter fat for herd, 247 lbs., at 25c., \$61.85; butter fat for best cow of 304 lbs., at 25c., \$76.17; butter fat for poorest cow, 186 lbs., at 25c., \$46.72.

One-half of the cows in the herd fell below the average for the whole herd, this lower average

in nature, alfalfa, like thousands of other plants, is aided in its lease on life by the insect world. It is not known just how many insects or birds assist this remarkable plant, but the honey bee is the most conspicuous, the most industrious, the most eager, and certainly the most useful. Careful observations have been made of seed plots grown near colonies of bees, and also of those so far from any bee colonies that it was safely assumed no bees had visited the fields producing the pods. In every case it was found that those from nearby fields had from 50 to 75 per cent. more seeds than the others and that they were larger and more perfectly developed. In Colorado and Western Kansas, where bee culture has been greatly developed in recent years, it is found that the alfalfa seed crop in fields nearest to bee colonies is much heavier and of better quality than that of fields but a few miles away.

At the Kansas experiment station a small plot of vigorous alfalfa was covered just before coming into bloom with mosquito netting supported on sticks. It was therefore known that no bees nor other insects could come into contact with the blossoms. Later a careful examination disclosed that the pods which had formed were entirely without seeds.—From Colburn's "The Book of Alfalfa."

Culture of the Potato Crop*

Wm. Jenkins, Parry Sound Dist., Ont.

As the warm weather approaches in the spring, I am very particular to keep the roothouse, where my potatoes are stored, closed, so as to keep the warm air out. In this way the potatoes are kept from sprouting. About this time of year I select what I want for seed. I select medium-sized, smooth potatoes. About 10 days before I intend to plant I bring them out and spread them on the stable floor. The potatoes will then begin to sprout and be just right for planting.

When cutting seed potatoes I usually cut them in half or make three pieces. They are planted the same day as cut, or not later than the next day. Two pieces are put in a hill. The variety I grow mostly is the American Wonder and Early Rose. I have been growing different kinds of potatoes, but these two, for an all-round crop, generally do the best.

SELECT CLOVER SEED.

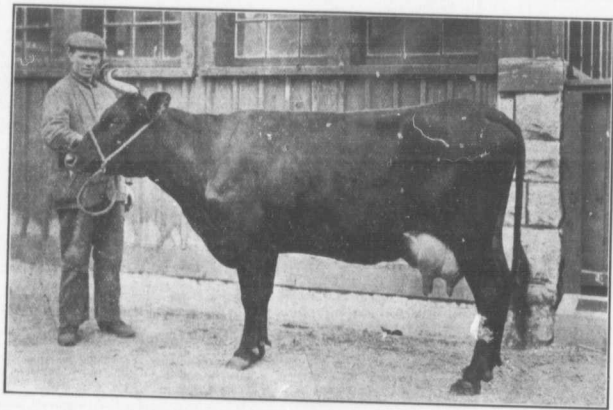
The soil here is a sandy loam. I usually select clover sod for potato ground. It is plowed in the fall and given a coat of barnyard manure in the spring. It is worked with the disc and iron harrows. When I get it in shape to plant, I mark the land with a home-made marker, marking it two ways, the marks being three feet apart each way. Then I commence to plant. With a shovel I remove the soil where the first row of potatoes is to be planted and in doing so for the second row I throw the dirt on the first row, and so on to the end of the patch. By doing so I dig the place for one row and cover the other.

As soon as it is possible to see the rows after the plants begin to come above the ground, I cultivate the patch two ways. In about a week I cultivate it again, using the small marked boards and throwing the soil to right and left. Sometimes I cultivate again before I finally hill the potatoes. This depends somewhat on the weather.

For finishing I use large mould boards on the cultivator. It is a mistake to hill too much. I try to have the soil hollow in the centre of the hill; this will hold the rain so that it may soak into the hill.

For the bugs I use Paris green and water. For several years now potatoes have been the most profitable crop we could grow, that is, when they are properly attended to; some farmers in this district seem to plant potatoes for the lugs. Then at digging time they wonder why the crop is poor

*Mr. Jenkins won a prize in the field crop competition, also, at the last Guelph Winter Fair.



A French Canadian Cow—A Popular Breed in the Province of Quebec

Inoquette—871—a cow in the French Canadian herd at the C. E. F., Ottawa, has a record with her first calf, at 2½ years, of 6,679 lbs. milk, 41 per cent. fat, equivalent to 216.65 lbs. butter. French Canadian cattle are very hardy, and have many excellent qualities. On both sides of the St. Lawrence River, below Quebec City, and in the Lake of St. John District the French Canadian represents for the most part the sole breed kept.

being 216.2 lbs. of fat, at 25c., \$54. Had they been up to average of whole herd, it would have made \$7.85 more each.

Best half of herd made 279 lbs. of fat, equal to \$69.25, a difference of \$8 each more than the average of whole herd. The whole herd made 3,458 lbs. of fat at 25c., \$864.86. Had whole herd made as much as best cow, it would have made 4,265 lbs. fat, equal to \$1,066.45—a difference of \$201.59 on the herd.

Bees Important to Alfalfa

It has been discovered that the honey bee is of even more importance to the alfalfa than the alfalfa is to the bee. The wonderful strength and speed of the bees takes them long distances for their food and they have recourse to a great variety of plants. But the peculiar construction of the alfalfa blossom renders it unable to fertilize itself and its shape makes cross fertilization very difficult. In the marvelous "balance of good"

I try to have as near to four stalks in a hill as possible. When hoeing I cut out all crooked or smutty stalks.

Great care must be taken in the selection of seed, which must be pure from other varieties, well matured and filled right up to the tip. Corn from the tip of an ear should not be planted. I select my seed in the fall during the husking season and hang it up by the husks in some place not too much exposed to the winter.

RUN IT YOURSELF.

You can quickly learn to run steam engines by studying the *Young Engineer's Guide*. Have the expense of hiring an engineer. Book recently revised, 324 pages. Illustrated. Endorsed by engine manufacturers and leading engineers everywhere. Price 50 cents. Write Windsor Supply Co., Windsor, Ont. FREE—Our large catalogue—*Engineers' Register*—

SEED CORN

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

M. A. JONES

RUTHVEN, ESSEX CO., ONT.

SEED OATS For Sale

Black Tartarian, second year, from imported seed. Scored 92½ points in standing field competition; 166 bushels from 6 sown. \$1.15 a bushel for a limited amount. Bags included.

B. LAYCOCK

Lock Box 155

Gravehurst, Ont.

CALVES RAISE THEM WITHOUT MILK

Booklet Free

STEEL, BRIGGS SEED CO., LTD.
TORONTO, ONT.

THE BEST LINIMENT

OR PAIN KILLER FOR THE HUMAN BODY

Gombault's Gauitic Balsam

IT HAS NO EQUAL

For the treatment of rheumatism and all other ailments of the joints, the *Wrist, Ankle, Shoulder, Neck, Back, Hip, Knee, and Foot*. It is also a *WOUND HEALER*. It is a *Body* as equal to a *Liniment*.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore is harmless to the system. It is a *WOUND HEALER*. It is a *Body* as equal to a *Liniment*.

REMOVED THE SORENESS—STRENGTHENED MUSCLES
MILKING—*WIND*—*COLIC*—*BRUISES*—*CHILDS*.
Gombault, The One-Only Genuine Balsam of
This rheumatism may cost \$10.00 paid in
doctor's fees. Write for booklet S.
Price \$1.00 per bottle. Sold by druggists, or sent
by mail. Write for booklet S.
The LAWRENCE-WILLIAMS COMPANY, Toronto, Can.

A
Purveyed Safe
and
Reliable Remedy
for
Sore Throat
Chest Cold
—Backache
—Neuralgia
—Sprains
—Strains
—Lumbago
—Diphtheria
—Sore Lungs
—Rheumatism
and
all SHU Joints

Feeding for Official Records

G. H. Gardner, Supt. of Advanced Registry, Delaware, Wis.

The Ohio farmer-dairyman, whom I mentioned some weeks ago, writes that having sires and dams, grandams and granddams, which have been developed in size, vigor and capacity by proper food and care, at least as far as such development is measured by advanced registration results, he valued too highly for his purse, and asks for suggestions as to selecting and starting a herd and testing for the Advanced Register. The old recipe for cooking a hare biceps, first catch your hare, so, in developing a pure bred herd, first select your foundation. It will be wise to move carefully, selecting well-grown, thrifty, promising cows and heifers of approved type and of the milk and flesh form; but not rejecting an otherwise desirable animal because she happens to be of the milk form, nor refusing a boy because the owner of the herd will only allow you to select from among his best cows by your paying him well for the privilege. Any dairy cow needs a rest of 60 days before parturition, and will yield more milk per year by this rest. If H.-F. cows are fed much grain at drying off time, it is difficult to get them dry; but when once dry, they can usually start in with 10 to 12 pounds a day. Keep the cow comfortable both before and after parturition; using plenty of bedding and the card and brush. See to it that she has water in plenty.

Milk three times daily from the start, and at nearly equal intervals; 5 a. m., 1 p. m. and 8 p. m. being convenient hours; recording the weight of each milking. Feed the grain ration by weight, feeding as often as the cow is milked, and increasing it slowly till the cow is on full feed. Classes differ, but one to one and one-half pounds will usually be found a sufficient daily increase. Keep the feed-box or manger perfectly clean; removing at once any feed left uncleanly, and reducing the next feed proportionally. Fifteen to 18 pounds of grain a day for a heifer, and 20 to 24 pounds for a full aged cow will usually be all that a novice should feed, though after gaining experience he may safely feed more; but it is only the cow or heifer making a very large record that needs so much. The appetite for grain may be checked by experienced feeders, but begin his test when he knows the cow is feeding her best; but the novice had better begin about ten days after calving.

Denmark Conditions Reviewed*

Danish farmers have for many years depended on the hog for necessary revenue. While continental markets were open for live hogs, and paid good prices for most breeds, there was no incentive to produce a special type of pig. The closing of Germany against live hogs from Denmark caused Danish farmers to seek a new market. They turned to Great Britain. Investigation revealed the fact that highest prices were paid for what was known as Wiltshire sires. It was discovered also that milk feeding was favorable to the production of a high quality of bacon.

Co-operation had already proved its value in the dairy industry. It could do so in swine husbandry. The Danish farmer, industrious, persistent

*An extract from the report of the Swine Commission.

and well educated, undertook the task of preparing his pigs for the highest priced trade. The Government recognized the possibilities of the swine industry, and was ready to lend a hand to the work. Breeding centres were assisted for the developing of improved seed stock; co-operative pig-breeding societies were organized for the dissemination of good blood at little cost, experiment feeding stations were set in operation to solve the question of economical feeding. Through these several agencies the pigs on Danish farms have been brought up to a high standard.

In the early period of the bacon industry co-operation was applied to curing and marketing until the entire agricultural fabric had assumed great strength. Commencing with the breeding stock it extends through the rearing of the pigs, the curing of the bacon and the securing of great market values in Great Britain. The work all through is conducted with energy and intelligence. Harmony prevails all along the way with the result that the whole work is constructive. Things that are done are lopped off, those of doubtful value eliminated or improved, while all that is good is cultivated and encouraged. The Danish official is apparently never satisfied with present conditions. To press forward has been his motto from the first and his ambition has not been dulled.

Consistent growing revenue from the hog has been a strong incentive to the man on the farm. In planning his rotation the Danish farmer remembers the pigs and grows what will best suit that branch of his operations. He has skin milk and has studied its value in pork production. He has learned the correct quantity to feed for best results for pigs of different ages. He combats his food and prepares them to reap the last cent of profit. Through the co-operative curing organization he pays an expert to look after the conversion of his pigs into bacon and dry bacon. He pays for having these things done, he does not worry about them but devotes his energy to cheap production of the most money. The bacon industry of Denmark might be compared to a well conducted departmental store having a competent manager in charge of each department. The success of each branch is the success of the store which in the case in question is the Danish swine rearing industry.

Cabins for Brood Sows

Respecting the cabins in which brood sows may be wintered we would be glad to have your answers to these questions:—
1—What size is found most satisfactory?
2—What material is required in construction?
3—How often is it advisable to clean out a brood cabin?
4—Should sows farrow in these small buildings?—C. B. Brant Co., Ont.

1. Cabins for brood sows to be satisfactory should be not less than eight feet long by six feet wide. The roof should extend along the longer side that is the gables should be on the six foot dimension.

2. As material necessary for such a cabin, we find satisfactory here is required:
Sills, 3 pieces, 4 x 4 in. scantling, 9 ft. long; floor, 8 pieces of 2-inch plank, 6 ft. long, 1 ft. wide; roof, 16 pieces of inch board, 8 ft. long, 1 ft. wide; roof battens, 14 pieces board 8 ft. long, 4 inches wide, one inch thick; gables, 100 square feet inch lumber.

3. Pens should be cleaned out every 10 days or two weeks. Fresh straw should be put in as necessary, always after cleaning.

4. Sows should not farrow in these cabins excepting sometimes in summer. Sows should be taken into pigsty about a week before farrowing. Sows sleep four or five in each cabin in winter. S. Gridale, Agriculturist, C.E.F., Ottawa.

FINANCIAL STATEMENT

OF THE

MUTUAL LIFE OF CANADA

For the Year Ending December 31st, 1908

Head Office: WATERLOO, ONTARIO

CASH ACCOUNT

INCOME		DISBURSEMENTS	
Net Ledger Assets, Decem-		To Policyholders:	
ber 1st, 1907	\$11,069,846 22	Death Claims	482,217 23
Premiums (Net)	1,917,334 15	Matured Endow-	
Interest	628,807 23	ments	271,116 00
		Surrendered Poli-	
		cies	107,608 23
		Surplus	85,596 46
		Annuities	11,221 34
		Expenses, Taxes, etc.	\$ 827,749 36
		Balance Net Ledger Assets,	
		December 31, 1908	12,363,066 46
	\$13,615,907 60		\$13,615,907 60

BALANCE SHEET

ASSETS		LIABILITIES	
Mortgages	\$ 6,244,701 78	Reserve, 4 p. c. p. a., and	
Debitures and Bonds	4,127,123 23	3 p. c. standard,	
Loans on Policies	1,070,825 07	Reserve on lapsed policies	\$10,967,431 69
Real Estate Company's		on which surrender	
Head Office	32,883 39	value is payable	11,237 57
Cash in Banks	309,216 10	Death Claims unadjudi-	
Cash at Head Office	2,222 45	Present value of death	
Due and Deferred premi-		claims payable in in-	
ums (Net)	336,944 17	statements	44,907 81
Interest due and accrued	259,776 92	Maturity payments un-	
		adjusted	4,400 00
		Premiums paid in advance	14,365 25
		Due for medical fees and	
		sundry accounts	9,822 78
		Credit Ledger Balances	23,297 03
		Surplus, Dec. 31st, 1908	1,852,016 54
		(Surplus on Government	
		Standard of Valuation	
		\$2,291,034 93)	
	\$12,963,674 37		\$12,963,674 37

Audited and found correct.

J. M. SCULLY, F.C.A.,

Auditor.

GEO. WEGENAST,

Managing Director.

Waterloo, January 25, 1909.

New Business written, 1908, (increase over 1907, \$171,062) .. \$ 72,252,464
Insurance in force (increase over 1907, \$3,092,035) .. \$54,693,882
Surplus (increase over 1907, \$348,296) .. \$ 1,852,016

Booklets containing full report of the Annual Meeting, held March 4th, 1909, have been published, and are being distributed among Policyholders and others.

W. H. RIDDELL, Assistant Mgr.

The Feeders' Corner

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

Substitute Roots for Concentrates

Recent investigations indicate that mangels may be used economically, in rations, to replace the grain ordinarily fed to dairy cows. The way seems to have been opened for a revolution in feeding methods, according to Bulletin 268 of the Cornell Experiment Station, entitled "The Substitution of Roots for Concentrated Foods in Rations for Milk Production." Mr. J. H. Grisdale, Agriculturist, Central Experimental Farm, Ottawa, practically confirms the findings of the Cornell experiments. He writes: "Nine pounds of roots for one pound of meal will, up to half the quantity of meal fed previously, be found satisfactory." During the last six years the cost of concentrated feeding stuffs has increased steadily. The possibility of placing before our farmers a means by

draw the following conclusions as being true under the conditions noted.

1. The amount of dry matter required to produce one pound of butter fat, taking the average of the results of all rations fed in this experiment, was 21.83 pounds.
2. Less dry matter was required to produce one pound of butter fat when mangels were fed as a succulent food with a full grain ration than with any other combination.
3. The average cost of one pound of butter fat under all conditions was 23.4 cents.
4. The lowest price at which a pound of butter fat was produced was 20.7 cents, with ration I (hay, grain and silage).
5. The cost of one pound of butter fat with ration II (hay, grain and mangels) was 27.4 cents. This was considered too high to be economical.
6. The cost of one pound of fat with ration III (hay, grain, mangels and silage, grain ration reduced one-half by substituting mangels) was 21.0 cents. Since the cost of one pound of fat in the check group averaged for the two years 20.6 cents, ration III was considered economical.
7. One pound of dry matter in mangels is a little more than equal to

A Wonderful Jersey Cow

Prof. W. J. Fraser, University of Illinois

A marvelous yearly record has been completed by a Jersey cow, Jacoba Irene 146443, belonging to Mr. A. O. Auten of Jerseyville, Jersey county, Illinois. This cow produced in one year 17,253 pounds of mostly neat tons) of milk, and 1,126 pounds of butter. This is an official record, made by a representative of the Dairy Department of the University of Illinois, and has broken all Jersey records. Only one other cow in the world has a higher record for one year, but, taking Jacoba Irene's average production for four years, she stands absolutely without an equal.

This is over four times the production of the average cow for Illinois, and seven times that of the poorest fourth in Illinois. There are 250,000 poor cows in Illinois, so poor that it would take 209 of them to equal one such cow as Jacoba Irene in actual profit. How much easier to milk one such cow than 209 poor ones! The first would be play—the latter drudgery.

During this year she could have supplied 80 pounds with the average amount of milk consumed per capita, and furnished cream for their coffee, besides. This was rich Jersey milk, containing 5 1/2 per cent. butter fat, and worth, for direct consumption, at least 8 1/2 cents a quart, amounting to \$635.50 a year. A dairyman would need only four such cows to supply milk for the average sized milk route, make him a good living, and have an excellent profit besides. If one could be so fortunate as to own 10 such cows, he could have a nice little income of \$6,355 a year.

The 17,253 pounds of milk produced by Jacoba Irene during the year contained 14.65 per cent., or 2,527 pounds, of total milk solids. This shows something of the perfectly enormous amount of work done by this efficient dairy cow in one year. Compare this with the work done by the average steer, weighing 1,100 pounds at the age of two years. When born, he will weigh close to 100 pounds. Thus, in the two years of growth he has actually produced 1,000 pounds of carcass, only one-fifth, or 200 pounds, of which is edible dry matter. This means that Jacoba Irene produced as

much edible solids in one year as would 25 steers, thus certainly establishing, by a good margin, the world's record for a cow of any breed. The total cost of the feed consumed by Jacoba Irene during this test year was \$36.43.

FEED DURING TEST.

Roughage.	Weight	Cost	Total
Silage	7410 lbs.	\$11.12	.....
Oil alfalfa	1074 "	8.06	.....
Hay	3000 "	15.00	.....
Totals	11484 "	.....	\$34.18
Grain			
Bran	1693.5 lbs.	\$18.97	.....
Ground corn 660.5 "		6.60	.....
Oil meal	488.5 "	7.80	.....
Gluten	1614.5 "	24.21	.....
Ground oats 363.5 "		4.53	.....
Alfalfa fat	14.5 "	0.14	.....
Totals	4835.0 "	.....	62.25

Total cost of feed.....\$36.43
900 pounds in pasture.

Record for 37 consecutive months, Dec. 19, 1905, to Jan. 24, 1909: Milk, 42,065 lbs.; fat, 2331 lbs.; butter, 2755 lbs.

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

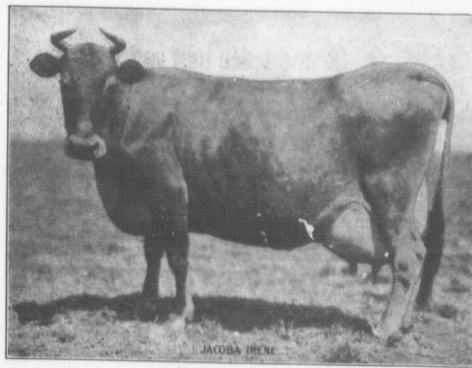
THE IDEAL GREEN FEED SILO

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



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

CANADIAN DAIRY SUPPLY CO. LIMITED
MONTREAL



JACOBA IRENE

A Jersey Cow with a Record of 1128 Pounds of Butter in a Year

The marvelous record of the Jersey cow Jacoba Irene affords a fine example of the possibility of the dairy cow as a producer of human food. This record is for an authenticated test, supervised by the Illinois Agricultural Experiment Station. For details, see adjoining article.

which they can reduce their grain bills materially and produce more of the food for their own cows on their own farms, is suggested by the results of these experiments. Danish experiments relative to this subject seem to indicate that one pound of dry matter in roots is equal to one pound of mixed cereal grains. Such results from Danish experiments suggested similar work to the authorities at the New York Station. The purpose of the Cornell experiments was to determine the value of the dry matter in mangels as compared with the dry matter in grains, in rations for milk producing cows.

The results of the experiments at the Cornell station seem to agree with the results of the Danish experiments, and perhaps go a little further, in that they seem to justify the conclusion that one pound of dry matter in mangels is equal to one pound of dry matter in grain, at least when one-half of the grain ration is replaced by mangels; so far as feeding value is concerned in the production of milk, this seems to be a safe assumption from the data obtained.

Taking into account the facts given in their summaries, the Cornell experimenters have thought it safe to

one pound of dry matter in silage.

8. One pound of dry matter in mangels is equal to one pound of dry matter in grain, and mangels may replace one-half the ordinary grain ration with mixed hay and silage.
9. Accepting the average price of commercial feeding-stuffs at \$30 a ton, and considering one pound of dry matter in mangels equal to one pound of dry matter in grain, mangels may be used economically in the ration to replace one-half the grain ordinarily fed when they can be produced and stored ready for feeding at \$4 a ton. In arriving at this conclusion, the average amount of dry matter in grain is considered to be 90 % and in mangels to be 12 %.
10. It would seem to be a safe assumption that farmers can raise mangels for \$4 a ton and thus reduce their feed bill materially by the judicious use of mangels to replace one-half of the grain ordinarily fed in the ration.

I now beg to hand you, herewith, enclosed \$1.00, being my subscription for Farm and Dairy for another year. While I am not a farmer, still it keeps me in close touch with farm life generally, and I feel that even if this \$1.00 was a sacrifice, I would have to make the sacrifice.—S. Way Kent, Brant Co., Ont.

Truth About Roofing

The first edition of "Truth About Roofing" has been completely exhausted. So we have been compelled to publish a second edition of this famous booklet. This is an improvement on the first edition. It goes right to the heart of the roofing problem. It tells the truth about wooden shingles, prepared roofing materials, and steel which is the only method of arriving at a correct conclusion as to which material is the best roofing investment. It explains the British Government's Acid Test and our Free Lightning Guarantee.

PRESTON

SAFE-LOCK SHINGLES

The information contained in this booklet we believe is accurate. We have taken pains to see that every statement we make can be verified. You can rely on this booklet to give you light in the choice of roofing materials. We should really charge you something for this booklet, but we will send it FREE as a reward to all who fill in, cut out and mail the coupon to us by return mail.

METAL SHINGLE & SIDING CO. Ltd., Preston, Ont.
BRANCH OFFICE AND FACTORY: MONTREAL, QUE.

Fill in, cut out and send coupon by next mail

Name _____

P.O. Address _____

County _____

Prov. _____

DOVER Street Factory. Please send your booklet "Truth About Roofing" and express interest in roofing and would like complete information about PRESTON Shingles.

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

HORTICULTURE

How to Prune and Why

H. Stabler, Bruce Co., Ont.

Aside from shaping the tree in the nursery, which is done before the trees are received for planting, pruning should begin the moment the trees are being set in the orchard. No systematic method of pruning can be recommended which will apply with equal success for all varieties of apples and for all localities. Varieties differ in shape and in habit. Different soils and climatic conditions necessitate different methods in different places. Even under similar conditions and with the same variety one man succeeds with one method while another succeeds perhaps equally as well by adopting a different plan. There are, however, certain principles which should be borne in mind in determining how to prune.

THE PROPER HEAD.

Pruning as a whole should be regarded as a means of adapting the tree, or its individual branches, to environment or surroundings. In considering the environment, the climatic condition of the region is important. Apple trees should be pruned so as to give the maximum amount of sunlight to every inch of leaf necessary to give sufficient sunlight for the proper development and the proper coloring of the fruit. The head may be formed of five or six leading limbs, which spread out equi-distant from each other as scaffold limbs. This arrangement of the branches affords an open centre to admit sun and air. On hill or ridge land trees should be headed much lower than in the valley. This is to prevent the wind from blowing the tops about and destroying the fruit. Trees that are headed low protect the bodies from sunscald, the fruit is gathered and spraying is done with much less effort.

WHEN AND HOW.

It is generally best to remove surplus limbs while they are young, rather than to leave them until they are large. The removal of very large limbs should not be practised where it can be avoided. It exposes parts of the tree to the sun which have been accustomed to semi-shade, and also makes large wounds on the trunk. Disease may get into these large wounds before they heal over. It should be borne in mind, however, that a limb may serve a very useful purpose for a year or two, and then it may be removed if no longer needed.

In removing limbs it is best to cut them very close, so as to leave no suggestion of a knot. The closer the cut the larger the wound will be, but a large wound made by cutting close will heal quicker than a small wound, which leaves the base of the removed branch.

One must depend upon the cambium of the trunk to grow over the wound where a limb is removed from the trunk. If a short knot is left it will die, and the growing layer of the trunk cannot close until the tree increases sufficiently in diameter to grow over the knot.

The most of our pruning is done during March, April and May. One can see better when to remove limbs when the trees have no leaves, though diseased and dead parts should be removed whenever they occur. They can be more readily observed when the tree is in leaf. Not that every tree in the orchard will need pruning. If a tree needs no pruning, do not cut simply for the sake of pruning. Some trees, however, will need attention every year. A little pruning each year is better than much pruning at long intervals.

Brown Tail Moth in Nova Scotia

A despatch from Truro, N. S., dated April 14, indicates how thoroughly the work of exterminating the Brown Tail Moth is being carried on in Nova Scotia. A party of college students in charge of Professor Smith proceeded from Truro to Annapolis and Digby counties on April 15 to complete the work which has been in operation during the winter of exterminating the Brown Tail Moth. Only a few days remained before the caterpillars would leave their nests and spread over the trees, making it almost impossible to effect a destruction by cutting and burning the nests. The work of destroying these nests has been in operation since January last and has been more thoroughly done than in any previous year. Altogether, between 1200 and 1500 nests were picked and destroyed, in comparison with 6000 four years ago, thus showing that great progress has been made in destroying these insects.

Dr. Hewitt, Dominion Entomologist who recently visited the Province, recognizing the national importance of keeping this destructive moth out of Canada, purposes recommending that the Federal Department of Agriculture join with the Local Department in the work of eradicating the Brown Tail Moth, and from a general inspection of the area infested, is sanguine of at least keeping in control, if not absolutely destroying the moth. Citizens of Nova Scotia who are familiar with conditions in Massachusetts, and know that it costs over \$1,000,000 per year to repress this pest in that single State, cannot but endorse the active policy which the Local Department has pursued. It is hoped that during the next few days owners of properties in Kings, Annapolis and Digby counties at least will make a very thorough search of their orchards, with a view to finding any possible nests which may be present. The matter is of great private and public importance.

Examine Seed Potatoes for Dry-rot

Potatoes in Ohio, both early and late varieties, suffered severely in 1909 from premature dying, due to Fusarium blight, which causes dry-rot in the tubers.

The Botanical Department of the Ohio Experiment Station warns growers so they may avoid the losses which might otherwise come from planting diseased seed potatoes. Aside from reduced yield or premature dying last year, everyone needs to examine his seed tubers before cutting or planting. If potatoes from cooking are being used from similar stock, then the women of the household will find the disease wherever present.

The disease shows as dark or black spots running through the potato from the stem end. Usually the stem end of the potato, when diseased, will show a sunken appearance around the stem. In any case the dark spots near the stem end when cut across near the stem end with a knife, in case of bad infection the black spots may run half way through the tubers. Where the infection is slight, it may occur only near the stem end. Of course, some of the tubers may be free from spots, and these are safe for planting on new land, but the diseased tubers over in the soil as well as

Where the disease has not penetrated more than one-third of the length of the potato, the half of the potato toward the stem end may be used for seed with better results. In such cases, the knife used for cutting should be dipped in a solution of carbolic acid after cutting diseased tubers, and before cutting others. The point of this warning is to enable growers who have potatoes on hand to examine at once and note whether their own seed is safe to

plant. The usual seed treatment for scab, etc., will be very useful to kill scab, etc. spores which may adhere to tubers, and may be applied to the healthy portions after separation from the diseased parts of potatoes.

Varieties of Fruits Recommended


Lists of fruits recommended for planting in various parts of the province of Ontario are set forth in Bulletin 179 of the Ontario Department of Agriculture, which is issued by the Fruit Experiment Stations. The fruits recommended have been selected by the Fruit Experiment Stations and by experienced growers. General lists and district lists are given. After testing a large number of varieties of

fruits at the various stations, the advisory board has decided upon those sorts most desirable for planting. These varieties are given in the general list. The district lists given by the various experimenters show varieties especially adapted to the sections represented by their stations. Prominent fruit growers in various districts have supplemented the lists previously published, and which in some cases were incomplete.

Intending planters should secure a copy of this bulletin, which they will find most useful. The bulletin has been issued to offset the great disadvantage which faces inexperienced growers who desire to engage in fruit growing, because of the very large and confusing number of varieties. These selected lists of tested varieties are invaluable as a guide to intending planters.

Peerless

The fence that stands up against every strain



Our heavy all No. 9 PEERLESS Fence, made from hard steel, English Wire, has double the strength ever required in a wire fence. The galvanizing by the "acid wire," stands twice as much as that on ordinary fence wire. This means many years longer life—greater value. Do you want the best?

the fence that saves expense

because it needs no repairs and lasts a lifetime. It is rust that destroys wire fences. English Wire Manufacturers know how to prevent this. To this English wire add the PEERLESS method of construction and the PEERLESS lock and you have a fence without a rival. We are manufacturers of high grade farm, poultry, ornamental fencing and gates. Write for book.

THE BARNWELL BOXIE WIRE FENCE CO., Ltd.
Dept. H, Hamilton, Ont., Winnipeg, Man.

START TODAY TO GET READY FOR HARVEST TIME

DON'T put it off any longer. From now on 'till harvest you are going to be busier every day. Your grain is likely to ripen all at once. Then with the best harvesting machines—in proper condition.

To be sure of getting the best machine for your needs—you must make a careful selection. That takes time. That's why we say start today. Because

we know if you go into the matter carefully you will choose a McCormick Binder. The McCormick Binder will meet your requirements as no other machine will. It is built to meet the conditions encountered on the Canadian farm. It has stood the test of years. Its capacity to handle grain that is tangled or downy in simplicity, strength, durability, light draft, uniform, good work and reliable work of its knoter, combine to make it the best machine for you.

Other farm machines of McCormick make a long line, are not less valuable than the Binder. The line includes: Harvesting Machines, Binder Twine, Mowers, Tedders, Hay Rakes and Side Delivery Rakes, Hay Loaders, Disk, Shoe and Hoe Drills, Cultivators and Seeders, Smoothing Spring Tooth and Disk Harrows, Land Rollers and Scarifiers. McCormick dealers also handle Gasoline Engines, Cream Separators, Hay Presses, Wagons, Bicks and Manure Spreaders.

Every McCormick everywhere is recognized by farmers as a leader in its class. But we don't ask you to take our word for this. We say—Start today to investigate so you will have time to make a proper decision.

For catalogue and specific information on any McCormick machine, call on the local dealer or write direct to nearest branch house.

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

INTERNATIONAL HARVESTER COMPANY OF AMERICA
(Incorporated)
Chicago U S A



POULTRY YARD

The Field for Poultry

L. W. Steinhoff, Perth Co., Ont. We had the pleasure of paying one man in the township of Hibbert, Perth Co., Ont., \$150 for 91 turkeys, delivered at our plant last year during the latter part of November. This man stated that his flock had been very little trouble to him after they had a fair start and that he had only fed them on grain about 10 days at the finishing point.

Let me illustrate what some districts in the United States are doing with poultry. This past season we had E. P. Wiseman superintending our poultry plant at Stratford. He has been engaged in the same capacity over one of Swift & Company's larger poultry houses at Ottumwa, Iowa. Mr. Wiseman stated that from a district of 60 miles in area about Ottumwa that eight to 12 cars of poultry were shipped weekly and that it was not infrequent that they received from 100 to 300 birds from one farmer. It is a well-known fact that even the value of agricultural land depends upon its producing capacity, and in the district referred to, farm land is selling at from \$125 to \$175 an acre.

We have recently opened a local plant at Stratford for killing, dressing and packing poultry for Messrs. Swift & Company, who have established an excellent reputation for their poultry, both in the United States and in Great Britain. The feature that is giving us the greatest concern is to obtain a sufficient supply at this point without having to draw from too great a distance. There is no richer agricultural district in Ontario than around Stratford, but not much

attention has been given to this branch of the farming industry.

In the attempt to develop this branch of our business in Ontario, we hope to be a benefit especially to the agricultural community in putting up our poultry in a systematic, up-to-date and reliable style of packing. For instance, one of the crude features in common practice in killing fowls in Canada in the past has been that of breaking the necks and leaving the blood in the carcass. Consumers of poultry killed in this way will confirm the statement that the necks are always found to be filled with clotted blood, and in many cases this extends up into the trunk of the fowl. The method adopted by Swift & Company is to bleed all poultry through the mouth, and it is cleaned by skilled pluckers, packing small varieties 12 in a parchment lined box in single layer, with feet washed before being packed. All birds are passed over the neck before being packed and graded according to quality and weight, so that purchasers of our poultry will know just what they are getting.

By these systematic and careful methods we hope to be a benefit to the trade. In this connection I may state that in England last year, where Swift & Company have established a reputation for their poultry, their best brands of chickens were selling at 11d to one shilling a pound.

The poultry branch of our farming industry is of such importance demands. Compared with some districts in the United States, as has been noted, the quantity produced in this province is insignificant. It is a fact recognized by business men, that the towns and cities in Ontario that are likely to make any material growth will only be those that are engaged in manufacturing industries, enabling them to cater to the wants of our fast developing Western Canada, as well as to local demands. Applying the same principle to the agricultural community, farmers should apply their energies to the branches for which the greatest demand exists and which yields the most liberal profits.

GOOD PRICES.

All over Canada, towns and cities are increasing rapidly with a population of consumers, and it is the business of the farmer to supply the wants thus brought to his doors; and one of these requirements, especially during the holiday season and fall and winter, is poultry. It should also be remembered that with the increase of food, our population becomes more particular as to the quality of the products that they place upon their tables, and it is found that where No. 1 quality can be secured, consumers are willing to pay good prices. The price of poultry to-day, compared with that of 10 years ago, is double, and yet the quantity produced in Ontario does not amount to a materially increased. With proper attention and the adoption of suitable conditions, poultry raising is among the most profitable of the branches of the Ontario farmer. It is also the branch with the very best prospects for the future.

The returns brought in by poultry will be found to be a very acceptable addition to the family purse, especially at the holidays. It is by the farmer's wife, who should receive a fair amount of these returns. I believe that one of the reasons that there is not a larger amount of poultry produced in Ontario is that the farmers themselves consider this branch not worthy of their consideration and leave it to the female members on the farm, without providing the necessary facilities and rations for the development of good poultry.

Milk fed to poultry in all forms, produces good results. However, it can work hurt if you do not keep the dishes clean.

The Feeding of Breeding Stock

M. A. Jull, B.S.A., Poultry Expert for British Columbia

A variety of wholesome food, grain, plenty of green stuff, pure water, animal and mineral food are essential. The hatchability of chicks is affected by the foods used, as well as by the method of feeding. Dry mash, kept before the fowls at all times, is preferable to wet mash. It is best to feed the dry mash in hoppers, as in this way it is kept before them all the time in a clean state. Wheat, bran, corn-meal, crushed oats, middlings, beef scraps and gluten meal are most commonly used in making dry mashes. The proportion of these materials may be varied with equally good results. It is well to balance up the ration as evenly as possible, so that the breeders may be kept in the best of health. Too much light, bulky food, or too large quantities of the very concentrated materials should be avoided. Some good mashes which are largely used are the following:

Mash No. 1.—By measure, 4 parts bran, 2 middlings, 2 ground oats, 1 cornmeal, 1 ground barley, ½ linned meal and ½ beef scraps. This is a very well balanced ration, though some changes could be made. The quantity of middlings may be reduced, and the quantity of beef scraps may be slightly increased. If green cut bone is available, feed scraps may be taken out of the mash altogether.

Mash No. 2.—By measure, 4 parts bran, 4 ground oats, 2 cornmeal, 1 middlings, 1 cut alfalfa (well cured) and 1 part beef scraps. This mash grows for green food and care should be taken to have this well cured, otherwise there will be a great deal of fibre, which is more or less indigestible. Field beets and cabbages are other forms in which green food may be supplied the breeding stock.

Of the staple grains, wheat and oats are more easily obtained. It is advisable to use as much variety as possible. However, the grain should not be fed exclusive of other materials. Many poultrymen do not supply their breeding stock with enough green food. Whenever possible, the birds should be allowed unrestricted range, as this gives them to a certain extent a chance to balance their rations by means of insects and other delicacies, besides the green food which they secure. They are also induced to take plenty of exercise, which tends to keep their blood in circulation. Skim milk may be given as a drink, along with water. Oyster or clam shells, as well as grit, should be constantly kept before them. These may be kept in self-feeding hoppers.

Judging a Fowl's Age

Among the methods used by the poultryman to examine the age of the fowls, the shanks, the spurs, the head, and the comb. If the spurs of the male bird are long, heavy and coarse, and the scales of the shank are rough and uneven, the conclusion can be safely reached that the fowl is rather old.

Cocklers, frequently have long spurs but the spurs will be clear and free of roughness on the surface and the shanks will be smooth and clean. The same evidence can be used for hens and pullets.

Old hens will have longer toe-nails, the ends of which will be worn or broken off from scratching. The scales of the shank will be coarse and rough, and frequently have dirt beneath them, while the shanks and toes of pullets are usually fresh-looking and smooth.

METAL ROOFING
WRITE FOR PRICES
METALLIC ROOFING CO
LIMITED
TORONTO, CANADA

Fowls that have black shanks will change the color with age. Older fowls of this kind will have shanks and toes of an ashy gray color, rather than black. Fowls with yellow shanks and legs usually turn white with age.

In pullets the points of the pelvis bone will be much closer together than they will be in old ones. Each year the space between these becomes wider. When noticeably wide apart, the hen will very likely be more than two years old. The skin of old fowls, both male and female, becomes coarse and rough and the holes from which the feathers have been taken more prominent. The head and eyes of old fowls become rough and dark. The eyes become sunken and the skin or prolegs over them more strong and prominent.

One of the most perfect tests which is used by expert market poultrymen is the examination of the wing feathers. At the conclusion of the complete moult, which takes place when the fowls are exactly 12 months old, the secondaries alter in shape, and bear evidence as to the dividing line having passed. Those who are thoroughly familiar with this change can tell at a glance whether the fowl is more than a year old.—N.Z.F.

FREE! RESULTS AMAZING

Heyl's Humus inoculated with Heyl's Concentrated Nitrogen Producer, the best Nitrogen Producer for inoculating all legumes, increasing the yield of crops, increasing according to our booklet, when applied to any soil, supplying not only nitrogen to soil, but acting as complete HUMUS FERTILIZER. Book let sent on request.

Price for Heyl's Humus, F.O.B., N.Y. per 100 lbs., enough for one acre \$1.35. Price for Heyl's Concentrated Nitrogen Producer, per bottle, enough for one acre, \$2.00.

Special Offer to Increase Use of Our Products
The first 30 farmers or garden owners replying to this advertisement will be supplied

FREE
with Heyl's Inoculated Humus or Heyl's Concentrated Nitrogen Producer to treat up to 20 acres each.

Expert advice to farmers given without charge.

STANDARD NITROGEN COMPANY
Dept. 129 Singer Building, NEW YORK City

Elm Grove Poultry Farm
Guaranteed Fertile Eggs for sale from the following breeds: Rose Comb Brown Leghorns, Silver Gray Dorkings, Light Brahmans, Barred Rocks, Mainfolds, Bronze Turkeys, Embden Game, Roun Ducks.

J. H. RUTHERFORD, Box 62, Caladen E., Ont.
Member of the Leghorn Club of Canada
Telephone 7 on 8

Well Drilling

I drill a 4 1/2 inch hole; work done summer or winter; pumps and fixtures always on hand. I guarantee water within 25 years experience. Eight gas-well and steam drilling machines on line and given if needed by notes. Worth your while to write for terms and prices this year, to

ARTHUR CAMPBELL
L'Original, Ont. Phone No. 8

Peerless Lawn Fence

Is Strong and Attractive. All the wires are uniformly crimped, large gauge, and give weight and strength. Never sags, never rusts. Improved enamel finish in a Peerless Fence. It is the most beautiful, most handsome and durable. Also full line of iron and steel building materials for information.

THE BANWELL NOXIE WIRE FENCE CO., Ltd.
Dept. K, Hamilton, Ont., Winnipeg, Man.

Peerless Lawn Fence

Is Strong and Attractive. All the wires are uniformly crimped, large gauge, and give weight and strength. Never sags, never rusts. Improved enamel finish in a Peerless Fence. It is the most beautiful, most handsome and durable. Also full line of iron and steel building materials for information.

THE BANWELL NOXIE WIRE FENCE CO., Ltd.
Dept. K, Hamilton, Ont., Winnipeg, Man.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD CASH IN ORDER
BEES.—Wanted, several colonies of bees. J. R. Blackwood, Ont.

FOR SALE—Six Buff Orpington and twelve Brown Leghorn pullets, \$1 each. From prize winners; Leghorn eggs, \$1 per 15. H. Weston Farm, Princeton, Ont.

EGGS GIVEN AWAY in return for new subscriptions. Settings of eggs of any standard variety free, given away in return for two new subscriptions. Farm and Dairy. Send to Circulation Manager, Farm and Dairy, Peterboro, Ont.

BARGAINS—Famous Pride of Ontario strain of Rose Comb, Rhode Island Red, White and Partridge Wyandottes, early prize-winning, records, large, broad-breasted, healthy breaking layers, circular feet. Eggs SPECIAL bargain, only \$1.00 per dozen guaranteed. Pride of Ontario Poultry, Colborne, Ont.

S. C. BLACK MINORCAS—Stock and eggs for sale. Thirteen eggs, \$1.00. One hundred, \$5.00.—Wm. McElhee, Sr., Beachville, Ont.

MY BIRDS won over five hundred first prizes at eleven shows. Best and White Rocks, White and Brown Leghorns, Black and Spangled Hamburgs, Buff Orpington, Black Javas, Columbia Crested, Black Poland, White and Silver Laced Wyandottes, Rose and Single Comb B. I. breed, No. 1. \$2. No. 2. \$1 per 15 eggs. Black Orpingtons, Houdans, Light Brahmans, Partridge and Buff Cochins, Silver Pencilled and Columbian Crested, Buff Rocks, Anconas, Golden Seabird, Bantams, one, one, one \$2 for 15 eggs.—F. W. Krosche, Guelph.

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

EGGS FOR HATCHING—S. C. W. Leghorns. Excellent layers. Eggs, \$1 per 15.—H. McKellar, Tavistock, Ont.

THE SUBSCRIPTION LIST OPENS AT THE OFFICE OF THE GUARDIAN TRUST COMPANY, LTD., TORONTO, ON MONDAY, APRIL 25th, 1910, AND WILL BE CLOSED ON OR BEFORE MONDAY, THE 9th DAY OF MAY, 1910, AT 3 P. M.

CAWTRHA MULOCK & CO.

OWN AND OFFER FOR SALE

AT PAR, \$100 PER SHARE

\$2,000,000 of the 7 p.c. Cumulative Preferred Stock, with a bonus of 25 p.c. Common Stock, of

MAPLE LEAF MILLING COMPANY

(Incorporated under the Laws of the Province of Ontario).

LIMITED

HEAD OFFICE - - TORONTO, CANADA

CAPITAL STOCK, Issued and Fully Paid Up
PREFERRED, (7% Cumulative)
COMMON

\$2,500,000

2,500,000

\$5,000,000

THE COMPANY HAS NO BONDS ISSUED OR AUTHORIZED.

GUARDIAN TRUST COMPANY, LIMITED

Is prepared to receive subscriptions for \$2,000,000 of the above seven per cent. cumulative preferred stock at the price of \$100 for each share, with a bonus of common stock equal in par value to 25 per cent. of the par value of the preferred stock. The dividends on the preferred stock, accrue from April 15th, 1910.

Subscriptions will be payable as follows:

10 per cent. on Application, and

90 per cent. on Allotment.

100 per cent. or

The right is reserved to allot only such subscriptions and for such amounts as may be approved and to close the subscription book without notice.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

BANKERS OF COMPANY—Imperial Bank of Canada and Bank of Montreal

BOARD OF DIRECTORS

D. C. CAMERON, Winnipeg, President.
President Kat Portage Lumber Company, Limited

CAWTRHA MULOCK, Toronto, Vice-President.
Director Imperial Bank of Canada, Director Confederation Life Association.

HEDLEY SHAW, Toronto.
Managing Director Maple Leaf Milling Co., Limited.

In instalments as follows, in which case interest at the rate of 6 per cent. will be charged.

10 per cent. on Application.

15 per cent. on Allotment.

25 per cent. on 1st June, 1910.

25 per cent. on 1st July, 1910, and

25 per cent. on 1st August, 1910.

100 per cent.

For such amounts as may be approved and to close the subscription book without notice.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

Rural Free Mail Delivery

In the House of Commons last week Mr. J. E. Armstrong of East Lambton brought up the subject of free rural mail delivery. "The present paltry system," he said, "merely leads to the creation of contention and strife in the rural districts." The mails are delivered only on existing mail or stage routes and only in certain portions of the country. "But he asked, "have not the people on the other concessions just as good a right to the advantages of the rural free mail delivery as those residing on existing mail or stage routes? Why should the men on these routes have their farms increased in value, as they undoubtedly are, by their enjoyment of the advantages that come from the delivery of the mails at their very door, and the people who live a mile or so away, perhaps in a more thickly settled portion of the country, be deprived of these advantages?"

Mr. Armstrong went on to note the disadvantages under which the farmers now labor. "I want," he said, "to call attention to the fact that the time has come in some of our rural districts where the population is decreasing yearly instead of increasing in the rural districts. Take the Province of Ontario; the Deputy Minister of Agriculture of the Province in his recent statement that while in 1889 the population was 1,108,874, in 1880 it was only 1,047,018, showing a reduction of 61,856. The population has increased in number but not the rural districts,

Worth \$5.00 a Year

Enclosed is my renewal to Farm and Dairy for another year. I could not think of doing without it. Farm and Dairy is certain a boon to the agricultural interests of farmers in Ontario. I would not be without Farm and Dairy for \$5 a year. Fred Chase, Prince Edward Co., Ontario.

and many people from the rural districts have gone to the Northwest where they get the advantages which they do not enjoy in the old provinces, and which advantages are a great inducement to people to remain on their farms."

"The day is at hand," he continued, "when we must give to the people in the rural districts every advantage to induce them to remain on the land—not only telephones and electric cars, but free mail delivery at their doors. The expense of running a farm is far in excess of what it was years ago, and it takes a lot of money to get high as they are at present. Free mail delivery will bring the farms and rural communities in closer connection with commercial centres. It encourages the improvement of country roads, and by making rural life more attractive it stimulates agriculture. It has been the means of increasing the value of farm lands."

Items of Interest

There have been established free rural mail delivery routes as follows: Prince Edward Island, 20; Nova Scotia, 6; New Brunswick, 16; Quebec inspection division, 8; Montreal, 2; Ottawa, 2; Kingston, 25; Toronto, 42; London, 1; Winnipeg, 21; Moose Jaw, 8; Saskatoon, 3; Edmonton, 15; Calgary, 6; Vancouver, 7; Victoria, 7.

A cup presented by Hon. G. H. Murray, Premier of Nova Scotia, for the best judging of live stock at the Truro Agricultural College was awarded to E. S. Leonard of Paradise, Annapolis County. Forty-two students contested for the cup.

Renew your subscription now.

NEW COMPANY A GOING CONCERN.

Maple Leaf Milling Company, Limited, is a new company which has taken over the whole undertaking as a going concern of the Maple Leaf Flour Mills Company, Limited, including therein that of the Hedley Shaw Milling Co. St. Catharines, Welland and Port Colborne (the last named in course of construction) in the Province of Ontario, and in the Province of Manitoba. When the construction at present under way at Port Colborne is completed the company will have a total milling capacity of five elevators situated throughout the Western Wheat Belt, and fifteen additional ones are being added at the present time. A million bushel elevator is being constructed next to the new mill at Port Colborne. The company has also warehouses and offices at Toronto, Winnipeg, Kingston, Ottawa and Montreal.

SECURITY AND EARNING POWER: The assets of the old Companies taken over as above stand in excess of all liabilities and without any allowance for good-will, trade marks, etc., at \$3,770,524.11, this net, as of March 17th, 1910, of the capital assets taken over, and the certificate of Messrs. Price, Waterhouse & Company, as of February 28th, 1910, as to current assets and current liabilities, with a liberal allowance for all contingencies. There has also been placed in the Treasury \$1,000,000 of additional cash, which, besides permitting of the completion of a 5,000 barrel mill and a million bushel elevator and storage warehouse working capital. As per certificate of Messrs. Price, Waterhouse & Company, of London, quoted below, the earnings of the old Company on the present plant amounted from September 25th, 1909, to August 20th, 1909, to \$218,843.35 being for the latter period at a rate equal to over 13 per cent. on the preferred stock of the Company.

LOCATION OF MILLS AND MANAGEMENT.

Mr. Hedley Shaw and Mr. D. C. Cameron, under whose direction the properties of the old companies have been developed, will retain large interests in and be actively identified with the new company, Mr. Hedley Shaw as Managing Director. A complete report on the advantages of the Port Colborne site, prepared by Mr. Hedley Shaw, will be found in the prospectus.

Prospectuses and forms of application may be obtained at any branch of the Imperial Bank of Canada or the Royal Bank of Canada, from Guardian Trust Company, Limited, Toronto, and from Cawthra Mulock & Co., Toronto.

APPLICATIONS FOR SHARES SHOULD BE MADE UPON THE FORM ACCOMPANYING THE PROSPECTUS AND SHOULD BE SENT TOGETHER WITH THE REMITTANCE DUE ON APPLICATION TO:

ANY BRANCH OF

THE IMPERIAL BANK OF CANADA
OR ROYAL BANK OF CANADA

GUARDIAN TRUST CO., Ltd., Toronto
or to CAWTRHA MULOCK & CO.
Members Toronto Stock Exchange
ROYAL BANK BLDG., TORONTO, ONT.

Pure Bred Sires as an Investment

M. H. Gardner, Supt. Advanced Registry, Glendon, Wis.

It is evident to a student of Holstein-Friesian official reports that by the use of well bred sires and developed dams, Holstein-Friesian breeders are producing animals of greater capacity, as well as acquiring greater skill in the development of that capacity; also that the improvement is but slightly dependent on an increased percentage of fat in the milk, resulting almost entirely from increased milk production. I note that increase in milk is the object of most farmer dairymen in introducing Holstein-Friesian blood into their herds, but sometimes they go at it in a queer and discouraging way.

A man who reads these reports as published in the dairy press writes me about a neighbor of his that is working into Holstein-Friesian cattle by using a fine-looking half-blooded bull, nearly half of his calves being black-and-white, and he intends to purchase a pure-bred bull as soon as they become a little cheaper. Such a man, in his efforts to improve his herd, is doomed to failure, for he intends to purchase a pure-bred bull as soon as they become a little cheaper. Such a man, in his efforts to improve his herd, is doomed to failure, for he intends to purchase a pure-bred bull as soon as they become a little cheaper. Such a man, in his efforts to improve his herd, is doomed to failure, for he intends to purchase a pure-bred bull as soon as they become a little cheaper.

As such men cannot be reached through the dairy press, Holstein-Friesian breeders should do mission work when meeting them at the creamery, the condensing or the shipping station. Point out the benefits, and urge them to subscribe for a good dairy paper; for if you can only get them to reading and thinking, you will find it easy to sell them pure-bred bulls. The question is not so much as to whether they can afford a pure-bred bull as it is as to whether they can afford to do without one, moving along in the old way, and using scrub or grade. Offer to sell such a man one of the old-fashioned narrow width tools, the plow, harrow, drill, mower, rake, or any other, and he will quickly tell you that he is not farming for his health, and that he cannot afford to have high priced help on high priced land monkeying time away with such narrow gauge tools. By purchasing a good dairy paper he will soon apply the same logic to the waste of time resulting from the use of narrow gauge cows.

Suppose that a man pays out \$100 for a pure-bred Holstein-Friesian bull and raises but 10 of his heifer calves. Suppose that each of these calves on coming into production yields one pound more of milk at each milking than did her dam at the same age, an amount too small to be noticeable without weighing; yet it would amount to 600 lbs. for the 600 milkings of the year, and have an average value of not less than \$7.50, or \$75.00 a year gain for the 10 heifers. But the average milking period for a cow is fully six years, which would bring the total gain to \$450.00 for the 10 head. In actual practice, a bull, especially when used by neighbors, benefits several times 10 daughters, and the individual gain in the production of the daughters over their dams is much greater; so that instead of the \$100 outlay being contrasted with \$450.00 gain, the gain is more apt to be much over \$1,000. What other investment could show such a percentage of profit?

Renew your subscription now.

Our Veterinary Adviser

GROWTH IN NOSTRIL.—I have a valuable young Cleveland, registered, coming three years old, that has for several months been troubled with a swelling in the left nostril, about half way down the nose. About last December he had an attack of influenza which seemed to settle in her nostrils. The right nostril swelled slightly at first, but this was treated by blistering and the swelling went away. Soon after this the left nostril commenced to swell and this did not yield to the blistering treatment. The nostril is almost closed, so that when breathing quite a "snorting" sound is produced, something like horses make when frightened. The mare is apparently in the best of health, feels well, and although she has not received any special feed or care is in excellent condition.

I have consulted three veterinary surgeons and they all tell me what is the cause of the swelling, or what to do for it. About two months ago one of them discovered that the mare had a badly ulcerated tooth on the right side, just about in a line with the swelling in the nostril, and he thought that possibly this was the cause of the trouble, and the tooth was removed, but the swelling still remained. One of the men said he thought the only remedy was an operation, but said he would not care to attempt it.

I wrote you about two months ago, and you advised waiting for a time, as it was possible that the swelling would go away of its own accord. It apparently is not going to do so.

What kind of treatment would you advise? Do you think an operation necessary? I do not like to use the potassium iodide treatment, for fear of injuring the animal. Do you think this can be safely used? As the animal is a valuable one, I do not want to take any chance of injuring her. F. H. Vignier, Co., Ont.

I am of the opinion that the only means of successful treatment will be an operation. The nature of the operation will depend upon the nature of the growth. The tooth mentioned may have caused an enlargement of the bone, and if so, this would have to be removed by bone forceps or chisel. The growth may be fibrous, in which case it will not be so hard to remove. Then again it may be an abscess, in which case the operation would be simple, simply consisting in puncturing the abscess to allow the escape of pus.

If there be no external enlargement and the growth be bony or fibrous, the operation will be a very difficult one, as it is situated so far back it will be hard to reach. If it can be operated on from the outside it will not be so difficult. I do not think the iodide of potassium treatment or any internal treatment would be effectual. This treatment will not injure the mare more than reducing her in condition. It is possible that a successful operation cannot be performed. The veterinarian who has seen the case will be in a better position to give an opinion than I.

A Profitable Feeding Trial

(Continued from page 2)

Interest on money for necessary shelter was not at the shed provided could not be considered as necessary. The cost of labor and interest on money invested in cattle for the 109 days is much more than offset by the value of the manure produced and available for application to the land. It is considered a wise policy to provide against contingencies, and it is quite possible that those who now regard farm yard manure as an evil to be disposed of with the least possible labor may live to regard it as a blessing. If grain may be given an increased market value by feeding it on the farm, a double advantage is secured; first, a larger profit in the production of grain, and second, in the manure produced, and insurance policy issued by insuring for the continuance of the good crops for which the naturally rich land of the west is already famous. It will be seen that

the labor cost was low and that one man could feed 100 head working 10 hours a day. Where a spring or stream supplied water, much larger number of cattle could be handled in the same time.

In the bunch were a number of two-year-old cattle; these did not stand high feeding as well as the three-year-olds, and from this work this winter it is thought safer to feed two's and three's by themselves. One two-year-old steer gradually failed and finally died, being unable to stand the feed. The three-year-old cattle gave no trouble in this respect.

One feature of this work worthy of special notice is the fact that frozen wheat which was worth in the fall 35 cents a bush, when fed and marketed on foot was given a value of \$1.28 a bush.

The following table gives the results:

Number of steers in lot	18
Gross weight weighed in	20337 lbs.
Average weight weighed in	1130
Number of days fed	109
Gross weight Mar. 30	23720 "
Average weight Mar. 30	1318 "
Total gain in 109 days	3383 "
Average gain per head	188 "
Average daily gain per head	1.72 "
Aver. cost per 100 lbs. gain.	\$7.42
Value per bush of frozen wheat fed and marketed as beef	\$1.28 3/4 cost.

18 steers av. weight 1130 lbs. at 3.658 a lb.	\$744.01
26216 lbs. prairie hay at \$6.00 a ton	78.65
9123 lbs. timothy hay at \$7.00 a ton	31.98
20810 lbs. frozen wheat chop at 1/2 % of 1c. lb.	138.73
145 lbs. salt	1.75
Total cost	\$995.07
The cost of 222 hours labor and interest (\$18.75) on money invested in cattle is not figured, but it is more than covered by value of manure available for application on the land.	

Sold 18 steers total weight 23720 lbs. 23720 lbs. less 5 1/2 % at \$5.75 a cwt. \$1265.70
Profit on gain of pigs following steers during last six weeks of feeding 4.75

Total receipts	\$1300.45
Total cost	\$995.07
Total profit	\$305.38

Average profit per head 16.97
Note—Loss of one steer 1130 lbs. at 3.658 cents plus value of hay and chop consumed \$49.69
Less 51 pounds hide at 6c. 2.56

47.14
Profit of \$305.38 less \$47.14 = \$258.24
Average profit per head after covering this loss 14.35

Renew your subscription now.

Kendall's Spavin Cure



The cure that saves horsemen and farmers millions of dollars every year.

It is known the world over as the one certain, reliable remedy for Spavin, Curb, Splint, Ringbone, Bony Growth and any Lameness.

Cases just developing in old, stubborn sores and swellings readily yield to the wonderful curative powers of this famous remedy.

Orangeville, Ont., Dec. 21, '08
"We had a horse which was getting very lame on account of a Spavin. I was anxious about him as we could not work the beast when we most needed him.

Our teamster saw Kendall's Spavin Cure in the store and tried it.

I am pleased to say he had success as the horse has stopped limping and is doing his day's work."

W. A. NICHOLSON.

Don't worry about Spavins, Growths, Swellings or Lameness, but use Kendall's Spavin Cure. It cures every time. The world's best liniment for man and beast. \$1. a bottle—6 for \$5. Get our book "A Treatise On The Horse," free at dealers or from us.

Dr. B. J. KENDALL CO.
Ebensburg Falls, Va. 52

"Gait" Shingles

Simplest and Quickest to apply yet invented. Perfectly Square, True and Easy-fitting. The bold Gothic Tile pattern presents a handsome and architectural appearance—unmarred by conspicuous joints. The Shingle with covered nailing. Ranges both top and side—the one with the new gale-proof, Sales and Distributing bottom lock. Catalogue "B" tells all about them.



Agents wanted in some localities

FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



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

2. SUBSCRIPTION PRICES are \$1.00 a year, strictly in advance. Great Britain, \$1.20 a year. For all countries, except Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

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

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

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

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

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed \$250. The actual circulation of each issue, including copies of the paper sent subscribers, and sent to agents in arrears, and sample copies, varies from 3,500 to 4,500 copies. No subscriptions are accepted at less than the published subscription rates. Thus our mailing lists do not contain any dead circulation.

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

OUR PROTECTIVE POLICY

We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We try to admit to our readers only the most reliable advertisements. Should any advertiser have cause to be dissatisfied with the treatment he receives from the circumstances fully investigated by one of our advertisers, we should we find reason to believe that any of our advertisers is unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose them through the columns of the paper. Thus we will not only protect our readers, but our reputable advertisers as well. All that is necessary to entitle one to the benefits of this Protective Policy, is to include in all your orders to advertisers the words, "I saw your ad. in Farm and Dairy," and should be sent us as soon as possible after reason for dissatisfaction has been found.

FARM AND DAIRY

PETERBORO, ONT.

A CAPABLE OFFICIAL NEEDED

The review of the work of the Dominion Department of Agriculture that was given by Hon. Sydney Fisher in the House of Commons recently was interesting and instructive. It shows that the Department has made great progress and performed work of immense value to the farmers of Canada. Hon. Sydney Fisher may well feel proud of the record he has made as well as of the good work that has been done by his officials. Hon. Mr. Fisher showed his large calibre by freely praising such public officials as Dr. J. W. Robertson, Dr. Saunders, Dr. Rutherford and Mr. J. H. Grisdale for their good work and by refraining from trying to take all the credit for the government.

While Hon. Sydney Fisher is to be congratulated upon the progress that has been made, there are some features of his report that are disappointing. For instance, it showed that the total expenditure of the Dominion Government for agricultural purposes during 1909 amounted to

only \$807,000. The expenditures on Militia and Defence this year, including those on the proposed new navy, although they will not increase the revenue of this country by one dollar, will amount to some ten millions of dollars. Do such expenditures bear the right proportions to each other?

While the Department of Agriculture has accomplished much good work, this is not the time for it to rest on its oars. In fact, there is need for advancement in all the branches of the department's work. As we have pointed out before, the greater part of the good work that has been accomplished by the Dominion Department of Agriculture has resulted from work that was initiated while Dr. Jas. W. Robertson was Commissioner of agriculture. What the Department needs more than anything else is a capable Deputy Minister of Agriculture. With a competent Deputy Minister of Agriculture, there would be a great extension in the work of the Department of Agriculture and a marked increase in its usefulness to the farmers of Canada. While Hon. Mr. Fisher has repeatedly demonstrated his ability as the head of the department, his time is so fully occupied with public matters it is necessary that he shall have as his deputy minister, not a lawyer, as at present, but a man who understands thoroughly the principles of agriculture and the needs of the farmers of Canada.

CHARGES DISPROVED

One of the most important features of the report of the Dominion Swine Commission is the flood of information it furnishes proving that the charges that have been hurled against our Canadian packers of manipulating prices for their own benefit have not been founded on fact. These charges probably have done more to create discontent among our Canadian hog producers and to cause many to give up the production of hogs than any other one factor. Although these charges have been strenuously denied by our packers, their denials were not generally believed, and a feeling of distrust was created which has worked untold harm.

The report of the Swine Commission shows that in spite of the fact that the majority of the packing establishments in Denmark are owned by the farmers, the prices the Danish farmers have received for their hog products have shown an even greater variation from month to month and from year to year than the prices that have been paid to our Canadian farmers. More than this, it shows that the variation in prices in Denmark and Canada have occurred at the same times and in practically the same degree. It shows further that the prices paid in both countries have fluctuated exactly in proportion to the fluctuations in the value of the finished product on the British market.

One table contained in the report shows the comparative prices of Canadian and Danish bacon on the British market during the years 1909 to 1908, inclusive, the figures for 1909 not be-

ing complete. The lowest average price paid for Canadian bacon in any one year was in 1904, when the average price was \$4.98. The highest average price paid was \$6.68, which ruled in 1906. For the Danish product, as the case with the Canadian, as the lowest price paid was in 1904, averaging \$6.19, while the highest price was paid in 1906, averaging \$8.05. Thus the variation in the prices paid for our Canadian bacon was \$1.70, while the variation in the prices of the Danish product was \$1.86.

Another table gives the average prices paid the Danish farmers for their hogs from 1888 to 1908. The lowest price they received was \$11.02, in 1896, and the highest price, \$16.63, which was paid in 1906, showing a fluctuation in values of \$5.61. The table shows that there was a considerable variation in values every year. The prices in Canada have not varied to a greater extent.

Still another table gives the selling price of Canadian and Danish bacon in England from 1904 to 1907. The lowest price paid for Canadian bacon was paid in December, 1904, and was \$10.46. The highest price paid for Canadian bacon was paid in September, 1909, and was \$17.37. Thus there was a fluctuation in values during the six years of \$6.91. The price paid for the Danish product varied in exactly the same proportion and at the same dates; the lowest price having also been paid in 1904, it being \$12.34, while the highest price was also paid in September, 1909, being \$18.49. In these cases the fluctuation in values was a little greater in the Canadian product, amounting to \$6.91, than it was in the Danish, which amounted to \$6.15. When, however, we examine the prices paid for the Canadian and Danish products during each month of the six years, we find that in five out of the six years, there was a greater variation in the prices paid for the Danish product than there was in those paid for Canadian bacon.

The average price paid for hogs on board cars at country points in Ontario during the first seven months of 1909 was \$7.20, while the average price paid at factories in Denmark was \$7.92. During the same months, the average price per hundred pounds of Canadian bacon in London was \$15.21, while the average price paid for Danish at the same time was \$15.84. Thus the price of hogs here was practically even with that paid in Denmark, when the difference in the selling value of the bacon made from hogs in the two countries is taken into account. One of the reasons why Danish bacon realizes a higher price on the British market is due to the fact that it is landed in fresher condition.

These figures indicate that our Canadian packers have been paying our Canadian farmers proportionately as much for their product as the Danish farmers have been paid for their hogs which they have been marketing through their own factories. This information should help to heal this sore spot with the producers and bring about a better feeling between our Canadian packers and producers. If

this proves to be the case, the sending of the commission of farmers to Denmark will have paid for itself many times over.

MANGELS ARE VALUABLE FEED

New light on the feeding value of mangels is brought out in a recent bulletin of the Cornell Experiment Station, which bulletin is reviewed elsewhere in this issue. Results obtained from the experiments seem to warrant the conclusion that mangels may be used economically in the ration to replace one-half the grain originally fed when mangels can be produced ready for feeding at \$4 a ton.

The facts brought out in these experiments are of prime interest to dairymen. They suggest wonderful possibilities in reducing the cost of rations for dairy cows. Old Country feeders have always appreciated the economy of roots, and it would seem that roots have been a most important factor in making it possible for these Old Country farmers to make profits from their stock raised on high priced land, and for the use of which heavy rents are exacted.

Since the introduction of the silo, and the greatly increased use of corn silage in the dairy sections of Ontario, there has been an inclination on the part of many feeders to do without mangels owing to the greater amount of labor required in their culture as compared with corn. Mangels can to a large extent be replaced by corn silage. It is a mistake, however, to think of doing without roots, and in view of these recent investigations which have shown the feeding value of mangels to compare so favorably with more costly feeding stuffs, the importance of mangels should not be overlooked.

INACCURACY VS. CORRECT METHODS

Much concern has been aroused over the discussion of scales vs. pipette in cream testing as carried on during the past few months in the creamery department of Farm and Dairy. Practically everyone agrees that the scales afford a correct method in sampling cream for the Balcock test. Opinions are widely diversified on the accuracy of the pipette method. One well known dairy authority states that to the best of his knowledge creamery managers are not employing correct methods in making the test. Another well known authority expresses doubt if the scales are any more correct, or just, than is the pipette in the hands of a careful man.

Practical makers who have had several years' experience in the use of scales for measuring samples of cream contend that the scales are most efficient; that once accustomed to them, one can measure samples more speedily than with the pipette; and that while the scales are somewhat hard on the overrun compared with the pipette, they prefer to use the scales, and through their use leave no doubt as to whether or not each individual patron receives justice for his cream.

Many and curious are the arguments

advanced against the use of the scales. It is claimed that the average maker is not competent to conduct the test when the scales are used. In reply to this it may pertinently be asked, is such a maker competent to conduct the test when the pipette is used? It is stated that the average scale is far from accurate and that the conditions in which these would be kept in average creameries are such as to render them inaccurate in a short time. Others claim that it would take too much extra time to make the test if the scales are used for sampling.

The testimony of such well known men as John H. Scott, given elsewhere in this issue, F. A. Keyes, Wm. Newman, J. A. Waddell, Chief Instructor Publow, Instructors Singleton and Mack Robertson, and others, who have advocated the scales in recent issues of Farm and Dairy, these men having based their information on the results of practical experience, is positive. In much of the evidence advanced in favor of the pipette there has been an element of doubt. Add to this the fact that the Government Creameries in Saskatchewan have found it advisable to adopt the scales, also the fact that New York state, Wisconsin and other States have found it necessary to enact legislation making the use of the pipette unlawful, then what shall the verdict be? We are content to leave the answer with our readers.

Some creamery managers and others have censured Farm and Dairy for making public facts concerning our creamery business. The argument has been advanced that creamery patrons should not know too much and that Farm and Dairy has presented a prejudiced and one-sided view of this important matter. The creamery business of Ontario is surely in a most unhealthy state if it cannot bear the light of investigation, and the sooner patrons are acquainted with all the facts, the sooner will the business right itself and be established upon a firm foundation.

The excellent manner in which the report of the Dominion Swine Commission has been compiled reflects credit on the secretary of the Commission, Mr. J. B. Spencer, of the Dominion Department of Agriculture. Mr. Spencer was for some years connected with the editorial staff of the Farmers' Advocate, and of the Family Herald and Weekly Star. The manner in which the information gathered by the Commission has been classified and presented in the report shows the result of Mr. Spencer's newspaper training.

Pointers on Calf Raising

It is said that about 70 per cent. of the dairy calves reared in Wisconsin each year must be raised on skim milk. The same may be said of this country, and for Ontario in all probability the percentage of skim milk calves is even greater. Prof. D. H. Otis of the Wisconsin experiment station has recently issued a bulletin on this subject of skim milk calves. Some extracts from this bulletin follow:

By good care and proper feeding several dollars may be added to the

value of any calf during the first year. The total increase by this means would amount to millions of dollars to dairy farmers.

Young calves need whole milk for the first few days. Skim milk is a cheap food for calves, but should be fed carefully in limited quantities and only while it is warm and sweet. Skim milk may form the principal diet of the calf for six months to a year. Factory skim milk should always be pasteurized to avoid the spread of tuberculosis. The best skim milk is that which is fresh from the separator and still warm.

Experiments show that it is only one-fourth as expensive to raise a calf on skim milk as on the whole milk. Two pounds of grain with the proper amount of skim milk equals in feeding value one pound of better fat. Buttermilk properly handled may profitably be fed to calves.

The grain for calves should be fed first while the calf is quite small with a little bran to aid the calf in learning to eat. High-priced concentrates are unnecessary and give no better results than cornmeal, oats and bran, ground barley, etc., when fed in proper combinations.

The management of the calf during the first year has much to do with its later usefulness. Plenty of water and salt should be given in clean vessels. Sudden changes of diet should be avoided and regularity in feeding should be practised. Warm, dry quarters should always be provided in damp weather. Plaster or roughage should be given, and not too much grain, so as to develop a large capacity for handling food, as is desirable in dairy animals.

PUBLISHER'S DESK

Swine Report Appreciated

Farm and Dairy is gratified that the members of the Dominion Swine Commission who visited Europe have been able to present such a splendid report and that this report is being received with such interest throughout the Dominion. Speaking in the House of Commons recently about the report, Hon. Sydney Fisher stated:

"It is evident from the demand for the report, that it has received acceptance not only at the hands of the people of the country, but also at the hands of the members of the House of Commons."

It was Farm and Dairy which suggested that this commission should be sent to Denmark. We take pleasure, therefore, in the fact that the report that has been presented by the commission is of such an illuminating character and so thoroughly instructive. Our suggestion when first made was adversely commented on by one or two of the other agricultural papers as well as by some farmers. Even Hon. Sydney Fisher has stated recently in the House of Commons, did not at first see the necessity for the appointment of the commission. Had it not been for the energetic manner in which the officers and members of the Dominion Swine Breeders' Association took up the suggestion and advocated the appointment of the Commission in the columns of Farm and Dairy, the commission would never have been appointed. While the expenses of the commission were considerable, the report that has been secured will be of value to our swine breeders and country for many years to come. It will do much to clear the air in Canada and bring about greater harmony between the packers and the swine breeders. In this respect alone the Dominion will derive will far more than offset the cost of the commission.

Renew your subscription now.



SUPREME

When it comes to Cream-taking, Thoroughness and all points of Superiority

DE LAVAL Cream Separators

ARE WITHOUT A PEER

Catalogue Free Agents Everywhere

THE DE LAVAL SEPARATOR CO.

175-177 William St.

MONTREAL

WINNIPEG

VANCOUVER

PURE BRED PIGS FREE

PIGS GIVEN AWAY

Have you won any pure bred pigs the past year, for the securing of new subscriptions to Farm and Dairy? If not you can easily do so now. Read our offer below.

We will give a pure bred pig, of any of the standard breeds, from six to eight weeks old, with pedigree for registration, for only **Nine New** subscriptions to Farm and Dairy at \$1 a year each.

Secure pure bred stock and weed out your old scrubs.

Send for Sample Copies at Once.

Circulation Department

FARM AND DAIRY

PETERBORO, ONT.

Creamery Department

Butter makers are invited to send contributions to this department to ask questions on matters relating to butter making and to suggest subjects for discussion. Address letters to Creamery Department.

The Dairy Industry in Quebec

In a recent issue of Farm and Dairy some mention was made in these columns as to some proposals concerning the dairy industry of Quebec that were being embodied in the form of legislation. In reply to our enquiry as to just what it was proposed to do, Hon. J. S. Caron, Minister of Agriculture for Quebec, writes Farm and Dairy as follows:

"I had proposed to remodel the inspection of cheese and butter factories this year, but I have not been able to put this proposition into execution for different reasons. The matter has been postponed until next year, when I hope to be able to put the whole inspection under the direction of the Department of Agriculture.

"I am trying this year to organize two or three co-operative societies which will include, each, at least 25 factories. This will enable those societies to put their products on the market, independently of the cheese and butter dealers, and get paid according to the value of their products, instead of being quoted according to the locality where the cheese and butter ever made.

"I have also before the House a bill to regulate the construction of factories. This bill is about the same as the law passed by the Ontario Legislature last year.

"I expect that this measure will help to better the condition of cheese and butter making in this Province; and if I can realize my proposition for inspection next year, our cheese and butter organization will then be perfect."

An Explanation of the Difference

Editor, Farm and Dairy.—I have never used the scales in testing samples of cream. I have found the pipette to be quite satisfactory. In regard to the difference shown in the two methods as per the circular from Cornell Experimental Station, N. Y., I would say it is because the cream had not been kept in proper condition, in which case the globules of fat are swollen and consequently the pipette cannot be gotten to contain the full amount of 18 grams.

Under the present percentages of cream there is no inducement for a patron to skim a heavy cream, because

if he does this he is financially helping those who skim a light cream which is afterwards kept in poor condition. The farmers should be educated to have a uniform cream of good quality and to keep it properly.

Much more could be done to educate patrons in this matter if it were done in a practical way by the use of their separators and how to keep their cream in proper condition. If this were done there would be no perplexity as to which method to employ in testing cream.—James Hamilton, Stratford Creamery, Ont.

Pipette O.K. with Careful Men

Editor, Farm and Dairy.—In reference to the article on cream-testing by Mr. Stonehouse in Farm and Dairy March 31, also the circular letter from the Cornell Experiment Station published in Farm and Dairy March 10, in a word, we have found very satisfactory results in testing cream using either a 9 c. c. or an 18 c. c. pipette. The article giving the results at the Cornell Station is rather misleading, as a 17.6 c. c. pipette should never be used for testing cream. There is no injustice done to patrons, using when testing cream up to 30% fat. Above 30% fat, it is advisable to add something to the readings.

We have found a convenient factor to be one-tenth for each percentage of fat above 30%. For instance, if the reading were 35, then we should credit the patron with 35.5%. In creamery practice, I doubt if the scales are any more correct, or just, than is a pipette in the hands of a careful man.—Prof. H. H. Dean, O. C. Dairy School, Guelph.

Scales vs. Pipette

John H. Scott, Huron Co., Ont. I have been very much interested in the discussion through these columns of Farm and Dairy, re pipettes and scales for sampling cream for the Babcock test. I gather from what has been written that all agree that the scales, if properly used, will give the correct quantity of cream. The test regardless of quality of cream there to be said in discussion of the matter?

When we have arrived at a practical method, that is absolutely correct, and in which there is any doubt whatever of the accuracy thereof?

With the cream scales now on the market, the question of time has disappeared to those accustomed to the use of them. In fact, I believe that in cream creameries, where composite samples are used, that the difference in time required is in favor of the scales.

Of course there is the cost of the scales. But I would like to ask, is it not worth the price of a set of scales to know that the cream is being tested by the most accurate method, practical to the butter maker of to-day?

I may add that I have used a 12-oz. cream scale for three years and a month, and have tested as high as 400 samples. I would not think of changing to any pipette method that I know of.

I realize the fact that the use of the scales is a little hard on over-run. That, however, is another argument in favor of the scales.

Justice To All.—I have used the scales when testing cream with the Babcock test and I find that they give the better satisfaction than the pipette given where they are used just as they are to all. I can make 24 tests in one hour without any trouble, weighing them out with the scales. I have now used the scales for two years and would not return to the pipette.—Sam Brill, Bruce Co., Ont.

Care and Shipping of Cream

The Birch Hills Creamery Co., which operates one of the most successful creameries in Saskatchewan sends out the following circular to its patrons, many points contained in it are of particular interest at this season.

Remember your ice supply, as no dairyman can afford to be without ice in summer time. Secure at least 10 good cows, and have them well looked after by giving them good clean water to drink, and see that they have good ventilation while in the stable.

If you have not a separator, get a good one, as the extra cost will soon pay for itself.

Separate your milk at 90 degrees, or higher, as it will give a better separation, and have your cream screw set to deliver a cream testing from 30 to 35 per cent. butter fat.

Cool the cream down to 50 degrees, or lower, and stir while cooling. Keep morning's and night's cream separate.

Keep milk and cream apart, avoiding anything causing odor, as they will take in a bad odor very rapidly.

When shipping by rail provide yourself with at least two cans. These can be secured from a hardware store, or from the Creamery Co., at a reasonable price.

Before putting cream in cans rinse them out with clean cold water, and keep the can in a clean, cool place, until ready to deliver to creamery.

Remember at all times to use your thermometer, and not judge the temperature by the touch of your finger. Deliver your cream in hot weather, and do not hold it until it gets off flavor, and then have it rejected. This will not pay you.

PRICE DEPENDS ON QUALITY. The market depends on the quality of the butter. The quality depends on the farmer. If he sends an old or off flavored cream, he cannot expect it to bring a high price.

When shipping cream by rail see that your cans are marked with your name and address, so it will not go astray.

And be sure to have your lid secure, so as to prevent the cream spilling out in case of an upset. The railroad will not be responsible where the lids are not fastened to can.

When taking cream to the creamery, or storing in summer time, be sure to cover the cans to prevent the hot sun striking it. A good plan is to soak a blanket in cold water and put this around the can.

When the cream arrives at the factory, it is examined in regard to fat. If found all right it is weighed, sampled and scalded, and returned to owner as quickly as possible. A very convenient drawing is fitted up for the farmer, drawing their own cream, where they can wash and scald their cans in a few minutes, and return that each one to him.

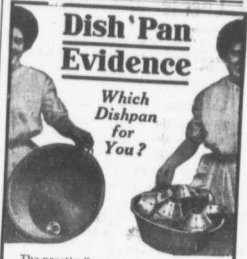
A careful account is kept of each can of cream, an account sent in to the Superintendent at Regina every two weeks, and a cheque and statement is sent back to each person. The statement bears the number of pounds delivered, also the number of pounds of butter fat and the advance price on even pounds only.

If at any time you happen to see in Birch Hills, be sure to visit the creamery, and we will be pleased to show you through the creamery and how the testing is done.

Any information that you may want regarding the handling of shipping of cream will be gladly furnished by the Manager J. W. Gibson.

Ice cream ought to be dealt with in the pure food act, as that of the so-called ice cream does not contain good cream and is injurious to health. Consumers ought to be guaranteed that the sum cream they purchase contains

wholesome cream.—R. Reid, Waterloo Co. Sec. Canadian Jersey Cattle Club.



Dish Pan Evidence
Which Dishpan for You?
The practically empty pan contains the only piece used inside Sharples Dairy Tubular Cream Separator bowls. It is smooth, tiny, instantly removable. The tubular contains the disks from a single can of the common sort that are discarded for Tubulars every year. The simple, sanitary Sharples Dairy cream separator—has twice the skimming power one reason why every woman should insist on a Tubular.

30 Years
The manufacture of Tubulars is one of Canada's leading industries. Sales easily exceed most, if not all others combined. Tubulars probably have any one maker of such machines sell. Write for catalog No. 23
THE SHARPLES SEPARATOR CO.
Toronto, Ont., Winnipeg, Man.

CANADIAN PACIFIC GREAT LAKES NAVIGATION NOW OPEN
REGULAR SAILINGS AS FOLLOWS:
Monday ... S.S. "Athabasca"
Tuesday ... S.S. "Keewatin"
Wednesday ... S.S. "Alberta"
Thursday ... S.S. "Manitoba"
Saturday ... S.S. "Assiniboia"
The Most Pleasant and Cheapest Route to Winnipeg and West

HOMESEAKERS' EXCURSION .. MAY 3
Through Train to Winnipeg and West from Toronto, 2:00 p.m., on above Date
Apply to nearest C.P.R. Agent, or write to R. L. THOMPSON, D.P.A., Toronto

Purity Salt
is the best on the market. Why?
BECAUSE it makes richer and tastier butter. It does not cake or harden, being in perfect crystal form. It dissolves quickly. It works in evenly, needs LESS, and draws a larger margin of profit for the dairyman.
THE WESTERN SALT CO., LIMITED
"DEPT. A" MOORETOWN ONTARIO

USE THREE DOLLARS WORTH
Nitrate of Soda
On an Acre and
INCREASE YOUR CROP OF HAY 1000 POUNDS
Directions for use of Nitrate on any crop will be sent if you will send Post Card to
W. S. MYERS, DIRECTOR PROPAGANDA
71 Nassau Street, New York
Write to dealers below for quotations.
Nitrate Agencies Co.
64 Stone Street, New York
1205 Hartford Building, Chicago, Ill.
305 Baronne St., New Orleans, La.
Citizens Bank Bldg., Norfolk, Va.
26 Bay Street E., Savannah, Ga.
Temple Building, Toronto, Canada

Cheese Department

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

Uniform Brands for Cheese

Those in the various cheese districts of Ontario should give serious consideration to the matter of a uniform brand for all cheese from their particular section. The uniform brand adopted by the cheese factories of Prince Edward County has become a considerable factor in keeping up the name of their cheese.

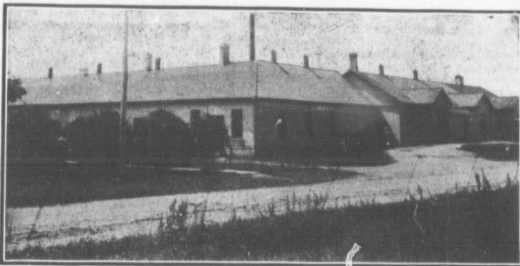
This matter was brought up for consideration at the recent annual convention of the Peterboro Cheese Makers' Association. A resolution was passed urging the salesmen of the Peterboro cheese board to adopt and put into practice this matter of having the cheese from the Peterboro district branded uniformly.

Since the benefits from such a course would be many, where cheese of the high standard and reputation

adian summer and early autumn cheese has a character distinctly its own and therefore commands the top price on the market, although some of the Canadian cheese could be classed only as seconds. We are glad to know that the Canadian summer cheese and early autumn cheese, at any rate, fits into a hungry spot in the British market as no other cheese can. But we must also recognize the fact that there is great room for advancement. What can makers do in this particular? Mr. Publow advocates that makers visit their patrons because it is his firm opinion that every factoryman knows best what are the needs of his patrons and therefore there is no one better qualified for this work than the makers.

I find that there are great possibilities in Peterboro County for makers to co-operate and assist their patrons. I doubt whether or not all makers get in touch as closely as they should to the Dairy and Cold Storage Commissioner's staff at Ottawa. From time to time excellent literature is sent out from there free. This literature can be procured in sufficiently large quantities to give a copy of whatever bulletin it is to every patron.

We find that where cow testing associations exist, the farmers are making better progress than elsewhere; there is no one who can help along the work of the cow testing associa-



The Bright, Ont., Cheese and Butter Factory - One of the Best in Oxford County

While in some sections of Ontario there are some small and inefficient cheese factories, we have many up-to-date, substantial factories; of this type, the factory illustrated above is a good example.

of those from the Peterboro district are concerned, and the cost so little, there should be no hesitation in adopting a uniform brand. Other sections of equal reputation, or that aspire to such a reputation, will find the uniform brand a considerable factor in helping them to attain the standard and reputation they desire.

Cheese Maker's Responsibility

H. C. Duff, Norwood, Ont.

As we look back over the progress of farm and dairy work, we find that we are advancing, to a certain extent, at least. As dairy farmers we are advancing, but there is great room for still greater advancement. To-day we find farmers taking an interest in their herds that years ago would have classed them as faddists. The aim to-day is not alone to feed cows that they may live, but to feed in order that they may return as much profit as possible.

As cheese makers we also have room for improvement. This is well shown by criticisms of British importers writing to Farm and Dairy. One firm criticized the products of our factories by saying: "The insipid and featureless stuff that is put on the market in the late autumn is driving the retailers to the use of New Zealand cheese." This should induce our makers to improve the quality of our cheese. Three firms assert that Can-

tions better than the maker himself. Where the maker does the testing, it is a direct money making project, for I understand that he is paid for every test made. If there is one work more than another which I think the cheese makers can do to advantage this summer, it would be to push the work of cow testing associations. You have an excellent opportunity at your annual meetings for booming these associations.

What we would like to see in every factory is not only good cheese makers, but we should say local preachers of the gospel of agriculture. There is no one better qualified for doing good and of advancing agriculture before the cheese makers of this country.

Importance of Cool Curing

New Zealand cheese are all practically cool-cured, and, owing to the distance from market, they do not suffer in reputation, as ours do, by being sold in too green a condition, because, even though they are shipped as soon as made, it takes about two months from the time they leave the factory until they arrive in the warehouse in Great Britain.

We should have no difficulty in meeting that phase of this competition. Cool-curing is becoming more general every year and there is no reason why we should not, with that improvement, give our cheese ample time to mature before they are sent forward.—J. A. Baddick, Dairy and Cold Storage Commissioner, Ottawa.

Get to the Factories Early

D. J. Cameron, Instructor for Lindsay District.

One of the first mistakes that we notice on the part of some makers is the fact of the maker not getting to the factory in the spring early enough. A great many makers will be getting to their factories only a day or two before the season opens. The result is that they will not be in shape when the milk begins to come to the factory. Such a maker will get behind. Some men have been a day or two behind all summer just on this account. I would strongly advise makers to get to their factories early. Get the factory and surroundings in good condition before the milk comes in. Be in good shape to receive the milk on the first morning.

Responsibility on Producers

G. G. Publow, Chief Dairy Instructor, Kingston.

It is impossible to make good butter or cheese without first having good milk from which to make it. The responsibility for the quality of the cheese or butter rests largely with the producer. Producers, therefore, require exact knowledge of their end of the business. There is great room for improvement in the milk delivered at factories. The aim of all should be to get the best product manufactured with the least loss and to realize the highest prices.

Cheese makers are in a position through their close relation to the patrons to be the greatest factor in educating producers. The maker knows, or should know, each one of his patrons personally. He knows the condition of the milk each day as received from individual patrons, and he should keep in touch with patrons and acquaint them with any defects of their milk as delivered at the factory. The farmer believes if his milk passes the maker without comment, that it must be all right.

Cheese making is a partnership business. Any loss is borne by all concerned. All are interested in the prices realized for the cheese, and it seems most foolish that people will go to the work of keeping cows and milking them and then not have a fine product made up in the best possible condition.

The time is almost here when the dairyman will depend more on green cut feed and ensilage rather than pasture for summer feed; also that cows must be kept in large numbers or this valuable land will not be so valuable.

after all.—D. N. Anderson, Lambton Co., Ont.

OUR STICKNEY GASOLINE ENGINE

is simpler than any other on the market. You can learn to run it in 15 MINUTES. Won't easily get out of kilter. POWER IS GUARANTEED. Our Booklet No. 57 is full of information.

ONTARIO WIND ENGINE AND PUMP CO. LIMITED
TORONTO, ONT.

WINDMILLS

Towers fitted where cost saves five feet apart and double braced

Grain Grinders
Pumps
Tanks
Gas and Gasoline Engines
Concrete Mixers

Write for Catalogues

GOULD, SHAPLEY & MUIR CO., LIMITED
BRANTFORD, - CANADA
BRANCH OFFICE WINNIPEG, M.A.N.

New Dairy Books

"Questions and Answers on Buttermaking," by Dr. Charles A. Publow. "Questions and Answers on Milk and Milk Testing," by Dr. Publow and Hugh C. Troy.

That You Should Have

Are written in a very interesting style, and contain the simple information that you want.

Bound in Cloth—50c. Each

The price of these books puts them within the reach of all. Send your orders to

BOOK DEPARTMENT, FARM & DAIRY
Peterboro, - Ontario

MAKE DAIRYING PAY BETTER

Strain your milk as it leaves the cow, not afterwards, and see that you strain milk only, not milk, dirt and bacteria. You can make pure milk an absolute certainty by using the

STERILAC SANITARY PAIL

Note its clever construction. The funnel is detachable. As the milk falls in the slant towards the milk, it passes direct to the strainer into the pail. All dirt falling in to the opening is caught on a deep metal shell inside the funnel—not on the strainer—thus milk and dirt never come in contact. You can use ordinary cheese-cloth for straining. Capacity 14 quarts, no joints on the inside; it is easily cleaned. Price, \$2.50. Used by all up-to-date farmers and dairymen.

PURITY MILK COOLER-AERATOR

Cools milk rapidly, within 2 degrees of running ice water, wet or spring water, whichever you use. Stop it using and through action ensures milk purity. The body and strainer are made of perforated metal. The milk is forced through the perforated pail on top on to the corrugated body which ensures the milk remaining down slowly as that it is perfectly cool. It reaches the bottom pail. There are outlets at each side of this pan. This cooler is well made, and is made in one piece and admits of repairs. Will last for years. Price, \$1.50. Illustrated on each cover. Write for large catalogue of dairy supplies, FREE.

W. A. DRUMMOND & Co., 177 King St. E., Toronto

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



SUCH as thy habitual thoughts, such also will be the character of thy mind, for the soul is dyed by the thoughts.

—Marcus Aurelius.

Baby Bunting—Chaperone

By Charles Raymond Barrett.
(Continued from last week.)

THE conductor led the way into the baggage car, gave Maxwell the only chair and seated himself upon a convenient trunk. "I suppose," he said, "that is your wife and your baby?"

Maxwell's color and confusion at once proclaimed his guilt.

"Well—no—not exactly," he stammered.

"Not exactly which—wife or baby?"

"Not exactly either."

"Then why are you traveling together?"

"I don't know that that's any concern of yours," retorted Maxwell, waxing indignant. "Does the road give you the privilege of prying into the private affairs of your passengers?"

"Yes—when they appear to be suspicious characters," was the curt response.

"What do you mean?" demanded Maxwell, half rising to confront the conductor.

That personage waved him back to his seat, and permitted a chill smile to soften his official manner.

"Don't get excited," he counseled, not unkindly. "A conductor has certain police power, *ex officio*, and I am acting wholly within my rights. A child was stolen in Winnipeg—just before we left, it seems—and I got instructions at the last stop to watch out for the kid and to arrest the kidnapper on sight."

"Good Lord!" ejaculated Maxwell, and stared at the conductor in dismay.

"You see," explained that official with judicial gravity, "it is very evident that you two people are not the parents of that child—I happen to be a married man myself, and I know something about taking care of children; and it is equally evident that you two are greatly excited about something—all the passengers have remarked it." Maxwell groaned aloud.

"So, when I got this telegram, I thought I'd better have a little talk with you."

"Let me see the telegram, will you?" begged Maxwell, sparring for wind.

"I guess not! I'm asking for information—not giving it."

"Whose kid was stolen?"

"If you don't know it doesn't matter."

"You had a description of the baby?"

"Sure!"

"And it fits?"

"Something—all the passengers have remembered, and a' babies don't look alike's to me."

"They do to me," muttered Maxwell. "I couldn't identify any particular one to save me."

"I suppose that's how you came to pick up the wrong one," was the sarcastic rejoinder.

"How about the kidnapper?" pursued Maxwell. "Does that description fit, too?"

"Well enough."

"But how do you account for the young lady?"

"The young lady? I've got her de-



Their Leaving the Train Caused as Much Excitement as Their Catching It—Baby Bunting Took Care of That?

scription, I tell you. It's you that I can't account for."

Maxwell fell back in his chair, gasping and gasped; and it was nearly a minute before he could speak.

"For heaven's sake!" he cried, when he had caught his breath; "do you mean to tell me that she is accused of stealing the child?"

"Sure! As near as they can figure it the nurse girl ran off with it."

"And you think she looks like a nurse girl?"

The scorn in Maxwell's voice penetrated even the brass-bound certainty of the conductor.

"Well," he admitted grudgingly, she doesn't look like the common sort, pretty smart lady sometimes."

"That's more than I can say for the railroads," snapped Maxwell. "That young lady happens to be Miss Claire Delaine—of the Portage Drive Delaines. You may have read a description of them somewhere."

The conductor nodded assent, but appeared to be little impressed. "My name is Maxwell—Sam Maxwell—and my home is on Victoria Boulevard. My

father is W. R. Maxwell, one of the directors of this road—"

"That's easy enough to say," sneered the conductor.

"And easier to prove," retorted Maxwell, and proceeded to empty the contents of his pockets on the trunk beside the conductor.

The kid are not the ones you're looking for; some letters—and bills; a initials on it; a seal on my watch fob, and my monogram on the watch; my initials inside my hat; monogram on my shirt sleeves—"

He paused, breathless but sarcastic.

"Shall I strip to the buff and show you the family strawberry mark—or would you prefer to make note of the number of teeth I have had filled?"

The conductor rose to his feet, red and embarrassed, and metaphorically threw up his hands.

"Don't for goodness' sake" he begged, laughing in spite of his chagrin; "I'm blushing enough now."

"Then you are perfectly satisfied with my identification of myself?"

"I'm swamped! I never realized before how much junk of that sort a man carried about with him."

"Nor I," said Maxwell, beginning to grin, and to return his property to his pockets. "And I suppose you'll take my word that the young lady and the kid are not the ones you're looking for?"

"Certainly!" answered the conductor promptly; but he moved nervously and cleared his throat, and finally burst out:

"You're not protecting the girl, are you, Mr. Maxwell—out of sympathy—"

know—I'm beginning to like this game of who's who."

Their leaving the train caused as much excitement as their catching it—Baby Bunting took care of that.

A sadly puzzled ported assistant thence the steps, a row of wondering faces watched them from the car windows, and a half-score of rustics gaped at them from the station platform.

It was quite evident that this queer trio could have no ordinary reason for alighting at such an obscure country

The station agent, impelled by curiosity and called by Baby Bunting, came forward to make himself known.

"Get on the wrong train?" he asked sympathetically.

"Yes," answered Maxwell, eagerly snatching at the extended straw. "I mean?"

"Sure! Just come inside," and the agent led the way into the bandbox of a station.

Maxwell followed with his charges, and what little luggage they had, and baby as comfortable as circumstances would permit.

"This is luck!" he whispered exultantly. "We've got the place all to ourselves. Now if you can get that kid quiet again—"

"I'll have her asleep again in a minute," she answered, with an assurance that amazed the man. "Waking her up made her cross. But you must get the child back to her mother."

"That's just what I'm going to do," he answered promptly.

"What time is the next train back?" she asked, wearily shifting the baby into a more comfortable position.

"I haven't asked yet. I've got to do some telegraphing first."

"Can I help you?"

"Yes—by keeping my beloved niece from yelling herself into convulsions."

"That will keep me busy enough so that I shan't be able to interfere with you," she said, a trifle bitterly.

Maxwell dropped his hand tenderly upon her shoulder.

"Don't Claire—please. You've been mighty good about it all; don't spoil everything now. I've got you into a disagreeable mess, I know, but I want to show you that I'm not altogether a fool."

"I know you mean well enough," she assured him, the while she studied him nervously; "but—your plans are so apt to go awry."

"This one won't," he answered shortly. "I've got it figured down to a dot." And, to prevent further discussion, he turned toward the little corner where the station agent awaited his pleasure.

But when he came to put his ideas upon paper they seemed to be something hazy, and he spoiled several blanks before he finally evolved the following:

"W. R. Maxwell, Winnipeg. Claire and I are here to get married. Prefer church wedding at home. What do you say?"

Samuel Maxwell.

P.S.—Baby Bunting sends love to grandpa.

The agent read the queer message and sniffed, and he once eyed the young man with evident suspicion.

"Postscripts don't go in telegrams," he remarked, with the weary scorn of his kind.

"Oh, yes, they do—when they're paid for," retorted Maxwell, once more domineering and wheedling. "You want it costs, and—have a cigar on passed between them; the agent must have smoked a tremendous cigar."

Something—the cigar or the yellow-backed rod from which Maxwell paid for it—produced a truculent change in the attitude of the agent.

(To be continued next week.)

or—anything of that sort?"

Maxwell pocketed the last letter and rose to face the worried official.

"I've already passed my word," he said coldly.

"I know," agreed the conductor apologetically; "but there's something queer about the whole thing—"

Maxwell laughed and blushed a little. "I guess that's evident enough," he said.

"Your niece?"

"It's a boy that's missing—the conductor."

Maxwell gave him a withering glance. "And you're a married man! Yes, this baby is a girl; and I fancy her clothes bear several identification marks."

"But that's not her mother?" persisted the conductor.

Maxwell ignored the question. "You're not on the lookout for two babies, I suppose?"

"No—"

"Then have a cigar, and forget your troubles," and Maxwell pressed the initial case upon him.

The conductor mechanically accepted a cigar, and took a second one without being urged; but he continued to eye the young man in much bewilderment.

"I wish—," he began.

"I know you do," said Maxwell, with a malicious grin; "but I won't. Your police powers don't cover this particular case, conductor, and I refuse to discuss my personal affairs with a stranger. We'll be getting off an idea that I want to try out; and you run across any more suspects in the meantime; I wish you'd let me

The Cheaper Cuts of Meat

The wide-spread agitation in regard to prices of food, and especially of meat, which has existed during the last few months, should lead to reforms in many directions. There are so many sides to the matter of food economy that it is small wonder if some important points are lost sight of in the rush of every-day living. For instance, the market price is not the final price of the food. The amount of waste that is paid for during the delivery to the cook increases its cost and there is an appalling waste in the trimmings and bones of the more expensive cuts of meat. This is not alone a question of loss of weight, but of nutriment, too. There is a choice in so simple a matter as buying stew meats, although one does not expect waste in cheaper cuts. A bit of fat does not harm, but pieces of meat containing much white skin are largely waste and this means something, even at 8 cents a lb.

The question of how much is thrown away in the kitchen also regulates the final cost. If food is attractively cooked it will be eaten without waste. The size of the portions or the frequency with which certain foods are served are also factors in the final cost. As a rule, people eat more than they need. An expensive nutritive food can be furnished in proper amount for a moderate sum, provided the palate is satisfied with a good soup for instance, which is nicely flavored and made from the bones and scraps. The soup has no nutritive value but satisfies the appetite in a degree and prevents overeating.

Aside from these questions is the one of actual first cost of various cuts of meat. Pound for pound, the cheaper cuts contain more nutriment than the dearer ones. By skilful cooking they can be made as acceptable to the palate. Generally speaking, we like the taste of meat that is browned by roasting or frying better than boiled or stewed meat. It is possible to prepare the cheaper cuts with this browned taste.

A roast quite good enough for any table can be prepared from what is known as the "plate piece." This is a strip cut from the end of the ribs and contains their cartilaginous ends with a small amount of fat. This piece may be boiled until almost done and then put into a pan for roasting. Sprinkle with salt and pepper, dredge with flour and pour some of the liquid used in boiling into the pan. Bake carefully and brown nicely. Pare some white potatoes and put into the pan with the meat. They will brown nicely. If any of the meat is left, it can be cut in thin slices or cold and served with horse radish or other sauce.

Another cheap cut is the flank steak. The steak has absolutely no waste and in cold weather can be kept a week without harm. The thick end can be baked. Working from the cut end of the thick portion split the steak in such a way as to make a pocket, keeping the end and sides uncut. Fill

from the thin end of the steak can be put in without browning or after being browned. If preferred the thin end can be cut into strips as wide as the steak is thick. Put into the frying pan. When almost done take from the pan, season with salt and pepper, dredge with flour and return to the pan in which the drippings have been heated. Finish cooking. Make a nice brown gravy to serve with this.

Another way of serving this same cut is as a stew. Brown the slices as before when almost done roll each slice around mixed vegetables which have been cut into strips and partly cooked in salted water. Carrots, celery and onions are a good combination.

The cuts referred to are tender, but even so, they should have slow cooking. After the surface is seared the heat should be reduced in all meat cooking. It is absolutely impossible to cook any of the cheaper cuts and have them good, if there is a fierce fire. On the other hand, it is possible to have them delicious if cooked slowly.

The neck and round are two other cuts furnishing much nutriment, there is no waste and they cost but little. Steaks are usually made of the poorer cuts of meat, and hamburger steak is another familiar form of serving.

A round beef is good speed. Rub the meat first with sugar and let stand three to twelve hours according to the size. Rub with a mixture of all seasonings used for meat, including the various spices and a bit of salt-petre. Allow to stand as before and a short time in cold water then simmer slowly till tender. Put in the cooking water the usual onion, carrot, parsley, etc.

At certain seasons of the year veal is cheap. Cutlets are most indigestible as usually prepared. Trim and season and put into a pan containing quite a good deal of fat. Cook till almost done, then dredge with flour or dip in egg and crumbs and finish cooking.



How to be Neat

If it be true that "order is Heaven's first law," it is surely also true that it is the law of every well-managed home. A really refined, attractive home cannot exist without neatness. How to secure neatness is one of the lessons some housewives have never learned, and, not possessing the secret, they cannot impart it to their families.

Sometimes a big mistake is made in beginning a home. The wife or the husband, or both, may have lived in one of those cluttered-up houses most of their lives, a home in which things in general are just dropped down in no place in particular.

Perhaps the husband had one of those dear, good-looking, hard-working, mistakenly devoted mothers who tagged after him, picking up his things and putting them away uncon-

plainingly year after year. Even so, he can be trained to better ways—that is, if he is caught in time.

The ordinary man under forty can be trained, if he has a tactful, wise trainer. One young wife who began the training process just as her home was started, achieved splendid success, spite of the doleful predictions of his mother.

Her husband's clothes were left flung around the bedroom on chairs or thrown over the foot of the bed after he changed them, though there were two clothes-closets in the room, with plenty of hooks, and a clothes-hamper for soiled garments. After picking them up uncomplainingly a few times, the young wife declared to stop the practise and leave each article just where he had left it.

"We might almost get along without our clothes-closet," she remarked sweetly, as they entered the room where his belongings lay strewn about. "I might use it to pack the extra being in, if you think you won't need it."

He took the hint, picked up his clothing and put things where they belonged. After that it was easier, though old habits are not broken and good ones formed in a week.

Competition Poetry

The following poetry was written and read by Mr. Angus Grant of Moose Creek, Ont., at the meeting held at Moose Creek in March, when the prizes won in Farm and Dairy's Farm Competition were given to a number of the prize winners. Mr. Grant won the third prize, being five points behind the winner of the first prize winner, Mr. Victor Begg of Moose Creek, and only one point behind Mr. J. A. Anderson of Dickinson's Landing, who won the second prize. Mr. R. R. Ness of Howick, Que., is the judge mentioned and the Mr. Cowan named is the editor-in-chief of Farm and Dairy.

The prizes of life are bonnie to get,
We all like a share in the game,
A first, a second, or third it may be,
There is pleasure in winning the same.
To the winner of points the world bows down,

Wherever it happens to find him,
But the honest man never fears it's frown
And the runner never looks behind him.

Chorus.

So here's to the man who didn't win,
He's as brave and worthy as others.
The men of the soil who ventured in,
Are Comrades, Friends and Brothers.

We hear of the wealth of the city grand,
Of men "to the Manor born,"
But, the happiest man, is the man on the land,
With his fields of growing corn.

For if stocks go up, or stocks go down
The grain still keeps on growing,
And unlike the breath of the crowded town,
The fresh sweet wind is blowing.

Peaceful he lives in his quiet home
With the flowers of love around him,
Bravely content with the simple joys
That everywhere surround him,
And whether he wins, or whether he loses,
No selfish fears oppress him.
He's first of his clan is the Farmer man:
Behind the plow—"God bless him!"

We folk who live in Stormont, are very proud to-day,
To bring our country honor, and help to

Before the Judge's argus eyes, that Committees will bring.

No matter if you have to fight weeds from a neighbor's farm,
That gently blow across the fence, as if to do no harm.
They'll not escape the well-trained sight of Mr. Robert Ness,
Who has stood for a few times, as if it has more or less.

No slipshod work escapes him, you may hustle as you will,
He'll score the "points," both good and bad, with all a Judge's skill.
And Mr. Cowan is to-day a lucky man indeed.

To prove that Eastern Ontario farms are not all run to seed.
Only five points to us three! The farm at Maple Hurst,

With Mr. Begg as owner, has proudly won the first,
While only one point stands between friend Anderson's and mine,
And on us both these prizes will, with equal lustre shine.

And now to Farm and Dairy our honest thanks we give,
We'll cherish these mementoes as long as we shall live,
And as we sing of "Auld Lang Syne" with grateful hearts we say,
"God bless the honest farmers of Canada today!"

THE COOK'S CORNER

Recipes for publication are requested. Inquiries regarding cooking, recipes, etc., gladly answered upon request, to the Household Editor, Farm and Dairy, Peterborough, Ont.

SCOTCH CAKE

Three-fourths of a pound of butter, one pound of flour, one pound of granulated sugar, one heaping tablespoonful of cinnamon and three eggs. Roll thin and bake in a quick oven.

GINGER COOKIES

Two cupfuls of molasses, one cupful of lard, butter or drippings, one cupful of sugar, one-half cupful of sour cream, one tablespoonful of ground ginger, two eggs and one teaspoonful of soda. Flour enough to make a soft dough, bake in a quick oven.

WATERCRESS AND CUCUMBER SALAD. Wash and remove all roots from watercress, drain, and chill it a little. Pare 1 cucumber, wash, cut in slices and arrange in and on the watercress, serving with French dressing.

BEST ROAST COFFEE

A very good coffee can be made of beet root in the following manner: Cut dry beet roots into very small pieces then gradually heat it in a close pan over the fire for about 15 minutes after the fire put in a little sweet, fresh butter, and bring it up to roasting heat. The Lutter will prevent the evaporation of the sweetness and aroma of the beet root. When fully roasted it may be cooled and ground, and otherwise used like coffee.

PEPPER NUTS

Beat 4 eggs to a froth, gradually add 1 lb powdered sugar, and beat



this pocket with a good dressing. Put into a pan, season with salt, pepper, dredge with flour and drop a bit of beef drippings here and there. Bake frequently and brown nicely. Any part of this that is left can be cut in neat pieces and used as a stew with a nice brown gravy and a few carrots, an onion and the flavoured used for stews. A few pieces cut

plainly year after year. Even so, he can be trained to better ways—that is, if he is caught in time.

The ordinary man under forty can be trained, if he has a tactful, wise trainer. One young wife who began the training process just as her home was started, achieved splendid success, spite of the doleful predictions of his mother.

lead the way,
To cleaner farms and better homes in all the farming land,
Where men of brawn and men of brains are working with their hands.
But, ah! my friends and neighbors, if you are one who wears a top hat,
You'll think a while before you try to win your farm a prize,
For live stock, buildings, crops and drains and every mortal thing

until light and foamy. To 1 cup flour add 1 teasp cinnamon, 1/2 teasp cloves, 1/2 nutmeg, grated, and 1/2 teasp baking powder. Mix well and stir this into the beaten eggs and sugar, then add the green rind and juice of 1 lemon and enough more flour to roll about 3/4 in. thick. Cut with small, round cutter and bake on buttered tins in a moderate oven.

Mothers' Day in Canada

There has in recent years been inaugurated a movement called Mothers' Day. It has spread through the entire United States, and last year for the first time was celebrated in London, Ont.

The second Sunday in the month of May has been chosen as the day, when all of us shall keep in especial remembrance the virtues of motherhood. On that day, the white carnation, which our own Canadian poet Bliss Carman has called the most comely of flowers, will be worn in honor of Home and Mother. The movement is meeting with the most enthusiastic appreciation, and Canadian people, who have as good homes as may be found in the world, will not be slow to observe a day which commemorates the central figure in the home.

This new movement for Mothers' Day is in itself more significant than any monument and, by associating itself with flowers, gives a peculiar sweetness and pleasing suggestion to the memories of the day. No matter how world-weary or troubled the woman or man may be, the remembrance of the old home and the childhood associations will bring refreshment and healing. Perhaps it was a farmhouse on the wide acres of a Canadian home-stead where there was room and to spare for a land of merry youngsters. There was such a fine old orchard, such an alluring creek for small feet to wade in, such a fine hayloft for a romp on a holiday! But best of all, was the mother's face smiling from the kitchen doorway as the tired small persons came home from school or play. What a fine old kitchen it was, with its wide flags and savory smells! There were all manner of good things, spiced and preserved and stored away, and from the old stove came the appetizing whiff which told of baked apples or hot biscuits for tea. The home scene comes back, borne on the scent of a white carnation which, strangely enough, is mingled with other perfumes—the fragrance of apple-blossoms in the large orchard, the lilacs in the old lane, and the heavy scent of the flowers which rested on the coffin. Wherever the old home may have been, it was a fairy spot, and the modern world shows not its like to weary hearts. There are many houses along life's road, but there is only one old home—and its queen was the Mother, whose love has followed her children all around the world. This is the magic in the white carnation.

OBJECTS OF THE DAY.

To honor the one who loved you first and always—your Mother.
To give tribute of loving remembrance of your mother—or her memory—through some distinct act of kindness, visit or letter.
To wear a white flower—emblem of purity and fidelity—on Mothers' Day.

Save Your Dimes



For a Club of two new yearly subscriptions to Farm and Dairy, we will send one of these fine metal banks free. Cannot be opened until \$5 has been put inside. It will hold \$50 in dimes. See a description of this bank dimes in another column. Remember only TWO NEW subscriptions required. Send them to-day, as supply is limited.

CIRCULATION MANAGER.

FARM AND DAIRY

Petersburg Ontario

If possible, send one to others as a message of sympathy or brotherhood. Remember the sick or unfortunate in hospitals.

While any white flower may be worn, the white carnation is the Mothers' Day special flower. Its whiteness stands for purity; its form, beauty, its fragrance, loveliness; its wide field of growth, charity; its lasting qualities, faithfulness—all a rue-mother's attributes.

Mothers' Day may be observed through special sermons, exercises or addresses in honor of "Our Mothers," and by the wearing and distribution of the white flower in connection with such occasion.

Mothers' Day is for every creed.



This illustration shows the home of the second prize winner in District No. 1, in Mr. J. A. Anderson, of Stormont Co., Ont. A comfortable farm home, fine lawn and pleasant surroundings. Read letter from Mrs. Anderson, this issue.

class, race and country. It is not denominational. Social, fraternal, civil, military and religious organizations; official, professional and business classes are all asked to pay homage to mothers through the wearing of the white flower, and observance of the spirit of the day.

Mother o' Mine

By Rudyard Kipling.

If I were hanged on the highest hill,
Mother o' Mine,
I know whose love would follow me
still,
Mother o' Mine.

If I were drowned in the deepest sea,
Mother o' Mine,
I know whose tears would come down
to me,
Mother o' Mine.

If I were damned of body and soul,
Mother o' Mine,
I know whose prayers would make me
whole,
Mother o' Mine.

Indebted to the Competition

Since we entered our farm in the dairy farms competition, we have had a bath room placed in our house, to which water is drawn from the cistern by means of a pump near the bath and from which a waste pipe leads into the sink below. Outside of getting some new furniture, that is all that has been done inside the house. We already had nearly everything that would tend to saving labor such as washing machines, butter mixer, bread mixer, etc. The separator and churns have been taken down to the barn to be operated by horse-power, saving considerable dirt in the house.

I feel indebted to the competition for the improvements that have been made just surrounding our house. An old stone wall that extended from one side of the lawn some distance westward, and which had been an eye-sore has been entirely removed and by tiling the ditch which work was extended in front of lawn doing away with a bridge.

The lawn itself has been plowed and leveled making it much easier to use the lawnmower.

Leading from kitchen door to well and milk-house a cement walk has been laid, which I greatly appreciate, especially on muddy weather."—Mrs. J. A. Anderson, Stormont Co., Ont.

Before You Clean House

In packing away clothes and other perishable goods a plan worth trying is as follows: If you have a closet to spare, first burn some sulphur in it, next with a small blowen blow insect powder into the cracks between the floor and baseboards, then line the closet with tar paper, being sure to

place the folds of the paper well over one another, tacking closely.

Have your furs and things ready hanged up on hangers and closed and lined bags of camphor balls, cedar chips or tar balls into them if you like. Keep this closet closed and locked, though if you are with a yard it will be well to take the contents out once during the season and hang in the sunlight for a whole day.

This is the way things are kept moth-free in the South, and unless your Northern moths are more belligerent one will not experience any trouble from them and clothes will keep in trunk much better than if packed in trunks. Blankets, rugs and curtains may be wrapped in tar paper or Lags, sealed up and laid on the floor of this closet.

OUR HOME CLUB

LITTLE THINGS THAT COUNT

Who knoweth the value of little things? The question is pertinent, for needs to do some good thinking on this point. Little things escape him. He has his mind's eye focussed on some big thing he is getting to do. Meanwhile he forgets little things, close by which, properly cared for and disposed of at opportune moments, would mean so much to all around him. It is because of little things that the farmer and his son often get out of harmony. Because of this the son "pulls up stakes" on the old farm and starts for pastures new.

What farmer do you know who does not plan big things for his boy as good start in life when perchance he marries—the whole farm when he the father, is dead and gone? Oh, that is it! When the father may be a long time dying—the son may go first—and what boy, what Canadian boy with good red blood in his veins would wander around for his father to die? Banish the thought!

WHY BOYS LEAVE HOME

Let us consider for a moment the much-talked-of labor problem. Why do the Ontario farmers' sons leave the farm for the city? Why do they flock to the West? Why don't they stay at home and help with the burdens of the day where they are most needed? Simply because their parents ignore these little things, parents forget the boy's present needs, real or imaginary. They think the only way to the distant future. "Oh, yes, John will have all when I am dead and gone." But John might get out and hustle for himself and have far more and make it easier than if he had stayed at home to await and work for his inheritance. And it is this belief, strong in the mind of any sturdy Canadian boy, that takes him from his father's farmstead.

THE REMEDY

"Give us the remedy," you ask. It is simple. Run the farm and its operations on strictly business principles. Make it worthy of the best that is in you. Aim to excel in some particular branch, in an specialty; be known to excel in at least some one thing; improvement the watchword all along the line. (Practically every farm in Ontario to-day could be made to double and triple its output.) Don't forget to use your boy as you would have to use a hired man. Pay him. Yes, that's right; pay him! No twentieth century Canadian boy, worth his salt, can be expected to work contentedly without pay. Far-off promises of a farm, etc., won't do. He might earn two or three farms while waiting and working for that one. The boy must be allowed to share, and to share in being a partner, he of necessity will be consulted in all things pertaining to the farm; hence will his interest and his confidence be obtained.

A CONCRETE EXAMPLE

"The Son" enjoys the acquaintance of many young men that left home for causes herein stated. The tendency to err is not with the big things, it is in little things. One well meaning father of the writer's acquaintance offered his son a start totalling respectable thousands. Yet that same man would pinch that son on small deals. How could such inconsistency be tolerated? We know the question is not one-sided. Boys often are at fault. Attention, in great measure to these little things, however, will smooth out many a troubled spot and go far towards contenting the farm boy with his lot.—"The Son."

We cannot urge too much on women ordering patterns, the importance of carefully giving name, address, size of pattern and number of same. Several orders are waiting to be filled, each one of which lacks some one of these essentials.

Farmers should eat more oatmeal.

Although the farmer of today is able to buy almost any quantity of wheat or to eat he isn't paying attention to food values when it comes to his own table.

He feeds his stock carefully, avoids over-feeding and selects the stock food that he believes will give the best return in strength and general efficiency.

If he has been watching the extensive researches and experiments on the question of the best human food for muscle and brain he will heed the advice from all sides to "eat more Quaker Oats."

Quaker Oats is mentioned because it is recognized in this country as Europe as the best of all oatmeals. Feeding farm hands on Quaker Oats means getting more work out of them than if you feed them on anything else.

The Upward Look

The Source of Strength

I can do all things through Christ which strengtheneth me.—Philippians 4.13

If each of us could once believe these words of the Apostle Paul, and carry them with us in our hearts and consciousness all the time then we could literally do all things. The trouble is that we are too prone to look upon our environments and permit them to mould us instead of moulding them. We feel that the conditions that enter into our lives, the troubles that weigh us down, the hindrances that appear to prevent us from making the success of ourselves that we would like are insurmountable. We forget that with God all things are possible (Luke 1.37) and that we can do all things through the strength that He will furnish us for our needs if we but wait on Him and have faith in Him.

Once God enters our lives in power everything about us is changed. We begin to think His thoughts and the difficulties that formerly appalled us appear insignificant before the realization that nothing can resist the power of God. Instead of wasting time worrying over circumstances that are apt to overwhelm us, we begin to listen ever more and more to the voice of God within our souls and thus a power springs up within us that makes it possible for us to do things that formerly seemed impossible. This is what Christ meant when He said, "If ye abide in me, and my words abide in you, ye shall ask what ye will, and it shall be done unto you." (John 15.7.)

In this department in recent issues we have endeavored to show that God is the source of all power, and wisdom and love. In just the degree that

we recognize our oneness with God does His Spirit of life and power enter our lives and transform us. The more we open ourselves to this divine inflow, the more do we enter into harmony with the highest, the most powerful and the most beautiful everywhere. And in the degree that we do this do we overflow, so that all who come in contact with us receive the effects of this realization on our part. And in the degree, also, that we fail to recognize our oneness with God, the infinite source of power, so close ourselves to this divine inflow, do we enter into that state where there seems to be with us nothing of good, nothing of beauty, nothing of power. We each have the power within us to open or close ourselves to this divine inflow—exactly as we choose. This we have through the power of mind, through the operation of thought. There is the soul life, direct from God. This it is that relates us to the Infinite. There is, also, the physical life. This it is that relates us to the material universe around us. By the control and direction of our thoughts and desires we can live within whichever of these two worlds we choose. All we require to enable us to rise to greater heights is to permit God to enter our lives in power and then we will realize that we literally can do all things through Christ which strengtheneth us.—I. H. N.

The American Farmer's Wife

(Concluded from last week)

Often the boy's whole future is darkened by this carelessness on the part of the home training. We are trying to counteract the example of our hired men by careful training.

Just the feeling that other women had not the same problems, and the

herself to death for her family!" When will such women learn that one is loved for what she is, not for the work she does? No one ever loved a machine!

The problems of the American farmer's wife are as many and varied as are the problems of the woman of the city or village. The conditions vary as much on the farm as in the city. A recent article on farm life depicts the "woman in the faded gown," and her selfish and penurious husband, who lets her overwork and lends no helping hand. It is a true picture of one type of woman and man; only one can find the same woman in the "country who can't afford to buy labor-saving devices," for his wife is the same man in the city whose spare change goes over the bar and helps to put an Indian at the tobacco bank.

Often this selfishness has been encouraged by the too self-obliterating spirit of the mother who is willing to rob at the wash-tub, while her daughter sits at the piano and sings "Who Will Care for Mother Now?" After nearly eight years of experience in the work of the Bureau of Farmers' Institutes, during which time I have been in close contact with the people of the rural districts in New York and other States, I have yet to find that selfishness and penuriousness are traits of our farmers alone. On the contrary, there is no class of husbands who see and appreciate the work done by their wives as do the men whose work brings them in almost hourly contact with the home interests. In proof of this I would point out that at every Woman's Institute held through the State of New York there was a large attendance of men. It means something to leave work and drive miles to hear home topics of such interest.

How many business men in our cities will leave their business to attend a meeting where the program contains only home topics?

For Greasing Cake Tins

Take a small round tin box with tight-fitting cover, bore a hole in the cover, through which invert the handle of a small paint brush, so that the brush may reach nearly to the bottom of the box. By keeping a little lard in the box, and setting it on the stove for a minute before using, cake tins can be greased quickly and without soiling the hands, while the close cover of the box keeps all dust from the brush.

The Sewing Room

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

PRINCESS COSTUME 6346

Princess costumes increase in number and gain in favor as the season advances. This one will be found equally available for wool, silk, linen and cotton and is both smart and practical.

Material required for medium size is 2½ yds. 27, 6¼ yds. 44 or 5 yds. 23 wide.

The pattern is cut for a 34, 35, 36 and 42 in. bust, and will be mailed on receipt of 10 cts.



MISSSES' WAIST 6352

Waists made with trimming portions of contrasting material are pretty and attractive. It includes the narrow, deep chemise and the medium and can be made either with or without the sleeve puffs.

Material required for the 15 yr. size is 2½ yds. 21 or 24, 1½ yds. 32, 1½ yds. 44 in. wide, with ½ yd. of ribbon and ½ yd. 18 for the chemise and deep cuffs.

The pattern is cut for girls of 14 and 16 yrs., and will be mailed on receipt of 10 cts.



FIVE GORED SKIRT 6290

The skirt with the panel effect makes one of the latest fashions and is very pretty and generally becoming.

Material required for medium size is 7½ yds. 34 or 27, 6¼ yds. 32, or 44 in. wide for walking length.

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



"LEG O' MUTTON" DRESS SLEEVES 6342

The "leg o' mutton" sleeve or the one that is slightly full at the shoulder and close fitting at the wrist, is the latest that has appeared. These models will be found well adapted to new material and to the remaking of gowns which already have been service.

Material required for either sleeve is 1½ yds. 21, 24 or 32 or ¾ yd. 44 in. wide with ¼ yd. of binding 1½ in. wide, 1½ yd. ¾ in. wide for the box plated sleeves; 1½ yds. of insertion, 2½ yds. of edging for the wide sleeves.

The pattern is cut in three sizes, small, medium and large, and will be mailed to any address on receipt of 10 cts.



Buffalo Carpet Beetle.—A most effective repellent for the Buffalo carpet beetle (Buffalo moth, as it is commonly known) is ground cloves. Sprinkle ground cloves around the corners of rooms, under the edges of carpets and under the paper in bureau drawers, and the Buffalo carpet beetle will never be found there.—Mrs. R. T. Gillespie, Ont.

VALUABLE CLUBS

FARM AND DAIRY—Weekly

An all-round, strong agricultural and dairy paper. It contains the best knowledge of the times. Its market reports and letters from farmers are two strong features.

CANADIAN POULTRY REVIEW

32 years wise—the peer of all American Poultry Journals. 4272 pages full of live poultry lore—shows, prices, information that helps you make money.

CANADIAN HORTICULTURIST

Practical common-sense advice on the culture of fruits and vegetables, lawns, flowers, shrubs, trees and all ornamental plants. It is inspiration for the amateur, and money-earning for the professional.

THE HOME JOURNAL

Looking over The Home Journal, you can scarcely believe it is the same magazine that you know a year ago, it has doubled in size—in quality—in attractiveness. The Home Journal of to-day is a forty page monthly—a magazine for which Canadian women can justly be proud.

One year trial subscription at lowest prices

Farm and Dairy	.....\$1.00	
The Home Journal	.....1.00	\$ 3.5
Farm and Dairy	.....\$1.00	
The Home Journal	.....1.00	\$1.75
Canadian Horticulturist	......50	
Poultry Review	......50	
Farm and Dairy	.....\$1.00	
The Home Journal	.....1.00	\$2.00
Canadian Horticulturist	......50	
Canadian Poultry Review	......50	

SEND ALL ORDERS TO

Farm and Dairy

PETERBORO, ONT.



A Useful Premium

Farm and Dairy has disposed of a great many pure bred pigs during the past year, giving them away as premiums for clubs of nine new subscribers. The illustration shows a pig used in a novel manner. Many boys and girls can win pigs with little trouble. We have several boys under 15 years in the good work.

ideas gained from their experience, helped this woman.

Often we find the woman who won't attempt to remedy her present woful state; the woman who will not use any labor-saving device, who prefers to work as her mother and grandmother did, and suffer just as much, perhaps a little more; the woman who is willing to buy patent liniments to rub on her back, but who will not spend money for a washing-machine, who scornfully smiles at a fireless-cooker and turns up her nose at a bread-mixer, who scrubs her kitchen floor on her hands and knees, and keeps it "so one could cut off it" (though nobody wants to), and polishes the stove daily, "though there see your face in it" (though there are plenty of mirrors for that purpose)—the woman who won't let her husband and children excuse her. But they are not proud of her. And yet she glories in the fact that she "saves

OUR FARMERS' CLUB Contributions Invited. PRINCE EDWARD ISLAND KING'S CO., P. E. I.

CARDIGAN HILLS. The weather has been very springlike since the first of April. The snow went away quickly and heavy rains and high winds have dried up the land. The crops are in the middle of summer. Very few farmers have started cropping, as the land is too cold, but prospects are good for the season. Farmers are busy fencing, and earlier than we have had for many years. Their summer supply of wood is about what which is run by a four h. p. gasoline engine. The gasoline engine is also used for threshing grain and is fast displacing the tread-mill for threshing. Prices of produce are as follows: potatoes, 25 bush; oats, 45c; eggs, 16c a doz; butter, 22c; pork, 10c; h. h. hides, 1c a lb.; hay, 410 a ton, straw, 86; wheat, 81.25 to 82; barley, 75c; h. h. h. to 1c a lb.; flour, 85 to 86 a bbl. - H. P.

ONTARIO LEEDS CO., ONT.

GANANOQUE. - We are having fine weather for seeding on account of it being so cool and dry. About two weeks ago the grass made a good appearance, but owing to some cold weather has improved very little since. Our factories are running but the supply of grain is so hard to come by that that of other years at this time. As a rule cows are freshening the 15th. There is a great demand for calves and deacons sell for \$1 apiece. - C. H.

HASTINGS CO., ONT.

CHAPMAN. - Seeding operations are in full swing and the weather up to the present has been very favorable. We have lately had rain which was very much needed. New seedling has stood the winter very well. Several cheese factories have opened for this season. There is a good demand for veal calves for the Montreal market; hogs have dropped to \$9.15 a cwt. - H. S.

TURRIFF. - Early spring, plentiful food, cheap oats and potatoes, and bright weather for the summer prevail. Small cultures as they are called are more in evidence, and there are more small farms. One hundred little maple trees shipped from here to Toronto, there to be planted in a park. From a former experiment it was thought best to get maples from this district, hence the experiment on a large scale. Despite the attraction of the west, and the steady, though not large exodus thereto, the farm labor market is not so acute, and we hear of no demand for the British laborers who are coming out. - W. E. W.

BERHAM CO., ONT.

FLEETWOOD. - Seeding will be almost completed in another week, then the planting will begin and will be well finished by the 15th of May. Young clover and fall wheat look very good and promise to show large increases over last year's yield, providing no June or July frosts should come and damage same. Live stock in general is looking fine and should go out on the grass in good condition. The snow storm of a week ago has helped to moisten the ground on the high places and has taken the place of rain, which was needed in some localities. - J. D.

VICTORIA CO., ONT.

HARTLEY. - Seeding has been going on for some time and many farmers are sowing, or nearly through. The fall grain and clover have come through the winter in splendid condition and are promising to be a good crop. Help on the farm is very scarce and wages raise and it has cost \$30 a month for the summer. There has

been plenty of feed for the stock and everything shows it by being in good condition, and the grass is growing nicely. Prices are high for all kinds of stock, beef cattle from \$5 to \$8.50 cwt.; pork, 89.25 a cwt. live weight. Horses are scarce and prices being paid are \$150 to \$250 each. - W. M.

ONTARIO CO., ONT.

TAUNTON. - The past winter has been the best that anyone experienced by the settlers of the north. The weather throughout the whole was excellent. Days with winds and the mercury below zero were few in number. Everyone enjoyed the unusual amount of sunshine during the sleighing. Spring has set in very early. The snow went away in a hurry, the land has dried and is in good condition, and as a result we have extra early seeding. Plowing and seeding were commenced in March and they have finished seeding by the end of the first week in April, and the middle of the month found nearly all the seeding done. The land worked over in splendid shape. Fall wheat and clover and corn all well; never looked better. A good time and easy raising the orchards with lime and sludge preparations. - S. A. N.

WELLINGTON CO., ONT.

ELORA. - Seeding is nearly all finished. This is a most unusual state of things. Seed has gone into the ground in excellent condition, and the soil is feeling very genial. Feed is fairly abundant; prices are high enough to suit the farmers, at least still high enough. The fall has fallen off slightly, but the weather has improved attention to production of this kind of inquiry for here is still an increasing industry. There is a great deal of winter work to be done before the summer, and it is possible to bring production up to possible conditions. It would seem almost impossible that the requirements for some time to come, and over production appears to be an impossibility. - G. W.

MIDDLESEX CO., ONT.

WATERLOO. - The sugar making season has been the most unfavorable season for sugar making for many years, with practically no frost. However, it is an ill wind which blows no good. While we have a small amount of sugar we have the promise of a good crop of bread. Fall wheat never looked better at this time of year. Seeding is well under way. The seed bed is in good shape. - C. N.

NORFOLK CO., ONT.

SOUTH WALSINGHAM. - Farmers are through seeding. Wheat and clover look well. Meadows and pasture lands are nice and green in good growing condition. Some farmers are working on their corn ground, getting it in order for planting later on. Hops are selling for \$3.25 a cwt.; eggs, 16c a doz; butter 18c a lb.; veal, 40c a lb.; beef, 10c a lb.; pork, 10c a lb.; sheep, 8c a lb.; potatoes, 25c a bush; corn, 50c a bush. - B. B.

BRUCE CO., ONT.

HEPWORTH. - Seeding is much earlier than for a number of years. It has been a very poor year for maple syrup. Fall wheat looks good and early sown. The winter well. There is a large crop of potatoes still in the hands of farmers. They are having a fine crop of many that are sold. Young pigs are very scarce and are selling at from \$5 to \$7 a pair, which is very high for the season. - K. L.

HURON CO., ONT.

GODERICH. - An editorial representative of Farm and Dairy, in company with Mr. George Laitwaite, the fourth prize winner last year in District contests, in the dairy farms competition, spent a few hours recently visiting some of the leading farms in the vicinity of Goderich, and a number of very fine farms and some excellent farm buildings were noticed. Land was numbered at \$10 an acre. Many of the farms or sections would readily bring \$30 to \$100. It is difficult to account for this in many other respects, but this section is well situated as regards railway and water connections. It would seem as if the land of this district is likely to greatly increase in value within the next few years. Fruit growing is becoming popular. A number of orchards have been planted. Apples do particularly well here. Hamlin has planted peaches extensively and expects to obtain favorable results therefrom. A visit was paid to the dairy farm of Mr. Bisset and the late Mr. Henry Isaac, John and Harry Salkeld. Mr. Bisset is milking some 30 Holsteins, having an ex-

LIVE HOGS

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

THIS WEEK'S PRICES FOR HOGS DELIVERED AT FACTORY \$9.00 a Cwt. FOR HOGS WEIGHING 100 TO 225 LBS.

THE GEO. MATTHEWS CO., LIMITED PETERBOROUGH, HULL, BRANTFORD

THE GLENHURST DISPERSION SALE

This well established and celebrated herd of Arrshires at "Glenhurst," Williamstown, Ont., was put up for sale on the hammer on Wednesday, April 27th, when 31 hogs, 16 to 2 weeks, having an average of over 245 lbs., ranging in ages from 2 days to 18 months, averaging 215 lbs., were sold by Andrew Phillips, Auctioneer by order of the Glenhurst Dispersion Sale. It was a great pleasure to have had a sale of such a large stock and in Canada. The sale was, unfortunately, to have conducted by Mr. J. B. Graves, of Peterborough, but the sale was, unable to do so through illness.

The Glenhurst herd was renowned far and near for its winnings in the show ring and for MILK. The animals were all bred by Mr. James Benning, who was one of the pioneer breeders of Arrshires, and formerly lived near Howick, in the Province of Quebec. The fact that the herd had Canadian-bred animals in the (imp.) 2637-7 species favorably for Mr. Benning as a stockman. Buyers were present from many sections; bidding was brisk and keen, and consequently a large number of persons were among whom were P. Ryan, Brewster, N. Y.; J. W. O'Fallon and J. Johnston, Morrisville, N. Y.; A. S. Stalter and J. H. Mendenhall, Canfield, Ohio; C. W. Short, Ogden, N. Y.; Gilbert McMillan, Spokane, Wash.; J. Hume, Menist, Ont. (rep.); W. W. Murphy, Toronto; A. W. McIntyre, Newington (who makes the best quality of wool); Wm. Hunter, Maxwell, D. T. and West; Messrs. John Brown, Hector Gordon, J. W. Logan, John Brown, James Symonds, James Guelph, Howick; Geo. P. D. E. Day, Guelph; Elgin Montgomery, Lancaster; J. L. Lincaster, Cornwall; A. D. Campbell, Morrisville; Wm. Thorn, Lindsay; A. C. McLean, Yankton, N. S.; J. A. Ribens, Scarborough; W. J. Walker, Winchester; D. Drummond and R. B. Faith, Ottawa; and W. F. Stephen, Sec. Can. Arrshire and Arr. Association, Huntington, Que.

The bidding was quiet. The imported bull and Trethewey secured the imported and the best secured of the lot. The Arrshire, - 3988 - as follows and set of the great dairy cows, and the best of the Agricultural College, Guelph, secured some choice cows, and Hunter and McIntyre in the heifers did some keen bidding and set the choice ones. Prices for the calves and the cattle, their prices and purchasers:

FEMALES-COWS

Table listing prices for various cow breeds and types. Includes entries for Silver Lass of Glenhurst, Arrshire, Trethewey, etc., with prices ranging from \$150 to \$375.

(Continued on page 25)

IOU. The latest success. Black & white The big black plug chewing tobacco.

MANITOBA. MARQUETTE CO., MAN.

KELLOE. - There has been a decided change in the weather since our last report. Skating is over and the order of the day and the work of the spring is stopped. It is not expected that this cold snap will last for long. No injury to wheat or other crops is expected as the winter in this country is pretty well used to that sort of thing. It is not considered that there has been any loss of stock, especially that farmers did not have a very grain cleaned, and this gives them a chance. - J. J. N.

Enclosed find my dollar for renewal subscription to Farm and Dairy. It is improving all the time. - A. E. Mercer, Al. goma Ist, Ont.

MARKET REVIEW AND FORECAST

Toronto, Monday, April 25th, 1910.—Whilst there is no question as to the progress that Canada is making in her industrial and commercial activities...

Corn, 64c to 65c a bushel, according to quality.

HAY AND STRAW

Hay is still keeping at a high figure, wholesalers quoting No. 1 timothy at \$14 to \$15 a ton...

MILL FEEDS

The demand for mill feeds is slow, and Manitoba bran is quoted at \$20; shorts at \$21 to \$22 a ton...

EGGS AND POULTRY

The price of eggs still keeps up although supplies are abundant, the reason of course being the continued high prices for all classes of meat...

WHEAT

There has been a rally in the wheat market, due to extensive buying, but there is nothing to show that this is caused by any panic feeling in Liverpool...

COARSE GRAINS

The market is steady for all kinds of grain and quotations are as follows: Oats, Canada Western, No. 2, 36c to 37c...

SEEDS

The following prices rule in Toronto: No. 1, 10 1/2c; No. 2, 9 3/4c; No. 3, 8 3/4c...

HIDES

The market is steady, and local dealers make the following quotations: No. 1, steer and cow hide, 11 1/2c...

DAIRY PRODUCTS

Dairy products are still more than holding their own in price on the local market owing to scant receipts...

MAPLE SYRUP

Maple syrup is selling on a steady demand on the local market at \$1 to \$1.10 per gallon...

MORSE MARKET

Trade for the Northwest has shown signs of falling off during the past week, but some few shipments have been made...

Price range as follows: Heavy draft horses, \$220 to \$250; agricultural horses, \$160 to \$200 drivers, \$100 to \$125...

LIVE STOCK

The fears of those who thought that the lot notch in the prices of cattle had been reached, was not long lived, for during the last sale of live steers...

Hogs are fairly steady in price at \$9 f.o.b., an \$9.25 fed and watered. Sheep and lambs are slightly lower in price...

The following prices for live stock have ruled during the past few days in Toronto: Export cattle, choice—\$4.50 to \$5...

Butcher's cattle, choice—\$6.50 to \$7.50; ordinary, \$4 to \$5.75. Milkers, choice—\$40 to \$75; ordinary, \$35 to \$55...

PETERBORO HOG MARKET

Peterboro, April 25.—Dunlop hogs delivered on English markets last week totalled 36,000. The demand for bacon in the Old Country is very poor...

MONTREAL HOG MARKET

Montreal, Saturday, April 23.—The market for live hogs shows an advance this week, owing to the small quantity offered...

EXPORT BUTTER AND CHEESE

Montreal, Saturday, April 23.—The market for cheese this week has been easy, and prices have declined almost one cent a pound from the top price paid last week...

WESTERN CANADA FARMS FOR SALE

H. F. LINDE'S LIST

I am in a position to give you the most valuable information regarding Western Canada lands. I have many desirable prospects to show in the following list...

320 ACRES - SASKATCHEWAN - JUST SOUTH OF WADEANA. ON THE RIVER. PLOTS: 270 acres tillable; 50 acres pasture...

160 ACRES - MANITOBA - 3 1/2 miles from Rathwell about 70 acres good prairie; 20 acres good cropland; balance 500 acres...

160 ACRES - SASKATCHEWAN - 3/4 mile from Canamowong on the C.N. Ry.

160 ACRES - CENTRAL ALBERTA - Close to Inisfail; has been improved; this is a first class city...

640 ACRES - SASKATCHEWAN - 1 mile from Inisfail, about 70 acres cropland; 400 acres under cultivation; 40 acres meadow...

In addition to the above I have hundreds of choice selected grain, stock, dairy and poultry farms to offer at rock-bottom prices...

H. F. LINDE, Box 44, WADEANA, Sask.

to get them at as low a price as possible. Receipts are increasing steadily, the total for 1910 being 152,000 boxes...

ABSORBINE. Removes Dorsal Enlargements, Thickened, Swollen Testicles, Curbs Filial Tendons, Borenses any Hernia...

Mr. Advertiser NOW IS THE TIME. To reserve space and prepare copy for your advertisement in the next Special Magazine Number of Farm and Dairy.

The Farm Improvement Number, May 5. If you have anything that the farmer will use to improve his property...

Anti-Trust Prices Freight Prepaid To You—No Duty on FARM and TOWN Telephones and Switchboards. We are the largest, exclusive and the only bona-fide Independent Telephone and Switchboard makers in Canada or (any) British Isles...

HOLSTEINS

BULLS! BULLS! BULLS!

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

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

SPECIAL OFFERING

Bull one year old, Dam Jessie Hewunde... Record at 2 1/2 years old (first calf), A. R. O. is 64% lbs. milk in 31 days; 15.6% lbs. butter in 7 days; 62.77 in 30 days. Price \$110 for immediate sale.

EDMUND LAIDLAW & SON Box 254 Aylmer West, Ont.

SUNNYDALE

OFFERS A GREAT BULL, Dashed Sir, Hengerveld Maplecroft No. 5260. He is son of the champion bull of the Holstein breed. The picture of this bull appears in Farm and Dairy, June 10th, 1909. Write for particulars. He has two daughters milking. One tests 37, the other 4 per cent.

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

LAKEVIEW HOLSTEINS

Count Hengerveld Payne De Kol heads the herd. His sire, Pieterje Hengerveld Count De Kol, is the sire of the world's champion milch cow, the Kol's Gemma, 119 lbs. milk in one day, and 10,017 lbs. in 100 days. His dam, Grace Payne End, has 25.30 lbs. butter in 7 days, and is the dam of Grace Payne 2nd's Holstead, the world's champion in 7 days. Bull calves for sale.

E. F. OSLER, Branta, Ont.

GLENSPRINGS HOLSTEINS

Several fine young bull calves from A. R. O. and E. O. Cows now on hand. One or two YOUNG HEIFERS from good milking strains, left. Bayers will do well to order bull calves for next year. Will also sell one or two good Cows at a reasonable price. Speak quick. Price according to quality at producers. (E-7-21-10)

E. B. MALLORY, Frankford, Ont.

RIVERVIEW HERD

FOR SALE, 2 Bull Calves, sired by Sir Aggie Beta Siga, son of King Siga, the Canadian's greatest 2 year old sire, dam Aggie Lily Pieterje Paul, champion Jr. 4 year old—25.16 lbs. butter 7 days. Dam of 4 calves a 2, 2 year old, and 23 lbs. 4 year old. Price reasonable considering breeding.

P. J. SALLEY Lachine Rapids, Que. E-10-10

THE SUMMER HILL HEAD OF HOLSTEINS

It making some wonderful records. This year it has produced the champion Canadian bred butter cow for 7 days record, 25.16 lbs. also the champion 2 year old of Canada, for yearly production. We have some younger ones that promise to be just as good. We offer for quick sale ten fine heifers, all in calf to an import bull.

Come and make your selections AT ONCE. Prices are right and everything guaranteed just as represented. Trains met at Hamilton or Windsor.

D. C. FLATT & SON, Millgrove, Ont. R. D. No. 2 E.T.P.

Farm Phone, No. 571 Hamilton.

HOLSTEINS

WINNERS IN THE RING

Gold Medal Herd at Ottawa Fair

and WINNERS AT THE PAUL

See Our A.R.O. Records

Just think! Well want. They combine

CONFIRMATION and PRODUCTION

Bull and Heifer Calves for Sale from Our Winners

"LES CHENAUX FARMS"

Vaudreuil, Que.

Dr. Harwood, Prep. D. Boden, Mgr

HOLSTEINS

FOR SALE—Cornelia's Posch, five times let prize bull at Toronto and London Fairs; also five of his sons, all from herd of merit cows. Also females of all ages.

THOB. HARTLEY Downsview, Ont.

HILLSIDE VILLA HOLSTEINS

FOR SALE

From great milking strains; three bulls ready for service; also spring calves of both sexes. All pure bred, descendants at \$100 per cow. Prices right.

GEORGE ROACH, Abbotsford, Que.

THE EVERGREENS HERD OF HOLSTEINS

Has just passed seven more young cows in record of merit. One 2 year old making in 7 days 17.97 lbs. butter. One heifer, 3 years 26 days made in 7 days 21.36 lbs. butter. We are offering the bull calves from each of these heifers; also dam from sire of Veletra Triumph, whose dam gave in 1 day 19% lb. of milk, and sire's dam 104 lb. in 1 day.

Geo. W. ANDERSON, Rosmore, Ont.

LYNDALE HOLSTEINS

We are now offering for sale a 13 mos. old son of "Count De Kol Prestarij Paul" out of a 20 lb. dam; also a son of Sara Hengerveld Kordyke, from an 18 lb. cow. Both choice individuals fit for service.

BROWN BROS, LYN, ONT.

NORTH STAR HOLSTEINS FOR SALE

Bulls ready for service, out of high tested A.R.O. dams, sired by Count Hengerveld De Kol, a son of Sara Hengerveld 2nd's, the highest tested, (30.38). Highest priced individuals in Canada. Also a very few females in calf to same bull.

J. W. STEWART, Lyn, Ont.

HOLSTEIN BULLS Ready for service

Individuals from big producing cows.

R. F. HICKS

Newtonbrook, Ontario

AYRSHIRES BULL CALVES

Bull Calves only from R. O. P. cows and 12 months. Prices right. Long distance.

JAS. BEGG, Box 88, St. Thomas, Ont

SPRINGHILL AYRSHIRES

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

ROBT. HUNTER & SONS

Long distance phone. Nashville, Ont. E-7-10

FOR SALE—AYRSHIRE BULLS

From one month to two years old; all bred from large, good-milking stock. Also Yorkshire pigs. Apply to DANIEL WATT or to HON. W. OWENS, Manapitow, Ont. E-9-10

Riverside Farm, Montebello, Que.

BURNSIDE AYRSHIRES

Having disposed of my 1909 importation, I intend leaving about March 1st, for another trip across to have a number of bulls through quarantine with first week of June. Orders entrusted to me will be carefully attended to. We have a few young bulls fit for service, on hand, of choice breeding, and females of all ages. Phone, etc.

Burnside Stock Farm, Howick, Que.

AYRSHIRES

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

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

STADACONA FARM

Show a Record for 1909

At Three Rivers, a Provincial Exhibition, at Sherbrooke, Canada's Great Eastern Show, at Ottawa, the Dominion's large Central Fair at London, Ontario. U. S. A. and at Quebec, my Ayrshires were the present judges WON MORE FIRST PRIZES THAN ALL OTHER AYRSHIRE BREEDERS COMBINED.

Care of both sexes, and all ages for sale at very reasonable prices.

GUS. LANCELIER

Stadacona Farm, Cap Rouge, Que.

spite of the reports from some sections of the country to the contrary. The butter market is very strong and owing to the great demand for creamery compact market in Montreal is being cleaned up every day at full prices. Toronto, Ottawa and other Ontario towns are active buyers and orders are coming from all parts of the West, indicating a general shortage market range from 30c to 30 1/2c a lb., according to section.

GOSSIP

Among the leading life insurance companies of Canada, and one in which farmers are especially interested, is the Mutual Life of Canada. The financial statement of the Mutual Life is given elsewhere in this issue. The Mutual Life is one of the grow ing companies, its growth being by virtue of fair dealing, and its business being done in the interests of the policy holders.

Mr. A. A. Colwill, breeder of Tamworth swine and Shorthorn cattle, calls special attention to the two Shorthorn bulls he is offering for sale at very moderate prices. They are nearly 16 and 17 months old respectively, both are red in color and in splendid good shape. They are sired by Baron Tulip No. 5697, son of Imp. Campbell Blanford, bred by Jagers, Jr. of Imp. Baron Blanford, Ont. This bull has been noted prize winner at several of the leading fairs. The catalogues are a credit to him as a stock getter. Their dams are of the famous Sym and Snowdrop families, of the combined. Both these cows have been prize winners. Among the half dozen or

CRUM'S IMPROVED WARRIERS STANCHION

H. A. Meyer, Syracuse, N. Y., says "I

can't save cost in feed in one winter."

He has advised me to use Crum's in place of expensive prairie hay, and has been successful in feeding my stock on Crum's.

WALLACE B. CRUM, Box 182, Forestville, Conn.

Dr. Bell's Veterinary Medical Wound Cures. The author writes: "I have used Bell's in every case of animal wounds, and have found it to be the best of all. It is only good for 60 days, limited for 100 days."

DR. BELL, V.B., Kingston, Ont.

MISCELLANEOUS

TANWORTH AND BERKSHIRE SWINE.—Boars and sows for sale by J. W. Todd, Cortland, Ont. Maple Leaf Stock Farm E.T.P.

TAMWORTHS AND SHORT HORNS FOR SALE

Young and matured sows sired by Imp. Boar dams by Colwill's choice Canada Champion Boar in 1902 and '06. Also choice pigs of both sexes. Two choice yearling Shorthorn bulls, choice family. Excellent milking strains. Three choice half Friesians, 2 years old, in calf to choice bull.

A. A. COLWILL, Box 9, Newcastle, Ont.

EASTWOOD YORKSHIRES

Spring pigs for sale from best strains for delivery in May at prices you can afford to pay; pedigrees given on application. Several Yorkshire sows in stock. Write to Eastwood Farm, Box 761, Trenton, Ont.

AYRSHIRES

"Le Bols de la Roches" Stock Farm

Here are kept the choicest strains of AYRSHIRES, imported, of best bred, WHITE MILKING, WHITE WYANDOTTES and BARRED ROCK. J. A. BISEAU, Proprietor, J. A. BISEAU, Manager E-5-10 Ste. Anne de Bellevue, Que.

CHERRY BANK STOCK FARM

FOR SALE—Bull calves, sired by Neb. heral Milk—No. 100, and by Imp. Bull of Canada. One bull calf, sired by Imp. Bull of Canada, sired by Horton Maine Cheese, Junior heral Marie 1st, a grand Imp. heifer, and Satisfaction guaranteed. Nothing but the best, is our motto. Visitors welcome. P. S. McSHAYR, North Georgetown, Howick Station, Ont. E-9-10

more heifers offered. Mr. Colwill calls special attention to a pair of choice two year old heifers of Sym and Lavender "Imp. Joy of Morning," one of Scotland and Canada's very best, and in calf to Baron Tulip No. 5697. These are a pair of choice heifers and will be sold at a low price. An extra choice young roan Segm family, is also a prize winner of the sort. He is also sired by the same dam as several two months ago. In addition to these, there will be sold a few more heifers from 1 to 2 1/2 years old. They will be bred this summer and fall; will be sold at a low price for the money. Mr. Colwill has quite a "cow" out of some that were sired by Colwill's Choice, Canada's champion sire 5433; is a few hears and sons from 3 to 5 mos., of choicest breeding and quality. Mr. Colwill now has a lot of young sows, in his herd, sired by his imported herd, which he wants to reseed with breeding for sale. He is 2 1/2 years old but as active good to work and very sure, and should come some good herd for several years to come.

Editor Farm and Dairy.—You will be pleased to know that the boom in Holsteins in this province has now been strengthened by large purchases of Holsteins by buyers. This week a number of the neighboring counties, and a great leap for near Hamilton, and lately another car load went to Winchester, Ont. Some more are leaving for near New Brunswick. If the Ontario people only realize they can do as well in quality and for price, than elsewhere, prices in Quebec Province, would be higher. Personally, our sales have been very good. One bull out of my De Kol Burke cow went up the Ottawa lately; another to Saskatchewan, one to Hunt heifer to Mr. Daniel Supple, Beauharnois, Quebec, one to Dorval; a bull and heifer to Mr. Daniel Supple, Beauharnois, Quebec, who is commencing a fine herd of producers.

This province has some Holsteins of exceptional breeding and performance, although we have not done so much testing as has been done in Ontario. I have had two heifers and one mature cow enter the record of Performance with creditable records. Have some daughters of my herd with tall calves now giving over 50 lbs. butter a day, and have a cow in her regular daily milking giving over 10 lbs. a day. This is a cow of my own breeding.

I expect at Sherbrooke exhibition this year to have our name meeting but will likely expand a bit; will have the president of the American Holstein Association, Gen. Wood, and possibly the secretary of that Association. We will give a hall with a lecture on the bred performance, etc.; also have views with a lantern of some of the most noted performers. F. E. GARDNER, Farm, P. Q., April 16.

EXCEEDED EXPECTATIONS.—Farm and Dairy has always received a good word in favor of the premium pigs which have been given away free in return for clubs of new subscribers. An enthusiastic and complimentary vote of thanks was handed last week from Mr. A. E. July, Peterboro, Ont. to whom we sent a pure bred Yorkshire pig and a sow for a club of nine new subscribers. This pig and sow were sent to Mr. J. E. Brethour, who writes that he writes that this pig far exceeded his expectations and is the best young pig he has ever seen of any breed. He is more than pleased with it, and informed me that he had not done so well how Farm and Dairy could be so good to give away such a fine pig as a premium. Mr. July was fortunate enough to win two pigs.

Enclosed find \$1.00 for my renewal subscription to "Farm and Dairy" and am much pleased with the second annual "Poultry Number." "Farm and Dairy" is the best agricultural paper printed in Canada to-day.—S. A. Tucker, Northumberland Co., Ont.

A Fine Growing Pig.—I take pleasure in advising you that the pure bred Chester White pig, which I sent me by Farm and Dairy from Mr. A. L. Goodhue, Freilighsburg, Quebec, is a fine growing first class pure bred Chester White pig. It will be safe in getting them through Farm and Dairy.—A. C. Whitley, Grenville Co., Ont.

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the official organ of the Canadian Holstein-Friesian Association...

HOLSTEIN COWS ACCEPTED IN RECORD OF PERFORMANCE

Lina Netherland Albeherk (12158) four year old class; 12,773 lbs. milk and 419.78 lbs. fat in 388 days...

Leslie De Kol Echo (8395), three year old class; 12,905 lbs. milk and 383.99 lbs. fat in 365 days...

Leticie Artis Johanna (10846), two year old class; 11,231.75 lbs. milk and 322.86 lbs. fat in 343 days...

Countess Carrie Mercedes (8120), mature class; 14,007.75 lbs. milk and 383.50 lbs. fat in 347 days...

Maggie Verbeke (7860), two year old class; 10,629.5 lbs. milk and 329.64 lbs. fat in 350 days...

OFFICIAL RECORDS FOR MARCH, 1910. Grandstand MILK De Kol (11763) 5 years 6 months and 6 days; 48,308 lbs. butter...

IMPORTATION OF STOCK

Space in the Association cards will be reserved for all stock coming from the East to B. C., providing the owners, or importers, make application for definite space before April 30th...

fat equivalent to 26.11 lbs. butter; 482.0 lbs. milk. Owned by Gordon H. Manhard, Mar. 1910.

Flora B. Hengerveld (12346), at 9 years, 11 months of age; 18.62 lbs. butter fat, equivalent to 25.83 lbs. butter; 479.18 lbs. milk. Owned by Gordon H. Manhard, Mar. 1910.

Jimma Wayne Angie De Kol (4620) at 7 years, 1 month and 7 days of age; 15.58 lbs. butter fat, equivalent to 19.60 lbs. butter; 358 lbs. milk. Owned by A. C. Hardy, Brookville, Ont.

De Kol Paul Baroness Topay (9431) at 5 years, 9 months and 22 days of age; 14.00 lbs. butter fat, equivalent to 17.50 lbs. butter; 423.1 lbs. milk. Owned by E. Laidlaw & Sutherland, Aylmer, Ont.

THE DUCHDALD bull offered for sale from "Sunnyside" is a son of the great bull Pieterje Hengerveld's Count De Kol...

GOSSIP

The Duchdald bull offered for sale from "Sunnyside" is a son of the great bull Pieterje Hengerveld's Count De Kol...

A NEW MILLING COMPANY

The new big Ontario milling concern which will be known as the Maple Leaf Milling Co., Limited, and will absorb the Maple Leaf Flour Mills Co., Ltd., and the Hedyley Flour Mills Co., has already under way a new big plant...

Just what the elevator capacity of Canada is going to be in a year's hence, is almost impossible to say, but some idea of how it is to increase may be gathered from the remark of Mr. Wm. White, the Vice-President of the Pacific Railway...

hors to the south produced somewhat over seven hundred million bushels, it will be that the mills of Canada will have all they can do to cope with the western crop...

THE GLENHURST DISPERSION SALE

- Her heifer calf, R. M. Howden, St. Louis Station, Que. - 2965-3, 75
Glenhurst Fay - 2966-4, 4 years old - 475
P. Ryan - 2967-5, 2 years old - 65
Rose of Glenhurst - 2968-6, W. J. Wal- lenger, Winchester, Ont. - 145
Maxwell - 2969-7, 2 years old - 200
Ruth of Glenhurst - 2968-3, W. G. Threthewey - 300
Her bull calf, D. Leitch & Sons - 300
Royal Agricultural College - 130
Her bull calf, J. McBride, Northfield, Ont. - 25
Bud 2nd of Glenhurst - 2910-1, 200
Agricultural College - 40
Her heifer calf, D. Leitch & Sons - 75
Primrose 4th of Glenhurst - 2967-1, Wm. Hunter - 60
Ruth 2nd of Glenhurst - 2969-1, W. G. Threthewey - 140
Her bull calf, D. Leitch & Sons - 90
Harr - 1477-7, Wm. Hunter - 90
Her heifer calf, J. W. Watt, St. Louis, S.N. Que. - 2968-1, 2 years old - 125
Bronie of Glenhurst - 2966-7, W. G. Threthewey - 125
Primrose 2nd of Glenhurst - 2917-1, 200
Her bull calf, D. Leitch & Sons - 300
Ed. Maxwell - 2965-3, W. G. Threthewey - 300
White Floss of Glenhurst A3988 (3 years old), P. Ryan - 2967-5, 95
Glenhurst Cherry - 2969-1, Ont. Agri- cultural College - 40
Her bull calf, James Donaldson, De- wittville, Ont. - 45
Floss 6th of Glenhurst - 2967-6, W. G. Threthewey - 300
Glenhurst Alison - 2967-2, D. Ness, Howick, Que. - 100
Her heifer calf, James Symons, St. Lou- is - 25
Glenhurst Pippin - 2965-5, 3 years, P. Ryan - 2967-5, 25
Her heifer calf, James Symons - 25

TWO YEAR OLD HEIFERS

- Glenhurst Violet - 2968-2, Wm. Hunter 115
Glenhurst Blossom - 2967-2, Wm. Hunter 110
Glenhurst Flossie - 2967-5, A. W. McIn- tyre, Newington, Ont. - 275
Glenhurst Killibee Maid - 2997-1, A. W. McIntyre, Newington, Ont. - 375
Glenhurst - 2998-1, Wm. Hunter - 120
Whitina of Glenhurst - 2969-1, A. W. McIntyre - 120
Madeline - 2981-1, Wm. Hunter - 100
Adeline of Glenhurst - 2975-1, Wm. Hun- ter - 175
Glenhurst Nettie - 2969-6, Alex. Hume, Sen. Ont. - 75
Glenhurst Besie - 2969-9, D. Leitch & Sons - 75
Glenhurst Lily - 2994-1, Alex. Hume, 75
Queen Floss of Glenhurst - 2968-7, D. 180
Myrtle of Glenhurst - 2968-1, D. T. Ness 93
White Leda of Glenhurst - 2969-3, Wm. 120
Blue Bell of Glenhurst - 2966-7, Wm. 110
Hunter

HEIFERS OF 1909.

- Glenhurst Page - 2967-0, Wm. Hunter 95
White Polly of Glenhurst - 2968-2, Wm. Hunter 95
White Molly of Glenhurst - 2969-2, A. W. McIntyre - 100
Glenhurst Jean - 2967-2, Wm. Hunter 145
Brown Beauty of Glenhurst - 2967-7, D. Leitch & Sons - 50
Glenhurst Zil - 2965-2, D. T. Ness - 50
White Rose of Glenhurst - 2967-9, A. W. McIntyre - 100
Bronnie 2nd of Glenhurst - 2966-7, J. McBride, Northfield, Ont. - 30
Glenhurst Queen Floss - 2966-8, A. W. McIntyre - 200
Floss Gem of Glenhurst - 2987-1, Wm. Hunter - 175

BULLS-TWO YEARS

- Drongan Mains Guarantee (Imp) (7316) -26337-, W. G. Threthewey - 375

BULLS OF 1909.

- Knockdown 2nd of Glenhurst - 2969-6 - James Irving, Venator, Ont. - 125
Glenhurst Guarantee - 2995-0, G. H. Mc- Intyre, Williamson, Ont. - 110
Floss Guarantee of Glenhurst - 2967-1 - Wm. Paul, Peterboro, Ont. - 110
Glenhurst Mains - 2983-3, Wm. Hunter - 90
Sons, Verona, Ont. - 90
Bud's Guarantee of Glenhurst - 2966-1 - Ont. Agricultural College - 100
Rose's Guarantee of Glenhurst - 2968-0 - J. A. Mackay, Northfield, Ont. - 100
Drongan Prince of Glenhurst - 26337- - W. H. Luttrell, South Gower, Ont. - 95
Ada's Guarantee of Glenhurst - 2966-5 - A. F. Dunn, Bainville, Ont. - 45

- White Drongan of Glenhurst - 2967-4 - N. Copeland, Cornwall, Ont. - 50
May's Guarantee of Glenhurst - 2968-5 - J. F. Arnold, Southfield, Ont. - 75
Killibee's Guarantee of Glenhurst - 29- 326 - A. Ryan, Northfield, Ont. - 25
King Drongan of Glenhurst - 2990-2 - John H. Deeks, Dunbar, Ont. - 50
Young calf, D. Leitch & Sons - 29- 320 - W. F. S.

FIRST ANNUAL OTTAWA HORSE SHOW HOWICK PAVILION, OTTAWA MAY 4-5-6-7 - 1910 -

Undoubtedly the biggest event of the season. A prize list of over \$5,000 Offered Stabling on the grounds Cheap Excursion Rates will be given on all railways, which will include admission to the show. The best time to visit the capital For Practical Lists and all informa- tion apply to R. J. BIRDWHISTLE Secretary, Ottawa

NORTHERN ONTARIO The Forest and Mineral Wealth of Northern Ontario has attracted many people from all parts of the civilized world. One-ninth of the world's reported output of Silver in 1888 was taken from Ontario mines.

New discoveries of undoubted richness are being constantly reported from sections far distant from the far famed Cobalt. Yet a more certain reward is insured to the settler who acquires for himself 160 ACRES OF THE RICH AGRICULTURAL LANDS now open for settlement and made accessible through the construction of Railways and Colonization Roads. THE FERTILITY OF THE SOIL IS UNSURPASSED

The Timber is in demand at a rising price. Mining, Railway and Colonization Road Construction, Lumbering, etc. afford work in abundance to those who have not the means to remove to the farms constantly. These means also provide a market for farm produce at prices unequalled anywhere. Cochrane, the Terminus of the T. & N. O. Ry., on the G.T.P. Transcontinental Railway, now under construction, is in the same latitude as the southern part of Manitoba, only 50 miles nearer the seaboard.

For information as to Terms of Sale, Homestead Regulations and for Special Colonization Rates to Settlers and for Settling apply to D. SUTHERLAND The Director of Colonization PARLIAMENT BUILDINGS, TORONTO HON. J. S. DUFF Minister of Agriculture

Read why **PEDLAR** NESTABLE CULVERT

saves farmers money
lowers taxes—betters roads



THESE culverts of mine are a great thing for the farming world. They not only make good roads possible, but they serve the farmer in many other ways. And they are so simply laid. They come nested like this:



This compactness saves freight and makes it easy to handle them. You put the sections together like this:



Then you clamp the flanges together like this:



And you've got a piping that will outlast anything of the kind there is. Better get the book and sample and study it.

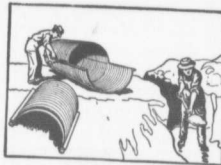
G. A. Pedlar

GET your township reeve or warden to study Pedlar Culverts. Send for the Free Book and show him why this Culvert surpasses for all ditch drainage, for restraining small streams, for every use that any culvert can serve. You will profit through lowered taxes, better roads and abolished washouts. Send for the book and interest your township's officials. You will benefit by what they will learn.

For a very moderate cost you can instal a perfect sewage-disposal system on your farm, using a suitably-sized Pedlar Culvert. You can realize the full value of the liquid manure your animals produce by draining your stable-floors with Pedlar Culvert—and that highly valuable manure is usually wasted on farms. Pedlar Culvert makes it easy to water your cattle in winter. And there are a score of other uses for it on the farm.

Nothing vies with Pedlar Culvert as a well-curbing or a cistern lining. The thick galvanizing absolutely protects the metal of these Culverts from rust or corrosion, and the metal itself protects the water supply from contamination. For draining swampy spots around the farm, or for irrigation ditches and under-drains Pedlar Culverts far excel tile or cement piping, are much less costly, much easier to instal and infinitely more durable.

Pedlar Culvert is made, in every standard size from 8 to 72 inches diameter, of Special Billet Iron of the best quality, in extra heavy gauge. This Billet Iron is curved into semi-cylinders—curved while cold, so the sizes never vary a fraction. These half-cylinders are then corrugated by a pressure of sixty tons to the square inch. After being corrugated, the whole surface and each edge is heavily galvanized and made positively rust-proof.



A few hours' work—no special skill needed—and an indestructible culvert is in place ready for use.



PEDLAR CULVERT

is made in Nestable Sections from the Best Billet Iron, heavily galvanized and deeply corrugated.

It is the simplest kind of work to put these half-sections of Pedlar Culvert together permanently. One half-cylinder is placed on another, and the flange-rib on each side is rigidly compressed flat by the huge pressure exerted by a simple but effective tool. No bolts, no rivets, no makeshifts—but a triple-thick locking rib-flange that gives Pedlar Culvert immense strength. Thus it will stand crushing strains that would destroy any other piping.

This peculiar flat-flange triple-thick rib makes the most perfect joint possible—nearly as good as if it were welded. Yet it allows for expansion and contraction under heat or cold. Thus a Pedlar Culvert will not spring nor split even though frozen solidly full of ice. Also the triple-rib flange principle makes it possible to break joints in putting this Culvert together, something you cannot do with any other culvert or with cement piping or tile.

Pedlar Culverts are the most portable, as well as the most durable, of any piping for any purpose. Being made in half-cylinders, they are nestable—so that a great many linear feet of culvert occupy but few cubic feet of car or wagon space. This economizes freight and carriage costs, and makes it easy to transport this Culvert even in rough country. You should get the free book and sample culvert that makes the whole story clear. State your possible needs when you write for the book, and let us quote prices.

HALIFAX 16 Prince St.	ST. JOHN, N.B. 42-46 Prince William St.
QUEBEC 127 Rue du Port	MONTREAL 321-3 Conq. St.
OTTAWA 423 Sumex St.	TORONTO 111-113 Bay St.
LONDON 86 King St.	CHATHAM 200 King St. W.
PORT ARTHUR 45 Cumberland St.	WINNIPEG 78 Lombard St.
REGINA 1901 Railway St. South	CALGARY 1112 First St. W.
VANCOUVER 821 Powell St.	VICTORIA 434 Kingston St.

ADDRESS OUR NEAREST WAREHOUSE.
WE WANT AGENTS IN SOME LOCALITIES.
WRITE FOR DETAILS.
MENTION THIS PAPER.

Send Now For Free Book
And Sample Culvert

BOOKLET NO. 51

Address Nearest Warehouse Of

THE PEDLAR PEOPLE
OF OSHAWA, CANADA
(Largest Sheet Metal Manufactory in the British Empire)

The Pedlar People of Oshawa
Ontario, Canada

include in the output of their manufactory the below-mentioned specialties in sheet metal building material. Samples, descriptions and prices of any of these will be readily forwarded postpaid and free upon request addressed to the Pedlar warehouse nearest to the inquirer.

Pedlar Nestable Culvert, Oshawa Steel Shingles, Steel Roofing, Corrugated Iron, Metal Shutters, Skylights, Conductor Pipes, Finials, Art Steel Ceilings, Art Steel Siding, Eave Troughs, Prepared Roofing, Metal Doors, Metal Lath, Ventilators, etc.