

16129

Moore W W
(51)

FARM AND DAIRY & RURAL HOME



DEVOTED TO
BETTER FARMING
IN THE CANADIAN
COUNTRY LIFE



Peterboro, Ont., Jan. 6, 1916



Our Lady of the Snows

What Canadian Would Exchange His Bracing Climate even for Balm Florida?

Profitable Production of Mutton
An Address by R. H. Harding.

Good Light for Rural Homes
An Expensive System is Not Necessary.

Echoes from the Lecture Platform
Cleanings from Addresses at Guelph.

All Around the Dairy Farm
Short Articles and to the Point.

Should Women Vote?
By the Editor of Farm Chats.

A Score of Other Articles
All Timely and to the Point.

ISSUED EACH WEEK

Rural Publishing Co., Ltd., Publishers

ONE DOLLAR A YEAR



Ring Out The Old
Ring In The New

BY the time you read this adv. the old year with its disappointments and sorrows will be covered by the Sands of Time in the great Sahara of the Past.

May the bells of 1916 ring in a year of happiness and prosperity to our many friends and users of the

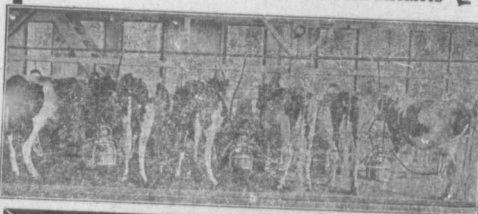
"SIMPLEX" Link Blade CREAM SEPARATOR
AND
B-L-K MECHANICAL MILKER

The New Year is the season for forming new resolutions. You cannot form a better, nor one calculated to save you more time, worry and money than to install a B-L-K Milker and "Simplex" Separator in your dairy. You will find them your greatest money-makers and money-savers throughout 1916. Let us send you the testimony of satisfied users.

Whatever your dairy problems are we can "solve" them. Write us for literature and information how to make 1916 the most prosperous year in your experience.

D. Derbyshire Co., Ltd.

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



Ottawa Winter Fair

HOWICK HALL, OTTAWA
JANUARY 18-19-20-21, 1916
\$16,000.00 Offered in PRIZE MONEY

Greatly Increased Prizes and Extended Classification

ENTRIES CLOSES JAN. 7th

Reduced Rates on All Railways

JOHN BRIGHT, President
OTTAWA, ONT.

W. D. JACKSON, Secretary
CARP, ONT.

A FEELING OF SECURITY

Of absolute Reliability and Power is Enjoyed by Every Owner of a

GILSON ENGINE

"GOES LIKE SIXTY"

A mechanical masterpiece of the highest type, with our improved simple methods of cooling, governing and sparking. Positively guaranteed, highest value. All sizes. Save money. Ask for catalogue and price.

GILSON MANUFACTURING COMPANY

7 York Street, Guelph, Canada 3310



his hair in the middle and dances so divinely, as she says "Oh really," and the lady members of Mr. Gray's family simply can't rest voting for Gray, and then, where poor Mr. "Votes for Women" seems very nice as an abstract sentiment but in practice, it is too dangerous a proposition. It is like letting the canary out for exercise; will it ever come back? The menfolk want to control the elections; that is certain and they know that they could no more swing their own wovey voters than they could the clouds; so, they've decided there won't be any clouds.

Votes for Women

H. Percy Blanchard, Hunts Co., N.S.
A LADY a few days ago demanded of me why the men refused women a vote. I tried all the cowardly excuses that I could lay my hands on, but to no avail. As one of the male sex I could wriggle and crawl but could not escape the excruciation of that lady's logic.

So when she left, and I brightened up a bit, and my palpitating heart began to beat normally again, I asked myself quietly, yet somewhat fearfully, the question, Why Do Men Refuse the Vote to Women?

Men as a rule are more interested in their party than in its principles. Party to them is a sort of religion. To be loyal to their party is almost like being loyal to their country; in fact, they are more so. When a man from principle deserts his party, he is called a traitor, a turncoat any evil name to which the contempt in which he is held by his pre-such associates. Through fear of such persecution, timid man is held to the party rule; and it is "born a torv die a torv" or "born a grit, die a grit."

But, give the women a vote, can they be so easily driven? Let some question like temperance, or social reform, some matter in which the women are really interested come up, and won't the women bolt the heart is? That is the trouble: to give the women a vote; will it help, or will it hurt the party!

Mixed Associations.

If it is true that men are so earnest that they will fight pretty hard to secure their victory, while election is on, they will divide into hostile camps; and each side work tooth and nail to defeat the other. Now, do they want their womenfolk mixed into this? Do they want Mrs. White accusing Mrs. Brown that one of the party heeled gave her that new hat? Or that she wears a false switch? When the ballots are counted the men shake hands, forgive and forget. Have women that same he-ov disposition? Or again, how is an earnest canvasser to slip a five dollar bill into Miss Black's pretty little hand without her blabbing about it? Or take her behind the woodshed for a wee drop of rum? It seems so impossible when you come to think of it.

If the women had a vote, there is a fairly well grounded fear that everything would have to be done straight and honest; or the womenfolk would jump the traces; and if there is no boodie, no rake-off, what inducement is there anyway for a man to be in politics? People generally are not in politics simply for their health.

Then consider again Mr. Gray. He has always "consistently supported through thick and thin" the rewards come, he surely must be remembered. But suppose Mrs. Gray and a couple of daughters have a vote. The opposition candidate parts

Feeding Corn Fodder

THIS year our corn crop was exceptionally good and four eaves of it could not be stored in silo. How can this fodder be fed to the best advantage? We but there was always a large waste of stalks which we like to avoid.—C. E. Dufferin Co., Ont.

We can answer this question no better than by giving in detail two different methods followed by two different dairy farmers in Ontario, when they found themselves in the same predicament as this man. Last Oct. Arbogast Bros., in Perth Co., acres of corn in the field. They were fortunate in having hydro-electric power cut into a corn cutter. The corn went into a corner of this cut fodder large quantities of this cut fodder were mixed with pulped roots in alternate layers, a little salt being sprinkled through the mixture. The roots and corn were allowed to stand for 24 hours before feeding. By this time the moisture of the roots had penetrated the dryer fodder, the whole was a mixture very palatable to the cows and one that they clean up readily without waste. This system of feeding was followed until after Christmas when the silo was opened.

An entirely different plan was followed by R. E. Gunn, when he was running his dairy farm in Ontario at the usual time in the fall. The balance of the corn crop was brought in and stooked against the fences of the barnyard. Along after Christmas when the silos had been partially emptied the silo fill ag outfit was transferred to the silo, a stream of water being run into the blower to moisten the corn. The result was a fairly good sample of silage and it too was consumed without waste. This same plan has been followed by many other farmers of our acquaintance with good results.

In any case corn fodder must be cut in short lengths, to be fed to the best advantage. A difficulty with one does not own a cutter is that so much must be cut at once that it would heat and spoil in the pile. This difficulty may be gotten over by mixing a quantity of oat straw with the corn in the cutter. Where roots are not available, it would be well to mix a little grain and a handful of moisten it before feeding. In one case some good results have been secured by stooking the corn in large stalks never properly cured out. The winter and was eaten with a relish without cutting in short lengths. In this case, however, the corn was planted thickly and the stalks were not large.

A new milk cow is a mother and will worry about her young one in a way that no others have. The calves should be far enough away that they cannot be heard in the dairy stable.

C. Tr
V
R. H
I
is
is as
permi
lay all
money
a sma
farm
(profit
cost of
yet we
perhap
as disc
of the
and wh
We wil
winter
The
grass is
be sup
clover,
etc., w
pounds
head, s
in good
off lam
access
phur, w
trough
pen.
within
will que
but this
available
day will
ewe to t
system.
In add
sary foot
ther thin
ewes mu
to be tro
tario wh
the flock
were allo
about Mr
be kept i
grass, un
plan is t
to the f
will get
forward,
the resul
As lam
*An add
Guelph, On

has such
dances
really";
r. Gray's
going for
oor Mr.
le vote?
very nice
it in vna-
proposi-
nary out
me back?
rol, the
and they
re swing
an they
ve decid-



Who Welcomes Practical Progressive Ideas.

FARM AND DAIRY

& RURAL HOME

The Recognized Equipment in Dairying in Canada.



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

VOL. XXXV.

PETERBORO, ONT., JANUARY 6, 1916

No. 1

The Profitable Production of Mutton on the Farm*

R. H. Harding, Middlesex Co., Ont., Outlines His Management of the Breeding Flock and the Market Lambs

IT is a difficult matter to stir up much enthusiasm on a subject that so few are interested in as is the case with sheep. Yet if time would permit I think I could convince anyone who would lay all prejudice aside, that there is more clear money to be made at the present time in keeping a small flock of sheep as a side line on every farm than there is in any other class of stock (profitable as they are) when we consider the cost of stock, cost of labor and cost of housing; yet we find the sheep industry at a very low ebb, perhaps scarcely holding its own in Ontario, as far as numbers are concerned, but as I am to discuss the fitting and marketing end of the game, I must leave the why and wherefores for some other time. We will first take up the question of wintering the breeding flock.

The flock should come in off the grass in good flesh. They should then be supplied a liberal daily ration of clover, alfalfa, pea straw, bean straw, etc., which, along with three or four pounds of turnips or other roots per head, should bring the flock through in good shape until a couple of weeks off lambing time, provided they have access at all times to salt and sulphur, which should be kept in a small trough nailed up on the side of the pen. Fresh water should also be within reach; it is true that sheep will quench their thirst with snow, but they prefer water. If no roots are available, one-half pound of oats a day will greatly assist the in-lamb ewe to meet the extra drain on the system.

In addition to supplying the necessary food and water, there is still another thing that is necessary—exercise. Breeding ewes must have exercise or there is almost sure to be trouble with weak lambs. In parts of Ontario where the snow does not get very deep, the flock would get sufficient exercise if they were allowed the run of a small field as will until about March 1st, after which time they should be kept in the yard and not allowed to taste fresh grass, until turned out on pasture. A very good plan is to make a moveable feed rack and place it at the far side of the yard from the pens, then feed the noonday meal in this rack, and the sheep will get sufficient exercise tramping back and forward, and strong, vigorous lambs should be the result.

As lambing time approaches, if it is before

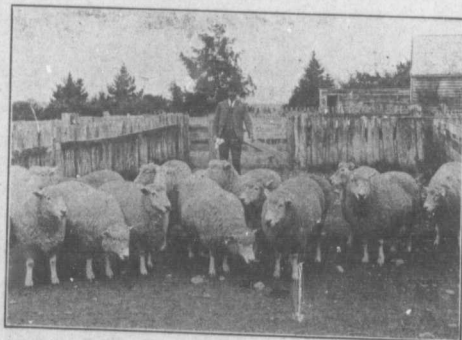
grass, it is wise to increase the grain ration a trifle to ensure plenty of milk and save the shepherd many worries. Dry, airy pens are much to be preferred to hot, stuffy basement pens. A tightly boarded shed, with a wide opening to the south, dry and free from draughts, is all that is required until lambing time, and unless we are breeding for a special purpose, such as raising purebreds to sell as breeders or for the early winter or Easter market, I think a man is farther ahead if he has his lambs dropped about May 1st, just when the ground is warming up, when the fresh grass will produce plenty of milk. The ewes

should be done when they are three to seven days old. A large proportion of the lambs still go to market undocked. Castrating is next in order, and certainly all male lambs being kept longer than three months should be non-sexed. Wether lambs will finish better and make fully 10 per cent. greater gains than ram lambs under the same care, and will cause no trouble in the flock.

The farm crops should be so arranged that a plot of second growth clover or rape is available on which to wean the lambs when they are three and one-half to four months old. If such cannot be arranged, right into the corn field is the next best place, and very little will happen to the crop. It is an excellent plan to go around the fences now (if it has not been done before) and dig out any stray burrs, as the lambs are sure to find them, the consequence being an unsightly animal and a damaged fleece and a smaller price. Good pasture should be provided right along until winter so as to keep the lambs thriving; if they once lose their baby flesh, they will never replace it with the same good quality again.

In the past, I have been an advocate of finishing the lambs, thoroughly, by feeding them for a couple of months in winter quarters, and prices for several years have warranted such being done. Yet, while I am still an advocate of putting them into the market in the very best form, with our best market now around \$9.75 a cwt., and pressure being brought to bear against the heavy lamb, I wouldn't like to advise the man (whose lambs are ready now) to hold them. As to the condemnation of the heavy lamb, is it real or only imaginary? While we are ready to admit that the big heavy lamb may be slightly coarser in texture than the lamb of the smaller breeds, I am doubtful if the taste of the average consumer is so finely cultivated that he can detect any material difference. I would rather be inclined to believe that the practice of selling to the housekeeper, almost anything that grows wool, as lamb, regardless of how long since, has caused the housekeeper to demand the lightest that can be had, feeling certain that by so doing they will surely get lamb.

The lamb properly grown up to 125 or even 140 pounds weight is better food than the same lamb marketed at \$9 to 100 pounds weight, and should be consumed without any waste. I mention this to discourage the marketing of heavier breeds



Woolly Money-Makers in Far-Off New Zealand

Sheep occupy a far more important place in the agriculture of New Zealand than they do in Canada. The flock illustrated are of the Romney breed, which originated in England, but has never gained favor in Canada. These animals constitute a part of the breeding flock of E. Short, Pararang, N. Z.

should be shorn unwashed about April 10th, before they get out into the fields to rub their wool out on fences, etc., and before the natural accumulation of dust and dirt (for which the wool buyers make due allowance in their own interest when buying unwashed wool) is washed out by spring rains.

Leaving the wool on sheep until late in May or June, is not only punishment to the sheep, but is wasteful of both labor and wool. It is also the cause of great loss among lambs from woolballs in the stomach from sucking wool.

Dipping and Castration

The flock should be dipped in the fall to clean them of vermin. If they are shorn thus early and the lambs are dipped about a week afterward, practically all the ticks are captured. The next simple operation is to dock all the lambs, which

*An address at the recent Provincial Winter Fair, Guelph, Ont.

in an unfinished condition simply to be within the desired weights to command the top prices. There is no doubt, however, that there will continue to be preference for handy weight, well finished stuff, and the way for the heavy lamb producers to get into that class will be to commence

to feed their lambs for the market a couple of months younger than is necessary with the smaller breeds. If the markets warrant it, lambs will make better and cheaper gains during the fall, if provided with plenty of rape and clover pasture, than they will during winter. If the fall

markets are slow and the lambs unfinished, it will pay to feed until after the New Year. To do this, it will cost from .03c to .05c per head per day, varied according to the local market values of the foodstuffs provided. Due allowance should also be made for the fertility returned to the land.

All Around the Dairy Farm

Value of Roots in the Ration

THE great value of roots for milk cows, even in combination with corn ensilage, was demonstrated at Macdonald College, Quebec. When one-fourth the ensilage ration was replaced by roots, the cows gained in milk yield five per cent. When one-half the ensilage ration was replaced by roots, the gain in milk was eight per cent.; but when 75 per cent. of the ensilage ration was replaced by roots the milk yield fell off three per cent. All of which goes to show the great value of roots in the milk ration. It also shows the value of a portion of ensilage in the ration, and that the dairyman who provides his cows with both roots and ensilage is doing the very best.

At the Macdonald College, situated near Montreal, they can grow 30 to 40 tons of roots per acre, while the yield of corn is 12 to 15 tons. As they have found, by years of experience in feeding, that roots are slightly more valuable, ton for ton, than ensilage, and as they can grow more than twice the weight of roots per acre than corn, the College authorities strongly urge the growing of roots, not instead of corn, but in preference to corn, or better still, in combination with corn ensilage.

Feeding the Winners

"BUT don't these big cows eat their heads off?" is a question that is asked 100 times a day by visitors to the Dairy Test stable of the Guelph Winter Fair. The question is asked so often that the answer may prove interesting. Here are the rations of a couple of the outstanding cows of the test:

Colantha Butter Girl, the sweepstakes cow, owned by M. H. Haley, did not get over 12 pounds of meal during the test. The meal was a combination of oat chop, bran and a handful of oil meal. In addition, she ate about 60 pounds of mangels a day, a little ensilage, and an ordinary ration of alfalfa hay and second growth clover.

Highland Ladoga Mercena, the cow that produced the greatest amount of milk during the three days of the test, owned by Jas. Currie & Son, Ingersoll, ate 24 pounds of grain a day, getting equal parts of oat chop, bran, oil cake, and cottonseed meal. In addition, she ate 40 to 70 pounds of turnips, about a bushel of ensilage a day, and all the alfalfa hay she wanted.

If the milk of either of these cows were valued at current prices and what they had eaten at current prices, it would be found that each of them returned a big profit on their day's work—as much profit a day as lots of small eating cows, sometimes mistakenly called "good feeders," make in a week.

Milking Machine Solutions

THE milking machine promises to solve to a certain extent the labor problem on the dairy farm; in this, it is a blessing. In some respects, however, the machine may be a menace, and, unless it be properly handled, there is a chance that the cheese factories of the land will be receiving worse milk in five years from now than they are now, and this deterioration due to mechanical milking.



Should Women Milk?

The milking machine will produce clean milk; many dairymen in Canada have proved this to their satisfaction. But if the milking machine is to give universal satisfaction, the question of cleaning and the selection of solutions in which to keep the rubber parts of the machine must be given more consideration than they have received in the past. Prof. Lund of Macdonald College recently took samples of solutions in which rubber parts were being kept on dairy farms, and in the cleanest of all the solutions sampled, there were 4,000 bacteria per cubic centimeter, and one solution actually had 110,000,000 bacteria per cubic centimeter. And yet this was called a sterilizing solution! At a recent meeting of Western Ontario factory men, Prof. Lund spoke on milking machine solutions as follows:

"Water itself is not good. A good solution must be a germicide. Lime water and salt solutions have been extensively used. Salt has not proved satisfactory. Lime water is better, but it is difficult to get fresh unslaked lime. Slaked lime is useless for the purpose. We have found Wyandotte Cleanser used in making sterilizing solutions, but even the makers of Wyandotte will admit that it is useless for this purpose.

"Our most satisfactory results have been got from chloride of lime. This is a cheap and good germicide. We mix in the proportions of one pound chloride of lime to 100 pounds of water, and use the clear solution only, and change it every two weeks."

Prof. Lund questioned if the busy farmer would give the proportion of his solution the attention that it deserves, and suggested that factory men buy full strength chloride of lime in large pack-

ages at wholesale rates, and make up the solution for their patrons. Prof. Lund advanced this suggestion, of course, only to factory men in districts where a considerable number of milking machines are in use.

Experiments With Corn

EDITOR, Farm and Dairy.—It may be of interest to some of your readers to learn the result of our own tests with corn, carried out under the supervision of Mr. H. R. Hare, B.S.A., District Representative for Halton. The corn, consisting of seven varieties, was planted in a heavy clay loam, which was a clover sod, plowed in the fall and manured during the winter, with a mixed manure, at the rate of 12 tons per acre, the corn from the butts and tips being sown separately from the bodies, and the whole planted in one-eighth of an acre lots, in hills 36 by 42 inches. The corn was planted on May 27th and harvested September 27th.

On cutting and weighing the whole crop of each variety separately, I found that the tips and butts gave nearly the same yield as the body of the corn. I then thoroughly dried samples of shelled corn, which I tested for germinating powers, and tabulated my results as follow, on a basis of the yield in pounds per acre:

Variety	Yield of milk bushels	Yield of milk cows	Yield of milk per cow	Germination percentage
Compton's Early	12912	7480	57.9	85%
Wisconsin	9310	7989	85.8	85%
Longfellow	10204	6516	63.8	85%
Salter's N. Dakota	3794	5216	136.8	95%
Baker	7240	6560	110.4	85%
Wh. Cap Yellow Dent	8124	5616	136.0	85%
Golden Glow	6800	6340	121.60	85%

Lakeview Farm, Bronte, Ont.

Profits (?) From Average Good Cows

"HAVE you ever figured your cows' as a business proposition in a business-like way?" This question is asked by Edgar S. Archibald, Dominion Husbandman, in a circular got out from the Central Experimental Farm, Ottawa. Mr. Archibald then submits an estimate based on a herd of 24 average good grade cows producing pure milk (not certified). His figures are as follow:

1. Cost of feed for cows giving 5,727 lbs. milk...	\$ 22.31
2. Barn for housing cows and feed (45.00 per cow)	1.08
Interest, taxes and depreciation, repairs, insurance, etc. 10 per cent.	4.50
3. Value of cows (55.00 per grade cow)	3.50
Interest at 6 per cent.	5.50
Depreciation at 10 per cent.	6.50
4. Value of tools, dairy implements, etc. per cow (5.00)	5.00
Interest and depreciation on same at 10 per cent.	5.00
5. Value of brushes, aprons, towels, iron, record sheets, soap, veterinary supplies, etc.	1.00
6. Cost of pure-bred bull, per cow (including 6 per cent. interest of \$150.00 and maintenance)	3.50
7. Care of cow and milk for year, men at 15 cents per hour	30.50
Total cost per year	\$102.11
Or total cost per 100 lbs. milk	1.78
CREDIT TO COW.	
1. Value on her milk at 1.20 per cwt.	62.70
2. Chemical value of manure, 10 tons in 365 days at \$25 when well kept and well applied	22.50
3. Human value of manure (565 days)	22.50
4. 1 grade calf yearly	5.00
5. Bedding not calculated as it is worth its average estimate as manure	5.00
Total credit per year	138.70
Profit not considering mortality and other risks, per cow	36.59

ished, it
To do
head per
at values
he should
the land.

the solu-
ced this
m-in of milk

of inter-
e result
nder the
District
sisting
ry clay
the fall
mixed
the corn
arately
in one-
inches.
vested

op of
ps and
ody of
les of
nating
on a

Chesapeake Bay
97%
91%
87%
83%
80%
76%

WS
as a
s-like
rchi-
got
awa.
passed
pro-
are

82.21
4.50
5.90
6.50
50
1.00
3.00
30.50
102.11
70.11
1.78
50.70
22.50
22.50
5.00
8.70
8.69

Echoes from the Lecture Platform at Guelph

Marketing Live Stock J. J. Ferguson, Chicago Ill.

AFTER many years of observation, I am firmly convinced that the open central, competitive market is the best place in the world to sell live stock. I am not here to boom any particular market. I am going to take the one I know most about as an illustration. At the Union Stock Yards, Toronto, there are buyers for a number of packers and butchers. There are buyers there for shippers and exporters. When your stock arrives it should be promptly unloaded. It should be rested and fed and watered.

As to whether you should sell your stuff personally or consign it to a commission man, there is a very great difference of opinion. One thing I would do if I had a car of stock shipped to Toronto, I would take the time to come in and see that car of stuff sold. I would consign it to a commission man. Why? Because he is your hired man; he is your agent for the time being. He knows all the ins and outs of the market and knows the buyers and knows the supply and demand. You go to the market once in six months. What do you know about the market? The other fellows are there every day in the year. My advice is to consign your stuff to a commission man and then come in and see it sold. If your stuff sells for 15 to 20 cents a hundred less than other lots shipped at the same time go along with the buyer and find out why your stuff sold for less, and the next time try and have that little extra finish or uniformity that will give you the highest price for your cattle.

I think that is one of the things in which we have been a little careless. I know that down here in Leeds county some of the farmers are feeding the same kind of cattle and in the same way that their grandfathers fed them fifty years ago. There have been great advances in the West.

Give What the Market Wants

I don't believe you people keep close enough to your market. I don't believe you know what the packer wants. While it is a nice thing to be master at home, when you get to the market you have got to supply what that market wants and you must take the price which that market will pay. What is the packer? He is merely the middleman; he is the manufacturer. The packer does not eat all the beef, mutton and pork that comes to the market. He takes the live animal and manufactures it into the finished product and that goes to the consumers of the world. When the housewives of Ontario say they want lamb chops from lambs weighing 75 to 85 pounds, then you will find that that kind of lamb will bring a good deal more money on the market than heavy lamb. Then it becomes a question of whether you want to get in line with the market and supply that kind of lamb and not the heavy lamb.

In the cattle, we have to do the same thing. What is required is a well trimmed steer weighing from 1,000 to 1,050 pounds. Occasionally somebody wants a heavier cattle to go to the New York or Boston market, and they will pay

a little extra for them, but that is a temporary market. The market you want to cater to is the large steady market. The day of the heavy fed ox has gone by. We no longer want the heavy beef weighing from 1,500 to 1,600 lbs.

I have seen at the Toronto Stock Show some heavy steers that weighed 1,700. They are white-elyphants on the market. They are cov-

export trade has held up the price during the past months to an unprecedented level for the period and it may be expected that lamb will be a dear commodity before spring.

That Canada, with her small sheep population, should have any surplus for export reveals definitely the shortage and high price of small meats in the North American continent.

The present situation is so plain that he who runs may read.

Taking into consideration the cost of production, it is doubtful if any more profitable animal than the sheep can now be kept on the Ontario farm. I cannot but recommend the advantages of sheep raising, and feel justified in pointing to the profits that may be obtained in this industry.

Feeding Hogs for Market *

Prof. Geo. E. Day, O. A. C., Guelph, Ont.

I hogs on a maintenance ration and then finish for market by heavy feeding in the last few weeks. My conclusion is based on the fact that young animals will make cheaper gains than older ones and it pays to hustle them right from the start.

In experiments that we have conducted the following results have been obtained:

Weight.	Meal per 100 lbs. gain
54 to 82	310
82 to 115	375
115 to 148	438
148 to 170	455

These figures show the more economical returns from feeding the younger animals.

In another experiment at Guelph we had pigs, fed on meal and water alone, make 100 lbs. of gain on 290 lbs. of meal. It just happened that these were particularly good pigs, but the result goes to disprove the common claim that pigs cannot be fed at a profit without skim milk, but a good substitute for it found in some of the best brands of tankage. And I would emphasize the fact that tankage is a food, not a tonic.

Pasturing Market Hogs

I would always supplement the best pasture with grain feeding and I do not believe in letting pigs have too much range when they are intended for market. They can be put on pasture at 100 lbs. weight. Red clover is one of the best pasture grasses for pigs. Alfalfa is better for the pigs than the pigs are for the alfalfa. Here is a pasturing plan that we find good.

Divide the hog pasture into two equal plots. Plow one-half in the spring and sow to grain seeded down with clover. Cut the grain early for hay or green feed and in a short time there will be good pasture available for the pigs. This same field will afford spring pasture for the pigs until the grain has been cut off the second plot, seeded the second spring. Or, again, clover hay may be gotten off by the end of June, and by the end of July the aftermath will afford good pasture for spring litters. Rape is not as good a pasture for hogs as is clover. On pasture we would feed three-quarters of the full meal ration.

*Synopsis of an address at the Guelph Winter Fair, December, 1915.



In the Rich Corn Belt of South Western Ontario. The scene of this photograph in Essex Co., Ont., is known as the West Scheme. The land here is very productive but must be drained with the aid of pumps, each land owner paying his share; from \$100 to \$300. There is no better corn land anywhere in America than is found in this and other sections of south-western Ontario. It follows, also, that there is no land better adapted to live stock farming.

ered with great daubs of tallow. Why that stuff is thrown in the rendering tank. You cannot sell pure tallow to anyone to eat. If you will follow the advice given by the experimental stations and our best practical feeders, and finish your cattle early, they will give you the best returns. If you bring them to the market in light weights all covered with good eatable meat, you will find that you will get the top market price.

The Outlook for Sheep

H. S. Arkell, B.S.A., Live Stock Branch, Ottawa

IT may be a surprise to some that the exportation of sheep for the months of September and October, 1914, aggregated 47,000 head. Or-



An Angus Steer that Sold for \$690 as Beef. This is "Wes MacGregor," champion beef steer at both Guelph and Toronto, posing for his last photograph. He was sold to the E. Eaton Co. for \$600 and dressed over 1,000 lbs.

dinarly, such surplus as Canada has had available during the last months, has gone into cold storage and been placed on the market for consumption during the winter and spring months. We have been informed that, at present, very few sheep or lambs are hung in Canadian cold storages. Our surplus has gone across the line into the New England market. This

spring. Or, again, clover hay may be gotten off by the end of June, and by the end of July the aftermath will afford good pasture for spring litters. Rape is not as good a pasture for hogs as is clover. On pasture we would feed three-quarters of the full meal ration.

Present and Future Status of the Draft Horse*

Dr. E. C. Grenville, Wellington, Ont.

THE history of heavy horse breeding for the past 40 years has seen one of ups and downs. In the first 10 years of the present century, we had a very pronounced up. Before that we had a 10-year period of booms and depressions. In the '70's, for instance, you could buy good draft horses at \$140 to \$180 each. About that time the Americans had a new idea. Formerly they had got by using light draft horses and mules to do their work. They began to favor a heavy type of horse and as Ontario was the nearest country offering them, they came here for their supplies. Their demand quickly raised the price of geldings \$25 and of mares \$40. This same demand maintained prices all through the 80's and tremendous prices were paid.

There was a change after the panic of 1893. Prices dropped \$100 in one night in the United States. This period of low prices continued for several years; right up to 1900 in fact. A little relief was afforded by shipping abroad. So low were the prices on this side of the Atlantic that dealers bought here and sold in the Old Country at the usual prices there and sold at a profit. This business began to get dearer here and this foreign trade was dropped.

The next 10 years, 1900 to 1910, was the highest price for horse flesh that ever obtained on this continent. I need not refer to this period. It comes within the range of your own personal experience. About 10 years ago there came another change and horses' began to decline. Trade makes a great deal of difference in the value of prospects. Horse flesh varies as trade prospects increase or decline. Two years ago trade began to decline and immediately the price of horses followed.

Possibly the most important factor in the high quotation of the first 10 year period of this century was the development of the northwest. Such development called for horses and the most of them came from Ontario. Are we done with this feature in the Ontario horse situation? I am inclined to think we are. They are now breeding fast enough in the West for their own requirements.

Will there be a revival of business and of old quotations in horses? I am often asked. Probably business will revive and thrive as it did in the past, but I hardly expect to see horses return to the old level. Prices have already dropped \$50 to \$75 on draft horses. The motor truck is being used quite largely in some cities, but I do not think it will have a material effect on horse quotations. The motor truck is peculiarly adapted to good roads and long trips, but not to bad roads with much backing and twisting.

What is the decision of the breeder in this crisis? Will he stop breeding horses as he did in the '90's and then when prices start up as they did before, be caught without even breeding stock? Abrupt changes are always a mistake. I would recommend going on with our breeding operations and producing only as good horses as we can. If there is an inferior mare let her pass. There is a future for the draft horse trade, but it is not in the immediate future. But we know, however, that in the past a down has always had a corresponding up.

Is Clover a Safe Feed

I have been asked time and again if I do not consider it dangerous in taking a long risk in feeding clover hay to both working and driving horses. The most convincing argument that I can give in favor of my

*Summary of an address delivered at the Ontario Agricultural and Experimental Station, Guelph, last January.

system of feeding, is that I have been feeding clover hay to horses for 18 years and so far without any serious results.

I find a general disposition to believe that heaves are frequently caused by feeding clover hay. It may be true. Poorly cured clover is apt to be dusty and dirty and this dust to get into the membranes of the throat and eventually may cause heaves. Even if the results are not so serious, the dust in the throat may reduce its efficiency. I plan to have all of the clover on the farm cut early and cured free from dust so far as weather conditions will permit. If because of fickle weather part of the clover is not cured as nicely as I would wish it to be, that particular clover is stored in the cow barn. When feeding clover to a horse, it is necessary to take care that the horses do not get too much.

This latter danger, overfeeding, is never to be feared in the case of timothy. Timothy hay is dry, and the stuff and horses never eat enough to hurt themselves. Timothy is not nu-



The Kind Always in Demand

These Clyde mares are the property of The Halton Farm Co., Ont. Breeding stock such as this promise to be more valuable after the war than it is now.

trititious and the large part of the horse's feed must come from the grain ration. I find that by carefully feeding clover, I can reduce the ration very considerably during the periods of harder work and almost down to the vanishing point through the winter and yet keep the horses in good fettle.

It is only within the last couple of years that I have had alfalfa in any quantity and after experimenting with it carefully, I have come to the conclusion that it is ahead of red clover even and that a grain ration is not needed at all for either work or driving horses when alfalfa is fed, unless the work is particularly strenuous.

Treating Grease Heel

Jas. Armstrong, Wellington Co., Ont.

GREASE heel is about the last thing a horseman wants to see in his stable. For one thing it is not a compliment to the care he is giving his horses, as it is usually due to one or more of the following causes: Poor ventilation, dirty footing when confined in the stable for sometime, excessive grain feeding, musty fodder, working in deep mud and either over- or under-feeding. Few horses that are properly cared for ever have grease heel.

Most horsemen can diagnose the trouble. The first symptom is a swelling of the skin in the heel with itching when it first starts. As the water this swelling will extend down to the knee and hock and a large charge of fetid odor will come over the leg. As the disease progresses, gapes form on the leg and foot which bleed if rubbed. The following treatment is effective.

Clip the hair off the legs of infected animals and wash the legs thoroughly with castile soap and not

water. By thoroughly I mean just exactly that. Lather the legs up and rub well, wash off and change the water frequently. It will take one-half hour at least for a man to wash the legs of a horse if he does it well. The last lather may be allowed to dry for a few minutes, then the legs thoroughly dried and rubbed briskly with a dry cloth. Apply this dressing twice a day: One ounce vaseline; three drams oxide of zinc, and 20 drops of iodized alcohol. Of course the stable must be kept clean, sanitary and well ventilated and the animal fed on good feed.

Every four or five days wash the legs thoroughly. If gapes form, rub them once a day with copperas or bluestone. The best place to work horses infected with grease heel is at plowing as the fresh earth seems to mitigate the trouble.

Alfalfa for Colt

I have a young red roan one year old colt, very smoothly bay. The hay is very coarse and the food is not as good as it should be. I have increased the amount of alfalfa in the timothy. Would this be harmful so as alfalfa, would the same amount of alfalfa be fed to the colt?

Timothy hay, as far as it does a large proportion of crude fibre, a small proportion of nutrients and being difficult of digestion, is not a suitable food for any class of young stock and particularly young colts. Where timothy hay is fed it must be supplemented by liberal grain rations as the digestive apparatus of a colt could not handle proper nourishment. In the alfalfa belts of the United States, colts have been raised altogether on alfalfa, and well-cured alfalfa has consistently practically a balanced ration for the growing colt.

We would suggest that the alfalfa be substituted gradually for the timothy and results noted. When feeding alfalfa hay, very little grain, if any, need be given. Here again it would be advisable to drop the grain ration gradually as the alfalfa is increased and watch results as affected in the growth of the animal.

We would suggest too that exercise is of first importance in inducing vigorous growth in young stock. Colts should be allowed to run out practically every day during the winter. They may develop rough, shaggy coats, but their health will be A. 1.

Coming Events

Eastern Ontario Dairyman's Association Convention, Renfrew Ont., Jan. 5 & 6.

Ontario Agricultural and Experimental Union Annual Meeting, O. A. C. Guelph, Ont., Jan. 11 and 12, 1916.

Ontario Corn Show, Chatham, Ont., Feb. 1 to 4.

Sixth Annual Apiculture Short Course, O. A. C. Guelph, Jan. 11-22, 1916.

Western Ontario Dairymen's Convention, St. Mary's, Ont., Jan. 12-18, 1916.

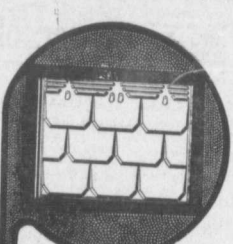
Ottawa Winter Fair, Ottawa, Jan. 18-30, 1916.

The 33rd annual meeting of the Holstein-Friesian Association of Canada will be held in the Canadian Foresters' Hall, 22 College St., Toronto, Feb. 3rd, 1916, at 8.30 a.m.

Work for the Horse

THE class in drawing was directed to draw a picture of a horse and wagon. When walking up and down the aisles, noting the various stages of progress, the teacher said that Charles had drawn the picture of the horse and wagon. She asked: "Why have you not completed your picture?"

"Oh, the horse can draw the wagon," replied the boy.



Reduce Your Roofing Costs, Protect Your Buildings From Fire, Lightning and Weather

You accomplish all these results by using our heavily zinc coated

"Eastlake" Metallic Shingles

They give longer service than any other roofing. Cost less to lay. Are rust-proof and do not require painting. Those laid 25 years ago are still giving good service. Send for free book that shows how "Eastlake" shingles make your buildings lightning, fire, and weather-proof and why they cost less per year than any other roofing.

We manufacture a complete line of Sheet Metal Building Material

THE METALLIC ROOFING CO., Limited
3 Manufacturers
King and Dufferin Sts., TORONTO

Send For Free Book



MAN OR WOMAN WANTED to distribute war literature. \$12 for sixty days' work in your community. Spare time may be used—Winston Co., Limited, Toronto.



With This Machine

the hogs grind their own feed, rotting on the feeding tray. There is absolutely no waste and they are always supplied with fresh, dry, ground grain. As a preventive of strapping, there is no equal to the Motor.

We will allow R. B. fare up to \$8.00 to those who make the trip to Listowel in operation, on condition that at least one Motor is purchased.

We are always pleased to have delegates and representatives of Farmers' Clubs come to Listowel to investigate and arrange to get your Hog Motor now, and save labor, along with saving of feed.

—THE—
Canadian Hog Motor Company
LISTOWEL — ONTARIO

Most of us waste enough time for self-education. By the time of our spare moments do we shape our destiny—selected.

Farmers of To-morrow

A Department for Ambitious Farmers' Sons

Do not squander time for that is the stuff life is made of.—Benjamin Franklin.

The Choice of an Occupation

THE most important moment in a man's life is that in which he chooses his occupation. That is the turning point, the epoch from which in future years he will date his success or failure. Upon the soundness of his judgment at that crucial time will largely depend much of the happiness of all his after life. How careful he should be to see that when the moment of decision arrives his choice will be such that all his later years will confirm the wisdom of his selection.

It is not here presumed to give gratuitous advice to the young man who has come to the age in which the choice of an occupation must be made. The responsibility and privilege of making that decision is his own and he should brook but little interference in what is so very much his own concern. It may be in place, however, to point out some of the dangers that observation and experience have suggested may confront him at this time.

"Blind Alley" Occupations
One thing should be guarded against with the utmost diligence and that is the choice of a "blind alley" occupation, one that leads nowhere. Under our present complex industrial system the name of such occupations is legion. Industry tends more and more to run automatically so that a few men may oversee the work of hundreds of toilers. One of these workers becomes virtually part of the machine he operates. Instead of being the master of himself and of the machine at which he stands, he is its reality its slave and must suit his

every movement to it. The man so situated becomes eventually an automaton, as incapable of rising as the inanimate castings which regulate the rate of his work.

Nor should it be thought that the skilled mechanic, who of all city workers has the greatest opportunity for putting his own ideas into his work, labors under conditions that are wholly desirable. To illustrate, take the case of a man engaged in one of the building trades, a carpenter for instance. Though he may experience the satisfaction, and doubtless it is a satisfaction, of seeing the material with which he works take form and he is at the beck and call of a foreman or employer. For eight or ten hours each day he must submit his will to that of his boss with but little scope for initiative. In the best of times he receives but little more than what is sufficient to keep the wolf from the door. In the times of industrial depression he may even be brought face to face with a lack of the necessities of life. Strikes, lockouts and other conflicts between capital and labor indicate among other things more and more to feel that they are being wage slaves and that freedom for them is a myth and a mockery.

These are not overdrawn cases. They illustrate the condition of millions of industrial and other workers all over the world, of whom Canada has her fair share. One has not to go outside of this country to witness one of the greatest tragedies of life, a man of natural ability and strong character engaged in some line

of work that cramps and hampers him instead of offering him an opportunity for developing and extending his power, his influence and his usefulness. Such a man "works sore," as the city toilers say, and his whole life runs in a groove from which he is powerless to extricate himself, when the time came to choose his occupation he chose a wrong one.

The advantage of farming is that the business of farming it to a large extent free from the disabilities which characterize much of the work of the city toiler. True it is that the farmer has his own problems to solve and difficulties of his own to overcome, but the young man of ability and energy who has a taste for farm work is still able to make a success of it. His opportunity for the exercise of initiative and originality is almost infinitely greater than that of the city worker. He also has a greater opportunity for seeing the plans of his brain and the labor of his hands materialize into forms expressive of his personality. He is free from the irritating, petty tyranny of the foreman or employer. As owner and operator of his own farm and in the activities which public life and the great farmers' movements of the day open up to him his chances for personal developments are becoming greater every day. To the ambitious young man who brings to the business of farming that concentration of purpose which is the backbone of all achievement in the world a large success is the sure reward.

The Value of an Education

J. F. WARREN, in his excellent work, "Farm Management," has some interesting things to say regarding the value of an education to the farmer. Mr. Warren does not theorize. His

statements are based on data secured from a thorough investigation by Cornell University of actual conditions in certain counties in New York State. This is what he says: "The young man who proposes to start farming should first get an education. Education is more essential in farming than it was twenty-five years ago.

"In one county the farmers who had attended high school made almost twice as much as those who had never been beyond the district school. A high school course is worth more than an investment of \$6,000 in 8 per cent bonds. Time spent in high school seems to be worth about \$7.00 per day to one who is to be a farmer."

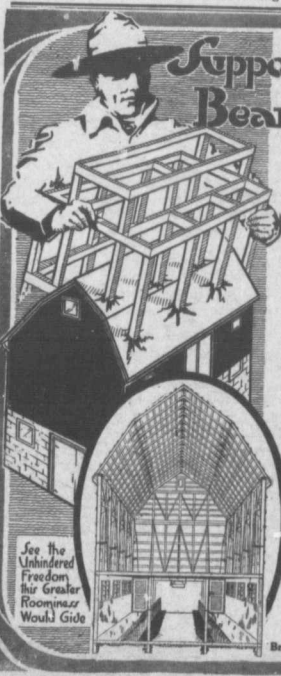
This is the opinion of one of the leading authorities on business farming in this Continent. If it is true that the study of things so remote from agriculture as those taken up in our high schools are beneficial how much more beneficial must be the study of practical agricultural subjects. To get thorough instruction in these subjects is the object of our Correspondence Course in Agriculture. By this means that instruction is now available to those to whom circumstances have denied the privilege of attendance at either a high school or the Agricultural College. To any such a letter enclosing the following coupon will bring full information:

Farm and Dairy, Peterboro, Ont.

Dear Sir,—Send me full information regarding your Correspondence Course in Agriculture.

Name

Address



Suppose you could have Mas'ive Beams Right Out of Your Barn

THINK of the clear, broad sweep of space from wall to wall and floor to roof their removal would give you. ROOMINESS would bring Greater ease in haying! More space for storing grain.

PEDLAR'S STEEL BRACE BARS

being you for the first time the most convenient use of every inch of space within your barn—with a positive strength of structure that even the costliest wooden beams could not give.

Greater Roominess Along the Walls
Notice how the Pedlar Steel Brace, "Wardle Patent," sets up along in every post. Extending one foot in the air, it is entirely out of the way of all things. The Pedlar Steel Brace is not a man's hurried idea, but a brace that proved its strength and convenience through the test of ten years usage.

Absolute Freedom at the Hips
Perhaps you didn't notice that the Pedlar Steel Brace "Wardle Patent" Barn is absolutely free of steel or wooden posts projecting to the hips! Take a good look again. The strain at these points and in the ridge is even when objects taken care of than by the old method, with double sets of steel braces, which lock each separate rafter. This absence of posts to the hips brings you

An Advantage Never Offered Before
An advantage found only in the Pedlar's Steel Brace "Wardle Patent" Barn, that allows you to operate your hayfork in either of the hips or in the ridge, in enclosing enclosures that points still further to the scientific thoughtfulness called forth in Pedlar construction.

Inherited Security
The same famous "Pedlar" coverings that have proved such protection to the wooden frame barns in the past are now found in the Pedlar's Steel Brace

TEAR OFF and Mail the Coupon NOW
THE PEDLAR PEOPLE, Limited
(Established 1861)
Executive Offices and Factories: OSHAWA, Ont.
Branches: MONTREAL, OTTAWA, TORONTO, LONDON, WINNIPEG



"Wardle Patent" Barn. "George" Shingles, in big quantity, "Perfect" Corrugated galvanized iron roof, 26 gauge, "Perfect" Corrugated galvanized iron wall frame, not one nail or screw placed on the outside. Pedlar's Steel Brace is absolutely LIGHTLY WEIGHT, FIRE-PROOF, RUST-PROOF and WIND-PROOF.

Surprises Await You
Once you see Pedlar's Steel Brace "Wardle Patent" Barn, surprises await you at every turn. Roof and the window metal framed and glazed with wire glass, reflect abundance of light to all parts of the barn. Pedlar's "Superior" Barn Ventilators supply ventilation that is proof against the nuisance of birds. Extra ventilation when breaking is available through the ventilators which are made to open and close. Eave trough, conductor pipe and complete accessories properly drain all water from the roof. Eave and Cable Connection makes an airtight covering at these vulnerable points.

Everything comes to you complete to the smallest detail ready for our expert workmen to set in and erect in a few short days.

Wouldn't you like to know more about Pedlar's Steel Brace "Wardle Patent" Barn? Would you like to see plans and blue prints of just the size of Pedlar's best and suited to your own farm? We will gladly send you, without obligation whatsoever, complete plans and drawings with working drawings with—

The Pedlar People, Limited
Send me, without obligation, Plans, Working Drawings and Blue Prints of complete of Pedlar's Steel Brace "Wardle Patent" Barn. It is understood that I will purchase on obligation to you.
Name _____
Address _____
City _____
State _____
Height of Post _____ ft. _____ in.

In Union There is Strength

A Department Devoted to Cooperative Agriculture

Wellington Men Get Together

A VERY interesting meeting was held at Palmerston last week, when a number of Farmers' Organizations, Granges and U. F. O. Clubs attempted to consolidate their interests, systematize their operations and convert their segregated endeavor into a practical business-like action.

The initiative was taken by Maple Leaf Lodge U. F. O., in calling a meeting of all surrounding organizations in Palmerston to discuss the project. The attendance was good, all existing organizations being well represented. Jas. Goodwin occupied the chair. Those from a distance were Robt. McArthur, ex-superintendent of Wellington county, and secretary of Moorefield U. F. O., J. C. Dixon, ex-president of The Kiel and Maryboro Fire Insurance Company, Inc. Pritchard, a director of The United Farmers' Cooperative Co., Ltd. and J. I. Morrison, treasurer of The United Farmers of Ontario.

W. H. Morgan, secretary of Maple Leaf Lodge, explained the disadvantage of the present mode of doing business.

Clubs were not large enough to take advantage of the carload system, and, having no storehouse, delivery was unsatisfactory.

Besides this, no proper system of financing the work had yet been devised and where all used the same railway station he thought consolidation in business the proper solution not only in the purchase of requirements but in the sale of products as well.

This seemed to meet with general approval, and was ably discussed by those present.

A resolution was passed approving of the schemes and asking that a committee be appointed to formulate a working basis for the various organizations to push the endeavor.

The committee appointed consisted of twelve members, three from each organization, as follows:

- Maple Leaf Lodge—Ino. McComb.
- Andrew Melville, F. Bridge.
- Teviotdale Grange—Jas. Mallett.
- T. Dieby, W. M. Calder.
- Maitland Grange—A. Carswell.
- Geo. Quinell, J. McMullan.
- Willow Grove Grange—Jas. Goodwin.
- J. T. Bramhill, Geo. Porteous.
- Chairman of committee—Jas. Goodwin.

Farmers' Organizations are Progressing

A NUMBER of meetings in the interests of the United Farmers of Ontario were recently held in Oxford county by Secretary J. J. Morrison. These meetings were more of an explanatory and advisory nature than as an organizational endeavor. One new organization was formed at Dickson's Corners, with 30 members of exceptional quality even for Oxford, which is strictly high grade in all things, temporal as well as intellectual.

Mr. Wm. Gallyer, of well known public spirit, was elected president, Mr. Robert Karrer, vice-president, and Chas. L. Henderson, secretary-treasurer.

Maple Leaf Farmers' Club, at Embro, held a most enthusiastic meeting; over 100 were present. Mr. A.

Smith, a man of exceptional executive ability, is president, and L. H. Blatchford, the energetic secretary. This club has over ninety members, is doing a large business, as evidence of which at this meeting they bought forty car loads of bran and shorts. They are affiliated with the United Farmers of Ontario, and have stock in the United Farmers' Cooperative Company.

Cloverdale Farmers' Club, near Ingersoll, is becoming an active unit in this work. They are stockholders in the United Farmers' Cooperative Company, and are a promising organization, well officered, and have a bright future. Mr. D. W. Clark is president, and Mr. M. C. Bell is secretary.

North Oxford United Farmers of Ontario has only been lately organized by L. H. Blatchford, and are just receiving their periscope, and should they get the proper range, will give a good account of themselves. Many ladies were present at their meeting, and took a keen interest in all their business. W. W. Nancollis is president, and Neil Muterer,

secretary-treasurer, young men of energy and intelligence.

Braemar Grange, the old and reliable farmers' organization of Oxford, is still in the business, and gave a fine response to an afternoon meeting. Fred Parker is master, and I. D. McKay is secretary. Thos. Plowright is head of the purchasing committee.

Beamington United Farmers of Ontario has excellent quality, and will yet make their way to a place among the strongest clubs in Oxford. Geo. Smith is president, and Alex. Pilton is secretary. Both these gentlemen are fully qualified to lead this to success.

The members of the Oxford Milk Producers' Association were also anxious to hear of cooperation, and assembled in fair numbers at Woodstock to hear of its progress, and signified by their readiness to do their part toward placing our industry in the position it ought to occupy alongside of the other organized industries of Canada. Mr. F. W. Gable is the energetic secretary of this organization.

C. C. James on Consolidation

WE have never yet measured up to our ideas of the education to which the country child is entitled," said Dr. C. C. James in the course of an address in Toronto last fall. "We must come to the consoli-

dated school. It is the surest and readiest solution of the rural school problem. What do we find to-day? Five or six little schools fairly close together, a girl in charge of each, a city girl perhaps, who knows nothing about rural problems. Her hands are full with pupils of all ages. We can not expect efficient instruction here. It is not fair to the country child.

"In Manitoba in one district, one school has replaced seven. The average attendance now is 77 per cent., whereas it was 50 per cent. before. There are six teachers now in place of the original seven, and they are 30 young men between the ages of 16 and 21. Would any one of them be in the small rural school?"

"In Manitoba has moved out no consolidated schools has witnessed no less than 80 small district schools. In the district schools the average attendance was 55 per cent. In the consolidated schools that have replaced them it is 73 per cent.

"The principals in the consolidated schools are paid a salary of \$1,150. That means that the schools are efficient instruction, you can't get efficiency unless you pay for it. You can't pay for it unless you consolidate. We will not consolidate unless we get a proper public spirit developed. This spirit must start in the rural home and the rural school."

The dairy bull is very apt to come down with "barn founder," unless his pen is well bedded and dry.

We cannot make ALL the fence—so we "make the best of it."

Price List				
No. of bars	Stays Hgt. in. apart	Span of horizontal	Price in Old Unit.	
5	37	22	8, 9, 10, 10,	24c
6	40	22	6 1/2, 7, 8 1/2, 9, 9,	28c
7	40	22	6 1/2, 7, 7 1/2, 8,	30c
7	48	22	5, 5 1/2, 7 1/2, 9, 10, 10,	31c
8	42	16 1/2	6, 6, 6, 6, 6, 6,	37 1/2
8	47	22	4, 5, 5 1/2, 7, 8 1/2, 9, 9,	35c
8	47	16 1/2	4, 5, 5 1/2, 7, 8 1/2, 9, 9,	38c
9	48	22	6, 6, 6, 6, 6, 6, 6,	40c
9	52	22	6, 6, 6, 6, 6, 6, 6,	43c
9	52	16 1/2	4, 4, 5, 5 1/2, 7, 8 1/2, 9, 9,	40c
10	48	16 1/2	3, 3, 3, 4, 5 1/2, 7, 7 1/2, 8,	43c
10	48	12	3, 3, 3, 4, 5 1/2, 7, 7 1/2, 8,	45c
10	52	16 1/2	3, 3, 3, 4, 5 1/2, 7, 8 1/2, 9, 9,	45c
11	55	16 1/2	3, 3, 3, 4, 5 1/2, 7, 8 1/2, 9, 9,	49c

Freight paid on orders of \$10.00 or over.

"Wire Costs More, But—"

Page fence is not advanced in price—in spite of the increased cost of wire. Heavy buying of raw material, before it started to advance in cost, has given us a supply that ensures your profit and ours, without sacrifice of quality or weight. We have our store-rooms heaped high with wire; and, as always, we are using full No. 9 gauge, even to the locks.

We are still "weaving our conscience" into every rod of fence we make, still shipping direct from factory to you—at the lowest prices it is possible to maintain for fence that is right.

The fence that's sold through dealers cannot compete with

PAGE Money-Saving Fence

at all. For when you buy our fence you pay no agents' commissions or dealers' profits. You get fence that is perfectly woven, on the most modern of looms—fence that will last a lifetime.

Order now and get quick delivery—before the orders begin piling in. Mail your order to-day to the nearest Page branch, with cash, check, money order or bank draft.

THE PAGE WIRE FENCE COMPANY LIMITED.

TORONTO
1139 King Street West

MONTREAL
505 Notre Dame Street West

ST. JOHN
89 Dock Street

FARM AND DAIRY

AND RURAL HOME
PUBLISHED EVERY THURSDAY



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

ADVERTISING RATES, 12 cents a line for a 16-day an inch an insertion. One page 48 inches, one column 12 inches. Copy received up to Saturday preceding the following week's issue.

UNITED STATES REPRESENTATIVES

STOKWELL'S SPECIAL AGENCY
Chicago Office—People's Building.
New York Office—Tribune Building.

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy number 25,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 23,000 to 25,400 copies. No subscriptions are accepted at less than the full subscription rates. Several detailed statements of circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

OUR GUARANTEE

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid-in-advance subscribers, we will make good the cost of your loss, provided such transaction occurs within one month from date of this 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 ply their trade at the expense of our subscribers, who are our friends, through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

The Rural Publishing Company, Limited
PETERBORO, ONT.

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

Now for an Inventory

HAS the year 1915 been a good one for you? Just how much have your possessions increased in value in the past twelve months? You don't know? In that case there is no time like the present to turn over a new leaf and value the development of your business in a real businesslike manner. Here is a plan that may be adapted to any farm in the land.

Take an inventory the first of the year. Make a list of everything you own, including all money due you. These totalled up constitute your assets. In another column make a list of all your liabilities, such as implement bills not paid, notes coming due, mortgages that you may have on your property, and so forth. Deduct your liabilities from your assets, and the difference is the value of your estate. Draw up a similar inventory in another twelve months, and the difference between the balance now and then will show how much you have gained or lost in the year's operations. If the balance is a good one, it speaks well for your business ability as a farmer and stockman. If, on the other hand, your inventory shows that the business is standing still or going backward, you will realize your standing and be spurred on to greater and more intelligent endeavor.

Why He Left

"YOU have written reams on rural depopulation," a young man remarked to an editor of Farm and Dairy recently. "I can tell you the whole story in one sentence—A boy will find the place where he is used best and stay there."

Our young friend did not tell the whole story,

but he did come very near to it. Economic factors alone are capable of explaining rural depopulation on a national scale as we have had it in Canada, but personal factors in individual cases are still stronger. It was the personal factor that had driven the young man to whom we refer to the town. He was brought up on one of the best hundred-acre farms in Western Ontario. Until he was twenty years old, he worked with his father, had his own driving horse, lots of pocket money, but nothing whatever to say in the management of the farm and no prospects so long as he stayed at home, of being anything better than a superior sort of hired man. In the course of time his father would die and he would step into his place. Such a prospect does not prove alluring to any energetic, ambitious young man, and our young friend is now in the city and is doing well. He would just as leave be in the country had conditions at home been more to his liking.

A Problem: Its Solution

THE problem that this father had to solve was quite as difficult as that of the son's. He is a man in the prime of life, a good farmer, and a successful manager. The idea of retiring, even to give his son full sway, is distasteful to him. He had started an older son on a farm of his own, and it was his dream that the younger boy should stay with him on the old farm. Every acre of it was dear to the elder man. But he failed to hold his son there, and the farm may drift out of the family altogether. This is the problem.

A few years ago another of Our Folks found himself face to face with a similar problem. He asked our advice and got it, such as it was. He, himself, gave hours of careful thought to the subject. Finally, a partnership agreement was drawn up between him and his son. A lawyer was consulted in the drawing of the papers and the conditions of the partnership were made binding and legal. The boy was given a portion of the capital and the management of stated branches of the farm business. The two consulted together on all important problems. A fixed dividend was paid on the capital, and in lieu of wages, they divided the profits evenly. This agreement has now been in force for some years, and both father and son are well satisfied. This, in many cases, may be the solution.

One Source of New Weeds

IN an address at the recent Guelph Winter Fair, J. R. Dymond, of the Seed Laboratories, Ottawa, drew attention to the danger of importing new weeds on to Eastern farms through the medium of bran, shorts and chop. The greatest danger lies in chop. On one hundred and forty-nine samples of chop feed selected all through the country and analyzed at Ottawa, thirty were found to contain wild oats, fifteen mild mustard, ten stinkweed and eight hare's ear mustard. One sample contained 1,648 weed seeds per pound. Another sample with fourteen kinds of weed seeds and six of them noxious, averaged 6,940 wild seeds per pound. Investigations conducted by the Department are more favorable to bran and shorts. It used to be the practice of some millers to mix their underground screenings with their bran and shorts, but they are now becoming more careful.

The danger of weed infection from these three feeding stuffs is still worth watching. How may the farmer protect himself? Bulletins issued from the Inland Revenue Branch at Ottawa, give the name of the dealer in each sample analyzed and the number of weed seeds found in his pro-

duct. This is one source of protection. Farmers may also send sample of feed they are contemplating buying to the Seed Laboratories, Central Experimental Farm, Ottawa, where they will be analyzed free of cost. We have enough weeds to fight now in the Eastern provinces without importing new ones through any medium whatsoever.

The Comradeship of the Farm

THE western sky was ablaze, but not with the sun. A neighbor's buildings were going up in flames. He was a young man, just getting on his feet. His friends for a couple of miles around turned out and fought the fire as well as they could, but in spite of their best efforts, the barn, part of his crops and almost all of his machinery and stock were destroyed. The young fellow was down and out with discouragement. But when he declared that he could not re-build he did not count on his neighbors. They quietly passed the hat, purchased the materials for a new barn and then helped him to build it.

This instance of neighborly generosity occurred in a little valley in Nova Scotia. Such instances, however, are not uncommon among country people. They are practically unknown in towns and cities. And yet the average townsman considers farmers as a class close and tight fitting. When we get right to the bottom of things there is more genuine comradeship on the farm than anywhere else on earth.

The Written Word

SEVERAL dozen times a year Farm and Dairy receives letters from those of Our Folks who are having trouble with their hired help. In fifty per cent of these cases the difficulty would never have arisen had there been a proper written contract between the employer and his man, or men, as the case may be. Many other disputes that are brought to our legal department for solution are also traceable to a lack of the written word.

Verbal understandings are almost certain to lead to disagreements. We cannot impress too strongly on Our Folks the necessity and value of the written contract properly drawn up and signed. In all more important contracts, it is well to have a lawyer draw up the papers. His fee may be money well spent. Contracts of less importance may be drawn up by the contracting parties and properly witnessed. In an agreement between employer and employee, the signatures of the contracting parties alone should be sufficient. Back of all agreements, however, we should have the security of the written word.

Do Dairy Farmers Die Poor?

(Hoard's Dairyman.)

DAIRY farming, like all other farming, has its shady spots; but, after all, we can't recall that we ever knew a farmer who followed it steadily and intelligently who did not increase in wealth. This is especially true of the all-round dairy farmer who patronizes a creamery. That man's farm increases in fertility for he grows young stock and hogs and makes lots of manure. There is money coming in to him all the time for pork and young cattle. He is all the time selling off his older cows, culling out his herd.

Those creamery sections that make a point to keep registered sires and produce cows and heifers for sale are going ahead in the accumulation of substantial wealth much faster than any other class of farmers we know of. At the end of the year, or, we may better say, two or three years, they can show more clean money than those who depend on the milk product alone for their money.

Good Light at Small Cost for Rural Homes

By R. E. Dintick

WHAT the large generating electric light plant is to the city dweller, what the gasoline generating plant is to the country store and other isolated public places not having the convenience of connection with electric lines, the new and improved kerosene mantle lamps are to the farm home as it is most generally found. Each one of these means of lighting has its place where it is the most suitable, and I have found by several months' use that the kerosene mantle lamp is pre-eminently the light for the small home. It gives a light equal to anything now known; it is as safe as any hand lamp can be, so that any member of the family at all competent to handle any kind of a lamp at all can use it as safely as a common lamp; it consumes but half the oil consumed by the old red flame lamps, and at the same time gives more than twice the light, this light being white light so neatly approaches natural sunlight, and giving cheer and convenience to the home; and the more than that it costs no more than the price of reliable ones being only about seven or eight dollars.

The matter of providing good lights for farm homes is one of the most neglected to be found on the farm. The farmer will equip his place with all the modern conveniences in the way of the latest labor-saving machinery; he will provide a piano at a cost of several hundred dollars for his daughter, and an automobile for his son; and yet his family will go right on using the old dingy, smelly and badly open flame lamps that cause eye strains, headaches, and necessitate the use of glasses by all members of his family prematurely. This is a sad conviction of the farmer's judgment, and yet it is only too true.

Conditions As They Are

In a recent investigation of the matter in 100 farm homes just as they came driving along the road I found that 98 of these homes had nothing better in the way of lights than the old open flame kerosene lamps, some of them with flat wicks and some with round, and about evenly divided among the two. Of these 100 farm homes 15 had automobiles and nine had pianos in the house. In 86 of them some members of the family were wearing glasses. What a regrettable error of judgment this is, when we consider that the gift of sight is by far the most precious our Maker gave us.

It is true that up to very recently the matter of providing the farm home with the best improved lights has been a difficult one to deal with because the cost of improved lighting plants for the individual home was prohibitive. And so the farmer has gone right on using the old flame light that was used by the first men and women created. Up to about fifty years ago, when Edison brought out the first practical electric light, there had been no real improvement in artificial lights for the home and the working places. Since then there have been brought out several lights, all of them equally good in the matter of the quality of the light itself, that are applicable to all the different needs, and there is no longer any reason why every home in the land should not be provided with an improved lighting apparatus.

The cost of a mantle lamp does not exceed six dollars, and it will save enough on oil alone in the course of six months or so to pay for itself, to say nothing of the comfort and cheer it provides in the farm home by

making it possible for all members of the family to read and work about the home as easily as by daylight.

They Are Success

A part of this indifference as to the lights provided for the farm home seems to arise from skepticism as to the value of the new lights, and a part of it because an old lamp of some kind can be bought for sixty cents while one of the new and improved lamps cost around six dollars. There need be no fear as to the value of the lamps now, since the manufacturers of the reliable ones do not hesitate to put them out on trial and approval; and in the matter of cost it is only a trifling difference at most, and should be considered as very slight. There are few farmers that would now discard the self-binder and go back to the hand sickle or the cradle for harvest or the cradle costs a little or much less; and yet I believe that in the long run there is just as much saving in the new and improved lights over the old ones as there is in the improved harvesting machines over the old ones if we stop to consider the matters of health, convenience and general happiness.

Happiness? Yes, that's the word exactly that I want to use, and in the right place. Happiness is what we should live for, not merely dollars and cents, and there is nothing that contributes more to happiness for ourselves and others than light. It was the first thing the Creator saw the need of after He had created the heavens and the earth. He provided all that was needed then, but left it to us to provide more as needed. The inventors have happily succeeded in providing the best of lights to meet the wishes and needs of everyone, and there is no longer any excuse for going along without all the light we need or desire.

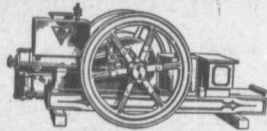
Horses Will Be Needed

"FARMERS are foolish to sell their good mares," stated Mr. John Bright, Dominion Live Stock Commissioner, at a meeting of the Ontario Horse Breeders' Association in Toronto on Dec. 31. "But they are very foolish to hold those same mares without breeding them. All the horses in Canada are going to be needed before the end of this war, while ten times as many animals as we have at present will be needed in the western provinces in a few years."

Some dissatisfaction had arisen over reports that thousands of rejected over horses were being sold in Canada. The Live Stock Commissioner gave an emphatic denial of these rumors. "Of the 30,000 animals bought in this country and of the thousands more passing through from the United States only 300 rejected horses have been sold, all of which were given a veterinary inspection before being disposed of."

Mr. Bright quieted much apprehension on the part of the Ontario farmers when he stated on the authority of the Canadian Premier that the Government had never ceased to buy horses.

Owing to the dissatisfaction among the farmers and horse-breeders of Ontario over the present system of buying army horses, a committee, composed of John Boag, Robert Graham and William Smith, was appointed to discuss with the Minister of Agriculture the question of buying remounts for the Dominion of Canada.



Alpha Gas Engines

Do Any Work—Use All Oil Fuels

An engine that will do the work you want it to do; that will operate without being continually adjusted and tinkered with; that will burn any fuel you wish, is one of the greatest conveniences you can have on your farm.

Alpha Engines entirely measure up to these requirements in every respect. You can always rely on them. They start and run on a simple, low-speed magneto. There are no troublesome batteries to watch or fuss with, or wear out, and frequently require renewing. Simply turn on the fuel, give the flywheel a turn, and the engine is good for a steady all day run at any kind of work.

Alpha Engines are ideal for farm use because anyone can operate them. Your wife or boy or hired man can use one of these engines without the least trouble, and do easily many small jobs that would otherwise require a lot of time and hard work. Alpha Engines will save you money by doing quickly those time-wasting jobs that ordinarily take you away from field work that is demanding your attention. Ask for the Alpha Engine catalogue. It will give you a lot of valuable information on the many superior and exclusive features of these Engines, and will show you how to get more work done in less time and at less cost.

Eleven sizes, 2 to 25 horse-power. Each furnished in stationary, semi-portable or portable style, and with either hopper or tank cooled cylinder.

DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
Sole distributors in Canada of the famous De Laval Cream Separators.
Manufacturers of Ideal Green Feed Silos. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER

SYDNEY BASIC SLAG

Now that the New Year has started Ontario farmers will be thinking of fertilizers. The man who has used them, knows their value. To him we say

"Give Sydney Basic Slag a Trial This Season"

The cost is \$20 per ton. Compare this with what you have been paying elsewhere. Is it not worth your while to investigate? Then there is the man who has been watching his neighbors and has been thinking of trying fertilizer, who probably has been reading our advertisements from week to week. We want to get at him. If we are not represented in your district why not take our agency and distribute a carload of 20 tons? You will be reasonably remunerated for your trouble and your neighbors will bless you for introducing Basic Slag into your district.

Write us at once and we will have our general Sales-agent call on you.

THE CROSS FERTILIZER CO. Ltd.
SYDNEY, NOVA SCOTIA

Some of Our Interesting Utility Articles

My Summer Cistern
Mrs. Robt. McFarland, Lanark Co., Ont.

IN winter time my cistern in the cellar was a great comfort to me, but when spring came and we moved out to the summer kitchen, it meant taking a great many more steps to get soft water. I had often read of the galvanize water tanks and decided that if I could earn the money in some way myself to have one put up in my wood shed.

We live near a large town, so I put in more garden vegetables than I knew our family needed and as we went to town every week, I made arrangements with some of the grocers to supply them every Friday. In this way, the only extra work was a little in the garden, keeping it clean and bunching up the vegetables and I had soon enough money to put in my cistern.

My husband built four stone pillars high enough that the bottom of the tank was the same height as our sink in the kitchen. When the tin-smith came to put up the water spout around the back of the woodshed for filling the tank, he put him to put a pipe with a tap on it from the tank into the kitchen beside the sink, and a branch from this pipe with a tap into the woodshed where my tubs, where I washed my clothes. In this way I had the water supply much handier in summer than in winter, as I have no pump to work or get out of order and could get the water out in two rooms. To clean it out or empty for winter, all I have to do is to put a pipe in for the purpose under the woodshed top and the water goes out into the garden.

Brains That Worked Overtime

"Gertrude," Essex Co., Que.

MOVING from town to a farm 10 years ago, I found the only convenient article on the place was a pump in the back yard. There seemed a thousand things lacking to make life comfortable and my work easier.

Can you imagine carrying water into the house, heating it on top of the stove and jumping into a wash-tub for a bath? Well, here's where my brain got busy working overtime. First I planned a bath-room 8 x 10 feet (by the way that is large enough to do family washing in too). The next question was where was a tank to be placed? The house being a cottage there was no spare room overhead, so I suggested to the carpenter that he lower the bath-room ceiling two and one-half feet. Then a tank the full size of room and two feet deep was placed overhead, and it holds 28 barrels of water, it lasts quite a long time.

Taps were placed in a sink in the kitchen and bath-tub. This same tank supplies enough water to flush our toilet also. The plumber easily added a hot water tank near the stove in the kitchen and so I have hot and cold water all the time.

You will wonder what I do for water when the weather man fails to send along his supply. Well that did not my wits out of business a bit, so I laced in my partner and his answer to that puzzle was, "gasoline engine." The engine was about 50 feet away from the house in a shed, so a pipe was put from it to the well and rubber hose from the engine to a tap in the kitchen sink and water is forced up into the tank again. A cesspool drains all pipes and is easily kept in good condition by dissolving some toilet and a month and pouring down the toilet and sink. Chloride of lime can also be used and is very necessary where a sewer is out of the question.

Still you may wonder if I use the

water in the tank for everything. No, I should not think the tea would taste quite as good if I did that. A small filter, costing \$2.25 was put in, just over the kitchen sink with four lengths of pipe, three elbows and a foot valve on the bottom well. I get all the fresh water I wish and by the way, this never freezes up either. Now for this waste paper basket.

"GERTRUDE"

Leamington, Ont. Box 540.
Note—Will "Gertrude" kindly send us her full name and address so

Our Next Contest

SINCE we have had such a hearty response in connection with our Utility Contest, we are going to conduct another of a decidedly different nature, but one of great importance and interest on the dairy farm. This time we want letters from Our Women Folks, giving their own experiences and methods in making butter on the farm. What we desire are the methods followed through the process, right from the gathering of the cream until the butter is ready for marketing, and something about the marketing, but not where a good private trade has been established. For the best letter received we will extend the contributor's subscription to Farm and Dairy magazine for one year, and for other letters published, will give a six month's renewal subscription. Let us have your contributions as early as possible as this contest will close Jan. 20th.

that we may extend her subscription in consideration of the splendid article she has contributed to this contest.

Our Dog "Carlo"

Mrs. Jos. Lawrence, Huron Co., Ont.

THE utility contest announced in Farm and Dairy of November 26 attracted my attention and my first wish was, "O, for the pen of a ready writer," that I might tell something that would do somebody good. Several things presented themselves; for instance, my kitchen stove with its beautiful warming closet, a convenient washroom, pantry and dumb waiter, but finally I decided to tell about our dog "Carlo."

Carlo is not a pretty dog to look at, but when it comes time for him to help us, he is "Johnny on the spot," and fulfills the saying "pretty things are not always useful." We had this dog for some years before we found him to be very useful. When we wanted him to chase the cattle, he would give a yell or two, and then would play with them. When we called him off, he would scamper away in another direction.

Such were the conditions when we thought Carlo was no good and might as well be killed. However, before this resolve was put into action, the boys tried to teach him to pump water with a hand pump (a sort of tread wheel)—in fact, he soon became quite proficient. They made a large wheel in which he ran, with a shaft from this to a smaller wheel, which in turn was attached to the pump handle. The dog is able to pump all the water we use for threshing, barn, and house. All we have to do is to let Carlo see the pail or if not in sight give a little whistle and he is right "on the job."

He waits for no one or anything but runs as if he jumps over two but runs as if he jumps over two doors and into the dog-wheel steps. Then you see the water fly. He pulps roots, cuts corn, can do the

washing and churning, so that we are relieved of the strenuous part of house-keeping. We have wondered if we could make use of him to house-clean. We have not yet experimented.

Carlo is also a very excellent chicken dog. He will not let a hen come into our house yard, nor will he let cattle graze on the road-side directly in front of our barn. But the best of all Carlo is "Johnny on the spot." He scarcely ever is away from house or barn.

When strangers come (and he knows them) to our house, Carlo likes very much to lead them to his wheel to show them what he can do. He will look up into your face with such an asking expression on his little brown face, as much as to say "shall I show you what one of God's dumb animals can do?" He loves to "show off" to strangers. It seems to me Carlo has a great deal more brains than many people. The boys have quite often done chores after dark and Carlo always helps them.

There is great economy in having a useful dog like Carlo for he does many other things besides washing and is much more easily recompensed.

Much Appreciated Convenience

Mrs. J. J. Foster, Simcoe Co., Ont.

JUST a few words to tell the readers of Farm and Dairy of my two greatest conveniences. They are what every woman who does her own laundry work should have, a washing-machine and wringer. You can put out two tubfuls of clothes for one in the old way, with less work, and as the machine is covered the steam cannot escape, which is one of the essentials in cleaning the clothes quickly and thoroughly. Just think of the amount of rubbing saved in washing socks and other pieces of clothing. The wringer presses the clothes smoothly instead of all those creases which wringing by hand causes. And the wringer takes out more of the water also which allows the clothes to dry quicker.

The cost is small when we consider how precious our time is. There are many other things to be done in which we can spend our time instead of drudgery. I have these conveniences, because not being strong, and having two small children to care for and help hard to get, I could not spend the time and strength. When we think of some women who are continually slaving to keep things done up spick and span, and who do not have time to seek to improve either their children or themselves, or to have recreation, it is time we who have improvements, should seek to show those who have none, their worth. When we have improvements, work is a pleasure, instead of drudgery and it is not as it should be, for we should work to live, not live to work.

I might say also that I have the above mentioned convenience and the promise of more, through the thoughtfulness of my husband. The cost of the washing machine and wringer was only \$11.75 and they are worth much more in the time they save in doing the weekly washing.

Hints that Make Work Easy

Mrs. Walter Edwards, Compton Co., Que.

UTILITY hints that have helped me—Buy your laundry soaps by the box, for best results.

In winter, warm your clothes pins thoroughly before hanging out the clothes. Your fingers will not be so cold and the pins will hold better.

A little Bon Ami rubbed on soiled shirt bands will clean them easily.

Salt in cold water will remove blood stains from linen. A weak solution of chloride of lime will remove mildew. Keep a wet card and a pencil in the kitchen to set down "things wanted" on next market day.

Have brass hooks, not nails over the sink, in the pantry, etc., to hang utensils on, and they will not always be tumbling down.

Have your sink, kitchen range, work table, etc., arranged the proper height, so that you can work with your back straight and without drooping shoulders.

If the top of the kitchen range requires polishing, first wash it with strong soap suds, and mix your "black-berry" with soap suds and it will remain black for days.

If your aluminum saucers become stained, boil a few stalks of rhubarb or pie plant in them and they will look like new.

The woman who lives in a small cottage and is obliged to do her own sewing, will find a large oblong clothes-basket a great convenience. When obliged to pack her sewing out of the way quickly, it can be packed into the basket in a few minutes and slipped out of the way and when needed again it will be a great comfort to find everything in one place.

On ironing day, see that your ironing board is the proper height, and have a heavy rug to stand on for comfort your aching feet. That is if you must stand, but many a wise woman sits on a high stool while she does her ironing.

Have all the cupboards in the kitchen and pantry painted or enamelled inside, and have the shelves covered with white or marble oil-cloth that can be wiped off clean in a few minutes once or twice a week.

When I house-clean, I cut a dozen or more sheets of clean paper to fit, and place them on top of my high cupboards. It takes but a minute to remove a sheet, dust and all and burn it once a week.

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

But I deceive myself if I think of Jack's moment in the round. But no ever uttered a word. But no had come yearning his against crawling into my territory see "it's terribly, an May day, any longer but what Dorothy, so I have Raising strodle of stood loo scape, by away, before his "I'll fit the neighbor down each high for land. The a buyer: fornia, an faces map. Dash t through Weston a the mail, vited his

The Silver Lining

(Continued from page 12)

plains of Alberta. As the familiar landscape receded farther and farther, and the broad, open prairie, already dotted with early spring flowers opened out before them, each wondered how she should ever become reconciled to the absence of the companionable home trees, and the coming picture what changes in five or six years would bring into their lives. Dorothy could not ignore the fact that this was a very different trip from the one which she and Jack had planned—their honeymoon trip.

Arriving at the little red station, they found Mr. Blair eagerly awaiting their coming. Soon they were seated in the spring seat of a lumber wagon, bumping merrily along over a trail across the wide prairie towards their home. There they arrived some three hours later, somewhat fatigued by the journey, yet cheerful withal, and glad to be in a home of their own once more.

Chapter III.

And so the weeks and months sped by until three years and passed. Spring had come once more, with its lively breeze and springing flowers. Already the anemones, harbingers of spring, were already peeping over hedge and there over the broad prairie. The meadow-lark trilled his sweet notes from the topmost branch of the old poplar. All Nature rejoiced and unconsciously humanity responded; the farm boys whistled merrily as they followed the plough.

And how fares it with Jack Gray? His years of honest toil had not been without recompense. Fortune had smiled upon him far beyond his expectations, and he now found himself a comparatively wealthy man. With dogged perseverance he had toiled early and late, hoping to banish forever from his mind the memory of one whom he believed untrue. Jack had mingled more freely with the neighbors, had joined in the social life of the community, and to a casual observer had regained his old buoyancy of spirit.

But Jimmy Weston was not to be deceived, and many a time had felt sorry for his friend as he detected an occasional note of bitterness in Jack's laugh, and at an unguarded moment a look of pain and suffering around the clear eyes, and deepening lines around the tightly compressed lips. But no word of complaint did Jack ever utter, and Jimmy wisely refrained from broaching the subject.

But now, with the return of spring had come all the old, unsatisfied yearning. With all the strength of his splendid manhood he strove against it, but, in vain, waking haunting memories of the past kept crowding through his brain. The yearning and gladness of Nature, the clear eyes, and deepening lines around the tightly compressed lips. But no word of complaint did Jack ever utter, and Jimmy wisely refrained from broaching the subject.

"It's no use," exclaimed Jack bitterly, as he ate his dinner one bright May day. "I can't stand this sham any longer. Pepper! Inward, but what's the use trying? Oh, Dorothy, Dorothy, how could you have been so foolish!"

Rising hastily from the table, he strode over to the open window, and stood looking at the winding landscape, and his thoughts were far away, and the beautiful panorama before his gaze unheeded.

"I'll finish the seeding, and advertise the whole thing. I hear that neighbor Jones wants a farm for his down east son, and he'll likely buy this for this as it adjoins his own land. There'll be no trouble in finding a buyer; that's certain. I'll try California, and among strange lands, faces may learn to forget the past."

Dash barked loudly, and glancing across the window Jack saw Jimmy Weston riding up the door with the mail. Hasten'g up outside, he invited his friend to return for dinner.

"Thank ye," answered Jimmy, "I'd like ter well enough, but I got ter make the 'two-bar' by noon." Thrusting his hand into his pocket he pulled out some papers which he pressed to Jack, afterwards unfolding a large poster which he held up for inspection.

"Look here, neighbor, there's goin' ter be a big whoop-up over the town on the twenty-fourth an' they're offerin' some catchy prizes for racin' and buckin' contest. See that? pointin' to the poster, "One hundred dollars for the best rider in the buckin' contest. That's mine."

"Don't doubt it," said Jack, knowing Jimmy's capacities in that line of work.

"An'," continued Jimmy, "there's forty for the winner of the free-for-all ramin' race; that's yours."

"Mine," exclaimed Jack. "How do you make that out?"

"Molly's goin' ter win that race," declared Jack.

"Well, I'll ride her myself then," quoth Jimmy.

"Bill Burkle was spoutin' 'bout his lanky, gray 'olter day; said Molly couldn't keep in sight 'o' him. He's goin' in that race, an' I'll just show Mister Burkle that he ain't the whole outfit."

"You'll have to leave your spurs off then," said Jack. "The mare

AYRSHIRE NEWS

Farm and Dairy is the recognized exponent of the Dairy Interests of Canada. Brooders of Ayrshire Cattle and members of the Canadian Ayrshire Breeders' Association are invited to send items of interest to Ayrshire breed-sections for publication in this column.

SUCCESSFUL AYRSHIRE SALE. THE consignee sale of Ayrshire cattle held at the Imperial Hotel, St. Louis, Mo., Dec. 30, by the Southern Ontario Ayrshire Breeders Club, was very successful affair. Messrs. Moore and Deau conducted the sale in their usual business-like manner, and more than maintained their reputation as a real live team of live stock auctioneers. The following are the names of the animals, their purchasers and prices paid: Cows, 3 years and over.

- Olirnoutmores, E. B. Darling & Son, Norwich, \$520; Strife of Darlington, E. Hothelias, Strifeville, \$185; Lena of Fairfield, J. B. Ross, Mendowdale, \$166; Milkmaid of Mt. Elgin, Smith Bros., St. Thomas, \$160; Polly 2nd of Fernbrook, E. Palmer, \$145; 2nd of Snowball, Smith Bros, \$282.50; Selwood Highland Mary, W. Leaming, Hildonville, \$117.50; Daisy, Frank Wright, Thaxford, \$100; Snowdrop of Montebello, J. B. Ross, \$115; Rose of Fernbrook, Bro. & Co., \$100; Pansy of Hillcrest, Wilbur Philip Bremer, \$115; substitute for lot 43, Fairfield 2d, J. A. Jamieson, Cookville, 125.00. Average, \$165.81.

- Queenie of Rangelyville, 4161; 8463 the milk, 33 lbs. fat, 4.15 per cent, fat, 365 dya.—W. T. Harris. Brookside Dairy, 5474; 7663 the milk, 360 lbs. fat, 4.4 per cent, fat, 365 dya.—E. J. Macfarlane, Kelso, Que. Sprightly of Hillcrest, 3706; 6015 the milk, 265 lbs. fat, 4.40 per cent, fat, 345 dya.—W. T. Harris. W. F. Stephen, Soc. Treas.

- White Lassie of Menie, 3768; 6012 the milk, 375 lbs. fat, 4.35 per cent, fat, 365 dya.—W. T. Harris. Brookside Dairy, 5474; 7663 the milk, 360 lbs. fat, 4.4 per cent, fat, 365 dya.—E. J. Macfarlane, Kelso, Que. Sprightly of Hillcrest, 3706; 6015 the milk, 265 lbs. fat, 4.40 per cent, fat, 345 dya.—W. T. Harris. W. F. Stephen, Soc. Treas.

- Queenie of Rangelyville, 4161; 8463 the milk, 33 lbs. fat, 4.15 per cent, fat, 365 dya.—W. T. Harris. Brookside Dairy, 5474; 7663 the milk, 360 lbs. fat, 4.4 per cent, fat, 365 dya.—E. J. Macfarlane, Kelso, Que. Sprightly of Hillcrest, 3706; 6015 the milk, 265 lbs. fat, 4.40 per cent, fat, 345 dya.—W. T. Harris. W. F. Stephen, Soc. Treas.

Two-Year-Old Heifers.

- Hillhouse Victoria, Robert Wright, Paris, \$90; Selwood Juniper, Strath Lynn Farm, \$121; Jean Armour of Fairfield 3rd, J. A. Jamieson, Cookville, \$125; Jessie of Fernbrook 3rd, Robt. Carson, Glen Meyer, \$85; Rose of Warden, J. A. Jamieson, \$112.50; Chief's Buttercup, Fernbrook 4th, Strath Lynn Farms, \$87.50; Brookside Bro. & Co., \$100; Hankinson Aymer, \$87.50; Brighton Brae Snowdrop 2d, C. S. Osmo-d, Milton, \$70. Total \$724.50. Average \$94.84.

- Sybella of Brookside 2nd, J. A. Morrison, Mt. Elgin, \$75; Blue Bell 10th of Neidpath, Smith Bros. St. Thomas, \$95; Brownie of Fernbrook 3rd, J. A. McKenna, Inverkerk, \$85; Brownie of Fernbrook 4th, Wm. Cairns, Salford, \$87.50; Selwood of Strathroy, Benbow Culp, Guelph, \$82.50; Violet of Montrose, W. A. Robinson, Imperial, \$84; 869; Althea, W. B. Stillwell, \$87.50; Chief's Buttercup of Fernbrook 5th, O. Carr, Beavchville, \$60; Marjorie 8th, C. Leano, Vienna, \$85. Total \$645.50. Average, \$87.38.

- Neidpath Rose 2nd, E. B. Palmer, \$94; Amelia 6th, E. B. Palmer, \$94; 865; Selwood of Strathroy, Benbow Culp, \$80. Total \$278. Average \$89.

- Heifer Calves (under six months). Brownie of Brookside 2nd, J. A. Morrison, \$55; Marjorie 4th, William Thom, Lynedoch, \$85; calf from Jean McNeil (5 dya.) J. B. Smith, Hamilton, \$30; calf from Selwood Rose 2nd, W. T. Harp, Aymer, \$82; calf from Hammanhough Rose 2nd, Alfred Moore, Brookside, \$82; calf from Brookside, George Apel, Mitchell, \$42.50; George and Nellie, \$42.50; Total \$347.50. Average, \$64.62.

- April Bulls: Hillhouse Taxmaster, J. A. Morrison, Mt. Elgin, \$80. Yearling Bulls: Selwood Pilot, George French, Eden, \$42.50; Neidpath B. Jack, William Thom, Lynedoch, \$100; Sir Ivan,

John Scott, Inverkerk, \$100; Mars of Fernbrook, McEwen, Putnam, \$62.50; Selwood Brown Prince, Alfred Moore, Total, \$327.50. Bull Calves: Sir Malcolm of Glen Fernus, George Houston, \$42.50; Selwood Juniper, Henry C. Walker, Chilliwick, B.C., \$47.50; Arthur Sledge, Montrose, \$82.50; Sir Allan of Hillside, J. Hurd, Mt. Elgin, \$40. Total, \$232.50. Average, \$46.50 Grand total, of sale \$4190.00.

AYRSHIRE IN R.O.P.

COWS and heifers that have qualified in the Record Book since Sept. 29 to Dec. 8, 1915:

- White 2nd of Perryville, 2404; 3082 the milk, 32 lbs. fat, 4.54 per cent, fat, 348 dya.—W. B. Walker, Chilliwick, B.C. White Bessie, 3085; 3086 the milk, 383 lbs. fat, 5.30 per cent, fat, 365 dya.—N.S.A. Howie's Orange Lily, 2121; 3973 the milk, 276 lbs. fat, 3.84 per cent, fat, 365 dya.—Oddy, 2799; 3513 the milk, 383 lbs. fat, 4.03 per cent, fat, 358 dya.—Woodside, Bro. & Co. No. 1, Moorefield, \$100. The cow of Oxford, 2306; 3221 the milk, 349 lbs. fat, 5.74 per cent, fat, 364 dya.—W. B. Walker.

Four-Year-Old Cows.

- White Lady of Craigville, 3070; 10,140 the milk, 313 lbs. fat, 4.13 per cent, fat, 365 dya.—Laurie Bros., Malvern. Gardrum Bonnie Jean, 3589; 9099 the milk, 349 lbs. fat, 4.38 per cent, fat, 348 dya.—N.S.A.C., Truro, N.S. Queenie of Rangelyville, 4161; 8463 the milk, 33 lbs. fat, 4.15 per cent, fat, 365 dya.—W. T. Harris.

- Queenie of Rangelyville, 4161; 8463 the milk, 33 lbs. fat, 4.15 per cent, fat, 365 dya.—W. T. Harris. Brookside Dairy, 5474; 7663 the milk, 360 lbs. fat, 4.4 per cent, fat, 365 dya.—E. J. Macfarlane, Kelso, Que. Sprightly of Hillcrest, 3706; 6015 the milk, 265 lbs. fat, 4.40 per cent, fat, 345 dya.—W. T. Harris. W. F. Stephen, Soc. Treas.

WHAT JERSEYS CAN DO.

THE following tabulation of the yield of milk, fat and butter in authenticated yearly tests of Jerseys are the best evidence of Jersey producing ability. 2528 two-year-olds, average, 6,532 lbs. milk, 873 lbs. fat, 45 lbs. 65 per cent. butter.

769 three-year-olds, average, 7,369 lbs. milk, 996 lbs. fat, 465 lbs. butter, 5.59 four-year-olds, average, 8,371 lbs. milk, 448 lbs. fat, 212 lbs. butter, 1.461 cows, five years old or over, average, 9,487 lbs. milk, 479 lbs. fat, 564 lbs. butter, 4,297 cows and heifers, all ages, average, 7,754 lbs. milk, 416 lbs. fat, 497 lbs. butter.

10-year-olds, average, 15,323 lbs. milk, 655 lbs. fat, 771 lbs. butter. 10 calves, 1st year average, 13,323 lbs. milk, 725 lbs. fat, 864 lbs. butter. 10 four-year-olds, average, 14,183 lbs. milk, 222 lbs. fat, 265 lbs. butter, 10 cows five years or over, average, 16,420 lbs. milk, 907 lbs. fat, 1,067 lbs. butter, 815 lbs. fat, 960 lbs. butter.

Best three-year-olds, 21,793 lbs. milk, 990 lbs. fat, 1,071 lbs. butter. Best four-year-old record, 16,147 lbs. milk, 877 lbs. fat, 1,037 lbs. butter. Best record at any age, 15,757 lbs. milk, 929 lbs. fat, 1,175 lbs. butter. Average production of fat for 4,297 year tests, 5.34.

20,000-LB. BLOOD.

In the way of record yearly baking the herd of J. J. Moore's Jerseys is unique and has established a position which no other herd in Canada. At Hillside Park, Ontario, records of milk made records over 20,000 lbs. From this time on, there are no records of any kind but Mr. Moore's herd of a few grandsons and grand-daughters of similar blood. Average production of Pontiac Kordyke. With such records as the above established in this herds the record of 20,000 lbs. or more should be exceptionally well in O.P. work. Look up the record of Dec. 9, if you require 20,000 lb. blood in your herd.

An Outsider's Entrance to the Cellar is an All-round Convenience. Why Not Construct One of Concrete?

won't take a spur."

"Oh, I'll leave 'em off," answered Jimmy. "Fact is, they're mostly for ornaments; don't use 'em 'ceptin' Pepper gets ornary, an' he's quit his cool tricks for good. Eh, Pepper? slaking his rein. But Pepper was quietly nibbling the grass in Jack's dooryard, and totally ignored his master's complaint."

At that moment, Dash appeared suddenly from behind the horse Pepper gave vent to a snort, a creak, snapped his teeth, and booted after the inoffensive Dash, who sprang into his kennel just as Pepper was about to seize him by the tail. Jimmy was almost unseated, but clucked to the good, swearing mildly. Then, gripping the rein tightly, he strapped the spurs to Pepper, as if circled round the yard, while Jack roared with laughter.

"Pepper, ye old hero," sarcastically remarked Jimmy, reining in his steed, "here ye've gone an' busted yer good reputation all ter pieces. Taint no good tryin' ter make yer respectable. Say, Jack, will yer go on the twenty-fourth?"

Jack rather reluctantly consented, then Jimmy having completed arrangements, turned his horse in the direction of the "two-bar" ranch.

(Continued next week.)

A pan of water in the bottom of the oven keeps the bottom of a cake from burning.

GASOLINE ENGINES
1 1/2 to 50 H.P.
Stationary Mounted and Traction



WINDMILLS
Grain Grinders, Water Boxes, Steel Saw Frames, Pumps, Trucks, Etc.

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

5 95 UPWARD
ON TRIAL
Fully Guaranteed

American Cream SEPARATOR

A SOLID PROPOSITION to send a new, well made, easy running, perfect cleaning separator, that makes thin cream or cold milk making heavy or light cream.

ABSOLUTELY NO APPROVAL, best sanitary method, easily cleaned. Different from others which illustrate our large capacity machine. Shipments made promptly from Winnipeg, Man., Toronto, Ont., and St. John, N.B. Whether direct or by mail. Write for catalogue and hardware free ending. Address: J. H. SHERMAN, 1001 Main Street, Box 10, St. John's, N. B.



EGGS, BUTTER Live Poultry

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

—Cause and Poultry Crops supplied upon request.

The Wm. DAVIES Co., Ltd.
Established 1874 TORONTO, ONT.

CREAM

WE WANT YOURS
We pay express and furnish cash Profitable Prices Promptly Paid Write us

BELLEVILLE CREAMERY LTD.
BELLEVILLE, Ont.

We Are Buyers
of Alaska, Red and Alfalfa Clovers and Timothy Seed.

Write us and send Samples

Geo. Keith & Sons
Seed Merchants—1216
124 King St. E. TORONTO

MAKE YOUR BIKE A MOTORCYCLE

As a small cost by using our Attachments, you can have a motor cycle. Write today for special forms required, gain list and free book describing this new and exciting attachment. Motorcycles, all makes, new and second hand, for sale by

SHAW MANUFACTURING CO.
Dept. 131, Galesburg, Kan., U.S.A.



Peck, Kerr & McElderry
Barristers, Solicitors, etc.

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

The Makers' Corner

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

Liability for Adulteration

A DECISION recently handed down in a Peterboro court by His Honor Judge Huycke, is of particular interest to dairymen generally. Harold Sanderson, a milkman, had previously been convicted by a magistrate for selling deteriorated milk. Mr. Sanderson's defense was that he had purchased the milk from a dairy farmer in the neighborhood of Peterboro and did not know that it had been tampered with. The court agreed that Mr. Sanderson "did not do nor authorize the contemptible as well as illegal act. The only question then remaining, is, can the conviction stand, no mens rea or guilty knowledge being shown on the part of the accused appellant. It was strongly urged he should and could not be convicted unless it was shown he either did or knew of the unlawful act. I have concluded the Statute

3.9 per cent. fat; in October and February 3.8 per cent., and in March, 3.7 per cent. In January, with the price at \$2.50 for 3.9 per cent. milk, the quotation on four per cent. milk is \$2.54; 4.1 per cent., \$2.58; and 4.3 per cent., \$2.62. Milk testing below 3.9 per cent. is subject to a deduction of four cents per 10-gallon can for each tenth of one per cent. of fat lacking. When the milk drops to \$2 during spring and fall, the amount added or deducted for each .1 per cent. of fat is three cents, and the same reduction holds in the summer months when \$1.80 is paid. Milk testing below 2.8 per cent. is paid for on a sweet cream basis. Milk falling below the legal standard for solids—not fat, is also subjected to deduction.

Alberta Dairymen Meet

THE dairymen of Alberta held their annual convention at Calgary, December 15 and 16. Reports indicate a most satisfactory growth of the dairy industry in Sunny Alberta. For the year ending October 31st, the creamery butter production was 7,400,000 pounds, as compared with 6,450,000 pounds the previous year, and with 68 creameries as against 46. The largest increase

address on "Dairying in Canada." The second day of the convention was strictly the butter makers' day, Mr. Barr speaking on "Pasteurization of Cream for Butter Making," and H. S. Pearson and H. Larson on "Defects in Creamery Butter." A creamery butter exhibit was held in connection with the convention, the challenge trophy for the highest average in two classes being won by H. W. Trimble of Red Deer.

Resolutions adopted at the convention requested the Department of Agriculture to place two butter graders at the Dairy College at Edmonton, and that the graders be changed vice versa at least once a month. A standard butter box of 19 1/2 x 19 1/2 x 11 3/4 inches inside measurement, made of clear spruce lumber, kiln dried, planed on all sides and edges, paraffined inside, was adopted. A progressive stand was taken in a resolution recommending the adoption of pasteurization of cream for butter making.

Economic Development Commission

THE Economic and Development Commission for some days has been in session in Ottawa, discussing which time it carefully considered a great many excellent statements, from various associations and many individuals throughout the Dominion, made in response to its request at the first meeting in November. The Commission has adjourned to meet again in Ottawa, the latter part of January, when it is expected that a very considerable further mass of information will be available.

The Commission invites the hearty co-operation of the Canadian public in the work which it has in hand. While, as above stated, it is taking steps to secure the assistance of individuals and organization likely to be able to furnish information of value on these and other matters coming within the scope of its work, it is to be understood that any person desirous of presenting written statements or appearing personally before the Commission, will be accorded every reasonable opportunity of so doing. Communications in this regard addressed to "The Secretary," 22 Victoria St., Ottawa will receive prompt attention.

Farm Seed Supplies
(Seed Branch, Ottawa)

FIELD and garden seed supplies are practically assured for the coming year. There is a scarcity in American grown crops, including beans, onions, and to a lesser extent sweet corn. Amongst the imported stocks, swede turnips are rather scarce, also carrots and some varieties of turnips. Red clover and alfalfa are unusually short and show an advance in price from 30 to 75 per cent. Other kinds that might be used as a clover substitute, as alsike, are higher in price than the supply would otherwise warrant. Well-established Canadian seed houses with contracts made two or three years in advance will have no serious trouble this season in taking care of their regular trade. Seed merchants, who depend year to year on the surplus stocks that may be offered, may have less assurance as to the character of their supplies.

Early to Bed

TEACHER: What is the difference between the sun and the moon?
Pupil: Please, sir, the sun's bigger and the teacher looks than the moon because he looks to be earlier.

Gem of Craigielea, One of the Guelph Dairy Test Winners.
She is owned by H. C. Hamill, Markham, Ont., and in the 72 hour test produced 12.9 lbs. of milk testing 3.5% fat, the best production of a three-year-old Ayrshire. This was the most closely contested class of the dairy test, Jno. Melrose of Norwich, following close behind in second, third and fourth places.

is an absolute prohibition—that knowledge or lack of knowledge are not material elements of the case. A milk vendor must sell pure milk. The consequences are too serious if he does not—he cannot take refuge under lack of knowledge or guilty mind. It is clear, therefore, that the law fastens the responsibility on the seller of the adulterated milk. The convicted vendor might sue for damages from the real offender, however, the man who watered or otherwise adulterated the milk.

Graded Milk Payments

FOR several months now the Crest Milk Company of Winnipeg, Man., dealing in all kinds of milk products, have been paying for sweet milk on the basis of its butter fat content. The plan has been in operation since last spring, and so far has been very satisfactory, and the manager, Mr. Jas. M. Carruthers, informs Farm and Dairy that they "expect no difficulty in continuing again this coming year. Although prices may be modified, the principle will be upheld." According to the recent schedule got out by this company, the price for the winter months is \$2.50 per 10-gallon can. In November, December, and January, the milk must test

in production was in Southern Alberta—60.75 per cent.—where climatic conditions are more favorable. Ninety-six per cent. of the total creamery butter production was made from cream which had been bought and paid for on a grade basis. Cheese making is a new industry in the province. Thirteen factories produced 372,603 pounds of cheese, as compared with 70,581 pounds in three factories in 1914.

H. A. Craig, Deputy Minister of Agriculture, presented the trophy and gold medal; W. Hanson, Innisfail, silver medal; J. J. Skulitsh, Viking, silver medal; A. A. Munro, Elnora, silver medal; H. McIntosh, Cardston, silver medal; A. Severson, Calgary Central Creamery, silver medal; Alex. Storrar, Carlyle Dairy, silver medal.

Addresses were given by S. G. Carlyle, Superintendent, Demonstration Farms of Alberta, on "Suitable Feeds for Dairy Cows," G. H. Hutton, of Lacaburg Experimental Station on "Grading up a Dairy Herd," and Geo. H. Barr, Chief of the Dairy Division, Ottawa, gave an illustrated

Jan
Altogeth
in the
number
HO
Farm
of the
Assoc
the G
paper
are: 1
up to
location
A
REBO
have
day prod
an averag
of the
and four
Avalon 25
and the s
can was 4
42 cow
Isabel For
of 2945 lb
of 632 per
THE
Quebec
colleagu
represent
of the C
and, there
the, that
that they
for year
ince of Qu
raining
of breeding
Account as
for \$200 to
Quebec, and
to Mr. Jos
\$40. This
dyke of He
In France
recovered 2
112 lbs. in
born in 18
been better
tests have
a full report
ly in Farm
SEMIOFFIC
PRIESTL
1. Arlis B
60 lbs. fat
Truro, N.S.
2. Doris
lbs., fat 70
ane, Hamill
3. Lilith P
1902; the w
tor—J. M. S
1400 lbs. mi
ter—O. E. P
5. Dolly Q
57; 12300 lb
butter—J. B
6. Delight
milk, 385 lb
Fyde, Simcoo
7. Hengerve
lbs. milk, 56
Macdonald
Que.
1. Osnary V
1004; 15600 lb
butter—J. M
2. Koba D
milk, 447 lb.
3. Hazel M
1001; the mil
ter—John Jo
4. Lilith Pa

AYRSHIRES

LAKESIDE AYRSHIRES

A select lot of young bulls, all ages, sired by Auchenbrain Sea Foam (Imp.) 35758 (8865), Grand Champion at both Quebec and Sherbrooke, from Record of Performance Dams. Write for catalogue.

Proprietor:
GEO. H. MONTGOMERY
Dominion Express Bldg., MONTREAL

Manager:
D. MCARTHUR
PHILLIPSBURG, QUE.

FOR SALE AND WANT ADVERTISING

Wanted Horse Hides and Tails Hides for coats and robes also all kinds of skins and furs. Send them to me and have them tanned soft and pliable
B. F. BELL - DELHI, ONT.

WANTED to hear from owner of good farm for sale. Send cash price and description. - D. F. Bush, Minneapolis, Minn.

WHITE AND COLUMBIA WYANDOTTES, LIGHT BRAHMAS, E.C. WHITE LEGHORN Over 50 years a breeder. Stock and Eggs for Sale.
Michael K. Boyer, Box 72, Hammonds, N.J.

AYRSHIRE BULLS

We have an exceptionally choice bunch of milk of all ages up to 18 months old to offer. Our are old enough for service, and are sired by a maternal brother to the champion J. of P. two year old record, 1421 lbs. of milk and 220 lbs. of fat, and from dams by Duke of Ayr, a son of the ex champion cow Princess of Tangier. ^{3rd} record, 1638 lbs. of milk and 65 lbs. of fat; and all from cows of excellent families of producers 12 of us both dams' and sire's sides.
W. W. Ballantyne & Son, R. 3, Stratford, Ont.

in these Reliable, Pro tested Counties. It'll sell you well

Advertise

HOLSTEINS

Splendid Sire For Sale

A Son of Pontiac Korndyke, Korndyke Calamity Jane (62259). Sire, Pontiac Korndyke (23282). Dam, Calamity Jane Blackness (74371). This is a very fine animal; weighs about a ton; gentle and kind. Will sell at a bargain as he has no further use for him. Would have to breed if he was kept longer. He is a sure stock-keeper. For further particulars, address
P. D. AIKINS - R. F. D. - BELLEVILLE, ONT.

Hospital for Insane, Hamilton, Ont. FOR SALE - Nine Holstein bulls varying in age from 3 to 19 months from Record of Performance or Record of Merit dams and the Grand Dams, Sir Korndyke Wayne De Kol, grandson of Pontiac Korndyke, or Leakeview Dutchland Le Strasser, grandson of Queen Jeneverful Payne De Kol. Prices right. Apply to Superintendent.

Watch Our Ad. for the Next 6 Weeks OFFERING No. 1
A 13 months old Son of My Robo Lyons Regie, dam Lady Trenton—record 13,236 lbs. milk, 700 lbs. butter in 11 months, milked twice a day.
Price \$125 delivered anywhere in Ontario.
E. B. MALLORY, Bayside Stock Farm, BELLEVILLE, Ont.

HOLSTEINS A 13 lb. Bull whose sire's dam is a 13.5yr.-old; four or five bulls ready for service and two (May) sons of Bag Apple Korndyke 8th and several by King Segis Pontiac Duplicate—one of the best.
R. M. HOLTBY - R. D. No. 4. - PORT PERRY, ONT.

Lakeview Stock Farm, Bronte, Ont. Breeders of high-tying Holstein-Friesian cattle, offer for sale a foundation herd, consisting of 1 male and 3 females, all backed by officially tested dams. Terms to suit purchaser.
F. F. OSLER, Proprietor.

KORNGOLD IMPROVED ENGLISH YORKSHIRES Boars and Sows of breeding age. A choice lot of Young Pigs, just ready to wean.
F. J. McCALPIN, Korngold Stock Farm, GANANOQUE, ONT.

The Annual Poultry Number OF FARM AND DAIRY Will be Published February 3rd

If you have Pure Bred Stock. Eggs for Hatching. List them in this Number. Write us for rates.

MARKET REVIEW AND FORECAST

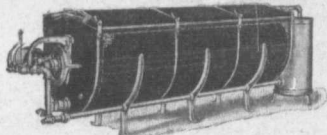
TORONTO, Jan. 5.—The new year opens most auspiciously for the farmers of Ontario on the whole very good. Prices also have been satisfactory. The outlook for the prosperity that this has brought to the farmer, the warm-weather property of the city has been augmented by Government purchases of hay and cheese have done much to strengthen the market. The commodities and the continuance of equal good prices through 1916 probably will bring the most orders from the same sources. Just at the present time trade is quiet. It is noticeable that all the drafts are being paid promptly and all business men are optimistic.

The market for farm products is suffering from the holiday dullness. This applies to commodities for immediate consumption. High demands, however, has not affected prices and all along the line, with the possible exception of beef cattle, quotations are as high or higher than those noted a week ago.

Recent sharp advances in wheat have been due largely to the withdrawal of the wheat from the Dardanelles. Russia now has a surplus of two wheat in store, a surplus that if marketed will seriously disturb the wheat markets of Western Europe. The advance, however, seems surprising in view of the fact that American, Argentine, and India all have great surpluses for export, but all are hampered by the lack of ocean freight room. No. 2 Northern, 81c; No. 1, 82c; Government No. 2, 81.25c; Ontario wheat, No. 1, 81.50c; No. 2, 81.25c; and No. 3, 81.00c; surplus or amity and tough, 90c to 96c; feed wheat, 80c to 85c.

CORNE GIVES. It is sometimes since there has been such a general advance all along the line in coarse grains as in the past week; peas alone have not shared in the general stiffening of quotations. Oats, G.W. No. 3, 50c; No. 4, 49c; Ontario No. 3, 37c to 39c; commercial oats, 36c to 38c; corn, 50c; No. 1, 51c; No. 2, 50c; No. 3, 49c; No. 4, 48c; feed, 50c to 53c; rye, 67c to 68c; buckwheat, 70c to 71c. Montreal quotes as follows: Oats, O.W. No. 2, 48c to 49c; No. 1, feed, 67c to 67c; local oats, 50c to 51c; barley, feed, 60c; No. 1, 61c; No. 2, 60c; No. 3, 59c; No. 4, 58c; No. 5, 57c; No. 6, 56c; No. 7, 55c; No. 8, 54c; No. 9, 53c; No. 10, 52c; No. 11, 51c; No. 12, 50c; No. 13, 49c; No. 14, 48c; No. 15, 47c; No. 16, 46c; No. 17, 45c; No. 18, 44c; No. 19, 43c; No. 20, 42c; No. 21, 41c; No. 22, 40c; No. 23, 39c; No. 24, 38c; No. 25, 37c; No. 26, 36c; No. 27, 35c; No. 28, 34c; No. 29, 33c; No. 30, 32c; No. 31, 31c; No. 32, 30c; No. 33, 29c; No. 34, 28c; No. 35, 27c; No. 36, 26c; No. 37, 25c; No. 38, 24c; No. 39, 23c; No. 40, 22c; No. 41, 21c; No. 42, 20c; No. 43, 19c; No. 44, 18c; No. 45, 17c; No. 46, 16c; No. 47, 15c; No. 48, 14c; No. 49, 13c; No. 50, 12c; No. 51, 11c; No. 52, 10c; No. 53, 9c; No. 54, 8c; No. 55, 7c; No. 56, 6c; No. 57, 5c; No. 58, 4c; No. 59, 3c; No. 60, 2c; No. 61, 1c; No. 62, 0c; No. 63, -1c; No. 64, -2c; No. 65, -3c; No. 66, -4c; No. 67, -5c; No. 68, -6c; No. 69, -7c; No. 70, -8c; No. 71, -9c; No. 72, -10c; No. 73, -11c; No. 74, -12c; No. 75, -13c; No. 76, -14c; No. 77, -15c; No. 78, -16c; No. 79, -17c; No. 80, -18c; No. 81, -19c; No. 82, -20c; No. 83, -21c; No. 84, -22c; No. 85, -23c; No. 86, -24c; No. 87, -25c; No. 88, -26c; No. 89, -27c; No. 90, -28c; No. 91, -29c; No. 92, -30c; No. 93, -31c; No. 94, -32c; No. 95, -33c; No. 96, -34c; No. 97, -35c; No. 98, -36c; No. 99, -37c; No. 100, -38c; No. 101, -39c; No. 102, -40c; No. 103, -41c; No. 104, -42c; No. 105, -43c; No. 106, -44c; No. 107, -45c; No. 108, -46c; No. 109, -47c; No. 110, -48c; No. 111, -49c; No. 112, -50c; No. 113, -51c; No. 114, -52c; No. 115, -53c; No. 116, -54c; No. 117, -55c; No. 118, -56c; No. 119, -57c; No. 120, -58c; No. 121, -59c; No. 122, -60c; No. 123, -61c; No. 124, -62c; No. 125, -63c; No. 126, -64c; No. 127, -65c; No. 128, -66c; No. 129, -67c; No. 130, -68c; No. 131, -69c; No. 132, -70c; No. 133, -71c; No. 134, -72c; No. 135, -73c; No. 136, -74c; No. 137, -75c; No. 138, -76c; No. 139, -77c; No. 140, -78c; No. 141, -79c; No. 142, -80c; No. 143, -81c; No. 144, -82c; No. 145, -83c; No. 146, -84c; No. 147, -85c; No. 148, -86c; No. 149, -87c; No. 150, -88c; No. 151, -89c; No. 152, -90c; No. 153, -91c; No. 154, -92c; No. 155, -93c; No. 156, -94c; No. 157, -95c; No. 158, -96c; No. 159, -97c; No. 160, -98c; No. 161, -99c; No. 162, -100c; No. 163, -101c; No. 164, -102c; No. 165, -103c; No. 166, -104c; No. 167, -105c; No. 168, -106c; No. 169, -107c; No. 170, -108c; No. 171, -109c; No. 172, -110c; No. 173, -111c; No. 174, -112c; No. 175, -113c; No. 176, -114c; No. 177, -115c; No. 178, -116c; No. 179, -117c; No. 180, -118c; No. 181, -119c; No. 182, -120c; No. 183, -121c; No. 184, -122c; No. 185, -123c; No. 186, -124c; No. 187, -125c; No. 188, -126c; No. 189, -127c; No. 190, -128c; No. 191, -129c; No. 192, -130c; No. 193, -131c; No. 194, -132c; No. 195, -133c; No. 196, -134c; No. 197, -135c; No. 198, -136c; No. 199, -137c; No. 200, -138c; No. 201, -139c; No. 202, -140c; No. 203, -141c; No. 204, -142c; No. 205, -143c; No. 206, -144c; No. 207, -145c; No. 208, -146c; No. 209, -147c; No. 210, -148c; No. 211, -149c; No. 212, -150c; No. 213, -151c; No. 214, -152c; No. 215, -153c; No. 216, -154c; No. 217, -155c; No. 218, -156c; No. 219, -157c; No. 220, -158c; No. 221, -159c; No. 222, -160c; No. 223, -161c; No. 224, -162c; No. 225, -163c; No. 226, -164c; No. 227, -165c; No. 228, -166c; No. 229, -167c; No. 230, -168c; No. 231, -169c; No. 232, -170c; No. 233, -171c; No. 234, -172c; No. 235, -173c; No. 236, -174c; No. 237, -175c; No. 238, -176c; No. 239, -177c; No. 240, -178c; No. 241, -179c; No. 242, -180c; No. 243, -181c; No. 244, -182c; No. 245, -183c; No. 246, -184c; No. 247, -185c; No. 248, -186c; No. 249, -187c; No. 250, -188c; No. 251, -189c; No. 252, -190c; No. 253, -191c; No. 254, -192c; No. 255, -193c; No. 256, -194c; No. 257, -195c; No. 258, -196c; No. 259, -197c; No. 260, -198c; No. 261, -199c; No. 262, -200c; No. 263, -201c; No. 264, -202c; No. 265, -203c; No. 266, -204c; No. 267, -205c; No. 268, -206c; No. 269, -207c; No. 270, -208c; No. 271, -209c; No. 272, -210c; No. 273, -211c; No. 274, -212c; No. 275, -213c; No. 276, -214c; No. 277, -215c; No. 278, -216c; No. 279, -217c; No. 280, -218c; No. 281, -219c; No. 282, -220c; No. 283, -221c; No. 284, -222c; No. 285, -223c; No. 286, -224c; No. 287, -225c; No. 288, -226c; No. 289, -227c; No. 290, -228c; No. 291, -229c; No. 292, -230c; No. 293, -231c; No. 294, -232c; No. 295, -233c; No. 296, -234c; No. 297, -235c; No. 298, -236c; No. 299, -237c; No. 300, -238c; No. 301, -239c; No. 302, -240c; No. 303, -241c; No. 304, -242c; No. 305, -243c; No. 306, -244c; No. 307, -245c; No. 308, -246c; No. 309, -247c; No. 310, -248c; No. 311, -249c; No. 312, -250c; No. 313, -251c; No. 314, -252c; No. 315, -253c; No. 316, -254c; No. 317, -255c; No. 318, -256c; No. 319, -257c; No. 320, -258c; No. 321, -259c; No. 322, -260c; No. 323, -261c; No. 324, -262c; No. 325, -263c; No. 326, -264c; No. 327, -265c; No. 328, -266c; No. 329, -267c; No. 330, -268c; No. 331, -269c; No. 332, -270c; No. 333, -271c; No. 334, -272c; No. 335, -273c; No. 336, -274c; No. 337, -275c; No. 338, -276c; No. 339, -277c; No. 340, -278c; No. 341, -279c; No. 342, -280c; No. 343, -281c; No. 344, -282c; No. 345, -283c; No. 346, -284c; No. 347, -285c; No. 348, -286c; No. 349, -287c; No. 350, -288c; No. 351, -289c; No. 352, -290c; No. 353, -291c; No. 354, -292c; No. 355, -293c; No. 356, -294c; No. 357, -295c; No. 358, -296c; No. 359, -297c; No. 360, -298c; No. 361, -299c; No. 362, -300c; No. 363, -301c; No. 364, -302c; No. 365, -303c; No. 366, -304c; No. 367, -305c; No. 368, -306c; No. 369, -307c; No. 370, -308c; No. 371, -309c; No. 372, -310c; No. 373, -311c; No. 374, -312c; No. 375, -313c; No. 376, -314c; No. 377, -315c; No. 378, -316c; No. 379, -317c; No. 380, -318c; No. 381, -319c; No. 382, -320c; No. 383, -321c; No. 384, -322c; No. 385, -323c; No. 386, -324c; No. 387, -325c; No. 388, -326c; No. 389, -327c; No. 390, -328c; No. 391, -329c; No. 392, -330c; No. 393, -331c; No. 394, -332c; No. 395, -333c; No. 396, -334c; No. 397, -335c; No. 398, -336c; No. 399, -337c; No. 400, -338c; No. 401, -339c; No. 402, -340c; No. 403, -341c; No. 404, -342c; No. 405, -343c; No. 406, -344c; No. 407, -345c; No. 408, -346c; No. 409, -347c; No. 410, -348c; No. 411, -349c; No. 412, -350c; No. 413, -351c; No. 414, -352c; No. 415, -353c; No. 416, -354c; No. 417, -355c; No. 418, -356c; No. 419, -357c; No. 420, -358c; No. 421, -359c; No. 422, -360c; No. 423, -361c; No. 424, -362c; No. 425, -363c; No. 426, -364c; No. 427, -365c; No. 428, -366c; No. 429, -367c; No. 430, -368c; No. 431, -369c; No. 432, -370c; No. 433, -371c; No. 434, -372c; No. 435, -373c; No. 436, -374c; No. 437, -375c; No. 438, -376c; No. 439, -377c; No. 440, -378c; No. 441, -379c; No. 442, -380c; No. 443, -381c; No. 444, -382c; No. 445, -383c; No. 446, -384c; No. 447, -385c; No. 448, -386c; No. 449, -387c; No. 450, -388c; No. 451, -389c; No. 452, -390c; No. 453, -391c; No. 454, -392c; No. 455, -393c; No. 456, -394c; No. 457, -395c; No. 458, -396c; No. 459, -397c; No. 460, -398c; No. 461, -399c; No. 462, -400c; No. 463, -401c; No. 464, -402c; No. 465, -403c; No. 466, -404c; No. 467, -405c; No. 468, -406c; No. 469, -407c; No. 470, -408c; No. 471, -409c; No. 472, -410c; No. 473, -411c; No. 474, -412c; No. 475, -413c; No. 476, -414c; No. 477, -415c; No. 478, -416c; No. 479, -417c; No. 480, -418c; No. 481, -419c; No. 482, -420c; No. 483, -421c; No. 484, -422c; No. 485, -423c; No. 486, -424c; No. 487, -425c; No. 488, -426c; No. 489, -427c; No. 490, -428c; No. 491, -429c; No. 492, -430c; No. 493, -431c; No. 494, -432c; No. 495, -433c; No. 496, -434c; No. 497, -435c; No. 498, -436c; No. 499, -437c; No. 500, -438c; No. 501, -439c; No. 502, -440c; No. 503, -441c; No. 504, -442c; No. 505, -443c; No. 506, -444c; No. 507, -445c; No. 508, -446c; No. 509, -447c; No. 510, -448c; No. 511, -449c; No. 512, -450c; No. 513, -451c; No. 514, -452c; No. 515, -453c; No. 516, -454c; No. 517, -455c; No. 518, -456c; No. 519, -457c; No. 520, -458c; No. 521, -459c; No. 522, -460c; No. 523, -461c; No. 524, -462c; No. 525, -463c; No. 526, -464c; No. 527, -465c; No. 528, -466c; No. 529, -467c; No. 530, -468c; No. 531, -469c; No. 532, -470c; No. 533, -471c; No. 534, -472c; No. 535, -473c; No. 536, -474c; No. 537, -475c; No. 538, -476c; No. 539, -477c; No. 540, -478c; No. 541, -479c; No. 542, -480c; No. 543, -481c; No. 544, -482c; No. 545, -483c; No. 546, -484c; No. 547, -485c; No. 548, -486c; No. 549, -487c; No. 550, -488c; No. 551, -489c; No. 552, -490c; No. 553, -491c; No. 554, -492c; No. 555, -493c; No. 556, -494c; No. 557, -495c; No. 558, -496c; No. 559, -497c; No. 560, -498c; No. 561, -499c; No. 562, -500c; No. 563, -501c; No. 564, -502c; No. 565, -503c; No. 566, -504c; No. 567, -505c; No. 568, -506c; No. 569, -507c; No. 570, -508c; No. 571, -509c; No. 572, -510c; No. 573, -511c; No. 574, -512c; No. 575, -513c; No. 576, -514c; No. 577, -515c; No. 578, -516c; No. 579, -517c; No. 580, -518c; No. 581, -519c; No. 582, -520c; No. 583, -521c; No. 584, -522c; No. 585, -523c; No. 586, -524c; No. 587, -525c; No. 588, -526c; No. 589, -527c; No. 590, -528c; No. 591, -529c; No. 592, -530c; No. 593, -531c; No. 594, -532c; No. 595, -533c; No. 596, -534c; No. 597, -535c; No. 598, -536c; No. 599, -537c; No. 600, -538c; No. 601, -539c; No. 602, -540c; No. 603, -541c; No. 604, -542c; No. 605, -543c; No. 606, -544c; No. 607, -545c; No. 608, -546c; No. 609, -547c; No. 610, -548c; No. 611, -549c; No. 612, -550c; No. 613, -551c; No. 614, -552c; No. 615, -553c; No. 616, -554c; No. 617, -555c; No. 618, -556c; No. 619, -557c; No. 620, -558c; No. 621, -559c; No. 622, -560c; No. 623, -561c; No. 624, -562c; No. 625, -563c; No. 626, -564c; No. 627, -565c; No. 628, -566c; No. 629, -567c; No. 630, -568c; No. 631, -569c; No. 632, -570c; No. 633, -571c; No. 634, -572c; No. 635, -573c; No. 636, -574c; No. 637, -575c; No. 638, -576c; No. 639, -577c; No. 640, -578c; No. 641, -579c; No. 642, -580c; No. 643, -581c; No. 644, -582c; No. 645, -583c; No. 646, -584c; No. 647, -585c; No. 648, -586c; No. 649, -587c; No. 650, -588c; No. 651, -589c; No. 652, -590c; No. 653, -591c; No. 654, -592c; No. 655, -593c; No. 656, -594c; No. 657, -595c; No. 658, -596c; No. 659, -597c; No. 660, -598c; No. 661, -599c; No. 662, -600c; No. 663, -601c; No. 664, -602c; No. 665, -603c; No. 666, -604c; No. 667, -605c; No. 668, -606c; No. 669, -607c; No. 670, -608c; No. 671, -609c; No. 672, -610c; No. 673, -611c; No. 674, -612c; No. 675, -613c; No. 676, -614c; No. 677, -615c; No. 678, -616c; No. 679, -617c; No. 680, -618c; No. 681, -619c; No. 682, -620c; No. 683, -621c; No. 684, -622c; No. 685, -623c; No. 686, -624c; No. 687, -625c; No. 688, -626c; No. 689, -627c; No. 690, -628c; No. 691, -629c; No. 692, -630c; No. 693, -631c; No. 694, -632c; No. 695, -633c; No. 696, -634c; No. 697, -635c; No. 698, -636c; No. 699, -637c; No. 700, -638c; No. 701, -639c; No. 702, -640c; No. 703, -641c; No. 704, -642c; No. 705, -643c; No. 706, -644c; No. 707, -645c; No. 708, -646c; No. 709, -647c; No. 710, -648c; No. 711, -649c; No. 712, -650c; No. 713, -651c; No. 714, -652c; No. 715, -653c; No. 716, -654c; No. 717, -655c; No. 718, -656c; No. 719, -657c; No. 720, -658c; No. 721, -659c; No. 722, -660c; No. 723, -661c; No. 724, -662c; No. 725, -663c; No. 726, -664c; No. 727, -665c; No. 728, -666c; No. 729, -667c; No. 730, -668c; No. 731, -669c; No. 732, -670c; No. 733, -671c; No. 734, -672c; No. 735, -673c; No. 736, -674c; No. 737, -675c; No. 738, -676c; No. 739, -677c; No. 740, -678c; No. 741, -679c; No. 742, -680c; No. 743, -681c; No. 744, -682c; No. 745, -683c; No. 746, -684c; No. 747, -685c; No. 748, -686c; No. 749, -687c; No. 750, -688c; No. 751, -689c; No. 752, -690c; No. 753, -691c; No. 754, -692c; No. 755, -693c; No. 756, -694c; No. 757, -695c; No. 758, -696c; No. 759, -697c; No. 760,

The Lure of the Lower Price



The Beaver-Jensen Ripener-Pasteurizer may cost more in the first cost—but in the end the cheaper machine will cost you more.

For example—

The BEAVER-JENSEN you need costs—we'll say, for argument's sake, \$350.00. But you don't have to pay out anything for repairs.

The cheaper machine sells for \$300.00. The cost for repairs averages \$10.00 a month, or \$120.00 the first year, making it cost you \$300.00 plus \$120.00, or \$420.00 invested.

Actually \$70.00 more than the BEAVER-JENSEN in the first year's investment. What will it be the second year?

Ask us about the BEAVER-JENSEN. Use proves what the surface cannot show.

W. A. DRUMMOND & CO.
TORONTO, ONT.

Canadian Representatives for the

J. G. CHERRY COMPANY, Cedar Rapids, IOWA, U.S.A.

Make the Change Now

**Mogul 8-16
Kerosene
Tractor**



**GRAND PRIZE
WINNER
AT
SAN FRANCISCO
EXPOSITION**

THESSE are the days of heavy horse power expense. The horses are idle. Hay and oats are worth so much it's a shame to use them for feed. It takes five acres of land to raise enough to feed one horse one year. Horses are at the top of the market, with prices higher than for years past. The market for horses is so good that, even at these higher prices, they are easy to sell. What better time could there be to consider replacing some of your horses with a Mogul 8-16 kerosene tractor?

You can use a Mogul 8-16 with profit for about all the work you are now doing with horses—the tractor does it better and cheaper. It takes less of your time to care for it. It increases the amount of land you make a profit from—five acres for every horse it replaces. It is the right size for most of your belt work. It burns any fuel oil—kerosene, naphtha, benzine, motor spirits, enabling you to use the cheapest fuel you can buy.

Why not plan to sell some of your horses now and save the winter feeding? Mogul 8-16 will take their place and do your spring work in time. Write today for our 100-page book "Tractor Power vs. Horse Power," which we will send promptly if you'll only ask for it. Write us at the nearest branch house.

International Harvester Company of Canada, Ltd.
BRANCH HOUSES

At Brandon, Calgary, Edmonton, Estevan, Hamilton, Lethbridge, London, Montreal, St. Paul, Regina, Toronto, Vancouver, Winnipeg, Yorkton

IMPORTANT ANNOUNCEMENT

REGARDING



Our 40 Piece Tea Set

To Our Women Folks

As stated in our last issue, we have been negotiating with the wholesalers who have been supplying us with our 40-piece tea sets with a view to getting control of the stock of these premiums which they still had on hand. The war has interfered with the trade in semi porcelain and we had expected to hear that the supply was nearing exhaustion. To our surprise we learned that there were

ONLY 60 SETS LEFT

for us. We at once sent in a covering order reserving them for our women folks, and we are sure that they will not be slow in availing themselves of this last great opportunity of securing this premium. Our 40-piece tea set has proved to be so popular with our women readers that we are sure that when they hear that the supply is so nearly exhausted that the balance will

Go Like Hot Cakes

and it will only be a short time until we have to drop this popular premium. We are sorry to have to do this, for in the past two years several hundreds of them have been won by our Women Folks and we have received hundreds of letters expressing the surprise and delight of those who have secured them. However, we shall have to bow to the inevitable, and while the supply lasts our motto will be

First Come—First Served

The set consists of 40 pieces; is in semi porcelain and is decorated with a gold band. It consists of 12 cups and saucers, twelve tea plates, two cake plates, one cream jug and a slop bowl.

Call up your neighbors over the telephone, get four of them to subscribe to Farm and Dairy at \$1.00 each, and we shall order one of the tea sets for you as soon as we receive the subscriptions.

Circulation Department

Farm and Dairy - Peterboro, Ont.