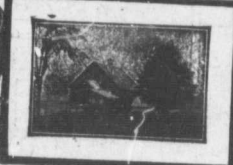


FARM AND DAIRY & RURAL HOME



DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE



Toronto, Ont., March 14, 1910

CONTRACT NO. 10
MARCH 14, 1910



ISSUED EACH WEEK.

Address all Correspondence to
The Rural Publishing Co., Limited, Peterboro, Ont.

ONE DOLLAR A YEAR

THE HYLO SILO

The cheapest Silo you can buy—because it will make you the most money.

ENTIRELY different and infinitely superior. Made of specially selected Imported Southern Long Leaf Yellow Pine—stronger than White Oak—equipped with patented automatically expanding and contracting hoops, patented ladders, etc.

The Hilo is chosen by men of discriminating judgment—who use their own brains in buying a silo. The Hilo is so plainly a silo of outstanding quality and is equipped with new patented service features, of such great value, that no one, wasting value for his money, will have anything else.

A Hilo Silo erected now on your farm will pay for itself the first winter you use it. Therefore it will yield you 100% profit on your investment each season—year after year, indefinitely, for all your farming days. It is a permanent investment—a monument to your good business judgment.

Write for free silo book today. 302

WILSON MFG. CO. LTD. 3074 YORK ST. GUELPH, CAN.



A Cheap and Efficient Poultry House

It Was Built of Scrap Lumber but on Correct Principles

THE principal items of expense in building our poultry houses were three squares of single-ply roofing costing \$2.55, four squares of three-ply roofing, costing \$7.40, a few pounds of nails and a couple of glazed window sashes. The house is 18 feet square and big enough to accommodate 100 Leghorns at 30 Barred Plymouth Rocks. The lumber that we used was almost scrap. A couple of years before we purchased the farm the barn had been blown down in a great hurricane that swept Ontario in rebuilding the barn, as much of the old lumber was used as possible, and what was not considered "worth bothering with" was piled up in a fence corner. It was from this fence corner that we got a good deal of the material that went into our chicken house. The rest of it came from an old pipepen, almost falling over, that had long before outlived its usefulness. All of the work was done in our spare time, and probably amounted in all to six full days' work for one man. It wouldn't have taken so long had it not been necessary to draw at least a half-dozen nails from every board used.

The sill of the house are four cedar logs, 18 feet long, which came out of the old barn. These were spliced to

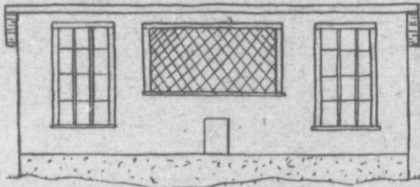
enough above the floor that draughts do not sweep around the hens when scratching.

The essentials of a good poultry house are light, dryness, good ventilation, freedom from draughts, and cheapness. This house possesses them all.—F. E. E.

Hatch Early

By M. A. Jull.

UNDER present conditions of high feed prices, it is more necessary than ever to get good egg production during the winter months. The most profitable fowls are those which lay in the fall and throughout the winter season. Since winter egg production is the most profitable phase of the poultry industry, and since the average number of chickens do not commence to lay before six months after being hatched, it is necessary to hatch so that the pullets will be fully matured by the beginning of November, when they should be in good laying condition. This means that Plymouth Rock, Rhode Island Red and Wyandotte chickens should be hatched during the month of April. Leghorns chickens mature a little faster than those of the general pur-



Front View of Poultry House.

gether on the side of the house and the studding erected on them. The house is of the shed roof type, seven feet high in front and five feet at the back. The door is at the front of one end. The nests are along one side and the feeding hoppers along the other. In one corner at the back is a coop for broody hens, and the rest of the space is taken up with four roosts, 15 feet long. There is no dropping board under the roosts. In cold weather the droppings freeze immediately and are in no wise objectionable. A 12-inch board set on edge prevents the litter from being scratched back under the roosts. The floor is of railway ties laid in on the ground and covered over with fine gravel. Concrete would probably be preferable, but it would also be costly. The two ends of the house and the base are tightly constructed with two ply of boards and single-ply building paper between. The lumber we used was so rough that neither tar paper nor building paper would have been satisfactory as a lining. We needed something stiffer and tougher. We would not consider anything less than three-ply roofing on top, especially with the roof so flat as it is.

A front view of the house is given in the diagram herewith. There are two good-sized windows at either side, and an open space 2 1/2 feet, covered with one-inch mesh wire netting. This we consider an ideal arrangement for an open-front house. Where the opening extends the full length of the front of the house, the tendency is for draughts to sweep back too far into the house. Where there is just one opening, and it is in the centre of the front, there is no opportunity for draughts to work back into the house. Even with a storm beating in we have been unable to detect any draught for more than four or five feet back from the window. The opening is far

pose broods; therefore, they may be hatched up to the first of June. The usual advance in the price of eggs, particularly fresh eggs, during the fall of the year, is due largely to natural causes. The moulting of the yearling stock sheds out this source of production, leaving pullets practically as the only source of fresh eggs at this time. It is very necessary, therefore, that the pullets be hatched in plenty of time to be matured for fall laying.

A large number of breeders who advertise such good returns from late hatched chicks make a very serious mistake. It is rarely possible, under average conditions, to have late hatched general purpose chickens do well during the winter months. Certainly when feed prices are so high it becomes almost impossible to make profit on a late hatched chick. Farmers and practical poultry keepers should not be encouraged to hatch late, rather they should be encouraged to hatch as early as possible, because under average conditions one pullet hatched in April is worth two hatched in June. The largest profits in poultry raising are made under the most efficient conditions of management. If a hen cannot lay eggs during the winter months she should be eliminated from the laying flock. This means the culling out of all late hatched pullets, and it will save a great deal of trouble if no chickens are hatched late.

Liver troubles are caused either by a lack of grit, or by feeding too rich or stimulating food. Care must be taken in that particular. In the early stages of liver disease the birds show droopiness, have a poor appetite, and seem stiff in their joints. One or two good family liver pills will very often correct the trouble.

ONTARIO WIND ENGINE & PUMP CO., LTD.

TORONTO SILOS

See the Hip Roof SILOS

IT will put money in your pocket. Get tons more ensilage in a Toronto Silo than in any other silo costing about the same to erect. The hip roof lets you tramp down the ensilage right up to the top of the walls.

Now consider the construction of a TORONTO Silo. All woodwork is carefully selected spruce, thoroughly impregnated with hot tar and creosote. The wood cannot rot and is not affected by ensilage acids.

Then Toronto Silos are airtight because the staves are DOUBLE tongued and grooved—double protection against frost as well as air. The Toronto Silo booklet sent upon request. 187

Ontario Wind Engine & Pump Co., Limited

Atlantic Ave., Toronto,
12 St. Andrew St., Montreal,
Winnipeg, Calgary, Regina.



Trade
VOL. X

A Racy

IT has been
I'm who
one who
without
have some
row. When
difficult to
and she is
denies of her
she has been
master, and
milk, who w
well provid
to take care
the pail.
Even thou
at hand, th
make a lot
feed into m
beef, and o
convert feed
Yet they are
are often fo
duction is co
feed destroy
should be de

A poultry s
hatched in
eggs she will
discarded 41
per cent. In
be culled out
fourteen "err
did when in
it would be m
her legs, head
many pounds
must get deta
feed and wel
Wisconsin in
dairymen who
now how m
many of our
best cows fir
feed and milk
The differen
we find scrub
among the
Swedes. Nor
that is black
black and wh
Herman Vetter
stein for \$50
color and "tho
Last year thi
second highest
ing 691.7 pou
bought a pur
not mark
my herd," but
779.6 pounds
develop such
would be to
became tempora

While feed an
in the matter of
most important
was "given don
month upon the
mind, the ability
to sidestep nega
low production
dairy cow. The
do we hear him

We Welcome Practical Progressive Ideas.

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. XXXVII

TORONTO, ONT., MARCH 14, 1918

The Recognized Exponent of Dairying in Canada

No. 11

To Get the Most Milk from the Feed Available

A Racy Address by Wisconsin's Superintendent of Cow Testing, Mr. Noel Begley, That Makes Good Reading for Dairymen Everywhere

It has been said that "all things are possible to one who believes," but that does not apply to one who believes he can get milk from cows without feed, although the present prices of feed have tempted some dairymen to try it to their sorrow. When feed costs are high, the cow finds it more difficult to make good returns over cost of feed and she is usually further handicapped by the tenderness of her owner to cut her ration. However, she has learned the "Safety First" slogan from her master, and before she makes any of that food into milk, she will see that her own precious body is well provided for, and if you suit her enough to take care of her body, you do not get any in the pail.

Even though we may have plenty of cheap feed at hand, that is no assurance that we are going to make a lot of cheap milk, for some cows convert feed into more or less milk, while others convert it into beef, and others are blessed only to convert it into converted feed at \$50 a ton into manure at \$2 a ton. Yet they are all called "cows," and the three classes are often found in the same barn. So far as milk production is concerned, the last two classes are simply "feed destroying parasites" and they themselves should be destroyed on discovery.

Picking the Winners.

A poultry specialist can tell by looking at the legs, beak, ear lobes and pelvic bones of a hen how many eggs she will lay. One man examined 7,566 hens, discarded 41.5 per cent. of them and lost only 3.3 per cent. in egg production. In one flock of 78 hens he culled out 84 without the loss of a single egg. The fourteen "workers" laying just as many eggs as the did when in the company of the 64 "losers." While it would be mighty convenient to grab a cow, look at her legs, head, ears, and pelvic bones and tell how many pounds of butter she was going to make, we must yet determine real efficiency by weighing the feed and weighing and testing the milk. Even in Wisconsin in the year 1916 we have many so-called dairymen who claim the ability to tell by looking at a cow how much milk and fat she will make, yet many of our best dairymen seem unable to tell their best cows from their poorest ones unless records of feed and milk production are kept.

The difference in cows is not due to breed, for we find scrubs in all breeds, just as we find scrubs among the Irish, English, German, and Swedish. Nor is it due to color, for a cow that is black can produce as much milk as one that is black and white or entirely white. A short white grade Herman Vetter of Fond du Lac bought a grade Holstein for \$50 from a neighbor who did not like her color and "thought she was not much good anyway." Last year this cow was in an association and was second highest fat producing cow in the state, making 691.7 pounds of fat. John Puls of Hartford bought a pure-bred Holstein heifer because she was not well marked and was "probably the poorest in my herd," but during the past year she produced 778.6 pounds of fat. It seems to me that when men develop such highly refined tastes for color, that it would be to their financial interest at least if they became temporarily color blind.

Scrubs—Men or Cows.

While feed and the kind of cow are very important in the matter of getting profit from the business, the most important factor surely, is the man—who was "given dominion over every living thing that moveth upon the face of the earth." In this matter, the ability is developed to a remarkable degree to sidestep responsibility and shift the blame for low production on to the bumble and defenseless dairy cow. The more inefficient he is, the more often do we hear him say: "My cows are no good, they are

only scrubs," when in reality we find his cows to be pretty fair and that it is he who is "no good," for he is the real scrub. Surely when such men claim they are "self-made" men, as they often do, they relieve the Almighty of a great responsibility.

What Made the Difference.

It seems in Wisconsin that our cows are better cows than our men are dairymen. For instance, two years ago one man sold three cows to his neighbor for \$70 apiece because under his conditions they were unprofitable. When the new man got hold of the cows and gave them his usual good feed and care, they more than doubled the production of the previous year. Bessie made 347.29 pounds of fat at a profit over feed of \$72.29, Daisy made 282.8 pounds made 608.3 pounds of fat at a profit over feed of \$142.24. The cows were just as good the year before man to give them a chance, and when they got it the year, and each put \$45 into the pocket of the fellow that gave her the opportunity. So before we look for the mole in our cow's eye, let us pick the beam out of our own.

Burning Corn.

There are still other items in sars which affect profit, such as water, ventilation, and temperature of barns. While feed has practically doubled, water at the same old price—free for the taking. Yet the cows very much of it, but raise halibut about the price of feed which is not of more importance than water. If we had to pay about 10 cents a gallon for water, we would probably try to get our cows as burning corn in your stoves this winter; if so, go ahead and make your cows drink ice water, it is practically the same thing. The cow uses corn,

barley, and other carbohydrate feeds to give her body heat and energy, and if she has to keep her body to a temperature of 101 degrees and warm up 75 to 100 pounds of ice water a day, it takes some feed.

If we are going to burn corn to heat ice water, we might as well burn some more to keep up the warm cracks to keep out the cold. Some people, as quickly freezing point and I know of some barns in which they go even farther and freeze the milk in the tests. I am wondering how many of you would be sitting here if there were no heat. Yet you put a cow on a cold concrete floor, stick her head in an iron yoke from this feed." While she can get away, she has sense enough to know that self preservation body is well warmed before she puts any of that feed into milk for the boss. With the exception of barn equipment, lumber, and other building material as it did before the war, and the fellow that uses keep his cows comfortable buildings and good care to through losses in the business, and further the man to be arrested and fined by the Humane Society for cruelty to animals, and by the Food Administration for wasting human food.

When Buying a Fanning Mill

A Few Hints re What to Look For

CHOOSE the mill that will produce the best grade of seed.

See that the mill is well made, but do not over-estimate the value of its lasting qualities: a mill that will clean and grade well will pay for itself in a capacity or two.

The ease and rapidity with which the amount of grain leaving the hopper can be controlled is an important matter. It should be possible to shut off or regulate the flow of grain to the sieves with one hand while turning with the other. If one must stop turning the mill in order to close the hopper, the sieves become flooded and poor work results. It is an advantage for the person turning the mill to be able to see the work the sieves are doing.

Preference should be given to the mill with the simplest and best arrangement for bagging.

It is a great advantage to deal with a firm who will guarantee to see that the mill is fitted with the proper sieves to handle the grain for which it is required. When you buy a mill give the firm to understand you will send them samples of your seed and cleaning it. If manufacturers would do this, only a few standard sieves need be supplied with the mill, not an advantage unless they are specially adapted for the work to be done.

BOYS AND GIRLS AND FARMING

FARMING is fully as much a boys' and girls' problem as it is a problem of production. If the boys and girls have not been interested in the farm they will likely leave. That means the end of that farm home in 10 or 20 years and a tenant will likely follow on the farm, and the ones who should be on it will likely be in town working for wages. That farm home has in a measure been a failure. Give the boys and girls on the farm recreation; a social centre is one solution. Give them a good consolidated school with its many advantages, and give the boy or girl a chance to learn that the farm produces things of value to them by letting them have a pig or a calf or acre to care for as their own and to market as their own, and then have the proceeds to spend as they choose. This develops the ownership idea and the spirit of independence. When the boy or girl is given nothing to raise and market as their own, the hired man or dependent attitude is too often developed.—W. C. Palmer.

Why the Price of Dairy Produce Has Advanced

The Stand of the Producer in the Price Controversy—By Prof. H. H. Dean

IN Canada, the unit of value measures is the dollar. The whole question of advancing prices might be dismissed by saying that the dollar has decreased in purchasing power; or that dollars are more plentiful than food in the form of milk, butter and cheese. Many of us find it difficult to realize that a dollar has varying values, especially when it comes to buying food. Dollars we do not need, but food we must have.

Labor is Necessary.
Practically all products of the soil, through the agency of plants and animals. But these of themselves do not produce food, except in very limited quantities. In order to get the largest and best results in food production, it is necessary for man to apply labor and skill to the soil, in the growing of plants, and afterwards in feeding these plants to animals. Dairy products require an extra amount of labor and special skill.

An American writer says: "There is but a simple method of procedure by means of which we can be certain that the nutrition of our people will be safeguarded, that is to maintain our dairy industry at its present extent of development. Actually it should be considerably increased, but it must not be permitted to decline. If it does, the United States will not long maintain its position of supremacy in the fields of human endeavor requiring both physical and intellectual vigor." The same is true for Canada, but how can this be done unless our dairy industry be supplied with plenty of skilled labor on the farm and in the factory? And this labor must be suitably rewarded.

The writer goes on to say: "Milk production cannot rest upon a philanthropic basis, but must be a paying industry. I want to emphasize that the public must allow the price of milk to advance so that the industry is profitable to the dairyman." In the foregoing we have the essence of the causes of advancing prices for milk, butter and cheese. Dairying must be made profitable for milk producer, manufacturer and distributor, or they will go out of the business. And under present conditions of great opportunity in other lines, the question of making dairying profitable is doubly important. One of the first causes of advanced prices for dairy goods is the increased difficulty of securing suitable labor and the increased cost of all kinds of labor. Other fields are beckoning to dairymen, some of them very attractive as to hours and wages.

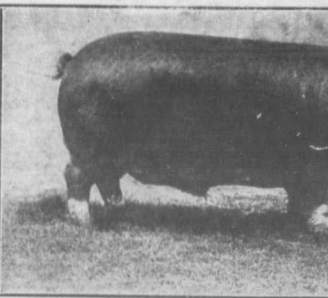
Cost of Feeds Advancing.

A second cause of advancing prices is the increased cost for feed, cows, capital, and overhead expenses on the dairy farm. The consumer finds it difficult to realize that oats have advanced from about 40 cents per bushel to nearly double that price in the last three years. Barley, oats, cottonseed meal and bran have advanced in nearly the same proportion. About the only feeds which have not "gone up" in price are grass, hay and silage, and the reason for this is, that as a rule these are not sold from good dairy farms, and except hay, have not market values like grain and other feeds used in milk production.

Cows have advanced at least fifty per cent. in the last year. Good graded cows now sell for \$125 to \$150, and we saw a report recently where an exceptionally good grade cow sold for over \$300. Pure bred cows have not advanced in the same ratio as have grades, but registered cows having good records to "back them," command very high prices, while

dairy sires with "good backing" for several generations sell for unheard of prices. One sale of such was reported last year at \$53,200 for a bull calf under six months old.

Owing to the increased demand for capital to finance war loans and guaranteed money enterprises of various kinds, farmers are finding it more difficult to secure capital for legitimate expansion and improvement on the farm. One Ontario farmer reported in December, 1913, in an agricultural paper as follows: "I have ten hogs about 100 lbs. each. Since my corn is so poor, I decide to buy shorts to finish them. I got the shorts at \$44 per ton, wholesale. I have to borrow the money from the bank at about eight per cent, to pay for them. I think this eight per cent. business is pretty hard on the poor man. There are lots of times that the other half of our money would buy both hogs and feed, the other half for



A Berkshire Boar That Sold for \$10,000.

The realization of the importance of a good sire in breeding work has led to many record prices when good sire change hands. The \$10,000 record for a boar was recently set when Enoch's Bonanza was sold by an Indiana Berkshire breeder, to Thomas Stanton, of Wheaton, Ill.

that matter, if he could get the money on reasonable terms." It would seem as if one of the ways in which dairy products might be hindered from further rise in price, would be, to furnish cheaper money to the farmer. Farm finance has not received the attention of capitalists which its importance deserves. Too often the farmer has been regarded as an "easy mark" for the modern Shylock. The bad effects of such a policy have not been realized until the present world-wide shortage brought it to the front.

Expenses for machinery needed in growing and harvesting crops, for filling silos, for cans to deliver milk, for purchases, food and clothing, and for every other operation on the farm have advanced out of all proportion to the advance in price received for dairy products, hence it is no wonder that some farmers are growing discouraged and selling their cows. All these things have tended to cause an advance in the price of milk and the foods manufactured from milk.

Dairy Supplies Gone Up.

But there are other things which have caused an increase in price of milk and its products. Among these may be mentioned the extra cost for labor and supplies in manufacturing milk into condensed and sterilized milk, cheese and butter. To mention only a few items: From a dairy-supply firm, the Dairy Department of the O. A. College purchased in December, 1913, two gallons of cheese curd for \$3.60; in December, 1917, we paid \$3.75 for one gallon of cheese curd from the same firm. In December, 1913, we purchased six gallons of rennet for \$11.70; in December, 1917, we paid \$7.95 for one gallon of rennet. In 1915 cotton used in cheesemaking was bought at 5 1/2 cents per yard, and starched cheese caps at \$7.50 per 1,000; in December, 1917, the cotton advanced to 18c per yard, and the cheese cap circles to \$12 per 1,000. In 1915, sulphuric acid for milk-testing was three cents per pound, now it is 6 1/2 cents per pound. The list could be

extended to great length, showing that nearly every item that enters into the manufacture of dairy foods has increased from 100 to 250 per cent.

Milk is Better.

Another cause for the increased price of milk is the more stringent regulations of Boards of Health in producing and distributing milk. Cleaner cows, cleaner stables, the pasteurization of milk—all these cost money and add to the price which the consumer must pay for these safeguards of public health—and they are worth the extra price for nothing is so important as good health. Children, especially, who depend so largely on milk must be protected in every possible way. A recent report by the Massachusetts Board of Health says: "Food which is so often spoiled by the malignant cow even under the most adverse conditions, in stepping into the breach between life and death when mothers fail, has received all too scanty emphasis."

One unnecessary cause of increased cost of milk in cities is the faulty method of distribution. The city milk business must find some better method of distributing milk, than in having ten or twelve milk wagons passing over "roads" which can be well served by one wagon, at one-half the expense.

Municipal control of the milk-supply, similar to the plan followed for supplying water gas, electric light and sewage disposal would seem to be the best solution. Failing this, the milk-sellers should divide the city into districts and have one distributor only for each district. With a standardized product and a watchful Board of Health, there is no reason why this system should not result in a lessened cost of less than one cent per quart to consumers, and a similar supply of good milk to all.

Dairy Products Really Cheap.

Dairy farming and the manufacture of dairy products are among the foundations of national prosperity. The American dairy industry (Dr. McCollum) referred to as the "bread of the people."

of this article says: "The efficiency of a people can be predicted with a fair degree of accuracy from a knowledge of the degree to which they consume dairy products. A venture into the world of milk, and butter and cheese, and not the meat which has the good influence on the promotion of the virile qualities of the people." Yet we find consumers cheerfully paying 30 to 40 cents per pound for beef and bacon, and grumbling over the price of cheese at 25 to 30 cents a pound, whereas one pound of cheese is worth two pounds of beef, has practically no waste, does not require cooking, and does not readily spoil. Milk and its products are among the cheapest foods which can be purchased at the present time. "We shall never again see 'fave' milk," "20-cent butter," nor "15-cent cheese." Other foods may get lower in price as measured by the dollar standard, but fine dairy products, never.

A nation that turns to cheese substitutes like "filled cheese," and "vegetable milk" has taken the first step towards degeneracy, because these do not contain the "vitalities" so essential for making a nation's face of people.

Milk is a cheap food as compared with other foods. "Milk at 12c per quart represents 699 calories. Steak at 35c per pound represents 260 calories. Chicken at 35c gives 253 calories, veal at 35c gives 273 calories, salmon at 50c gives 400, and sardines mackerel at 55c gives 330 calories," says Prof. Pearson, of Illinois, U. S. A.

The dairy farmer, and the dairy manufacturer, who work long hours, and runs considerable risks for capital invested should be encouraged by reasonable prices for milk, butter and cheese. This will insure a good supply of "life meat" for home and export markets. The dairy industry has now a great many, and wishes to increase the number of, clean, honest dairymen. No others are wanted. It pays to pay a good price for a good article of food.

—An Address.

Are any of the following operations not yet attended to? Testing seed grain and corn; cleaning seed; mending harness; increasing rain fall for work horses; sharpening plow points; harrow and cultivator teeth; renewing broken and worn parts of drill, cultivator and roller; making a couple of spare wheel tires; sharpening disc-harrow blades; replacing worn and broken cultivator and harrow teeth; cutting summer stock; hauling manure; pruning apple orchard; training manure; preparing the live stock for the spring.

A. M. Zoeller

TO the milk...
incl...
Mr. A. M. Zoeller...
be fall...
Mr. A. M. Zoeller...
is across...
just a con...
the v...
burg in...
The whole...
is de...
ively to...
crops prod...
almost eve...
der the plo...
for the...
dairy herd...
which are...
converted...
farming call...
the scarce...
Zoeller has...
and ende...
r silage? I...
this he has...
ably ther...
the farm...
The tract...
of working...
farmers will...
Mr. Zoeller...
of fall plow...
by the heavy...
vested in an...
inch bottom...
that 14-inch...
land, but what...
outfit did ex...
three furrow...
two in real...
has plowed...
spring horse...
putting in...
the acre farm...
penge with...
two

penge with

The usefulness...
work. As a...
has a thresh...
ing blow...
ated by the...
Just how use...
indicated by...
section with...
cement silos...
ment these...
feet. Althoug...
easied with...
The dairy r...
them on a lar...
tored in the...
such a herd...
most diffic...
four years ago...
with six unit...
purchased a...
speaks well...
other machin...
first the strip...
and a quarter...
we are real...
five h.p. m...
milking mach...
which the bul...
puffs roots...
putting with...
"But," said...
engine during...
dixon lantern...
two to five...
on the four...
two h.p. gas...
the milking...
Limb...
The milk fr...
chased from...
right on the...
recognized the...
Canada for...
small cheese...
convenience...
collar ind...
the market is...
sured no...
cheese decid...
send his milk...
into Canada...
varieties is

varieties is found



A Recent Development in the City Milk Trade.

With the growth of our cities their demands for milk are being heard in the more distant rural districts. And that they may get the milk from these districts in their hands and fed soon after it leaves the farm, the larger city dairy companies are establishing shipping stations. Here the milk is received, cooled and shipped in kegs. The illustration shows the station which the Toronto City Dairy has established at Woodstock, Ont.

Mechanical Appliances for the Dairy Farm

A. M. Zoeller Uses a Tractor, Milking Machines, Gasoline Engines to Reduce Man and Horse Labor

TO the mechanically inclined, an hour or so on the farm of Mr. A. M. Zoeller will be full of interest. Mr. Zoeller is working 300 acres of rich, clay loam soil, just a couple of miles from the village of New Hamburg in Waterloo county. The whole of this big farm is devoted almost exclusively to dairying, the crops produced on it, and almost every acre is under the plow, are designed for the feeding of the dairy herd or the hogs which are the principal side line. All roughages are converted into a finished article. Such a system of farming calls for a maximum amount of labor, always the scarcest commodity on dairy farms. Mr. Zoeller has had the usual difficulty in securing men, and is endeavoring, so far as possible, to substitute machinery for man and horse-power, and in doing this he has progressed in mechanical lines considerably further than most others who are trying to solve the farm labor problem in the same way.



The Zoeller Homestead.

The tractor has been an important factor in the working of this farm since the fall of 1915. Few farmers will forget the wet, late harvest of that year. Mr. Zoeller found himself with an immense amount of fall plowing to do, but with his horses worn out by the heavy work of the muddy harvest. He invested in an 8-hp tractor, and a gang plow with 14-inch bottoms. It did not take him long to discover that 14-inch bottoms were not adapted to heavy clay soil, but when fitted with 10-inch bottoms, his tractor outfit did excellent service in fall plowing, plowing three furrows under favorable conditions or just two in real hard work. With this outfit Mr. Zoeller has plowed as much as eight acres a day. Last spring horses were used only on the grain drill in putting in the crops, and in the working of the 300-acre farm the tractor has made it possible to dispense with two teams.

Tractor for Bett Work.

The usefulness of the tractor is not limited to field work. As a part of his farm equipment Mr. Zoeller has a threshing machine, a chopping mill and an ensilage blower. All of this power equipment is operated by the tractor which delivers 15 h-p on the belt. Just how useful is this phase of the tractor's work, in connection with the silo capacity on the farm. In connection with the two sets of buildings are two big cement silos, 15 x 45 feet and 12 x 45 feet. Supplementing these are two stave silos 14 x 25 and 12 x 25 feet. Altogether 50 acres of corn are grown and ensiled with the help available on the farm.

The dairy herd consists of the original 100 acres, with such a herd as this, milking becomes the biggest and most difficult problem of all. Mr. Zoeller solved it four years ago, when he purchased a milking machine with six units for the larger herd. Since then he has purchased a second outfit for the smaller herd, which speaks well for the satisfactory service given by the first machine. "One can milk 35 cows in one and a quarter hours," remarked Mr. Zoeller, "and if we are real busy one man can do the work alone."

A five h-p. gasoline engine operates the larger milking machine. It also runs a dynamo from which the buildings are lighted, separates the milk, sulps roots, pumps water, and so forth. In connection with the dynamo there is no storage battery. "But," said Mr. Zoeller, "it is cheaper to run the engine during cherry time than to keep up a half a dozen lanterns. The dynamo has now been running two to five hours daily for five or six years, and it ran for four years without one cent of expense."

On the smaller farm there are two engines, both two h-p. gasoline, designed to pump water and run the milking machine.

Limburger Cheese a Farm Product.

The milk from this big dairy herd, and some purchased from neighbors, is manufactured into cheese right on the farm. Years ago Mr. Zoeller's father recognized that a market might be developed in Canada for Limburger and other fancy cheeses. The small cheese factory, which he erected, has every convenience for manufacture with a good curing cellar underneath. Fancy cheese only are made, and the market is continually growing. Mr. Zoeller assured me that he finds the manufacture of these cheese decidedly more profitable than it would be to send his milk to the neighboring factory to be made into Canadian cheddars. The market for the fancy varieties is found in Kitchener, Toronto, Hamilton

and several other Ontario cities. Another advantage of the farm factory that Mr. Zoeller did not forget to mention is that the whey is available when still sweet and good for feeding the calves and hogs. Of the latter, about 100 are usually on hand.

The buildings on the Zoeller farm are useful, but most of them differ from those of the old buildings in the country. They are well painted, and in the painting of them Mr. Zoeller followed a plan that is capable of wide application where old and open siding is being painted for the first time. It is done directly to the lined oil mill and purchased the settings of the oil tanks. These settings are much heavier and thicker than the regular paint oil, and when mixed with medium capacity and more durability than where a thinner oil is used.

"We first had the 100-acre farm," Mr. Zoeller told me as we drove to the station. "We found such a demand for pure bred Holstein cattle that we bought the 200 acres across the road five years ago, primarily to further develop the Holstein business. The herd to stock he was using the natural increase of our pure bred Holsteins, the development of which from now on will be the main feature of our work."

Figuring Cost of Production

The Importance of Considering Depreciation
JAS. R. METCALF, Peel Co., Ont.

I HAVE just been reading some of the free literature distributed by our various Governments. In one bulletin I have found something really good on methods of figuring the cost of production of farm products. The writers teach briefly but convincingly on one point that practically every farmer ignores in balancing his year's accounts. The paragraph is as follows:

"Define knowledge as to the legitimate charges which enter into the cost of production, handling and marketing is an absolute essential to success and permanency in business. Some of these charges, for a time, as, for example, depreciation. The judgment awaits his eyes to them, but the day of enterprise has been wrecked because of failure to take all the expense items into account. Accurate system of cost accounting in business enterprises are now required by law in several States, in order to protect the interests of investors. Of course, in the restricted sense, the individual dairyman does not have to protect any one but himself, yet in his own interests he ought to know what it costs him to do business."

We have a case in mind that illustrates the contention. Some years ago a young man bought a farm in Ontario county. The buildings were in good shape, and for the next few years young fellow made a good living and paid all his honest debts, including the interest on a rather large mortgage. He thought he was doing fairly well. He was meeting interest payments without difficulty, so the size of the mortgage did not worry him. As he was not possessed of more ambition than the average man he had no incentive to make a more intelligent study of his business, or a greater expenditure of energy. He was just drifting.

Suddenly he woke up to discover that every building on the place would have to be re-shingled at a cost of several hundred dollars. Some of his machines were wearing out. All along he had been considering that he was making end meet. All along his buildings had been depreciating, but he had made no provision for their

repair. This depreciation, he came to see, was an annual charge against the farm, and when he had no provision for it, he had not really been plugging further into debt to make good this depreciation. It did have the one good effect, however, of stimulating him to greater exertion.

It is a failure to calculate items such as this that explains in part why farmers have for scores of years been willing to sell their produce for less than cost of production. Few of us knew what the sketches for the farm press, telling, for instance, the amount of roughage eaten, the amount of grain, perhaps a veterinary charge, and then subtracted profits. We never mentioned anything about depreciation in the buildings, in the cow house, interest not protested when our agricultural colleges have calculated profits in the same way. On the whole, legislators a bad education. They have been accused to get farm produce cheaply, and they think getting it cheaply is more important. They are still stiles of life. It seems to me that it is up to us to keep our accounts in a business way and start right away to re-educate the public.

Purchasing the Herd Sire

The Views of Prof. C. Larsen

THE purchaser of the purebred sire to head a reasonable scrub herd should be willing to pay 10 or 15 grade cows. If a man owns a herd of kind of a sire is not a paying investment. Such a sire may easily sire 30 daughters during the three years in the herd and each one may produce 50 This increased production would amount to 1,500 pounds of butterfat per year and this butterfat is worth about \$600.

These daughters should make this increased production for at least eight years. The total value of over scrub dams would then be \$4,500. A hundred herd head or less is not the big question when can I reasonably expect this herd bull to transmit large production to his offspring?

These inherited qualities are not visible. The average buyer usually pays for what he can see. This is often where the mistake is made. The invisible qualities, viz., large milk and butterfat production, which are hereditary, are the valuable ones. They should be combined with good type. I paid \$100 for what I could see and what I figured that for what I could not see and what I could not handle.

It is often advisable to purchase an aged and tried sire in preference to a young and untried one. A large producing daughters of excellent type is a sure investment.

One pint of formalin is sufficient to treat from 50 to 40 bushels of grain for rust, and from 40 to 45 bushels of potatoes for scab.



A Brown Swiss Cow with a Creditable Record. Iowa, owned in one of the best herds in New York State, has an official record of 16,844 lbs. of milk and 424 lbs. of butter in a five-year record. Her sire, Tom Bull, has an official record of 15,863 lbs. The breed is remarkable by its adaptability as a dual purpose character with a strong leaning to the dairy end.



Take Your Time

NEVER buy a cream separator in a hurry. Your reason for buying is not so much to get a cream separator, as to get all the cream from your milk, all the time. It takes time to pick that kind of a machine out of the many on the market.

Send to reputable firms for catalogues, and study them carefully. See which machine requires the fewest and simplest adjustments; which has the best tilting system; which is most sanitary and most easily cleaned, which is so well made that it will undoubtedly do good work for a long time. Go into details, and pick the best two or three of the lot.

Then ask for skimming demonstrations to determine how little cream is left in the skim milk. This is important, because the wrong machine can waste more cream than it is worth, while the right one will put money in your pocket every time you use it.

When you are through you will find that you have bought a **Lily Cream Separator** because the Lily will prove to be first on all these counts. We will send catalogues on request, leaving the final decision to your judgment. Write to the nearest branch house.

International Harvester Company of Canada, Limited

BRANCH HOUSE

WEST—Brandon, Man., Calgary, Alta., Edmonton, Alta., Estevan, Sask., Lethbridge, Alta., N. Battleford, Sask., Regina, Sask., Saskatoon, Sask., Winnipeg, Man., Yorkton, Sask.
EAST—Hamilton, Ont., London, Ont., Montreal, Que., Ottawa, Ont., Quebec, Que., St. John, N. B.

"Goes like sixty"

This Engine Will Cost You Nothing

You need an engine—get a Gilson on our new easy-payment plan, and it will pay for itself. You have the work for it to do all this winter, help its tractor and help yourself—save yourself a lot of worry and enjoy that "feeling of security," which is such a Gilson Engine.

Gilson Engines have long enjoyed an indisputable reputation for dependability, power, simplicity and economy. This you find us with an even more attractive proposition for the discriminating buyer. Prices of everything you have been buying have been soaring, but by careful management we are able to furnish Gilson Engines at remarkably low prices. Write to-day for catalogue, price, and easy payment plan, stating what size you are interested in.

GILSON MFG. CO., LIMITED, 257 York St., Guelph, Ont.

\$2.21 Per Bu. **GUARANTEED WHEAT** CANADIAN NORTHERN

Oats, Barley, Flax, Live Stock GREAT OPPORTUNITIES

IMMENSE WEALTH IN WESTERN CANADA

SEND FOR FREE BOOK: "Home-seekers' and Settlers' Guide"

LOW FARES

100,000 FREE FARMS

OF 160 ACRES EACH. Government lands along the Canadian Northern, surveyed and ready for entry. Yours is waiting, and a share of the three-quarter billion dollars for crop production to be distributed to farmers this Fall. Estimated crop values of Wheat, Oats, Barley and Flax \$17 in Manitoba, Saskatchewan and Alberta \$16,885,700.00.

IMPROVED LANDS FROM \$15 UP

ALONG CANADIAN NORTHERN. Rich, well located farms, close to railway—immediate producers—can be purchased on easy terms, cash, or cash and crop payments. Means schools, good roads, telephone and convenient transportation. Act now—get away this Spring.

Tractors and Farm Implements

Easily available—new Government assistance plan. Capital or no capital—the work, the opportunity, is there, and the Canadian Northern offers the way. Write today for the new "Guide." Contains valuable information based on Government statistics. Any C.N.R. Agent, or General Passenger Dept., Montreal, Que., Toronto, Ont., or Winnipeg, Man.

A Defence of "The Field Method" of Eradicating Tuberculosis*

A Reply to the Criticism of Prof. Gillette—By Weltho

I HAVE been much interested in a brief article in your issue of Farm and Dairy of February 14, 1918 entitled "Eradicating tuberculosis from the dairy herd—a criticism of the Field method," with reference to a summary of methods followed by Fred F. Field at Dutchman Farms as appearing in the issue of October 11, 1917.

The Field method assumes that the foundation herd is suspicious—that it may even be made up of many "reactors." Presumably the tuberculin test may be applied to this herd as it is stated in the October article (Section 14), "Never allow these calves to mingle with any reacting animals or any cattle, old or young, which you have assumed to be reactors." Further on, page 1088, October 11—"It is well to have your breeding cows tested at least once by a competent veterinarian with the tuberculin test." Whether tested by the tuberculin method or not this herd may be assumed to be made up of (1) healthy animals, (2) animals that under the tuberculin test might be regarded as reactors, but owing to recent or light infection not "spreaders," (3) animals that may or may not react to the tuberculin test, but that may be "spreaders" of the worst type without showing clinical symptoms.

This foundation herd is maintained under the best possible semi-isolation conditions. It will be readily seen that while the reactors present may not be dangerous at the present time that one dangerous condition is always present and that a second may arise at any time. In other words, spreaders may be present without showing clinical symptoms, as already mentioned, and that reactors, as indicating recently or slightly infected cows, are always liable to become spreaders. It is the "spreader" that must be isolated, in the strictest sense, or destroyed as a distinct menace.

Tuberculin Test 95% Efficient.

The tuberculin test may be considered to be 95% efficient in detecting the presence of affected animals as proven by post-mortem examination. From the observations of the writer of numerous instances, indisputably proven and authentically on record, the tuberculin test fails to reliably indicate the disease in advanced cases where no clinical evidence is apparent, thus passing over the very individuals that it is most urgently desirous of segregating and destroying and rendering, in the final analysis, the results obtained in many cases worse than useless. This statement you might contrast with the claim of Professor Gillette in the final paragraph of his criticism in your issue of February 14th. The man who relies on the tuberculin test to build up a clean herd may isolate or destroy many cases of light or recent infection and not spreaders, thus declimate his herd, and at the same time unwittingly retain the very source of infection that has polluted and that will just as actively continue to pollute his remaining clean herd.

The sputum test, whether applied as an auxiliary to the tuberculin test, or used alone, should indicate whether the cow is passing off from the nose and throat the infectious tubercle bacilli, or, in other words, whether or not she is a "spreader." Further, while an affected cow (or a reactor) may not at the time be capable of disseminating the disease she may at any time become so. The sputum test applied regularly should indicate

*The writer of this article has had an extensive experience with methods of eradicating tuberculosis from dairy herds; he served perhaps the longest term in Canada in the present instance, however, he prefers to write under a nom de plume.

just when such a case ceases to be dormant and becomes a menace.

In the foregoing connection it is just doubtful whether isolation of reactors (tuberculin test), should not be the first step in a proposed clean-up, particularly where this was being considered from an experimental standpoint. Employing the Field system, this would mean the establishment of an extra herd, or four herds in all: 1. The clean foundation herd as indicated by the tuberculin test. 2. The herd in process of building-up, consisting of calves from the foundation herd that have been strictly isolated. 3. The reacting herd as shown by the tuberculin test. 4. The herd of "spreaders" (where such individuals were kept) made up of animals drawn from one, two, or all three of the foregoing herds. In actual farm practice such procedure would be utterly impossible, so that the Field system seems to the writer at least practical in this regard.

Keeping the Young Herd Clean.

No comment is necessary regarding the clean herd that is being built up (under the Bang system) from the foundation herd. It may be noted that the application of the tuberculin test at this period (say as yearlings) will determine the progress made in "cleaning up" pasteurization of all milk fed from the foundation or "suspicious" herd is the keynote. It would appear that the sputum test should also have a place in safeguarding this herd, applied from time to time both in secretions from the nose and throat, and to those of faecal nature or of the intestines, proof being present that milk infection in the calf would likely be of mesenteric nature. Secretions valuably recently or slightly infected cows, therefore, in such cases would be available only from intestinal sources.

The argument advanced by Professor Gillette that "even with the frequent application of the sputum test the danger remains, the amount depending directly on the period of time between tests" is undoubtedly true, but it would seem to the writer, however, that any test that would indicate reliably the virulent cases, even if but infrequently applied, would be a tremendous step toward the aims of the tuberculin test, aims which, as previously emphatically stated, are far from being achieved.

In conclusion, it may be stated that the present status of the bovine tuberculosis question is not satisfactory. Undoubtedly isolation is difficult and not conducive to saving of labor, pasteurization is a relatively costly operation both as to outfit and operation, and the adoption of a diagnostic test is expensive and attended by the exercise of great care and patience. The breeder, great or small, however, who aims to breed a clean herd must adopt some practical common sense method, realize the nature of the disease from which he desires to free or protect his herd and "keep overcastly at it." The Field method undoubtedly has defects, but it has been evolved from the results of experience, is sound in theory and would seem to have given results. The criticism offered in your February 14th issue is not constructive in its entirety.

The new Pure Maple Sugar law gives the public protection against adulterated maple products. The scarcity of cane and beet sugars this year will also make it less probable to mix them with maple flavoring extracts. The markets of Canada and the United States are eager for pure maple syrup and maple sugar, and the new law has restored public confidence.

I HAVE
and was
this
straw for
this winter
it rots?

Couch
spread for
method of
stalls pres
where cou
the feed o
ed rather
on the land
effect on
Leitch, O.

Cedar

I N your
of the de
Vanhook
a cow barn
number are
to know
cedar blocks
his basement

The cedar
foundation
barn were
were placed
and set
other to
This gives
the appear
round cobble
makes a go
wars, dry
Remick, a

Seeding

T HIS last
with our
very poor
to re-seed
in the
We have
but never
We would
wheat after
of the corn
belt is
is frequently
dries with
season
E. Woud
E. Halton

I think it
seed your
last snow.
T extremely
slike, and
alfalfa.

It is not com
to drill
the fall. I
method is qu
ed the corn
and
should not
this country,
moved from
of September.
However, in
strip of land
with wheat.
The writer
growing. It
warn to attempt
ing—A Leitch,
Management, O.

Seeding

I HAVE a
sowing with
sweet clover
there is no
part of the
thing about
can be seen
can turn the
take of the
of the next
On Ont.

The usual
to sweet clover
our subscribers
spring grain. T
why timothy
along with sweet
with red clover.

Farm Management

Killing Couch Grass

I HAVE some couch grass which I sowed and was threaded along with my grain straw for feed and bedding, would you this winter, or about it, piled until it rots? Will pasturing kill couch grass?—C. G. J., Lamson Co., Ont.

Couch grass will quite readily spread from seed, and the usual method of propagation is through root stalks present in the ground. In cases where couch grass seeds are found in the feed or bedding, I would suggest piling the manure until it is well heated rather than spreading it directly on the land. Pasturing has very little effect on killing couch grass.—A. Leitch, O.A.C., Guelph.

Cedar Block Foundation

IN your issue of Jan. 2, I saw an account of the dairy barn of Mr. Hennick, of Vanhook, Ill. As I am going to build a cow barn so high in price, I would like to know the length of the cedar blocks used in the construction of the basement.—T. C., Grenville Co., Ont.

The cedar blocks used to make the foundation of Mr. Hennick's dairy barn were cut 16 inches long. They were placed in lime mortar with one cut end set to the weather and the other to the inside of the cow barn. This gives the wall from a distance the appearance of being built of round cobble stones or boulders. It makes a good-looking wall, a very warm dry wall, and according to Mr. Hennick, a cheap one.

Seeding Alfalfa and Wheat

THIS last fall we seeded alfalfa along with our fall wheat, but it made a very poor stand. Would it be wise to re-seed in the spring on the land now? We have seeded red clover in this way but never alfalfa.

We would like, if possible, to follow wheat after corn. I have heard that in the corn belt of the United States wheat is frequently drilled in between the corn rows with a one-way drill, late in the season. Would this plan work here?—F. E. H., Halton County, Ont.

I think it would be quite wise to re-seed your alfalfa in the spring, on the last snow. This method works out extremely well with red clover or alsike, and should do equally well with alfalfa.

It is not common practice in Ontario to drill wheat between corn rows in the fall. I notice, however, that this method is quite successfully used in the corn growing sections of the United States, and I see no reason why it should not be successfully applied in this country, if the corn is entirely removed from the field by the latter part of September. There will be left, however, in each corn row a small strip of land which will not be seeded with wheat. This makes the field look rather ragged while the wheat crop is growing. It would certainly do no harm to attempt this method of seeding.—A. Leitch, Lecturer in Farm Management, O. A. C., Guelph.

Seeding Sweet Clover

I HAVE a five-acre field that I intend sowing with oats seeded down with sweet clover for after pasture. As there is no sweet clover grown in this part of the county, and no one knows anything about it, will you tell me if timothy can be sown with sweet clover; also, if I take off the oat crop without killing the clover for the next year?—J. H., Simcoe Co., Ont.

The usual method of seeding down to sweet clover is that proposed by our subscribers—along with some spring grain. There is no reason why timothy should not be seeded along with sweet clover just as it is with red clover. Much more clover

seed, however, must be used in the case of sweet clover than of red, the amount commonly recommended being 20 lbs. to the acre, although a fairly full stand will be secured with 15 lbs.

Last fall we visited Mr. G. A. Brodie, of Newmarket, one of the most extensive growers of sweet clover in Ontario. Mr. Brodie, we found, makes a practice of pasturing his sweet clover stands in the late summer after the grain crop has been removed, and where care is taken not to pasture too closely, no harm results. He showed us one field that had carried quite a stock for a while, and still showed sufficient strength to protect it through the winter. He had difficulty in drying out the sheaves of the

grain, owing to the great length of sweet clover in the butts.

Pasturing Spring Grain

I HAVE two fields that I would like to get into grass this coming spring. The grain I have been thinking of seeding one to clover along with the oats and the other I thought of sowing very heavy to grain and then turning the cows in for pasture. Would the cows not destroy the grass seed plants?—W. M., Perth Co., Ont.

An annual pasture of spring grains has been used for several years at Guelph, the land being seeded in each case to red clover. Mr. Leitch, the farm manager, assures us that, in all cases this method of seeding down will be a success, the tramping of the cows over the land seeming

to improve the stand rather than otherwise. Last spring on our own farm we seeded a small field near the barn for night pasture with a mixture of one and one-half bushels each of oats and barley per acre and seven pounds of red clover seed. The cows pastured that field all summer, being kept off only directly after rains when it was feared that their tramping might puddle the soil. The clover made an excellent growth, much better than it would have done had the field been cropped for grain and went into the winter in splendid condition. We see no reason why a field should not be cropped.—F. E. H.

Heavy soils, if well surface drained, will not pay for much under drainage.—J. H. Spry, B.S.A.

The "Ideal" Lock



"Ideal" Fence Prices

Freight Paid to Your Station

Below we give the freight-paid prices to any station in Old Ontario (except electric) on only a few of the many styles of "Ideal" Fence. The "Ideal" Catalogue and Freight Paid Price List—sent free on request, a postal will bring it to you—shows and describes fully, and gives prices, freight paid to your station on—

25 Styles Heavy "Ideal" Fence

Made throughout of full gauge No. 9, evenly galvanized Hard Steel Wire, from a 4-wire fence 38 inches high to a 15-wire, 57-inch fence. A style for every purpose.

12 Styles Medium Heavy "Ideal" Fence

Made with No. 9 gauge wire for top and bottom, all other wires No. 12 gauge.

2 Styles "Ideal" Poultry Fence—Made with No. 9 gauge wire for top and bottom, all other wires No. 13 gauge. All Size Farm and Stock Gates—with improved features found on "Ideal" gates only. **6 Styles "Ideal" Lawn Fence and Gates.** Brace Wire, Barb Wire Coiled Wire, Stretchers, Steel Posts, Diggers, etc.

Send today for "Ideal" catalog with Freight-Paid Prices

No. 7400 HORSE AND CATTLE FENCE

7-line wires, 40 inches high, stays 22 inches apart. Spacing 5, 6, 6, 7, 7, 8, 8. Made throughout of full gauge No. 9, evenly galvanized hard steel wire.

50c

No. 7480 HORSE AND CATTLE FENCE

7-line wires, 48 inches high, stays 22 inches apart. Spacing 5, 6, 7, 9, 10, 10. Made throughout of full gauge No. 9 evenly galvanized hard steel wire.

51c

No. 831 HOG FENCE

8-line wires, 31 inches high, stays 16 1/2 inches apart. Spacing 3, 3, 3, 4, 5, 6, 7. Made throughout of full gauge No. 9, evenly galvanized hard steel wire.

60c

No. 1048 GENERAL STOCK FENCE

10-line wires, 48 inches high, stays 16 1/2 inches apart. Spacing 3, 3, 3, 4, 4, 5, 6, 7, 8, 8. Made throughout of full gauge No. 9, evenly galvanized hard steel wire.

75c

No. 1150 GENERAL STOCK FENCE

11-line wires, 50 inches high, stays 13 inches apart. Made with top and bottom wires No. 9 gauge, all other wires No. 12. Price per rod

55c

25-lb. bundle No. 9 galvanized brace wire 22-lb. box (any size) galvanized fence staples

1.85

4-point galvanized barb wire per 80-rod spool

5.50

"Ideal" stock gate, 14 feet long x 61 inches high. Each

6.50

"Ideal" farm gate, (close mesh) 12 feet x 48 inches. Each

7.00

Send today for complete "Ideal" fence, gates, lawn fence and all supplies freight paid to any station in Ontario or New Ontario.

Quebec and Marine Provinces

We have opened a warehouse and office in Montreal to handle Eastern shipments and correspondence. Ask our Branch, 14 Place Royale, Montreal, Quebec, for "Ideal" prices, freight paid to any station in Canada east of Montreal.

OUR GUARANTEE

"Ideal" fence is guaranteed to be made exactly as represented, to be made as the best fence should be made and to give you THAT VALUE you expected to receive when ordering.

We have a large stock of all styles of "Ideal" fence on hand and will ship all orders the same day as received, while stock lasts.

The McGregor Banwell Fence Co., Limited Walkerville, Ont.

HORTICULTURE

The Food Controller and Fruit

VENTURE to state that the Food Controller will be the greatest single element in the distribution of the fruit crop of 1918. It is expected that we will have a moderate crop of apples in Canada next season. I am not looking for a big crop. Labor conditions are such that farmers are diverting their energies to other lines of agriculture, which are not so speculative as that of fruit production. Orchards which a few years ago were receiving every attention, are now neglected and deserted and the owners maintain that the labor situation is too acute and the profits from an orchard too speculative for them to take a chance and they are therefore giving their attention to the other parts of the farm and if they are able to make anything at all from the orchard, they are just that much ahead. This spirit has prevailed since the height broke out. Every spring the statement has gone out that there will be no market for fruit, and yet the price of fruit has steadily advanced until this year it has reached such a height that it has practically stopped consumption.

The Food Controller's policy is the substitution of fruit and vegetables for the more concentrated foods such as meat and flour and I believe that before next season's crop is harvested, the people will be educated to consider it a national duty to consume fruit and vegetables in preference to the exportable staples. If prices are moderate the consumption will be enormous and I believe that Canada could have consumed two or three times as many apples this year as they did. We have imported against a duty of 30 cents per bush, 374,414 bushels of apples from the United States from the 1st of April, 1917, until the 31st of January, this against 234,300 bushels for the same period last year. This fruit should all have been produced at home. The average householder in our cities and also in our country towns is not using apples; they are simply doing without them, not because they do not want them, but because the price has been prohibitive owing to shortage of supply. In 1918 the fruit growers must not expect the high prices that prevailed this year, but I believe that those who give their orchards the proper care and pack their fruit in strict accordance with the requirements of the Inspection and Sale Act, will be rewarded for the time and money invested—D. Johnson, Dominion Fruit Commissioner.

Best Varieties of Vegetables

OWING to the scarcity of seeds of many varieties of vegetables this year it will not always be possible to get those which are desired, hence the importance of ordering early in order to make sure of getting at least some of the best sorts. In the following list, based on tests made at the experimental farms and stations in Canada, several varieties of almost equal merit of some kinds of vegetables are suggested so that if it is not possible to get one it may be possible to get the other.

Beans—(Round Pod Wax) Round Pod Kidney Wax, Pencil Pod and Brittle Wax; (Flat Pod Wax), Wardwell Kidney Wax, early, and Hodson Wax; late; (Green Pod), Strickless Green Pod, and Early Red Valentine, early, and Refugee or 1000 or 1, late. Lima and Pole beans are not very satisfactory except where the season is long and warm. The bush varieties are of Lima are the most satisfactory. Scarlet Runner is the most reliable

Pole bean but Kentucky Wonder is one of the best in quality. Blue-Grain—Crosby, Eszling, Detroit Dark Red, and Early Model. Borcoco or Kale—Dwarf Green Curled Scotch.

Brussels sprouts—Improved Dwarf. The Dwarf varieties have been found more satisfactory than the tall ones.

Cabbage—Early Jersey Wakefield, Copenhagen Market, early; Succession, medium; and Danish Ballhead and Drumhead Savoy, late; and Red Dutch, red.

Caulliflower—Early Snowball and Early Dwarf Erfurt.

Carrot—Chautauque, Danvers Half Long, Early Scarlet Horn for extra early.

Celery—Golden Self Blanching (Paris Golden Yellow) early; Winter Queen (Evan's) Triumph, and Perfection Heartwell, late; White Plume for cool air parts.

Corn—(Extra early), Early Malcomb, Malloff, and Peep O'Day; (early), Gold Leaf (medium); Early Evergreen or Black Mexican; (late), Country Gentleman and Stowell's Evergreen; Squaw for cool parts.

Cucumber—Davis Perfect, White Spine and Chicago Pickling, Improved Egg Plant—New York Improved, Long Purple, and Black Beauty.

Lettuce—Grand Rapids and Black Seeded Simpson (early loose curled), Iceberg, Giant Crystal Head, Improved Hanson, Salamander, All Heart, and Crisp as leaf (head or cabbage).

Melons, Musk—(Nutmeg type), Long Island Beauty, Hackensack, and Montreal Market, (yellow fleshed); Emerald Gem, Hoodoo and Paul Ross. Melons, Water—Cole Early, Ice Cream, and Phinney early.

Onions—Yellow Globe Danvers and Early Red Wethersfield. Prize Taker especially for manufacturing. Early Flat Red and Australian Brown are good where the season is short. Dutch sets ensure a crop in a short season when, if grown from seed, the onions may not mature.

Parsley—Double Curled.

Parsnip—Hollow Crown of a good strain is the best. Intermediate is also good.

Pepper—Early Neopolitan of the large variety and French, Chill and Cardinal of the small ones.

Peas—(Extra early) Gregory Surprise; (early) Thor, Laxton, Grades, Nott Excelior, American Wonder, and Sutton Early Giant; (second early) Sutton Excelior and Premium Gems; (medium to late) McLean Advance, Helme and Stratagems; (all late sorts) Telephone, Champion of England and Quite Content.

Radish—Scarlet White Tipped Turnip, Rosy Gem, and White Icicles.

Salsify—Long White, Sandwich Islands.

Spinach—Victoria Thickleaved, Windsor.

Squash—Long White Bush, Summer Crookneck; late, Delicious, Hubbard.

Tomatoes—(Extra early) Alacrity, Sparks Earlians; (early and main crop) Bonny Best, Chalka Early Jewel, later good sorts are Matchless and Trophy (scarlet), and Livingstone Globe and Plantiff (purplish pink), Ignom for canning.

Potatoes—(Early) Irish Cobbler or Eureka Extra Early; (main crop) Green Mountain, Gold Coin, Wae MacGregor, Carman No. 1. Early Ohio is a good extra early pink sort, but is not very productive.

The Ontario Agricultural and Experimental Union conducted 283 tests with potatoes in 1917. Only two varieties were distributed, Extra Early Eureka's and Davies Warrior. The former had two per cent. more small potatoes, but the tubers of this variety, scored higher for maleness when cooked. The yield of bushels per acre was 167.8 and 147.8 respectively.

Pulled!—by One Man!



Prove It By 30 Days' Free Trial That's what you can do—on this great puller for 30 days! Hook it onto any stump, pull it loose, unladen. Then if you don't agree that the great KIRSTIN puller is the best of its kind, you can return it at once, unladen, and we will refund your money. If you ever dreamed possible, send it back! Trial cost nothing, but we give you a way way to save WASTE into PROFIT!

Pulls Stumps for 50' pulls in from 4 to 10 minutes. There's nothing with this wonderful device. The power KIRSTIN (No. 2) will stump Puller. People everywhere that want it. A. J. KRISTIN CANADA, Ltd., 253 KING ST. W. TORONTO, ONT. TOLSON on stump—give you power at back! With it, you can stump at labor cost!

4 Liberal Offers with the above—Addressed to Super-Master today. All described with pictures below. No money down. Free trial. Free shipping. Free return. All liberal offers. All liberal offers. All liberal offers. All liberal offers.

Kirstin ONE-MAN Stump Puller

BE YOUR OWN BLACK-SMITH

THE HALLIDAY COMPANY, LTD., HAMILTON FACTORY DISTRIBUTORS CANADA

UNDER DRAINAGE

BUCKING TRACTION DITCHER Particulars on application H. HUTCHINSON & SON, Mount Forest, Ont.

Gasoline and Kerosene Engines

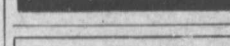
A. R. LUNDY 253 King St. W., Toronto, Ont.

Peck, Kerr & McElerry

415 Water St., Peterborough E. A. Peck F. D. Kerr V. J. McElerry

\$2000.00

to lend on Farms, First Second Mortgages. No advance charge. E. B. REYNOLDS, 77 Victoria St., Toronto.



Water tanks of the best quality. "Guaranteed" THE FARMER'S SILO CO., MARKHAM, ONTARIO.

BIG MONEY TRAPPING THIS YEAR Trap Musk rats

ship your RAW FURS to John Hallam Limited

WANTED All kinds of RAW FURS Highest Prices Paid.

The Wonderful Light-Running Gilson Thresher Goes like Sixty

Save Time—Money—Labor. Be independent of the gas. Keep your farm free of weeds.

Brantford Kerosene Engines 1 1/2 to 20 H.P. Stationary, Mounted, Traction

Illustration of a large mechanical engine or pump.

Some engines are the perfected product of years of study and experimentation with Internal Combustion Engines, and are a demonstrated success on thousands of farms throughout Canada.



WE hear about the medical ing men. In K... pital known as where... with new m... And with c... comonplaces, artificial lega... stocker by al... si store, like a shoes. Now a good thing if y... number of nat... ing the call... you may be a... with a hard m... weels. You swing a 17-b... ingly with w... sider is report... this stateme... to question.

But a hand h... ing as a hook o... handle. It is a... shake. What p... have in squeez... hand? He woul... brining a... thing if he end... And then con... of a non-concu... pretty girl and... into the case, y... hand may now... a badge of hon... removed (one h... handshake) int... ing the w... The handslap... universal gae... Here and there... amateur mathe... four... Holmes for ste... nature to its p... judge everyone... he wears, 'forget... new strap, m... mis-shapen too... all human natu... domes of their v... place great stre... whed... straightforwardly... fourth button o... carrying on a c... consider a dange... unsavory young... ed to apply thi... poste sex have... been numbered... But the handcl... elaborate syst... men if you han... with them. You... stinctively. The... a cold clammy h... an ed, has told y... plainly as his... the word "behav... stranger who sh... the hand and in... of his disenpaw... tonhole at the fa... suspicion. Hence... everybody is a... probability is th... scription to a fa... of the postage... Then there is th... usually indicate... difference to soc... empty head. Of... have acquired thi... in the last few y... become (over)w... shake anything fo... a fit of abstracti... the furmace and... the precense fol... with a wreathe... ing. If you want



On Handclaps

WE hear a great deal nowadays about the wonders achieved by medical scientists in remodeling men. In England we have an hospital known as "The Tin Nose Shop," where mutilated faces are furnished with new noses, ears and eyes. And with such marvels becoming commonplace, it is not strange that artificial legs and arms are being stocked by almost every department store, like so many gloves or gum shoes. Now an artificial arm is a good thing if you haven't the ordinary number of natural ones, but think not that it is a desirable acquisition. True you may be able to hold the reins with a hand made of springs and cog wheels. You may even be able to swing a 17-lb. hammer at arms' length with your new arm, as one soldier is reported to be doing, although this statement is, in my opinion, open to question.

But a hand has other uses than acting as a hook on which to hang a fork handle. It is necessary in a hand-shake. What pleasure would a friend have in squeezing your mechanical hand? He would always be afraid of breaking a plate, or a can or something if he endeavored to be cordial. And then consider the disadvantage of a non-conducting hand when a pretty girl and a summer moon enter into the case. No, though an artificial hand may now be usually regarded as a badge of honor, I do not think it would be wise to have a natural arm removed (one having the capacity for handclaps) just for the sake of proving the wonders of science.

The handclasp is probably the most universal gauge of character in vogue. Here and there one comes across amateur detectives who employ various adaptations from Sherlock Holmes for sleuthing chaste human nature to its proper lair. One will judge everyone by the shape of boot he wears, forgetting that one of the new straight lasts may often hide misshapen toes. Another will classify all human nature by the bulges on the domes of their victims. Another will place great stress on the action of eyes, whether they meet your's straightforwardly look you in the fourth button of your waistcoat while carrying on a conversation. This I consider a dangerous test, for many unsway young men who have attempted to apply this test to one of the opposite sex have at the next census been numbered with the benighted.

But the handclasp is different. No elaborate system is needed to classify men if you have once shaken hands with them. You classify them instinctively. The man who holds out a cold clammy hand that feels like an eel, has told you his character as plainly as if he wore on his forehead the word "beware." The smooth stranger who shakes you warmly by the hand and inserts the index finger of his disengaged hand in your buttonhole at the fair is likewise open to suspicion. Remember "A friend of everybody is a friend of nobody." The probability is that he wants your subscription to a farm paper, "at the price of the postage, only 93 cents."

Then there is the limp hand. This usually indicates either supreme indifference to social intercourse or an empty head. Of course some may have acquired this characteristic within the last few years, since coal has become scarce. They are afraid to shake anything for fear they might in a fit of abstraction, do the same with the furnace and thereby lose some of the precious fuel. I once shook hands with a wrestler when he was in training. If you want to experience the

sensation, place your hand between the bunter and the hay in a hay press. He didn't know how strong his handclasp was, but I can assure you it was the opposite of limp.

I like a good firm handclasp from a friend. I like him to trip my hand in welcome when I come to his house and I like him to shake hands heartily when he is inviting me in again on my leaving. It shows the sincerity of his handclasp usually gives him away.

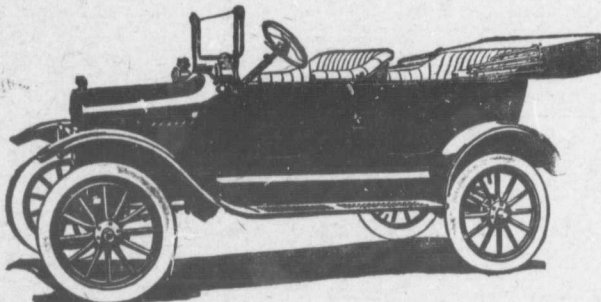
A man experiences many kinds of handclaps in his journey through this "vale of tears," but the best of all is the handclasp of his sweetheart. Do you remember how you used to thrill when your hands touched? And then one evening you summoned up enough courage to hold hers. But do you

ever hold her hand now, you old benedict? It would help some in these strenuous days. Both you and your helpmate would derive strength for the cares of life, because you would feel you were tackling the tasks together, hand in hand you see. Yes, a little "hand holding" among staid married couples might often lead to better understanding. Dad would be able to notice the welts on mother's hands and so would appreciate more roses. We would have more labor saving devices in the kitchen and a gasoline engine would run the washing machine.

Sam Ray

The Nova Scotia Department of Agriculture has issued three bulletins on food production which are available to Nova Scotia farmers on application. The first one deals with wheat growing in Nova Scotia, the second with bean growing and the title of the third one is, "Greater labor efficiency on the Farms of Nova Scotia by Using Digger Implements." In this bulletin an announcement is made that the government of Nova Scotia will pay a bonus of 25 per cent. of the cost of two furrow plows, bought in the province of Nova Scotia between now and the first day of May.

I would speak a word as to the merits of your paper, as I take several. I like Farm and Dairy best of any I have, and would not be without it—F. S. Sharp, Kings Co., N. B.



A Ford Car Takes the Place of all These Things

WHEN you own a Ford you can do away with many articles that are a source of continuous expense to the man who still drives a horse. For instance, not only your driving-horse and buggy, but the single harness, blankets, whips, currycombs, brushes, horse-shoes, pitch-forks, feed-bins, etc.

In their place you have a speedy, dependable, dignified, roomy Ford Car—complete in itself. It is vastly superior to the narrow, cramped buggy that travels so slowly. And when a Ford is standing idle it does not eat three meals a day, and it requires no "looking after."

A Ford will save you time, trouble, and money. It is the utility car for the busy farmer and his family.



Ford
THE UNIVERSAL CAR

- Runabout - \$575
- Touring - \$595
- Coupe - \$770
- Sedan - \$970
- One-Ton Truck \$750

F. O. B. FORD, ONT.

Ford Motor Company of Canada, Limited
Ford, Ontario

More Work for Less Feed

Thirty horse owners give their horses Pratts Animal Regulator with the feed, and affect a saving of 10 to 25 per cent.

Pratts ANIMAL REGULATOR

Improves digestion, keeps the blood cool, bowels regular, coat smooth and glossy. Makes your animals healthy, vigorous and productive.

At your dealer's in pigs, 25-lb. pails and 100-lb. bags.

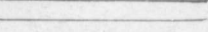
Money Back if Not Satisfied. Write for Free Booklet.



PRATT FOOD CO. OF CAN. Limited, 651 Clarendon Toronto

HARNESS and HORSE GOODS

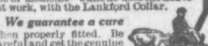
Lowest prices, every style guaranteed. Write for catalogue. We sell direct. The HALLIDAY COMPANY Limited, 1400 BATHURST ST. HAMILTON, ONT. CANADA



The Lankford HUMAN HORSE COLLAR

cures your horse while he works. Galls and sore shoulders reduce the efficiency of your horse—ap his strength—down his spirit. Cure him without the use of medicine—while he does his heaviest work, with the Lankford Collar.

We guarantee a cure when properly fitted. The careful and art the genuine Lankford Collar—made of the best white duck, trimmed in extra heavy leather and stuffed with clean and downy curled cotton, imbedded, which will not pack or harden. Also comes in special heavy waterproof duck.

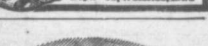


The Lankford Collar may shape itself—may pull on or expand—may never set and please. Write for copy. Lines straightened. Prices \$1.00 and up. In Canada \$1.50 and up. Use four dollars.

Over 12,000,000 used. Lankford Collars prevent galls and sore shoulders, as well as cure them. Get one today—use for six months. Best Buy for \$1.00 Lankford.

Send for a copy of our literature on Lankford Collars to

Powers Mfg. Co., Dept. 56, Waterloo, Iowa



DEPARTMENT OF AGRICULTURE

ADD QUALITY TO EVERY POUND OF BUTTER

Windsor Dairy Salt

Made by THE CANADIAN SALT CO., LIMITED



Protect Your Crops Next Season

Prepare Now for the Great Insect Offensive

Entomological Branch, Ottawa

THROUGHOUT the country there was a splendid response during 1912 to the call for increased agricultural production. Larger crops were raised on the farms, and city dwellers, by the cultivation of gardens and vegetable lots, contributed greatly to the success of Canada's efforts to relieve the world-wide food supplies than ever is required next year, for field crops are not only required to meet immediate human needs, but increased production of hoes, dairy products, and beef are dependent upon such crops.

The production of maximum crop demands constant watchfulness and effort on the part of the farmer, fruit grower, and vacant lot cultivator, in order that such crops may be protected from the numerous pests that attack them. We repeat: "Crop protection means crop production." Insect pests destroy annually from 10 to 25 per cent. of all crops grown. The total loss to the country is enormous; if we express the aggregate loss inflicted annually by insect pests to the field crops of Canada in terms of wheat we find that the total loss is sufficient to feed the population of the country for one year. Much of that loss can be prevented. At the present time it is incumbent upon us to take every means to prevent it. Insects can be as effective as enemy submarines in destroying food supplies. Like submarines, they are insidious in their operations. They must be sought out and destroyed.

Order Supplies Now

Now is the time to make preparations for next year's offensive. To be prepared is half the battle. Lack of foresight and the preparation means disappointment and the greater cost of production and the greater need of more crops make crop protection all the more necessary. Utilize the present quiet season to make plans for next year's campaign. According to the crops that are grown and the insects that occur in your district make preparations now for preventing their ravages next season. Owing to the sudden demand during the period when insects were active last summer for insecticides such as lead arsenate and paris green, a serious shortage occurred in many places, with consequent higher prices. This can be avoided if growers will obtain their requirements before spring.

Insecticides are the growers' ammunition, ample supplies of which are necessary to a successful offensive. Fruit growers should now determine their requirements and take steps to meet them. Growers of potatoes and other field crops subject to insect attack should obtain supplies of the standard insecticides to meet these needs: arsenicals for insects such as grasshoppers, potato beetles, cutworms and other caterpillars that devour the foliage; contact insecticides such as whale-oil soap and nicotine emulsions for such insects as plant lice or aphids. All spraying machinery should be thoroughly overhauled, cleaned, and oiled in readiness for use when required in the spring, as the spring is a busy time for the grower. Such timely preparation will mean not only the saving of time—an important matter when labor is scarce—but it will also mean the saving of crops, for a few days' delay in applying preventive or control measures will frequently result in serious losses from insect pests.

Clean Up Rubbish.

When it is possible rubbish and trash of all kinds should be cleaned up and burnt. A clean farm, orchard, or garden means fewer insect pests. Weedy fences and fields and accumu-

lations of rubbish provide hiding places for these crop destroyers.

It will be advisable to watch seeds of all kinds that are stored under cover, as these are subject to the attacks of many insects, such as weevils, etc. Seed peas and beans should receive special attention, and if they are infested they should be fumigated with carbon bisulphide.

In the spring special attention should be paid to the careful preparation of the land and time of seeding. Such special care will result in the securing of a more vigorous growth, and vigorous plants can more successfully withstand insect attacks.

Certain insects are more readily controlled during the winter months. In the provinces of Nova Scotia and New Brunswick fruit-growers should make every effort to collect the winter webs of the brown-tail moth; the law requires owners of properties infested with this insect to adopt control measures. Throughout eastern Canada there is at the present time a widespread and white-marked tussock moth, which we expect to be serious next year. Fruit-growers and owners of shade trees should now destroy as many as possible of the cones which lack such stems during the coming winter and early spring before the buds burst.

Farmers, fruit-growers, and others are urgently requested to make the fullest use of the office of the Entomological Branch. Enquiries or calls for assistance addressed to the Dominion Entomologist, Department of Agriculture, Ottawa, to whom all communications may be sent free of cost, or to any of the officers in charge of our field laboratories in the various provinces, will be given immediate attention and all the help possible will be rendered to secure the protection of crops. It is the desire of all these officers to assist to the fullest extent of their powers. Let them help you to protect your crops and thus increase our food supplies which are so vitally essential at the present time.

28 Years With Tile Drains

WHEN I left this institution 28 years ago, I was tired with enthusiasm for tile drainage," remarked Mr. Nelson Monteth, of Perth County, speaking at the last meeting of the Experimental Union at Guelph. "In the years that followed, I put in 25,000 feet of tile on the home farm with my own hands. I remember when I was doing my tiling we got four-inch tile for \$12; five-inch for \$18, and three-inch for \$8 per thousand.

"We have had our investments returned to us many times over. Spring operations have been easier. The land is easier to work. The crops have been greater because of the land being well drained."

A couple of points mentioned by Mr. Monteth are worthy of note. He has found that three feet is too great a depth for drains on heavy clay soils. The land is so retentive of moisture that excess water does not get the tiles and the land does not get friable. His second point was, "If you ever have occasion to lift tile that have been in the ground for some years, use again immediately, as they will not withstand exposure to air or frost."

The method of curing has much to do with the strength of cement field tile. When cured in a steam kiln the tile are usually good. If cured by sprinkling, a large per cent. may be poor.—J. H. Spry, B.S.A.

PLANT STEEL, BRIGGS' SELECTED SEEDS

For Sale by reliable dealers everywhere. Send for Catalog

STEEL BRIGGS, SEED CO., LIMITED

CANADA'S GREATEST SEED HOUSE

TORONTO

HAMILTON WINDYBEE

IMPERIAL TREES

True to name and sure to please. Send for our low priced catalogue.

THE IMPERIAL NURSERIES

Ridgeville Ontario

HIGH GRADE SEED

O.A.C. No. 72 oats, registered seed, germ. test 93 per cent., \$2 per bushel. Improved O.A.C. No. 72 oats, germ. test, 100 per cent., \$1.60 per bushel. Registered O.A.C. No. 21 barley, germ. test, 97 per cent., \$2.50 per bushel. Improved O.A.C. No. 21 barley, germ. test, 98 per cent., \$2.00 per bushel. All true to variety and free from smut and noxious weed seeds. Small white field beans, extra quality, \$10 per bushel. Samples on request. Sacks free. Prices F.O.B., Alliston, C. P. R. or G. T. R.

RUTHVEN BROTHERS

R. R. No. 2 Alliston, Ont.

ROOFING FACTORY PRICES

WIRE-ROOFED, 69-cent. business buildings, 80-cent. houses, 90-cent. barns, 100-cent. sheds, 110-cent. silos, 120-cent. towers, 130-cent. chimneys, 140-cent. cupolas, 150-cent. towers, 160-cent. towers, 170-cent. towers, 180-cent. towers, 190-cent. towers, 200-cent. towers.

THE HALLIDAY COMPANY, HAMILTON, CANADA

345 Acre Farm \$7500

With Stock, Tools & Crops

Wire-fenced, 69-cent. business buildings, 80-cent. houses, 90-cent. barns, 100-cent. sheds, 110-cent. silos, 120-cent. towers, 130-cent. chimneys, 140-cent. cupolas, 150-cent. towers, 160-cent. towers, 170-cent. towers, 180-cent. towers, 190-cent. towers, 200-cent. towers.

E. A. STROUT FARM AGENCY DEPT. 9, 150 Nassau St., New York, N.Y.

BOOKS

Write for our catalogue of farm books. It is sent free of charge. Ask us for information on any book. We will supply you with a book free of charge.

BOOK DEPT., FARM AND DAIRY PETERSBURG, ONT.

FEEDING

A New

We have a new method of producing milk. It is a fairer and more economical method than any other. It is a method that has been tried for years in the best dairies of the world. It is a method that has been tried for years in the best dairies of the world. It is a method that has been tried for years in the best dairies of the world. It is a method that has been tried for years in the best dairies of the world.

FEEDING

18 months

We have a new method of producing milk. It is a fairer and more economical method than any other. It is a method that has been tried for years in the best dairies of the world. It is a method that has been tried for years in the best dairies of the world. It is a method that has been tried for years in the best dairies of the world. It is a method that has been tried for years in the best dairies of the world.

FEEDING

We live in a family. We have a new method of producing milk. It is a fairer and more economical method than any other. It is a method that has been tried for years in the best dairies of the world. It is a method that has been tried for years in the best dairies of the world. It is a method that has been tried for years in the best dairies of the world. It is a method that has been tried for years in the best dairies of the world.

FEEDERS CORNER

A New Brunswick Ration

Wh have started to supply the city milk trade and have to ship a stated amount of milk. How can I make up a suitable ration for the Holstein, Friesian and Jersey cows? The ration should be composed of the following: timothy, bran, middlings and cottonseed meal. My hay ordinary meadow hay should have feeds be proportioned for best results—S. J. McDonald, N. B.

A ration for milch cows composed of materials mentioned which should be fairly satisfactory might be composed of hay, 15 pounds daily; turnips, 25 to 30 pounds daily; and a meal mixture composed of wheat bran 4 parts; wheat middlings, two parts, and cottonseed meal, 2 parts; this mixture fed at the rate of one pound; for every three and a half to four pounds of milk produced, varying, however, with the individual requirements per cow. In feeding turnips, care should be taken to give these immediately after milking in order to prevent turnip flavors in the milk. However, if it is desired to pulp the turnips and mix with the grain in feeding, care should be taken to feed at least one-half hour before milking.—E. S. A.

Feeding the Herd Bull

We have a registered Holstein bull 18 months old and weighing 11 lbs. or thereabouts. How should we feed him? We have lots of alfalfa, but we do not think that this is not good for the bull. We have also good mixed hay, but will have to buy all grain. Is it necessary to feed grain at all?—Jim, Frontenac Co., Ont.

An excellent ration for an eighteen month Holstein herd bull might be as follows: hay, 12 pounds; ensilage, 20 pounds; roots, 20 pounds; and a grain ration composed of bran, 3 parts; oat chop or oat and barley chop 2 parts; linseed oilcake, 1 part; fed at the rate of 3 to 5 pounds daily, depending on the condition of the animal. It is usually unwise to feed large quantities of corn ensilage to the exclusion of roots, hay and grain, and especially so if the ensilage was made from comparatively ripe corn. I believe it would be wise to purchase and feed grain even at present prices. The size and type of this bull depends largely on how he is fed during the next 12 months. In addition to this, the vigor and thrift of his calves depends very largely on the way in which he is fed and his general condition at time of service. Such grains as bran, oats and oilcake are unexcelled in the feeding of a herd sire when in use.—E. S. A.

Feeding Family Jerseys

We live in Iowa but keep two Jersey cows, nearly to supply milk for the family and partly for sale. We buy all our feed. Clover hay is \$22 a ton, and other feeds are about the same price. One of these cows is now fresh and giving 25 lbs. of milk a day. Would you suggest a better ration for this cow, with clover hay as the only roughage? Would you suggest a ration for the other cow that is nearly dry?—E. F. Pendergo Co., Ont.

The selection of any grains or mill feeds for milch cows is at the present time governed largely by the available supply. There is much less room for choice than in normal years. Probably of feeds available, wheat bran, crushed oats and oilcake could be obtained with least difficulty, although the substitution of these for other feeds containing the digestible nutrients in cheaper form might be possible. A ration composed of clover hay 15 lbs., clean oat straw 5 lbs., wheat bran 4 lbs., crushed oats 2 lbs., and oilcake 2 lbs., is about perfectly balanced for a cow producing 25 lbs. of milk daily, presumably testing well over 4 per cent. of fat. It is possible that your correspondent may substitute for the oats some foods such as Schumaker Feed or some other compounded dairy meal. If it could be obtained more cheaply,

It is also possible that either gluten feed or cottonseed meal or a high grade of distillers' grains might be obtained in place of the oilcake. For the cow which is nearly dry a ration composed largely of clover hay and wheat bran, the amount of the latter depending on the condition of the cow and the proximity to calving, would be most economical.—E. S. A.

Substitutes for Coarse Grains

We have been feeding our cows right to left of clover hay daily and all the oat straw they will eat. In addition they have gotten a few roots, just in order to keep their digestive right and oat and barley chop with a little bran. They are making fine milk and but they have been advancing so rapidly that I am wondering if I can afford to feed these coarse grains to dairy cows. What feeds should I buy to replace them? The cows are good, and I have Holsteins and Durhams and fairly good milkers.—E. W. C., Wellington Co., Ont.

At the present prices of oats and barley it is doubtful if these can be economically fed to milch cows except in very small quantities. Wheat bran, even at present prices, contains nearly as much total digestible nutrients as oats and barley, contains 30 per cent. more digestible protein, contains twice as much manurial value, and at present prices is only half as expensive as oats or barley, either for total digestible nutrients or digestible protein; hence it would certainly pay to sell these grains and replace them if available with such meals as wheat bran, cotton bran, dried distillers' grains, cottonseed or oilcake meal. The present ration does not contain sufficient protein for milch cows. A ration which I would suggest may be composed of two parts wheat bran, two parts corn bran, two parts dried distillers' grains or cottonseed meal and two parts oats and barley chop. This grain ration might be profitably fed at the rate of one pound for every four pounds of milk produced, this, however, depending upon the individual production and condition of each cow.—E. S. A.

The Potato Situation

By D. Johnson, Dominion Fruit Commissioner.

THE FRUIT AND VEGETABLES committee appointed by the Food Controller has studied the potato situation. An investigation into the source of supply leads us to believe that there is a large surplus in Canada. A like condition exists in the United States, but owing to transportation difficulties, most of these potatoes are not directly available to the consuming public. Take, for instance, the case of Prince Edward Island, where we have a surplus of over 2,000,000 bushels. The Food Controller made a special effort to move these potatoes into consumption. Mr. Baxter of our staff and a number of others went down to the island and worked out a system, which had it not been for abnormal weather conditions and breakdowns in the railway organization, would have insured a plentiful supply of potatoes to central Canada. Unfortunately the Prince Edward Island railway was unable to meet the demands made upon it and only a limited quantity of potatoes were moved, and it is now feared that many of these potatoes will not reach the market but will have to be consumed by live stock upon the farms. It is unfortunate that the transportation facilities of this fertile island are so inadequate. Large quantities of food are produced there and the Food Controller has urged that the government take immediate action to improve the transportation service there in order that these foods may be available in the larger consuming centers. The car shortage has also been very acute in New Brunswick, it being almost impossible for shippers to secure any kind of cars for the movement of potatoes. The Committee, however, was able through Mr. Spencer and Mr. McIntosh to procure

As You Plant, So will You Pick

Good crops are not accident. Big, heavy tomatoes—Crisp juicy radishes—Large, firm cabbages—come only from true, vigorous and reliable seeds. Doubtful seeds are dear at any price. This year, when your country needs the largest crop yet sown, plant only perfect production, tested grains of highest germination and vigorous growth, particularly adapted for a big yield in Canada's climate.

SEND TO-DAY FOR BIG NEW CATALOGUE

Our new 1918 catalogue is free for the asking. It contains a complete variety of Vegetable and Flower seeds, Agriculture and Fodder plants, Seed Grain. In fact, everything for the Farm and Garden.

For 40 years we have furnished seeds of the highest quality. Thousands of customers attest the fact. Fill in the coupon now and send it today.

KENNETH McDONALD & SONS, Limited
MARKET SQUARE, OTTAWA, CAN.



McDonald's
TESTED SEEDS

K. McDONALD
8 8088, Limited
61 Market St., Ottawa

Please send me your new 1918 Seed Catalogue.

Name _____
Address _____

DICKINSON'S
PINE TREE BRAND SEEDS
Timothy, Clover, Alfalfa and Other Field Seeds
If Your Local Dealer Cannot Furnish This Brand
WRITE
THE ALBERT DICKINSON CO.
MINNEAPOLIS CHICAGO

HARDY ALFALFA SEED
GRIMM ALFALFA SEED GROWN IN ALBERTA
The hardest kind alfalfa. Practically no danger of winter killing with this seed. Guaranteed pure Grimm. Write for prices and samples
CANADA LAND & IRRIGATION CO., Limited
SUFFIELD, ALTA.
W. A. MCGREGOR Superintendent of Farms

APPLE TREES
If you intend planting Apple Trees or any Nursery Stock this spring, be particular as to the kind you get, and be sure they are grown right, are healthy and clean, and backed by a reliable, dependable company.
Plant E. D. Smith's Trees
They cost no more than inferior, poorly-grown trees, and they are all inspected by Government Inspectors.
If you are unfamiliar with the best varieties for your section, we will be glad to assist you in your selection, and such assistance places no one under any obligation to purchase. We have nearly 800 acres stock of the following selected and inspected trees:
APPLE, PLUM, PEAR, CHERRY, QUINCE, PEACH, APRICOT, SMALL FRUITS, GRAPE VINES, ORNAMENTAL TREES, SHRUBS, CLIMBING VINES, HERBACEOUS PERENNIAL ROOTS, ETC.
Catalogues and prices on application.
E. D. SMITH & SON, Winona, Ont. NURSERYMAN, ETC.
Established 1882.

SOW SIMMERS' SEEDS
Established 1886
Our handsome Spring Catalogue now ready. A copy will be mailed free on request.
J. A. SIMMERS
Limited
Bulbs, SEEDS, Plants
Toronto, Ont.



"There was never a time when the benefits of Life Insurance meant so much to the home-makers of the country as they do to-day. In this crisis, when the future is uncertain, it is the duty of every father to see to it that the home he is establishing for his family is made secure."

—PETER MCARTHUR.

What Life Insurance Means to Canadians

"A FRIEND in need is a friend indeed." Life Insurance has proven a friend to the Canadian people passing through the dark and anxious days of the war. The Canadian people have shown their appreciation.

During the past year new insurances to the amount of \$20,124,563 were placed on the books of the Mutual Life—an increase of thirty per cent. over the previous year.

The Savings Banks have never before held such heavy deposits. This makes Life Insurance possible to many who previously thought they could not afford to buy.

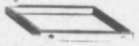
Many people are putting to good use their share of the immense amount of money in Canada to-day available for investment—by their safe investing in life insurance, knowing it is a "sure thing." They feel that, as Peter McArthur says—

"In this crisis, when the future is uncertain, the home should be made secure."

Write for booklet entitled "Ideal Policies."

The Mutual Life Assurance Company of Canada Waterloo, Ontario

WELDED STEEL SAP PANS



Made of heavy sheet steel—finished around top with heavy angle steel, strong and durable. All strips welded so it cannot leak—NO SOLDER TO MELT.

Depth.	Width.	Length.	Capacity.	Price.
6"	2 ft.	5 ft.	30 gals.	\$10.00
6"	2½ ft.	7 ft.	55 gals.	\$12.00
8"	2½ ft.	7 ft.	75 gals.	\$15.00

This will enable you to work your small bush at a small expense, and prices of syrup and sugar are very high.

Send cash with order, and we will ship promptly.

THE STEEL TROUGH & MACHINE COMPANY, Limited
TWEED, ONTARIO

CREAM WANTED

We supply cans. We pay all express charges. We remit daily. We guarantee highest market prices. For prompt service ship your cream to us. A card will bring you cans.

MUTUAL DAIRY AND CREAMERY COMPANY

N. Yankoo & Co., TORONTO, ONT.
743 KING STREET WEST

130-Egg Incubator and Brooder for \$15.75

If ordered together we send both machines for only \$15.75 and we pay all freight and duty charges to any R. R. station in Canada. **BREEDER AND DUTY PAID**
Sears Roebuck & Co. has the best incubator and brooder in the world. Orders shipped from nearest warehouse to your R. R. station. Hot water, double walls, dead-air space between, double glass doors, copper tanks and boiler, self-regulating. Sterilizer under egg tray. Especially designed to Canadian climate. Incubator and Brooder.

Incubator and Brooder. **WISCONSIN INCUBATOR CO., Box 222, Racine, Wis., U. S. A.**

Deal with Farm and Dairy Advertisers

ample cars for the movement from that province, and while the price of potatoes has remained high in our consuming markets, this has been due to the strong demand in New York and Boston. The question may arise as to why shipments are going forward to these centers, but it is entirely a matter of transportation, the United States railway facilities being ever poorer than our own, making it exceedingly difficult for them to move potatoes from the producing to the consuming points, with the result that a keen demand has been created for potatoes wherever cars are available.

A good deal of attention was also given to the question of setting a maximum price on potatoes. This was discussed from every possible angle. Delegates waited upon the Food Controller on various occasions and the wholesale and retail trade were consulted. It was felt that for this year, however, it would be better not to interfere with the market. Producers were obtaining as it might seriously stop production. It was made clear to all concerned that speculation would not be allowed, and the result is that the farmers are obtaining by far the greater proportion of the price that the consumer is paying.

The grading of potatoes was also discussed and a strong recommendation was made to the Food Controller that these should be established for the purpose of developing confidence between buyer and seller and also to encourage international trade between Canada and the United States. It was pointed out by some that Northern grown potatoes from Canada, if properly graded, would be in great demand for seed purposes in the United States. It is hoped that some action in regard to grades will be taken in the very near future.

Cholera Controlled in Indiana

URING the investigation recently carried on in the United States by a committee from the Canadian Swine Breeders' Association for the purpose of studying the efficacy of the hog-cholera treatment, Boone county, the leading county in the State, was visited. Two farmers were interviewed. It was learned that the farms average about 100 acres, and that each farmer keeps about six brood sows. The general practice is to have all sows farrow in the spring, while about half of them are bred back to litter again in the fall. This works out in the neighborhood of three litters in two years per sow.

Joseph Becker, a farmer who buys and feeds extensively, spoke favorably of the double treatment (serum and virus), and said that without it as an insurance he would have to double on his money one year for fear of losing it all the next if his pigs are not immune when he brings them home, they are double treated and kept by themselves until danger from any "breaks" is past.

J. W. Brendel, a prominent breeder, endorsed the double treatment. He stated that for a period of thirty years prior to the advent of the double treatment his loss would be as high as 30 per cent., but for the last six years his loss would not exceed one per cent. "Everyone does not vaccinate in this county," Mr. Brendel said, "but the immune herd act as a buffer, checking the spread of the scourge and thus preventing heavy loss."

When breeding pigs can be rendered immune there is greater opportunity to raise the standard of quality, because the stock is not periodically destroyed. Another advantage in breeding is that when the veterinarian visits the farm to inspect or treat hogs, he often points out necessary changes in sanitation and consciences that benefit the farmer and

render the industry more profitable for him.

The sentiment or belief in Boone county is that immunized hogs are not carriers of disease. At auction sales those who can make the statement in their catalogues that the hogs to be sold are vaccinated. This helps rather than injures the sale, and many farmers with non-immune herds are buying. Mr. Brendel himself did not vaccinate his young stock in 1911, and he considered that he lost \$15 per head at his fall sale, because he was not able to guarantee his young herds immune.

During 1911 the State of Indiana, through the State Veterinarian, Dr. Northrop, collected 55,000 shots in the stockyards where being offered for sale, and sent them back to the country to be fed. They were all double treated, dipped and shipped in disinfected cars to farmers who would take them to sows. The loss in these double treated hogs handled was less than one per cent., and this from all causes.

In the State of Iowa the Iowa Farms were visited. Pure-bred Holstein cattle and Berkshire swine have been developed to a remarkable standard of excellence at Iowa Farms. The herd of spring about \$90 in number, went out to be immunized, and the committee agreed that they never saw a more thrifty or healthy looking bunch of pigs anywhere. In the neighborhood of 100 sows are farrowed each year, and all breeding stock sent out is guaranteed "cholera-immunized." They are shipped to practically all States of the Union. In the neighborhood of 100 sows are farrowed each year, and all breeding stock sent out is guaranteed "cholera-immunized." They are shipped to practically all States of the Union. In the neighborhood of 100 sows are farrowed each year, and all breeding stock sent out is guaranteed "cholera-immunized." They are shipped to practically all States of the Union.

"Six years ago," mentioned my manager that unless some protection against hog cholera could be found to cease breeding swine. After investigation at our State College and at Washington, we became convinced that the double treatment was trustworthy, and we inoculated \$40,000 worth of hogs with serum and virus. We have had no outbreaks of the disease and none of our customers have suffered."

Conserving Fertility by Dairying

DAIRY farming takes but little from the soil. Wheat at \$1.00 per bushel, the normal price, is worth \$53.25 per ton, and it carries with it elements of fertility worth \$9.59 per ton. This value is calculated on a basis of 20c per pound nitrogen and 6c per pound potash. A ton of mill at \$1.50 per cwt. is worth \$30.00 per ton, and the elements of fertility are only worth \$2.56 per ton, calculated on the same basis, but the manure put back on the soil will more than offset the \$2.56. In the older parts of this country and in the other European countries where the land has become depleted in fertility by continued grain growing, the farmers who have engaged in dairying have brought farms back to their former state of fertility.

This has been done not only by applying the manure on the soil, but also by growing luxuriant fodder crops. In Ontario and the Eastern States these crops comprise chiefly the clovers and corn. In some parts of Alberta these crops have not as yet been grown successfully. The one hope of profitable dairying in the future in this country is in the growing of some kind or kinds of fodder crops, preferably of the legumes, such as clovers and peas. These next season—S. G. Carlyle, Supt. Alta. Demonstration Farms.

Dairymen may be assured of a market for all their dairy products because of the world-wide shortage of dairy cattle.—Prof. H. H. Dean.

F A
H. Percy

No
T O
any
blades
years
America,
are taken
of two
prophetic
sant who
only good
fly would
back of
the wool
com fit for
to beautiful
of the ago
nit

Looking
not admit
rival. And
have its end.
told of the
should come
the reign of
The Turk
calculator
from A.B.;
year 1355
we drove
by the Brit
the capture
of the
the pause for
Now, while
the hundred
day as imm
the captiv
and discov
era is agrie
I remember
farming";
remember
sincerely a
thought was
"Line makes
son." Thrif
myself a gr
pled Gillett
trees, and
Half a cent
abandoned
to-day the
and ere lon
vide all its
What is do
a genius un
remember
yourself by
you will believe
With only
plend the f
that will a f
it could nev
the mercha
the manure
of the whole
fertilizer
science sought
saddle, and
legume upbri

Consider
for new
to this the
mowers, bind
means least
were provided
ties to help
Now comes
similar power
cultural water
we see the
and at a pri
farmer's need
In the reali
that the peo
in North
have entred
in soft sa
America and
cooperation
and fruit prod
movement
in the futu
ment of prod
summer come
to food is bou
gress of the
of civilization
New and fair
contribution
those who prof

FARM CHATS
H. Percy Blanchard, Hants Co., N.S.

Novus Ords Seclorum

To any small boy in the United States, this later motto which appears on the Great Seal of America, would be plain. The words are taken from a famous Roman poet of two thousand years ago. In his prophetic eye appeared a day far distant when evil would cease; when only good and happiness and prosperity would prevail; when even on the banks of the quiet shoo would the wolf come red and blue and purple, but for the spinner's hand to weave into beautiful raiment. A "new order of the ages" is the translation of our title.

Looking back into history, we cannot admit that such a day has yet arrived. And yet every period must have its end. The Prophet Daniel was told of the blossoming of those who should come to the 1260th year; when the reign of the Desolator should end. The Turks keep their Mohammedan calendar from the Hegira, as we do from A.D.; and the end of the Hegira year 1335 was last November. When we dovetail this fact with the entry by the British into Palestine, and now the capture of Jerusalem, it gives us pause for thought.

Now, while there are year dates by the hundred that note these present days as momentous, there are conditions which in the line of invention and discovery tend to point to a new era in agriculture.

I remember the time when "book farming" was a thing to scoff at. I remember when time was considered merely a useless substance; the thought was couched in the motto: "Time makes a rich father but a poor son." Thirty years ago, I appraised myself a great discoverer when I applied Gillett's Lye solvent to apple trees, and cleaned off E's bark-house. Half a century ago, Nova Scotia abandoned wheat because of disease. To-day the wheat yield is increasing; and ere long this Province may provide all its own bread.

What is doing these things? When a genius once announced that he had discovered perpetual motion: "Wait yourself by your hoist-ropes, and I will believe you"; was the reply. With only the manure product to replenish the farm, it seemed fantastic that while a farm might deteriorate, it could never advance. Then came the commercial fertilizers to boost the manure pile. That was not all. The whole atmosphere aloft was a vast fertilizer fountain. Despoiled science sought out the modest clover sodde, and so came the green legume upbuilder.

Consider then the various sprays for insect and disease enemies. Add to this the gang plows, disc harrows, mowers, binders, threshers, and by no means least the gasoline engine. Here were provided a hundred iron muscles to help the farmer's single arm. Now comes the Hydro-electric, and similar power wherever the river or tidal waters can be harnessed. Finally, we see the little tractor of a shoe and at a price to meet the average farmer's needs.

In the realm of politics we can see that the people are coming to their own. In North Dakota the farmers have ousted the politician from his soft easy chair. In the West of America and our own Canadian West, cooperation among the grain growers and fruit producers is forming a commonwealth within the state, a parliament of producers. When the consumer comes to realize that his best good is bound up in the highest progress of the producer, the vampires of civilization will begin to disappear. New and fairer ideas of taxation as a contribution to the community from those who profit by the community,

is in the air, and some day will come, surely at the beginning of this new year of 1918 we can look forward with hope and confidence, and feel with the poet of old, that "a new order of the ages" is dawning, to shine forth unto a brighter and a better day.

Tractor Experience

"We have 225 acres in our farm, all workable, and last year we had 110 acres in corn," states Roy B. Potter of Essex Co., Ont. "On this farm we have found use for a tractor, a 6-12 machine weighing 2600 pounds and costing \$385.

"We started to use this tractor for the first time last spring. It pulled three 12 bottom plows on my farm, but the company does not recommend such a heavy-draft. It will handle two furrows anywhere. With it I plowed 45 acres last spring, then went on with a big disk and the harrows behind the disk. I do not know how we would have gotten that 45 acres in crop without the tractor. At harvest time we hitched the tractor to an eight-foot blinder and it did great work, cut the corners as nice as a team could have done."

The Best Book
on
Dairy Farming

Perhaps You Have it in Your Library

If so its title will be

"DAIRY FARMING," Eckles & Warren

After a close study of the great number of dairy publications that are available, our Book Department feels justified in recommending this book as the most comprehensive of its kind ever written. The book is only recently published and covers practically every phase of dairy work—the balancing of rations, feeding crops for heavy production, the best feeds to use when prices are high—crops to grow, etc. If you want a book that you wouldn't sell for double the price later, order one and study it this winter.

The book sells for \$1.50 and can be secured direct from our

BOOK DEPARTMENT
FARM AND DAIRY Peterboro, Ont.



The Greatest Help a Farmer Ever Had

This is the book that over 100,000 Canadian farmers are now using as a text-book for the improving of their farms. In it you will find 100 pages of valuable advice—each page devoted to some one money-saving improvement that you can make yourself quite easily of

CONCRETE

Tells how to build a Silo, a root cellar, a water-trough, a culvert, a retaining wall, or a gate post. Explains why it is better to build these (and numerous other farm utilities) of concrete, than of any other known material. Gives simple yet complete directions. All the buildings and small jobs the farmer needs to build can be constructed of concrete, which is nothing more nor less than a combination of cement, sand, pebbles or crushed stone—all staple products easily and cheaply obtainable.

Considers these important advantages of Concrete: fire-proof; water-tight; durable; vermin-proof; sanitary; weather-proof; rapid; rapidly built; no repairs; no painting.

Write for the book—check off on the coupon below the subjects in which you are interested.

Canada Cement Company Limited
Herald Building
MONTREAL

Concrete blocks	Concrete tanks	Concrete foundations
Concrete roads	Concrete silos	Concrete tanks
Concrete water-troughs	Concrete culverts	Concrete retaining walls
Concrete gate posts	Concrete root cellars	Concrete water-troughs
Concrete foundations	Concrete tanks	Concrete foundations

SEED GRAINS

We can supply on short notice limited quantities of choice high quality feed grains from the following varieties:

Marquis Wheat, Goose Wheat, O. A. C. No. 21 Barley, Bunker King Oats, O. A. C. No. 72 Oats, Silver Hill Buckwheat, Centennial Peas, also highest grades of Clover and Timothy.

Ask for our prices on Mangels, Turnips, Onions, Potatoes, Beans, Corn and Garden Seeds of all kinds. If in need of feeds write us. We can supply Cotton Seed Meal, Linseed Oil Cake Meal, Corn Oil Cake Meal, Gluten Feed (35% protein), Bran, Shorts, Corn, Cracked Corn, Corn Meal, Rice-cleansed, Standard Screenings, Ground Screenings, Root and Bone Soaps, poultry Grit, Oyster Shell, Alfalfa Meal, etc.

We manufacture the well known "Good Luck" Brands of Poultry Feeds and can supply any quantity. Try our Good Luck Baby Chick Feed—it gives results. Long Distance phone—Day, Junction 214; Night, Junction 434.

Write or phone for prices.
CRAMPEY & KELLY
773 DOVERCOURT RD., Toronto, Ont.

A FORTUNE IN POULTRY

Increase your egg output by purchasing a **Choice Cock or Cockerel** of our high record Bock's and Gandottes, Leghorns or it a 4. 1215 Mating List containing 45 photos of stock, buildings, feed and rock formula.

Our 24 Egg Kind

L. R. Guild, Box 76, Rockwood, Ont.

Bred-to-Lay Leghorns

My breeding pen, as pullets, averaged 174 eggs, and this under general farm conditions. Cook birds are from trap-nested stock specially selected for winter egg production. List your orders now. Eggs for hatching, \$6 per 100; \$1.50 per setting of 15, at our station. Cash with order or C.O.D.
F. E. Ellis, Campbellville, Ont.

Egg Producing Hen Feed

Green Ground Bones

\$5.00 Per 100 Express order or Post Paid.
Geo. Stevens
364 Mark Street, Peterborough, Ont.

32 CENTS FOR CHICKENS

30 cents for large hens ALIVE.
Above prices paid by **WALLER'S**
713 Spadina Ave., Toronto, Ont.
Write for Price List.

ARE YOU BUILDING OR REPAIRING?
THE HOLIDAY COMPANY, LAMAR, HAMILTON
FACTORY DISTRICT

MAKE YOUR BIKE A MOTORCYCLE
Write today for our FREE BOOK
Bicycle and Motorcycles
Bicycle and Motorcycles
Bicycle and Motorcycles
Dept. 138, Galesburg, Kansas, U.S.A.

Letters to the Editor

The Rural Community

EDITOR Farm and Dairy.—I am a farmer and I recognize that farm life and activities have not been holding the best of our blood in the farms, with the result that the cities are profiting by our losses. The out-of-door country life is healthy and best, both socially and economically. Does it not behoove us to seek and appreciate this, to interest ourselves rural activities and play life that our young people may not continue to seek contentment in the unhealthy city? If some program of rural activities could be carried out, the country would advance in every way and more people would be seeking for country homes. Our leading men in the city were once boys on the farm, and we can retain them on the farm, the country would soon be on the ascendancy.

City life is unnatural. It is enjoyed by people who do not understand the real natural way of living and who prefer pleasure that comes in unnatural ways. Why do people seek the seashore and country for their vacation? It is the appeal of the natural. I have seen statistics quoted to prove that were it not for the fresh new blood from the country; city people would not survive beyond the third generation.

Rural communities in America have not done their best to make things interesting for the boy and girl on the farm. In old England we found the country divided into small farms with small villages everywhere. The village green was the local play centre, and here the young folk congregated. This was so, indeed, all because of a social centre. Here our young folk are expected to work too much, and if they were not thus engaged, they would have nothing else to take up their time. We must cooperate to make country life more attractive.—Leslie B. Metcalf, Brant Co., Ont.

On Dynamite

EDITOR, Farm and Dairy.—Is this old word of ours sitting on top of a charge of dynamite? I sometimes think it is. I live away out in the country, supposedly away from the heart of things, but my reading of the daily press fills me with misgivings. There seems to be a spirit of lawlessness abroad, "hoodlumism" some folks call it, but to me it is more serious than that.

Take the howling down of W. J. Bryan when he attempted to speak in Toronto a few days ago. Mr. Bryan came to Canada, the representative of 25,000,000 United States prohibitionists. In his own country he is still one of the greatest men in the public eye. As he said himself, his loyalty is accepted to the president and people of the United States. And yet we did not accord him the ordinary courtesies that are due to an invited guest. We allowed him to be howled down by a mob of hoodlums. This in itself is bad enough. When I picked up the papers the following day, I expected to find on the editorial page, at least an expression of sincere regret for the disgraceful proceedings in Massey Hall. The expressions of regret were notable by their absence. The Mayor of Toronto, not only refused to accord Mr. Bryan a welcome to the city, but apparently thought lightly of the insult to the great American. Does it mean that lawlessness is to be winked at by those in authority and by the moulders of public opinion?

This is not an isolated case. Meetings were broken up during the last election campaign by Nationalists in Quebec and by returned soldiers in Vancouver; both equally lawless and both examples of mob rule. A more

recent example was the deputization of the labor interests to see the Premier in Toronto when on his refusal to grant their demand for stronger beer, he was glad to best a retreat into the Parliament Buildings to save himself from personal violence.

All over America and all over the world we seem to have abundance of the material of which lawlessness is made. We have the ever widening chasm between labor and capital. In my earlier days I took much interest in socialism. Socialists years ago believed that both laboring men and capitalists were the victims of an unjust system and they pictured an ideal system wherein all could live in peace. Socialism to-day seems to have degenerated into nothing more than class hatred. The Bolshevik typifies socialism in action and I don't believe that Russian socialists are making a greater mess of it than would socialists in any other country. I can recall several times when the militia were called out in Canada to quell labor disturbances which had their birth in nothing else than this same class hatred.

I am not defending the capitalists. Their greed is responsible for many of our social disorders, but I think that this is a time over any other time for some clear thought and balanced judgment. Such balance, however, is characteristic of neither the public nor the government. The appeal to passion or prejudice seems to win in both cases. Are times shaping up in that end of the age and the great tribulation foretold by Daniel the prophet? I believe so. Certainly prophetic scriptures are taking on a new development in view of present day developments. At least all thinking men must agree that in dealing with social questions nowadays, we are handling dynamite.—F. E. E. Hulton Co., Ont.

Settling Soldiers on Land

EDITOR Farm and Dairy: Some time ago I read with interest your article on settling Farm and Dairy, describing the new settlement which is being prepared for returned soldiers at Kapuskasing, in New Ontario. It seems to me that the clearing of that heavily wooded territory will be slow work at best. The work that has already been done is hardly a start towards a solution of the real problem which will present itself when 500,000 men come back to Canada. Of this vast army of returned troops, surely there will be quite a percentage who will desire to go back to the land. It takes years to prepare homes for them all in a bush country. But why should it be necessary? Out here in the West we have millions of acres of the most fertile land, all ready for the plow.

Since I have come West I have travelled considerably. I have had the experience of getting off at a railroad station with vacant land lying in every direction and settling for it. Ten miles back from the railroad, I would find the country fairly well populated. These people had not gone back from shipping facilities because they preferred to, but because all the good land near the station was being held by speculators at prices which settlers could not afford to pay. This is true all over the West. Large sections of good land are held out of use by railroads and trust companies as well as private speculators. Here I should say is the proper home for those of our returned boys who prefer to farm.

Will we buy this land for our returned soldiers? I can guarantee that the minute the government came on the market for land the land prices would immediately begin to soar, and these speculators would prepare for a rich harvest at the expense of the Canadian public. Lending money to settlers at a low rate of interest to buy land for themselves would have the same tendency. Just in proportion as

Every Sheet is true and even
"Empire"
corrugated Iron

"EMPIRE" Corrugated Iron is made with deep corrugations fitting closely and snugly; it makes a splendid, strong, rigid wall that withstands all storms. Remember—building with Metal gives you fire-proof, weather-proof and lightning-proof buildings.

Our "Metallic" building materials—the "Quality First" kind—may cost a little more than other building materials, but they are permanent. "Metallic" (Galvanized) shingles, "Metallic" Ceilings, "Metallic" Siding and Brick-face and Clapboard Siding; Roof-light and Ventilation, Sile Tops, etc., save you money. Write for interesting booklet giving complete information, prices, etc.

Metallic Roofing Co. Limited
Toronto - Winnipeg

IF YOU DON'T FIND IT, WRITE US

Occasionally readers of Farm and Dairy wish to secure the address of manufacturers of farm or household equipment, but are not able to locate it in our pages. At our time Advertising Dept. will be pleased to give you any information of this nature. Write us freely.

ADVERTISING DEPT.
FARM & DAIRY, PETERBORO, ONT.

CURLALAC AND SPONGY PEPSIN

(STANDARDIZED)

The First and Original Peptic Coagulants.

Not an experiment. Tested and a demonstrated success in the manufacture of Canadian cheese.

START-O-LAC

(LACTIC-ACID CULTURE)

A pure culture of selected and tested lactic-acid-producing bacteria for fermenting milk and cream, and improving the quality and flavor of cheese, cottage cheese, butter and buttermilk.

GERMTOX

(NOT A POISON)

A scientifically prepared Germicide, Disinfectant and Deodorant. The ideal sterilizer for all dairy utensils.

The above products are sold by all dealers in Canada.
Write us for descriptive booklets and any other desired information.

PARKE, DAVIS & CO.
WALKERVILLE, ONT.
MONTREAL, QUE.

the int
land w
The
taxation
have ty
these in
the rev
source
the ind
land w
tax with
War tax
form of
would f
those
speculat
form of
the most
tend to
farmers'
principles
was par
United P
Ontario
organiz
eclipse. K
land in
Saskatch

E DITC
com
am not a
of the te
maker, d
side. Am
brood se
a pig in
the balne
nearly al
let me tel
say there
an impr
worth of
from the
returns.

But this
epk of ec
an article
21st, by H.
Co., N.S.,
same thou
have passe
work or te
temptation
plemish his
am a Cana
and like ma
like to do
in the pres
our Mother
the Channel
to my own
contained in

I have a
I killed som
I also the
pen to be
to use wh
mer and se
to give h
my friend
ingly try
already in
and sell the
one that they
need them
they reached
further, and
pigs until the
pork each an
try if they
by which they
who need the
would contin
lbs. of dresse
terms, so long
If it is long
15 or 20 cts.
cure it myself
won't cost 25

To Elim
Like Mr. B
at a loss to
my country ab
tion so that the
full benefit from
pigs and sell the
a very poor

the interest was low, the price of the land would be high.

The solution I favor is to tax vacant land into use. After the war we will have tremendous taxes to bear. If these taxes are placed on land values, the revenue will be derived from the industry and at the same time the land will be forced into use; a case of killing two birds with one stone. This tax will not be a burden on farmers. War taxes will have to be paid in some form or other. Anyway a land tax would merely equalize taxation on those who use land and those who speculate in it. Under the present system the man who uses land pays the most taxes. Never have I been so proud to be a farmer as when our farmers' organizations advanced the principle of taxing land values, and I was particularly glad to see that the United Farmers of my old Province of Ontario were behind our Western organizations in approving the principle. Keep up the good fight for the taxation of land values.—G. H. Shaw, Saskatchewan.

The Pork in the Barrel

EDITOR Farm and Dairy: I have been a subscriber to your paper for a few years, and have come to think a good deal of it. I am not a farmer in the proper sense of the term. I am a brick and the maker, doing a little farming on the side. Among other things I have kept a brood sow for a few years, keeping a pig or two each year, and selling the balance when wanted, as I buy nearly all my feed. And, by-the-way, let me tell some of the farmers that say there is no money in pigs at present prices that last year, from \$36 worth of feed, bought at retail prices from the feed stores, I received \$186 returns.

But this is not what I intended to speak of. I have just been reading an article in your paper of February 21st, by H. Percy Blanchard, of Hants Co., N.S., and as it contained the same thoughts and principles that have passed through my mind the last week or two, I could not resist the temptation to write a few lines to supplement his article and argument. I am a Canadian of English parents, and like many other Canadians, would like to do all I can for our Empire in the present crisis, especially for our Motherland and her allies across the Channel. But I must come down to my own case and to the thought contained in Mr. Blanchard's article.

I have a pig in the barrel which I killed some time ago for my own use. I also have two young ones in the pen to kill this spring, intending to use what I require during the summer and sell what I may have to spare. I have remarked to some of my friends recently that I would sell, singly try and get along with the pork already in the barrel until next fall, and sell the other two pigs if I could see that they would reach those who need them most, and especially if they reached them at cost. I will go further, and say that I will feed those pigs until they will dress 200 lbs. of pork each and give them to my country if they will inaugurate a system by which they will be carried to those who need them most, at cost, and I would continue to supply at least 500 lbs. of dressed meat a year on these terms, so long as the war lasts, and if it is going to cost the Government 15 or 20 cents a pound to cure it, I will cure it myself, without charge, for it won't cost 25 cents a cwt.

To Eliminate Middle Profits.

Like Mr. Blanchard, however, I am at a loss to know how I can sell my country along any line of production so that those who need it will get benefit from my efforts. To raise pigs and sell them at 18 cents a pound is a very poor way of helping some

poor family, who may be on the verge of starvation in the Old Country or in Belgium or in France, even if they got it at cost after that. But when the only channel is that which we have now—to sell to the millionaire combine packers, who cure it at a cost next to nothing, and then sell it at from 10 to 60 cents a pound, which we are paying right in our own shops, and no doubt about this price by the time it reaches those who we aim to assist overseas, there is no encouragement for us to try and assist our country in this way. The killing and curing of pigs is about the simplest and easiest thing the Government could undertake. This is where our Food Controller should go to work, and not so much at our dinner tables. We will economize and supply the goods if they will do the rest.

Let the Food Controller conscript the packing houses and systems and make them handle and pack the meats at a price in keeping with that received by our men at the front for what they endure, and even the risk of their life; and it will not amount to more than a fraction of a cent a pound on what is paid for the meat. My article is much longer than I intended, Mr. Editor, but even at that it does not express my feelings on the subject as I would like to, and trust that, along with that of my friend in the east, it may accomplish something. I remain, yours for my country first at this time and not for the almighty dollar.—Walter Clark, Lambton Co. Ont.

In Defence of "Manvers"

EDITOR Farm and Dairy.—In Farm and Dairy of Feb. 21st, I notice some "Notes" written by "Mac," in which he refers to Manvers as being a part of that semi-desert district lying between Toronto and Peterboro. Now, as a resident of Manvers for more than 40 years, I protest against that good old township being called semi-desert. If "Mac" will stop off at Manvers station some day next June we can show him just as beautiful a stretch of farming country as any one may wish to see. True there is some light land in Manvers and some farms have been poorly worked and run-out and have fallen into the hands of unscrupulous real estate agents; but taken as a whole, the district is prosperous and is far from being semi-desert. In fact it has been stated upon good authority that there are less mortgaged farms in Manvers than in any other township in the county.

"Mac" says he called on Mr. Rogers of Manvers, who bought a farm here some three years ago. Now I wish to say that Mr. Rogers' neighbors are not surprised at him "making good." They know Mr. Rogers to be an up-to-date, experienced farmer. The only surprising thing is the fact that a man of his judgment and experience should purchase one of the poorest farms in the township.

We are also told that previous to Mr. Rogers' entry into the neighborhood, it was considered impossible to grow clover. Such a statement is, to say the least, misleading. For years there have been good fields of clover in the district and many farmers have made much from their clover seed, to say nothing of an abundance of hay.

The majority of farmers till their soil according to modern methods and if "Mac" wishes to taste some really first-class potatoes, come to Manvers. And when he next writes notes of this district, let us hope he will give us what all Britishers love, and that is justice.—"A Farmer Reader."

[Note: Farm and Dairy wishes to absolve Mr. Rogers from any responsibility for the "Notes" in question. They were written by one of our staff after a visit to the township in question.—The Editors.]

Don't Sell Your Cows



THE increasing shortage of hired men is forcing many farmers to seriously consider selling their herds as they cannot get the time nor labor to milk them. To sell now is similar to "killing the goose that laid the golden egg"—for never in the history of necessity of their production so vital to the Empire's needs. Your herd is a source of rapid growth in your yearly income—a source of rapid increase in productive value of your land itself. Why cut off that income and increased productivity, when you can save it and get better results from your cows?

EMPIRE MILKING MACHINES

have solved the problem of saving time and labor in milking—and have freed the hired man for work in the fields. Mr. J. H. Gristdale, B. Agr., Director of Dominion Experimental Farm says: The real drudgery of the dairy farm is eliminated by the use of the milking machine. ONE man with a milking machine can take the place of the extra hired men so hard to obtain at this time and are recognized as a good investment.

The most exacting tests by Experimental Farms and Stations prove that Empire Machines milk without injury to the cow, with readily to being milked at intervals. Cows and heifers take Machine and benefit by it. An Empire will save money for you in labor and soon pays for itself. Space prohibits giving full information about this money saver. Our booklets, however, have the whole story and valuable testimonials from other dairymen just like yourself. Write us for them.

Address Dept. E
The Empire Cane Separator Co. of Canada, Limited
TORONTO MONTREAL



THERE IS ONE BOOK

That we would like to sell in the house of every dairy farmer in Canada. It covers every subject in dairying, from growing the feed—to testing your herd. The price of the book could be saved in two weeks' FARMING," by Eckles & Warren, tells how to balance the feed—what feeds to buy when prices are high—the cheapest feeds to grow on your own farm—and a score of other subjects. It is a very readable book for the practical farmer. Well bound in linen.

Price is but \$1.50.

Book Dept. **FARM & DAIRY** Peterboro, Ont.

PEERLESS GATES



Down the road or far across the fields is often an "entrance," a mere hole in the fence, a constant source of danger to stock getting through. The best way to

Keep Your Stock Where You Want Them

is to provide real gates, strong and durable. All Peerless Farm Gates are of heavy open heart steel wire on strong tubular steel frames electrically welded in one solid piece, and braced like a steel bridge. No sag, no rust, no wearing out. Ask your dealer to show you Peerless Gates, also look at all intersections.

SEND TODAY FOR CATALOG. It tells you how to put up a fence to "stay put."

The Banwell-Hoxie Wire Fence Co., Ltd.
Windsor, Manitoba Hamilton, Ontario

APICULTURE

An Opportunity for Beekeepers

SUGAR is an important war food, its price is high and there will probably be a shortage in the near future. Honey is being affected in sympathy. The crop of honey produced in Ontario, Quebec and Manitoba in 1917 was sold quickly at prices above those of the previous season and present indications point to a still greater demand and higher prices for the new crop. Thus, by producing as much honey as possible this year the beekeepers of Canada will not only increase their returns but will be helping the Empire. These remarks refer to extracted honey. An increased demand for comb honey cannot be predicted.

The appeal for greater production is especially to those who are neglecting their bees or are not managing them in the best manner. There are many apiaries in good locations for profitable honey production, more particularly in Eastern Canada, where

colonies in box hives or in seldom-opened frame hives, now producing from 20 to 40 pounds of honey each, could be made to produce 80 to 100 pounds or more in an average season. If time cannot be spared to give the bees the attention they need, they might be handed to a member of the family who would take an interest in them, or they might be sold to a professional beekeeper. But well managed bees often pay as well as, or better than, one's regular occupation for the amount of time spent with them.

The different operations in modern apiculture are briefly described in "Bees and How to Keep Them" (Experimental Farms Bulletin No. 24, Second Series), which may be obtained free on application from the Publication Branch of the Department of Agriculture, Ottawa. A good way to become acquainted with the better methods of beekeeping is to arrange to attend one of the apiculture demonstrations that will be held early in the summer, under the auspices of several of the Provincial Beekeepers' Associations. A list of the Beekeepers' Associations with the addresses of the

Secretaries is given in the above-mentioned bulletin.

The principal problem of the expert apiarist will be how to increase the number of bees to the fullest extent in time for the honey flow, so as to make the most of his valuable knowledge of bee management. The early replacing of unsatisfactory queens is important. Judicious feeding during the dearth that in many places immediately precedes the honey flow will help under some conditions. By dividing strong colonies not less than six weeks before the middle of the main honey flow an increased crop of honey will be obtained, provided fertile queens are on hand to be given to the queenless part. These queens may be procured from breeders in the Southern States at from 80 cents to \$1.00 each. This procedure is chiefly applicable to the fireweed and golden-rod districts; as a rule the clover honey flow comes too early for it. Two-pound packages of bees with untested fertile queens obtained from the south by express in May or early June costing about \$4.00 each, including transportation charges, will be found a paying investment, if they arrive in good

condition and can be placed on combs. There should be a sufficient supply of supers for extracted honey, with frames and foundation, or combs, on hand to take a maximum crop, and this year it is more than ever necessary to order supplies and honey containers early. These supers may be fastened together to make one deep super for extracted honey production. Particulars of an attractive container for honey that has been designed to meet a possible difficulty in obtaining sufficient tin pails or glass jars will be supplied on application to the Apiarist, Central Experimental Farm, Ottawa. Beeswax is very scarce and all discarded combs and scraps of wax should be saved to be turned into foundation. It will be wise to retain some combs of clover honey in case they are needed for winter stores, because sugar may be very dear in the autumn.

Conditions in P.E.I.

DAIRYING in this section is not as good at the present time as it was some 15 or 20 years ago. At that time, the cheese factory was in a flourishing condition, but it was allowed to divide away for the want of milk. Then everybody bought a hand separator and manufactured butter at home, the result being that it is not all of the same quality and a great deal of the butter is sold in the summer months for a very low figure. Since the egg circles started on the island, the poultry industry has gone ahead to a great extent. The egg yield and crate fattened chickens have increased almost double.—Geo. Annon, Kings Co., P.E.I.

Big Roots Preferred

WE were standing behind the Bages' exhibit of Jerseys at the Guelph Winter Fair. Our conversation drifted from one subject to another until finally we were discussing the growing of roots. "We like to grow big roots," remarked one of the Bages boys. "We grow ours two feet apart in the drill and the drills three feet apart. Some of our best roots have been grown following potatoes. We have manured fairly heavily in the fall and then rowed up. In the spring we harrow down the rows and drill in the seed on the firm seed bed where the row had been. Varieties? We used to grow white sugar mangels, but lately we have gone over to the Levsthan sugar beet and the Giant-sugar mangel."

One Litter of Pigs

By "A. Halton County Farmer."

ON April 29th, 1917, my sow farrowed a litter of 10 pigs. The following is an account of the meal fed and the selling price. The hogs were fed some mangels, the weight of which I am unable to give. They also received a quantity of skim milk twice a day. The feed bill is as follows:

4,495 lbs. mixed chop at \$2.00 per cwt.
500 lbs. shorts at \$2.25 per cwt.
200 lbs. shorts at \$2.40 per cwt.
Making a total cost for feed of \$128.26. On October 21st, 1917, I sold nine of the hogs at \$15.50 per cwt. They weighed 1,780 lbs. The other hog was killed for home use on Nov. 15th, 1917, and dressed 170 lbs. Dressed pork was selling at \$24.00 cwt. Thus the total receipts were \$216.79, leaving a profit over cost of grain of \$188.24. Taking mangels, skim milk and labor into consideration, I consider there would be about \$190 net profit.

I look in the next five or 10 years for a marked development in milking by machinery. The machines have been developed to such a point that men with 20 to 25 cows or more should have them.—Prof. H. H. Dean.

BOB LONG

Union-Made
Overalls
Shirts & Gloves

THE TEST
68 lbs. to the
square inch
under hydraulic
pressure is the
test that "Bob
Long" overalls
have been put to.
Their strength
is in the tightly
woven fabric.



Bob Long says:

"My overalls and shirts are the best, because they stand the test of the wash-tub—no starch filler or cheap dyes to wash out."

Insist on "Bob Long" brand. Ask your dealer for Big 11—the big grey overalls—the cloth with the test.

My Dad wears 'em.

Known from Coast to Coast

R. G. LONG & CO. LIMITED TORONTO, CANADA

FIE
By C.
Smith

WHEN
see
not
gerrell, I
ting up th
in answer
amount re
"We do not
ice as we
small gain
for pumpi
used by th
the milk co
ice is requi
enough to
has been co
in fact, qu
quired is f
Sunday. Th
lot of hard
and during
every saving

What can
of land and
after a large
was the que
by Mr. Geo.
talked to me
selling his pi
said: "We ha
this herd to
pletely lost f
cows to milk
in the matte
or so we ha
farther behi
Formerly we
regularly, but
and I are al
coming summ
done and hav
get out our
kept our milc
mer we would
work our far
would have to
On the other
give our farm
we must be a
milking our
from attendi
give us a chan
our farm wor
able to get bel
produce as man
in the past,"
that is facing
dairymen this

"At Home
It is a comm
be a success
have been bo
close touch w
that he is han
this is of grea
ed Mr. Harry
about his work
bred Holsteins
farm recently,
sion that after
lute necessity,
ed from this p
four years ago
thing to do w
life. In fact, h
of ever living o
Judging by
which he goes
reputation his
in the show ring
he must have al
of the instinct o
has made a won
experience at fa

Sw
While calling
kin, of Cobour
drifted to the su
of which crop M
enthusiast. Two
15 acres and was
the result that
his acreage to 48
intends to plan
and to seed dow
ough land wh
able to satisfact

FIELD NOTES

By G. C. McKillican, Field Representative, Farm and Dairy.

WHEN I dropped in recently to see Jas. O. Curtis & Son, the noted Holstein breeders of Ingersoll, I found them engaged in putting up their season's supply of ice. In answer to my enquiry as to the amount required, Mr. Curtis said: "We do not put away nearly so much ice as we used to. We now have a small gasoline engine which we use for pumping water. As the water used by the stock first goes through the milk cooling tank. Sometimes no ice is required and at most only enough to keep the milk cool once it has been cooled by the running water. In fact, quite often the only ice required is for holding the milk over Sunday. This arrangement saves a lot of hard work in putting away ice, and during this shortage of labor every saving of time counts."

Cows or Crops.

What can two men do on 320 acres of land and at the same time look after a large herd of dairy cows? Such was the query which was put to me by Mr. Geo. Laidlaw, of Aylmer, as he talked to me regarding his reasons for selling his pure bred milch cows. He said: "We have spent years in getting this herd together and will be completely lost for the next year with no cows to milk, but we have no choice in the matter. During the past year or so we have been getting farther and farther behind with our farm work. Formerly we kept three or four men regularly, but at present my brother and I are alone. We are facing the coming summer with no fall plowing done and have as yet been unable to get out our supply of wood. If we kept our milch cows the coming summer we would not be able to properly work our farm. A large part of it would have to go to grass."

On the other hand, if we wish to give our farm proper attention we must be relieved of the work of milking our cows. A year's relief from attending to a dairy herd will give us a chance to get caught up with our farm work. If by that time we are able to get help, we can go ahead and produce as much milk as we have done in the past." This is the situation that is facing a great many of our dairymen this winter.

"At Home" Among Stock.

It is a common idea that a man to be a success among live stock must have been born and brought up in close touch with the class of stock that he is handling. While no doubt this is of great value, yet as I watched Mr. Harry Bailey, of Paris, going about his work attending to the pure bred Holsteins while I visited their farm recently, I came to the conclusion that after all it was not an absolute necessity. Upon enquiry I learned of this gentleman that up to four years ago he had never had anything to do with live stock or farm life. In fact, had never had any idea of ever living on a farm.

Judging by the familiarity with which he goes about his work and the reputation his herd has achieved, both in the show ring and in official testing, he must have always had considerable of the instinct of the stockman or else has made a wonderful use of his short experience at farm life.

Sweet Clover.

While calling on Mr. Bertram Hoskin, of Cobourg, our conversation drifted to the subject of sweet clover, of which crop Mr. Hoskin is quite an enthusiast. Two years ago he sowed 15 acres and was so well pleased with the result that last year he increased his acreage to 48 acres. Next year he intends to plow up his first 15 acres and to seed down a 50-acre piece of rough land which he has not been able to satisfactorily work into his re-

turn. This he will count on having for pasture, trusting that it will reseed itself year after year.

On the first piece he sowed he used 20 lbs. of seed per acre. The second was sowed on flat, wet land, 12 lbs. per acre, and sowed with buckwheat as a nurse crop. His neighbors told him that the buckwheat would choke it, but such was not the case. This land was so wet that it was very unsatisfactory for ordinary farm crops and he is watching with great interest to see how it stands the winter and spring. He says that if it will stand such conditions as this he will be ready to uphold sweet clover as the crop to grow under any cover as the

Mr. Hoskin says that his cattle, once they have become accustomed

to it, prefer it to any other feed he gives them. In fact, they will eat the sweet clover straw after it has been threshed and which he usually uses for bedding. He is contemplating the building of another silo for the use of sweet clover and thinks that with the liberal use of sweet clover for pasture, ensilage and a certain amount for hay, much of the expenses at present incurred in the buying of concentrates will be eliminated. Possibly the greatest difficulty in seeding it down with another grain crop is that the sheaves are so full of green stalks that they are hard to dry. This difficulty, however, is counteracted by the large value of the straw for feed that has such a large percentage of clover in it.

I was talking recently with a breeder of pure bred stock who has been enjoying a most unique success with his favored breed. In answer to my enquiry as to how he got started, he told me as follows: "I was not at all a breeder. In fact, I know absolutely nothing about cattle, but was one day at an auction sale and was so attracted by the appearance of a little calf that came into the ring that I put on a bid. This led to another bid and in a few minutes I found myself with the calf. This became the nucleus of my herd. I began to study up pedigrees and bought a few more and fixed up a barn to put 15-20 in." That man to-day has one of the best herds of his favorite breed and has a knowledge of pedigrees which is simply wonderful.

NEPONSET ROOFS

NEPONSET PAROID ROOFING NEPONSET TWIN SHINGLES



"Here's My Real Insurance"

IT'S quite right to carry insurance, but when storms are raging or fires are spreading in the neighborhood, it is far more comforting to know that your barns and other buildings are roofed with

NEPONSET Paroid ROOFING

Farmers have had this comfortable assurance through 19 years of rain and shine, hail and fire, snow and ice. It is safe to say that you have heard of the great superiority of Paroid.

What may not be quite clear in your mind is the fact that Paroid is not the name for all roll roofing. The only genuine Paroid bears the label shown herewith.

It is made in gray color, two weights; also with permanent red or green slate surface. Sold by lumber and hardware dealers.

Neponset Twin Shingles for all residences.

BIRD & SON - Head Office, Hamilton, Ont.
WAREHOUSES: Montreal, Toronto, Winnipeg, Calgary, Edmonton, St. John
The Largest Manufacturers of Roofings,
Wall Boards and Roofing Felts in Canada

Look for the roll with the Paroid label.

Farm and Dairy AND Rural Home

The Farm Paper for the farmer who milks cows.
Published every Thursday by
The Rural Publishing Company, Limited
Peterboro and Toronto.

47

SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.25 a year. For all countries, except Canada and Great Britain, add 50c. per annum.
ADVERTISING RATES, 15 cents a line per week, 10 cents an insertion. One page 50 inches one column 12 1/2 inches. Copy received up to Saturday preceding the following week.
Toronto Office—Mainster and Water Streets.
Toronto Office—37 McCaul Street.

United States Representatives:
Stockwell's Specialty Agency,
Chicago Office—People's Gas Building,
New York Office—Tribeaux Building.

CIRCULATION STATEMENT.

The paid subscriptions to Farm and Dairy approximate 20,000. The actual circulation of each issue, including copies of the paper sent to subscribers, who are but slightly in arrears, and sample copies, varies from 20,000 to 23,000 copies. No subscriptions are accepted at less than the full subscription rates.
Sworn detailed statements of circulation of the paper, showing its distribution by counties and provinces, will be mailed if so requested.

OUR GUARANTEE.

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and strive to protect our readers, turning away all unscrupulous advertisers. Should any advertiser herein deal with you as one of our paid-in-advance subscribers, we will make good the amount of your loss, provided such transaction occurs within one month from the issue that it is 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 in writing to advertisers you state: "I saw your advertisement in Farm and Dairy."
Rogues shall not pay 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 AND TORONTO

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

Duty Free Implements

In a letter addressed to the Canadian press, Robert McKenzie, Secretary of the Canadian Council of Agriculture, makes a logical and forceful appeal for the removal of the customs duty on farm implements imported into Canada. The following is a paragraph from his letter:

"Deprived largely of man power, the best substitute farmers can secure is an ample supply of modern machinery. The Federal Government recognized this fact and to help meet the case, removed customs duties off tractor engines for a year, thus placing this help within the reach of many farmers. They also entered into arrangements to supply a large number of farmers with tractor engines at cost. Of course, there is no misunderstanding the Government's intention in this regard. They want to supply tractor engines at a price that a large number of the farmers can afford to pay and operate at a profit. If it is a good thing to remove duty off tractor engines as a war measure, to encourage production, which only affects a comparatively few farmers—how much better sense could we render the Empire and Canada if the Government would remove duty on all farm implements, as a war measure."

And why not? As Mr. McKenzie well says, of the 200,000 farmers in the prairie provinces, not more than 50,000 of them could purchase and operate tractors if they would. Only a fraction of this 50,000 will consider the investment desirable. The proportion of prospective tractor owners in the other provinces is even smaller. All farmers, however, requires the duty on tractors was necessary to facilitate production, then the removal of the duty on implements follows in logical sequence as even a greater necessity.

And how will the manufacturers view such a move? Naturally they will not willingly give up privileges that, through long enjoyment, they have come to regard as vested rights. At the same time we are confident that if the duty were removed on all the raw materials used by manufacturers, our implement makers could hold their own in competition with imported goods. Only last week one Ontario

manufacturer of cultivating machinery professed publicly to be in favor of such a move. The removal of these duties would be but a matter of tardy justice in any case; and justice should now be hastened under the spur of national necessity.

A Dominion Dairy Council

At the convention of the Dairyman's Association of Western Ontario in January, W. A. McKay, of Nova Scotia, expressed regret that steps had not been taken at Ontario conventions this year looking toward the formation of a Dominion-wide dairy organization. The recent dairyman's convention in Alberta carried the project a little further; by a formal resolution, the convention expressed itself as favorable to a Dominion-wide organization of the dairy interests, and at a special session, attended by representatives of dairying in the three prairie provinces, initial steps were taken looking towards the formation of an association to be known as "The National Dairy Council of Canada."

In the meantime, Eastern Canada is preparing to look after her end of the organization work. Prof. H. H. Dean has announced a meeting to be held at Guelph, in the first week of April, at which all departments of the dairy industry will be represented. A compact Ontario organization will then be formed, and this Prof. Dean regards as an initial step toward complete organization in each province out of which will grow a national organization.

Whether or not these movements result in definite action, the need of a national dairy council that would unify the efforts of the dairy industry to receive the recognition due it, must be self evident. At present Canadian dairymen are not represented by any national organization. Even the present provincial associations are representative of only a section of the industry. The ideal dairy council, we believe, whether provincial or national, is the one that has represented in it the producers of dairy products, the manufacturers of dairy products, the manufacturers of dairy equipment and at least a part of the distributors, the middlemen, if you please. In all of the larger issues that confront the industry, and to cope with which such organization is necessary, the interests of all connected with the industry are identical. Such issues are the fight against oleomargarine, and the advertising of dairy products. We trust that at the meeting at Guelph, at least something will be accomplished toward a union of these interests in Ontario with the bigger objective, the national council, always kept in view.

The Threshing Gang

Dr. G. C. Creelman, is, we believe, responsible for the suggestion that threshing gangs be organized to look after threshing in the Province of Ontario next fall. His suggestion is that the province be divided into districts, and that certain territory be allotted to each threshing outfit. In addition to the usual equipment the thresher would carry along a bunk house, as sleeping quarters for his men. As to the site of the gang and the feeding of them, there is a division of opinion. One suggestion is that the thresher carry only a mow gang of four or five men and the farmer himself, with the help of his neighbors, will take care of the grain and the straw; or the thresher might carry a full gang and the farmer look after the grain only. Some suggest that the thresher feed his own men, while others believe that the farmer should provide the meals.

The threshing gang plan has one great advantage that will appeal to all farmers, having only their own threshing to look after, no time will be lost from fall plowing. On the average farm the time of one man taken up for from one week to a week and a half, or perhaps two weeks, returning threshing help. The saving of this time would result in a much greater acreage being prepared for crops the following season. The thresher would reap an advantage in that having all of the farms in one district, he would move directly from one farm to another, with a minimum loss of time.

A probable disadvantage of the gang method of threshing would be the cost. It is estimated that

where a mow gang only is carried, the cost to the farmer would amount to five or six cents per bushel of grain threshed. This would mean from \$50 to \$70 a day, which is a great deal more money than farmers are accustomed to expend in direct cash outlays for such threshing. The threshermen themselves might object to being so organized. The Department, however, has asked for an expression of opinion from the farmers of Ontario, and Farm and Dairy would welcome the opinions of our folks, particularly of those who have had experience with the threshing gang method.

The United Grain Growers, Ltd.

The greatest monument to the hardy men and women who settled the Western prairies of Canada, is the country itself, "a nation built in a day." The most wonderful evidence of their business sagacity and courage is the United Grain Growers', Limited, the greatest business concern in the world to-day owned and operated by farmers. The auditors' report of the last year's work of the Grain Growers' Grain Company and the Alberta Farmers' Cooperative Elevator Company, the two companies that amalgamated to form the United Grain Growers', Limited, is now to hand, and gives a statistical review at least of the magnitude of the business operations of the new company. The profits of the Grain Growers' Grain Company for the year ending Aug. 31st, 1917, were \$607,399.13, and of the Alberta Company, \$236,502.76, a total for the two companies of \$844,401.94. With the economies of operation possible by the amalgamation of the two companies, and the extensions planned, much more business will be handled next year, and the profits should be proportionately greater.

We sometimes think that we Canadian farmers do not sufficiently appreciate the magnitude of this work which the grain growers have accomplished. But men outside of Canada fully appreciate it. Agricultural publications in the United States are constantly holding up the grain growers' organizations to their people as examples of what cooperation at its best can accomplish. Commissioners in all countries appointed to study agricultural cooperation, have always given a great deal of attention to the grain growers' companies and their business methods. All over the world the farmers of Western Canada are recognized as the world's most successful cooperators.

But the directors of the United Grain Growers', Limited, and the various other associations of farmers on the prairies, are not satisfied. They believe that they can almost double their business and their membership. If this can be done on the prairies, what is not possible in Ontario, with a greater and a wealthier farm population to work in than any other two provinces of Canada combined? The future possibilities of the United Farmers of Ontario and the United Farmers' Cooperative Company, Limited, should be sufficient to inspire the humblest member of a local branch, and seize the imagination of its ablest leaders. Whether the possibilities of the Ontario movement are realized or not, depends most largely on the cooperative spirit displayed by Ontario farmers.

Leave for Farmers

C. RICE-JONES, the Agricultural Representative on the Leases of Abandon Boards, states that in view of the vital importance of increased production during the coming summer every farmer or farm laborer who is in uniform or who has been ordered to report for military service, should, as a duty to the country, immediately apply for leave of absence. There can be no doubt about their first duty, as, while the need of men is great, Canada recognizes that at present the need of increased production on the prairies is greater. He further states that a number of farmers and farm laborers have left with the last draft, when in the national interest they should have secured leave of absence to work on the farms during the coming summer.

Getting To

N Ontario the development movement United Farmers of Ontario, that we our province country aside in which the making heads

The fact United States realize the working together successful in organization in Farmers and Da found that I along some further progress Canada. For instance to an now Governor told how, during farmers of the and to the selected him State and a member of the Legislature the State have form which they carry through In the State ers have organized. Nebraska Farmers has been doing farmers on the have the same to contend Ontario. This drew attention Organizations F. Sturges, of Century Farmer, meeting of the Congress. The report of Mr. taken from the vention publishes Farmer.

Causes That organizers solutions some human elements to arouse interest in agricultural condition of Mr. speech telling organizations failing causes are ition of the time to accomplish results, leadership and dependence of farming, subject, danger in loyalty of members.

Mr. Sturges organizers for the lose sight of their enthusiasm conditions were in Another evil effect and claims for through organization interest after the time for more so when immediate Time is essential desired results in Leadership is farmers' organizational any business firm loves, for there to represent and The tendency of dependence and ing on of their operation makes it he does not need his neighbors, and cept that assistance Experience is Farmers' organization back in a business them and for that experience may drawback unless obtained. Mr. S against the employ from among men

In Union There is Strength

Getting Together in the U.S.

IN Ontario we are so interested in the development of our farmers' movement as represented in the United Farmers of Ontario and the United Farmers' Cooperative Company, that we are prone to think that our province is the only section of country aside from Western Canada in which the farmers' movement is making headway.

The fact is that the farmers of the United States for sometime have realized the necessity of farmers working together and they have been successful in many States in forming organizations very similar to the organization in Ontario. An editor of *Farm and Dairy* while in Chicago found that in some States and along some lines they have made further progress than we have in Canada. For instance, our editor listened to an address by a farmer, now Governor of North Dakota, who told how, during the past year, the farmers of that State got together and to the surprise of everybody elected him Governor of the State and a majority of the members of the Legislature. The farmers of the State have a very radical platform which they are planning to carry through the Legislature.

In the State of Nebraska the farmers have organized what is called the Nebraska Farmers' Congress, which has been doing a valuable work. The farmers on the other side of the line have the same difficulties of organization to contend with that we have in Ontario. This is shown by an address entitled "Why Some Farm Organizations Fail," delivered by T. F. Sturges, editor of the 30th Century Farmer, at the recent annual meeting of the Nebraska Farmers' Congress. The following is from a report of Mr. Sturges' address as taken from the report of the convention published in the Nebraska Farmer.

Causes of Failure.

That organizers of farmers' associations sometimes forget the human element in their efforts to arouse interest among farmers and segregate conditions was the assertion of Mr. T. F. Sturges in a speech telling why some farmers' organizations fail. Other contributing causes are the lack of appreciation of the time required to accomplish results, the lack of good leadership and experience, the independence of farmers, too broad an object, danger in numbers, and disloyalty of members.

Mr. Sturges suggested that organizers for the farmers sometimes lose sight of the human element in their enthusiasm and picture conditions worse than they really are. Another evil effect of over-enthusiasm and claims for immediate relief through organization is the loss of interest after the members have had time for more sober judgment, and when immediate relief fails to come. Time is essential to bring about the desired results in any business.

Leadership is more important in farmers' organizations than in ordinary business firms. Mr. Sturges believes, for there are more members to represent and elements to meet. The tendency of farmers toward independence and the successful carrying on of their business without cooperation makes the farmer feel that he does not need the assistance of his neighbors, and he is slow to accept that assistance.

Experience a Needed Element.

Farmers' organizations usually embark in a business that is new to them and for that reason the lack of experience may prove a serious drawback unless good managers are obtained. Mr. Sturges cautioned against the employment of managers from among members. That may

mean an inexperienced man for which the members must pay, and it also creates dissatisfaction because many will want the position. The best method is to hire some one from outside and expect to pay a good salary. Organization should not be perfected until there is necessity for such. The history of all farmers' organizations and business associations shows that they accomplish the most where they originate through necessity.

Relative to the attempt of farmers' organizations to cover too broad a field, Mr. Sturges pointed out that a business nowadays tends toward specialization, because more can be accomplished within a limited field. Too many irons in the fire may mean disaster. Numbers also spell weakness until the members learn the essentials of cooperation. One of the greatest dangers besetting the Farmers' Union is that they have many enterprises which have failed because they were not needed, or because the members did not know the principles of cooperation or lacked interest.

Mr. Sturges emphasized the danger of playing upon the prejudices of the people and portraying conditions too strongly. Some middlemen are necessary, said he. Distribution is not a neighborhood affair, but one of nation-wide and world-wide significance.

Mr. Carl Slatt differed with Mr. Sturges on the efficacy of methods used to arouse some farmers a radical man is necessary. He also contended that farmers' organizations have not been failures, even though some have met with an early death. Individualism and independence are responsible for most of the failures, he said. He believed that the elimination of isolation through modern conveniences will help to avert these conditions.

Mr. Slatt deplored the menace to farmers' organizations from without. The local and other press have tried to create dissatisfaction in the ranks, he said. There also have been in situations that officials are working for their own gain. Slatt admitted that personal friendship instead of business qualifications often is the basis of employment by farmers.

City Milk Supply

To Cut Out Middlemen

IT was agreed at the annual meeting of the Fraser Valley Milk Producers' Association, held in New Westminster recently, that the wastage that existed between the producer and the consumer of milk in the city of Vancouver, was too great owing to the large profits made by the middlemen and it was decided that a general meeting of all shareholders would be held at which a definite scheme would be presented for putting the producers' association in full control of the delivery system as well. It is hoped that the consumer will get cheaper milk and that the producer will get more money. An ambitious undertaking!

The financial statement of the association showed it possible to pay six per cent. dividends, equivalent to \$36,000 divided among 44 members, and a nice surplus besides for running the business. Mr. J. W. Berry announced that steps had been taken looking toward the purchase of the Chilliwack and Sardis cooperatives; payments to be made with stock of the Milk Producers' Association. Mr. E. D. Barrow, M.L.A., expressed the opinion that the association supplied more milk than any other similar association upon the coast.

Save Butter-Fat, Time and Labor for Yourself and for the Empire with a NEW DE LAVAL CREAM SEPARATOR

Save for Yourself

Butter-fat right now is selling at the highest price in many years, and you can't afford to waste an ounce of it.

Whether you are trying to get along without any cream separator or using an inferior or half-worn-out machine, you are losing valuable butter-fat that would soon pay for a New De Laval.

The De Laval is not only a cream saver but a time and labor saver, and with the present shortage of farm help every farmer needs to utilize time and labor saving machinery wherever it is possible to do so.

Save for the Empire

It is the patriotic duty of every cow owner to save butter-fat. We are a nation at war, and not a particle of fat should be wasted. When all European countries are encouraging the use of the best cream separator, can we do less?

Buy Your De Laval Now

Railway delays are so serious that deliveries can't be depended upon, and if you don't order your De Laval early there is no telling when you can get it. Then, too, labor and material conditions may compel higher prices. The sooner you get a De Laval saving butter-fat and labor for yourself and the Empire, the sooner it will pay for itself.

If you haven't the spare cash right now, that need not stand in the way of your getting a New De Laval at once. We have an arrangement with De Laval agents which makes it possible for any reputable farmer to secure a De Laval on the partial payment plan—a small payment at the time of purchase and the balance in several installments—so that your De Laval will actually pay for itself while you are using it and getting the benefit from it.

Why not see the nearest De Laval agent at once? If you do not know him, write to the nearest office for new catalogue or any desired information.

THE DE LAVAL COMPANY, Ltd.
 LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos, Alpha Gas Engines, Alpha Churns and Butter Workers. Catalogues of any of our lines mailed upon request.

MONTRÉAL PETERBORO WINNIPEG VANCOUVER
 50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

Will it be a Dry Season?

You don't know—nobody knows. But if you take the precaution of proper tilling you will have as little fear from insufficient moisture as hundreds of users of Peter Hamilton Cultivators last year. Good seed deserves better treatment than simply planting it haphazard. Work up your soil with a

Peter Hamilton Cultivator

and you'll get improved results. All teeth cultivate to the same depth and thoroughly work up every inch of the ground. Every tooth reinforced, each section of heavy steel. See this splendid implement before investing in any cultivator.

The Peter Hamilton Company, Ltd.
 Peterborough, Ont.



When Writing Mention Farm and Dairy

OUR FARM HOMES



THE praises of others may be of use in teaching us, not what we are, but what we ought to be.—Hae.

The Heart of the Desert

(Continued from last week.)

CHAPTER XIV.

The Beauty of the World.

FOR many hurrying minutes, Rhoda saw only the passing tree branches black against the evening sky as she lay across Kutie's breast. The pursuers had made no sound nor had Kutie broken a single twig. The entire incident might have been a pantomime, with every actor tragically intent.

Having long learned the futility of straggling, Rhoda lay quietly enough, her ears keen to catch the sound of pursuit. Kutie did not remove his hand from her mouth. But as he dropped rapidly and skiffily down the mountainside he whispered:

"My own ground, you see! It will take them a good while in the dusk to find that back trail. Only a few Indians know it."

But Rhoda's heart was beating high. Let Kutie boast as he would, she was sure that Jack and John DeWitt were learning to follow the trail. The most vivid picture in her mind was of the utter weariness of John's face. In the past weeks Rhoda had learned how fearful had been the hardships that would bring such weariness to a human face. Tears came to her eyes. No one so weak, so useless as herself, she felt, could be worth such travail.

Silently, they moved through the dusk. Rhoda knew that the other Indians must be close behind them, yet no sound betrayed their presence. After a half-hour or so she struggled to get set down. But Kutie only tightened his hold and it was fully two hours later that he set her on her feet.

"Don't move," he said. "We are on a canon edge."

Rhoda swung her blanket to her shoulders, for the night was stinging sharp. She was wakened, so accustomed to the night trail that she moved unhesitatingly along black rims that had long paralyzed her with fear.

"Now," said Kutie, "I'm not going to travel on foot. The only horses within easy distance are some that a bunch of Navajos have in the canon below here. So we will go down and get them. We will have to hike pronto after we get 'em. Just remember that you are contaminated by the company you are keeping; and that if you make any noise, the Navajos will shoot you up, with the rest of us. Keep right behind me."

The little group moved carefully down the canon trail. In a short time they reached a

growth of trees. They stole through these, the only sound Rhoda's panting breaths. Suddenly Kutie stopped.

"Wait here!" he breathed in Rhoda's ear, and he and Alchise disappeared. A hand was laid on her arm and Rhoda knew that Molly and Cesca were guarding her. Almost immediately the soft thud of hoofs was upon them. Kutie seized Rhoda and tossed her to a pony's back.

"It was dead easy!" he whispered. "They were all asleep! I even took a saddle for you! Now hike!" Rhoda gripped her pony with her knees as the little fellow cantered unerringly through the darkness after Kutie. She felt a sudden pride and exultation in the security she had developed in the saddle during the travail of her night rides. She knew that no man of her acquaintance could ride a horse as she could now. "And with the exultation," she was trembling with excitement. She knew that none of them could expect mercy if the Navajos discovered their loss in time to take up the chase. All the experience of the gambler who stakes his life on a throw of the dice; all the wild thrill of the chase; all the trembling of the panting, woodland things that hunt and are hunted, were Rhoda's as the night wind ruffled past her face. The spathy of illness was gone. To-night she was as wild a thing as the night's birds that brushed across their trail on sweepings wing.

When they made camp at dawn Rhoda tumbled into her blanket and was asleep before Alchise finished

covering their trail. When she woke she found that they were camped in a strange cove. They were high up on a mountain on a shelf that gave back into a shallow cave. In front, facing the desert, was a heap of rock that formed a natural rampart. A tiny spring bubbled from the cave floor. Here a little fire would seem as secure in their dizzy seclusion as eagles of the Andes.

It was barely noon and the mountain air was sweet and exhilarating. Kutie set against the rampart, smoking a cigarette, while Molly and Cesca worked over the fire. Rhoda lunched on the torulas to which Molly had clung through all the vicissitudes of flight.

"Where are the horses?" she asked Kutie.

"Oh, Alchise took them back. We must stay here a while till your mob of friends disperses. I couldn't get them and I wanted to pacify the Navajos and get some supplies from them. Alchise will fix it up with them."

And here on this dizzy brink of the desert Kutie did pause as if for a long, long holiday. The wisdom of the proceeding did not trouble him at all. The call of the desert was an allurements to which he yielded unreservedly, trusting to elude capture through his skill and unflinching good fortune.

To Rhoda the pause was welcome. She still had faith that the longer they camped in one spot the surer would be the pursuers to stumble upon them. Kutie began to devote himself entirely to Rhoda's amusement. He knew all the plant and animal life of the desert, not only as an Indian but as a college man who had loved biology. By degrees Rhoda's good brain began to respond to his vivid interest and the girl in her stay on the mountain shelf learned the desert as has been given to few whites to learn it. Besides what she learned from the men Rhoda became expert in camp work under Molly's patient teaching. She could kindle the tiny, smokeless fire. She could concoct appetizing messes from the crude food. She could detect good water from bad and could find forage for horses. The crowning pride of her achievements was learning to weave the dish basketry.

She had lived in the mountain niche some three weeks when Alchise and Kutie left the camp one afternoon, Alchise on a turkey hunt, Kutie

on one of his mysterious trips for supplies. Alchise returned at dusk with a beautiful bird which Rhoda and Kutie noted with enthusiasm. But Kutie did not appear at supper time as he had promised. When the meal was almost spoiled from waiting, Rhoda and the Indian started at the evening word on Alchise grew uneasy, but he dared not disobey Kutie's orders and leave the camp unguarded at night.

Rhoda speculated, torn between hope and fear. Perhaps the searcher had captured Kutie at last. Perhaps he had given up hope of winning her love and had gone for good. Perhaps, somewhere or other, was a lying badly hurt! The little group sat up much later than usual. Cesca silently smoking her endless cigarettes, Alchise and Molly talking now in Apache now in English. Rhoda was convinced that they were puzzled and worried.

Even after she had lain down on her blankets Rhoda could not sleep. With Kutie gone her sense of the camp's security was gone. She rose finally and sat beside Alchise who, rifle in hand, guarded the ledge. There was no moon but the stars were very large and near. Rhoda was growing to know the stars, the Indian pointing to the East; in the desert they became a part of one's existence. The sense of stupendous distance was greater at night than in the daytime. The infinite heavens, stretching depth beyond depth, the faint far spaces of the desert, were as if one looked on the Great Mystery itself.

When dawn came, Alchise awakened Cesca, put the rifle into her hands, and hurried back up over the mountain. The purple shadows had lightened to gray when Rhoda saw Kutie staggering up the trail from the desert. Rhoda gave a little cry and ran down to meet him.

"Kutie! What happened to you? We were so worried!"

There was a bloody rag tied just below the young man's knee. He paused, supporting himself against a rock. Across his eyes, drawn and haggard with pain, flashed a look of joy that Rhoda, starting the bandage, did not see.

"I was late starting back," he said briefly. "In the darkness a bit of the trail gave way, dropped me into a canon and laid my leg open. I was unconscious a long time and lost a lot of blood, so it has taken me the rest of the night to get here. Would you mind getting Alchise to help me up the trail?"

"Alchise has gone to look for you. Lean on me," said Rhoda simply.

Despite his weakness, the dark side of the young man's face while Rhoda's utter unconsciousness of her changed in a heartbeat brought a smile to his set lips. Not if the nature of dragging himself up the trail were to be ten times greater would he now have rallied himself of help from Alchise.

"If you will let me put my arm across your shoulder we can make it," he said as quietly as though his heart were not leaping.

Rhoda's squaring of her slender shoulder was distinctly boyish. Utterly heedless of the pain which each step cost him, Kutie made his way slowly to the ledge, ordering his flustered squares as leaning on Rhoda as if leaning on Rhoda only enough to feel the tender girlish shoulders he

divided up into sides up a charade.

When a few rows ahead to reappear breakfast, bandage,

The Up

God is

44 THE Lord...
ance up
peace."

Yesterday I
will be barg
said one, as
there erect,
strength of
came upon
power what.

Once he said:
I have done an
but—"Here I
while we witness
out of sight, a
shaken by cont
but for a few se
again, master of

In those cove
holistically, in s
beside me on a l
cap, and fastene
cabinet-sized pho
and children, "I
is answer to my
discovery: "Yes,
all the time, an
what a comfort t
this happened, w
no more, I could
them."

Oh! if we could
this vivid conc
and sliding pres
in the hour of I
of His nearness c
force, because He
the hour of part
needed strength,
stands. As one ha
He can comfort
fully calls for it.

In the hour
I rejoice with yo
much it is deserv
of self-mastery, H
what it means to
battles. He alone

Thus in all of
have the bless
sense of His near

Young Peo

Conducted by

Playing

WITH the rev
customers c
pastime so
known as "Char
how to play them"
or exclaim. Well,
words acted in yell
being an act and t
given for the last

Don't attempt to
ate. It is astonishing
a little ingenuit
hand to run down
make a good head
dian. A red table c
red. Patches can
easily by pinning a
the coat and patch
wrong side out may
god jacket.

Very Easy

Miss—A little girl
and is apparently
thing she has miss
led—A girl comes
Missed—The little
toy by her moth
person.

When the gather
divide up into side
up a charade.
Here are a few row
added to reappe
breakfast, bandage,



Helping the Farmer.

—From The Country Gentleman.

The Upward Look

God is Ever-Present

"THE Lord lift up His countenance upon thee and give thee peace."—Num. vi. 24.

Yesterday I had my first real talk with a discharged soldier. It was a sad one, as he was blind. As he stood there erect, vigorous in all the strength of his young manhood, it came upon me with overwhelming power what we owe to such as he.

Once he said: "I do not regret what I have done and what I have lost, but—" Here he turned his back, while we witnessed one of the hardest of sights, a strong man's frame shaken by controlled sobs. It was but for a few seconds, when he turned again, master of himself.

In those seconds, as I looked around helplessly, in silent pity, I saw right beside me on a low table, his soldier's cap, and fastened inside a very good, cabinet-sized photograph of his wife and children. When he turned he said in answer to my telling him of this discovery: "Yes, they were with me all the time, and no one can know what a comfort they were. Even after this happened, when I could see them no more, I could feel and know I had them."

Oh! if we could only all of us have this vivid consciousness of the near and abiding presence of our Saviour! In the hour of loneliness this sense of His nearness can give untold comfort, because He, too, was lonely. In the hour of peril He can give the needed strength, because He understands. As one acquainted with grief, He can comfort when the heart pitifully calls for it.

In the hour of success He can rejoice with us, because He knows how much it is deserved. At the moment of self-mastery, He can appreciate what it means to us as no one else, because He alone knows of the self-battle.

Thus in all of life's moments we have the blessed privilege of this sense of His near presence.—I. H. N.

Young People's Forum

Conducted by Marion Dallas.

Playing Charades

WITH the revival of simple old customs comes the favorite pastime so popular years ago, known as "Charades." "O do tell us how to play them!" I hear some react or exclaim. Well, charades are only words acted in syllables, each syllable being an act and then the whole word given for the last scene.

Don't attempt to have them elaborate. It is astonishing what merriment a little ingenuity will develop. For example, a feather duster with the handle run down the actor's back, make a good head-dress for an Indian. A red table cloth makes a blanket. Patches can be easily represented by pinning a piece of paper to the coat and pants. A coat turned wrong side out may look like a ragged jacket.

Very Easy Charade.

Miss—A little girl enters the room and is apparently hunting for something she has missed.

Leo—A girl comes in leading a dog.

Missed—The little miss appears being led by her mother or some other person.

When the gathering is a large one, divide up into sides and each side get up a charade.

Here are a few words that are easily adapted to representation: Grooms—breakfast, bandage, courtship,

cambial, Manhattan, Constantinople,

fellow, paradox. Besides acting words, there is amusement in acting proverbs such as "A new broom sweeps clean."

Charades for St. Patrick's Day.

This month the day on which we may most easily plan to entertain our friends is St. Patrick's Day, and the occasion may always be a jolly one because of the wit and humor and fun that characterize it. A party, or whatever form the entertainment may take, is on this day, therefore, always informal.

I cannot resist giving one game, called "Irish City Charades," apart from these I have suggested, just for the sake of the folks who would like to puzzle out these charades. If you wish to use them at your party, the first two lines of each charade may be written on a card for each of the gentlemen, the remaining two on a card for each of the ladies, and partners may be secured by matching them.

Irish City Charades.

(1) My first is a "B" and my last is a "t."
The Emerald Isle is made of me; The name is a curious one, I guess, Reminding you of a maid in distress.

(2) "D" is my first and my last is an "n";
I'm the centre of things to good Irishmen, Wherever they roam over valley and hill; My sons and daughters love it still.

(3) My letters are four, and if you will look,
They will make you think of your good Irish cook, In a round table of glass my name—sake you'll see; Now, if you think hard, I'm sure you'll guess me.

(4) My first half means slaughter,
My first rates with penny. Of heroes great I do not have many. But two famous cats, in a much-talked-of fight, Fought each till the other was vanquished from sight.

(5) My first half means laze, my second a way;
I'm a city, a county, and also a bay. My people, an odd but industrious crew, Are very great talkers and good laborers, too.

(6) My first is a "K," my second is ill;
With "y" do I end; now listen until I tell you my secret—my pride and my glory Are my beautiful lakes, famed in song and in story.

(7) With a "y" do I end, I begin with a "B";
A castle fair in my place you will see. Within is a stone—if you due homage above, Honeyed words from your lips ever will flow.

(8) My first half means a city great and renowned;
My second an Irish "derry" is found. While I'm not so great as my cousin, I'll own, On the pages of history I'm not wholly unknown.

(9) My first half is water, my last means a crossing;
I'm down in the south near the sea waves foaming; Many sieges historic and battles I've known; I've visited Lord Cromwell and welcomed Prince John.

(Continued on page 22.)

Westclox

Westclox is Big Ben's family name. Westclox is a name of an alarm clock is proud to bear. Westclox is a mark of quality.

All Westclox must earn the right to wear it. Like Big Ben, they must be as good all through as they look outside. The Western Clock Co. makes each one in the patented Westclox way—a better method of clock making. Needle-point pivots of polished steel greatly reduce friction. Winder runs on time and ring on time.

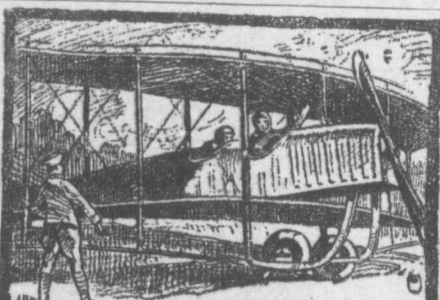
That's why Westclox make good in the home, that's why these clocks have so many friends. Your dealer has them. Big Ben is safe. Or, send for the same price, if your dealer doesn't stock him.

Western Clock Co.—makers of Westclox
300-302 So. Park Ave.—London, Ontario, Canada
La Salle, Illinois, U. S. A.

Big Ben



A Westclox Alarm



Endurance!

Artful wretches to playing a new instrument in this world soon. Without our Advertisers the wretches would be blind and deaf.



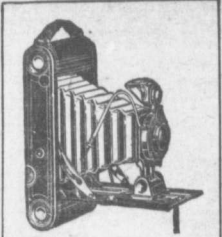
Those who have to endure tedious and nerve-racking duties need to be stirred up and fortified for the occasion. There must be no dip in the strength-making machinery of the human body. One must be clear, brain quick and body normal. It is not to die. Food must be consumed that is rich in Chocolate, Cocoa and Fat. COCOA—when mixed with milk is the ideal food drink to meet these requirements. It is a safe and suitable way to nourish the human body. At all times when you meet, exercise, or when you are excited and when indigestion may set in, take and expect results to come you get.

COWAN'S COCOA

"Perfection Brand" Purest and Best

31-41

Farm and Dairy stands forequare against everything that is detrimental to the farmers' interests, and whatever appears in its columns, either advertising or editorial, is guaranteed reliable.



No. 2C
**AUTOGRAPHIC
KODAK, JR.**

Price, \$15.00

PRACTICAL PICTURES

Your farm in picture—there would be pleasure in that for you—and utility.

An Autographic Kodak not only gives you pictures of buildings, live stock, crops, fields, but the opportunity for a written record—the all-important data and title joined herewith each negative directly after exposure.

The result is a farm record—complete, authentic, practical.

The 2C Autographic Kodak, Jr. is an admirable camera for this purpose. So easy to work successfully that you will get good pictures from the camera in ten minutes so convenient to carry that you can always have it with you on your rounds of farm inspection—so generous a picture area (2½ x 4½ inches) that there is plenty of room for view and record.

Fitted with carefully tested lens and Kodak Roll Feeding Shutter with adjustable speeds of 1-25, 1-50 and 1-100 of a second as well as time bulb. Coated with hand some, serviceable black leather, black leather bellows. Metal case in nickel and black enamel.

Canadian Kodak Co.

Limited
Toronto, Canada

EARN \$10 TO \$2 A DAY AT HOME
Help to meet the big demand for Hosiery for us and your Home Trade.
Inclusion papers provided with suitable, all-year-round employment on Auto-Knitters. Experience and Success Guaranteed.
Write for particulars, rates of pay, full particulars, and Auto-Knitters.
Auto-Knitter Hosiery (Can.) Co. Ltd.
Dept. 207 127 East G. Street

FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER

FOR SALE—Privet, Barbery, Cedars, Spruce, Pine, Oak, Chestnut, Walnut, Mulberry, for hedges, Windbreaks, Timber, mailing also. Special Dutch elm variety, one dollar; hundred, five dollars. Lists free. John Downham, Strathroy, Ont.

CHEESEMAKER WANTED, with two or three years' experience. Apply stating wages, to Box 81, Farm and Dairy.

CHEESEMAKER WANTED for the Fraser Creek Cheese Factory, Box 1918, 17 miles from railway. Apply, stating price per lb. and furnish references. James Douglas, President, Fort Stewart, Ont.

FARMERS AND FARMERS' CLUBS interested in cooperation, write for information, enclosing stamp, about cooperative insurance. Jas. Lockie, Zephyr, Ont.

FARM FOR SALE—105 acres; plowing done; possession July 1st. Apply W. S. Walton, Scarborough Junction.

Farm and Dairy is in an excellent position to champion the cause of the farmer in Canada, because it is owned and controlled exclusively by farmers.

lows: Take 12 sweet oranges (bitter ones may be used if preferred), and four lemons. To this add 31 cups of water and let stand for 36 hours. Place on stove and allow it to boil from one and a half to two hours, so as to become a little thick before adding sugar. Then add one cup of sugar to each cup of the liquid. Do not allow it to boil long after the sugar has been added, just until it begins to jelly.

Some people like marmalade made by combining oranges, lemons and grapefruit. A good recipe for this is to use in the proportion of one orange, one lemon and one grapefruit, and after measuring fruit add three times its bulk in water. Let stand overnight. Next morning boil 10 minutes. Cover tightly and let stand again overnight. Boil 14 minutes the following morning and to each pint of fruit add a pint of granulated sugar and boil until it jellies, stirring as little as possible.

Those of us who are endeavoring to save sugar as far as possible, may not favor the idea of making marmalade for that reason. For those of an experimentalive turn of mind, however, this difficulty may be overcome by using glucose instead of the regular cane sugar. Recently in the Domestic Science Section of the Technical School in Toronto, classes have been trying out glucose in making marmalade with good success. Glucose, we are told, is made by heating starch under pressure with sulphuric acid, and its sweetening power with cane sugar is three to five. It can be prepared either in crystallized or in syrup form. By using glucose we would not only be obeying the advice from the Food Controller to preserve all non-exportable goods possible, but we would also be saving sugar. At the same time, authorities at the Technical School claim that marmalade made with a delicious marmalade at less cost than if made with cane sugar. One of the recipes used at the Technical School for making such a marmalade was as follows: One grape fruit, one lemon, one orange, eight cups of water, and 10 cups of water, which will make eight pint of marmalade.

We will be glad to hear from any of our Women Folk who try out this method and find it successful or otherwise.—R. M. M.

Improve Fish With Sauce

FISH is much improved if served with sauce and below we give two or three ways of making fish sauce. Every one possibly is familiar with the standard white sauce for fish made with flour, milk, butter, pepper and salt. To vary this an egg sauce may be made by adding a hard boiled egg, chopped very fine, or the fish chopped fine to the sauce and grate the white through a sieve over the fish when serving, or vice versa.

For tomato sauce make the same a white sauce using tomato juice that has been strained from cooked tomatoes. Instead of milk and add an onion. Horseradish sauce can be made by adding to white sauce a tablespoon of grated horseradish, wet with lemon juice and work to a creamy whiteness.

If one desires to make a fancy dish, they might serve Maitre d'Hotel sauce with the fish. This is made by heating two tablespoons of butter to a cream with the half a lemon, adding a tablespoon of finely minced parsley. Serve cold with hot fish. This sauce may be served in little cups made from half a lemon from which the pulp and inside skin has been removed. Hollandaise sauce is made from standard white sauce with the addition of the yolk of an egg and after removing from the fire, the juice of half a lemon. This can be served with either boiled or baked fish or with fish cakes.

How About Shoes and Gloves?

Farm and Dairy patterns shown in these columns are especially prepared for our Women Folk. They can be relied upon to be the latest models and include the most modern features of the paper pattern. When sending your order please be careful to state just what measure for adults, for children, and the number of the pattern described. Orders are filled within one week to 10 days after receipt of price of all patterns and Dairy, Peterboro, Ont.



the back of this dress is fastened. Three sizes: 14, 18 and 20 years.

2344—2343—Lady's Costume—Here is an interesting costume. The blouse has one of the newest styles, collars in the shawl effect and loosely tied in front. The skirt, too, is unusual in effect and would look nicely made up from serge or some of the new spring materials. This costume calls for two patterns. It costs for each. The blouse is cut in sizes from 34 to 44 inches bust measure, and the skirt from 22 to 34 inches waist measure.

2345—A Simple Suit—This simple set of coat and cap for the small tots of the family carry cozy looking. Four sizes: 6, 10, 12 and 14 years.

2346—Lady's Apron—This is one of the "general" styles of apron and it could readily be used in hot summer weather as a dress which would be cool and comfortable for working. Four sizes: small, 32-34; medium, 34-36; large, 36-38; extra large, 44-46 inches bust measure.

2347—Lady's Corset—There are so many styles of corsets nowadays that one requires very little made in the style here shown. It is very attractive and should fit neatly. Seven sizes: 34 to 44 inches bust measure.

2348—Girl's Dress—Large pockets are showing again, on children's dresses at any rate, and this little frock shows an attractive style of pocket. The dress is very pretty throughout. Four sizes: 6, 8, 10 and 12 years.

2349—Girl's Dress—For the little maid who has her heart set on a dainty dress of cloth or muslin, here is a most attractive thing in this model. Lace and tucks from the trimming, and a few neat embroidered corners. Four sizes: 6, 8, 10 and 12 years.

2350—Lady's Negligee—A blouse or kimono made from pretty material after the style here shown should prove very attractive and comfortable. It is a small, medium, large and extra large.

peeth the worn

In the camp, man while K watching her put one of Al on to boil, grew washed out aged it with a shirt. She bro and her own t coated the new suming great, the happiness was so energetic as no one else. His was just the far peak, his bacon and looking at him on one side, wit of superiority, placent tenders can assume oil tered to the nec culing thing.

"There's" she satisfaction.

"Rhoda," said the heavy thum not shake his "how long ago a helpless, duty strength to cut How long since one but yourself Rhoda drew a stood staring, drest, to her al again. She helo looked at them, and brown and chee looked at he never was to her eyes.

"Kutle!" she an well again! she packed back ledge. Through cheeks flushed ally she stopp

"You have out ed instincts," she you have zaved health. Whatever never shall fore "I have chang old hatful of R Rhoda turned t of the distant r of red. Crimon s to the tenth, in finite peace.

"Why!" she ras beautiful! It's ad, adorned beaut

The Indian, hody speak," Rhoda he, "The realization, catch the aftergl her rebirth. Sudd that never could a health in a setting. The realization, Kutle, with sign was gratefu, did much. One, howe

"I drink," he smoothed his black "You who have b manded service al you do this?"

"It was not serving pay up soot of the Kutle was not and by the end of quite himself. He expeditious with R rich provided tter her. Her ency, her old agy mediate rescue ad strange conflict of

tearful for rescue, w constant, achng, de people, and yet the

The Heart of the Desert

(Continued from page 20.)

poeth the worn blue blouse.

In the camp, Rhoda assumed command while Kut-le lay on his blanket watching her in silent content. She put one of Alchise's two calico shirts on to boll over the breakfast fire. She washed out the mat, cut and banded it with strips from the sterilized shirt. She brought Kut-le's breakfast and her own to his blanket side and accosted the young man to eat, he assuming great importance merely for the happiness of being urged. Rhoda was so energetic and efficient that the sun was just climbing from behind the far peaks when Kut-le finished his bacon and coffee. The girl stood looking at him, hands on hips, head on one side, with that look in her eyes of superiority, maternity and com- placent tenderness which a woman can assume only when she has ministered to the needs of a helpless masculine thing.

"There!" she said with a sigh of satisfaction.

"Rhoda," said Kut-le, hoping that the heavy thumping of his heart did not shake his whole broad chest, "how long ago was it that you were a helpless, dying little girl without strength to cut up your own food? How long since you have served any one but yourself?"

Rhoda drew a quick breath. She stood staring from the Indian to the desert, to her slender body, and back again. She held out her hands and looked at them. They were scratched and brown and did not tremble. Then she looked at the young Indian and he never was to forget the light in her eyes.

"Kut-le!" she cried. "Kut-le! I am well again! I am well again!"

She paced back and forth along the ledge. Through the creases in her cheeks flooded richly crimson. Finally she stopped before the Apache.

"You have outraged all my civilized instincts," she said slowly, "yet you have saved my life and given me health. Whatever comes, Kut-le, I never shall forget that!"

"I have changed more than that," said Kut-le quietly. "Where is your old hatred of the desert?"

Rhoda turned to look. At the edge of the distant ranges showed a rim of red. Crimson spokes of fire flashed to the south. The sky grew brighter, more transparent; the ranges melted into molten gold. The sun, hot and scarlet, rolled into view. Into Rhoda's heart flooded a sense of infinite splendor, infinite beauty, infinite peace.

"Why!" she gasped to Kut-le, "it is beautiful! It's not terrible! It's not adorned beauty!"

The Indian nodded but did not speak. Rhoda never was to forget that day. Long years after she was to catch the afterglow of that day of her rebirth. Suddenly she realized that never could a human have found health in a setting more marvelous. The realization was almost too much. Kut-le, with sympathy for which she was grateful, did not talk to her much. Once, however, as she brought him a drink and mechanically smoothed his blanket he said softly:

"You who have been saved and demanded service all your life, why do you do this?"

"I'm not serving you. I'm trying to pay up some of the debt of my life."

Kut-le was about in a day or so and by the end of the week he was quite himself. He resumed the daily expeditions with Rhoda and Alchise which provided text for the girl's desert learning. Rhoda's old despondency, her old agony of prayer for immediate rescue had given way to a strange conflict of desires. She was eager for rescue, was conscious of a constant aching desire for her own people, and yet the old sense of out-

rage, of grief, of hopelessness was gone.

Of a sudden she found herself pausing, thrusting back the problems that confronted her while she drank the full this strange mad joy of life which she felt must leave her when that the fear of death was gone. That her mind had found its old poise but with an utterly new viewpoint of life. Her blood ran red. Her lungs breathed deep. Her eyes saw distances too big for their conception, beauties so deep that her spirit had to expand to absorb them.

The silent nights of stars, the laborious crests that tossed sudden and unpeaking views before the eyes, the eternal canons that led beneath ranges of surpassing majesty, roused in her a passion of delight that could find expression only in her growing physical prowess. She lived and ate like a splendid boy. Day after day she scaled the ranges with Kut-le and Alchise; tenderly reared creature of an ultracivilization as she was, she learned the intricate lore of the aborigines, learned what students of the dying people would give their hearts to know.

Kut-le wakened Rhoda at dawn one day. She prepared the breakfast of coffee, bacon and tortilla. Alchise shared this eagerly with Rhoda and Kut-le, though already he had eaten with the squaws. The day was still gray when the three set out on a long day's trip in search of game. The way this morning led up a canon deep and quiet, with the white shadows still on rock and covey within it. The air was that of a northern day of June.

Rhoda tramped bravely, up and up, from cactus to bear grass, from bear grass to stunted cedar, from cedar to pines that at last rose triumphant at the crest of a great ridge. Here Rhoda and Kut-le flung themselves to the ground to rest while Alchise prowled about restlessly. Across a hundred miles of desert rose faint snow-capped peaks.

Kut-le watched Rhoda's rapt face for a time. Then, if unable to keep back the words, he said softly: "Rhoda! Stay here, always! Marry me and stay here always!" Rhoda looked at the beautiful pleading eyes. She stirred restlessly; but before she could frame an answer Alchise appeared, followed by a lean old Indian all but toothless who wore a pair of indented overalls and a gauze shirt. The two Indians stopped before Kut-le, and Alchise jerked a thumb at the stranger.

"Sabe no white talk," he said. Kut-le passed the stranger a cigarette, which he accepted without comment. A rapid conversation followed between the three Indians.

"He is an Apache," explained Kut-le, finally, to Rhoda. "His name is Injua Tom. His says that Newman and Porter hired him to trail us but he is tired of the job. They foolishly advanced him five dollars. He says they are camping in the valley right below here."

Rhoda sprang to her feet. "Where are you going?" smiled Kut-le. "He says they are going to shoot me on sight!"

Under her tan Rhoda's face whitened.

"Would they shoot you, Kut-le, even if I told them not to?"

At the sight of the paling face the young man murmured, "You dear!" under his breath. Then aloud, "Not if I were your husband."

"How could I marry a savage?" cried Rhoda.

Kut-le put his hand under the cleft chin and lifted the sweet face till it looked directly into his. His gaze was very deep and clear.

"Am I nothing but a naked savage, Rhoda?" he said. "Am I?"

Rhoda's eyes did not leave his. "No!" she said softly, under her breath.

(To be Continued.)

SUN LIFE KEEPS GROWING

THE results of operations for the year 1917 show a continuance of the notable expansion that has marked the career of the Sun Life Assurance Company of Canada. In Assets, Income, Surplus, New Business, and Total Business in Force substantial increases are recorded over the corresponding figures for previous years.

RESULTS FOR 1917

Assets at December 31st, 1917.	\$90,160,174.00
Increase	7,211,175.00
Cash-income	19,288,907.00
Increase	189,865.00
New Assurances issued and Paid for in Cash	47,811,677.00
Increase	8,689,570.00
Assurances in Force at December 31st, 1917.	\$11,870,045.00
Increase	38,628,625.00
Profits paid or allotted to Policyholders	1,660,880.00
Increase	469,488.00
Profits paid or allotted to Policyholders in past five years	5,234,063.00
Total Payments to Policyholders, 1917.	\$5,946,846.00
Payments to Policyholders since organization	\$80,904,816
Assets held for Policyholders	\$8,959,174
Premiums received since organization	\$108,254,400
Payments to Policyholders and Assets held for them exceed the premiums received by	\$10,305,756
Undivided surplus at December 31st, 1917, over all liabilities including capital	\$8,550,761.00

THE COMPANY'S GROWTH

YEAR	INCOME	ASSETS	LIFE ASSURANCES IN FORCE
1872	\$ 48,010.75	\$ 90,401.50	\$ 1,004,200.00
1873	477,110.75	1,212,504.49	30,373,677.29
1874	2,026,654.71	7,232,771.18	145,282,777.29
1875	7,994,538.75	26,438,598.18	511,185,509.88
1917	19,288,907.00	\$90,160,174.00	911,079,966.73

The Company takes this opportunity of thanking its policyholders and the public generally for the continued confidence and goodwill of which the above figures give such strong evidence.

SUN LIFE ASSURANCE COMPANY OF CANADA

1871 HEAD OFFICE MONTREAL 1917
T. B. MACAULAY, President

The Maple Sugar Drive

MAPLE sugar and maple syrup production come as the first attack in the greater production campaign for 1918. The call for food of all kinds comes to Canada and all Canada, east and west, to leave the situation must produce this year as never before.

The first crop of the year, in Eastern Canada at least, and in parts of Manitoba and British Columbia as well, is secured by tapping the sugar maple. The season is due to open in Essex County, Ontario, the most southerly point in Canada, about March 20, and gradually the spring wind creep north and east, spreading across the older part of Ontario into the Eastern Townships of Quebec and on to New Brunswick and Nova Scotia. The sap running season will last in each section until the leaves fall—about three or four weeks. The greatest use a farmer can make of that sap running period, if he has a sugar bush on his farm, is to turn in with all the help he can command or persuade and make a couple of hundred dollars' worth of sugar. It will cost him some firewood, it is true, and in some districts of Canada cordwood is getting mighty scarce, but the farmer has to consider that this is an exceptional year. We have had a great world shortage of cane and beet sugars. Canada has not suffered as some countries, but the demand for sugar is greater than ever known. Britain is on a sugar ration of two pounds per month, France one and one-tenth pounds per month and Italy one pound per month.

The Canadian market has hitherto readily absorbed 75 per cent. of the Canadian sugar maple production. The United States takes all we can send and would gladly take more. Western Canada is a growing market where the pure maple sugar and maple syrup of the East is highly esteemed. In the big cities of Canada has been hard to get pure maple sugar and the demand for the pure products has for years exceeded the supply. The United States offers an unlimited market. And, further, the American people have been asked to conserve cane and beet sugars and reduce the consumption of sugar candies. The greatest consumers of candies in the world are forced to find substitutes. Maple sugar is a wholesome substitute and popular wherever introduced.

The people of Britain and France have lately been made acquainted with the Canadian sugar. The Canadian soldiers have introduced it. Thousands of pounds have been sent to the front by the Red Cross, and the knowledge of maple flavor has spread far and wide. The demand for it by now into the various countries of Europe where Canadian troops have been stationed. This has created the foundation for a permanent export trade, and Canadian maple producers have now a market opportunity practically without a limit.

Maple sugar and syrup have been protected from adulteration by the Pure Maple Sugar amendment to the Adulteration Act, passed in 1915, and the word "maple" may not be used in branding or offering for sale any but the pure products. Dealers in the Ottawa Valley and the Eastern Townships of Quebec are offering prices netting 16 cents a pound to the farmers for sugar and \$1.75 per gallon for syrup. These prices are easily double those received five or six years ago. Every available maple tree should be tapped this spring and every sap bucket, pail and pan pressed into service, whether it is the most up-to-date equipment or the old-time sugar making outfit that has not been used for years. Every little helps. Every pound of maple sugar is wanted.

Keep roses and other shrubs free from suckers, shoots that start at the base of the plants.

RAW FURS

WE require immediately One Million Five Hundred Thousand Muskrat Skins (1,500,000), and Fifty Thousand Beaver Skins (50,000).

We have no time to issue Price Lists. Don't ask for any. Ship us your Muskrats. We will pay the very highest Market Prices. Put your own valuation on them if you wish, but ship to us. A trial shipment will convince you that we are the best buyers of Raw Furs in the World.

We have Stocks of Money.

We are no Fickers.

We are in the Market for the Entire Canadian Catch.

We buy all kinds of Canadian Raw Furs.

The George Monteith Fur Co.
21 JARVIS STREET - TORONTO, ONTARIO

Lump Jaw

The first remedy to cure Lump Jaw is

Fleming's Lump Jaw Cure and its results to-day the standard to measure, with years of experience back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. See if Fleming's Lump Jaw Cure ever fails. The fact does of itself, together with substantive information on Lump Jaw and its treatment, is given in

Fleming's Vest-Pocket Veterinary Adviser
Most complete veterinary book ever printed in the green cover. Unusually bound, colored and illustrated. Write for a free copy.
FLEMING BROS., Chemists
63 Church Street - Toronto, Ont.

WHITE AND COLUMBIA WAGAN, DOTTIE, LIGHT BRAHMAS, S. G. WHITE LEGHORNS,
Michael K. Boyer, Box 22, Hamonton, N.J.

WANTED—Assistant for cheese and butter factory for 1918 season. Give references and prices expected. G. Sheely, R. R. No. 7, Picton, Ont.

Are You Working for the Machine or Is the Machine Working for You?

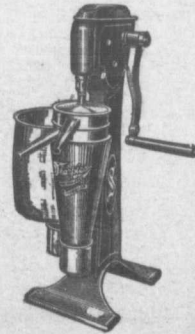
No one wants to be bossed by a bell, or chased by a speedometer. Fixed-feed separators are hard taskmasters, unless cream waste means nothing to you. How much better it is to have your separator skim clean at any speed—working for you, not against you. Only one separator does this—the Sharples suction-feed. It skims equally clean at all speeds, averaging a saving of 10 lbs. of butter per cow yearly over any other separator. Every time you turn a Sharples you are saving the butterfat that will help win the war.

SHARPLES SUCTION-FEED CREAM SEPARATOR

- the *only* separator that will skim clean at widely-varying speeds
- the *only* separator that gives cream of unchanging thickness—all speeds
- the *only* separator that will skim your milk quicker when you turn faster
- the *only* separator with just one piece in bowl—no discs, easiest to clean
- the *only* separator with knee-low supply tank and once-a-month oiling

Remember—Sharples is the *only* separator that automatically prevents cream losses, and doesn't rely on human nature. Write for catalog today to nearest office, addressing Dept. 77

TORONTO, ONT. **The Sharples Separator Co.** REGINA, SASK.
THE MITCHELL & McCREGOR HARDWARE CO., Brandon, Man.
Distributors for Manitoba



RENNIE'S War Time Production Seeds

THERE must be no "slackers" this year, either among the seeds or the growers.

Table listing various seeds and their prices, including Brussels Sprouts, Cabbage, Cauliflower, Celery, and Tomatoes.

FLOWER SEEDS

Table listing flower seeds such as New Giant Asterum, Rennie's XXX Giant Comet Asters, and Rennie's XXX Exhibition Mixture.

Mail Your Order TODAY For Planting Up to April 15th

LOOK FOR THE STARS Turn the pages of your Rennie catalogue. You will notice a great many paragraphs with stars at the corners.

THE WILLIAM RENNIE COMPANY LIMITED, KING & MARKET STS TORONTO

40 Annual Winter Sale 36 Registered Holsteins

Hunt & Collier's Livery Barn Brantford, Tuesday, April 2nd

The Brant District Holstein Breeders have a reputation for square dealing and high quality animals at their various sales...

E. C. CHAMBERS, Pres. N. P. SAGER, Secretary, St. George.

OOL. ALMAS, Auctioneer.



When Writing Mention Farm and Dairy

NORFOLK CONSIGNMENT SALE OF HOLSTEINS.

THE annual consignment sale of the Norfolk Holstein Breeders' Club was held at Hagersville, on Thursday, March 7th, about 400 buyers were present...

The following are those which sold for \$100 with their buyers: Elmcrest Pontiac Sylvania, \$200, T. Wilson Smithville, etc.

Ad Talk

I BIT at my desk and glance out of the window. It is pouring rain. I congratulate myself on the fact that I am not out on the road.

As I watch the rain falling and hear a sigh of satisfaction being uttered under a good roof, my thoughts run thuswise: If owing to weather conditions...

In my efforts to secure advertising for Farm and Dairy I find that the best results are realized where I make a personal call. But the number which I get in touch with is rather limited.

Instead, why not take a rainy afternoon as I have done, and make use of the columns of Farm and Dairy...

A hockey team plays beta on the home rink and a farmer tests out his own home soil. Bring the other fellow right to your home. Don't offer him. Take the first wet afternoon, or better still, the first evening...

If you have not time to attend to this matter, try to have it in our Special Dairy number, which appears on April 15th.

C. B. McKILLICAN, Farm and Dairy, Peterborough, Ontario.

1316. A. Parker, Caledonia; Pontiac Bohe Holme, \$100, W. Biggar, Jarvis; Bellows, \$100, J. Pieterik, \$100, W. C. Houch, Elmcrest Dairy, \$200, J. E. Brown, \$100, etc.

THE HESPELER SALE. IDEAL weather, small attendance, but good buying were the main characteristics of the Hesperia sale of Holsteins on March 8th.

Five mature cows averaged \$197, six heifers averaged \$182.50, and nine calves averaged \$113.21. The total receipts of sale were \$12,414.33.

The following are the animals selling for \$100 with their buyers: Vronka 6th Abbecker DeKok, \$100, W. Cronka, \$100, etc.

SALE DATES CLAIMED

- PETERBORO COUNTY. March 28th—G. A. Bretton, Norwood, Dispersion sale of Holsteins. BRANT COUNTY. April 2nd—Brant County Breeders' Club, Sale of Holsteins at Brantford. N. P. Sager, St. George, host.

Address: A high-class Ayres (Imp.) No. 5666. Bull calf 2 or 3 lbs. at WINTRO HILL, KILN, Stoney Creek, call or write J. B. CAIRNGROSS, A. She

STONEYCROFT STOCK FARM DISPERSION SALE

at Ste. Anne de Bellevue, Que.
at 12 o'clock
MARCH 26th.

Pure Bred Ayrshires

Ayrshire and Holstein Grades

Clydesdale Horses

We regret very much that we find it necessary to dispose of our stock. The fire which demolished our buildings last fall, however, has made it impossible for us to continue until other arrangements have been made.

While building up our herd, our object has been to procure individuals possessing beauty, utility and breeding. Two main points that we considered were utility and health combined with pleasing conformation and good breeding. The result has been satisfactory. We now possess a healthy herd of good producing cows with a uniformity of type and breeding which compares favorably with that of any similar lot ever before offered to the public. We believe that every animal offered in our sale will make good and uphold the proud standard that the Ayrshire Cow has won for herself among the Dairy Breeds of cattle.

Breeders and prospective breeders, here is your opportunity

to secure individuals of good conformation, breeding and utility, which will make creditable additions to any herd, and a safe and sound investment for the prospective breeder who is laying the foundation for a healthy herd of cows with the desire for uniformity of type and production uppermost in his mind.

One of the features of the sale will be our herd sire--- Hobsland Record Piece---54821

This young herd sire was bred by Thos. Barr, well known throughout Scotland and America as a famous breeder of Ayrshires. In 1915 Major Houldsworth purchased him at the great Hobsland sale—paying the highest price of the day.

Mr. Barr claims that Hobsland Mary 3rd, 37590, dam of Hobsland Record Piece, is the best producer in his herd and the only living cow of the world renowned Bull, White Coeade of Nether Craig, 2852. Her record at 15 years of age was 9,290 lbs. of milk and 3.74% Butter Fat.

The sire, Hobsland Perfect Piece, 10665, is known to all Ayrshire breeders as UNDEFEATED GRAND CHAMPION OF SCOTLAND AND AMERICA. His grandsire, Hobsland Mastpiece, 8795, is the greatest show ring and breeding bull the Ayrshire breed has known.

The sale will be held under cover---so come rain or shine

Stoneycroft Stock Farm is situated one mile from the station of the Grand Trunk and Canadian Pacific Railways at Ste. Anne de Bellevue, and splendid train connections can be obtained to all points, either in Canada or the United States. Vehicles will meet all the trains at both stations on the day of the sale.

Catalogue of Sale will be sent you on request

Address: L. C. McQUAT, Manager

STONEYCROFT STOCK FARM

Ste. Anne de Bellevue, Que.

MACDONALD COLLEGE.

(BANKERS AND TRUSTEES) OFFICE
STE. ANNE DE BELLEVUE, QUE.

POST OFFICE
MACDONALD COLLEGE QUE. CANADA.

NOV. 29TH., 1917.

TO WHOM IT MAY CONCERN:--

THIS IS TO CERTIFY THAT THIS

TWENTY-NINTH DAY OF NOVEMBER NINETEEN

HUNDRED AND SEVENTEEN I HAVE COMPLETED A

THERMAL TEST FOR TUBERCULOSIS ON ALL

CATTLE OVER SIX MONTHS OF AGE, THE PROPERTY

OF STONEYCROFT STOCK FARM, STE. ANNE DE

BELLEVUE, QUE., AND HAVE FOUND THE ENTIRE

HERD TESTED FREE FROM THE DISEASE.

W. E. McEwen, B.V.S.

CHOICE AYRSHIRES

A high-class Ayrshire bull calf for \$25. Dam, HOLMES CHEERIE BLOSSOM (Imp.) No. 5686. Also a son of LADY'S BLOSSOM LADY GEMMA (Imp.) 25247. Bull calf and 2 or 3 heifer calves at \$35 each, from good dams, and bull sired by WHITE HILLS KING OF BEARERS (Imp.) 35276. When at the above sale at Stoneycroft, call or write.

J. B. CAIRNCROSS - Box 128 - STE. ANNE DE BELLEVUE, QUE.
A Short Distance East of McDonald College.

The Surest Way

To sell your surplus stock in through the live stock columns of Farm and Dairy. The cost is little and the results certain. Send in your ad.

THE FARMERS SEEDSMAN

SEEDS FIFTY-TWO YEARS SERVICE

1866 1918

Decide what to plant now!

Seeds will be in greater demand this year than ever before on account of the big shortage of good seed and the government's demand for increased production. Do not delay your order.

CORN.

On account of the severe shortage of seed corn this year, practically none being obtainable from Canada—we have secured for orders NOW for seed corn (shelled) Southern grown direct to our receiving delivery from United States War Board. This corn is of excellent quality and is on the way now. We quote the following varieties—**Red Cob—Early Prince Charles** (Red Cob) would do as a substitute for Wisconsin No. 71. **Leaming** (Improved); **Leaming (Poddy)**; **Mammoth Southern** \$5.00 per bushel, freight paid on orders of \$25 and over to Ontario and Quebec points. We are in the market for 8-rowed and 2-rowed barley, Marquis wheat, Emmer black barley and Sweet Clover. Send samples.

CLOVER AND TIMOTHY.

Government Standard, bushel No. 1 Red Clover..... \$29.00
No. 1 Alsike..... 16.00
No. 2 Alsike, No. 1 for purity..... 15.00
Alsike, Ontario variegated No. 2, almost No. 1 for purity..... 24.00
No. 1 Timothy, extra No. 1 for purity..... 6.25
No. 2 Timothy, extra No. 1 for purity..... 5.75
No. 2 Timothy, No. 1 for purity..... 5.25
Kentucky Blue Grass, 2 lbs per lb., postpaid..... .35

We pay railway freight to all parts in Ontario and Quebec on orders of \$25 or more.

Get our quotations on Mangels and Turnip Seeds.

GEO KEITH & SONS
SEEDS

124 KING ST. E.
TORONTO

Specialists in
Holstein lore

A third of a century
of experience

WE KNOW HOW

F. H. McCULLOUGH & SON
LIVE STOCK AUCTIONEERS

Epworth Farm

NAVAN, ONT.

AVONDALE FARM OFFERS

A choice young bull, born Nov. 2, 1917, sired by "Woodcrest Sir Clyde," Dam, a 23-lb. daughter of "Prince Hengerveldt Pietie"; 2nd, sired by "A bargain for immediate sale."
B Also a grand young bull, born Oct. 6, 1917, light in color, sired by "King Elio Sylvia Johanna." This is the \$5,000 yearling son of Belle Model Johanna 2nd, the twice 37-lb. Dam of calf is a 16-lb. two-year-old daughter of "K. W. A. Canada"; 2nd dam, 29.96-lb.; 3rd dam, 31.70-lb. A bargain.

H. LYNN, Avondale Farm, Brockville, Ont.

Consigned by M. H. HALEY at Woodstock, Mar. 20

MARY BUTTER BARONESS—27½-100 Bred to King Fayne Al-carra, 1st prize senior bull calf at Toronto, London and Guelph, 1917, sired by Butter Baron, brother to 2 ex-champions of Canada, and whose dam won first place in Guelph dairy trial. Sire's dam, Queen Butter Baroness, 33.17 lbs.

SILVER FAYNE BELLE—a mature cow sired by Grace Fayne 2nd Sir Colantha, 21 M.M. daughters and 107 A.R.O. sisters, and bred to son of Queen Butter Baroness.

RE-BECKY FAYNE OF CEDARBRAE—Bred to a son of 100 lb. cow, sired by Grace Fayne 2nd Sir Colantha, and from A.R.M. dam.

M. H. HALEY, Plan to attend **SPRINGFORD, ONT.**
this sale.

Dispersion Sale

HOLSTEINS and CLYDESDALES

Near Toronto---Yonge St. Stop 38 Metropolitan R.R.

on Thursday, March 21st, 1918

I will sell, without reserve, 13 head reg. Holsteins, 7 high-class Grades and 7 registered Clydesdales. Send for Catalogue.
P. W. BURTON **R. R. 1, Eglinton, Ont.**

HOLSTEIN-FRIESIAN NEWS

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

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FROM FEB. 1 TO FEB. 28, 1918

Mature Class.

1. Abbecker Queen Countess, 2340, 5y. Im. 244; 482.1 lbs. milk, 23.30 lbs. fat, 29.29 lbs. butter. R. J. Hicks, Dalhousie, N.S.
2. Florite Pietierie Mechthilde, 13460, 2y. Im. 146; 595.5 lbs. milk, 24.00 lbs. fat, 30.29 lbs. butter. Dr. A. A. Farewell, Ontario.
3. Madam Pauline Canary, 16499, 7y. Im. 24; 574.8 lbs. milk, 23.39 lbs. fat, 28.78 lbs. butter.
14-day record: 1217.7 lbs. milk, 45.81 lbs. fat, 57.26 lbs. butter.
30-day record: 2078.8 lbs. milk, 56.44 lbs. fat, 119.46 lbs. butter. F. J. Haislet, Norwich.
4. Nora Canary, 23305, 6y. Im. 141; 475.3 lbs. milk, 23.14 lbs. fat, 29.92 lbs. butter. J. M. Steves, Riverston, B.C.
5. Edgemont Edna, 25476, 5y. Im. 74; 636.5 lbs. milk, 22.61 lbs. fat, 29.26 lbs. butter. Dr. A. A. Farewell, Ontario.
6. Netherland France, 19602, 6y. 10m. 304; 568.8 lbs. milk, 22.19 lbs. fat, 27.73 lbs. butter. C. P. Wilcox, Chatham, N.S.
7. Lady Aargie Netherland, 20399, 6y. Im. 114; 474.1 lbs. milk, 23.78 lbs. fat, 27.29 lbs. butter. Arbogast Bros., Sebringville, N.Y.
8. Thelma Mechthilde, 14712, 3y. Im. 241; 483.3 lbs. milk, 20.96 lbs. fat, 26.20 lbs. butter. J. M. Steves, Riverston, B.C.
9. Maple Grove Hesseltie DeKok, 22824, 6y. Im. 161; 585.1 lbs. milk, 23.43 lbs. fat, 26.61 lbs. butter. W. O. Bailey, Paris.
10. Ladoga Idaline Veeman, 11230, 3y. Im. 134; 529.2 lbs. milk, 23.36 lbs. fat, 26.48 lbs. butter.
14-day record: 1042.1 lbs. milk, 37.60 lbs. fat, 49.30 lbs. butter. A. E. Hulet.
11. Duchess Wayne Calanity, 10603, 5y. Im. 131; 594.5 lbs. milk, 22.98 lbs. fat, 26.19 lbs. butter. Walburn Rivers, Ingersoll.
12. Millie Leigh Pouch, 15260, 6y. 7m. 284; 545.6 lbs. milk, 20.11 lbs. fat, 26.17 lbs. butter. E. C. Chambers, Hatchley Stn.
13. Lady Pauline Colantha, 22560, 5y. Im. 51; 499.5 lbs. milk, 19.99 lbs. fat, 23.74 lbs. butter.
14-day record: 1091.6 lbs. milk, 37.11 lbs. fat, 46.20 lbs. butter. A. E. Hulet.
14. Hellowell's Pride, 11599, 5y. Im. 161; 401.9 lbs. milk, 18.80 lbs. fat, 23.69 lbs. butter. J. Day, Ingersoll.
15. Greta Fawcett Pouch, 12829, 7y. Im. 161; 569.1 lbs. milk, 18.77 lbs. fat, 23.46 lbs. butter.
14-day record: 1057.9 lbs. milk, 36.27 lbs. fat, 44.09 lbs. butter. Curstons, Brantford.
16. HEB-CRAE Florite Pietierie, 22712, 5y. 10m. 274; 416.5 lbs. milk, 18.49 lbs. fat, 23.11 lbs. butter. Joseph O'Reilly, Peterborough.
17. Aggie Emily of Riverdale, 10523, 3y. 10m. 121; 566.6 lbs. milk, 17.39 lbs. fat, 22.49 lbs. butter. John Morrison, Aurora.
18. Cornelia Cornelia Mercena, 23222, 5y. Im. 142; 615.8 lbs. milk, 17.66 lbs. fat, 22.07 lbs. butter. A. E. Cornwall, Norwich.
19. Johanna Dewdrop, 20058, 5y. 10m. 141; 519.5 lbs. milk, 16.54 lbs. fat, 20.68 lbs. butter. Grace Hulet, Ingersoll.
20. Bess DeKok Scheuling, 11678, 5y. Im. 154; 412.2 lbs. milk, 15.86 lbs. fat, 19.83 lbs. butter.
14-day record: 1196.0 lbs. milk, 30.43 lbs. fat, 41.14 lbs. butter. W. O. Bailey, Paris.
21. Nettie W.'s Belle DeKok, 22427, 5y. 11m. 154; 442.0 lbs. milk, 15.26 lbs. fat, 19.11 lbs. butter. M. A. Ramsay, Downsview.
22. Glenrithy Hilda, 21387, 5y. Im. 141; 397.6 lbs. milk, 14.76 lbs. fat, 17.32 lbs. butter. Fred T. Pife, Indian River.
23. Fair View Fairview, 20814, 3y. Im. 84; 609.9 lbs. milk, 24.01 lbs. fat, 30.02 lbs. butter.
14-day record: 1243.9 lbs. milk, 46.35 lbs. fat, 55.56 lbs. butter. Fred T. Pife.
30-day record: 2547.4 lbs. milk, 61.18 lbs. fat, 69.64 lbs. milk, 32.83 lbs. fat, 25.64 lbs. butter.
14-day record: 1182.8 lbs. milk, 44.78 lbs. fat, 55.97 lbs. butter.
14-day record: 1614.7 lbs. milk, 58.01 lbs. fat, 73.74 lbs. butter. A. E. Hulet.
8. Mays DeKok, 20674, 4y. 11m. 54; 611.6 lbs. milk, 41.43 lbs. fat, 26.79 lbs. butter.
30-day record: 2142.0 lbs. milk, 85.10 lbs. fat, 108.38 lbs. butter. The Expor. Farms, Ontario.
4. Lady Keyes Mercena, 27602, 4y. 11m. 241; 651.6 lbs. milk, 20.81 lbs. fat, 26.02 lbs. butter.
14-day record: 1222.6 lbs. milk, 40.15 lbs. fat, 55.19 lbs. butter. A. E. Hulet.
5. Edgemont Pride Sena, 25475, 4y. 10m. 41; 514.0 lbs. milk, 20.74 lbs. fat, 25.93 lbs. butter. Dr. A. A. Farewell.
6. Fair View Fawcett Leigh, 2318.8, 4y.

- 17d; 509.2 lbs. milk, 17.79 lbs. fat, 22.16 lbs. butter.
14-day record: 1016.0 lbs. milk, 33.12 lbs. fat, 41.46 lbs. butter. E. C. Chambers, Hatchley Stn.
 3. Maple Grove Hianh, 26390, 4y. 11m. 314; 496.5 lbs. milk, 23.16 lbs. fat, 35.38 lbs. butter. R. J. Hicks, Dalhousie, N.S.
- Junior Four-Year Class.**
1. Ladoga Idaline Mercena, 26689, 4y. 2m. 141; 431.5 lbs. milk, 22.79 lbs. fat, 26.49 lbs. butter.
14-day record: 1224.6 lbs. milk, 44.04 lbs. fat, 55.45 lbs. butter.
294-days record: 10347.4 lbs. milk, 65.89 lbs. fat, 81.80 lbs. butter.
2. Lady Belle Mercena, 26241, 4y. 6d. 458.2 lbs. milk, 18.76 lbs. fat, 24.46 lbs. butter. R. J. Hicks, Dalhousie, N.S.
 3. Alberta Canary DeKok, 31336, 4y. Im. 24; 461.7 lbs. milk, 18.76 lbs. fat, 23.45 lbs. butter. E. C. Cornwall, Norwich.
 4. Princess Edy DeKok, 20911, 4y. 2d; 500.3 lbs. milk, 17.16 lbs. fat, 21.12 lbs. butter. R. W. E. Burnaby, Jefferson.
- Senior Three-Year Class.**
1. R. K. Augustus, 26309, 2y. 3m. 2d; 346.8 lbs. milk, 14.66 lbs. fat, 20.71 lbs. butter. J. M. Steves, Riverston, B.C.
- Junior Three-Year Class.**
1. Burkoye Hengerveldt May Echo, 26441, 1y. 10m. 15d; 454.2 lbs. milk, 16.79 lbs. fat, 20.68 lbs. fat, 26.68 lbs. butter. Joseph O'Reilly.
 2. Rhodavale, 26420, 1y. 10m. 15d; 459.0 lbs. milk, 16.49 lbs. fat, 20.61 lbs. butter.
14-day record: 971.6 lbs. milk, 30.87 lbs. fat, 38.19 lbs. butter. A. E. Hulet.
 3. Princess May Echo, 26441, 1y. 10m. 15d; 347.7 lbs. milk, 12.53 lbs. fat, 15.43 lbs. butter. J. J. Davin, Ingersoll.
 4. Queen Cornelia, 20200, 2y. Im. 17d; 464.7 lbs. milk, 12.62 lbs. fat, 15.25 lbs. butter. Arbogast Bros.
- Senior Two-Year Class.**
1. Rose Teako Hourie, 26767, 2y. 10m. 241; 461.1 lbs. milk, 15.47 lbs. fat, 16.97 lbs. butter. E. D. Hilliker, Burgessville.
 2. S. C. M. Senora Hengerveldt, 42873, 2y. 2m. 2d; 444.8 lbs. milk, 17.93 lbs. fat, 22.18 lbs. butter. J. M. Steves, Riverston, B.C.
 - 30-day record: 1647.7 lbs. milk, 71.04 lbs. fat, 89.79 lbs. butter. J. M. Steves, Riverston, B.C.
 2. S. C. M. Nora, 42878, 2y. 6m. 2d; 264.2 lbs. milk, 10.07 lbs. fat, 18.84 lbs. butter. J. M. Steves.
 3. Belle J. G. Livingston, 42823, 2y. Im. 17d; 368.3 lbs. milk, 13.90 lbs. fat, 17.37 lbs. butter. O. D. Bates, Lansing.
 4. Ethel DeKok Colantha, 45705, 2y. 13d; 417.0 lbs. milk, 13.27 lbs. fat, 16.49 lbs. butter. Arbogast Bros.
 5. K. S. W. Ormsby, 42843, 2y. 6m. 4d; 232.0 lbs. milk, 13.04 lbs. fat, 16.31 lbs. butter. Arbogast Bros.
 6. Pioneer Fairmont Harton, 46316, 1y. 11m. 1d; 411.6 lbs. milk, 12.78 lbs. fat, 15.95 lbs. butter. Walburn Rivers, Ingersoll.
 7. Lily Pauline Baronesa, 43003, 2y. 14d; 304.4 lbs. milk, 10.17 lbs. fat, 12.72 lbs. butter. Ethel DeKok Colantha—W. A. CUMSTONS, Secretary.

MARKETS FOR HOLSTEINS.

"THE WET" has become very trendy for Holstein cows in the province of Alberta, Rutherford, of Alberta, in his address at the Holstein-Friesian Association's fair February 1st. At the end of the war there will be a greater demand in Great Britain. Mr. Rutherford then traced the history of the Holstein business. Importations were stopped in 1894. With the small foundation stock in the country at that time, the breed grew wonderfully in popularity. In 1914, the British Government permitted the importation of 9 head of Holstein cattle from Holland; a public sale, the bulls in this importation averaged \$1,287, and the cows \$1,325. "And the records of the past few years did not begin to compare with the records held by Holsteins that are now being marketed." When comparatively few animals brought these prices, considerable attention is being directed toward the victory of a few inferior Holsteins in the neighborhood of the Jersey, the Jersey and the Ayrshire."

WANTED!

a helper, "by the year." For The Elmira Creamery. Experience not necessary. Apply to
F. A. KEYES, Mgr.
ELMIRA, Box 304, ONTARIO

Who Wants This 3½ Head Sire!

Sir Pieter Walker, Sire King's Royal Warbler, Dam Pieter Belle DeKok. 3145 lbs. butter 7 days. He is perfectly quiet, sure and active, a good show animal. We have now a number of his heirs and expect to raise 10 more next season. A bargain for quick sale. Extended notice requested.
GEO. S. ALLIOTT
R. R. 5, Hillsboro, Ont.

Mr
De
req
in
191
tion
Auc
and
line
are
rich
voic
acter
We have
King-only
sale, also a
the will be
in all ages.
R. M. HOLTE
Hust
Into
by feedin
Cream St
Meal, Sav
milk--our
with--feed
let you ju
suits, at Je
be help th
the Albuca
food crisi
Calves a
tains the f
Protein, 15
hydration, 5
Order Ca
we will sup
The Ca
Makers also
STA

Belleville, March 5th, 1918

Mr. Dairy Farmer,
Canada.

Dear Sir,—

The Belleville Holstein Breeders request the pleasure of your company at their Eighth Annual Sale, to be held in Belleville, on Wednesday, April 3rd, 1918.

There will be One Hundred Selections Rendered by our Elocutionist, Auctioneer Montgomery.

He will make his debut at 12.30, and continue throughout the afternoon until the entire list of well-bred masculine and high record feminine selections are rendered to the public.

Music furnished by one hundred richly bred Holstein male and female voices.

Seats are free.

Catalogue, with full cast of characters, now ready for distribution, by

F. R. MALLORY,
Sales Manager,
Frankford, Ont.

HOLSTEINS

We have the only two sons in Canada, of the 46-lb. bull Ormsby Jane King—only mature son of the world's most famous cow. One of them for sale, also a 20-lb. calf, whose dam and two great-grand-dams average 84 at all ages.

R. M. HOLTBY, R. R. No. 4, PORT PERRY, ONT.

CALDWELL'S

Hustle Your Calves Into the Beef Class

by feeding Caldwell's Cream Substitute Calf Meal. Save your whole milk—feed separator milk or water in combination with our calf meal and you will get just as good results, at lower cost. You will be helping also to feed the Allies in this world food crisis.



Calves always do well on Caldwell's Calf Meal, because it contains the food elements of whole milk in their proper quantities. Protein, 12 per cent.; Fat, 7 per cent.; Fibre, 5 per cent.; Carbohydrates, 56 per cent.

Order Caldwell's Calf Meal from your feedman, or write us and we will supply you promptly.

The Caldwell Feed & Cereal Co., Ltd.
DUNDAS, ONTARIO

Makers also of: Dairy Meal, Molasses Horse Feed, Hog Feed, and Poultry Feeds of all kinds.

STANDARD FEEDS

R. O. P. CHAMPIONS

According to the R. O. P. reports a Jersey cow produced more butter fat during last year than any other cow of any other breed. We have now for sale Twenty Cows, fresh or springing, also Young Bulls, all ages. Some of these are closely related to the champion butter cow mentioned above.

B. H. BULL & SON, BRAMPTON, ONT.

EXPERIENCED HERDSMAN WANTED

To take charge of dairy herd of Kemptville Agricultural School. Free house supplied to married man. Apply, giving references, and stating experience to W. J. BELL, Principal KEMPTVILLE, ONTARIO

AYRSHIRE CATTLE

are easy feeders—and thrive well.

Write for booklet.

W. F. STEPHEN,
Secretary Canadian Ayrshire Breeders' Association
Box 508, Huntingdon, Quebec.

10-15-20

Years from now the Bin-sell Silo will be giving good service. It is built of selected lumber, treated with wood preservatives, that prevent decay. It has strong, rigid walls, and heavy steel. Therefore it lasts simply because it can't very well do anything else. Our folder explains more fully. Write Dept. B. T. E. Bassil, Co., Ltd., Elera, Ont.

LAKESIDE AYRSHIRES

A choice selection of young bulls for sale from Record of Performance dams, imported and Canadian bred. Sires: Auchrain Sea Foam (Imp.), 2578; many times grand champion. Fairfield Mans Triumph (Imp.), 3127; a son of the noted Holsland Perfect Piece. Write for catalogue.

Proprietors: GEO. H. MONTGOMERY Dominion Express Bldg., Montreal. D. MCARTHUR, Philippsburg, Que.

Southern Counties

AYRSHIRES BREEDERS

6th
Consignment
Sale



Pure
Bred
Ayrshire
Cattle

50 HEAD 50
MARCH 27th at 1 P.M.

at Dr. Rudd's Sale Stable
WOODSTOCK, ONT.

The heaviest producing strains of Ayrshires in Canada are represented in this sale. Ten richly bred young bulls and 41 females, many of them due to freshen about sale time.

Jean Armour, Lady Jane and Scotch Thistle were all bred in this district. Attend this sale and secure some of the good ones. No by-bidding or bidding-in at our sales.

Write the Secretary for Catalogue.

F. H. Harris, President, Mt. Elgin, Ont.
Moore & Dean, Auctioneers
John McKee, Sec. & Sales Mgr., Norwich, Ont.

You'll Find the Advertisers in FARM AND DAIRY advertising reliable goods. They want to know you; 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.

BROWN BROS.—HOLSTEINS.

WHILE in Eastern Ontario recently, our representative called on Messrs. Brown Bros., of Len., Ont. These noted breeders of Holsteins have they are offering at tempting figures. One of them is a 12-months-old son of Champion Echo Sylvia, whose dam is May Echo Sylvia, one of the world's greatest cows, and whose three nearest dams average 752 lbs. milk and 28.36 lbs. butter in seven days. The grand sire is Spring Fawn Pontiac Corropi, a son of the first 44-lb. cow, who is the daughter of Prince Pontiac Corropi. This is an exceptionally fine young animal. His dam is a 15-lb. junior two-year-old daughter of King Fawn Canada, one of the most noted bulls of the breed, and who has given two two-year-old and three-year-old daughters and more two-year-old daughters with records over 30 lbs. than any other bull of the breed. He is generally recognized as the best son of King Pontiac, who in turn is recognized as the best son of Pontiac Korropi.

They have another young bull for sale, 18 months old, whose sire is by May Sylvia Pontiac Corropi, a three-quarter brother to Champion Echo Sylvia Pontiac, bred by the Ontario breeders, but at present under lease to Mr. M. H. Haley of Springfield, Ont. The dam of this young bull is Fawn Janka Pieterie, who has the following record as a junior four-year-old: Butter seven days 37 lbs., 10 days 124.53 lbs. milk 1 day 192.5, seven days 594 lbs., 30 days 2,756 lbs. She is one of the best daughters of Prince Hengerveld Pieterie, who has seven 30-lb. daughters.

They are also offering two grandsons of King Pontiac Artis Canada, one from a 15-lb. two-year-old. Their sire's dam is a large, light-colored cow, which is one of the most notable cows of Brown Bros. herd. She is a 27.6-lb. four-year-old and a daughter of Prince Hengerveld Pieterie.

These are fine growthy animals. Messrs. Brown Bros. have been breeding a high-class line of stock for many years. They own an excellent herd in the show ring, and at the larger fairs, in public display, R.O.P. and R.O.M. Breeders who are desirous of obtaining one of the best bull obtainable, would do well to get in touch with these breeders with a view to securing some of these excellent offerings.

W. A. MEADOWS' SALE AT NEWTONVILLE.

BREEDERS of the Black and Whites will be interested in Mr. Meadows' sale of registered and high-grade Holsteins, to be held at Newtonville, on March 20th. Mr. Meadows has sold his farm and is putting his entire stock on the market by auction.

There will be a total of 45 head offered, including the 3-year-old herd sire, King Segis Alacra Hengerveld, son of King Segis Alacra Sijford, who is owned jointly by Leavina J. Purcell and Mr. W. A. Meadows. This young bull is a fine individual, and as his dam is of the Francy strain, he should be worth something after. All the calves offered are from this sire, and all cows in calf are bred to him. The former sire was Inka Sylvia Plus, of the same sire as May Echo Sylvia, and from a 26.50-lb. 4-year-old daughter of DeKol Plus, 1906 Canadian champion. There are eleven of his daughters in the sale. There will be 22 registered females and 14 excellent Holstein grades of 30 years' careful breeding, and a senior yearling bull from former sire and Evergreen Fawline. This herd has an enviable reputation as profitable producers, averaging \$170 per head for the past season in milk returns, besides large quantities of milk used for raising calves and other purposes. The herd appears to be in excellent health, and according to Mr. Meadows, every cow has given him a sound calf every 13 months, or often, for many years. This in itself is a point well worth considering. Newtonville is 10 miles west of Port Hope. Train service is unexcelled.

A FINE YOUNG SIRE AT LANING-DALE.

M. Robert C. Laning, of Villa Nova, Ont., in sending us a change of advertisement, writes us as follows: "I have been fortunate in securing from Alacra Brothers, King Segis Alacra Witzke, the fine young sire, Prince Rouben Abbecker Mercena. He is a 12-month-old. His sire is King Segis Alacra Calamity, whose dam has a record of 36.77 lbs. butter in seven days. His dam is King Witzke's daughter, Witzke Evangelina DeKol. She is a straight cow of great capacity, and has just finished an official record of 30 lbs. milk, 31 lbs. butter, in seven days, 88 lbs. milk in one year. Her record was made under ordinary conditions. Evangelina has been dry four weeks before calving. She will be heard from again in the future. She has two R.O.M. sisters, Alca Madeline, born 1909, and King Witzke, 18, at two years. We are looking for good things from King, as he has a good field to work. We have had R.O.P. cows at present 11 daughters (from R.O.P. cows) of Rouben Abbecker Mercena, whose dam and sire's dam average 30 lbs. of butter in seven days. Our next crop of calves should be very valuable."

70 Head OXFORD BREEDERS' CLUB 70 Head
Will Hold a Consignment Sale of
REGISTERED Holstein-Friesian Cattle
at Dr. Rudd's Sale Stable
in the CITY OF WOODSTOCK, March 20, 1913

The cattle consigned will make this the best sale the Club has ever offered. They are always inspected and always sold. A few choice bulls, ready for service, dams' records up to 33 lbs., and 4 near-PRINCE ECHO SYLVIA; sisters to Canadian Champions, and blood of MADAME POSCH PAULINE, QUEEN BUTTER BARONESS, ROYALTON DEKOL VIOLET, with a record of nearly 30,000 lbs. milk in 1 year; and many others.

Write **W. E. Thompson, Woodstock** for Catalogues
MOORE & DEAN, Auctioneers **M. L. Haley**
A. E. Hulet Manager

HERE'S A REAL BULL.

Elmappo Stock Farm is offering an 11 months' old Holstein bull, sired by KING SEGIS ALACRA SIFORD, a son of the \$50,000 bull. His dam is by Count Segis Walker Pieterie, who has 16 H. C. M. daughters, 5 of which have 30 lbs. milk per day, and whose butter records average over 30 lbs. in 7 days. Write, phone or come and see him and his dam.

Will also sell a half-sister of MAY ECHO SYLVIA, 3 years old, due to freshen last of March to a full brother of a 34-lb. cow. Her dam is a full sister to dam of above bull. Her breeding and individuality are hard to beat. Priced reasonable.

J. E. HUFF & SON
R. R. No. 1, Bloomfield, Ontario

41 Holsteins 6 Clydes
AUCTION SALE OF 47 HEAD
Holsteins and Clydesdales
Malton, Ont., March 19th, at 12 o'clock

This is an excellent opportunity for breeders on the lookout for some choice animals to procure them. Included in the sale are grand daughters of the famous sire King Pontiac Artis Canada. Most of the females are in calf to my herd sire, Count Echo Pontiac, a son of the great King Pontiac Artis Canada, and Dolly Echo DeKol, included are a DeKol, who was first at Toronto in 1911 as a 15-lb. 2-year-old. There is also an extra well bred bull, son of King Segis Pontiac Posch and Manor P. H. Alpha, a 15-lb. 2-year-old. Six Clydesdales are also included in the sale. These are exceptionally fine animals, including 2 imported males. Recently I refused \$600 for one exceptional sale. Excellent R. T. facilities. Parties met on C. P. R. Write for catalogue to
C. SLAVIN R. R. 4 - Malton, Ont.
J. K. MEWAN, Auctioneer Weston



SEEDS—Timothy No. 2, \$4.75 per bushel; Alaska clover, \$12; new bags, 45c. Write for samples. A. Bingie, Grimsby, Ontario.

EVERGREEN STOCK FARM
HIGH CLASS REGISTERED
HOLSTEINS

OUR CONTRIBUTION TO THE
Oxford Holstein Breeders' Club Consignment Sale
TO BE HELD IN THE CITY OF
Woodstock, Ont., on Wednesday, March 20th
WILL CONSIST OF

1. Lady Veeman Abbecker, 27,013, 4-years-old. Record 604.4 lbs. milk and 28.64 lbs. butter in 7 days, individually one of the largest and finest cows of the breed.
2. Lady Keyes Mercena, 27,603, 4-years-old. Record 651.4 lbs. milk and 26.02 lbs. butter in 7 days, a very fine individual, and winner of several good prizes.
3. Shadelanna Lassie, 26,615, 3 years old. Record 499 lbs. milk and 20.61 lbs. butter in 7 days—an outstanding individual with great promise.
4. Madam Paulina's Sire Abbecker, 34,149, 3 months old. Individually as near perfect as you can get to the very best Canadian bred bulls, the records of his four nearest dams average 82.65 lbs. of butter in 7 days, and 107 lbs. milk in 1 day. Also, his four nearest dams have all been first prize winners at Toronto Exhibition, and have all been raised on this farm, and none of them weigh less than 1,600 lbs. We consider him a good prospect for any one wanting the best.
5. Prince Colantha Sylvia, 31,923, 10 months old, and nearly ready for light service. This bull, like the preceding one, is as near perfect as possible, and his twelve nearest tested dams average nearly 30 lbs. butter in 7 days.

The above are the best lot we have ever consigned, and any of them would look good in any herd.

A. E. HULET - **NORWICH, ONT.**
Secure a catalogue from **W. E. Thompson, Woodstock, Ont.**

OFFERING No. 3

Another Great Bargain

KING SYLVIA FAYNE 33896

This calf was born Nov. 22, 1917. A shade more black than white. He combines the BEST in PROOVEN type and production, as his sire is the winner in the ring and his dam was at the Canadian National Exhibition as a senior calf in 1916—first as a senior yearling in 1917.

SBMS—King Sylvia Keyes 2366. Twenty of King's nearest relatives average 30 lbs. of butter in 7 days. His dam and 5 sisters average 115 lbs. milk per day. His dam made over 100 lbs. and he is a brother to the GREATEST COW IN THE WORLD—May Echo Sylvia, 162 lbs. milk in 1 day, 1906 lbs. milk with 41.9 lbs. of butter in 7 days.

DAM—Countess Hengervald Fayne, 3357; an unselected daughter of CANADA'S GREATEST cow bull, Lakeview Dutchland Hengervald 2nd. As she freshened at 2 years and 1 month, I did not test her. This calf will do when the freshens again and I expect SOME test from her. This calf is very large and a true show bull. Don't delay.

Write at Once for Extended Pedigree and Price.

W. G. BAILEY, Oak Park Stock Farm R. R. No. 4 PARIS, ONT.

SUNNYBROOK FARM HOLSTEINS

We are offering at a most reasonable price 1 young bull of serviceable age. These are from approved dams, testing from 18.37 to 29.34 in 7 days; must be sold at once. Write for Particulars.

Jos. Kilgour - Eglington P.O. - North Toronto

Remember

35 HEAD 35 HEAD The sale of HOLSTEINS to be held at TAVISTOCK on

MARCH 19th at 1 P. M.

TRAINS WILL BE MET ON DAY OF SALE

Noah S. Bender TAVISTOCK, ONT.

DISPERSION SALE

45 HEAD HOLSTEINS HEAD

at Farm Newtonville Station 10 miles west of Port Hope

C.P.R. and G.T.R. on

Wednesday, March 20th, 1918

at 1 p.m.

Included in the sale will be our herd sire KING SEGHS AL-CARTRA HENGERVELD, son of King Segis Alcartra Spofford, owned jointly by Purtelle & Leavens and W. L. Shaw.

Former herd sire was INKA SYLVIA PLUS, by same sire as MAY ECHO SYLVIA, and whose dam is a 26.80 lb. 4-year-old daughter of DeKOL PLYVA, 1910 Canadian Champion. This sire has 11 daughters to be sold.

Sale will include 23 registered females, 6 of which will freshen shortly, being bred to above herd sire; also a senior yearling bull by Inka Sylvia Plus, and EVERGREEN PAULINE.

Also 12 high grade Holstein cows of 20 years' selection, just fresh, or due to freshen. Three 2-year-old sprinzers of excellent breeding; five calves; horses and farm machinery will also be sold.

This herd has had a splendid reputation as producers. Last year returns from Farmer's Dairy, Toronto, were \$170 per head, besides a large quantity kept at home for calves, house, etc. The herd is in perfectly healthy condition. For 20 years no cow in the herd has failed to have a healthy calf each year. An excellent reputation and a safe place to buy.

For further particulars write.

W. A. MEADOWS, R.R. No. 3, Newcastle, Ont.

F. R. Mallory, Sale Manager. J. W. Wilson, Auctioneer.

MARKET REVIEW AND FORECAST

TORONTO, Mar. 11.—The live stock market is continuing in a firm tone... Horses are hard to sell, but other classes of farm animals are in good demand. Live prices are good for very well graded animals, but unfortunately many lots are coming under the hammer under-undished. This is no doubt due to the scarcity of grain. Dairy cattle are bringing in good prices with grade milk cows fetching from \$75 to \$200. The sale of sows is very brisk and is phenomenal. Prices for hogs are keeping firm and are selling at \$10 to \$11 a cwt in many parts of Ontario.

There is very little movement in the grain market. A few cars of Western wheat are moving out to keep the mills of Ontario going, but practically no Ontario wheat is being marketed, although there is active demand for this commodity. With feed corn quoted at \$2.35 a bushel and practically unobtainable even at that price because of the heavy export demand from the U. S. Government, Ontario farmers find more profitable to feed their wheat for which they are only getting \$2.00 to \$2.10 a bushel at country points. The consumption of home-grown grain for stock raising has been increased by the difficulty in procuring mill feeds.

The seasonal nature of this week's market was the slump of about 10 cents a bushel in wheat, due to the milder weather and the large shipments from the Southern States. With the lower prices now prevailing, a slump is likely to be increased, and it is possible that a slight reaction will set in.

Wheat

Buyers state that there is no Ontario wheat being offered in spite of the keen demand on the part of the mills. It is said to 20 cars of Western wheat is being sent to Ontario millers by the Wheat Export Company. The price of wheat is about a tenth of what could be used by the millers. What wheat is coming east is being sold on the basis of the Government's fixed price in store at Port William, plus the way tax and one-half per cent. No. 1 northern being quoted at \$1.23 with freight extra; No. 2 northern, \$1.18; Manitoba wheat—No. 1 northern, at 2 1/2c with freight extra; No. 2 northern, \$1.20; No. 1 northern, \$1.15; No. 2, \$1.10.

Coarse Grains

Data are available for the only grain raised freely on Ontario soil. While prices at country points range all the way from 50c to \$1.00, the larger dealers are buying most of their supplies at 75 to 85c country points. There is no movement in American corn, present and dealers do not look for any improvement until the demand for half a million bushels is satisfied. Quotations—American Corn—No. 5 yellow, kiln-dried, \$2.00; No. 2 C.W., 99c; No. 1, 95c; No. 2 C.W., 94c; extra No. 1, 92c; No. 1 feed, 89c; in store, Port William.

Ontario wheat—New York, No. 2, 2 1/2c, basis in store, Montreal. Ontario oats—No. 1 white, 98c to \$1.00; No. 2, 95c to 98c. Rye—No. 2, 2 1/2c. Barley—Malting, new, 1 1/2c to 1 1/2c, according to freight.

At Montreal quotations—Oats—Canadian Western, No. 2, \$1.05; do extra, No. 1 feed, 1.02; do No. 2 local white, 1.01; do No. 1, 98.9c; do No. 2, 96.5c; do No. 3, 94.5c; do No. 4 local white, 1.04. Bran—\$5.50. Shorts—\$4.00. Middlings—\$4.00. Meal—\$3.00. Montreal quotations, No. 2, 2 per ton, shorts, \$17. Middlings, \$16 to \$50; meal, \$60 to \$62.

Milk Feeds

Milk feeds are very scarce at any price on account of the small quantities of wheat that are being milled. Toronto quotes car lots, delivered, Montreal quotations—No. 1, \$1.05; Bran, \$35; shorts, \$40; middlings, \$40; meal, \$50. Montreal quotations, No. 2, 2 per ton, shorts, \$17. Middlings, \$16 to \$50; meal, \$60 to \$62.

Hay and Straw

Considerable hay is being disposed of at prices varying from \$16 to \$18 a ton, including Toronto quotes car lots, delivered, Montreal quotations for No. 1 mixed, \$18 to \$16, while car lots of straw are fetching \$10.00 to \$9.00. Montreal quotations for No. 2 hay, in car lots, \$17.

Seeds

Wholesalers are paying the following prices for seed at country points: Alaska, No. 1 fancy, bush, \$12.00 to \$13.00; do No. 1 ordinary, \$11.75 to 12.25; do No. 2, per bushel, \$9.50 to 11.50; do No. 3, \$8.00 to 10.00; do No. 4, \$7.00 to 9.00; do No. 5, per bushel, \$5.00 to 17.00; Red clover, No. 2, bush, \$15.00 to 20.00; do No. 2, per bushel, \$16.00 to 17.00; Timothy, No. 1, per bushel, \$16.00 to 11.00; do No. 2, per cwt., \$7.75 to 8.00; do No. 3, per cwt., \$7.75 to 8.00; Flax, bushel, \$2.00 to 2.50.

Potatoes and Beans

Potatoes are arriving more freely on city markets. Toronto quotes Ontario's

and Delaware at the same price, \$2.35 a bag. Montreal quotations are a little lower than last week, and the price of Ontario white selling as low as \$1.75 per cwt. but they are not in any great demand at \$2.10 to \$2.45 for Green Mountains and \$1.70 for Ontario white stock per cwt. bag.

Much firmer feeling has developed in the beef market since the United States Government communique all American white beans. Supplies coming on the market are few and prices are not inclined to quote prices. Holders of large supplies of eggs coming in, but sympathy with the rapidly declining market in the United States. It is thought by some dealers that the low prices which have been reached will speed up consumption, and a similar reaction may be expected in prices in the market here. Selected new hickory nut selling in Toronto in a wholesale way 45c to 50c; new hickory, 45c to 47c; No. 1, 45c to 47c; No. 2, 45c to 47c; No. 3, 45c to 47c; No. 4, 45c to 47c; No. 5, 45c to 47c; No. 6, 45c to 47c; No. 7, 45c to 47c; No. 8, 45c to 47c; No. 9, 45c to 47c; No. 10, 45c to 47c.

Eggs and Poultry

The customary spring break in the prices for eggs came last week when the market dropped about 10c. The Ontario Canadian markets was not because of large supplies of eggs coming in, but sympathy with the rapidly declining market in the United States. It is thought by some dealers that the low prices which have been reached will speed up consumption, and a similar reaction may be expected in prices in the market here. Selected new hickory nut selling in Toronto in a wholesale way 45c to 50c; new hickory, 45c to 47c; No. 1, 45c to 47c; No. 2, 45c to 47c; No. 3, 45c to 47c; No. 4, 45c to 47c; No. 5, 45c to 47c; No. 6, 45c to 47c; No. 7, 45c to 47c; No. 8, 45c to 47c; No. 9, 45c to 47c; No. 10, 45c to 47c.

Receipts of live and fresh killed poultry are very light, prices however, are not so high as last week. The market for fat hens, which are in demand from the Jewish trade, is quiet.

Live weight. Dressed Chickens, spring, 25c to 30c; 30c to 35c; 35c to 40c; 40c to 45c; 45c to 50c; 50c to 55c; 55c to 60c; 60c to 65c; 65c to 70c; 70c to 75c; 75c to 80c; 80c to 85c; 85c to 90c; 90c to 95c; 95c to 100c; 100c to 105c; 105c to 110c; 110c to 115c; 115c to 120c; 120c to 125c; 125c to 130c; 130c to 135c; 135c to 140c; 140c to 145c; 145c to 150c; 150c to 155c; 155c to 160c; 160c to 165c; 165c to 170c; 170c to 175c; 175c to 180c; 180c to 185c; 185c to 190c; 190c to 195c; 195c to 200c; 200c to 205c; 205c to 210c; 210c to 215c; 215c to 220c; 220c to 225c; 225c to 230c; 230c to 235c; 235c to 240c; 240c to 245c; 245c to 250c; 250c to 255c; 255c to 260c; 260c to 265c; 265c to 270c; 270c to 275c; 275c to 280c; 280c to 285c; 285c to 290c; 290c to 295c; 295c to 300c; 300c to 305c; 305c to 310c; 310c to 315c; 315c to 320c; 320c to 325c; 325c to 330c; 330c to 335c; 335c to 340c; 340c to 345c; 345c to 350c; 350c to 355c; 355c to 360c; 360c to 365c; 365c to 370c; 370c to 375c; 375c to 380c; 380c to 385c; 385c to 390c; 390c to 395c; 395c to 400c; 400c to 405c; 405c to 410c; 410c to 415c; 415c to 420c; 420c to 425c; 425c to 430c; 430c to 435c; 435c to 440c; 440c to 445c; 445c to 450c; 450c to 455c; 455c to 460c; 460c to 465c; 465c to 470c; 470c to 475c; 475c to 480c; 480c to 485c; 485c to 490c; 490c to 495c; 495c to 500c; 500c to 505c; 505c to 510c; 510c to 515c; 515c to 520c; 520c to 525c; 525c to 530c; 530c to 535c; 535c to 540c; 540c to 545c; 545c to 550c; 550c to 555c; 555c to 560c; 560c to 565c; 565c to 570c; 570c to 575c; 575c to 580c; 580c to 585c; 585c to 590c; 590c to 595c; 595c to 600c; 600c to 605c; 605c to 610c; 610c to 615c; 615c to 620c; 620c to 625c; 625c to 630c; 630c to 635c; 635c to 640c; 640c to 645c; 645c to 650c; 650c to 655c; 655c to 660c; 660c to 665c; 665c to 670c; 670c to 675c; 675c to 680c; 680c to 685c; 685c to 690c; 690c to 695c; 695c to 700c; 700c to 705c; 705c to 710c; 710c to 715c; 715c to 720c; 720c to 725c; 725c to 730c; 730c to 735c; 735c to 740c; 740c to 745c; 745c to 750c; 750c to 755c; 755c to 760c; 760c to 765c; 765c to 770c; 770c to 775c; 775c to 780c; 780c to 785c; 785c to 790c; 790c to 795c; 795c to 800c; 800c to 805c; 805c to 810c; 810c to 815c; 815c to 820c; 820c to 825c; 825c to 830c; 830c to 835c; 835c to 840c; 840c to 845c; 845c to 850c; 850c to 855c; 855c to 860c; 860c to 865c; 865c to 870c; 870c to 875c; 875c to 880c; 880c to 885c; 885c to 890c; 890c to 895c; 895c to 900c; 900c to 905c; 905c to 910c; 910c to 915c; 915c to 920c; 920c to 925c; 925c to 930c; 930c to 935c; 935c to 940c; 940c to 945c; 945c to 950c; 950c to 955c; 955c to 960c; 960c to 965c; 965c to 970c; 970c to 975c; 975c to 980c; 980c to 985c; 985c to 990c; 990c to 995c; 995c to 1000c; 1000c to 1005c; 1005c to 1010c; 1010c to 1015c; 1015c to 1020c; 1020c to 1025c; 1025c to 1030c; 1030c to 1035c; 1035c to 1040c; 1040c to 1045c; 1045c to 1050c; 1050c to 1055c; 1055c to 1060c; 1060c to 1065c; 1065c to 1070c; 1070c to 1075c; 1075c to 1080c; 1080c to 1085c; 1085c to 1090c; 1090c to 1095c; 1095c to 1100c; 1100c to 1105c; 1105c to 1110c; 1110c to 1115c; 1115c to 1120c; 1120c to 1125c; 1125c to 1130c; 1130c to 1135c; 1135c to 1140c; 1140c to 1145c; 1145c to 1150c; 1150c to 1155c; 1155c to 1160c; 1160c to 1165c; 1165c to 1170c; 1170c to 1175c; 1175c to 1180c; 1180c to 1185c; 1185c to 1190c; 1190c to 1195c; 1195c to 1200c; 1200c to 1205c; 1205c to 1210c; 1210c to 1215c; 1215c to 1220c; 1220c to 1225c; 1225c to 1230c; 1230c to 1235c; 1235c to 1240c; 1240c to 1245c; 1245c to 1250c; 1250c to 1255c; 1255c to 1260c; 1260c to 1265c; 1265c to 1270c; 1270c to 1275c; 1275c to 1280c; 1280c to 1285c; 1285c to 1290c; 1290c to 1295c; 1295c to 1300c; 1300c to 1305c; 1305c to 1310c; 1310c to 1315c; 1315c to 1320c; 1320c to 1325c; 1325c to 1330c; 1330c to 1335c; 1335c to 1340c; 1340c to 1345c; 1345c to 1350c; 1350c to 1355c; 1355c to 1360c; 1360c to 1365c; 1365c to 1370c; 1370c to 1375c; 1375c to 1380c; 1380c to 1385c; 1385c to 1390c; 1390c to 1395c; 1395c to 1400c; 1400c to 1405c; 1405c to 1410c; 1410c to 1415c; 1415c to 1420c; 1420c to 1425c; 1425c to 1430c; 1430c to 1435c; 1435c to 1440c; 1440c to 1445c; 1445c to 1450c; 1450c to 1455c; 1455c to 1460c; 1460c to 1465c; 1465c to 1470c; 1470c to 1475c; 1475c to 1480c; 1480c to 1485c; 1485c to 1490c; 1490c to 1495c; 1495c to 1500c; 1500c to 1505c; 1505c to 1510c; 1510c to 1515c; 1515c to 1520c; 1520c to 1525c; 1525c to 1530c; 1530c to 1535c; 1535c to 1540c; 1540c to 1545c; 1545c to 1550c; 1550c to 1555c; 1555c to 1560c; 1560c to 1565c; 1565c to 1570c; 1570c to 1575c; 1575c to 1580c; 1580c to 1585c; 1585c to 1590c; 1590c to 1595c; 1595c to 1600c; 1600c to 1605c; 1605c to 1610c; 1610c to 1615c; 1615c to 1620c; 1620c to 1625c; 1625c to 1630c; 1630c to 1635c; 1635c to 1640c; 1640c to 1645c; 1645c to 1650c; 1650c to 1655c; 1655c to 1660c; 1660c to 1665c; 1665c to 1670c; 1670c to 1675c; 1675c to 1680c; 1680c to 1685c; 1685c to 1690c; 1690c to 1695c; 1695c to 1700c; 1700c to 1705c; 1705c to 1710c; 1710c to 1715c; 1715c to 1720c; 1720c to 1725c; 1725c to 1730c; 1730c to 1735c; 1735c to 1740c; 1740c to 1745c; 1745c to 1750c; 1750c to 1755c; 1755c to 1760c; 1760c to 1765c; 1765c to 1770c; 1770c to 1775c; 1775c to 1780c; 1780c to 1785c; 1785c to 1790c; 1790c to 1795c; 1795c to 1800c; 1800c to 1805c; 1805c to 1810c; 1810c to 1815c; 1815c to 1820c; 1820c to 1825c; 1825c to 1830c; 1830c to 1835c; 1835c to 1840c; 1840c to 1845c; 1845c to 1850c; 1850c to 1855c; 1855c to 1860c; 1860c to 1865c; 1865c to 1870c; 1870c to 1875c; 1875c to 1880c; 1880c to 1885c; 1885c to 1890c; 1890c to 1895c; 1895c to 1900c; 1900c to 1905c; 1905c to 1910c; 1910c to 1915c; 1915c to 1920c; 1920c to 1925c; 1925c to 1930c; 1930c to 1935c; 1935c to 1940c; 1940c to 1945c; 1945c to 1950c; 1950c to 1955c; 1955c to 1960c; 1960c to 1965c; 1965c to 1970c; 1970c to 1975c; 1975c to 1980c; 1980c to 1985c; 1985c to 1990c; 1990c to 1995c; 1995c to 2000c; 2000c to 2005c; 2005c to 2010c; 2010c to 2015c; 2015c to 2020c; 2020c to 2025c; 2025c to 2030c; 2030c to 2035c; 2035c to 2040c; 2040c to 2045c; 2045c to 2050c; 2050c to 2055c; 2055c to 2060c; 2060c to 2065c; 2065c to 2070c; 2070c to 2075c; 2075c to 2080c; 2080c to 2085c; 2085c to 2090c; 2090c to 2095c; 2095c to 2100c; 2100c to 2105c; 2105c to 2110c; 2110c to 2115c; 2115c to 2120c; 2120c to 2125c; 2125c to 2130c; 2130c to 2135c; 2135c to 2140c; 2140c to 2145c; 2145c to 2150c; 2150c to 2155c; 2155c to 2160c; 2160c to 2165c; 2165c to 2170c; 2170c to 2175c; 2175c to 2180c; 2180c to 2185c; 2185c to 2190c; 2190c to 2195c; 2195c to 2200c; 2200c to 2205c; 2205c to 2210c; 2210c to 2215c; 2215c to 2220c; 2220c to 2225c; 2225c to 2230c; 2230c to 2235c; 2235c to 2240c; 2240c to 2245c; 2245c to 2250c; 2250c to 2255c; 2255c to 2260c; 2260c to 2265c; 2265c to 2270c; 2270c to 2275c; 2275c to 2280c; 2280c to 2285c; 2285c to 2290c; 2290c to 2295c; 2295c to 2300c; 2300c to 2305c; 2305c to 2310c; 2310c to 2315c; 2315c to 2320c; 2320c to 2325c; 2325c to 2330c; 2330c to 2335c; 2335c to 2340c; 2340c to 2345c; 2345c to 2350c; 2350c to 2355c; 2355c to 2360c; 2360c to 2365c; 2365c to 2370c; 2370c to 2375c; 2375c to 2380c; 2380c to 2385c; 2385c to 2390c; 2390c to 2395c; 2395c to 2400c; 2400c to 2405c; 2405c to 2410c; 2410c to 2415c; 2415c to 2420c; 2420c to 2425c; 2425c to 2430c; 2430c to 2435c; 2435c to 2440c; 2440c to 2445c; 2445c to 2450c; 2450c to 2455c; 2455c to 2460c; 2460c to 2465c; 2465c to 2470c; 2470c to 2475c; 2475c to 2480c; 2480c to 2485c; 2485c to 2490c; 2490c to 2495c; 2495c to 2500c; 2500c to 2505c; 2505c to 2510c; 2510c to 2515c; 2515c to 2520c; 2520c to 2525c; 2525c to 2530c; 2530c to 2535c; 2535c to 2540c; 2540c to 2545c; 2545c to 2550c; 2550c to 2555c; 2555c to 2560c; 2560c to 2565c; 2565c to 2570c; 2570c to 2575c; 2575c to 2580c; 2580c to 2585c; 2585c to 2590c; 2590c to 2595c; 2595c to 2600c; 2600c to 2605c; 2605c to 2610c; 2610c to 2615c; 2615c to 2620c; 2620c to 2625c; 2625c to 2630c; 2630c to 2635c; 2635c to 2640c; 2640c to 2645c; 2645c to 2650c; 2650c to 2655c; 2655c to 2660c; 2660c to 2665c; 2665c to 2670c; 2670c to 2675c; 2675c to 2680c; 2680c to 2685c; 2685c to 2690c; 2690c to 2695c; 2695c to 2700c; 2700c to 2705c; 2705c to 2710c; 2710c to 2715c; 2715c to 2720c; 2720c to 2725c; 2725c to 2730c; 2730c to 2735c; 2735c to 2740c; 2740c to 2745c; 2745c to 2750c; 2750c to 2755c; 2755c to 2760c; 2760c to 2765c; 2765c to 2770c; 2770c to 2775c; 2775c to 2780c; 2780c to 2785c; 2785c to 2790c; 2790c

FARM VALUES IN CANADA.

THE Census and Statistics Office at Ottawa, has published its annual estimate of farm values in 1917, as compiled from the reports of correspondents at the end of January, 1918. The estimated countries (1) the average value of farm land, (2) the average value of farm buildings, and (3) the average value of live stock and of wool.

Average Values of Farm Land.
According to the returns received, the average value of farm land for the whole of Canada, including land improved and unimproved, together with dwelling-houses, barns, stables and other farm buildings, is approximately \$44 per acre as compared with \$41 in 1916. The average values by provinces are as follows: Prince Edward Island, \$43.7; Nova Scotia, \$38.4; New Brunswick, \$36.1; Quebec, \$33.7; Ontario, \$32.2; Saskatchewan, \$26.7; Alberta, \$26.7; and British Columbia, \$48. In the last-named province the higher average is due to orcharding and fruit growing.

Average Wages of Farm Help.
The average wages paid for farm help during the year 1917, have increased considerably since 1916, and have again reached the highest level on record, since many cases they are double what they were before the war. For the whole of Canada, the wages per month, including board, during the summer, including board, for male help, as compared with \$43.23 and \$22.46 in 1916. For the year 1917, including board, the average was \$43.11 for male help, as compared with \$43.23 and \$22.46 for females, as compared with \$37 and \$20.75 in 1916. The average value of board per month is returned as \$13.44 for males and \$10.47 for females, as compared with \$17 for males and \$13 for females in 1916. By provinces, the average wages per month and board are as follows: Prince Edward Island, \$39.74 and \$24.52; Nova Scotia, \$33.75 and \$26.43; New Brunswick, \$37.19 and \$24.72; Quebec, \$33.09 and \$26.91; Ontario, \$33 and \$21.90; Manitoba, \$37.37 and \$24.29; Saskatchewan, \$21.21 and \$14.09; Alberta, \$26.69 and \$14.41; and British Columbia, \$28.13 and \$18.29.

Average Value of Live Stock and Wool.
On the whole there is but little change reported in the value per head of horses, inasmuch as the average value has remained stationary, or has even declined. For cattle, sheep and swine, however, values are substantially higher than last year, and are higher than in any previous year for which records have been collected. For Canada, the average value of horses, three years old and over, is \$167, as compared with \$189 in 1916; cattle below are \$34 as against \$37; cattle be-

lowen one year and three years, average \$104 and \$41; sheep are \$16.35 against \$10.45 last year, and swine are \$17.60 against \$11.95 per cwt. The average value of wool in Canada for the year washed and 75 cents per lb. The average value of wool is estimated to be nearly as good as possible. The average value of each description of farm animal, and for calculating the total value of these averages have been applied to the total number of farm animals as returned in June last. The results are as follows: Horses, \$429,123.00 as compared with \$418,650.00 in 1916; cattle, \$294,577,000 as against \$199,806,000; other cattle, \$770,500 as against \$704,477,000; sheep, \$22,836,000 as against \$20,700,000; swine, \$35,576,000 as against \$40,700,000. The total value of farm live stock in Canada is estimated to be \$1,102,261,000, as compared with \$780,261,000 for the year 1916, as finally revised by the Statistics Bureau for the Prairie Provinces. In 1917, for the first time the total value of farm live stock exceeds one billion dollars.

LOWBANKS NOTES.

READERS will notice the advertisement of Mr. K. M. Dalgleish, of Kenmore, who is breeding a choice young Holstein bull. Our representative very favorably impressed with his herd, offered also his dam and her calf, both of which are in the stable.

The animal question is being viewed by Fairview Korydke Boy, Mr. Dalgleish's herd of the famous bulls fair to become one of the best of the breed in the West. His first ten daughters, the only ones of milk are at this time in the average test of 19.64 lbs. butter in seven days. This record is probably without an equal. Furthermore, he is a son of that noted sire, Pontiac, Korydke, who has 146 A.I.C.O. daughters.

As well be seen by the advertisement the dam of this bull has a five-year-old daughter, a full sister of the best offered, has a three-year-old record of 19.65 lbs. The young bull, his dam and full sister, are of excellent type, apparently to win in any show ring. The only objection which might be raised by some, regarding this young bull, is that he is dark in color. However, he is well within the limits required for registration, and as his ancestors are well-marked, he should be a good bull, especially for any breeder whose view has become possibly a little too white. In any case it would be an unwise act on the part of any breeder to neglect the opportunity of securing such a combination of type and breeding, as is combined in this animal, for the sake of such an unimportant matter as color.

43 HEAD THE DUNROBIN FARMS 43 HEAD

DISPERSION SALE OF Registered Holsteins

The property of Col. John A. Gunn WILL BE HELD ON

Friday, April 5th, at the Union Stock Yards, Toronto

Inadequate railway service and scarcity of efficient help compel us to go out of dairying. The herd is being sold in Toronto as train connections for Beaverton are not good for buyers from a distance. Some 30 of the herd bred to Echo Segis Champion, whose sire is a full brother of May Echo Sylvia.

For Catalogue (ready March 15th) Apply to

The Dunrobin Farm, Beaverton, Ont.

CHOICE BULLS READY FOR SERVICE

Some extra choice young bull calves from \$200 to \$1,000. We have sold thirty-five bulls this winter.

No. 1—By a son of MAY ECHO SYLVIA. His two nearest dams (both Canadian champions), average 25.62 lbs. butter in seven days. Price \$1,000.

No. 2—By a son of MAY ECHO SYLVIA. His two nearest dams (one a four-year-old), average 14.17 lbs. butter in seven days. Price \$600.

HIGHLAND LAKE FARMS

R. W. E. Burnaby Farm at Step 55 Yonge Street Keadia Jefferson, Ont.

LAKEVIEW STOCK FARM

offers for sale several daughters, granddaughters and grandsons from the following cows—LAKEVIEW LACTIFLOR, 27.56 lbs. butter 7 days, calving; LAKEVIEW CHAMPION 30-day butter cow, 8 months after Canadian; LAKEVIEW DUTCHLAND ARTIST, the 34.66 lb. Canadian Champion Sen. 3-yr.-old; FRY CANARY CONFESSOR 2ND, 27.13 lb. after calving; QUEEN ENKA DEKOL, 21.63 lbs. butter in 7 days, and chas. 3 mos. after calving; and her granddaughter, LAKEVIEW 7-day butter cow, 8 mos. after calving, 16.01 lbs. who is now on test as a 2-yr.-old, and running over 30 lbs. milk a day. This is the first time in the history of Canada that such high producing Holsteins have been offered for sale.

DON'T WAIT TO WRITE, but take the first train for Bronte, Ont. Terms, cash or time.

Major E. F. Osler, Prop. BRONTE, Ont. T. A. Dawson, Mgr

80 Head

Allison Stock Farm Holsteins

At Chesterville, Ont., March 21, 1918

"A RECORD SALE OF RECORD HOLSTEINS."

You will find this sale an opportunity unequalled for buyers of Holstein cattle. It will be one of the greatest sales of registered Holstein Cattle ever pulled off in Canada, the offering consisting of some of the most noted strains of the breed. There will be thirty-five daughters of Sir Lyons Segis, ten daughters of King Segis Alcarra Pietje and ten daughters of Sir Riverdale Echo Lyons.

In the offering of eighty head there will be thirty mature cows, seventeen two-year-old heifers, Echo Posch, a son of Lawrence May Echo Posch, 702 lbs. milk and 33.78 lbs. butter in 7 days, and whose first ten dams average over 30 lbs. Remember that the dam of this bull is a full sister of May Echo Sylvia. The best the breed affords is offered you in this sale. You cannot afford to miss it.

Herd Sires

King Segis Alcarra Pietje. This bull's sire is from the \$50,000 bull, King Segis Alcarra. His dam is a cow of great capacity and fine breeding, by Pedro Spoford and Calanthy Paul, former winner champion 4-year-old 7-day butter producer, Fairmont Zerma Segis Pietje. Six daughters of this bull are in the sale.

Sir Lyons Segis. The dam of this bull is from the noted three times 20-lb. cow, Beata Lyons Netherland, by the great King Segis. His sire is from Pietje Segis Alcarra's Count DeKok. We have catalogued this 7-day sire for the sale and along with him will be sold 23 of his daughters and two sons.

Some Females and their Records

	Lbs.	Milk.	Lbs.	Milk.
Riverdale Lyons Echo Posch, the famous 33-lb. cow, Branche Lyons DeKok and King Hengerveld.	30.64	29.68	30.64	29.68
His dam is by Pedro Spoford and Calanthy Paul, former winner of the 25-lb. cow, May Echo Sylvia. His sire is, therefore, a full sister to May Echo Sylvia, who has a record of her own of nearly 34 lbs. butter in 7 days, and 138 lbs. in 30 days, 40 females in the herd have been bred to this great sire.	32.81	32.81	32.81	32.81
King Segis Alcarra Pietje. His dam is a cow of great capacity and fine breeding, by Pedro Spoford and Calanthy Paul, former winner champion 4-year-old 7-day butter producer, Fairmont Zerma Segis Pietje. Six daughters of this bull are in the sale.	35.43	35.43	35.43	35.43
Sir Lyons Segis. The dam of this bull is from the noted three times 20-lb. cow, Beata Lyons Netherland, by the great King Segis. His sire is from Pietje Segis Alcarra's Count DeKok. We have catalogued this 7-day sire for the sale and along with him will be sold 23 of his daughters and two sons.	30.94	30.94	30.94	30.94
Aggie Hengerveld Burke 2nd	26.90	26.90	26.90	26.90
Form Hengerveld DeKok Jr	44.20	44.20	44.20	44.20
Puffing Crossmoppe DeKok	37.92	37.92	37.92	37.92
Daisy Pearl	37.80	37.80	37.80	37.80

Specials—We have catalogued for this sale:

- Two 100 lb. cows. One 30 lb. cow (record made twice).
- One 25.58 lb. cow. One 28.30 lb. cow.
- Eleven females with better records averaging above 20 lbs. each.
- Five Junior two-year-old heifers with official seven day butter records averaging over 20 lbs. each.

Write To-day for Copy of Catalogue.

ALLISON STOCK FARM, W. P. Allison, Prop., Chesterville, Ont.



A Big Output of Maple Sugar for 1918 is Urged by the Canada Food Board

MAPLE SYRUP and maple sugar possess very high food value and they can be produced by thousands of Ontario farmers. The demand is larger than ever and high prices for the producer seem sure to prevail this spring. In February, 16c per pound was offered by buyers in the Ottawa Valley and the Eastern Townships of Quebec.

The Canada Food Board, Ottawa, ask the hearty co-operation of the Ontario maple syrup producers and all who could be producers this year and hopes for a fifty per cent. increase in the output for 1918.

This increase will tend to release huge quantities of cane sugar for later shipment to Great Britain and our European allies where the lack of sugar is being severely felt both on account of its own great food value and general scarcity of food stuffs. England is on a ration of two pounds a month per person, France one and one-tenth pounds, Italy one pound—Canadians use two or three pounds a week! The submarines sank 100,000 tons of last year's sugar crop.

Every bucket, every spile, every maple tree should be set to work this spring—the children can help—every pound produced adds to our food supplies and strengthens us for the winning of the war.

Ontario Department of Agriculture

Parliament
Buildings,
TORONTO



Sir Wm. H. Hearst,
Minister of Agriculture
Dr. G. C. Creelman,
Commissioner of Agriculture

ONTARIO