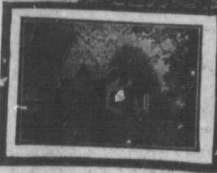


FARM AND DAIRY

AND
&
RURAL HOME



Peterboro, Ont., April 20, 1916

DATE and TIME of MEET-
ING
see Comm. Dec. 10



HIS FIELD OF SERVICE.

—On farm of Thos. Chapman, Huron Co., Ont.

ISSUED EACH WEEK

Rural Publishing Co., Limited, Publishers

ONE DOLLAR A YEAR

The "SIMPLEX" Cream Separator

As shown in the illustration herewith, is a convenient machine. It is of convenient height to operate. The supply can is low down, and yet the discharge pipes are high enough up to discharge into standard sized milk cans.

The machine is easily accessible for cleaning. It is substantial and heavy. It will last almost a lifetime.

It will pay you to know all about the "Simplex." There are exclusive features on the "Simplex" not to be had on any other separator.

In addition to the mechanical construction which is all to the good in your favor, we are sure that there is no manufacturer using a higher grade of material than we use in the "Simplex" separators. Take for instance, the bowl agitator. It is made of a special formula, furnished by one of the best metallurgists in the country. In fact, the consulting metallurgist for the leading manufacturers of American automobiles.

This steel is subjected to a special heat treatment, whereby it has an elastic limit, three times as high as ordinary steel. The same is true of the bowl cover, and of the middle post, or pinion, that meshes with the larger spur wheel. It is made of Vanadium steel, or nickel steel, of the same kind that is used in the transmission gears in the best grade of automobiles. We believe that we are the first to use these special alloy steels in cream separator construction.

The "Simplex," as far as we are able to judge, represents a higher manufacturer's cost than any other separator on the market. The Two-Horse-Drive Bearings that go in every "Simplex" Hand Separator, cost more than all the bearings got together in most other cream separators. And yet on account of the large number that we import, single orders covering over 10,000 bearings at a time, we are able to furnish them as extras at a reasonable price, so that the cost of replacement, if needed, is not more than in other machines.

We believe that "the proof of the pudding is in the eating." We allow you to try out the "SIMPLEX" on your own farm.

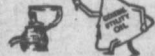
Write us to-day for free illustrated literature about the "Simplex." Arrange to have a "Simplex" Cream Separator on your farm. Then you will make sure that the "Simplex" is the best cream separator for you.

D. Derbyshire Co., Ltd.

Head Office and Works : BROCKVILLE, ONT.

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

THE WRONG OIL RUINS YOUR SEPARATOR



To lubricate your separator with ordinary or general-utility oil is one of the quickest ways of sending it to the junk pile. You need a special oil for the finely adjusted mechanism of this delicate farm machine.

Standard Hand Separator Oil

is made especially for cream separators—and for that reason it will most satisfactorily lubricate your machine. It keeps the bowl spinning smoothly and enables you to get all the cream. It doesn't "gum." Saves repair expense. Ask your dealer.

THE IMPERIAL OIL COMPANY
Limited
BRANCHES IN ALL CITIES

When You Write---Mention Farm and Dairy

Practical Experience With Mare and Colt

Jan. Betts, Simcoe Co., Ont.

WE don't go in very extensively for colt raising, but every year we have one and sometimes two or three. We place our chief reliance for the colt crop in a brood mare that is now 14 years of age and that scarcely ever fails to present us with a good lively youngster every spring. Up to the present time we have had five colts from her, of which she has lost only one and that by accident. We do not know her breeding exactly, but have found that when bred to good Clydesdale she produces strong, healthy colts which will attain a weight of around 1,400 lbs.

Perhaps I am a little old fashioned in this, but I am a great believer in having a brood mare that is a natural born mother. From my own observations and from what I have learned from the older men amongst my neighbors, there have always been two or three outstanding brood mares in this district. I myself remember one who raised in all 13 colts of excellent size and quality. Of these other hard, some mares seem to be always getting into difficulty with their foals, so that they really double the risk that their owner runs in producing colts. My old mare generally has good luck and though she is getting old, she seems to be good for some years yet and I expect to raise a few more colts from her before she is through. When her days are over, I have another one coming on, which promises also to be a good one.

Good, Natural Mothers.

As I said before, I believe that the first requirement in the brood mare, is that she be one of those old, natural mothers. The first thing is that she have abundance of exercise during the winter and spring months. I take particular care not to put my brood mare at work where she has to wade through snow that is too deep, or where she has to do any jerking such as getting out sawlogs. Jogging to the village, drawing up manure, fetching up a lot of wood and doing the ordinary trucking about the farm, will give her abundance of exercise of the right kind. When it is icy, I make it a point to see that her hooves are on and kept sharp, especially on the front feet. I find that there is no difficulty in making on a pair of shoes if they are required, and by using "never slip" calls no sharpening is required. The danger from a fall can always be eliminated.

Usually have the colt come late in the spring, generally after reeding. The mare works throughout the seeding, but she is always given the preference of the lighter jobs, such as harrowing and plowing. I never put her at such jobs as drawing stoves, where there is a danger of over-straining. I usually drive her myself, so that I can keep my eye on her and see that she is coming along all right, taking care that she does not become overheated. One precaution that should always be taken at this time is to work her with a long whiffletree, one that is at least six or 10 inches longer than the ordinary kind. I believe that this period of steady, though light, work, combined with good, liberal feeding, tends to make a smart and healthy colt.

As the time draws near when she is to have her colt, I quit working her and out the heating feeds. As at this time there is usually a little grass, I let her pick around the yard. This keeps her contented and interested, as well as having a loosening effect. As to forecasting just when the colt will arrive, this cannot be done very accurately, though one advantage of having long experience with one brood mare is that one learns to be able to forecast her time pretty well. The presence of wax on the teats and the sunken condition around the tail head

are reliable indications that her time is near.

Preparations for Fealing.

About the only preparations that I make is to have two good wax-ends prepared and my hands clean and sharp. I also have a clean box stall with plenty of bedding in which she is placed for the night, but if the weather is clear and warm and she foals during the day, I find that it is perfectly safe to let her do so out in the field. When the little fellow arrives, I find that it always pays to be present, but that it does not pay to be too officious. It is best to watch and see that it comes right, but I must say that in all my experience I have never had them come any other way. As soon as the head is born, I see that the nose is cleared. A little assistance given at such times as when the mare is pressing, does no harm and assists her over a very trying time. As soon as the cord is exposed, I tie it in two places with a wax end, the nearest about two or three inches from the head, and the other end or six inches further away. The cord is then severed with a sharp knife, midway between the places where it is tied.

Some put salt on the newly-born colt in order to get the mare to take to it more readily. I, however, have never had any trouble with the mare disowning her having a brood mare that is a natural mother. Nine-tenths of the difficulty that is experienced with colts is due to the conditions under which the mare is kept during the last few months of her pregnancy. Where she is worked in moderation and fed well, there is not much danger. That's another thing that I must mention. The color of the mare's udder shows indications of being a breeder of weaking colts, or of being unlucky in any way. I take it as an indication that she has had the makings of a suitable brood mare. Success comes from taking care, but not too much care.

Boys Are Placed Satisfactorily

EDITOR, Farm and Dairy,—I must again thank you for your kindness in inserting photo of six boys from our shelter. I received about forty applications. A large number are from the eastern counties of Ontario, three or four are from Quebec and one from Prince Edward Island. If any agents in counties east of Toronto have boys to place, I will be pleased to furnish the names and addresses of applicants.

You have rendered a great service in bringing homes and children into such jobs as drawing stoves, where there is a danger of over-straining. I usually drive her myself, so that I can keep my eye on her and see that she is coming along all right, taking care that she does not become overheated. One precaution that should always be taken at this time is to work her with a long whiffletree, one that is at least six or 10 inches longer than the ordinary kind. I believe that this period of steady, though light, work, combined with good, liberal feeding, tends to make a smart and healthy colt.

Fifty Want the "Live Wire."

EDITOR, Farm and Dairy,—I should have written you a long time ago re your kindness in advertising our children last Dec. 30 in "Farm and Dairy." That advertisement brought us nearly 150 applications, about one half of which were for the boy I mentioned as "a live wire." Some of the others wanted something impossible, others turned out to be unsatisfactory, but we have sent out about all we had for adoption. Just as we were ready to send some away the measles took our shelter by storm and for two months we had to wait. We are sending two more soon so our shelter is pretty well stripped of those available for adoption.

Please accept my thanks for your kindness. Your paper has proved to be the best. As a result, we are sending our children we have yet found—E. C. Hall, Agent C. A. S., Ontario Co., Ont.

We Welcome

Trade Increases

VOL. XXXV.

THE

I HAVE seen several Dairy from people think they would land. Perhaps it is my brief outline of my

In 1913, my wife

try farming, and her

we came to the con-

could be to take a C-

of 1914, we came to

locally. When all w-

small babies, my bro-

out here. It was a

right, when we arriv-

comfort it was rain-

small oil stove, and

the babies off to be

quickly as possible,

ourselves, thoroughly

out, rested on the mat-

on the floor.

Our furniture had

forwarded in advance

we expected to get

within a day or two,

to make the best of

the meantime. Our n-

neighbors loaned us a

heating stove, a table

three chairs, and this

all we had until our

nature arrived, which

did "more or less" of

seven weeks. I shall

forget that seven we-

It was bitter cold

several times the matt-

on which we slept

frozen to the floor.

had nothing to cook w-

except the heating st-

loaned us and a small

heating bedroom. W-

shop wood four-and-o-

on our neighbors pass-

as we had no horses or

did we until the fall of

for we had very little c-

back for some \$600, a

enough, I obtained

in both courts. (I men-

understand how it was

little capital.)

The First Year

The first year I paid into crop, and by working wood, fence posts, and six cows from the rangelands with a neighbor's hay, and we were



We Welcome Practical Progressive Ideas

FARM AND DAIRY & RURAL HOME



The Recognized Exponent of Dairys in Canada

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

VOL. XXXV.

PETERBORO, ONT., APRIL 20, 1916

No. 15

The Experiences of a Back-to-the-Lander

We Have Had Our Disappointments and Reverses But We Like the Life

COWPER SMITH, ROCKY FORD, ALBERTA

I HAVE seen several enquiries in Farm and Dairy from people with but little capital, who think they would like to be livin'; on the land. Perhaps it may be of interest if I give a brief outline of my experiences on the land.

In 1913, my wife and I decided that we would try farming, and having considered the matter we came to the conclusion that the best way would be to take a C. P. R. farm, so, in the spring of 1914, we came to Calgary and decided on the locality. When all was ready, my wife, with two small babies, my brother-in-law and myself, came out here. It was a cold, dreary day, or, rather, night, when we arrived, and to add to the discomfort it was raining. We got out a mattress, a small oil stove, and a few provisions. We got the babies off to bed as quickly as possible, and we ourselves, thoroughly tired out, rested on the mattress on the floor.

Our furniture had been forwarded in advance, and we expected to get it within a day or two, and to make the best of it in the meantime. Our neighbors loaned us a small heating stove, a table and three chairs, and this was all we had until our furniture arrived, which it did "more or less" after seven weeks. I shall never forget that shiver weeks. It was bitter cold, and several times the mattress on which we slept was frozen to the floor. We had nothing to cook with, except the heating stove loaned us and a small oil stove, suitable only for heating a bedroom. We had no coal, so had to chop wood four-and-one-half miles away and rely on our neighbors passing to carry it back for us, as we had no horses or wagon at the start, nor did we until the fall of our first year of farming, for we had very little cash. I had to sue a debtor once for some \$600, and have never got a cent back, although I obtained judgment against him in both courts. (I mention this so that you may understand how it was we started out with so little capital.)

The First Year on the Land.

The first year I paid for 20 acres to be put into crop, and by working for others managed to get wood, fence posts, etc., hauled for me. We got six cows from the C. P. R., and I made arrangements with a neighbor to help aim get in his hay, and we were to have one-third as pay-

ment for that and other work I had done for him. He, however, went back on his word, and I was in a quandary to know how to get up another 10 tons. Finally I made arrangements to have 10 tons cut and raked into windrows, and we put it up ourselves. We had no horses or wagon, but we got that 10 tons harvested by loading it on to a square carpet and hauling it in ourselves. I wonder if any reader has ever tried hay making that way. It sure was hard work.

In the fall I was able to get a good team, wagon and hay rack, and it was a satisfaction to be more independent. We planted an acre of potatoes and got a fair crop. Our oat crop, however,

wire and posts to make a really secure fence, and, consequently, the range cattle have gotten quite a few tons out of the 50 the stack contained. We were lucky this year to have a kind neighbor who loaned us his disk and harrow and several other implements, without which we would have been unable to make good. It is this question of implements that the beginner finds the most difficult to cope with. Most of our so-called neighbors will only lend implements in return for a great deal of work. Even then I have worked for some neighbors and would not be loaned the implement when it was of any use to me.

To any city man who is thinking of starting farming with, say \$1,000 or \$1,500, I would advise him if possible to choose his neighbors or make

arrangements, if possible, to borrow implements in exchange for those you have. On the other hand, do not buy any more implements at first than are absolutely necessary, but try to make arrangements to exchange machinery with a neighbor. You cannot afford, however, to wait two weeks for a seeder, or perhaps longer for a disk, but yet you cannot afford to get a seeder or binder when starting on \$1,500.

This year we put in about two and one-half acres of potatoes and got 300 bushels from them which is good considering that it was only the second time the land had been plowed. All kinds of roots grow well in this district.

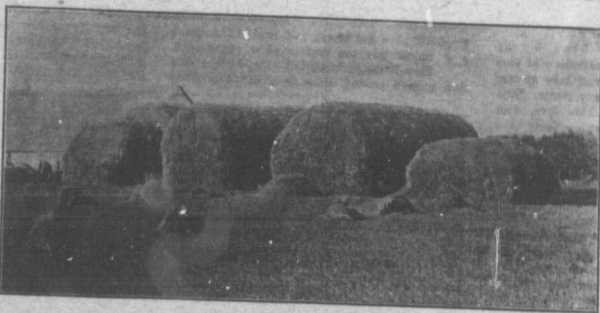
Our Live Stock.

Last spring was a poor one for raising chicks, and out of 200 incubator raised chicks I have only about 100 left. I believe, however, that the place is ideal for chicken raising, as it is usually so dry our foot.

In regard to dairying, we have only grade cows, but they do well, and the hay costs us nothing but the cutting and stacking, although I do not think the hay we have is very suitable for cows. We sell our cream and the prices range from 33 to 37 cents a pound of butter-fat. Our cows when fresh give about 4 lbs. of milk a day, but we have not been able to feed them as they ought to be fed, and so am not in a position to judge what the profits might be under better conditions.

We have had splendid results from our kitchens.

(Concluded on page 6.)



The Hay Crop of an Alberta Farm.

The native grasses of the prairie are amongst the most nutritious in the world. For the production of either milk or beef they are not excelled. In most sections of the West they are still largely relied upon for the hay supply. And almost invariably the hay is stacked in the open, as seen in the illustration.

was only fit for green feed, as that year was very dry. We raised about 80 chickens, and we had four pigs to kill for winter use. We raised five calves that year, and I had the good fortune to be given a tiny colt. We had no income at all, however, except from cream, butter and eggs.

Work of the Second Year.

In the spring of 1915 I got two more horses and a plow, and managed to get in 30 acres of oats, 18 of wheat, some green feed and three acres of potatoes. We then continued breaking new land for summer fallow, and we have now about 80 acres broken. I did not have sufficient cash to put up a proper fence between the pasture and crops, and we had great difficulty trying to keep the cattle out.

It is in such ways as these that a man with too little capital has to suffer. It was the same with our hay stack this fall. I could not get enough

Making Much of Small Things

Time and Energy are Saved by Taking Advantage of the Short Cuts
JAS. MCARRELL, MIDDLESEX CO., ONT.

"EVERY little movement has a meaning all its own," says the old jingle.

Every little movement has its business significance as well. In a United States magazine a writer tells of how a study of little movements enabled a working man to do much more work in a day, to earn greater pay, and to have more leisure hours to spend with his family.

This working man was employed along with hundreds of others in loading pig-iron on to cars. An efficiency expert took the working man in hand. First he studied every movement the working man made and then he began to direct his movements. The expert started in the morning. He showed the man exactly how to stoop to pick up a pig of iron. He directed every movement the man made until he was in an upright position. He then showed him how to turn as he faced the car. He told him when to move forward to the car, and then he directed every little movement as he deposited his burden on the car floor. Not a movement was allowed to be wasted. All day the laboring man worked under the expert's direction, and at five o'clock in the afternoon he found that instead of loading a thousand blocks, his usual day's work, he had loaded 3,000 blocks, and was not so tired as usual at the end of his work. He was allowed to go home an hour earlier. The efficiency expert by studying every little movement had made that working man of more value to his employers, had put him in a position to command greater wages and to have more leisure time at home with his children.

Little Movements on the Farm

Has this little incident any lesson for the farmer? We farmers cover a multiplicity of jobs in the course of a day. Few men have greater opportunities to waste little movements, little minutes, and in the long run little days, than have we farmers. I believe that we could save ourselves much labor did we stop work for a while and spend a few hours co-ordinating the work of the farm. Here is an instance taken from a back issue of Farm and Dairy that illustrates what I mean.

On the Tamblin farm in Durham county they had been accustomed to walk for 40 years around the end of the barn to reach the stable door. In the natural course of events the elder Tamblin resigned his position as farm manager and his son took his place. I do not know whether young Mr. Tamblin had studied efficiency and the significance of "every little movement," but at any rate he had the application all right. No sooner was he in command than he cut a door through the near side of the wall into the stable, which meant that he saved himself and his men 60 feet of walking every time they went to the stable.

Saved 72 Miles a Year

It does not sound like much, does it? Sixty feet is only 20 steps, and the slowest man can walk 20 steps in a few seconds. In the aggregate it means a lot. It means that one man taking three trips a day one way saves 12 miles in the year. But the man who goes to the stable necessarily comes back again. Three trips a day both ways meant a saving of 34 miles. On a farm the size of Mr. Tamblin's there would be at least three persons travelling between the house and the stable, and that little door, which probably represented only a couple of hours' work, will save to the farm the time that it would take one person to walk 72 miles, which is equivalent to the distance travelled in giving a 10-acre field of corn four cultivations.

In the nearby county of Prince Edward is another farmer who believes in efficiency. Like all other good dairymen Mr. James Anderson believes that the milk stand should be a safe distance from the stables and barnyard. The common ordinary way of taking the milk to the stand is to milk a couple of buckets full, walk out to the stand and empty them, and then back to the stable and fill them again. Mr. Anderson has a different plan. He constructed a track from the milk stand right to the stable door. He then constructed a truck to run on the track. The milk cans are loaded on to the truck, wheeled out to the door, the 30 or more cows are milked, the milk loaded into the cans without any travelling whatever, and then pushed back on the truck to the milk stand. I have not figured out just how much travelling Mr. Anderson saves in the year, but it would be as much as Mr. Tamblin saves on his door multiplied by several times.

Efficient Egg Collection

And still another instance taken from a back issue of Farm and Dairy. A few years ago cooperative egg circles were organized in Peterboro county. One of the rules on which members were admitted was that the eggs should be gathered twice a day during the summer months. This looked like a lot of trouble to most of the

circle members. One man solved the problem to his entire satisfaction. When he went to feed the pigs he always remembered to carry a little basket along and collect the eggs at the same time. In coming in from the stable at noon he visited the henhouse on the way. Thus the requirements of the circle were met without any extra trouble. I know for a positive fact that the twice a day collection of their eggs represented two special trips to the henhouse for many of this man's neighbors.

The planning of the interior arrangement of the dairy stable represents a big problem. The problem of whether the cows shall face each other or not is of vastly more importance than most of us would think. Our decision means the saving or wasting of many little minutes that aggregate many hours in the course of a year. The arrangement of litter and feed carriers also represents a big saving that is demanded by true efficiency.

Efficiency in modern business, and in modern business I include farming, means the difference between success and failure. The man whom the employer raises in pay is the efficient man. The employer who succeeds in competition with other employers is the one who can direct his labor most efficiently. We farmers, by studying efficiency, will be enabled to pay higher wages to our men. We will be able to take more leisure hours ourselves and to partake to the full of the pleasures that country life affords when we are not burdened with overwork. Shall we start now to study "every little movement"?

Plowing and Harrowing

Showing It Is Advisable to Harrow Before and After Plowing

J. A. MACDONALD, PRINCE CO., P. E. I.

DO NOT plow sod or any stiff land in the spring unless you are certain of a wet season. Plow it the previous fall. Fig. 1 represents such plowed ground, showing air-space between



Diagram illustrating the Benefits of Harrowing both before and after Plowing.

the turned-over furrow-slice and the ground beneath. This air space prevents a firm and complete seed-bed from being made and stops capillary connection with the sub-soil.

Fig. 2 is plowed ground disked. Note that the air spaces, as in Fig. 1, still exist. The harrowing has not filled them up. This is what happens when strong ground is plowed without first being harrowed with a disk harrow. The only thing that will close those air spaces is a wet season. With a dry season the crop is usually a failure.

Fig. 3 shows ground harrowed before it is plowed. The mulch breaks the capillary attraction so that moisture cannot escape from the top of the ground. This permits what moisture there is in the ground to come close to the surface.

Fig. 5 illustrates harrowing before and after plowing. When the ground is treated in this manner the seed-bed becomes compact and firm in a much shorter time, and permits capillary attraction. This treatment puts the ground in such condition that whether the season be wet, dry or normal, the farmer is not taking any chance.

Fig. 4 is a view of the harrowed surface shown in Fig. 3, plowed. Harrowing, preferably with a disk, the ground before it is plowed leaves a mulch of fine dirt which fills up the air spaces left between the furrowed slices and the ground beneath, thus making the foundation for a firm and compact seed-bed.

In plowing out ground for fall wheat the oat ground should be disked immediately after the field is cleared, disking lengthwise and crosswise so as to form a mulch to retain moisture, as in Fig. 4. When this ground is plowed later (Fig. 5) the moisture will be retained, and, if a dry fall, capillary will supply the needed moisture to the growing wheat. When wheat follows corn this harrowing, as shown in Fig. 4, is still more important, whether the corn ground is to be plowed or not.

But it is in the spring of the year that this

work is of importance, before an difference between season turns

QUITE a number of the men are stating the case right. Instead of taste and is not this account.

The cause of been too dry work that I investigate corn has been for being ensi time of being mentation sets silage we have For this reason field nor to leave 24 hours before of practical farm the binder also cutter so that will not tie up silo.

Sweet silage even when the corn very short always to cut it longer than this danger of setting

A Cement

By Raymond N. It is during the their plans for growing of v agement of the stock, and the home.

Most improvem



Provision for

The cement trough his farm in Prince (descri

but there are things cost during the tin that will increase t a convenience as w a small cement tro ins. deep, that we For the outside planks, which, by t placed in position, tom of this was pla 8 to 1, which was g in the end. This is in the inside form w

work is of more importance. The early harrowing, before and after plowing, may make all the difference between success and failure if the season turns out to be a dry one.

Cause of Sweet Silage

By J. H. Griedale.

QUITE a number of farmers have written to the Central Experimental Farm this winter stating that their silage is not coming out right. Instead of being sour, it has a sickly sweet taste and is not relished by the cattle so well on this account.

The cause of this trouble is that the corn has been too dry when put into the silo. In one case that I investigated the fact was revealed that the corn has been allowed to lie for over a week before being ensiled. When corn is too dry at the time of being put into the silo, the wrong fermentation sets up, and instead of sour or acid silage we have a sweet silage of inferior quality. For this reason it is best not to stook corn in the field nor to leave it on the ground for more than 24 hours before putting into the silo. As a matter of practical farming, however, it is best to keep the binder about a day ahead of the ensilage cutter so that an accident in the harvest field will not tie up the whole operation of filling the silo.

Sweet silage may to some extent be avoided even when the corn is rather dry by cutting the corn very short so that it packs better. It is best always to cut it one-half inch or less. Corn cut longer than this is too long as it introduces the danger of setting up the wrong fermentation.

A Cement Trough Costing \$2.20

By Raymond Norton, Prince Edward Co., Ont.

IT is during the winter months that farmers lay their plans for the season's operations in the growing of various crops, the care and management of the different herds and flocks of live stock, and the improvements on the farm and home.

Most improvements entail considerable expense,



Provision for Summer Comfort: Good Shade and Fresh Water.

The cement trough seen to the left was constructed by Raymond Norton on his farm in Prince Edward Co., Ont., at a total cost of \$2.20. Mr. Norton describes its construction in the article adjoining.

but there are things that can be built at a small cost during the time when work is least urgent that will increase the value of the farm and prove a convenience as well. Below is a description of a small cement trough, 8 ft. long, 16 ins. by 14 ins. deep, that we built.

For the outside form we used ordinary 2 in. planks, which, by the use of a spirit level, were planked in position, fastened securely. In the bottom of this was placed one foot of cement mixed 8 to 1, which was given one inch fall to an outlet in the end. This is used in cleaning the trough.

The inside form was made from a 14 inch board,

and was made 6 inches smaller than the outside one, thereby making a 3 inch space. The corners were rounded, some old strips of tin were placed in the corners of outer form on a curve, thereby giving a rounded corner on the trough. The 3 inch space was filled with concrete made 2 to 1, with sifted gravel. When dry, the forms were re-

moved and the trough plastered inside and out. It also was given a coat of cement wash applied with a brush.

In making the trough we used four bags of cement at 50 cents each, and one load of gravel costing 20 cents, or \$2.20 for a trough that for durability will outlast several wooden ones.

Contagious Abortion; Its Spread and Control

It Is Closely Associated With Garget and Sterility in Cows and With White Scours in Calves

BY PROFESSOR W. L. WILLIAMS, CORNELL UNIVERSITY, N.Y.

NUMEROUS inquiries are made regarding sterility, abortion and mammitis (garget) of cows, and white scours of calves. They are in some ways so closely associated that measures installed to prevent one may affect the others. Each has been largely investigated, but in no case has the study been at all completed. In a popular circular, data cannot be related nor authorities quoted, but merely general statements and conclusions given.

Abortion in cattle is generally, if not always due to contagion. It is not in itself a disease, but merely one of numerous symptoms. The phenomenon of abortion is due to an inflammation of the uterus, the fundamental cause of which is believed to be the abortion bacillus. The inflammation of the uterus may prevent conception (sterility), may destroy the life and cause the expulsion of the immature fetus (abortion), or may cause the premature expulsion of the living fetus (premature birth). Pregnancy may continue for the normal period, a dead or living calf be expelled, and the inflammation of the uterus be recognized later by the discharges, frequently associated with retained afterbirth. Each of these symptoms ordinarily indicates the presence in the uterus of the same infection, which is designated "contagious" or "infectious" abortion.

standard essentially all herds of size are involved).

(b) The recognition of the abortion bacillus in the uterus or in the milk (according to this standard, the disease has been recognized in most



Mother and Daughter: An Object Lesson in Inheritance.

These are Ayrshires of the dairy type—good constitution, good capacity and good teeth. The older cow has produced 3,500 lbs. of milk within three months of freshening. She is the kind to breed from, as her daughter, with money making, may be expected to do as well. Owned by W. E. Dryden.

dairies where search has been made).

(c) The agglutination and complement-fixation tests upon the blood (According to this standard, the infection exists generally. In single tests we find frequently an animal whose blood will not react, but if we repeat the test we find ultimately that the blood of so many individuals reacts, whether the animal be a cow, bull, heifer, or a young calf, that it is unsafe to assume that a given individual is wholly free).

So far as known, an animal once infected is always infected, though the infection may at times decrease until hardly or not at all recognizable. In many cattle the infection is so mild that it does not cause sterility, abortion, premature birth, retained afterbirth, or other recognizable disease. In adults it is only when the infection is severe in the genital organs that serious disease is observed.

Signs of Infection.

According to the most recent researches, the two chief sources of the infection are the milk fed to the new-born calf and the infection within the genital organs. It has been shown that the abortion bacillus exists in the milk of so many apparently healthy dairy cows that the general contamination of milk with this organism may well be suspected, so far as determined, most calves are born free from infection. If a calf born sound is taken at once from the cow and fed exclusively upon boiled milk, the tuft of hairs at the lower part of the vulva of the heifer calf and that about the opening of the sheath of the bull calf remain separate, clean, and unstained; if left with the dam and permitted to suck or if fed raw milk, the sexual hair become matted together and stained a dirty brownish black by the time the calf is thirty to sixty days old. This condition then persists in both sexes throughout life. If grown upon boiled milk and later bred to an animal reared upon raw milk, the sexual

(Concluded on page 6.)

Where the Bacillus is Found.

The abortion bacillus is found in the uteri of cows which have aborted, or have suffered from premature

birth, retained afterbirth or other disease. It has been found extensively in the milk of dairy cows, in the internal organs of aborted fetuses, in the lungs of living calves prematurely expelled, and in the joint cavities of calves born at full term. It appears to be the essential cause of some cases of this disease, though generally associated with other bacilli.

The diagnosis of contagious abortion in cattle may be made by:

(a) the occurrence of sterility, abortion, premature birth or inflammation of the uterus, with or without retained afterbirth (Measured by this

Why Not Cut Off the Two Cars of Filler?

It takes 400,000 cars to carry Fertilizers to our farmers every season. Forty per cent. — 2 cars out of 5 — is Filler. Order higher grades and Nitrate of Soda for your active Nitrogen and save freight.

The greater producing capacity of high-grade fertilizers without much filler means bigger out-bound tonnage for railroads and bigger purchases by farmers.

Send for "Cost of Available Nitrogen."

DR. WM. S. MYERS, Director
23 Madison Ave., New York

MICA AXLE GREASE

Has been the standard for years. The mica fills the pores in the spindle. Saves friction, wear and money.

Dealers Everywhere

The Imperial Oil Co., Limited



CLOVER SEEDS

Government Standard

	Per Bus.
No. 1 Red Clover	\$16.00
" 2 Red Clover	15.50
" 1 Alsike	12.50
" 2 Alsike	11.00
" 1 Alfalfa (Northern Grown)	16.00
" 2 Timothy	5.50
(This seed grades No. 1 for Purity)	
" 3 Timothy	5.00
White Blossom Sweet Clover	15.00
O.A.C. No. 72 Oats	\$9.85
Marquis Spring Wheat	1.60
O.A.C. No. 21 Barley	1.25

Terms—Cash with order.
Bags extra at 25c. each. On all orders East of Manitoba of 125.00 or over we pay the freight.

We Guarantee Seeds to Satisfy or ship back at our expense. Ask for Samples if necessary.

Todd & Cook
Seed Merchants
STOUFFVILLE ONT.

a cow conceives and her uterus becomes sealed, which occurs within thirty days after conception, the fate of the pregnancy is sealed. If the uterine cavity is clean and the seal normal, the pregnancy is assured against essentially all dangers, but, if infection exists within the uterus, abortion, premature birth or retained afterbirth may ensue. If the infection is present, accident or bad feeding may increase the probability of disaster.

There is no cure for abortion. When it breaks as a storm in a herd of pregnant cows and heifers, it will run its course, and the extent of the disaster can be known only when pregnancy has terminated in the last animal. In many outbreaks the phenomenon of abortion is virtually absent, but in its place many animals have retained placenta, sometimes the mid, sometimes severe, ruining the cow for one milking period and often leaving her temporarily or permanently sterile. In rare cases the inflammation of the uterus with retained afterbirth assumes a highly virulent type and many cows in a herd may die or be ruined.

Carbolic acid, methylene blue, abortion vaccines and other alleged remedies of various kinds have been used. Many secret nostrums are advertised to cure sterility and abortion, but each is worthless. If any one of them could cure abortion, the disease would be on the decrease, but it increases.

Quarantine Useless.

The quarantining of aborters has always failed, and must continue to fail, because it merely removes an animal which shows one symptom, abortion, and leaves all others showing such symptoms as sterility, retained afterbirth and other evidences of the same infection. The removal of all infected animals would commonly involve all the herd. Quarantine is misleading and generally harmful. A quarantined animal is usually a shamefully neglected animal. Quarantine does not and cannot affect materially the prevalence of abortion. A contagious disease cannot be controlled by taking one infected cow which has aborted out of a stable of twenty cows, when the other nineteen already have the same infection. Even were the other nineteen cows free from the infection, our researches indicate very strongly that there is no material danger of the spread of the disease through ordinary contact and that we may practically ignore all exposures to the infection except the contaminated milk fed to calves and the sexual contact in animals of breeding age. If the aborter or cow with retained afterbirth has a decidedly repulsive discharge from the uterus or is otherwise very ill, she should be removed from the dairy as a measure of common decency, but not directly for the purpose of controlling abortion.

The disinfection of the stable and of gutters, so profusely recommended for the control of abortion, is good for the stable hygiene, if well done in conjunction with physical cleanliness, but it will not directly stop or lessen contagious abortion. The infection which is causing abortion, as retained afterbirth in the uterus or if the cow, not in the stable water, and it cannot be reached unless abortion is aborted or calved, and may be reached only by invading the uterine cavity itself and removing the offending organisms.

To be concluded in next week's issue.

Bondres have been the cause of much property damage. If one is necessary have it well removed from buildings and wooden fences, and before leaving it make sure it is thoroughly extinguished.



The No. 25 O.K. Potato Planter

On the Fence?

"Potatoes! Well, I dunno." That's the attitude of hundreds of farmers throughout the country, whose dubious success last season has made them doubtful about planting this year.

Yet their experience of last year was chiefly due to poor cultivation. Hundreds of farmers who had installed O. K. Potato Machinery and looked after their crops carefully, had excellent success, and the high prices this winter have enabled them to clean up a tidy fortune on their potatoes.

Order a No. 25 O. K. Planter now and put in a big acreage of potatoes. You can plant four acres with this machine in the same time as one before, and it drops a seed on every hill in finely worked soil. The cup system and dial plate ensure absolute perfect O. K. Planter fertilizes and fills in on the same trip. It's a winner from every angle.

Our Free Book "Money in Potatoes" treats every phase of potato growing. Write for it NOW.

OK CANADIAN POTATO MACHINERY

CANADIAN POTATO MACHINERY CO., LIMITED,
493 Stone Rd., GALT, ONT.

Send FREE—"Money in Potatoes."

NAME

ADDRESS

67-A

Get in Close!

Use an extension head disk harrow and liven up every tree.

Orchard tillage pays as big a field tillage—especially where it is carried close. Note the illustrations below—see how the cultivation extends beyond the team and under the low limbs. Here you have the orchard tool of unsurpassed efficiency—

Cutaway CLARK

Extension Head Orchard Harrows

Both Single and Double Action



They have CUTAWAY CLARK's cutlery steel disks, forged sharp. Close up into a regular harrow for field work. Light in draft. The single action is reversible. If your dealer has not the genuine CUTAWAY write to us direct. Be sure to write for our new free book, "The Soil and Its Tillage." Get your copy now.

The Cutaway Harrow Company
Member of the original CLARK Disk Harrow and Firm
609 Main Street • Higgonsville, Conn.

You'll Find the Advertisers in FARM AND DAIRY advertising reliable goods. They want to know you; they are reliable. They are where you saw the Ad. When writing them don't forget to tell them you saw the Ad. in FARM AND DAIRY.



A Baby Food for Baby Chicks

A carefully prepared, partly cooked, partially predigested food—just what is needed for the first three weeks to give the chick the right start. Do not confuse with ordinary feed. The following results (which we guarantee if your money backs) will follow the use of

Pratt's BABY CHICK FOOD

At all dealers.
 1 lb. pgs. and larger mess-feeding sizes.
 Pratt's White Diarrhea Remedy—A guaranteed preventive. 25c. Will save 100 chicks.
 FREE—"Poultry Wrinkles," 64 pages. Write for it.

Pratt Food Co. of Canada Limited
 681 Clarence Street, Toronto 12

Paroid ROOFING

You cannot afford to experiment with cheap roofings, when Paroid, though it may cost a little more, is the least expensive roofing in the world.



WRITE FOR BOOKLET

Paroid Roofing is made of the best bit, thoroughly saturated through and through with nature's own Waterproof Asphalt and finished in Grey, Red, or Green. Burning embers dropped on it, do not touch it. It is a positive fire-resist, and is easy to lay. Look for the Paroid Ball—there are no imposters—dealers throughout Canada.

Write for FREE Booklet—"Repairing and Building with Paroid."
BIRD & SON
 Dept. 9
 75 King St.
 Hamilton, Ont.

Look for the Paroid Ball



HOMESEEKERS' FARES

From TORONTO To

WINNIPEG and Return ... \$35.00
 REGINA and Return ... 35.75
 SASKATOON and Return ... 36.75
 EDMONTON and CALGARY and Return ... 43.00

Every Monday to October 30th.
 Properly-kept fares from and to other points.

Electric-lighted Tourist Cars.
 For our Booklet, "Home-seeker's and Settler's Guide," tickets and information, apply to City Ticket Office, 52 King St. E., Toronto, or Union Station, or write R. L. Fairbairn, General Passenger Agent, 25 King St. East, Toronto.

CANADIAN NORTHERN

Cow Testing: What the People Say

In one of his annual reports, C. F. Whitley gives quotations from what people say of Mr. Whitley's special charge, cow testing. From Lanark Co., Ont., comes this statement:

"We all know in a general way that some of our cows give much more milk than others, but I am quite sure that none of us realized the difference was anything like so large as it has proven to be. Our best cow gave 7,150 pounds of milk and our poorest cow gave 4,206 pounds, a difference of one and a half tons, which is easily \$50.

"As my cows cost exactly the same feed in winter and the same pasture in summer, any one can see at once the greater importance of cow testing to raise up the milk production without one cent of increase in the cost.

"Another point is we know how just what our cows are doing for us: before, we only gave them credit for milk sold to the factory; our best cow paid us \$50, which is far in excess of what we ever expected her to make.

"Milk fed to our calves must be just such as we get from our cows, so that we should be as much interested in the quality as in the quantity; we had no way of knowing the difference in quality till we tested each cow separately and found great differences."

"I find it very much more interesting dairying when keeping records, as well as being able to know which cow to get rid of. I wish there were more in this district keeping records as it is a good guide when you want to get new stock or young calves."—(From Cassburn, Ont.)

Wants More Of It.

"We have been weighing our milk now for three years and find it very beneficial. Please send more sheets for daily weights; we would not like to keep cows if we had to stop weighing the milk."—(From Hollen, Ont.)

"I never seem to miss the time spent weighing daily, and in any case the benefits more than offset the time spent."—(From Hollen, Ont.)

"I have been weighing cow for one year and find that I have such poor cows in the herd that I am ashamed to send in the figures. I promise you that the unmistakable eye-opener which I have received this year will result in a much happier return next year."—(From Inna, Ont.)

"And another man near Stratford, Ont., who with a herd of 10 cows, including one farrow and three 2-year-old heifers, has an average of 3,333 pounds of milk, writes:

"I certainly feel well-pleased with the idea of weighing the milk at every milking. A person takes more interest in his dairy work when he knows just what his cows are doing every day. I also believe we should keep an account of the feed they consume."

The Dairyman's Indicators

By G. L. Martin.

In order to put dairymen upon a business basis, every farmer needs to use the milk scales, the tester and the record book. The successful business man has a ledger to guide him in his transactions. Every dairyman needs to write a separate account with each of his cows so that he may have an indicator to tell him at the end of the year just how much feed each cow has consumed, the amount of milk produced and the percentage it tests.

Too many farmers of the country are keeping the scrub cow, feeding and milking her twice each day, 14 times each week, 60 times each month and 720 times each year, merely for

the pleasure of her company, when a portion of this time might well be expended in estimating the feed, weighing and testing the milk and crediting same to each cow. Many good dairymen squander 30 minutes each day gambling with the scrub cow, when three minutes time with the scales, to test and record book in the would put the herd upon a paying year.

basis and money in their pockets. The keeping of records is a business transaction and means the essential difference between knowing and guessing, pleasure and drudgery, profit and loss, success and failure.

The small farmer can keep a variety of fine stock sufficient to produce something to sell and bring in a bit of ready cash every month in the would put the herd upon a paying year.

WHAT THE FARMER CAN DO WITH CONCRETE

This Valuable Booklet FREE

It's not a catalogue but a book of information—brim full of valuable, money-saving facts for the farmer.

It tells how to construct fire-proof, weather-proof, wear-proof buildings and other farm improvements of indestructible concrete—the most economical of all building materials.

It is the same book that has saved time, labor and money for more than 75,000 progressive Canadian farmers. Let it save money for you.

Clip the coupon below. Fill in your name and address and mail to-day.

Canada Cement Company Limited,
 Herald Building,
MONTREAL.

CUT OUT AND MAIL

CANADA CEMENT COMPANY LIMITED, Herald Building, MONTREAL.
 758
 Gentlemen:—Please send me a free copy of "What the Farmer can do with Concrete."
 Name _____
 Street and No. _____
 City _____ Prov. _____

RENNIE'S SEEDS

EVERYTHING NEW
FRESH—PURE/
RELIABLE

Ask your dealer or write
RENNIE'S — TORONTO

ALSO AT
MONTREAL WINNIPEG VANCOUVER

Production and Thrift

"CANADA from her abundance can help supply the Empire's needs, and this must be a comforting thought for those upon whom the heavy burden of directing the Empire's affairs has been laid. Gain or no gain the cause before the farmers of Canada is as clear as it was last year—they must produce abundantly in order to meet the demands that may be made, and I believe this to be especially true in regard to live stock, the world's supply of which must be particularly affected in this vast struggle. Stress and strain may yet be in store for us all before this tragic conflict is over, but not one of us doubts the issue, and Canadians will do their duty in the highest sense of that great word."—HON. MARTIN BURRELL, Minister of Agriculture.

"MODERN war is made by resources, by money, by foodstuffs, as well as by men and by munitions. While war is our first business, it is the imperative duty of every man in Canada to produce all that he can, to work doubly hard while our soldiers are in the trenches, in order that the resources of the country may not only be conserved, but increased, for the great struggle that lies before us. 'Work and Save' is a good motto for War-time."—SIR THOMAS WHITTE, Minister of Finance.

THE CALL OF EMPIRE COMES AGAIN IN 1916

TO CANADIAN FARMERS, DAIRYMEN, FRUIT GROWERS, GARDENERS

WHAT IS NEEDED? THESE IN PARTICULAR—

WHEAT, OATS, HAY,

BEEF, PORK, BACON,

CHEESE, EGGS, BUTTER, POULTRY,

CANNED FRUITS, FRUIT JAMS,

SUGAR, HONEY, WOOL, FLAX FIBRE,

BEANS, PEAS, DRIED VEGETABLES

We must feed ourselves, feed our soldiers, and help feed the Allies. The need is greater in 1916 than it was in 1915. The difficulties are greater, the task is heavier, the need is more urgent, the call to patriotism is louder—therefore be thrifty and produce to the limit.

"THE AGRICULTURAL WAR BOOK FOR 1916" is now in the press. To be had from The Publications Branch, Department of Agriculture, Ottawa.

THE GOVERNMENT OF CANADA

THE DEPARTMENT OF AGRICULTURE

THE DEPARTMENT OF FINANCE

HORTICULTURE

How to Grow Raspberries

By F. L. Gable, Fruit Inspector.

RASPBERRIES are better planted in the fall on well prepared and manured land, preferably on land which has grown a plot of potatoes or some such good hoe crop. Early spring planting is also satisfactory, but owing to the rush at this season, it is usually more difficult to get it done properly. Raspberries are better planted in the row system than in hills. The rows, however, must be kept to a suitable width, not more than 10 inches, as the great bulk and the best quality of fruit is grown on the outside canes, and little more would be produced from wide-rows than from narrow ones.

The original sets should be planted about seven to nine inches in the row, with rows 18 to 20 inches apart, so that cultivation can be carried on with two horses. The berries should be well cultivated during the summer, up to picking time and through picking time in case of dry weather. A little cultivation after picking, up until early fall, will also be beneficial. In the fall, after the growth has ceased, the ground should be plowed up toward the canes, leaving a light dead furrow in the centre. In the spring this is cultivated again and pulled back toward the centre, away from the row, with a reversible disk harrow.

To get the best results, raspberries should be mulched yearly with manure. This is done by piling manure at the ends of the rows during the winter time, and with the aid of a one-horse cart, distributing the manure in the row in the spring, spreading it amongst the canes as carefully as possible. In this way what is left of this manure in the fall is covered by the furrow that is plowed up to the canes, and thus year after year it becomes well incorporated in the soil and produces good results, not only furnishing fertilizer, but assisting very materially in holding moisture and avoiding the disastrous results that occur during the hot, dry season of raspberry harvesting.

Canes should not be cut back during the growing season. I leave my canes in the condition in which they grow, until spring time. They are then cut back and the dead canes taken out in one operation. Care should be taken to avoid damage from disease and insects. One of the worst insects we have had to contend with during the last few years is the snowy tree cricket that deposits its eggs in the growing cane and kills them back from the tip. The only remedy for this is to watch closely and cut out the affected canes.

Pruning Trees for Production

M. B. Davis, B.S.A., Experimental Farm, Ottawa.

WE prune primarily to obtain better fruit, and in so far as our pruning practices help along that one line, just so far is our pruning a success. We do not, or at least should not, prune to obtain a beautiful or sightly tree. A tree possessing beauty alone does not add dollars to our pockets, so that look at it as you may, we prune only to obtain better fruit.

The different types of trees that we grow may be roughly divided into three classes. One is the pyramidal form, another is the open centre, and the third is a combination of the two. The first or pyramidal form, which consists of a central leader, with branches radiating off from it, gives too large and too high a tree for our conditions. It shuts out too much sunlight, thus making the production



A well-pruned

tree is shown

of clear, well-difficult task to naturally thrive, directing the sanitation, and cannot be called tree. The open, possessing admirably possess the standard leader type, so the two is more combination type of central leader, year until five arranged in a can be selected work of the tree. Having decided tree shall take, follow the pruning first year, or th out, it will be all all branches in an opportunity make our trees and willow; years of a tree wood. This adds this first cutting to form a good, head, we must growth, and pruning four or five years towards that end. If the tree is leader type, it is central branch and five other branches selected, as possible, other branches a five selected branch a considerable weaker ones the branches will laterals on the move these at the



Lakeview

The production of 37 highest producing but established a new 10 months after calving.



A well-pruned tree in the orchard of Jas. E. Johnson, of Norfolk Co.

of clean, well-colored fruit a more difficult task than it should be. Where insect pests and fungous diseases naturally thrive, the first factor in directing the shape of the tree is sanitation, and the central leader type cannot be called a sanitary type of tree. The open centre tree, while possessing admirable qualities, does not possess the strength of the central leader type, so that a combination of the two is more desirable. The combination type consists in allowing the central leader to grow for the first year until five or six good branches, arranged in a whorl and well spaced, can be selected to form the framework of the tree.

Having decided on the form our tree shall take, we are now ready to follow the pruning year by year. The first year, or the year the tree is set out, it will be necessary to head back all branches in order to give the roots an opportunity to get a hold and to make our trees stocky instead of long and willowy. During the first two years of a tree's growth, prune for wood. This adds to the importance of this first cutting back. To enable us to form a good, strong, well-balanced head, we must have abundant wood growth, and pruning during the first four or five years should be directed towards that end.

If the tree is to be the modified leader type, it is pruned so that the central branch will maintain the lead, and five other branches at most will other branches are removed, and the five selected branches are cut back a considerable distance, cutting the weaker ones the least. As these main branches will probably have some laterals on them, it is advisable to remove these at this time.

Which is Your Way?

TWO men were leaning over the pasture bars. Their conversation is related in the Western Farmer of Spokane, Washington, as follows:

"Yes, sir, that colt is for sale, but he belongs to my son in the field yonder. You'll have to bargain with him," said the farmer, motioning to the boy. "He'll be here presently and you can talk to him."

"That boy!" ejaculated the stranger. "Yes, George is seventeen, and a smarter boy never was raised on any farm—if I do say it. You ought to hear him in debate. He can hold his own with the best of 'em. He raised that colt and the sale money goes into the bank in his name. He's saving for a course in an agricultural college; then I'll step down and out and he'll run the old farm. Here, George, this man is looking at your two-year-old."

The bargain was soon concluded, but not before the buyer had learned that the seventeen-year-old boy was a keen judge of horse flesh and knew the worth of his colt.

Two men were leaning over the pasture bars.

"Yes, sir, them steers are as good as ever was raised in this town. That boy over there calls 'em his, and has fussed with 'em ever since they were calves. Hey? Oh, that makes no difference when it comes to selling. They were fed from my now, and I reckon the cash goes into my pocket. Boys are ungrateful nowadays, and I can't keep him longer than he is twenty-one. He might take the old farm and let me have a rest, but he will not listen to that. Well, it can't be helped, as I see. You don't offer quite what I consider the steers worth, but there's no use in feeding 'em any longer. They're yours."

Which boy made a successful, contented farmer, and why?

Rural Leadership Course at O.A.C.

The Ontario Agricultural College has made arrangements for its second annual Summer School for Rural Leadership. It is the purpose of this school to discuss the country home, school and church, and their relationship to the community life. Along with these subjects will be given a few outline lectures on strictly agricultural topics, with the idea of bringing all rural leaders, such as clergymen, teachers, and so forth, more closely in touch and more sympathetic towards the problems of the farmer. Further information may be had by applying to Dr. G. C. Creelman, O. A. College, Guelph.

Made in Canada

Tarvia
Preserves Roads
Prevents Dust-

Dust Costs Money

Dusty roads are expensive, for the presence of dust means that costly road material is being cast away to the four winds of heaven. Sooner or later it must be replaced at great expense.

The taxpayer foots these bills. Ordinary waterbound macadam is not sufficiently bonded to resist modern traffic. A stronger binder is needed. That is why many Canadian towns are turning to Tarvia—a coal tar preparation of great adhesive power, which is used to cement the stone together.

Under heavy loads a tarviated road is somewhat elastic—not brittle—and traffic wears it smoother. The Tarvia also has the effect of making the road surface waterproof and preventing raveling by rain torrents.

The addition of Tarvia to the macadam costs so little that it is more than balanced by

the saving in maintenance expense. The road, instead of being torn up by traffic and blown away by the winds, stays where it is put, and the annual repair bill is reduced materially. Tarvia is made in three grades: "Tarvia-X" for new or rebuilt roads and pavements, "Tarvia-A" for surface application, and "Tarvia-B" for dust prevention and road preservation.

If you want better roads and lower taxes, our Special Service Department can greatly assist you. Write to nearest office regarding road conditions or problems in your vicinity and the matter will have the prompt attention of experienced engineers. This service is free.

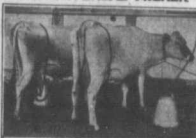
Write nearest office for free illustrated booklet

THE PATERSON MANUFACTURING COMPANY, LIMITED
MONTREAL TORONTO WINNIPEG VANCOUVER
THE CARRITTE-PATERSON MANUFACTURING CO., LIMITED
ST. JOHN, N.B. HALIFAX, N.S. SYDNEY, N.S.



Gull-Prison Macadamized Road, Waterloo Co., Ont. Treated with "Tarvia B." 1914

HINMAN
THE UNIVERSAL MILKER



MADE IN CANADA.

THE HINMAN
\$50.00 Per Unit
Why?

Because—it has NO metal piping, NO gauges, NO safety valves, NO pulvers, NO rubber lining in the test cups, NO vacuum in the pail. In short, NO COMPLICATION.

Write for Booklet D.

H. F. BAILEY & SON GALT, Ont.
Sole Manufacturers for Canada
Under HINMAN Patents.

OUR Farm Improvement Number

WILL BE OUT
MAY 4th

Remember, only half of our pages are right hand ones. Make sure of being on one by reserving your space NOW.

ADV. DEPT., FARM AND DAIRY - PETERBORO, Ontario

Lakeview Rattler, the New Canadian Champion 7-Day Cow.

The production of 37.54 lbs. butter from 724 lbs. milk in seven days makes her the highest producing butter cow of any age or breed in Canada. In December last she established a new long-distance record for Canada in her 30-day division, eight months after calving. Lakeview Rattler was bred and is owned by Lakeview Farm, Bronte, Ont.

Climbing the Dairy Ladder:

As Told by the Man Who Climbed

"WHAT one man can do, another can." Who was the author of this homely old proverb? Whoever he was owes him a debt of gratitude. It has encouraged many who find the rungs in the ladder of success in farming rather far apart and hard to reach. We never hear a story of success but that old jingle comes into our mind and urges us on. But we just need to hear of what the other fellow has done. That is why Farm and Dairy is always telling our Folks about the success of other folks.

Not long ago R. L. Vincent, a United States Journalist and farmer, hitched up alongside a fellow passenger on an express train and was told in a few words the story of that man's life. It was an inspiring story. The conditions overcame were the same as mine out of ten farmers are face to face with today. So good was the story that Mr. Vincent retells it in *Kanaboli's Dairy Farmer*. We retell it again for the benefit of our Folks. Here it is:

The Story.

"I was like a young man when I was in the twenties. I had worked hard and I thought it would be a smart thing to go down to Washington and hold a government position for a few years. So I got a chance to be appointed to a place in the interior department and went. I soon married and started a family. But the confinement began to tell on me. I had always been used to the free air of the country and I came near dying before I waked up to the fact that it was no place for me down there. So I did a queer thing, I suppose. I resigned and took my way back to the old northland. They say a man rarely does that. The pay is so sure with the government and the work not heavy that most men stick to it to the end of their days. I never did a better thing, however, than when I packed up and went away from Washington. In fact, I am sure I would have died soon if I had not quit when I did.

"We bought a little place of 55 acres along the railroad and began to 'farm it.' At first we had only three cows, and they were just the same kind of stock the rest of the folks around there had—very ordinary stock and surely not such as would be likely to cut any great figure in the world's dairy history. Nobody then had any better cows than we did. If I had wanted to buy thoroughbred stock I would not have known where to look for it any more than the man in the moon. No one had any such stock in all the country round about; and that was less than 35 years ago. My! What a change these few years have brought!"

My friend looked out of the car window a minute and seemed to be letting his mind run back over the years. Then he took up the thread of his story again.

The Awakening.

"Somehow I did not like the way we were getting along. I think now it was the reports we got from the creamery. Our test was terribly low.

COMBINING BARLEY AND OATS FOR HIGHEST YIELDS PER ACRE.

Results secured by Prof. C. A. Zavitz in his Experimental Work.

Varieties	Acres	Seed per Acre	Tons of Straw	Yield per Acre	Pounds of Grain
Combinations	5/8	50	1910 1911 1912 1913 1914 1915 Avo.	1910 1911 1912 1913 1914 1915 Avo.	1910 1911 1912 1913 1914 1915 Avo.
Oats	1/2	41	1.38 .75 .87 .68 1.25 1.50 1525 1420 1350 1316 1380 1445		
Barley	1/2	82	1.47 .93 1.25 .96 1.72 1.21 2104 1620 1510 1286 2270 1800		
Oats	1/2	123	1.61 1.29 1.63 .95 1.86 1.41 2006 1504 1700 1480 1980 1778		

We had kept our milk at home some days to make a little butter for ourselves, and the cream we got did look pretty plain and thin. We were getting our eyes open a little, and finally I told my wife I believed we might just as well keep some good cows as to be worrying along with these poor ones. By the time I had five or six cows, all the same kind, and we began with, and we kept some records which helped still more to open our eyes. We were down about as near the foot of the ladder as folks ever get.

"Well, we began right, as I look at it now, by fixing up the barn and getting ready for the better and bigger herd. We moved a little old barn that had stood probably for 60 years, raised it up, and added to its length. It was then 36 by 60 feet in size. Our ambitions overcame me the same as mine out of ten farmers are face to face with today. So good was the story that Mr. Vincent retells it in *Kanaboli's Dairy Farmer*. We retell it again for the benefit of our Folks. Here it is:

A Serious Setback.

"But when we got the barn straightened up, we set out to get still better stock. When I began to ask myself where I would go to find that stock, I found that it was not such an easy matter. I had quite a hunt, but I found what I wanted and bought it. That was in the form of a promising-looking registered bull calf. We paid a good price for him as things went then, \$10. Before long we learned that he was not a breeder. We never got a calf from him!

"They talk about discouraging things in dairying. I know all about them; but I know, too, that failures are a good many times just what a man needs to make him hustle. It was so with me. I wanted a good bull but then the worst I ever did in all my life, and I was not satisfied till we had one.

"While we were trying to get our bearings again, I had a chance to buy a nice little heifer calf of good, thoroughbred stock and I went away over in the east part of the territory some miles, to get it. I thought she had the earmarks of a good cow and it proved that this was so. She was, and is today, the best cow we ever owned. All her calves are good, too. The only fault I have to find is that so many of them are bulls.

A Good Start at Last.

"I kept looking for a bull and at last we got one. This was a Guirsey. We had tried some other breeds and they did not quite seem to come up to our expectations. That is, not saying anything against the other kinds of stocks, you understand. Other men might do better with them than

Get Real Tire Economy!

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

No accident ever led to a automobile but what the tires were forced to play a part in it. And no accident ever was averted but what the tires had a say in it, too.

If you will drive fast,
If you will make those sudden stops,
If the city will water asphalt,
If rain will make muddy roads:

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

DUNLOP TRACTION TREAD.



1866 Order now and get the first choice of our stock. Everything for the farm and garden. We pay freight on all orders in railroad and outside over \$25.00. Order Catalogues is at your service. Write for one to-day—it is free.

SEEDS FIFTY YEARS SERVICE

1916

Gov't. Standard Blue Extra No. 1 for Purify \$18.50
No. 1 Red Clover 15.50
No. 2 Red Clover 14.75
No. 1 Alsike 11.90
No. 1 Timothy (Almost Sterile) No. 1 for Purify 6.00
No. 1 Timothy 5.75
No. 2 Timothy, slightly bulled but Extra No. 1 for Purify (margin) 6.45
No. 4 Timothy 4.55
Sweet Clover (White Blossom) for Hay baled 12.00
Alfalfa For Bush
Ontario Variegated No. 1 25.00
Ontario Variegated No. 2 20.00
MONTANA (Northern Green) No. 1 17.00
Loyman's Grimm, No. 1 75
Aberdeen, Green, No. 1, 3c. 7c.
North Western Grimm, No. 2, 3c. 7c.
Allow 5c for each cotton bag registered—Clover & Timothy.
Mangel Seed.
Pristaker, Bluestrap and Longham.
1 lb. package, postpaid, at 50c lb., express or freight collect. 2c. lb. in bulk, if 5 lbs or more ordered of one variety. 5c. lb. Same postpaid. 5c. lb. Yellow.
Lambert's. At an extra 5c. Long Red, Grand Seed 5c. per 50 lb. bag. Same above pattern. White Intermediate Carrot, 40c per lb. Ask for complete catalogue.
Potatoes, per bag.
Bureka, Cobble, Delaware, and Green.
Mountain \$3.75
Barty Ohio \$2.00

GEO. KEITH & SONS SEEDS 124 KING ST. E. TORONTO

He's shrewd
Canada
Debered in
The S
and se
in the
So ho
money
Canada
panies?
Why do
same?
Write fo
Profits fr
show yo
for prof
STANDARD
BRANCHES
4 Elmira,
THE FIRST F
WARREN'S
FARMING
What is y
is it to w
or to mak
business s
some farm
WARREN'S
MENT IS T
is secure.
DO YOU W
how to cho
of a farm
to start fa
capital, how
to run, how
count, so t
are making
are losing t
New subscri
Dairy at \$1
will be sent
It answers
tions and m
CIRCULATIO
Farms and Dairy

**CONSIDER
THE
SCOTSMAN**

He's thrifty and a
shrewd investor.
\$60,000,000 worth of
Canadian Mortgage
Debentures are owned
in Scotland.

The Scotsman knows
they are the finest
and safest investment
in the world.

So he invests his
money in ours and other
Canadian Mortgage Companies'
Debentures.

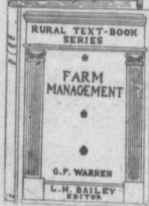
Why don't you do the
same?

Write for our book about
Profits from Savings. It will
show you how to invest
for profit. Address Dept. B

**STANDARD RELIANCE
MORTGAGE CORPORATION**

Branches
Ayr, Beakville, Chatham,
& Elmira, New Hamburg

**THE FIRST Farm Book To Secure
WARREN'S FARM MANAGEMENT**



When the highest priced farm manager in Canada first read this book he was so impressed with it that he took a trip all the way to Cornell to have a talk with the author. Why was he so impressed? Because he realized that to run a farm successfully is a business proposition, and that this is the greatest farm book ever published, because it treats of

FARMING AS A BUSINESS

What is your object in farming? Is it to work out fine-spun theories or to make your farm a business success? If it is to make it a business success you will need WARREN'S FARM MANAGEMENT is the FIRST book you need.

DO YOU WANT TO KNOW
how to choose a farm, what size of a farm is most profitable, how to start farming with the least capital, how to equip and lay out a farm, how to keep farm accounts, so as to know where you are making money or where you are losing it? Then send us two new subscribers to Farm and Dairy at \$1.00 each and this book will be sent to you free of charge. It answers fully all these questions and many more.

CIRCULATION DEPARTMENT
Farm and Dairy Peterboro, Ont.

they would wish the Guernseys. But we liked the Guernseys, and do now.

"Then we were on the way to see our dreams realized. We added about 160 acres to the farm, put more length on the big barn, making it wider and longer and put a cement floor under the whole, besides putting up a silo. Now we have about 30 head of stock, not all registered, but some fall breeds and a number of good grades. Last season our test at the creamery was the best of anybody's that patronized the institution.

"But we are not satisfied yet. There are better things than any we have reached, and we are going after them. We want some better cows. We want a sire to head the herd that is all wool and a yard wide, and we are going to have him."

I have visited this man's farm and know that all he told me that day is true. And he was—overly modest about the advance he has made since he came on the farm. The story was told in no boasting way, but in the most quiet, everyday sort of manner, and yet, with the light of a great purpose and a big dream in his eyes. That is one of the best things about doing good things in dairying, as well as in any other kind of business; it makes a man want to do still greater things.

Auto Running Legislation

PLEASE give information re the running of automobiles and auto trucks. What are the requirements since the new regulations? Where could a person qualify for running the same, if a special study is required? Is there any distinction between the qualifications for city and private country use?—T. T. Peterboro Co., Ont.

Subject to Section Thirteen of the Motor Vehicles Act, which provides that no person under the age of 18 shall drive a motor vehicle, the owner of a motor vehicle may operate his own car, providing, of course, that the registration fee is paid and the number properly exposed, etc. The regulations provide for no distinctions in respect of your enquiries between the running of automobiles and auto trucks.

It is further provided that no person shall for hire, pay or gain, drive a motor vehicle on a highway unless he is licensed to do so, and no person shall employ anyone to so drive a motor vehicle who is not so licensed.

This license may be obtained from the Department of the Provincial Secretary at Toronto on filing a certificate in that office signed by two members of the Ontario Motor League, appointed for that purpose, residing in the municipality in which the applicant for the license resides, and also by the Chief Constable for the municipality, stating that they have examined the applicant and that he is a fit and proper person to be licensed, having regard to his character, physical fitness, ability to drive and knowledge of the rules of the road.

If there are not two such appointed members of the Ontario Motor League residing in the municipality in which you live a certificate may be signed by two appointed members in the municipality nearest to that in which you reside. If you are in doubt as to whom these persons are to be, a letter inquiring to the Provincial Secretary, Toronto, will bring you the necessary information. No other examination or special study is required.

There are no distinctions between the regulations for city and country use. There are, of course, special regulations as to the passing of street cars in cities, and the speed rates for country roads and city streets. You had better apply to the Provincial Secretary for a copy of the Act governing these matters.

Good-by, Guess Work

THE New Sharples "Suction-Feed" is the only cream separator which eliminates guess work from cream production. All other separators have to be turned at exactly the speed indicated on the crank or they will lose from 7 to 13 pounds of butterfat per cow per year. The Purdue Experiment Station and other scientific investigators have proven these figures (see Bulletin No. 116, Vol. 13.)

This "guess" speed is used by 19 operators out of 20, because it is impossible to turn the crank at exactly the right speed.—It is much easier to turn it slower—and, whenever you do, you lose cream. Even a speed indicator will help but very little, as you won't and can't watch it every minute.

So we say to you dairymen: Quit guessing about your separator speed and your separator profits. Use

**THE NEW
SHARPLES
SUCTION-FEED**

Separator and know that you get all the cream all the time.

Whether you turn faster or slower, the bowl of the Suction-Feed drinks in just the right quantity of milk. The feature is entirely automatic; if you are tired, you turn slower (which is easier) and, if in a hurry, you turn faster and finish so much sooner. No matter how you turn, the New Sharples always skims clean.

The Sharples even is always of even thickness, whether you turn fast or slow. The Supply can is but knee high so you can fill it without any back breaking effort. The three-piece Sharples bowl is lighter and simpler than any other—no discs to wash.

All these money-saving and trouble-preventing features are described in a handsome catalogue; "Veelet" for Dairymen. Send for a copy, now, while you think of it. Address Dept. 77.



The Sharples Separator Co.

Toronto

Canada

FARM AND DAIRY

AND RURAL HOME
PUBLISHED EVERY THURSDAY

SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.50 a year. For all countries, except Canada and Great Britain, add 50c. for postage.

ADVERTISING RATES. 12 cents a line flat, 15.00 a inch an insertion. One page 40 inches, one column 12 inches. Copy received up to Saturday preceding the following week's issue.

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

CIRCULATION STATEMENT
The paid subscriptions to Farm and Dairy exceed \$1,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 20,000 to 25,000 copies, and no subscriptions are accepted at less than the full subscription rates.

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

OUR GUARANTEE

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

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

The Rural Publishing Company, Ltd.

PETERBORO, ONT.

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

The Horse-Hoed Garden

GARDENS are capable of classification into two main divisions, hand-hoed and horse-hoed. The former variety grace thousands of city back yards. They afford pleasant diversion to office and factory employees and lend city tables in humble homes with good things that would not otherwise be there.

But there is little room for the hand-hoed garden on the farm. Gardening to the farmer is not a diversion, and the garden should be planned so that the horse can do the work. This means a garden of considerable size and laid out in long rows. In it will be found as wide a variety of vegetables as it is possible to collect from a seed catalogue. There will also be small and bush fruits and, if the value of the product were kept track of, the total sum would be wonderfully satisfactory. A city friend of ours with a garden forty-five by fifty feet kept careful account of the value of its products last year, and the total was forty-seven and fifty dollars. We with our big, healthy country appetites should find the garden proportionately more valuable. Why not make 1914 a record season in the garden line? There is lots of room for such improvement in farm gardens. We ourselves have not noticed that good gardens were so common as to become monotonous.

The Regulation of Fraternal Insurance

THE request of some twenty to thirty fraternal societies to have a bill put through the Ontario Legislature, putting fraternal insurance on an actuarial basis and submitting it to Government inspection is a reassuring indication that some of the societies at least are anxious to prevent a recurrence of the difficulties that some such societies have encountered during the last few years. Farmers will welcome any measure by

which the business of life insurance, which so indelibly affects so many of them, will be put on the soundest possible financial footing. If Government regulation has any place in human affairs, it should be in connection with institutions by which men seek to provide for the members of their families, in case they should be taken away from them.

Many of our older farmers, men who have done so much in the opening up and development of Canada, are now suffering from the effects of the unbusinesslike methods of some of our fraternal insurance societies. Only recently a case came to our notice of a farmer who had taken out a thousand dollars of insurance some twenty-five years ago in one of these societies. His payments for some years amounted to sixteen dollars per annum. By the time he had reached 65 years of age, however, it was becoming apparent that all was not well with the company to which he had entrusted so much of his savings. The rates were increased until they amounted to thirty-six dollars a year. He is now an old man, and the payment of such an annual amount is no longer possible, with the result that he has had to comply with a provision by which he can draw out what he has paid in, so that instead of a thousand dollars, which he confidently expected for some many years to leave to his dependents, he will only have some three or four hundred.

Another case of which we have been informed is that of a man and wife, who each insured in a certain company in the other's favor. They owned their little home, and felt that so long as they were spared to each other they would be able, by frugal living, to make ends meet. They realized, however, that as soon as the home was broken up by the death of one, it would not be so easy for the other to get along. By taking out the insurance they felt they had provided for the declining years of the one of them which was spared the longest. For over 30 years they kept their premiums paid up, then the inevitable rate in the rates was made, and they found it absolutely impossible to continue to pay them. The old man has now gone to his reward, and his aged wife has been left dependent on the charity of the neighborhood. Incidents such as these make the actions of some of our fraternal insurance societies look like flagrant breaches of confidence.

To prevent the repetition of such occurrences, which amount to little less than a tragedy in the lives of those affected, the whole business of life insurance should be placed upon the soundest possible basis. Recent experience has shown that this important work cannot be left altogether in the hands of the officials of insurance companies. The strictest Government regulations should be enforced, and it should be made impossible for any company to attract members by offering low rates of insurance, when on the evidence of our best insurance experts such rates cannot be maintained. Years later, when such members become old, and their earning powers have decreased, they would not then have to face the payment of increased premiums or be forced to drop their insurance. Nothing is settled until it is settled right, and the agitation for the putting of all insurance business on an actuarial basis will keep on until that result is accomplished.

Have you ordered your farm and garden seeds yet? Get in before the rush.

Avoid coistipation in cows at calving time. Plenty of roots and elimination of heating grains from the ration will keep the cow in excellent condition.

The increased tariff on apples, it is said, will increase the price of Ontario's apples. Just how a protected home market can increase the price of a farm product of which there is a large, exportable surplus, passes our comprehension.

Educational Features of Sale

EVERY auction sale of pure bred dairy stock is a valuable dairy demonstration. As the animals are led out one by one, as their merits and breeding are announced and subjected to the criticism of the ringside, and as the bidders contend with one another for the possession of the animals, the novice in breeding has a splendid opportunity to become acquainted with the technicalities of the business. By being observant he has an opportunity for training his eye and becoming a better judge. By referring to his catalogue as the animals are sold, he has an opportunity to become familiar with the records, the families and the outstanding individuals of the breed. In watching the bidding and observing the prices that are put on the animals, he becomes familiar with the values of such animals as estimated by those best qualified to judge, and finally by mixing with the breeders, he is sure to absorb some of the enthusiasm that adds so much zest to the work of the dairyman and breeder.

At this time of the year, when sales of pure bred stock are being held every week, the opportunity is brought to hundreds of our readers to profit thereby. Such an opportunity should not be wasted, especially by the younger farmers. To the observant one, an auction sale of good stock is in reality a short course in which enough instruction is condensed into one afternoon's work to materially assist any young farmer in becoming more familiar with the best that live stock breeding has to offer.

Progressive Manitoba

THERE is an old proverb which says that "a new broom sweeps clean," and which can be very properly applied to Manitoba's new Legislature. After the rather slowly house-keeping of the late Government, there was considerable cleaning up to be done, but the new Government, backed by the earnest desire of the people of the Province for a large amount of progressive legislation, went to work with a will, with the result that Manitoba can now be said to have again restored her home to order. The recent session, lasting from January 8 to March 12, was characterized by the carrying out of a record program of progressive legislation. The Grain Growers' Guide, Winnipeg, sums the work of the session up as follows:

"The women were enfranchised. The Macdonald Temperance Act was passed and endorsed at the referendum on March 13. Direct legislation was incorporated into the statutes. A Compulsory Education Act became law and the bilingual clauses were expunged from the School Act. The Caldwell amendments were repealed. Much labor legislation was enacted, including a new Workmen's Compensation Act, new regulations governing employment in shops and factories and a Fair Wage Act. Authority was given to the Government to sell cattle on easy terms to needy settlers, and a Mother's Pension Act received the royal assent."

"The passing of such an amount of progressive legislation in one session shows what rapid strides can be made when the political atmosphere is cleared, and instead of throwing dust in the electors' eyes, the legislators get down to the business of enacting the will of the people. Men of all party affiliations now agree that only a year ago Manitoba was one of the least progressive Provinces. At one bound, however, she has taken a foremost place among the Provinces in this regard.

Production and thrift—these are the factors that have bought and paid for thousands of Canadian farm homes. There is a call for even greater effort in this year of war, and Canadian farmers will do their part.

United Farm

ONE of the Farmers' Limited, have

was organized, of the Company, and 12. The limited showed

months of February considerably in a the same months to \$37,020 for

\$30,152 in February March to \$55,097 last year. Owing later in opening

the sales in January not as large as in 1913, the total for three months of 1914, was \$107,143, as against

the same period an increase for 1913 of \$19,033. In this pointed out that are more nearly

then they were a as the feed shortage a great demand year the demand comparatively high

Another report to the Grain Growers of Winnipeg, of a supplies here in O amount to at least

ably twice that alone. This couple East and the West one of the great

with the development ment. The directors

are a special committee sident John Pritchard Beck, South Cayton of Farm and Dairy

appointed by the of last annual meeting

to review methods of work of the company its usefulness. This is a report which is

steadily in full. The good a business consultation with the ager and accountant

get methods of off which will ensure a records base hereafter that will be use in the most s

business of the sales in each of information has been before, but heretofore able in a more conv

company's business the province, showed were well pleased they had received fr some complaints we regard to a few lines, or given attention by The directors decid

In Union There is Strength

United Farmers' Company Show Great Gains

ONE of the most successful meetings of the directors of the United Farmers' Cooperative Company, Limited, have held since the company was organized, was held in the office of the Company in Toronto, April 11 and 12. The financial statements presented showed that the sales for the months of February and March were considerably in excess of the sales for the same months last year, amounting to \$37,020 for February, as against \$30,153 in February of last year, and in March to \$55,907, as against \$23,196 last year. Owing to the season being later in opening this year than last, the sales in January of this year were not as large as those of a year ago. However, the total sales for the first three months of this year amounted to \$107,145, as against total sales during the same period last year of \$88,110, an increase for the three months of \$19,033. In this connection it was pointed out that the sales this year are more nearly normal in character than they were a year ago, inasmuch as the feed shortage last year created a great demand for feed, while this year the demand for feed has been comparatively light.

Another report that was received with great satisfaction, the details of which cannot be made public at present, was to the effect that arrangements had been completed for the sale to the Grain Growers' Grain Company of Winnipeg, of a certain line of farm supplies here in Ontario, that will amount to at least \$60,000 and possibly twice that amount this year alone. This cooperation between the East and the West, promises to be one of the great features connected with the development of this movement.

The directors received the report of a special committee composed of President John Pritchard, of Gorrie; S. A. Beck, South Cayuga; and H. B. Cowan, Farm and Dairy, which had been appointed by the directors after the last annual meeting of the company to devise methods of facilitating the work of the company and to extend its usefulness. This committee brought in a report which was adopted practically in full. The committee had engaged a business expert, who after consultation with the business manager and accountant was able to suggest methods of office management which will ensure the company's office records being kept in a manner hereafter that will compare with those in use in the most successful business houses of the country and which will enable the directors to know at all times practically every detail of the company's business as it relates to the sales in each department. This information has been available heretofore, but heretofore it was available in a more convenient form.

It was decided hereafter that all matters affecting the policy of the company will be determined by the executive committee, subject to the approval of the board of directors, but that the details of the carrying out of these policies will be left with the management. The executive committee of the company will consist of President Pritchard, Vice-President W. C. Gurney of Paris; E. C. Drury of Harris, managing director; Anson Groh and Secretary J. J. Morrison.

Replies received by the special committee from some 35 locals throughout the province, showed that the locals were well pleased with the service they had received from the central. Some complaints were registered in regard to a few lines. These are being given attention by the executive.

The directors decided that the com-

pany should affiliate with the Canadian Council of Agriculture and work be kept in close touch with the work of the farmers' organizations in Western Canada.

As it was felt that a comprehensive policy should be adopted defining more clearly the relationship of the United Farmers' Company with the United Farmers of Ontario and outlining a means of keeping the locals in closer touch with the work being done by the provincial organizations and of increasing the interest in the movement throughout the province, a committee composed of Messrs. H. B. Cowan and J. J. Morrison was appointed to confer with a like committee from the United Farmers of Ontario and prepare a report for submission at the next meeting of the board of directors.

Stock was allotted to 25 farmers' organizations and to 36 individuals, thus showing the practical interest being taken in the movement by farmers and farmers' organizations throughout Ontario. The directors present included President John Pritchard, Vice-President W. C. Gurney, Messrs. S. A. Beck, South Cayuga; E. C. Drury, B. C. Tucker, Harold; L. H. Schurr, Shallow Lake; Geo. Carlaw, Warkworth; Manager Anson Groh and Secretary J. Morrison.

A meeting of the directors of the United Farmers of Ontario is to be held in Toronto on Thursday and Friday, April 20 and 21, when matters relating to that organization will be discussed at length.

Farmers to Build Terminal Elevator

A DEAL has just been closed for a waterfront site at Port Arthur, Ont., on which the Saskatchewan Cooperative Elevator Company will build a terminal elevator. The first unit will be commencing capacity. Work will be commenced early this summer, and the terminal will be completed in time for the 1917 crop. The C.N. and the C.P.R. already connect with the site.

The 1916 building program of the company provides for the erection of about 30 interior elevators in the province, this being the largest number for which the company can count on getting material and crews with which to carry on the work. This program falls very far short of meeting the requests for interior elevators by the cooperating farmers, but under prevailing labor and other conditions, it is all that the company feels it should undertake.

The Testing of Dairy Products

THE price of success is attention to detail. This fact is distinctly emphasized in a bulletin recently issued by the Dairy and Cold Storage Branch of the Federal Department of Agriculture under the title of "The Testing of Milk, Cream and Dairy By-products" and written by J. F. Singleton, Chief Inspector of Dairy Products. Without being profuse Mr. Singleton tells in plain language about what is to be told of the practical application of the test, the care that should be taken of the component parts of the apparatus, the measurements advisable and the methods that should be employed. A number of exact and plain illustrations lend additional worth to a notable bulletin, the number of which is 45 of the Dairy and Cold Storage Series and that can be had by post-free application to the Dominion Branch, Department of Agriculture, Ottawa.

Clean Skimming
Easy Turning
Easy Washing
Small Repair Cost
Best Cream Quality
World's Highest Awards



DE LAVAL Stands On Its Record

FOR nearly forty years the De Laval Cream Separator has led in the cream separator field. It was the pioneer in 1878. It had a step of cream separator development and popularity, and more De Laval are in use today than all other makes combined.

It has always been recognized as the closest skimming cream separator. That's the main reason why 98% of the world's creameries use it to the exclusion of all others.

Because of its cleaner skimming, ease of operation and wonderful durability, every De Laval user is a "booster" and the better its work is known in a neighborhood the more popular it becomes.

The better quality of cream it produces is attested by the fact that De Laval produced cream and butter have scored highest at every annual contest of the National Buttermakers' Association for twenty-three years. Last but not least, the De Laval was awarded the Grand Prize at the San Francisco Exposition in 1915 as at every other great exposition since its invention.

The creamerymen's choice can't be far wrong. The world's greatest dairymen and mechanical experts who act as judges at the great expositions can be depended upon to recognize real merit, and the fact that the De Laval is the choice of the majority of all cream separator buyers must mean a good deal to you. In your purchase of a cream separator can you afford to ignore these considerations?

Let the De Laval start saving cream for you right now. See the nearest De Laval agent at once, or if you do not know him write us direct for any desired information.

DE LAVAL DAIRY SUPPLY CO., Ltd.
MONTREAL PETERBORO WINNIPEG VANCOUVER
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



Established 1886
Our handsome Spring Catalogue now ready. A copy will be mailed free on request.

SPRING SEEDS

J. A. SIMMERS
Bulbs, Limited
SEEDS, Plants
Toronto, Ont.

A FAVOR Please mention FARM AND DAIRY, when OF YOU writing to our advertisers.



Victories that are easy are cheap. Those only are worth having which come as a result of hard fighting.—Beecher

God's Country and the Woman

(Continued from last week.)

In those few moments she had taken her place in his life. She stood before him like a goddess, tall and slender and unafraid, her head a golden aureole, her face filled with his purity, a beauty, and a strength that made him look at her speechless, waiting for the sound of her voice. In her look there was neither boldness nor suspicion. Her eyes were clear, deep pools of velvety blue that defied him to lie to her. He felt that under those eyes he could have knelt down upon the sand and emptied his soul of its secrets for their inspection.

"It is not very strange that I should be here," she said at last. "I have always lived here. It is my home."

"Yes, I believe that," breathed Philip. "It is the last thing in the world that one would believe—but I do! I believe it. Something—I don't know what—to me that you belonged to this world as you stood there, resting on the rock. But I don't understand. A thousand miles from a city—and you! It's unreal. It's almost like the dreams I've been dreaming during the past eighteen months, and at the vision I've seen during that long, maddening night up on the coast, when for five months we didn't see a glow of the sun. But—you understand—it's so hard to comprehend."

From her he glanced swiftly over the rocks of the coastline, as if expecting to see some sign of the home she had spoken of, or at least of some other human presence. She understood his questioning look.

"I am alone," she said. "The quality of her voice startled him more than her words. There was a deeper, darker glow at her eyes as she watched their effect upon him. She swept out a gleaming white arm, still moist with the water of the pool, talking in the wide, autumn-tinted spaces about them."

"I am alone," she repeated, still keeping her eyes on his face. "Entirely alone. That is why you startled me—why I was afraid. This is my hiding-place, and I thought—"

He saw that she had spoken words that she would have recalled. She hesitated. Her lips trembled. In that moment of suspense a little grey eminence dislodged a stone from the rock ridge above them, and at the sound of it as it struck behind her the girl gave a start, and a quick flash of the old fear leaped for an instant into her face. And now Philip beheld something in her which he had been too bewildered and wonder-struck to observe before. Her first terror had been so acute that he had fallen to see what remained after her fright had passed. But it was clear to him now, and the look that came into his own face told her that he had made the discovery.

"The beauty of her face, her eyes, her hair—the wonder of her presence stirred his heart from within civilization—had

held him spellbound. He had seen only the deep lustre and the wonderful blue of her eyes. Now he saw that those eyes, exquisite in their loveliness, were haunted by something which she was struggling to fight back—a questing, hunted look that burned there steadily, and of which he was not the cause. A deep-seated grief, a terror far sadder, shone through the forced calmness with which she was speaking to him. He knew that she was fighting with herself, that she nervously twitching fingers at her

caught the white fingers that trembled at her breast. And there was something about him now that made her completely unafraid. "Why?" she asked, and the fire, he will tell you. Four years ago I came up into this country from down there—the world they call Civilization. I was not a conqueror, and I never dreamed I ever had broken and crushed. And up here I found God's Country. I found new ideals and new dreams. I am going back with them. But they can never be broken as the others were—because now—I have found something that will make them live. And that something is you! Don't let my words startle you. I mean them to be as pure as the sun that shines over our heads. If I leave you now—I I never see you again—you will have filled this wonderful world for me. And if I could do something to prove this—to make you happier—why, I'd thank God for having sent me ashore to cook a mess of prunes."

He released her hand, and stepped back from her. "That is why you should tell me," he finished.

A swift change had come into her eyes and face. She was breathing quick, shallow breaths, and throbbing at her throat. A flash of color had mounted into her cheeks. Her lips were parted, her eyes shone like stars.

"You would do a great deal for me?" she questioned breathlessly. "A great deal—and like—a man?"

The Message of Easter

There is nothing quite so delightful as the spirit of Springtime. It is the resurrection of hope, of life. All creation rejoices in the glad new morning when Nature, after her long sleep, awakes and decks herself with her most entrancing robes.

"Awake, thou that sleepest!" The slumbering seeds which have been held in winter's grip are not the grip are not the mysterious call. We humans hear it, feel its inspiration. It stirs us to our depths. A new life pulsates in our veins, thrills our very being. There is a quickening of our vitality, a resurrection of our ideals, a moral re-awakening. Our hopes, our prospects, are renewed, re-energized. We feel the warming power of the words of cheer, higher and nobler impulses. As Spring awakens the seeds of new promise, new hopes, new expectations, new joys, new growth, new beauty in Nature, so Easter comes to us with the joyful message of a new and fuller life.—Orison Sweet Marden.

breast told more than his lips had confessed. He stepped nearer to her and held out a hand, and when he spoke his voice was vibrant with the thing that made men respect him and women have faith in him.

"Tell me—what you started to say," he entreated quietly. "This is your hiding-place, and you thought—what? I think that I can guess. You thought that I was some one else, whom you have reason to fear."

She did not answer. It was as if she had not completely measured him. Her eyes told him that. They were not looking at him, but into him. And they were softly beautiful as wood violets. He found himself looking steadily into them—close, so close that he could have reached out and touched her. Slowly there came over them a fiery softness. And then, marvelously, he saw the tears gathering, as dew might gather over the sweet petals of a flower. And still for a moment she did not speak. There came a little quiver at her throat, and she caught herself with a quick, soft breath.

"Yes, I thought you were some one else—whom I fear," she said then. "But why should I fear you? You are not down there, are you? You are down from there, from what you please to call civilization. I should distrust you because of that. So why—why should I tell you?"

In an instant Philip was at her side. In his rough, storm-beaten hand he

"Yes."

"A man—one of God's men?" she repeated.

He bowed his head.

Slowly, so slowly that she scarcely seemed to move, she drew nearer to him.

"And when you had done this you would be willing to go away, to promise never to see me again, to ask no reward? You would answer that?"

Her hand touched his arm. Her breath came tense and fast as she waited for him to answer.

"If you wished it, yes," he said.

"I almost believe," he heard, as if she were speaking the words to herself. She turned to him again, and something of faith, of hope transfigured her face.

"Return to your fire and your prunes," she said quickly, and the sunlight of a smile passed over her lips. "Then, half an hour from now, come up the coastline to the turn in the rocks. You will find me there."

She went quickly and picked up the little bag and the brush from the sand. Without looking at him again she sped swiftly beyond the big rock, and Philip's last vision of her was the radiant glory of her hair as it rippled cloudlike behind her in the sunlight.

CHAPTER THREE

That he had actually passed through the experience of the last few minutes, that it was a reality and not some

beautiful phantasm of the red and gold world which again lay quiet and lifeless about him, Philip could scarcely convince himself as he buried his way back to the canyon and the fire. The discovery of this girl, huddled in a hundred miles in a wilderness that was almost a terra incognita to the white man, was sufficient to boggle his mind. And now, as she looked at him, the embers from under the palls, and looked at his watch to time himself, did he begin to realize that he had not sensed at the hundredth part of the miracle of it.

Now that he was alone, question after question leapt unawakened through his mind, and every word of his body throbbed with unvolitional content. Not for an instant did he doubt what she had said. This world—the forests about him, the lakes, the blue skies above, were her home. And yet, struggling vainly for a solution of the mystery, he told himself in the next breath that this could not be possible. Her voice had revealed that she was a creature, not a being, in its sweetness. Not a br- it had been the purity of her speech. She had risen before him like the queen of some wonderful kingdom, and not like a woman seen the soul of our world, lived upon the world as the world lived outside of its forest walls. Yet he believed her. This was her home, her life, her power, her knowledge, her liliesomeness of her beautiful body—and something more, something that he could not see but which he could feel in her presence, told him that this was it. This wonder-world about him was her home. But why—

He seated himself on a rock, holding the open watch in his hand, one thing he was sure. She was oppressed by it as a man, it was not the fear of being alone, or a wretched lot, of some happen-chance peril that she might fancy was threatening her. It was a deeper, bigger thing than that. And she was not alone—she was not wholly, but enough to make a man know—that this fear was a man. He felt at this thought a little thrill of joy, of a glorious, indescribable joy, as he sprang from the rock and sped down to the shore of the lake, scanning the surface with eager, challenging eyes. In these moments he forgot that civilization was waiting for him, that for eighteen months he had been struggling between life and death at the naked and barbarous end of the earth. All at once, in the space of a few minutes, his world had shrunk until it held but two things for him—the autumn-tinted forests, and the girl. Beyond these he thought of nothing except the minutes that were drawing his thirty weights of lead.

As the half of five was struck, and of the twenty-fifth of the prescribed thirty he turned his steps in the direction of the pool. He half expected to find her waiting for him, that she came over the ridge of rock, and she had not returned. He looked up the coastline, and then at the firm white sand close to the water. The impressions of her feet were there—small, narrow impressions of a hand, and unconsciously he smiled, for no other reason than that each surprise he encountered was a new delight to him.

A forest girl as he had known them would have worn her moccasins—six hundred miles from civilization.

As he was about to leap across the narrow neck of the pool he noticed a white object almost buried in the dry sand, and picked it up. It was a handkerchief; and this, too, was a surprise. He had not particularly noticed her dress, except that it was blue and clinging close. The handkerchief he looked at, and he saw it was fine linen with a border of lace, and so soft that he could have hidden it in the palm of his hand. From it

(Continued on page 19.)

The Up

Travel Thro

An East
44-
servant
whats
shall

15. At this glad hour that we forget think of our Saviour's resurrection, someone the hour must think more sacrifice, so that even, living idea

On the Alaskan great privilege Biringer on board precious heroism always be an insome of the facts Esquimaux of the land left for the hand the night he years he labored work for years he and hourly peril of the people looked, cause he would canoes wild could not shoot, he ice-house. The built for him, in order to get work that it soon broke One, just as the beginning to look respect, he was gl esteem, a large p sent meal. Feeling good mouthful was to swallow it, was a cry of "Whal looking, he threw

One time he and lost for two month for two days. Son this: "Were you your hood, a simple answer, leather is not so very just how to toast it small out of it."

For a long time strained to send some missionaries to a north. This tribe treacherous; dangers. He put t fore his people and teers. No one reca ght of his people, asked himself if of all his years work "Will no one go?" he was saying: "I go, but we must."

So at this Easter-tion of our Saviour sacrifice, may each of us be all ready our heart of bread, chooses for us to do. "I, servant, am I do not know my Lord the point,"—I. H. N.

Floor Waxi

I HAVE followed and decorat and schemes which he recent. The floor waxing and polished with the of March 11. I treated in the spring, and as I do not know of waxing floor know how to apply floor wax, Ont.

The me application with waxing floors, given in the article of March 16, in a bulletin of the We would advise try on some material trying applying it to the f

The Upward Look

Travel Thoughts—No. 26

An Easter Thought.

THY servants are ready to do whatsoever my lord the king shall appoint."—2 Sam. 15: 15.

At this glad Easter hour I often think we forget the sad, agonized hours that our Saviour suffered before the resurrection; the hours in Gethsemane; the hours on the cross. We must think more of that great self-sacrifice, so that it will be a more solemn, living ideal and reality in our own lives.

On the Alaskan ship we had the great privilege of having Bishop Stringer on board. The brave, unpretentious heroism of that man will always be an inspiration. Here are some of the facts of his life among the Esquimaux of the Far North:

He left for that almost unknown land the night he was ordained. For years he labored without one convert; for years he and his wife were in hourly peril of their lives; for years the people looked down upon him, because he could not get into one of their canoes without falling out, he could not shoot, he could not build an igloo. The first one that was built for him, in it he built a big fire in order to get warm, with the result that it soon broke down around him.

Once, just as the Esquimaux were beginning to look upon him with respect, he was given, as a mark of esteem, a large piece of raw, high seal meat. Feeling he must, he took a good mouthful, but knew not how he was to swallow it. Just then there was a cry of "Whale." When all were looking, he threw it as far away as he could.

One time he and his assistant were lost for two months, with provisions for two days. Someone asked about this: "Were you really reduced to eating your boots?" "Yes," was the simple answer, "but eating boot-leather is not so very bad if you know just how to toast it to get the greasy smell out of it."

For a long time he had felt constrained to send some of his converts as missionaries to a tribe still farther north. This tribe was cruel and treacherous; the trip fraught with dangers. He put the whole case before his people and asked for volunteers. No one responded. With a great sinking of the heart, the bishop asked himself if he was the result of all his years' work. Again he asked: "Will no one go?" Then an old man arose, saying: "We are all ready to go, but we wanted you to choose."

So at this Easter, in commemoration of our Saviour's supreme sacrifice, may each of us say, gladly, that we are all ready to do what in our heart of hearts we know He chooses for us to do. May each say: "I, thy servant, am ready to do whatsoever my Lord the King shall appoint."—I. H. N.

Floor Waxing Query

I HAVE followed with interest the decoration and house furnishing schemes which have been published recently in Farm and Dairy, and was much pleased with the hints given in the issue of March 16. I am particularly interested in the treatment of floors this spring, and as I do not understand the kind of waxing floors, would like to know how to apply "A Reader," Hamilton Co., Ont.

The first application in connection with waxing floors, called the filler, is given in the article mentioned in our issue of March 16, namely, a mixture of two ounces of permanganate of potash in a bucket of boiling water. We would advise trying this mixture on some material lying around before applying it to the floor. If you de-

sire a light floor, the filler should be quite light in color.

Purchase a standard make of floor waxing, apply it with a soft cloth, then take another soft cloth and polish vigorously. Of course the more polishing the floor gets, the better will be the appearance. If you are anxious to do this work in the least possible time, a method which has been suggested to us is, to take a board, two feet long, wind it with soft cloths and apply the wax to the floor with this padded board. In this way one can cover a space two feet wide at one time. If a large amount of floor space is to be waxed, a weighted brush made especially for polishing waxed floors can be purchased.

COOK'S CORNER

**Easter Dishes
Maple Custard.**

BEAT four eggs, add four cups milk, a dash of salt and one half cup maple syrup. Beat into wet custard cups and set in a pan of hot water to bake. The water should not boil after baking has begun.

Banana Cream Sauce.

Press one banana through a sieve, add juice of half a lemon, half a cup of sugar and one egg—well beaten. Beat all together until light and set in a cold place until ready for use. This sauce may take the place of whipped cream for any jelly deserts.

Peanut Cookies.

One cup chopped peanuts, two tablespoons milk, one-quarter teaspoon salt, two teaspoons baking powder, flour and roll.

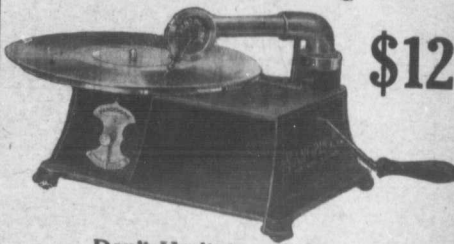
Apple Snow Jelly.

Dissolve a package of jelly powder with a pint of boiling water. When partly cold, turn into tall, slender glasses, filling about three-quarters full. When set, mix apple snow on top. Apple Snow—White of one egg, one grated apple, one half cup sugar. Beat until light and feathery.

Potato Chickens.

Six potatoes, one teaspoon salt, three tablespoons butter, pepper, one-third cup hot milk. Boil potatoes and drain and mash, season, add the hot milk gradually, beat until light and creamy. Pile on a hot dish, form in the shape of little chickens, using

**Here is the Phonograph
You've Been Waiting For**



Don't Hesitate a Minute

But send to-day for this Wonderful Music Producing Machine. It is a scientific high class phonograph that will hold its own against any, even at three or four times the price.

Its volume and beauty of tone and clearness of reproduction are simply marvellous. Just imagine the pleasure and recreation you can have from the best music of the highest priced artists or the comical "Uncle Josh" mono. You can have a free concert every night if you wish.

VANOPHONE



will play any size of disc needle record made.

The reason of the low cost is because we are making such vast quantities of them and in only one style.

It possesses many valuable and exclusive features. It is built of metal of a special composition, thus they are not affected by weather or climate and are almost fool proof.

It has a new automatic break which stops and starts on or off the record.

The secret of its splendid tone and volume is in the patented "Resonite" diaphragm or reproducer which no other machine can use.

For dancing it is ideal on account of its great volume of sound and clear reproduction.

It can easily be packed in a grip or suitcase and taken away when desired.

Every Vanophone made is absolutely guaranteed to be satisfactory in every particular or money refunded.

The price is only \$12.00 and we pay the freight. No home fit complete without a Vanophone, and at this remarkably low price no home need be without one. Send in to-day and it will be shipped to you by return.

Splendid Opportunity for Agents in Same Localities

VANOPHONE SALES CO., LIMITED
Dept. 12, McKinnon Building, Toronto

Improve the appearance of your Home with Canada Paint

There's no economy in allowing the wood or iron in any of your buildings to dry out or rust—weather-beaten surfaces soon decay unless protected.

Paint when your buildings need it and lengthen their period of usefulness—use

Canada Paint

and you need not paint so often. Its superior quality gives it durability and makes it the most economical paint for every purpose.

The Canada Paint Co., Limited
550 William Street,
Montreal.

"See Floor Finish gives permanent finish"



What? When and How to Paint?
Canada Paint Co. Limited

Write for
Catalogue
No. 25



We Pay
Freight
to Any
Station in
Ontario.

Complete Dining Room Suite for \$67.50

The suite, which is made of solid oak, in either Tamed or golden finish, consists of 9 pieces of matched design. Buffet, 25 inches wide, has British bevel mirror, spacious cupboard and drawers. China Cabinet, 48 inches wide, 60 inches high, has glass doors and sides; Extension Table, 6-inch round top; 2 Side Chairs and 1 Arm Chair; upholstered in genuine leather. A grand outfit for the dining-room, sent to any station in Ontario at above price.

The Adams Furniture Co., Limited, Toronto, Ont.

When You Write---Mention Farm and Dairy

THIS STOVE PAYS FOR ITSELF IN SAVINGS

For economy, if for no other reason, you need a New Perfection Oil Cookstove. From five to ten cents per day is its fuel cost for the average family—cheaper than coal, wood or gas.

The New Perfection brings all the comfort and efficiency of gas. Instant heat. Perfect regulation for any cooking. No smoke or smell. No overheated kitchens. No fires to build, no wood to chop, no ashes, no dirt.

Made in all sizes including the cabinet models with the fireless cooking oven.

For sale at moderate prices at hardware, furniture and department stores everywhere.

Royalite Coal Oil is Best for All Uses.

THE IMPERIAL OIL COMPANY
Limited
BRANCHES IN ALL CITIES



tiny pieces of beet for the eyes and toothpicks for the beaks. Place in a nest of parsley.

Eggs on Toast.

Toast as many slices of bread as desired. Moisten crusts in hot water or milk, butter well. Place on each slice a nicely poached egg with a dot of butter and dash of pepper on each egg. In poaching eggs, have plenty of boiling water, actually boiling when eggs are dropped in, but not afterwards. A little salt and vinegar may be added to the water. Try poaching each egg separately in a small, deep saucepan.

The Crow

ONE of our native birds so much concerns the average farmer of the Eastern provinces as the common crow. Many of our present criticisms of this bird, as its pulling sprouting corn, feeding on ripening ears, damaging fruits of various kinds, destroying poultry and wild birds, and disseminating diseases of live stock, were common complaints in the days of the early colonists. Many of the virtues of the crow, now quite gener-

ally recognized, also have been matters of record for many years. In recent times, however, scientific study of these problems, including the examination of the stomachs of hundreds of crows secured in every month of the year and under a variety of conditions, has enabled us to render a somewhat fairer verdict than was formerly possible.

The insect food of the crow, which comprises about a fifth of its yearly sustenance, does much to atone for its misdeeds. Grasshoppers, May beetles and their larvae (white grubs), caterpillars, weevils and wireworms stand out prominently. In 1,103 stomachs examined these highly injurious forms comprised over 80 per cent. of the insect food.

In the other animal food of the crow are several items of the utmost economic importance. Spiders are taken a considerable numbers in May and June, but the yearly total is a little over one per cent. of the food. In early spring crawfish are eagerly sought, and the aquatic foot and molluscs lend variety to the crow's bill of fare the year round. In the consumption of toads, salamanders, frogs, and some snakes, which, together, compose a little over two per cent. of the yearly food, the crow is doubtless doing harm. Small rodents occurred in the stomachs collected nearly every month, but it is often difficult to determine whether small mammals found in birds' stomachs were taken alive or found dead.

From its carrion-eating habits the crow has been unfairly criticized as a disseminator of live-stock diseases. While this may be to some extent just, the fact that there are many other important carriers which lie largely beyond our control, shows that we must seek final relief only through the strictest methods of sanitation.

The nest-robbing habit of the crow, by a serious criticism, is verified by stomach analyses. Fifty of the 1,103 crows examined had fed on wild birds or their eggs, and the eggs of domestic fowls were found slightly more frequently. The crow's habit of rummaging about garbage piles may explain much of this latter material.

Of the vegetable food, corn, which is eaten every month, is the most important item, and forms about a third of the yearly diet. However, it, however, must be considered waste. Over 60 per cent. is consumed from the first of November to the end of March. During the periods when corn is sprouting and when in the "roasting ear" stage, the crow is eating this grain at a rate considerably less than the yearly average, and the months of smallest consumption are July and August. Wheat and oats suffer similar damage at times, especially in the Western States, where these grains predominate.

Various kinds of cultivated fruits also are eaten, and local damage to such crops as apples, peaches, pears, beans, peaches and almonds is occasionally reported.

Damage to the eggs of poultry may be reduced to a minimum by careful housing of laying hens, and the farmer can protect his sprouting grain to a large extent by the use of tar-coated seed. While legal protection is not needed for so wary an individual as the crow, it seems well, where local conditions have not aggravated some particular shortcomings of the bird, to allow it to continue the good services rendered to man in the destruction of noxious insects.

"Mammy, dear," said little Matty,

"what is a stepmother?"

"If I should die and your dad should

marry again, the lady would be a step-

mother."

"Oh, I see," remarked Matty; "you'd

step out and she'd step in."

rose a faint,
rock violet,
he had crushed
his hands. His
fabric in the
shirt, and we
could.

A hundred
stream turned
strip of forest
water's edge.
bank, and stood
girl".

She had been
was waiting for
welcome on her
potted her tott
her wonderful h
bed in a heavy
of lace at her f
of it at her w
beautiful, more
queen of a king
fore him now.

He saw that it
"You didn't a
asked, and for
a bit of laughter

"No—I—I kic
der them," he s
He caught the
words, and her
ture. A short d
was a small tent
front of the tent
cloth, on which
he had not looked

"I am glad,"
her eyes met his
friendly humor.

spoiled your app
up my mind that
dinner with me,
or doughnuts. H
made fruit cake,
that I made mys
me!"

"They sat down
between them, and
to turn him a cup
that was already

Her lovely head
he stared with hi
the thick, shining
white contour of h
she leaned back o
him. The words
lips remained un
ter went from hi
wave the blood fin
"Forgive me if
don't understand,"

weeks past I hav
how I would eat
people again. Per
dreaded. But eig
there—eighteen mo
of a white woman
glimpse of her face
to live on—will m
time. Can't yo
little?"

"A great deal,"
quickly that she
again. "Back ther
believe you. I am
You are honest. F
of ourselves until
you like the cake?"

She had given hi
as his fat, and he h
"Delicious!" - h
"Think of it—noth
'nannock, bannock
only six ounces f
last six months!
eat the whole of
mean?"

Seriously she beg
remainder of the cak
"It would be othe
compliments you c
said. "But won't
bold tongue with
lobster, a pickle-

"Pleasant!" he in

God's Country and the Woman

(Continued from page 15.)

rose a faint, sweet scent of the wild rock violet. He knew that it was rock violet, because more than once he had crushed the blossoms, between his hands. He thrust the bit of fabric in the breast of his flannel shirt, and walked swiftly up the couloir.

A hundred yards above him the stream turned abruptly, and here a strip of forest meadow grew to the water's edge. He sprang up the low bank, and stood face to face with the girl!

She had heard his approach, and was waiting for him, a little smile of welcome on her lips. She had combed her tresses, and it was gathered in a heavy, shimmering coronet about her head. There was a flutter of lace at her throat, and little tufts of it at her wrists. She was more beautiful, more than ever the queen of a kingdom as she stood before him now. And she was alone. He saw that in his first swift glance. "You didn't eat the princess?" she asked, and for the first time he saw a bit of laughter in her eyes.

"No—I kicked the fire from under them," he said.

He caught the significance of her words, and her sudden alderlike gesture. A short distance from them was a small tent, and on the grass in front of the tent was spread a white cloth, on which was a meal such as he had not looked upon for two years.

"I am glad," she said, and again her eyes met his with their glow of friendly humor. "You might have spoiled your appetite, and I have made up my mind that I want you to eat dinner with me. I can't offer you pie or doughnuts. But I have a homemade fruit cake, and a pot of jam that I made myself. Will you join me?"

They sat down, with the feast between them, and the girl leaned over to turn him a cup of tea from a pot that was already made and waiting. Her lovely head was near him, and he stared with hungry adoration at the thick, shining braids, and the soft white contour of her cheek and neck. She leaned back suddenly, and caught him. The words that were on her lips remained unspoken. The laughter went from her eyes. In a hot wave the blood flushed his own face.

"Forgive me if I do anything you don't understand," he begged. "For weeks past I have been wondering how I would act when I met white people again. Perhaps you can't understand. But eighteen months up there—eighteen months without sound of a white woman's voice, without a glimpse of her face, with only dreams to live on—will make me queer for a time. Can't you understand—a little?"

"A great deal," she replied so quickly that she put him at ease again. "Back there I couldn't quite believe you. I am beginning to now. You are honest. But let us not talk of ourselves until after dinner. Do you like the cake?"

She had given him a piece as large as his fist, and he bit of the end of it. "Delicious!" he cried instantly. "Think of it—nothing but bannock, bannock, bannock for two years, and only six ounces of that a day for the last six months! Do you care if I eat the whole of it—the cake, I mean?"

Seriously she began cutting the remainder of the cake into quarters. "It would be one of the biggest compliments you could pay me," she said. "But won't you have some balled tongue with it, a little canned lobster, a pickle—"

"Pickles!" he interrupted. "Just

cake and pickles—please! I've dreamt of pickles up there. I've 'em come to me at night at big mountains, and one night I dreamed of chasing a pickle with legs for hours, and when at last I caught up with the thing it had tumbled into an iceberg. Please let me have just pickles and cake!"

Behind the lightness of his words she saw the truth of the craving of fatme. Ashamed, he tried to hide it from her. He refused the third huge piece of cake, but she reached over and placed it in his hand. She insisted that he eat the last piece, and the last pickle in the bottle she had opened.

When he finished, she said: "Now—I know."

"What?"

"That you have spoken the truth, that you have come from a long time in the North, and that I need not fear—that I did not."

"And that fear? Tell me—"

She answered calmly, and in her eyes and the lines of her face came a look of despair which she had almost hidden from him until now. "I was thinking during those thirty minutes you were away," she said. "And I realized what folly it is in me to tell you as much as I have. Back there, for just one insane moment, I thought that you might help me in a situation which is as terrible as any you may have faced in your months of Arctic night. But it is impossible. All that I can ask of you now—all that I can demand of you now—to prove that you are the man you said you were—is that you leave me, and never whisper a word into another ear of our meeting. Will you promise that?"

"To promise that—would be lying," he said slowly, and his hand unclenched and lay helplessly on his knee. "If there is a reason—some good reason why I should leave you—then I will go."

"Then—you demand a reason?"

"To decide a reason would be—"

He hesitated, and she added: "Unchivalrous."

"Yes—more than that," he replied softly. He bowed his head, and for a moment she saw the tinge of gray in his blond hair, the droop of his clean, strong shoulders, the something of hopelessness in his gesture. A new light flashed into her own face. She raised a hand, as if to reach out to him, and dropped it as he looked up.

"Will you let me help you?" he asked.

(Continued next week.)

Well Pleased With Butter Mixer

Mrs. J. H. Sherk, Grey Co., Ont. SAW by our last Farm and Dairy that you are asking the women readers to write giving their experiences in butter making. I thought I would write and tell you how I make butter; not because I think I know how, but if no one writes on the subject, none of us will learn anything about it. It may be that some one will benefit by my way of making butter. I do not make a great deal but I try to make it as good as I know how. We have by no means a dairy farm, but we have a few cows and what experience I have had, I am willing to pass on.

Last summer I had difficulty in getting cream to come to butter and had to churn about three hours every time. I tried everything and asked everyone whom I thought might know anything about my difficulty, but did not get much satisfaction. At last my husband visited a butter factory and in asking about butter making, he was told about the starter of yeast

GILLETT'S LYE

HAS NO EQUAL

It not only softens the water but doubles the cleansing power of soap, and makes everything sanitary and wholesome.

REFUSE SUBSTITUTES.

Well-raised Pie Crust That Digests Unconsciously follows the use

FIVE ROSES FLOUR

Breads Cakes Puddings Pastries

19-16-20

Years from now the Biswell Silo will be giving good service. It is built of selected timber, treated with wood preservatives, that prevent decay. It has strong rigid walls, air-tight doors and hoops of heavy steel. Therefore it lasts simply because it can't very well do anything else. Our folder contains more fully-written Dept. R. T. E. BISSELL CO., Ltd., ELORA, ONT.

Peck, Kerr & McElderry

Barriers, Solicitors, etc.

415 Water St., Peterborough

E. A. Peck F. D. Kerr V. J. McElderry

ADVERTISE in these popular columns, which others find so profitable—costs you only \$1.65 an inch.

Home seekers Excursions

Every Tuesday, March to October "All Rail"

Every Wednesday During Season Navigation "Great Lakes Route"

Somewhere out on the prairies where last year Canada's Greatest Wheat Crop was produced there is a home waiting for you. The

CANADIAN PACIFIC

will take you there, give you all the information about the best places, and help you to succeed.

Particulars from any Canadian Pacific Ticket Agent, or write W. B. Howard, District Passenger Agent, Toronto.

The Makers' Corner

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

Eastern Dairy School Graduates

THE following is a list of students ranked in order of merit who successfully passed their examinations at the Eastern Dairy School, Kingston, and will be granted diplomas after proving their ability by operating a creamery or cheese factory satisfactorily this season:

- Honors: Fred Hudson, Kingston; Wm. Wright, South Mountain; Fred Murray, Komptville; D. McDougall, South Indian; J. W. Bolton, Ormond.
 Second Class: A. W. Morrison, Rockport; J. W. Tordiff, Brooklin; J. B. Mercer, Jasper; E. G. Wilson, Wilson; Jas. King, Almonte; C. Ogle, Kingston; W. C. McEwen, West Brook; F. W. Standa, Clarence.
 Pass List: F. Patterson, Frankville; A. J. Sullivan, Pantagenoc; W. E. Tordiff, Brooklin; H. Stinson, Brunridge; C. H. Lee, Lindsay; W. G. Davidson, Glasgow Station.

Maritime Dairy School Requested

THE Farmers' and Dairymen's Association of New Brunswick, which recently met at a convention, went on record as favoring a Maritime inter-provincial dairy school. The following resolution was passed:

"Whereas the farmers of New Brunswick feel the need of more advanced methods in farming and dairying.

"And whereas the facilities for education along these lines are not equal to that of the Western Provinces, or even Nova Scotia.

"And whereas the finances of the Maritime Provinces, individually, are inefficient to maintain educational institutions up to the standard of those in the Western Provinces.

"Therefore, resolved: That the Farmers' and Dairymen's Association in convention ask our Legislature to give us such assistance as will enable us to cooperate with the other Maritime Provinces in establishing a Maritime Dairy School in conjunction with the Nova Scotia Agricultural College at Truro, and maintaining and developing those institutions up to a standard second to none."

A New Cold Storage Bulletin

EVERY person who makes use of a kitchen refrigerator, or places milk, butter, meats, fruit, or vegetables in a cool cellar, puts into practice the principles which underlie the operations of the most up-to-date cold storage warehouse and follows in some particulars the methods described by Bulletin 44 of the Dairy and Cold Storage Branch, Ottawa, entitled "The Cold Storage of Food Products." The bulletin is prepared by J. A. Ruddick, Dairy and Cold Storage Commissioner, and Joseph Burgess, Cold Storage Inspector, and outlines all the methods and processes that are pursued in the handling, storing, shipping, and preservation of such perishable articles as butter, cheese, vegetables, eggs, milk, poultry and apples. The necessary temperature is given in each instance, information also being given on the care of furs and woolens.

A cardinal principle seems to be that when storage is to be resorted to, the cooling process cannot be set about too quickly in the majority of cases, although with moderation and not extreme suddenness. For instance, milk which is cooled immediately to

60 degrees F. will keep longer than if kept for several hours at 70 or 80 degrees and then cooled to 40. Butter keeps best at a low temperature, but needs care in method. Cheese, under certain described conditions, can be kept at a moderate temperature, F. W., and particularly apples, keep much better if promptly cooled after picking, and can be preserved longer in cold storage. Eggs intended for cold storage should be gathered and treated as soon as possible after being laid. But, in a brief review, it is not easy to lay adequate stress upon the importance of this bulletin, which can be had free of cost by application to the Publications Branch, Ottawa.

Progressive Saskatchewan

F. M. Logan, B.S.A., Asst. Dairy Commissioner of Saskatchewan.

IT has been my privilege to study at first hand the systems followed in several of the other provinces, and after being intimately associated with the work here during the past nine months, I have no fear of contradiction when I say that Saskatchewan leads the procession. Through the wisdom, foresight and untiring energy of her Dairy Commissioner, Saskatchewan has had in operation during the past three years, methods which old Ontario hopes to adopt some time in the distant future. The growth of the industry during these years is convincing proof that these methods are both practical and effective.

The grading of cream which is carried out more universally in this province than in any other in Canada, has had the effect of improving the cream to a remarkable degree. The possibility of obtaining six cents more per pound of butterfat for cream of good quality than for cream of inferior grade, has been the means

Write TO-DAY for FREE BOOK on SILO CONSTRUCTION



Any farmer can erect this Silo without outside help—the best silo on the market to-day. Can be put up in 10 to 15 hours absolutely without scaffolding. In the

BURLINGTON PERFECT SILO

2 1/2 x 6" Norway Pine, selected dry stock is used, with airtight adjustable doors all treated with special Preservative, and painted dark red. Our patent galvanized Steel Cable Bands are stronger than iron bands and have many other advantages over iron rods, having sufficient elasticity to permit of the expansion and contraction due to change of seasons, keeping the silo tight at all times. You will be surprised not only at the low cost of the Burlington Silo, but at the easy way it is erected. The book tells all about it. Write to-day, using the coupon below.

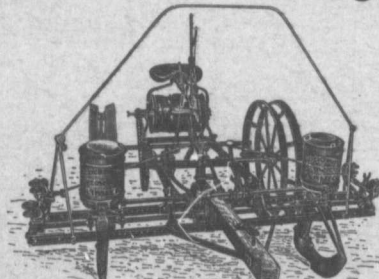
The Nicholson Lumber Co., Limited
 BURLINGTON ONTARIO



Please send me your FREE BOOK on SILO CONSTRUCTION.
 Name
 Address

A FAVOR OF YOU Please mention FARM AND DAIRY when writing to our advertisers.

Every Corn Planting Problem Solved



The Cockshutt Corn Planter is one of the most ingenious and highly perfected implements we sell. Its big asset is its flexibility. It will plant your corn any way you want it, and every way is done right.

Another big asset, common to all Cockshutt implements, is its ease of operation. Easily worked hand and foot levers convenient to driver give you complete control, while the draft is light and the work is easy on the horses.

There is big money in corn. The biggest job is getting it planted quickly and right. Here is the implement to do it for you.

THE COCKSHUTT CORN PLANTER

Planting corn is often so very wasteful of time and seed. The farmer who wants to raise corn on a profitable scale will find the quick, accurate, "brains" work of the Cockshutt Corn Planter a splendid help. Its variable drop feed allows 2, 3 or 4 kernels per hill—a touch of the foot lever changing the count. Corn never jams or crushes. Will plant in rows instead of hills if desired. Fer-

tilizer can also be drilled along with seed by a simple attachment.

But very strong and rigid, yet light in draft and very simple to run, and permitting fast work without attention. Keep the seed boxes full, and the operator has nothing to do but drive and set his stalks. Many important Government and big corn growers' tests and ideas have been worked out in this splendid implement.

You ought to write our nearest Branch today for our special Corn and Corn Planting book. It's free.

Cockshutt Plow Co.
 LIMITED
 Brantford, Ontario

Sold in Eastern Ontario
 Quebec and Maritime
 Provinces by

The Frost & Wood Co.
 LIMITED
 Montreal, Smith's Falls, St. John

The Farmers' Grain Exchange

Strong, Vigorous Seed is the Start for a Big Yield.

BUY THE BEST

REGISTERED NO. 72 OATS, \$1.10 PER BUS.

Registered quality, but not inspected, 90c per bus. Bags included. F.O.B. C.P.R. or C.P.E. This seed is of highest standard, pure and clean, and will pay for itself in the resultant crop.

A. FOYSTON & SONS

MINESING, ONT.

SEED OATS

Yellow Russian. Three years hand selected seed, free from weed seeds, treated for smut. Will win you a place in competition. Won six firsts at Toronto, and also first, second, third, fourth, fifth, eighth and tenth prizes at Ottawa. Price 75 cents per bus. Bags extra, 20c. THOS. COSH, Bobcaygeon, Ont.

O. A. C. NO. 72 OATS.

FOR SALE—A quantity of high grade O. A. C. No. 72 Oats, grown from selected registered seed, free from smut and noxious weed seeds, and guaranteed true to variety. Government germination test 100 per cent. Price, 50 cents per bushel, F.O.B. Alliston. Sacks free. Samples sent on request.

W. H. C. RUTHVEN,
R. R. No. 2, Alliston, Ont.

FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER

WANTED—Three sets of second-hand agitators to fit on 5,000 lb. cheese vats. Must be in good condition. Address Box 113, Farm and Dairy, Peterboro.

STRAWBERRY PLANTS.—Plants from pedigreed stock from \$3.00 per thousand. Send for list. Leavens Orchards, Bloomfield, Ont.

WHITE AND COLUMBIA WYANDOTTES, LIGHT BRAHMS, S. C. WHITE LEGHORNS.

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

HAWK BICYCLES

An up-to-date High Grade Bicycle fitted with *Color Chain*, *New Expatent* or *Harrier* *Center Brake* and *Hub*. *Development*, including *Block*, *Saddle*, *Pump*, *Tools*. \$22.50. Send FREE 1918 Catalogue, 50 pages of *Buyers*, *Standard* and *Repair Material*. You can buy your supplies from us at Wholesale Prices.

T. W. BOYD & SON,
27 Notre Dame St. West, Montreal.

SHIP YOUR BUTTER & EGGS

—to us. We are not commission merchants. We pay net prices and remit promptly.

THE WILLIAM DAVIES' COMPANY LIMITED
Established 1854. TORONTO, ONT.

ASK

our sales office nearest you for prices and terms on fertilizers adapted to your soil and crops

Send for Canada Booklet—From The American Agricultural Chemical Co.

New York, Boston, Buffalo, Detroit

BOOK ON DOG DISEASES

and how to feed H. Clay Glover, V.S.
Mailed Free to any Address by The Author
118 West 31st St., N.Y.

of reforming many of the careless dairymen of the province. If you hit a farmer on the head he will listen, but if you hit him in the pocket he will not. In addition to the system being the means of improving the quality, it is the just and fair way to pay for milk and cream. The old system penalizes the best dairymen and rewards the careless and indifferent. Grain, fruits and other farm produce are sold according to their quality. Why should not milk and cream be purchased in the same way? Saskatchewan did not adopt this system, she would not now be able to sell her butter from one to two cents per pound higher than Eastern butter will bring on the same market.

Another feature of almost equal importance to the grading of the cream, is the cooperative marketing of the butter. The practice of having all the butter from the creameries brought into cold storage as soon after it is made as possible and each churning carefully scored, and its condition reported immediately to the man who made it has been more effective in improving the quality and workmanship than any system of inspection that could have been adopted.

By this system the butter from the 15 cooperative creameries operated by the Dairy Branch can be made almost uniform in quality, while, if these creameries were operated privately or separately, they would be producing 15 different grades of butter, and none of them would be in a position to supply any quantity of butter of a particular grade. By the operation of this principle we are enabled to build up a reputation and market for Saskatchewan butter that would be impossible if the old methods were followed.

By the adoption of the cooperative principle in the formation of the companies and the operation of a number per pound higher than Eastern butter, important savings can be made in various ways, such as buying supplies, keeping the books and marketing the output, and the business generally speaking, carried on much more economically than if each creamery were operated separately. I think I have said sufficiently to convince you that the creamery industry in this province, so far at least as the cooperative creameries are concerned, is on a sound and businesslike basis.

Home Grown Clover Seed the Best

It is Hardier, Cheaper, and is Usually Sown More Liberally Than That Purchased From the Seedsmen—By F. C. Nunnick

OUT of twenty-three farmers in the Eastern Provinces who have conducted illustration work for the Commission of Conservation, only two claim to have been sowing their clover seed thick enough to ensure a good catch. Twenty-one have been sowing an average amount of six pounds to the acre, whereas they now sow 10 pounds to the acre. Some had sown as low as three or four pounds, but are now convinced that 10 pounds is better and are sowing it. Three farmers had previously grown their own seed, while now 12 are regularly doing so. George R. Barrie, Galt, Ont., says:

"The high price of clover seed had something to do with our sowing a small amount, but since growing our own seed, we do not mind sowing it heavier and find that the extra seeding more than pays for itself."

Another farmer who had not previously grown his own seed states that in 1914 they produced 500 pounds of alsike seed and 100 pounds of red clover, while in 1915, he grew over 1,000 pounds of red clover seed. The farmer doing illustration work for the Commission in Lanark County, Ont., in 1914, grew 1,200 pounds of red clover seed and had never grown a pound of his own seed previous to commencing work with the Commission.

J. M. McLean, New Perth, P.E.I., says:

"During the last two years the first crop of hay was always much better on the area sown with 10 pounds of clover and 10 pounds timothy, while this year we have an unusual stand of clover in the plots heavily seeded. We find the second crop is always much thicker and of a better quality after the thick seeding."

Numerous comparisons have been made on the Illustration Farms in the way of trying out home-grown seed side by side with that purchased from seed houses. The home-grown seed has given, in every instance, better results. In some cases the home-grown seed was just enough harder to survive the winter, while the crop from the purchased seed suffered very much from winter killing. The wise farmer will plan now to have a crop of clover seed this coming summer, if possible. By cutting the first crop early, the second or seed crop is allowed to get an early start.

The Milking Problem

A. Bishop, Oxford Co., Ont.

OUR larger dairymen are investing more and more in the mechanical milking machine. They find it next to impossible to get men who are efficient milkers. To them the milking machine will be a good investment, now about as small farmers with 10 cows, who will have to continue milking by hand until the machines become cheaper. Many of the men on whom we must depend to milk are old country immigrants, who have not a sufficient appreciation of what a highly nervous animal is the dairy cow. A man that I had recently informed me was engaged to milk a cow that was the way they do it over home. The only way out of the difficulty that I can see is to take each man as they come to us, explain to them fully the characteristics of our dairy cows, and then tell them how to milk as we would do it ourselves.

In the first place I would not allow a green hand to start right in milking a valuable cow. I would start him on the least valuable cows that I have, and on some that are fairly well advanced in lactation. When they have learned to manipulate the teats without pulling too hard, and with dry hands, I would let them attempt the more valuable cows. I always lead my men to believe that good milking is really an art, and something worth acquiring, and have trained some very green immigrants to be very considerate milkers.

A bigger proposition than the green immigrant, however, is the careless farm hand who thinks he knows how to milk and really doesn't. We have had some of them. They jerk the teats, wet their hands and then wonder why we are not satisfied. If it were not that help is so hard to get I would never hire a man of this kind. He, too, however, can be educated to take a reasonable pride in the operation. I have noticed that since I have started to take a dairy, instead of the times a month records of the milk produced by each cow that my staff takes more interest. We have an own cows to milk, and one can safely work up rivalry between the two sets

Concrete

of cows, each one make his own cow. I have frequently complain about the men on the dairy farm that hired men for beef or grain raising, but never had this trouble believe that they regard the milk as their own. I insist on it being done and after I were a hired man between working six on one farm with and on another with to milk after supper late long in employment. We need to side of the fence to proposition in it.

Other People

The Curse of

EDFORD, Farm a year ago the item in "Owens" Methodist Sunday school the effect that the Memorial Temple, built on a lot in Field, a well-known chaut of that city of The price paid by people for this lot is dollars, with the end of a term with all buildings over to Marshall Field.

Of course this is intended to persuade us to show the far-sighted in being so judicious a spot of encouragement its readers similar spots of earth to imitate the Lionaire Field.

Now, Mr. Editor, permission I would forego as a text a sermonette, seeing monies are rather sure to be interesting to dollars and cents—and age.

Let us remember that Marshall Field's own labor not his wife and children—thousands of others see or know or care. The gathering together makes the holders of had rich at the expense of others. The stance of Marshall every year rent out others for the privi-

A Very Close Skimmer That Operates Easily

By introducing the ball-and-socket spindle bearing to ensure an absolutely self-balancing bowl, improving the oiling system and the crank clutch, and perfecting the disc type of skimmer, we have developed in

The "SUPERIOR" Separator

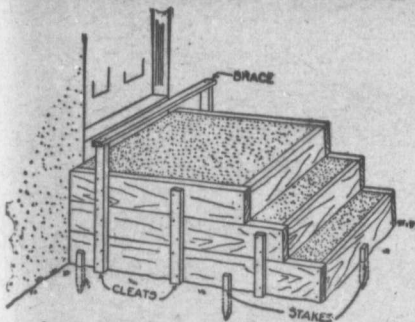
a machine that skims more closely and operates more easily than any other on the Canadian market. The price is remarkably moderate, and a five year guarantee accompanies every machine.

You will find the book on "Superior" Separator facts most interesting. Write for it to-day.

Agents wanted for unrepresented territory.

The Ontario Machine Co., Limited
18 Bloor St. East, Toronto





Concrete Step Construction Diagrammatically Explained.

of cows, each one doing his best to make his own cows come out ahead. I have frequently heard neighbors complain about the difficulty of hiring men on the dairy farm. They tell me that hired men prefer to work on a beef or grain raising farm, where there are no cows to milk. I have never had this trouble myself, and I believe that their difficulty is that they regard the milking as chores, and insist on it being done early in the morning and after supper at night. If I were a hired man and had to choose between working between seven and six on one farm with no cows to milk, and on another with five or six cows to milk after supper, I wouldn't hesitate long in employing with the first man. We need to get on the man's side of the fence to see this milking proposition in its right light.

Other People's Opinions

The Curse of Landlordism

EDITOR, Farm and Dairy.—A few years ago the writer saw a short item in "Onward," one of the Methodist Sunday school papers, to the effect that the Miss Willard Memorial Temple, of Chicago, was built on a lot owned by Marshall Field, a well-known millionaire merchant of that city of some years ago. The price paid by the temperance people for this lot was one million dollars, with the condition that, at the end of a term of years, the lot with all buildings on it, was to revert to Marshall Field or to his estate. Of course this little item was printed in the paper above mentioned to show the far-sightedness of Mr. Field in being so lucky as to own so valuable a spot of earth, and to encourage its readers to look out for similar spots of earth elsewhere and aim to imitate the example of Millionaire Field.

Now, Mr. Editor, with your kind permission I would like to use the foregoing as a text for the basis of a sermonette, seeing that such sermonettes are rather scarce, and it is sure to be interesting, as it relates to dollars and cents—god of this day and age.

Let us remember that it is rent that Marshall Field got rich on—not his own labor nor the labor of his wife and children—but the labor of thousands of others that he did not see or know or care anything about. The gathering together of people makes the holders of title deeds of land rich at the expense of the laborers of others. This particular instance of Marshall Field, drawing every year rent out of the labor of others for the privilege of letting

them use a spot of earth, is duplicated in every city and town in the world. Henry George aptly termed this creature that lives on rent as "the robber that takes all that is left." The great Richard Cobden, of some years ago, saw the very same, "Robber," for he often said: "The heaviest burdens on the land is on the landowners." That is, land owners, as such, are a growing Public Debt on the rest of people. As the city or town grows, so grows the Public Debt represented by the title

deed of the landowner. His title deed is a bond and the other people are "in bondage" to him. No matter what people may do, no matter what efforts they make in order to better conditions, the Marshall Fields everywhere can laugh in their sleeves and take rent, more and more, and keep the masses at or on, or below the poverty line.

Seeing this great wrong, Henry George proclaimed, "Unless the foundation of our civilization be laid in justice the structure cannot stand." Another year ago another great liberator, Lincoln, declared the same thing: "A house divided against itself cannot stand. This nation cannot permanently endure—half slave and half free."

Shall we heed their warning? The good old Bible points out the remedy when it states: "The profit of the earth is for all." That is, the value of land is for all. How can it be taken for all instead of allowing it to go into the pockets of a few who "toil not, neither spin," who become rich at the expense of the toil, tears and poverty of the many? Here is a problem as important as the war. If this war does not overthrow civilization, then the continuing of this system of allowing some to own the earth for the purpose of robbing those who work, is sure to do the trick. While our young men are enlisting to fight the enemy abroad let these left behind enlist in our great army to do what they can, by pen and voice, to help destroy


this same destroying monster here at home. It is not necessary to look into the cannon's mouth to become a hero. This monster is right here now, devouring widows and orphans, crushing little children, and reaching out its tentacles to generations yet unborn. Enlist in the great campaign for the un-taxing of labor and the products of labor for municipal, provincial and federal purposes, and the taxing of the value of land into the public treasury, where it justly belongs. They who have hearts to feel and minds to reason, to them the clarion of the battle calls.

"Behold, in bonds, your Mother Earth!"

The rich man's prostitute and slave: Youth Mother Earth, that gave you birth,

You own her only for a slave." Why not arise, think, act and inwardly resolve that this giant wrong shall speedily disappear?—W. L. Lamb, Alberta.

Every year, readers of Farm and Dairy are in need of practical information concerning the proper mixing and methods of building concrete construction work for foundations, floors, sidewalks, fence posts, and other lines of permanent work on the farm. Those who are planning to do the most work this Spring should not fail to avail themselves of the opportunity of getting that splendid booklet put up by one of our big cement firms, entitled, "What The Farmer Can Do With Concrete." You will find the coupon for another page of Farm and Dairy. The writer has found this booklet one of the most practical ones that is issued on the subject. It is free for the asking. If you are planning to do cement work of any kind, turn up the coupon and make sure of getting a copy.



What does a bevel gear cost? The Ford owner saves \$12 that the other fellow has to pay for one

- \$16.00—Average cost of the bevel gear of cars priced around \$1000 and less.
- \$ 4.00—Cost of Ford bevel gear.
- \$12.00—This stays in the Ford owner's pocket book.

Other Ford spare parts are just as low priced in proportion—the 25 most called for parts altogether cost only \$8.04.

And less than a dollar a year as a total expense for spare parts is not at all an uncommon experience of Ford owners.

Ford Motor Company
OF CANADA, LIMITED.

Ford Runabout - \$250
Ford Runabout - 500
Ford Coupelet - 700
Ford Sedan - 850
Ford Town Car - 1000
E. & S. Ford, Ontario

FORD, ONTARIO

All cars completely equipped, including electric headlights. Equipment done and include appliances.

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the leading exponent of dairying in Canada. The great majority of the members of the Canadian Holstein-Friesian Association are readers of the paper. Members of the Association are invited to send items of interest to Holstein breeders for publication in this column.

SALES DATES CLAIMED.

Sales of Holsteins, D. A. McElbee, Crystal Spring Farm, Vanhook Hill, Apr. 20. Complete disposition sale of 100 head of pure bred Holsteins, J. W. C. Gilroy, St. Mary's, W. C. Gilroy, Philadelphia. Complete disposition sale of Holsteins, C. C. Kettle, Wilsonville, May 2. Annual sale of Holsteins at Avondale Farm, Brockville, May 17. Brockville District Club, sale of Holsteins, about 15 head, May 18. G. A. Gilroy, Secretary.

HOLSTEIN LEADERS DEAD.

TWO giants of the Holstein world recently passed away. G. A. Dimock, of Kalamazoo, Mich., had just returned from a meeting of the Board of Directors of the Holstein-Friesian Association of America, when he collapsed while at task of cerebro-scopy. Mr. Dimock was president of the Maple Crest Stock Farm Co., whose head is Earl Clarendon, Ohio, is one of the greatest in existence. John W. Artman, of Fairport, N. Y., a great Farmer, Middletown, N. Y., had a fatal heart attack from failure on March 29th. Mr. Artman was especially enjoying his usual health and had attended the Holstein Square Garden sale earlier in the week. Square Garden sale earlier in the week.

MAY ECHO SYLVIA.

All Holstein breeders will be interested in the fact that Mr. A. C. Hardy's great cow, "May Echo Sylvia," is again breaking records in a here to here in a manner. Although only a short time dry before lactating, and after suffering a severe attack, milk flow she has set the time of writing a record of 85.4 lbs. milk and 4 1/2 lbs. butter in seven days. She stands to-day as "Queen of the breed" for both milk and butter production. Mr. Hardy claims as a year-old, 8-year-old and 7-year-old, and still in the ring.

Breeders should not miss a chance to see this great cow under test. Come to Mr. A. C. Hardy's sale on May 17, 1916, when she may be seen fed. Watch for notices of second Avondale sale in next week's issue of Farm and Dairy.

Note: On another page of this issue is published an illustration of Lakeside Butter as Champion butter cow of the breed in Canada. This illustration was drawn by the artist before Farm and Dairy breed of the now great record of May Echo Sylvia.—Editor.

LEADING RECORDS OF HOLSTEIN-FRIESIAN COWS FROM MAR. 16 TO MAR. 31.

Mature Cows.

- 1. Daisy of Burnbrae Farm, 918, 7y, 1m. 12d; 196.3 lbs. milk, 23.9 lbs. fat, 23.6 lbs. butter. D. A. McElbee, Vanhook Hill.
2. Hill-Crest Hengervald Lassie, 1533, 7y, 1m. 14d; 67.1 lbs. milk, 21.9 lbs. fat, 17.42 lbs. butter.
3. Hill-Crest Hengervald Lassie, 1533, 7y, 1m. 14d; 67.1 lbs. milk, 21.9 lbs. fat, 17.42 lbs. butter.
4. Lella Queen 3r, 1122, 7y, 6m. 2d; 111.2 lbs. milk, 21.1 lbs. butter. A. C. Hardy, Brockville.
5. Kattie Abbecker Mercena, 2126, 5y, 1m. 24d; 56.1 lbs. milk, 17.50 lbs. fat, 26.8 lbs. butter. L. A. Everett, Simcoe.
6. Cora Netherland, 1705, 4y, 1m. 10d; 51.9 lbs. milk, 17.93 lbs. fat, 22.2 lbs. butter.
7. 15-day record: 4y, 1m. 10d; 110.1 lbs. milk, 37.08 lbs. fat, 48.36 lbs. butter. J. M. Van Patten & Co., Burnbrae Farm.
8. 30-day record: 6y, 9m. 13d; 232.2 lbs. milk, 62.94 lbs. fat, 1.60 lbs. butter. C. A. Haviland, Wilsonville.
9. 15-day record: 4y, 1m. 14d; 131.8 lbs. milk, 41.13 lbs. fat, 53.25 lbs. butter. A. C. Hardy, Brockville.
10. Lella Queen 3r, 1122, 7y, 6m. 2d; 111.2 lbs. milk, 21.1 lbs. butter. A. C. Hardy, Brockville.
11. Kattie Abbecker Mercena, 2126, 5y, 1m. 24d; 56.1 lbs. milk, 17.50 lbs. fat, 26.8 lbs. butter. L. A. Everett, Simcoe.
12. Cora Netherland, 1705, 4y, 1m. 10d; 51.9 lbs. milk, 17.93 lbs. fat, 22.2 lbs. butter.
13. 15-day record: 4y, 1m. 10d; 110.1 lbs. milk, 37.08 lbs. fat, 48.36 lbs. butter. J. M. Van Patten & Co., Burnbrae Farm.
14. 30-day record: 6y, 9m. 13d; 232.2 lbs. milk, 62.94 lbs. fat, 1.60 lbs. butter. C. A. Haviland, Wilsonville.

Senior Four-Year Class.

- 1. Woodcrest Cornelia Piezo, 2614, 4y, 1m. 2d; 58.1 lbs. milk, 25.18 lbs. fat, 23.25 lbs. butter.
2. 15-day record: 4y, 1m. 2d; 103.0 lbs. milk, 43.0 lbs. fat, 53.25 lbs. butter. A. C. Hardy, Brockville.
3. Kattie Abbecker Mercena, 2126, 5y, 1m. 24d; 56.1 lbs. milk, 17.50 lbs. fat, 26.8 lbs. butter. L. A. Everett, Simcoe.
4. Cora Netherland, 1705, 4y, 1m. 10d; 51.9 lbs. milk, 17.93 lbs. fat, 22.2 lbs. butter.
5. 15-day record: 4y, 1m. 10d; 110.1 lbs. milk, 37.08 lbs. fat, 48.36 lbs. butter. J. M. Van Patten & Co., Burnbrae Farm.
6. 30-day record: 6y, 9m. 13d; 232.2 lbs. milk, 62.94 lbs. fat, 1.60 lbs. butter. C. A. Haviland, Wilsonville.
7. 15-day record: 4y, 1m. 24d; 56.1 lbs. milk, 17.50 lbs. fat, 26.8 lbs. butter. L. A. Everett, Simcoe.
8. 30-day record: 6y, 9m. 13d; 232.2 lbs. milk, 62.94 lbs. fat, 1.60 lbs. butter. C. A. Haviland, Wilsonville.
9. 15-day record: 4y, 1m. 24d; 56.1 lbs. milk, 17.50 lbs. fat, 26.8 lbs. butter. L. A. Everett, Simcoe.
10. 30-day record: 6y, 9m. 13d; 232.2 lbs. milk, 62.94 lbs. fat, 1.60 lbs. butter. C. A. Haviland, Wilsonville.

Junior Four-Year Class.

- 1. Flora Payne, 2187, 4y, 1m. 10d; 81.9 lbs. milk, 18.65 lbs. fat, 23.25 lbs. butter.

- butler, C. C. Haviland.
2. Frolic Betsy Bobbett, 2123, 3y, 6m. 2d; 46.7 lbs. milk, 17.83 lbs. fat, 23.25 lbs. butter. T. H. Dent & Son, Woodstock.
3. Senior Three-Year Class.
1. Yvonne Pontiac, 2529, 3y, 6m. 2d; 37.9 lbs. milk, 13.3 lbs. fat, 27.37 lbs. butter. A. C. Hardy, Brockville.
2. Fionna Wynne Dunham, 2279, 3y, 6m. 2d; 36.3 lbs. milk, 12.35 lbs. fat, 22.96 lbs. butter. A. C. Hardy.
3. Woodland Columbian Meritona, 2733, 2y, 9m. 1d; 44.85 lbs. milk, 16.13 lbs. fat, 20.16 lbs. butter. W. H. F. McKay, Cornwall.
4. 15-day record: 3y, 9m. 7d; 942.0 lbs. milk, 34.7 lbs. fat, 42.84 lbs. butter. J. M. Van Patten & Co., Burnbrae Farm.
5. Queen Mutual De Kol, 2977, 3y, 11m. 1d; 87.5 lbs. milk, 16.01 lbs. fat, 20.01 lbs. butter. W. H. F. McKay, Cornwall.
6. Junior Three-Year Class.
1. Duchess Bonheur, 2547, 3y, 1m. 12d; 1.1 lbs. milk, 11.45 lbs. fat, 14.35 lbs. butter. W. H. F. McKay, Cornwall.
2. Hill-Crest King Pontiac Rawwood, 2089, 2y, 9m. 3d; 44.2 lbs. milk, 18.19 lbs. fat, 22.74 lbs. butter.
3. 14-day record: 2y, 9m. 3d; 916.4 lbs. milk, 35.15 lbs. fat, 42.94 lbs. butter. G. A. Brethen, Norwood.
4. Kattie Abbecker Mercena, 2126, 5y, 1m. 24d; 56.1 lbs. milk, 17.50 lbs. fat, 26.8 lbs. butter.
5. 14-day record: 2y, 9m. 4d; 866.4 lbs. milk, 32.12 lbs. fat, 40.15 lbs. butter. C. C. Haviland.
6. Hill-Crest King Pontiac Countess, 3018, 2y, 9m. 13d; 437.1 lbs. milk, 16.49 lbs. fat, 20.62 lbs. butter.
7. 14-day record: 2y, 9m. 13d; 826.5 lbs. milk, 27.37 lbs. fat, 40.46 lbs. butter. G. A. Brethen.
8. Lady Rhoda Netherland, 2022, 2y, 9m. 6d; 36.3 lbs. milk, 15.48 lbs. fat; 12.15 lbs. butter. Geo. A. McElbee, Bainsville.
9. Junior Two-Year Class.
1. Daisy Hengervald Payne, 3026, 2y, 6m. 2d; 43.2 lbs. milk, 16.45 lbs. fat, 20.44 lbs. butter.
2. 14-day record: 2y, 6m. 5d; 875.1 lbs. milk, 31.39 lbs. fat, 32.24 lbs. butter. A. J. Campin, Unionville.
3. Fionna Wynne Dunham, 2279, 3y, 6m. 2d; 36.3 lbs. milk, 12.35 lbs. fat, 19.15 lbs. butter. A. C. Hardy.
4. Maud A. C. Hardy, 2332, 1y, 11m. 14d; 29.0 lbs. milk, 14.31 lbs. fat, 17.90 lbs. butter. C. C. Haviland.
5. Riverwood Sylvia, 3530, 1y, 10m. 25d; 37.8 lbs. milk, 12.90 lbs. fat, 16.01 lbs. butter. W. H. F. McKay, Cornwall.
6. Special Record Made at Least Eight Months After Calving.
7. Junior Four-Year Class.
1. Hill-Crest Pontiac Vale 1721, 4y, 1m. 12d; 37.0 lbs. milk, 14.9 lbs. fat, 18.36 lbs. butter.
2. During the last half of March the records of 67 cows and heifers were re-recorded and accepted for entry in the Record of Merit of Burnbrae Farm stands first among the mature cows with 100 lbs. milk in 7 days, while Hill-Crest Hengervald Lassie comes second with 77.43 lbs.
3. In the 3y, four-year-old class of the second months after calving division, Hill-Crest Pontiac Vale makes 18.36 lbs. a new Canadian record for her age.
4. W. A. CLEMONS, Secretary.

WATERLOO HOLSTEIN BREEDERS MEET.

THE second annual meeting of the Waterloo-Holstein-Friesian Breeders' Club was held in the Council Chambers, Berlin, on Thursday, April 6, a large representative gathering from throughout the county being present. President A. C. Hallman, Breeder, occupied the chair and gave short talk on the work of the club and the future program of the county. A motion was carried to take up advertising of stock by the club. It was decided to establish a central agency with the Department of Agriculture, Galt, where all stock for sale or purchase for export will be advertised to District Representative Knapp. This method it is thought will be a better system of buying, selling and exchanging of stock than being the breeders will also be supplied with the necessary printed letterheads and envelopes will also be supplied by the club. Mr. Malloy, secretary of the Belleville District Holstein Breeders' Club, gave a short report on the work of his club, and in his remarks stated that he had been very successful in securing the strongest features of Holstein stock. The work of making a Holstein district representative agency was addressed the meeting on the "Making of Records at the First West Hill

Settle the Silo Question. -and settle it for good. Do away with repairs, with tightening of hoops, with the loss of time and adjusting of bolts. Know that your silo won't blow over. Be sure of perfect silage at all times. Build the weather-proof, fire-proof.



Nateo Imperishable Silo. In hollow, vitrified, clay tiles are impervious to air and moisture - they preserve the silage sweet and juicy. The standard air spaces in the walls resist frost-making it the silo for severe climates. The continuous, reinforcing bands laid in the mortar hold it in a group of vessels. It is a silo of efficiency, and a silo you'll be proud of. Send for our silo catalog describing it fully. Also get our splendid new book, "Nateo On The Farm," describing other farm buildings made of Nateo Heavy Fire Proofing. It is used just as efficient. Both books free. We will help you solve your building problems. Free. What you are going to build? Let's hear from you. Write today.



1203 Dominion Bank Bldg. Toronto - Ontario

For fire safety inside the home use Metallic Ceiling Plates

YOU can make your home fireproof and more attractive at small cost by using Metallic Ceiling and Wall Plates. Many beautiful designs with cornices and moldings for any style of room. You can put them on old walls as easily as new. Wash them or brighten up with paint whenever desired. Metallic Ceiling Plates are sanitary, fireproof, impervious and good for a life time. Write for booklet and prices. We manufacture all kinds of "Metallic" building materials and sell direct at lowest prices. Metallic Roofing Co. Limited, Toronto and Winnipeg.

address was very interesting, and many valuable suggestions and helpful remarks were received by those present. The following officers were elected: President, A. C. Hallman, Breasau; first vice-pres., Andrew Zoolner, New Hamburg; second vice-pres., Anthony Gees, Waterloo; secretary, Wm. A. Hill; treasurer, Wm. A. Hill; directors—H. Knell, Berlin; Warren Boat, New Hamburg; I. Shoemaker, Berlin; Wm. Douglas, Galt; John Howling, New Dundee; D. H. MacFarlane, Elmira; H. Bechner, Elmira; H. Grob, Brantford; A. Santer, Waterloo; H. Tudorsh, Berlin—Wm. A. Hill, secretary.

MAKE YOUR BIKE A MOTORCYCLE. Write today for FREE BOOK. Describing the NEW Inexpensive Motor Bikes. Motorcycles, all makes, new and second-hand, and up to date. SHAW-WALKER MOTORING CO., Dept. 10, GALESTON, Ont., O.A.A.

A 37-L REPEATER. BILEALE Model Johanna 26 has just accomplished a feat hitherto credited only to Waterloos. She has made two records each above 37 lbs. butter in 7 days. She has been a most consistent performer, as shown by the following list of records: At 7 y, 1 mo—

Table with columns: Days, Butter (lbs), Milk (lbs), Fat (lbs). Rows include records for 7 days, 15 days, 30 days, and 45 days.

At 4 yr, 5 mo— 7 days 32.05 870.7 4.49 (Canadian record when made). At 2 yr, 11 mo— 7 days 21.97 384.9 4.38 She has further proved her greatness by producing the following: Hebe Model Pietje.....3 y, 1m. 15.62 30 days 136.87 (Canadian record when made). Belle Model Queen.....4y m. 22.03 30 days 20.47 She has been a first prize winner of many of the greatest Holstein shows in Canada. While her achievements have all been recorded in Canada, she is distinguished of America, her record being by Sir Hengervald Homestead De Kol, a non-district Holstein, and by the famous Model Johanna, a 25-year-old daughter Johanna Rue 3d's Ltd. She is owned and been bred by the late Mr. Malloy, Brockville, Ontario, Canada.—Black and White Record.

Another Money-Saver. Costs you less than a third the price of a Leather Breast Strap and gives you greater strength where you need it. Note the heavy steel slide that holds the strain and wear of the rope rings and strap, and you get that ensures greater strength. PER PAIR, WITH PAID SNAPS AND SLIDES. (31.00 Worth of Furt William.) Order a pair from your dealer, or if he doesn't stock them write us and we will send you the price. We are supplied with that you are supplied with. Write to-day for Booklet entitled "What's New for the Stable."

D. L. GRIFFITH & SON, 76 Waterloo St., Stratford

LEADING AYRSHIRE R.O.P. COWS AND HEIFERS' REPORT RECEIVED IN FEBRUARY AND MARCH.

1937 the milk, 429 lbs. fat, 3.65 days. 284 days. W. C. Tutty, Aylmer, Que. Chief's Buttercup of Fernbrook 2d, 25495 lbs. milk, 418 lbs. fat, 4.10 % fat, 363 days. Collier Bros., Benvidville, Massachusetts. Maggie, 21670; 3066 lbs. milk, 371 lbs. fat, 3.95 % fat, 365 days. Andrew Stark, Huntington, Que.

1937 the milk, 429 lbs. fat, 3.65 days. 284 days. W. C. Tutty, Aylmer, Que. Chief's Buttercup of Fernbrook 2d, 25495 lbs. milk, 418 lbs. fat, 4.10 % fat, 363 days. Collier Bros., Benvidville, Massachusetts. Maggie, 21670; 3066 lbs. milk, 371 lbs. fat, 3.95 % fat, 365 days. Andrew Stark, Huntington, Que.

1937 the milk, 429 lbs. fat, 3.65 days. 284 days. W. C. Tutty, Aylmer, Que. Chief's Buttercup of Fernbrook 2d, 25495 lbs. milk, 418 lbs. fat, 4.10 % fat, 363 days. Collier Bros., Benvidville, Massachusetts. Maggie, 21670; 3066 lbs. milk, 371 lbs. fat, 3.95 % fat, 365 days. Andrew Stark, Huntington, Que.

SELDOM SEE

A big knee like this, but your horse may have a bunch of bruises on his Ankle, Heels, Sides, Knees or Throat.

ABSORBINE TRADE MARK U.S. PAT. OFF. will clean it off without laying the horse up. No blistering, no hair gone. Concentrated—only a few drops required at an application. \$2 per bottle delivered. Dealers carry by special instructions. Agents for Canada, ABSORBINE, Inc., 1000 Avenue of the Americas, New York, N.Y. Price \$1 and \$2 a bottle. W.F. YOUNG, P.O. Box 123, Montreal, Que. Absorbine and Absorbine, Jr., are made in Canada.

Cure Your Cows of Caked Udders

WITH EGYPTIAN LINIMENT & APPLICATIONS GUARANTEED For Sale Everywhere. Write for FREE Sample Douglas & Co., Mfgs. Toronto, Ontario

PURCHASING AGENT. 25 years experience with Pure Bred stock. References and terms on application. R. H. Harding, Thorndale, Ont.

WANTED Young Holstein Bull for service. Must be bred right for pure production. Reasonable price. Neil McDermott, R.R. 1, King, Ont.

Fairmont Holsteins Present offering a fine young bull, ready for service, sired by Ourville Sie Trasko Colman; dam, Besse Banks Mercens, 16.25 lbs. butter at 2 years. Write to-day. Peter & Arbagat, R.R. No. 2, Mitchell, Ont.

Registered Holsteins Several extra No. 1 yearling bulls for sale, also heifers and cows. Our present herd sire, "Bebo de France," is out of a "Royal Bred" sire of World's Record Cow. "Fin" for price or terms and see "Fin" at John M. Montt, Stanstead, Que.

Collier Bros. Princess 5th of Hickory Hill, 29512; 2855 lbs. milk, 380 lbs. fat, 3.87 % fat, 365 days. W. C. Tutty, Aylmer, Que. Two-Year-Old Class.

Princess of Thanglovy 3rd, 41737; 19250 lbs. milk, 431 lbs. fat, 4.17 % fat, 365 days. Woodhouse Bros., Morefield, W. Va. White Star of Washington 2d, 41449; 28445 lbs. milk, 379 lbs. fat, 3.47 % fat, 365 days. W. C. Haultail, Box Grove, N. Y. Polly of Fernbrook 3th, 42649; 823 lbs. milk, 360 lbs. fat, 4.04 % fat, 365 days. Collier Bros. Thonsavlov Lady, 37973; 8642 lbs. milk, 181 lbs. fat, 4.40 % fat, 365 days. A. Edwards, Aylmer, Que. W. F. STEPHEN, Secretary.

TWO NEW AYRSHIRE RECORDS

The highest four-year-old, August Lassie, 29881, A.S. 1911, bred and owned by J. W. Cline, Redmond, Washington, has just closed her year of official testing, with a record of 17,784 lbs. milk, 720.0 lbs. fat, 3.46 % fat, 4.05 % fat, which places her the World's Champion in her class. The Junior two-year-old, Willowmoor Etta 3rd, 38523, A.S. 1911, bred and owned by J. W. Cline, Redmond, Washington, has just closed her year of official testing, with a record of 16,621 lbs. milk, 585.0 lbs. fat, 3.52 % fat, 4.01 % fat, which places her the World's Champion Junior two-year-old—C. M. Windsor, Sec. American Agrarian Breeders' Association.

BANKER AND FARMER. SELBING butter-fat, machine separated, 29881, A.S. 1911, bred and owned by J. W. Cline, Redmond, Washington, has just closed her year of official testing, with a record of 17,784 lbs. milk, 720.0 lbs. fat, 3.46 % fat, 4.05 % fat, which places her the World's Champion in her class.

The above are a few extracts from a recent issue of the "practical book" written by H. F. Hart, a banker-farmer, and published in a booklet form by the De Laval Dairy Co., Illinois. The writer, owner and operator of the largest farm in Canada, Illinois, in addition to being president of the First National Bank, Champaign, and executive of the Canadian Bankers' Association. His practical farm experience, combined with his training, gives him an exceptionally clear grasp of the business end of farming. Copies of this booklet may be obtained in the banks of the branches of all our Canadian banks. It gives a very clear appreciation of the position of the dairy farmer in relation to rural property, and should be an incentive to closer cooperation between our banking institutions and our progressive class of farmer—the dairyman.

UNDAMAGED BY FIRE. ON account of the wrong impression created by the advertisement of the dairy Co., Ltd., Holford, Ont., we are asked to announce to our readers that it was the shell plant only that was destroyed. The Standard Cream Separator plant and the scum factory were not damaged. Plans are being completed for the erection of a new shell factory to replace the one destroyed.

FARMERS' CLUB Correspondence Invited.

ONTARIO BRUCE CO., ONT. CARLETRUIE, April 6.—Our winter from New Year's on has been mild, but for the month of March, mostly rain. The snow for the last two months, as the roads were pretty badly, and the last part until the 29th, when the weather turned mild with rain and snow was nearly all by the end of the week. MILK—shorts, \$1.20; milkings, \$1.85; cows, 40c to 45c; heifers, 35c; barley, 55c; oats, 40c; wheat, 75c to 80c; 100-lb. sack, 22c; butter, 27c to 28c; eggs, 19c to 20c; average have lots of feed, such as straw and roots, and good quality of milk, are looking well. Making maple syrup is in full swing at present.—E. P.

BRITISH COLUMBIA NEW WESTMINSTER CO., B. C. CHELLYWACK, April 7.—Farmers are being plowed and sowing. The crop for the year is growing, but not any general, as feed has been scarce, and high in price. In consequence of this, the shortage of feed, more silage will be used in this district. A cask of milk cows land, B.C. The cows were bought for an average of \$45.—N. E. C.

90 Dispersion Sale of 90 HEAD HEAD

PURE BRED HOLSTEINS - AT - PHILIPPSVILLE, MAY 3rd, 1916

The greatest chance of a lifetime to secure some of the high testing blood of Pat Deek Bred at your own price. Every animal in the sale will be sold, absolutely without reserve. The females are nearly all tested and their records range from 15.78 lbs. butter to 30.61 lbs. in seven days. Gypsy Queen Shoda, the 30.61 lb. cow in this sale is a splendid individual and her bull calf ten months old, sired by a grandson of Pietje Korndyke Lad, is a dandy—you will like him. Another nice young bull is sired by a son of Ing Apple Korndyke 8th and out of a 25 lb. 3-year-old daughter of Pietje Korndyke Lad. Every female in this herd but six is under eight years of age. Twenty-six are two years old this spring. Terms of sale—4 months credit on approved notes at 6 per cent. All trains met at Brockville Junction, and Philippsville station on day of sale and evening before.

H. W. IMERSON, Auctioneer. W. C. STEVENS, Prop

Private Sale of 44 Head

of pure bred H. F. cow, heifers and calves. Fourteen cows have freshened to date—six cows and seven heifers are due to freshen this spring. The Johanna. For further particulars write MRS. J. W. JOHNSON R. R. No. 2 PARKHILL, ONT.

WRITE QUICK FOR A BARGAIN

TWO-YEAR-OLD BULL from a heifer with 91.35 lbs. butter in 30 days R.O.M. as a two-year-old. One bull 15 months old. Also some choice young females and a couple of bull calves for sale. These are all from dams with high official records. They are going at a bargain. Our six months old bull has been sold. If you want one of the remainder, write quick. W. J. BAILEY, Lyndenwood Farm, Jarvis, Ontario

Pure Bred Holstein Bull Calf For Sale

Born March 23rd, 1916. Sired by Max Echo Chastillon, full brother of May Echo Sylvia, Milk, 879.5; butter, 36.23 in seven days. This calf's dam, Mrs's dam, Mrs's grand-dam and sire's two full sisters average 30.14 lbs. butter in seven days, with any variation in Ontario. W. E. WATSON PINE GROVE, ONT.

AVONDALE HOLSTEIN BULLS

SIX BULLS 8 to 13 months from high record dams and sired by our KING PONTIAC and PIETJE (32.60 lb. dam) bulls. We are offering bulls to make room for our better arrivals, and are selling fast. Several younger ones from dams with 27 to 27 lb. butter in seven days. Address—H. LYNN, Avondale Farm, R.R. No. 3, BROCKVILLE, Ont.

LAKEVIEW STOCK FARM, BRONTE, ONT.

Offer for sale Choice Young Bulls of various ages, all sired by H. F. testing Holsteins 100-lb. cows. One is out of a 24.66-lb. son. 3 yr. old daughter of Lakoviev Hattro to La Dutch, Arto, Can. Champ. 3 yr. old butter cow (34.56 lb. butter in 7 days. Terms to suit purchaser. E. F. OSLER, Proprietor. T. A. DAWSON, Manager.

SIBED BY BURNSIDE HENGERVELD KORNDYKE

We have several fine young bull calves from the above great sire, whose dam gave 20.125 lbs. milk in 9 months and 26 days; 110.6 lbs. in 1 day, and 27.60 lbs. butter in 7 days. If you need a young sire with such rare backing, write me. Satisfaction guaranteed—and priced at only \$25.00 for early sale. JAMES MOORE R. R. No. 1, ALMONTE, ONT.

SIBERS FROM CRESCENT RIDGE

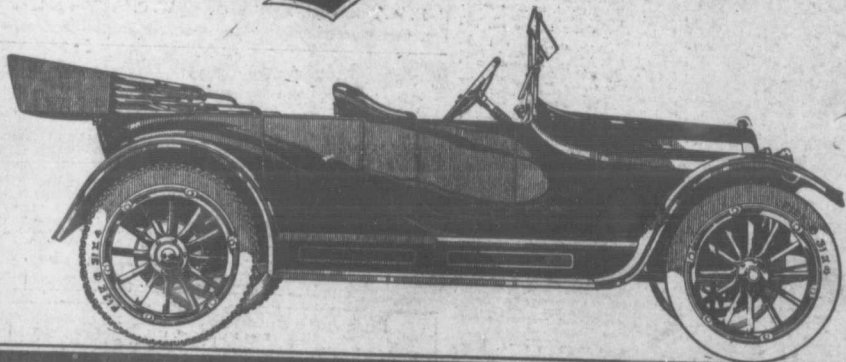
No. 1—Born October 18, 1915; backed by official records for four seasons—12,900 lbs. a 3 yr. cow, and promises to make King Lyova Hengerfeld. No. 2—Out of a 26.32 lb. daughter and by our herd sire, Corvot Change, a son of Chantrelver Butter Box. Write us about these fellows if you wish the best in blood and backing. We have also a number of females to offer. JACOB LEUZER & SON R. R. No. 1, BRIGHT, ONT.

\$850

Roadster \$825
Model 75—f.o.b. Toronto

Overland

TRADE MARK



—so now there's no need to sacrifice pride to economy

This Overland costs only \$850.
But it is every inch an Overland—a perfect beauty.
Though a small, light, economical car, it is roomy,
sturdy and powerful!

And it is absolutely complete to the last detail.
Never before has a stylish, comfortable, completely
equipped car been offered at anywhere near so low a
price.

Now for the first time, exacting pride and strictest
economy are fully satisfied in one and the same car.

And for easy riding this newest Overland is not to be
compared with any other car of its size.

In fact, many a big, high-priced car is nowhere near
so easy riding.

It has cantilever rear springs which absorb road
shocks more perfectly than any other type.

Large four-inch tires add to its easy riding qualities.

And the seats are soft and deep and built up over
long spiral springs.

The seats are also broad and wide—ample in their
roominess for five full grown people.

Of course it is electrically lighted and started and
the electrical control switches are located on the steer-
ing column—right at your hand.

You should have a car this spring—

And if you want top class at bottom price, it must be
this Overland, for no other car meets both these re-
quirements.

No wonder it has swept the country—the biggest and
quickest success of all our long line of record making
models.

But one thousand cars a day is the present limit of
our production.

That is more than double the capacity of any other
producer of cars of this size and class.

But the demand is in proportion to the excess value
in this car.

Order yours now to avoid delay.

See the Overland dealer to-day.

Catalog on request—Please address Dept. 661

Willys-Overland, Limited
Head Office and Works, West Toronto, Ont.