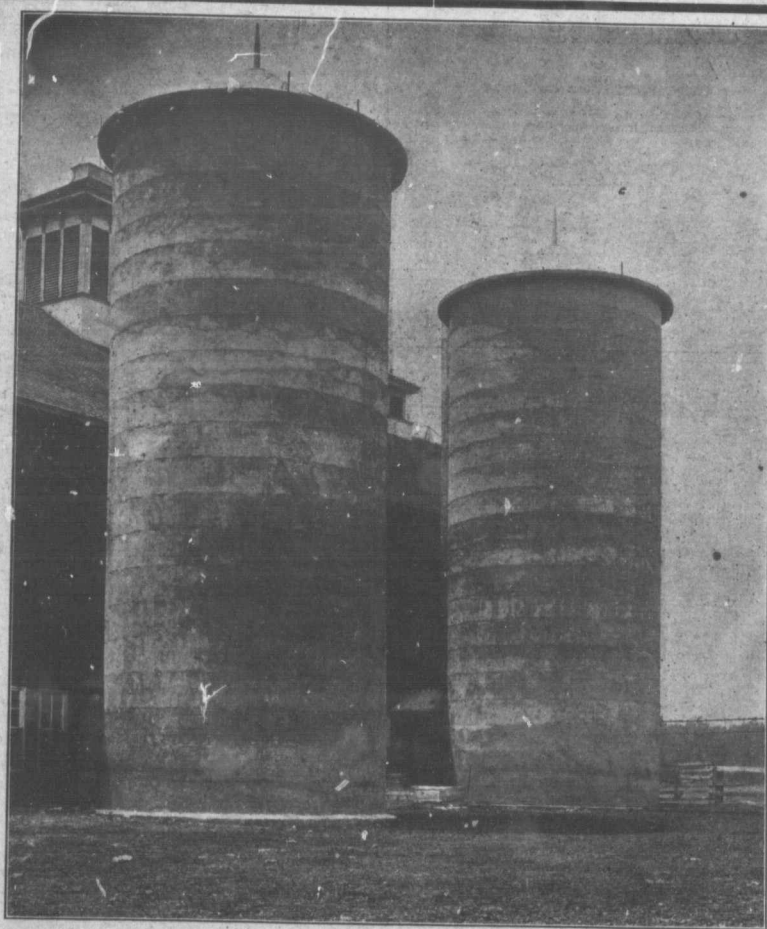


# FARM AND DAIRY

AND  
&  
RURAL HOME

Comm. of Conservation  
1st Chairman Jan 10

Toronto, Ont., August 8, 1918



"THE TWINS" AT OAKLAWN FARM.

ISSUED EACH WEEK.

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

ONE DOLLAR A YEAR.

## Building a Stack to Shed Water

A Minute Description of an Art We Have Lost. By John Couine

IN stacking grain the first requisite is clean, dry ground, and under no circumstance should a stack be built on silt or any kind. Level ground is preferable to sloping, for there is always a tendency for a stack to settle down hill, when built on uneven ground.

Begin the stack in the same manner as building a round shock, setting the sheaves close together and as straight up as possible, gradually allowing the butts of the sheaves to slope outwards, but even the outside row should be sufficiently upright that the grain cannot reach the ground and thus prevent any loss.

Round stacks are preferable to ricks, as, in case of rain, they are more easily protected from injury while in course of erection, and it is much easier for the pitcher to place the sheaves close to the stacker on a round stack than on the rick. A twenty feet in diameter and a ten-foot pole can be used to get the size of the foundation, or by walking around close to the butts of the sheaves twenty steps, a yard each, will be practically twenty feet in diameter.

**Work on the Knees.**  
Stacking should be done on the knees, a piece of old, heavy cloth being fastened over the knees to save the overalls and protect the skin. With the right size for the foundation secured, build the outside course, keeping the butts of the sheaves even with those on the ground, and with this course complete lay a second course, the butts of the sheaves to the hand of the outside course, all sheaves pressed closely together and firmly packed by the weight of the body on the knees.

Continue in like manner until the center of the stack is reached, packing it full and jamming on the sheaves with the feet to insure a high center in the stack when fully settled. A grain stack properly built should be like a saucer inverted, highest in the center and the slope to the outside, just as steep as it can be made and at the same time prevent the sheaves from slipping off the stack. In fact, with a well-built stack, the outside course of sheaves is only held in place by the inside rows of sheaves and in threshing when the inner courses are removed, the outside course will at times slip and fall from the stack. This is a sure indication of a well-built stack and should it rain continuously for a month a stack built in this manner will shed water equal to the best shingle roof.

After standing in the shock the butts of sheaves are slanting, this condition the result of the heads being pressed together and in laying the outside course of the body of the stack the long side of the sheaf should be laid towards the stacker, overlapping the short side of the preceding sheaf, thus insuring an even surface on the outside.

### The Head of the Stack.

When drawing in to make the head of the stack, the long side of the sheaf should be placed down and the short side on top, which aids materially in giving a slant on the head and assists in shedding rain.

For rapid work by the stacker and to prevent overstrutting, much will depend upon the ability and skill of the pitcher, as a good pitcher will toss every sheaf so that the butt will lie forward of the stacker, the bands close to his right hand, that the sheaf may be readily grasped, laid in place and the stacker crawling forward on his knees presses, the sheaf closely in place.

In stacking on a side hill after the foundation is laid, extra courses should be built on the low side of the stack to bring it above the level to allow for settling. Each one of these courses on the low side should be fol-

lowed by a full course on the entire stack as a binder. No rule can be given as to the number of extra courses required, this depending upon the slope of the ground, care being taken to keep the stack leaning somewhat up hill that when fully settled it will be standing practically plumb on the ground.

### Buige Not Generally Advisable.

While a slight bulge in the body of a stack when properly built gives a somewhat artistic appearance to the stack it is not essential, and too often it is a source of injury. With the heart of the stack kept flat and well rounded as it should be, from start to finish, there is always a tendency for the outside course to slip out, and too often when there is a swell in the stack, the heart has been kept too flat to prevent slipping, and when the stack settles the heads of the sheaves often come up with the butts, or perhaps tipping down, as an invitation for water to enter every time it rains. With the heart kept close together, the sheaves packed closely together, there will be no tendency to spread out, without any effort to make a bulge, or swell, in the body of the stack, and care must be taken to keep the outside nearly plumb, with only a little swell, otherwise the stack will get too large to afford a steep head which is absolutely necessary to insure a dry stack, during a heavy, dashing rain.

The whole art of success in stacking is to keep the sheaves from start to finish, in as nearly an upright position from the outside to center, as it is possible to hold them from slipping off the stack altogether. It means work to build a stack in this manner and it is much easier to lay the sheaves loosely, keeping the stack about level instead of low on the side and high in the middle, and this fact is the main reason why so few farmers fail to succeed in building a grain stack that will shed water, while if the work is properly done water will not enter the stack when fully settled. It is better to have a steep head on a stack and a lower body than to have a high body and a flat head, but it is only by actual experience that the height of the body can be determined.

### Medium Height Preferable.

A medium height is preferable, as it is difficult to pitch sheaves to the top of a high stack, for there are few men at the present time who can stand with their back to a stack and pitch a sheaf over their head in such manner that the stacker when finishing the stack can readily grasp it.

The stack should be finished by standing on a ladder and the foot should never be thrust into the head of the stack making holes for water to enter.

A good raking down with a steel garden rake from top to bottom after a few days' settling and early in the morning when the butts of the sheaves are damp with the night's dew will aid materially in shedding the heaviest rainfall.

This work will require a twenty-foot ladder on which to stand, the same as used in finishing the stack, and if a few forkfuls of long, green grass can be secured to top out the stack sheaves will be saved equally as well as those of straw or hay.

In the absence of straw or hay break a couple of sheaves, place on top as in capping a round shock, and secure by hangers to prevent their being blown away by a windy wind. Stacks built as here indicated will turn water equal to a good roof, and if allowed to stand six weeks or two months before threshing the grain will have gone through the sweating process and be in far better condition than if threshed from the shock and the sweating is done in the bin.



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## International Ensilage Cutters

The following table shows the sizes and capacities of the five types of International ensilage cutters. There is, you see, a size for every farm. The smaller sizes will easily fill a 30-ft. silo. The largest are used to fill the highest silos in the country.

Type	Feed Throat Size	Capacity Ton per Hour	Power Needed	Length of Cut	Speed
A	16" x 6 1/2"	16-25	20-25 H.P.	3/4" to 1"	500-700 M. F. M.
B	14" x 5 1/2"	12-16 1/2	15-20 "	3/4" to 1"	700-800 "
E	11" x 4 1/2"	10-12 1/2	10-15 "	3/4" to 1"	800-900 "
G	11" x 5"	8-10	8-10 "	3/4" to 1"	800-900 "
F	9" x 3"	3-6	4-6 "	1"	800-1000 "

All International cutters are of the knife on blower type—simplest and requiring less power. All are equipped with a corn chute for feeding from the wagon. Steady power feed insures even cutting, silage packs properly and keeps. The slow speed at which they run, and the safety devices on the machines insure the safety of the operator.

Send for full information on any of the cutters listed above. Write to the nearest address given below.



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We Welcome Practitioners

Trade Increases the

VOL. XXXVII

An

NOW, what you stop you have better cows ago? Have you got the production of your 4,500-lb. cow, do you rear you if you could put in 10 minutes you made the dairy reduce the cost of milk from 20 to 22 per cow producing the same much roughage and require as the other cow. A grain cost are practical. I will tell you briefly why I did it. I was forced to decrease the cost of milk by increasing the price to go out of the dairy business system of farming—or to

In the year 1898 my management of the home. At his death I had not 10 tons which had to be moved along smoothly. With a good dairy herd at that time, and now more so, I had a little, but as the price advanced, increasing the herd and, as the price of grain in proportion, the margin at the end of the year 1907 and tried to settle the business basis for the next 1200 or 1300 short of one I assure you it was a serious obligation hanging over my head that I could avoid would change conditions. My head a little.

"After doing that, I said 10 cows. There are 16 men to convert the products of my income and a profit, if I could market for the crops I grow, I would have more so be so much more. If one assumes more economically more efficient machine."

But over carefully, I decided January 1 would be the best date. I knew that of a year's dairy farm has. I got some that were not as good.

On the first day of January with each cow, and I am glad what I found after a year's best cow I owned at the produced 6,115 lbs. of milk each, and her average test since 1894 the cutter had better for every 20.7 lbs. labor cost and feed cost this

For the purpose of comparison that herd of 16 cows into one containing the best 10 cows. The 8 best cows in milk and 268 lbs. of 85 per cow averaged 192 cans of milk, a difference of 58 lbs. more what than the best 10 cows. 50 cents a can would amount to the 8 cows of \$4.

I want to show you what after ten years' work. I have been a lesson to many I have to study and find out what

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# RURAL HOME

We Welcome Practical Progressive Ideas

The Recognized Exponent of Dairying in Canada

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

VOL. XXXVII

TORONTO, ONT., AUGUST 8, 1918

No. 32

## An Object Lesson in Dairy Herd Improvement

A Farmer Who Turned a \$300 Deficit Into a Substantial Profit, Tells His Story

Now, what you stop to think of, how many of you have better cows than you had twenty years ago? Have you done your part in bringing up the production of your herds? If you are keeping a 4,500-lb. cow, do you realize what it would mean to you if you could put in her place a 6,500-lb. cow? The minute you made this change you would automatically reduce the cost of producing any given amount of milk from 20 to 22 per cent. Why? Because the cow producing the smaller amount consumes just as much roughage and requires just as much time and care as the other cow. The expenses outside of the grain cost are practically the same.

I will tell you briefly what I did in my own herd and why I did it. I was forced to do one of three things—  
1. To increase the cost of production, because I could not increase the price for which I was selling—or to  
2. To go out of the dairy business and adopt some other system of farming—or to  
3. To go off the farm.

In the year 1898 my father died, leaving me the management of the home farm, heavily mortgaged. At his death I had not only the farm, but the obligations which had to be met. For a while everything went along smoothly. We had what was considered a good dairy herd at that time. We were getting a living and now and then I would reduce the mortgage a little; but as the price of feed and labor began to advance, increasing the cost of production of the herd and, as the price of the product did not advance in proportion, the margin became less and less until, at the end of the year 1905, when we took an inventory and tried to settle the bills and start on a good business basis for the next year, I found myself some \$300 or \$300 short of enough to meet the expenses. I assure you it was a serious problem to me, with the conditions hanging over me and with no other methods that I could adopt, so far as I knew, that would change conditions. I took a day off and used my head a little.

After doing that, I said to myself, "We have here 16 cows. There are 16 machines that I am using to convert the products of my farm into cash—a cash income and a profit, if I can get any. They are the market for the crops I grow, and if those machines can handle that more economically, my income will be so much more. If one can handle what she consumes more economically than the other, she is the more efficient machine." So after thinking the matter over carefully, I decided that on the first day of January I would open an account with each individual cow. I knew that I had some good cows, as every dairyman has. I thought perhaps I might have some that were not as good as I could get.

On the first day of January I opened an account with each cow, as I am going to tell you briefly just what I found after a year's work. I found that the best cow I owned at the end of the year 1904 had produced 6,115 lbs. of milk, or 339 cans of 8 1/4 quarts each, and her average test was 4.2 per cent. She produced 254.94 lbs. of butterfat. She made a pound of butter for every 20.7 lbs. of milk. In those days of labor cost and feed cost that was a profitable cow.

For the purpose of comparison, I want to divide that herd of 16 cows into two herds of 8 cows each, one containing the 5 best and the other the 8 poorest cows. The 8 best cows in 1904 averaged 255 cans of milk and 255 lbs. of 85 per cent butter. The 8 poorest cows averaged 192 cans of milk and 200 lbs. of butter—a difference of 58 lbs. of butter per cow. You see what that means in cash. The 65 cents of milk at 86 cents a can would amount to \$56.96, or a total difference on the 8 cows of \$395.68.

I want to show you what I was able to accomplish after ten years' work. The records of that first year were a lesson to me. I had to take another half day to study and find out what was best. I decided that

I would dispose of all the cows in my herd that did not produce \$10 worth more of dairy products than the feed cost. That would give me a basis to start on. Then I would go out and buy a pure-bred sire from a good producing cow out of a herd where records were kept and I could judge from the production point of view. I have followed that work from but I have weeded out the poor cows. Instead of 5.1, which would mean 488.77 lbs. of butterfat. I have sold the unprofitable cows, until in 1914 we had as a best cow one that would produce 9,580 lbs. of milk, or 532 cans, with an average butterfat test of 5.1, which would mean 488.77 lbs. of butterfat.

For purposes of comparison I want to take the best half of the herd in 1904 and the best half of the herd in 1914. In 1904 the best half of the herd produced an average of 253 cans of milk, and 255 lbs. of butter. In 1914, the best 16 cows averaged 7,144 lbs. of milk, or 397 cans, 379.84 lbs. of butterfat, or 448.87 lbs. of 85 per cent butter—a difference of 139 cans of milk and 188.87 lbs. of butter. This was an increase of 54 per cent in milk production and 75 per cent in butter production. Let us see what the value of the increase is. One hundred and thirty-nine cans of milk at 66 cents per can is worth \$77.84. Now we come to what it costs to produce that milk. In our herd we feed on

the basis of one pound of grain to 3 1/4 lbs. of milk. We claim that the cow producing the extra milk does not consume any more roughage than the other cow, but she does need more grain—more concentrates. Figuring on the basis of one pound of grain to 3 1/4 lbs. of milk, and figuring grain at what it was paying for it last month, the extra milk would cost \$18.05. The net value of the increase in milk would, therefore, be \$59.78 per cow, which in a herd of 20 cows would amount to \$1,195.50.

I want you to look very carefully at these figures. I want you to realize what it would mean to you if you could increase the production of your herds to that extent, and I want you to know that I have had to labor under the same disadvantages, and meet the same obstacles, the same drawbacks, that every farmer has to meet. We meet with these at some time, all of us, but if we continue at the job, using our best judgment in the weeding out and selection of cows, and in the breeding, we can all do so improve our conditions materially, and I see no reason why we cannot improve them to the extent that I have been able to do.—From Bulletin of Maine Department of Agriculture.

## A Twenty-three Year Success The Record of an Ontario Beef Ring

By Jas. R. Alexander.

JUST ten years ago this summer I worked for the season on a farm near Norwich, in Oxford County, Ont. One of the local institutions that was then giving universal satisfaction was the beef ring. Farm families far and near were supplied with fresh meat the whole summer through by "the ring." A couple of weeks ago I was back in Norwich visiting some of the old friends and found the beef ring just entering its twenty-third year and with the same man still in charge—Mr. E. B. Palmer, well known as the senior member of the firm of E. B. Palmer & Sons, breeders of Ayrshire cattle. On the day of my visit Mr. Palmer had just killed the first animal for 1918.

"This is the first day of our twenty-third year of continuous operation," Mr. Palmer said, "so you see we have passed our majority. In fact, the members of the ring gave me a surprise party to celebrate our coming of age. It was a year ago last fall, and we had just finished our twenty-one years, when the neighbors came in and we spent a most enjoyable evening."

"A beef ring is a splendid thing when it is properly conducted," continued Mr. Palmer. "In our ring we have just 16 shares and we operate for just 16 weeks, starting with the first week in June. This carries me through the hot weather, when fresh meat must be had frequently if it is to keep. The owners of each share in the ring must provide one beast each season. Almost all of the shares are held by two farmers to each share, although there are a few shares held by three men. Each share gets all the different pieces of a beef in the season."

"And how are values adjusted?" I asked. "Some animals might be worth a great deal more than others."

"At the first of the season," answered Mr. Palmer, "we get together and set a price for the following few months. This year the price is 15 cents a pound. On this basis each share is credited with the value of the animal contributed and debited with the value of the meat they get. I keep the books, and at the end of the year an adjustment is made."

"It's 23 years of success is pretty good proof of the satisfactory service that this beef ring has given. It is only one of several successful rings in that part of Ontario."



### Labor and Crops.

NEWS comes from Washington that a great army of harvesters, recruited by the United States Employment Service, will soon move north to aid in the harvesting of the grain crops of Western Canada. This move, in accordance with an agreement between the two governments, and should go far towards solving the labor problem on the prairies this year. A partial failure of the crops in many districts has, unfortunately, reduced the need for outside labor, but there is still room for the help of thousands of men in harvesting the 1918 crop and in the fall work preparatory for a great acreage in 1919.

Harvesting is now well under way in Ontario, and prospects are for a splendid crop of barley and a good crop of spring wheat. Oats are short in the straw, but are heading out well. Potatoes promise better than usual, but disease is prevalent in many districts. Roots on a reduced acreage, will be a good crop. Corn will again be under average, but better than was expected a month ago. Unfortunately an army of harvesters cannot easily be mobilized in Ontario, nor could they be used to so good advantage in groups as in the West. Much help will be needed, however, and the present offers a grand opportunity for the townspeople of Eastern Canada to send their aid where it will be needed in the next month. The suggestion that every town and village should have its employment agency where willing townspeople and farmers in need of help may get together is an excellent one. But if such action is going to be taken it must be taken immediately.

## Fly Spray for Dairies

It Will Cost One Cent a Cow Per Day

By Prof. L. S. GILLETTE, Iowa.

COWS may be sprayed twice a day by a total cost of less than one cent per animal. At the beginning of the cows early in the day, just after the morning milking and again at noon, when they are brought into the barn for feeding silage or molasses crops, they may be brought under complete abeyance. This practice allows the objectionable odor present in most mixtures to pass off before the ensuing milking, and thereby eliminates one of the objections commonly urged against fly sprays, namely, that of tainting milk.

Flies cause considerable annoyance to dairy cows during the summer, both by attacking the cow along the back and legs and also by preventing her feeding to her maximum capacity, so necessary for economical production. The restlessness of the cows in the stable is also apt to be a frequent cause of inefficient milking or even of wasted milk. The actual decrease directly and indirectly attributable to flies is difficult to measure, depending as it does upon the temperament of the cow, the amount of milk given, the number of flies prevalent on the farm, and many other factors.

Many different patent sprays are on the market, some of which are effective, but many of which are quite unsatisfactory in addition to being expensive. Under ordinary conditions the dairyman will find it more economical as well as more effective to make his own fly spray. This can be quickly and easily done, as has been demonstrated by the Iowa Experiment Station during extensive tests of different mixtures in the college herd. After trying out many different preparations during the past few years, the following one has proved most satisfactory when all factors are considered, and is the equal of any prepared spray that has been available: Four and one-half quarts coal tar dip, four and one-half quarts fish oil, three quarts coal oil, three quarts whale oil, and one and one-half quarts oil of tar.

These ingredients are added to lukewarm soft water, in which 3 lbs. of laundry soap have been dissolved, and the total brought up to 30 gallons by adding more soft water. This amount is sufficient to spray forty cows twice daily for a period of six weeks. This spray serves to rid the cows of flies and

in operation farmers are now buying tractors of their own. One of the several that have been purchased in Norfolk County is now doing a large part of the work on the farm of Mr. John Simmons, who lives near Courtland. "This tractor is exceeding my expectations," Mr. Simmons told an editor of Farm and Dairy. "It is rated for 10 horse-power on the draw bar and 20 horse-power on the belt. It pulls three plows and a mold plow nearly as easy as a horse. Of course, we must have good level land to make this speed. I am convinced that the tractor has come to stay, and that I will to a large extent displace horses on farms of over 100 acres."

This spring Mr. Simmons put in almost all of his crop with the tractor. In the past it has always been necessary to carry more horses to rush through the spring work than are needed at any other time of the year. On his 200 acres Mr. Simmons disposed of three extra horses when he purchased his tractor, and during the spring he used horses on the grain rid only. He will continue to use horses for cutting hay and grain, but the tractor will be used for all of the heavy work. The sale of the extra horses went a long way toward paying for the tractor, and because he did not have these horses, Mr. Simmons sold 300 bushels of oats that would otherwise have been fed. Along with the tractor he purchased a three-furrow plow, costing \$200, and a big double 35-disk harrow.

Mr. Simmons' son, Arthur, is engineer-in-chief, and makes himself responsible for practically all of the tractor work on the farm. Arthur gave us an example of what tractor speed means. Last spring he was preparing an eight-acre field for corn. He plowed this field and crossed it twice with the double disk harrow in just 2 1/2 hours. On fall plowed out ground he has found that, getting on at the right time, once over with the double disk and the drag, and once the land in shape for seeding. His tractor uses one gallon kerosene per acre for disk and three gallons per acre for plowing, although it will take more than this in hard ground.

## Annual Pastures are Coming

Some Observations of the Past Month

A FEW years ago annual pasture crops were practically unknown in Ontario outside of Government farms. In the past two seasons, however, these annual mixtures have been tried in practically every district of the province, due largely to the propaganda of Mr. A. Leitch, of the Ontario Agricultural College. Two factors account for the ready acceptance of the annual pasture mixture. In the first place, Mr. Leitch demonstrated on a large scale on the farm at Guelph that the idea is practicable. In the second place, conditions were favorable to an acceptance of the annual pasture idea. High prices for milk made farmers desirous as never before of maintaining a steady production throughout the season. The high cost of concentrated feeds for grain feeding to maintain the flow unpopular, and the scarcity of labor made sowing on the same time practicable. The annual pasture mixture, which cost little, and on the part of the dairymen, seemed to fill the bill. Practically every district visited by the editors of Farm and Dairy this summer has at least some annual pasture.

Mr. A. C. Hallman, of Waterloo County, Ont., has just one acre of the annual mixture, covering a paddock adjoining the barn yard. Mr. Hallman apparently used a little of all the seed he had on the place, as in the paddock we detected oats, wheat, barley, vetches, rape, sweet clover, red clover, alfalfa and timothy. In the evening of a couple of weeks, a dozen cows in the paddock were on the feed, and seven calves have pastured it continuously since it was first ready for feeding. "I like this pasture mixture first-rate," said Mr. Hallman. "I am not feeding my brood sows anything at all except the pasture they get here, and they are looking well. It also has a decidedly favorable effect on the milk flow even when



In Clover—And Sweet Clover at That.

This sweet clover was seeded without a nurse crop the last week of May on a piece of sandy land that for years had not grown even a decent crop of weeds. The seed was secured on July 15th, when a growth of 12 to 15 inches had been made. The crop will be pastured this summer and fall and plowed under when the ground is coming to look upon sweet clover as the great soil and soil renovator.—Photo by an editor of Farm and Dairy.

the cows were in for only two or three hours in the evening."

A short time after we visited Mr. Hallman we saw Mr. C. E. Moore, Peterboro' County, a visit. Mr. Moore had ten cows pasturing on a two and one-half acre field adjoining the stable. "I never had anything as the place give so much feed of the same acreage," remarked Mr. Moore. That little field had been seeded with wheat, oats and barley, as recommended by Mr. Leitch, and, in addition, with alfalfa, red clover, alfalfa, and timothy, the intention being to keep the field for permanent pasture. Blue grass, it is expected, will work in of itself.

These are only a couple of the many instances that we might quote. The annual pasture mixture is due to hold a permanent place in Ontario's agriculture.

## Fertilizing for Wheat

Some Significant Figures From Illinois

THE State of Illinois is conducting the most exhaustive and most conclusive fertilizer experiment of any state or province in America. This work is under the direction of Dr. Cyril S. Hopkins, whose object it is to determine some system or systems of crop management that will ensure a permanent fertility of the soil. Most of this work is being conducted in demonstration fields throughout the state. The farmers of each district buy the land and deed it to the state for experimental purposes. There are 40 acres or more in each plot, with an experimental barn and threshing outfit. The experiments, therefore, are on a good scale, and the results have a very practical bearing. What is threshing has already begun on these experimental fields. The following table of yields is for the oblong field in Crawford County, Illinois. The figures speak for themselves:

Soil treatment applied.	Bushels.
None (average of three tests).....	5.5
Farm Manure.....	14
Manure and Limestone.....	21.7
Manure, limestone, phosphate.....	25.2
Crop residues.....	17.2
Residues and limestone.....	29.5
Residues, limestone, phosphate.....	37.1
Residues, limestone, phosphate, kainit.....	38.3

These records show that as an average the yield of wheat was increased nearly six bushels per acre by the organic manures, about 13 bushels more by limestone and eight bushels in addition by phosphate. In permanent systems of soil improvement, with ground limestone, fine ground raw rock phosphate, and home-grown manure, the average yield was nearly 25 bushels per acre, or about four times the yield from untreated land, which of itself produced less than nine bushels of wheat.

"Why expend labor to farm 40 acres when the same amount of what may be grown on 10 acres," asks Dr. Hopkins, "do you believe that the results of his

Continued on page 9.)

## On the A Short Sketch of Bred Boys W

There are many who have heard the phrase "bred boys" and have been disappointed in the result. But to one who has had the pleasure of riding on a yard which extends a short distance from Niagara Falls to Buffalo, just across the Buffalo, or who has had a short privilege of staying at Black Creek and enjoying the hospitality of the farm, the term is a one indeed.

During the past few years the Holsteins have figured quite prominently in official reports. Mr. H. O. Compenn, the boys have become known as Ontario bred boys and it is quite possible that those who have not made acquaintance with them, and what is the result with the farm, may be surprised.

Though known to the farmer and an enthusiastic supporter of the American known in his home city as greater extent of the farm, the H. O. Compenn, and as also having interests. Whether it is his business man, I do not know, but he is one of the best men I have ever seen in his fields without seeing him. They would save the welfare of his fellow-men. They would short years, had acquired matters which is astounding of Ontario farm conditions and pathfinder with the present.

The Lenore Farm consists of heavy Welland clay, and this run several strips of at the back of the farm upon which are grown. There are 60 acres of this.

Owing to the fact that piece by piece during the past few years it has been impossible to prospect operations and a definite farm is so far from profitable allowed to stay with any other than is profitable. The corn, wheat, oats, and rape are as advisable, then plowed. There are two large barns. The alfalfa is stored there, as required during the winter months. The alfalfa in the barn is as advisable, then plowed. Mr. H. O. Compenn has succeeded to the use of lime. This is but of all the crops. Two or three years ago, an investment. Owing to the fact that the farm was not yet in the best of the low spots, Blue grass, but the two crops



Irish Cobbler which Yielded at the Rate of 320.7 Bushels per Acre.

Mr. J. A. Williams, Peterboro' Co., Ont., whose potato growing methods were fully described in Farm and Dairy this spring, planted Irish Cobbler (New Brunswick Seed) on April 20th and on June 11th he dug the crop here illustrated, which yielded at the rate of 320.7 bushels per acre. Mr. Williams is a great advocate of immature seed.—Photo by an editor of Farm and Dairy.

does not cause the coats of the animals to become thick or harsh, although dust adheres more easily.

A very simple spraying apparatus may be constructed by making a portable cart from a half barrel and wheels, to which is added a spray pump and nozzle. By using this cart two men can spray a herd of forty to fifty cows in five minutes. The cost of labor plus the ingredients used in the spray will be practically a cent per cow daily, while the increased milk production, greater comfort to the cow and milker and maintenance of more sanitary conditions makes the investment an exceptionally profitable one.

## Tractor Experience in Norfolk

A Tractor Displaces Three Horses

THE tractors operated by the Ontario Department of Agriculture last year and this have done much to popularize the tractor in Ontario. In every county where Government tractors have been

# On the Boulevard of the Beautiful Niagara River

A Short Sketch of W. C. Houck, the Genial Proprietor of Llenroc Farm—His Farm—His Holsteins—His Three City-Bred Boys Who Are Handling the Farm, and Some of the Things They Have Accomplished—By C. G. McKillican

TO one who has never been there, the phrase which heads this article, and which has been adopted by the Houcks in connection with their farm, may seem somewhat fanciful. But to one who has had the pleasure of riding on the Boulevard which extends along the shore of the majestic Niagara, from Niagara Falls to Bridgeburg, just across the river from Buffalo, or who has had the additional privilege of stopping off at Black Creek and enjoying the hospitality of the farm home at Llenroc, the term is a very real one indeed.

During the past few years or so Llenroc Holsteins have been figuring quite prominently in official reports. Mr. Houck and the boys have become familiar figures at Ontario sale rings, and it is quite possible that to those who have not had the privilege of more intimate acquaintance a short description of what has been done, and what is now taking place in connection with the farm, may be of some interest.

### The Proprietor.

Though known to farmers of Ontario as a brother farmer and an enthusiastic stock man, possibly to some as an American business man, Mr. Houck is known in his home city of Buffalo, and over the greater extent of the American Republic, as president of the H. O. Company, manufacturers of feeds, and as also having interests in other business concerns. Whether his business confers he is known in any other way than that of an honest, successful business man, I do not know, but I do know that no one could visit at his home and walk with him about his fields without seeing more than a mere business man. They would see a man who, before all else, places the welfare of his family and the welfare of his fellow-man. They would find a man who, in a few short years, had acquired a knowledge of live stock matters which is astounding, who is a keen observer of Ontario farm conditions, and who is a strong sympathizer with the present farmers' movement.

### The Farm.

Llenroc Farm consists of 750 acres; about half of it is heavy Welland clay, as level as a floor. Across this run several strips of fine loose loam, also level. At the back of the farm is a section of rolling land, upon which are grown splendid crops of alfalfa. There are 60 acres of this crop now on the farm.

Owing to the fact that the farm has been bought piece by piece during a period of seven years, it has been impossible to properly systematize farming operations and a definite rotation covering the whole farm is so far impossible. No field, however, is allowed to stay with any one crop one year longer than is profitable. The principal crops are alfalfa, corn, wheat, oats, and roots. This is on the part of the farm farthest removed from the main buildings. There are two large barns at this end of the farm. The alfalfa is stored there and is drawn to the main barns as required during the winter. They do not include the alfalfa in the rotation. It is left as long as advisable, then plowed up and re-seeded.

Mr. Houck lays his success in the growing of alfalfa to the use of lime. This is so, not only of the alfalfa, but of all the crops. Two or three carloads are used as fertilizer each year, and he considers it a good investment. Owing to the fact that he has as yet been unable to put in covered ditches, the alfalfa kills out in the low spots. These spots grow up with blue grass, but the two combined make an excellent



The Boulevard in Winter as it Passes Through Llenroc Farm.

mixture. They usually leave the alfalfa about five years before plowing it up.

In order to do their share in the patriotic duty of food production a large acreage of wheat is grown. This year they have 70 acres. This is the only crop which is sold off the farm, and with this crop. The clover and timothy is done with this crop. The timothy is seeded in the fall with the wheat and the clover added with the last snow in the spring, or when the frost is just coming out and the ground is in the honeycomb stage. They claim that this method has given good satisfaction, and that by seeding in this way and by proper tillage a smaller quantity of seed per acre is necessary.

The hay is left two or three years, according to the stand, and is plowed up for corn and some for summer fallow, though the latter plan is not considered advisable except in case of shortage of labor to handle a cleaning crop such as corn or roots.

### Forty Acres of Eureka Corn.

Speaking of corn, this year's crop covers 40 acres. It is the Eureka variety, and usually stands about 14 feet high. There are four large silos on the farm, which are as a rule crammed to the roof. Mr. Houck says that this variety gives good satisfaction with them—that they have had it ripen sometimes, but usually cut it in the milk stage.

Hay also is an important crop. This year they have 225 acres besides the alfalfa, and if the sample which I saw them cutting at the time of my last visit is a fair sample of the rest, there will be abundant feed for the Holsteins during the coming winter.

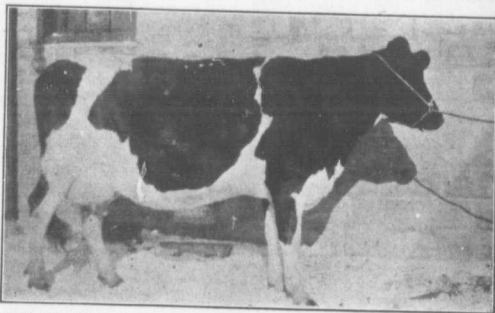
Another crop which is grown, though small in acreage, yet large in importance, is the beets. These are used for the test work during the winter. There are which give excellent results for test work, and some of the larger varieties.

While oats is not a crop of first importance with the Houcks, last year they threshed 1,800 bushels. This is all fed on the farm. Included in the farm equipment is a small power grinder, with which they do all their own grinding. The oats are mixed with such commercial concentrates as oil cake, cottonseed, gluten, etc., of which considerable quantities are bought.

In order that a farm of this size may be worked to full advantage with labor as scarce as it is now, it is necessary that the farm equipment be modern. All the best machinery is used, including side delivery rake, hay loader, and two-horse cultivators. The milk from the Holstein herd is separated and made into butter right on the farm, a small modern plant having been put in for the purpose. The butter is sold in the city market, and the skim milk and buttermilk are invaluable in raising the young stock of the farm. The latest addition to the equipment on the farm is the milking machine. It has now been in a few months and is giving good satisfaction. There are five gas wells on the farm, and anyone who has experienced the shortage of coal can appreciate what this means, as, besides supplying the whole farm with light, heat and power, these wells bring in \$75 per year rental for outside users.

### How It All Came About.

As we sat on the verandah after tea and talked of



A Representative Female; Jemima Johanna Posch 29.50 lbs. Butter and Over 100 lbs. Milk in One Day.

live stock matters and other matters of general interest, I asked Mr. Houck if he had been a farmer in the past, and if not, how was it that he had become interested. He said:

"Well, it was this way. A few years ago the idea of buying a farm had never crossed my mind. But when the two oldest boys, Bill and Chris, finished high school, they wanted to take the agricultural course at Cornell. This was a new idea to me, and I said that before they did so they must first get a taste of real farm life. Then they would be better able to decide whether they would like to follow farming as a permanent occupation."

"I had known this locality before," continued Mr. Houck, "having often come out for a holiday and to do some fishing during the summer. So I bought a farm of 190 acres and secured a good farmer to work it. Then I sent the boys out to work for him. They were to get up at five o'clock and rough it. Just the same as the other farm help. They were to clean out hog pens, dig ditches, and to all the other dirty work, and if at the end of the summer they still wished to be farmers, all well and good; and if they did not, I would sell the farm even if at a loss. I considered wanted them to know right at the start what sort of a proposition they were up against. They went along all summer, and I never said anything to the boys till threshing time came. Then their mother said, 'You're not going to let those boys work at that dirty

(Continued on page 9.)



A Group of the Buildings. The Main Dairy Barn May be Seen to the Right.



horses is as consistent as the stall farmer's luck is bad. Why the differ-

It is just a matter of good, regular attention. A horse, like its driver, thrives when it is comfortably housed and well and regularly fed. This man never complains of his lack of luck has never regarded his horses as income makers in the same way as he regards his dairy cows. They have gotten hit and miss attention. If there was grain on hand they got it. If there was none around, oh well, it didn't matter for a few days. The driest pastures were good enough for the horses when they were out in the stables. Minor ailments were never attended to and if a veterinarian was called at all it was when a horse was as good as dead.

Horses are on an up market and it will be a long time before they are any cheaper than they are now. The farm teams deserve the best of attention and hit and miss methods are sure to bring "bad luck."

Pork Restrictions Removed

A CANADIAN Press despatch from Ottawa on July 31, cancelling the restrictions on the consumption of pork reads as follows: "The Canada Food Board has removed temporarily the restriction on the consumption of pork. Such action has been made possible by the pork production and conservation efforts in Canada and the United States, and the Food Board's order, passed today, provides that pork, including bacon and any part of the carcass, may be served at any time in public eating places operating under Canada Food Board licenses."

"In making this announcement, the Food Board stated that as a result of conservation measures and increased production, net exports of pork from the Dominion have been increased by 125,000,000 pounds per annum, which is an increase of 97 1/2 per cent over a five-year pre-war average."

Field Notes

By "Mac."

Silo Filling Gangs Needed

IN the dairy districts of south-western Ontario, the filling of the silos is one of the biggest problems with which the farmers have to deal. "I am interested in the threshing gang idea, but it is silo filling gangs that we need more in this district," remarked Mr. John Simmons, whose farm adjoins the village of Courtenay in Norfolk county. "It takes more men to fill our silos than it does to thresh our grain and five teams in addition. We require 15 to 17 men altogether at silo filling time and I would be glad to pay the extra price involved in the gang method of filling if we could get the gang." Mr. Simmons' silos were illustrated in a recent issue of Farm and Dairy; a large cement silo for winter feeding and a smaller stave structure for the summer months.

WHEN calling on Mr. Simmons, I dropped in to see his neighbor, Mr. George B. Ryan, who lives a mile or two away on the road to Tillsonburg. I have known Mr. Ryan ever since he started to enter his grade Holstein cows in the dairy test at Guelph, always carrying away a good share of prize money, and one year capturing the sweepstakes itself. At the time of my visit Mr. Ryan was milking eight grade cows which would have passed for pure-bred Holsteins anywhere, and he expected that his milk cheque for June would be between \$240 and \$250. All but one of these cows were spring freshened. That one cow had been milking since the previous fall and had produced between \$240 and \$250 worth of milk in the meantime, and was even then

giving more milk than any of the fresh cows. I find that dairymen with the grade of the calibre of those owned by Mr. Ryan do not worry particularly about feed bills.

M R. Ryan, during my visit, which lasted only half an hour, gave me an excellent example of the value of a constant supply of water before the cows in the stable. Last winter Mr. Ryan's water system was the case on hundreds of other farms in the Province, froze up and the tank last was damaged, so that it would hold a little water in the bottom. For some weeks the cows were watered outside. When the tank had been freshened Mr. Ryan began to put a little water in the tank night and morning and the cows immediately began to come up on their milk. "There is no question but that a water system pays and pays well," concluded Mr. Ryan.

A FEW weeks ago in Farm and Dairy I told of how Mr. McKillop of Maxville, almost met his death at the hands of a "gentle" bull. I have heard of similar cases since. Mr. Malcolm Morrison, member of the Southern Counties Ayrshire Breeders' Club, went to the field last summer for a two year old bull that had never been regarded as good material and harmless. On that particular day, however, the bull turned on him and for several months Mr. Morrison was confined to the house and, I understand, has not yet fully recovered from the results of the encounter. Mr. Jack Simmons in Norfolk county had a similar experience. He was leading a perfectly quiet bull from one barn to another, with a rope run through the ring in the animal's nose. First the bull began to pull back on the ring and then he charged and got Mr. Simmons down, and it is a miracle that he escaped with his life. The more I see and hear of "gentle" bulls, the more certain do I become that the only safe course is to remember that "a bull is a bull" and never trust them to an inch.

"WE have Hydro for almost everything now," remarked Mr. M. L. Haley, when I dropped in to see him on his up-to-date farm home at Springfield. "It is a great thing. We have lights all through the house. We have a light at the road which we can switch on from the dining-room, and lights

through the yards which can be switched on or off from either the barn or the house. We can even turn on the lights in the barn before we leave the house and switch them off again at either barn or house."

I found that Mrs. Haley was most enthusiastic about her washing machine and wringer, both operated by a small motor connected with hydro-electric power. This outfit has almost completely eliminated hand work. "Do you wonder the wash day has lost its terrors for me?" asked Mrs. Haley as we watched it in operation. Outside the house a one horse power motor pumps all of the water required on the farm, and runs the emery wheel and other small tools. The pump comes in particularly fine in cooling the milk, which is run over an aerator and cooler. And I must not forget to mention the toaster and electric iron which complete the inside equipment, the latter taking much of the work out of ironing day.

WHITE turnips for fall feeding are greatly favored by Mr. A. C. Hallman, of Waterloo Co., Ont. When I visited Mr. Hallman the last week of June, the white turnips were just showing above the ground. It likes to give the silage a chance to mature and develop that peculiar flavor which is so acceptable to the cows before I open the silos at all," remarked Mr. Hallman. "It is here that white turnips fill an important place. I feed them tops, roots and all, and in the late fall, when otherwise I would have to be feeding ensilage."

Financing Western Wheat

REPRESENTATIVES of the grain, milling and banking interests had an interview to-day with Sir Thomas White, Minister of Finance, and Hon. T. A. Cresser, Minister of Agriculture, respecting the matter of financing the western wheat crop. As a result of the interview the question of a fixed price will immediately be taken under consideration by the Grain Commission. The matter of the financing will be taken up by the Minister of Finance with the Imperial authorities and the Bankers' Association. It is likely that to give financial and commercial stability to the grain situation the Government will give its guarantee of the fixed price upon the whole of the

new crop. This will enable the banks to extend the needed credits to grain and elevator firms so that buying may promptly commence when the grain is ready to move.

Among those present at the conference were: E. L. Pease, Sir John Aird, C. A. Herbert, B. E. MacKenzie, Dr. McGill, W. R. Bawit, Frank Fowler, W. A. Black, E. W. Kneeland, F. W. Young, B. Winans and others.

County Wants Auto Monies

THE County Council of West Peterborough has approved of the following resolution: "That this council memorialize the Provincial Government to refund the counties the money collected as automobile licenses, to be expended on the main roads of the different counties."

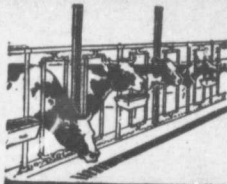
A copy of this resolution has been sent to all the county clerks in Ontario to be read to the different county councils. The stand of the Peterborough councillors will be better understood when it is known that Peterborough county has not, as yet, adopted the county good roads system.

A Cheap Cream Cooler

WHEN the temperature of the well or spring water is not too low enough to cool the cream and it becomes necessary to use ice and a cooler, a device that is used by an Arizona dairyman comes in handy. He takes a common glass fruit jar, quart size, and fills it with cracked ice. The jar is then sealed and placed in the strainer, which in turn is placed over a ten-gallon can. The water in the strainer and the jar of ice is set under the cream spout of the separator in such a way that the cream strikes the jar of ice on the side and near the top, spreading over a considerable portion of the jar. As the ice melts the water naturally forces the small pieces of ice to the top so that the cream always strikes the part of the jar that is coolest.

The dairyman stated that a quart jar of cracked ice was sufficient to cool the cream from a dairy of fifteen or twenty cows to keep it sweet for delivery.—M. E. B., in Country Gentleman.

Advertisement for a Brounie Camera. Text includes: 'Pocket Camera TAKE YOUR CHOICE 2 1/2 x 3 1/2 For only 10 New Yearly Subscriptions at \$1.00 Per Year.' Images show the camera and a woman. Text continues: 'Brounie Camera Given for 3 New Yearly Subscriptions at \$1.00 Per Year.' 'Memory sometimes fails us—but a Kodak Picture never does.' 'Nothing so nice as the actual scenes of bygone days.' 'A few minutes' time will secure one of them for you.' 'Hundreds of other gifts.' 'Circulation Department FARM AND DAIRY Peterboro Ontario'.



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## Farm Management

### Is the Corn Binder in Shape?

**Prof. John Evans, O.A.C., Guelph, Ont.**

**T**HE adoption of improved farm machinery has reduced the cost of production on the farm in much the same proportion as high speed machinery has reduced the cost of production in the modern factory. The efficiency of both has been raised, but we believe there is still an opportunity for greatly increasing the efficiency of the average farm without raising the cost of production or lowering the farmer's profits.

The first requisite in this direction that speaks for advancement, for efficiency and for better service, is to properly care for all farm implements and machinery. What if the used or the best corn crop in the province if our corn binder breaks down at every turn of the field. The fact that small profit in farming is the general rule and not the exception may be very largely attributed to the annual waste in farm machinery due to a lack of proper care of farm equipment. To reduce the annual waste in farm machinery proper housing and intelligent and timely repairs is necessary. Good housing reduces deterioration from the action of the weather, while frequent and systematic overhauling and oiling reduces breakages to a minimum and the losses due to the stoppage of work at busy seasons.

### A Corn Harvester Necessary.

To handle the corn crop expeditiously, economically, and successfully some kind of a corn harvester is an absolute necessity, and it must be in good working order. Various cheap machines have been tried and found wanting, but the corn binder has become a permanent fixture on a large number of farms in this province. These are several kinds of corn binders on the market, and while each kind may have its special merit as to the arrangement of its essential parts, trouble must arise if these parts are not properly cleaned, oiled and kept in alignment.

The advancing part of the corn binder consists of two diverging jaws which may be raised or lowered by an arrangement of levers. Attached to each jaw are two or three travelling chains furnished with fingers. Their function is to convey the stalks to the binding deck in an upright position as the machine advances. The chains should not be too loose as they will ride the teeth of the sprocket and slip down the teeth. With machines having packers—to prevent ears being knocked off by jamming the stalks behind the needle—see to it that the packers yield slightly while the bundle is being tied. Too many bundles crowding the cart will interfere with the binding attachment properly freeing itself. The knoter and the needle cannot do your work efficiently when covered with rust. Polish them with fine emery cloth. If the knoter or the knoter is dull, sharpen it or it will cause trouble by pulling the twine from the hook before the knot is made. As it requires considerable power to cut the sappy stubble and not tear it up by the roots, the knife should be thoroughly keen, otherwise it will clog with grass and weeds. The stubble cutter should also be kept in good condition. It is a useful device, and when rightly sharpened and adjusted does not add very much to the draft.

**Superficial Examination Not Enough.** Do not depend on a superficial examination of the machine to acquaint yourself if it needs repairing, because if you do, you will surely miss some small but most pertinent attention which if neglected, if they break during the busy season they will cause greater breakages and serious loss. Clean the machine thoroughly with kerosene, and get a spray over every part of the machine, and while doing this you will locate loose bolts and worn or broken parts. Oil holes and worms should be cleaned out and

new waste, if aquired, put into the wells. Reoil the grease cups; in short, renew and repair anything and everything that requires attention. The time of the year to do the general overhauling is, of course, during the winter months, when other work is not pressing, but if it were not done then it must be done now.

### Wintering of Grasshoppers

**D**O grasshoppers die in the fall or live over to the next year.—B. C. Que.

The eggs of grasshoppers are deposited in packets or pods in old neglected meadows, along roadsides, etc., in spots where the soil is dry and largely free from vegetation. These eggs are deposited in late summer and autumn. Young locusts hatch about May of the following year. All living grasshoppers die by the latter part of September.

### A Market for Limestone

**W**OULD it be a good investment to invest in lime kilns? I have all the firewood in my farm and the limestone, of course. Or would it be a better investment to buy a stone crusher and crush the stone? I have a 5 h.p. gas engine. Where could I sell the crushed limestone of the lime and at what price.—B. C. Quebec.

Experimenters are abundantly proving that carbonate of lime, that is ground limestone rock, gives better results than brnt lime, when applied for agricultural purposes. I think there is no doubt of this point. The Allis-Chalmers Company, of Milwaukee, with an office in Toronto, handle crushers made purposely for this work. Hereinbefore crushed Humberston rock has been sold for \$2.50 to \$3 a ton in bags. One firm coming into the market now states that they will sell under \$2 a ton in bulk. This would be a good point of shipment. I think that we should try as much as possible to get this material shipped in bulk to save cost, and I believe the time will come when we can buy it for \$1.50 a ton in this form.

Regarding sale, it all depends upon the nature of the soil in the neighborhood. If the soil is in need of lime there ought to be no difficulty in selling the product. The Ontario Government have bought a small crusher, presumably for the use of Mr. Campbell would want and have it installed at the Penitentiary at Kingston, grinding rock for experimental purposes. If you are going into the business it would pay him to look over the work which they are doing there.—Prof. R. Harcourt, O. A. C., Guelph, Ont.

### The Young Bull

**T**HE bull calf should be separated from the heifers at about four months of age. His treatment and feeding should be identical with that of the heifer except that to get maximum growth he should receive a little larger quantity of grain. If properly handled, the young bull is ready for light service at the age of from 18 months to a year. Too much service before he is two years of age will do him permanent injury, which, of course, should be avoided. It is important that this be properly trained to halter, as he will make him much easier to handle when he is old. At six months of age a ring should be put into his nose.

Among some breeders it is the practice to remove the bull's horns at two years of age. It is asserted that this tends to tame him and prevent him from becoming vicious. One thing that should always be kept in mind is that exercise is essential to the proper development of a young bull and to the health and vigor of a mature one. A small paddock with a shed for protection against stormy and windy weather, will give him room for plenty of exercise and keep him in good condition. Two bulls, if dehorned, may be kept together to advantage, as they exercise each other. Precautions should be taken to see that each receives his proper portion of feed.



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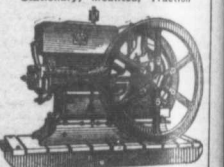
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## On the Boule

work are you? I believe very unhealthy." My rod if they are going to be will have to work at it, thrashing, and they might out right now what it like."

After it was over, under under the weather. Houck thought if a good up the old subject again and found that they were still in the same line. He was selling me of it, Mr. told them. Well, I guess it. To Cornell you'll be to the two oldest boys were younger one also took the and also wished to follow end of the business of necessitated the enlargement by his eight lots. He added to the holding, un farm of 750 acres started block with three sets of

The Herd.

Early in their farm career boys displayed a liking for the cow. The first breed were two cows purchased by J. W. Richardson, of C. of these, Jimma Johanna also has given the time of my last cow was under test and days previous to my view over 30 lbs. but she was in one day and gave 11 lbs. the months in milk, giving per day. Though having a stable seven-day work now running this cow their first attempt at it she has given in 68 days of milk. Her cow record has 79.50 lbs. at five over 100 lbs. milk in of her next has a 23-lb. record. She has also a year-old daughter, two daughters and three daughters in the herd. This was Johanna. Her daughter holds the world's record for three-quarter udder. The of her daughters in the herd a 25-lb. four-year-old record.

In addition to the production of milk, the farmer should be careful buyers at auction sales on both sides. They have now a 31-lb. record for a few months. The record in her class. This is in call to Mr. Cabana's R. Great. A few of the other are a 23-lb. Junior four-year-old to Uniform Lorena, the record three-year-old, a 15-lb. old, both bred to the same two daughters of Field's King Point. King Point is also a daughter of Ormsby whose dam is a daughter of the Eighth.

This also brought a grand King Siegs Chamney in the of Fairview Korndyke and two heifers sired by R. Eighth. They have a yearling of Sir Vasman and she has more 30-lb. udder than other bull now living, an daughter of the 40,000 Mighty Monarch. The daughter of the 50-lb. cow. purchased at the consignee's sale last fall.

The herd now numbers of which are at present 27 young heifers six worthy of it. He is a son of Sir Vasman and Orchard Grove A. a 34-lb. Junior four-year-old of King Siegs. Thirty-eight now in the farm is the feature of the farm is the of about 30 heifers in the which appeared to be of big type. When the young on the farm and the prog-



# On the Boulevard of Beautiful Niagara River

(Continued from page 5.)

work are you? I believe the dust is very unhealthy." My reply was, "Well, if they are going to be farmers they will have to work at work no jobs than threshing, and they might as well find out right now what it is going to be like."

After it was over they did feel rather under the weather, and Mr. Houck thought it a good time to bring up the old subject again. He did so, and found that they were both more than ever filled with the farming idea, in telling me of it, Mr. Houck said, "I told them, Well, I guess that settles it. To Cornell you'll both go." When the two oldest boys were through, the younger son also took the same course, and also wished to follow the practical end of the business of farming. This necessitated the enlarging of the farm, so bit by bit eight lots altogether were added to the holding, until now the big farm of 750 acres stands in a solid block with three sets of buildings.

### The Herd.

Early in their farm experience, the boys displayed a liking for the Holstein cow. Their first cow in this breed were two cows purchased from J. W. Richardson, of Caledonia. One of these, *Jenima Johanna* of Riverdale has given them six calves. At the time of my last visit the cow was under test and in the seven days previous to my visit had made over 30 lbs. butter and 150 lbs. of milk. She had given 112 lbs. of milk in one day and was then, though two months in milk, giving over 105 lbs. per day. Though having done considerable seven-day work, the boys are now running this cow in R. of P. their first attempt at this work, and she has given in 68 days over 6,000 lbs. of milk. Her only former daughter has 29.30 lbs. at five years old and over 100 lbs. milk in one day, while her next has a 25-lb. three-year-old record. She has also an 18-lb. two-year-old daughter, two other grand-daughters and three great grand-daughters in the herd. The other cow was *Johanna Rose Lorraine* 2nd, who holds the world's record (for milk) for three-quarter udder. There are two of her daughters in the herd, one with a 25-lb. four-year-old record.

In addition to the progeny of these foundation cow the Houcks have been careful buyers at the various auction sales on both sides of the line. They have now a 31-lb. two-year-old, who for a few months held the world's record in her class. This heifer is now in calf to Mr. Cabana's Rag Apple the Great. A few of the other good ones are a 24-lb. junior four-year-old sister in Uniform Lorena, the former world's record three-year-old, a 19-lb. two-year-old, both bred to the same bull, and two daughters of Field's \$35,000 bull, King Pontiac Holsteiner. They have also a daughter of Ormsby Jane King, whose dam is a daughter of Rag Apple the Eighth.

They also bought a granddaughter of King Sleg Champion, in calf to a son of Fairview Kordyke Mata, 47 lbs. and two heifers sired by Rag Apple the Eighth. They have a yearling daughter of Sir Veoman Hengerveld, who has more 30-lb. daughters than any other bull now living, and a son and daughter of the \$40,000 bull, The Mighty Monarch. The bull is a fine individual from the 1913, four-year-old, Uniform DeKok. There is also a grand-daughter of Vikana Johanna, the world's record 14-year-old cow, and daughter of the 50-lb. cow. This cow was purchased at the consignment sale at Paris last fall.

The herd now numbers 95 head, 32 of which are at present milking. The young herd sire is worthy of mention. He is a son of Rag Apple Kordyke 8th, and Orchard Grove Auburn Segie a 34-lb. junior four-year-old daughter of King Segie. Thirty-eight head are now in calf to this sire. A noticeable feature of the farm is the fine bunch of about 20 heifers in the pasture, which appeared to be of the production type. When the young stock now on the farm and the progeny of their

present sire are a few years older we may expect some great records from this herd.

While the cattle are the main line of stock, they have also a strong side line in the form of poultry. The flock of R. I. Reds having been winners in line in the form of poultry, the flock have a strong outfit of sows, their favorite breed being the Belgian.

### Farm Life.

The Houcks appear to enjoy farm life. Two of the boys are married and live in houses on the farm. Mr. and Mrs. Houck, senior, live on the farm during the summer, Mr. Houck going to and from his work in Buffalo by auto or motor boat. During the winter they live in Buffalo, but Mr. Houck finds many excuses for running out to the farm just as often as possible.

One of the reasons which I believe is responsible for the success of the Houck boys on the farm is that they went at it under no mistaken idea of what they were up against. On speaking of the subject, Mr. Houck, senior, said:—"My idea was that the boys should run the farm, and as far as possible do their own work; that it should be on a practical economic basis, and that if for the time ever came when they could walk about the farm in silk hat, gloves, and cane, it must come through their own efforts and not from any other source."

One of the noticeable things about the farm is the satisfied appearance of the boys. This is not done by paying them wages of proportion to the work they do, but by working regular hours, and by treating every brother man, whether he be laborer or capitalist, as a brother. During the winter months it is the custom of the farm help to gather together one night each week at one of the farm houses, and there they are given the pleasure of entertaining themselves in games and music. It is a plan that works out to the satisfaction of all concerned.

These are a few items of interest on this big dairy farm, owned by a city business man, and managed and worked-up by his three city-born but farm-educated sons. There are many improvements yet to be made. The buildings are practical but far from elaborate. No covered ditches have yet been put in, but it is well surface ditched. Necessary improvements will be added as the Holsteins pay the way, and judging by the way the boys are going about their work now, the time is not very far distant when both the farm and the stock will rank among the very best.

### Fertilizer for Wheat

(Continued from page 4.)

work demonstrate that, with proper fertilization, larger crops may be grown from smaller areas and with greater profits. Prof. R. Harcourt, who has recently concluded a soil survey in Western Ontario and is now working in Eastern Ontario, believes that there are large sections of Ontario where the proper use of commercial fertilizers would greatly increase the profits of agriculture, and Prof. Harcourt is planning as soon as practicable to establish experimental fields in Ontario similar to those now operated in Illinois. There are some sections of Ontario where the soil is naturally deficient in phosphoric acid. In other sections lime is the missing ingredient. In both cases experimental demonstrations would be of immense value to the farmers in the districts affected.

The Dairyman's League of New York State has established prices for August and September as follows: \$2.70 for August and \$2.90 for September per hundredweight of three per cent milk at 150 miles from New York, subject to the usual freight and butter fat differentials. The B. B. price is, therefore, 25c. per cwt. more than last year in August and 45c. more than in September.

**FREE TO BOYS AND GIRLS** This Lovely Pony or \$100.00 Cash

Can You Solve This Great War Puzzle?




### Four Things That Will Win The War

#### WHAT ARE THEY?

**T**HE 16 Circles above can be made to spell out the names of the four chief things that will win the war. Our bright loyal Canadian boys and girls can provide at least one of these things. Every boy and girl should know all of them. Can you tell what words the four magic circles represent?

How to solve it.—Each circle represents a letter of the word called for. The number of dots in the circle represents the position of that letter in the alphabet. For instance, "A" would be represented by a circle with one dot because it is the first letter of the alphabet. "B" would be represented by a circle with two dots because it is the second letter. "C" would be represented by three dots, "D" by four dots and so on. You must correctly count the dots in each circle, figure out the letter represented by its position in the alphabet and when you have them all figured out put them into proper relation to spell the names wanted. It's not an easy puzzle but if you can solve it correctly you may win this lovely staid pony or one of the grand Cash prizes above.

### WHO WANTS ME?

**THE PRIZES**  
 1st Prize Beautiful Staid Pony or \$100.00 Cash  
 2nd Prize \$25.00 Cash 3rd Prize \$15.00 Cash  
 4th " 10.00 " 5th " 5.00 "  
 6th " 3.00 " 7th " 2.00 "  
 8th " 2.00 " 9th " 1.00 "  
 10th " 2.00 "

25 Extra Cash Prizes of \$1.00 each

**G**ET your pencil and paper right now. Try to figure out the words and when you think you have them, write them out as neatly as you can and send them to us. We will reply right away telling you the correct answers. If you want a complete illustrated list of correct and sending you the complete answer sheet of paper. Be neat and careful because in case of ties the prizes will go to the boys and girls whose answers were most neatly and best written. Proper spelling and punctuation will also count.

**What Others Have Done You Can Do**

Here are the names of only a few of the boys and girls to whom we have recently awarded prizes.

Staid Pony and Cash, Helen South Edmonton.  
 \$100.00 Cash, Helen South Edmonton.  
 \$25.00 Cash, Lyle Henson, Hamilton, Ont.  
 \$15.00 Cash, Helen Heston, Hamilton, Ont.  
 \$10.00 Cash, Florence Heston, Hamilton, Ont.

We will send you the names of many others too.

Send Your Answers This Very Evening!

Only boys and girls under 15 years of age may send answers and each boy or girl must have his entry to stand for the sending of the grand prizes will be required to perform small service for us for which an additional valuable reward or special prize will be given. The Contest will close on September 30th and the prizes will be awarded immediately after that date.

The Postman, c/o BUREAU, CANADA, Dept. 329 Toronto, Ont.



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# Farm and Dairy

## Rural Home

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

No. 47

**SUBSCRIPTION PRICE, \$1.00 a year.** Great Britain, \$1.25 a year. For all countries, except Canada and Great Britain, add 50¢ for postage.  
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### CIRCULATION STATEMENT.

The paid subscriptions to Farm and Dairy approximate 20,000. The actual circulation of each issue including copies of the paper sent to subscribers, who are but slightly in arrears, and sample copies, varies from 18,000 through 20,000 copies. No subscriptions are accepted at less than the full subscription rate. All orders should be accompanied by remittance in full. No subscriptions are accepted at less than the full subscription rate by counties and provinces, will be mailed free on request.

### OUR GUARANTEE.

We guarantee that every advertisement 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, advertiser herein deal dishonestly with us. Should any of our paid-in-advance subscribers, will make good any amount of your advertising, we will make good any amount within one month from date of this issue, that it is reported to us within one week of its occurrence, and that this contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy in a condition of my signers shall not ply their trade at the expense of our subscribers, who are our friends, through the medium of trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts."

**The Rural Publishing Company, Ltd.**  
PETERBORO AND TORONTO

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

## The Drift of Population

ACCORDING to figures supplied by the Canada Food Board not more than thirty out of every one hundred workers in Canada are found in farming occupations. In 1891 approximately forty-six out of every one hundred workers were on the farms engaged in agriculture. In 1901 the percentage had been reduced to forty. In 1911 to thirty-four, and to-day to thirty in one hundred.

The comparison is even more striking when we consider the proportion of the urban and rural population in Canada. In 1881, or only thirty-seven years ago, only fourteen per cent of the population of Canada lived in cities. By 1891 this percentage had increased to thirty-one; by 1901 to thirty-seven, and in 1911 to forty-five decimal five per cent. "To-day fully one-half of the population of Canada is urban," states the Canada Food Board. "Canada, with one-thirteenth of the population, is almost as highly urbanized as the United States."

These figures, coming as they do from a reliable source, are highly significant. They explain some problems that seem to be vexing many of the farmers' critics and self-appointed advisers. They explain the farmers' objections to the drafting of farm labor, which, it seems, has already been reduced to the point where, in this agricultural country, less than one-third of the workers are actually on the land. They explain why production has not been speeded up, as it might have been, to meet the high pressure demands for food stuffs. Finally they afford conclusive evidence of the disabilities under which agriculture has labored; such disabilities that the city population has doubled and tripled while the farm population has actually been decreasing. And yet in the face of evidence as conclusive as this the Canadian Manufacturers' Association dares to ask for a continuance of the privileges that have been depopulating rural Canada. The granting of the demands of the manufacturers would be short-sighted statesmanship. Rural Canada has been exploited altogether too long by public policies which

save urban industry the first consideration. It is time to call a halt.

## Butter Fat or Camouflage

IT is gratifying to note the growing tendency to state a cow's producing ability in terms of butter fat rather than in estimated butter. In this the Ayrshire breeders are leading the way. Fancliers of the Scotch milch cow have practically abandoned the old 85 per cent basis of estimating butter, and speak wholly in terms of fat. The Holstein men adhere more strictly to the 80 per cent basis of estimating butter. In the Jersey breed it is a case of "confusion worse confounded," as fanciers of the breed are variously using the butter fat, 80 per cent and 85 per cent standards. C. N. McArthur, a United States breeder of Jerseys, illustrates the confusion that arises from this triple method of expressing production by reference to the cow St. Mawes puppy, which produced 952.28 lbs. of butter fat, 1,120.32 lbs. of 85 per cent butter, or 1,190.35 lbs. of 80 per cent butter. "Is she a 952 lb. cow, a 1,120 lb. cow, or a 1,190 lb. cow," asks Mr. McArthur. "How can the breed maintain a common basis of understanding as to records when three sets of figures are being used in advertising and publicity matters?"

After all, is not computed butter a bit of camouflage on the part of breeders? Is it not an attempt to make a cow's production look big to prospective buyers and the interested public? Computed butter may have had its justification when the major portion of the milk of the country was made into butter in the home dairy, and the every-day, practical, dairy farmer thought of production in terms of butter. At the present time, however, butter fat is the market standard for the product of the cow. Cream is sold to the creameries on the butter fat basis; the condensary is paying on the basis of the butter fat test; many cheese factories are paying by test, and it is not far in the future before all will be doing so. A change by breed societies to the commercial standard would do away with a lot of misunderstanding, and even if it would depose a lot of thirty, forty and one thousand pound cows from their elect positions, it would at the same time simplify and rectify dairy publicity.

## Canned Milk vs. Can Milk

WRITING under this heading in Hoard's Dairyman, Helen S. K. Wilcox calls the attention of city milk producers all over America to a rival which may undermine their whole business. An illuminating paragraph from this letter follows: "As we are well aware, the consumer balks at paying from twelve to sixteen cents a quart for milk. That she balks not wisely but too well does not help matters in the least. But she must have milk of a certain quantity, and incidentally that which she now chooses is uniform in quality and always good. She finds her answer on the shelves of the corner grocery—and her bothersome milk problem is efficiently solved. 'Once used, always used,' cries Mrs. Housewife with a sigh of relief. Many millions women have found this to be true and the family cow is purchased by the dozen or box—and the milk bottle disappears from a shocking number of back stoops all over America. It's surprising in accord with those of this New York woman. We have seen the space devoted to canned milk in our grocery stores constantly enlarging and the numbers of buyers who order canned milk regularly just as constantly on the increase. Condensed and evaporated milks are rivals that milk producers and their organizations will do well to take into consideration. Is the willingness of the great Borden Milk Company to set its bottling and distributing plants in New York State an indication that they see the trend of consumptive demand and intend hereafter to give all of their attention to the condensing end of their business? And does this mean, in turn, that producers' organizations will be well advised to move slowly in making great expenditures on distributing plants of their own? Improved quality of can milk and economies in distribution may hold the consumption of canned milk in check, but from now on this dangerous rival of the city milk producing business must not be overlooked.

## Tests and Tests

SOME years ago an Eastern Ontario dairy farmer determined to make a reputation for his Holstein herd through the instrumentality of the Record of Performance test. For several years he had cows running continuously in yearly test work. He made excellent records and proved that he had in his herd some of the best producers of the breed in Canada. At the present time there is not a cow in this herd on yearly test, and so far as we can learn, this breeder had no intention of again entering cows in Record of Performance. Instead, all of his cows and heifers are being subjected to short-time official tests.

A few days ago we visited one of the many good Holstein herds in Western Ontario. In this herd, too, Record of Performance had once been the popular test. Here again there are now no cows entered for yearly work. Several of the cows, however, have been subjected to seven-day official tests with very creditable results and hereafter Record of Merit work is to be followed exclusively.

Both of these men have switched from yearly to short-time record work for the same reason,—there is more money in it. The great demand and the high prices for Holsteins nowadays are for cattle with R. O. M. tests or backing. This one pretends to claim that a seven-day test is as good an indication of a cow's commercial ability as is the yearly test. There is a very general suspicion that the short-time tests are more susceptible of manipulation by skilled herdsmen. And in the long run, it is the utility test that must win out. Breeders will follow the test and will sell their stock, however, can hardly be blamed for catering to the public demand. But are Holstein fanciers as a body not making a mistake in stressing R. O. M. tests at the expense of R. O. P.? This is a question that every man who holds the good of his breed at heart should ponder carefully.

## Work and Fight

(Country Gentleman.)

THE necktie-counter clerk, the elevator runner, the club doorman, the butler, the burglar, the pool-room leaver, the barroom bum — all the rest of the "non-essential" lads, as Provost Marshal General Crowder calls them—can pick their own jobs—soldier, sailor, shipbuilder, munitions worker, anything that is either work or fight—so or the other.

But the farmer has no choice. He must do both work and fight. He must work to grow crops in the face of such handicaps as he has never known before. He must fight to keep them from his eyes—pests, ever-busy enemies—the bugs and the blights, the weeds and the weevils, the storms & the droughts.

Nobody is pinning any medals on the breast of that Middle-Western farmer who sat on the seat of a tractor for twenty-two hours at a stretch—and plowed in one day as much as two horses could do in a fortnight. Nobody has cited for meritorious service that Eastern farmer who overplanted his wheat acreage because the Government asked him to, and now has to harvest it with the help of one high-school boy. Nobody has even printed the picture of that man who with his wife alone is milking eighteen cows and caring for a hundred and sixty acres of crops, fighting a gallant defensive to bring them through to harvest. These are the usual incidents of 1918.

The blistering, backbreaking toil of these men, and of millions like them, can be measured in no simple terms of shop hours, and though in their battle no bullets are flying they must fight on, for hunger and starvation are entrenched across the non-man's land of winter snows. Their sons have enlisted and are fighting in France. Their hired men have gone to work in the munition factories and shipyards. But the farmers themselves are right on the job at the old place, backing up their absent ones and cheerfully carrying the double and triple burden of work.

Work or fight? Heavens and earth, that's a dual! The hard job—work and fight—is the farmer's!

## Letters to the Editor

### Demonstration Plot

EDITOR, Farm and Dairy:—I am glad to see by the correspondent that the truth of some of the unjust and injustice of the profit from small demerit farms. I firmly believe demonstrations are able for the friction in the country people at large should all work together good of the country.

Such demonstration the truth of some of the profit not be given out of a farm. A short time a meat sent out a circled 70 per cent could be the result of some of the profit per cent. It would be to know the reason for profits in sheep raising.

Our Holsteins are full ignorant of the farmer must make a profit, that it is impossible for the farmer devoted to one account of whether, men of labor at a certain number of carried, as one alone. Now if this is so there on one line unless they show a profit in the Agricultural Department, where on small demerit have the city people average profits on a farmer, that is, the man who reports, the city man should the farmer is a profiteer kind?

The farmer is consequently a poor business man, nothing so foolish as small plots and give it his profits. Let the show us a system of better than what we have not all theory, but that been used on a farm the wages, interest and depreciation farmers should demand food of that size, but when figures of profit should include the entire farm after deducting the Victory Bond rate, tax, all concerned, depreciation. It is a proper system of had been insisted on the have been so many farmers out by both the Provincial Departments of which we would not have strained relations between country.—G. F. Marsh, G.

### A Soldier's View

EDITOR, Farm and Dairy:—I am glad to see by the speculation as to whether "over there" will think of Canadian farmers in the public against the record of these measures of the war. These officers evidently take of the boys "over there" from Canadian farms and even better than the editors who are making the editors will impose. In a came under my notice, boys from a farm home fighting "over there" and burden of a big farm fell remaining son at home. This son is drafted been given permission to copy of the letter which boys "over there" wrote he first heard there was danger of being taken from it is as follows:

"In mother's letter date I hear for the first time of about 11.—It isn't that

Letters to the Editor

Demonstration Plots Questioned

EDITOR, Farm and Dairy,—I am glad to see by the letter of your correspondent that the farmers are not so much interested in the profit from small demonstrations on farms. I firmly believe that these demonstrations are largely responsible for the friction between city and country people at a time when we should all work together for the good of the country.

Such demonstrations tend to show the truth of some theory but should not be given out until proved on a farm. A short time ago the government sent out a circular stating that 70 per cent could be made on sheep. A recent article cuts it down to 33 per cent. It would be interesting to know the reason for a reduction in profits in sheep raising of nearly one-half in a few months.

Our teachers all seem to be in blissful ignorance of the fact that a farmer must make a profit on his whole farm, that it is impossible to run a farm devoted to one department on account of weather, markets and the keeping of labor steadily employed. A certain number of lines must be carried, as one alone will not pay. Now if this is so there is no profit on one line unless the entire farm shows a profit. It is unfair for the Agricultural Department to give figures on small demonstrations and have the city people accept them as average profits on a farm. In it any wonder that, reading agricultural reports, the city man should think that the farmer is a profiteer of the worst kind?

The farmer is censured for being a poor business man, but he does nothing so foolish as to single out small plots and give it as evidence of his profits. Let the government show as a system of bookkeeping that is better than what we have, that is not all theory, but that has actually been used on a farm that is paying wages, interest and depreciation. The farmers should demand that this flood of "hot air" be stopped, and that when figures of profit are given they should include the entire profit of the farm after deducting interest at say Victory Bond rate, taxes, wages for all concerned, depreciation, etc.

If a proper system of bookkeeping had been insisted on there would not have been so many fairy tales given out by both the Provincial and Dominion Departments of Agriculture, and we would not have the present strained relations between the city and country.—G. F. Marsh, Grey Co., Ont.

A Soldier's View

EDITOR, Farm and Dairy,—Some of our city editors have been speculating as to what the boys "over there" will think of the action of Canadian farmers in protesting publicly against the recent conscription measures of the government. These editors evidently forget that a lot of the boys "over there" come from Canadian farms and understand even better than the editors in question the hardships that the recent order will impose. In a case which came under my notice, a couple of boys from a farm home are already fighting "over there" and the main burden of a big farm fell on the only remaining son at home of military age. This son is drafted and I have been given permission to send you a copy of the letter which one of the boys "over there" wrote home when he first heard that his brother was in danger of being taken from the farm. It is as follows:

"In mother's letter dated May 7th, I hear for the first time of your worry about H.— It isn't that he is any

better than anyone else's boy or that there is any danger of army life injuring him. It would probably do him good. There is much about it that he would positively enjoy and he isn't the sort of boy to be hurt by it. But notwithstanding this, it came as a shock to hear that there is a chance of his having to go. We haven't seen any Canadian papers, so know nothing of the news of the region. There must be many better than the ages of 25 and 30 better able to go than some between the ages of 19 and 23, yet no provision is made for that, or for exceptional cases. I look on H.— as in a great measure responsible for the support of our home. Father is getting too old to have to undertake hard work and while he is only a boy, left work and tools, with labor impossible, the farm will just have to slide.

"It may seem unpatriotic, as this year is undoubtedly a critical period in the war; a line simply must be held—yet I shall regard it as grossly unjust as well as glaringly poor judgment if he and others as responsible for the production of food are taken yet. As for H.— himself, it would have been better if he were in the world to have gone long ago. It was popular and honestly the army has great attractions to offer. If it were only he, I'd say go by all means. As it is, I don't like to think about it. If he goes the farm will just have to slide. In any case it's you who matters, not the farm, and you must not attempt to do impossibilities. Seed the whole place and invest in Liberty Bonds without help on the farm. So don't work too hard, and above all don't worry. The war is going to be won alright and as long as you are there when we come back, nothing else matters in the whole blinking world."

I consider this letter a pretty good answer to those who wonder what the boys "over there" will think about it. I credit them with common sense enough to know that farmers did not protest as decidedly as they did without having mighty good reason for their action.—R. S. F., Ontario Co., Ont.

For the Rail Fence

EDITOR Farm and Dairy.—Several articles have appeared in Farm and Dairy reflecting on the rail fence and lauding the wire fence.

A good wood-wire fence of not less than eight or nine bars is a good fence, all will admit, provided the farmer has the 70c to 75c to pay for a rod of it. The six and seven-bar fence is little better than single wires, as it allows sheep and pigs to go through. A good rail fence would, to the majority of Old Ontario farmers, cost more than a 9-bar wire, hence, probably, "sour grapes." The most of the fences on my farm are rail fence built of straight spruce rails or "longers," six rails to a panel, rails cut to a uniform length of 14 feet, worm or angle, 3 ft. I have thousands of these rails growing on my wood lot. I want no better fence. I prefer this fence, for at least the first eight years of its life, to the best nine-wire wood fence. Such a fence is horse, bull, pig and sheep-proof. It is good, when well built, pickets well driven, vertically, in ground, and with good cross-wire weights, for eight years, and if cross-stakes are used in addition to the two vertical stakes to a panel, it strengthens the fence, greatly and prevents storms or vakey horses from pulling it down.

I had a wire fence in part of the yard. My mother this spring made me pull it down and make a rail fence in its place, as her lambs and some of the breechy sheep were going through it. Now, with the rail fence, these

(Continued on page 18.)

You've no time to waste

If you expect to get your silo erected in time to take care of your 1918 corn crop, don't put off placing your order a day longer.

With the railroads congested with war traffic, no manufacturer can guarantee prompt deliveries very far ahead.

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Advertisement for Peerless Perfection Fence, featuring a wire fence illustration and text describing its durability and availability.

Advertisement for Standard Hand Separator Oil, featuring an illustration of the oil can and text describing its benefits for machinery.



**DO**ST thou love life? Then do not squander time, for that is the stuff life is made of.—*Benjamin Franklin.*

### Her Happiest Vocation

Etta Webb.

WITH a sigh Hester dropped her book. It was useless to try to study longer. She must think about what was so troubling her. Of course she knew that there was no way out. Home and vacation meant one and the same thing for her. And she dreaded both. It came on her unpleasantly that she was perhaps the only girl in the whole school who did not look forward to the fast approaching summer with eagerness and joy. But, then, that was not her fault. Those fault indeed was it?

"I've never been able to find out," she thought. "They haven't the knack of getting along at home somehow. Of course I know that things will go better when I get to earning money by teaching. Then I can really begin to help. But now—oh, now! How am I ever going to live through such another vacation as the last?"

She sighed again heavily while her gaze wandered about the pretty room. Mentally she contrasted it with what awaited her at home. There were some things about the room that were almost luxurious, but these had all been contributed by Janet. Janet was her room mate. For Janet to have a wish granted was as easy as crooking her little finger. It was almost as if she lived within constant communication with a fairy godmother.

"Lucky Janet," thought Hester, wistfully.

As if in response to her own name the door opened and Janet entered. She was smiling.

"Good news, Hester!" she cried, waving a letter over her head. "For you!" There was a lightness in Hester's tone. She was not expecting any good news.

"Yes, and for you, too," Janet dropped down upon the divan beside Hester. "Listen! In my last letter home I asked mother if I couldn't invite you to spend your vacation with me. And she's written to say I may, Hester!" She flung an arm about Hester, and hugged her. Aren't you glad?"

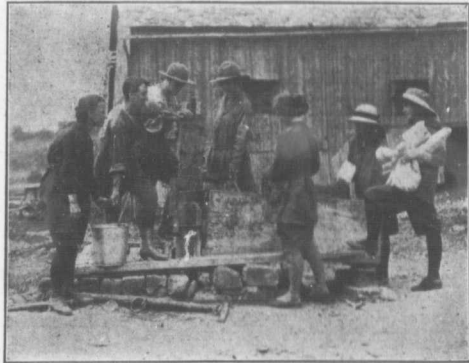
"I'm so glad that I can't realize it yet," Hester answered, slowly. "Oh, Janet, it is beautiful in you and your mother to give me this opportunity to have a really happy vacation. You see I was thinking about going home just as you came in. And I actually dreaded it, Janet."

"I can't imagine anyone dreading to go home," Janet said. "Why, vacation is one long holiday for me. Tom's home from college and Katherine from the conservatory. They have hosts of friends, but though I'm younger they always let me into their good times. There's boating and picnics and auto rides—father's got a new car, you know. And Maria, who has been with us ever since I was born, makes my favorite dessert for me. And there are new books to read and new stories I hear, and always a lot of invitations. The only trouble is vacation is soon over. Just as I begin to realize I'm having a perfectly splendid time the dressmaker is hired in and begins to fit me out with a new school wardrobe.

This summer there will be an added joy. You will be there, too."

"Yes!" Hester was flushed with anticipation. She laughed gaily. "And to think all my worrying was to no purpose! I'll just write to mother and tell her that I'm going home with you. She will consent, I know. But I want to be sure."

Three days later Hester got a reply written in her mother's delicate, wavering hand. She was willing that Hester should spend her vacation with her school friend instead of coming home.



Girl Flax Pullers in Wellington Co., Ont.

The big labor team in growing cash, now so urgently needed for aeroplane wings, is the pulling of the crop. In this field, bands of city girls are now rendering efficient service. The ones here illustrated are working in Wellington Co., Ont.

"Of course we have all looked forward to your coming, dear, as you must know, but we do not want to deprive you of anything that will give you happiness. And I realize that you have worked very hard all the year and need more complete rest than you can find here at home."

Hester's eyes filled with tears. She felt a sudden straining at her heart of the ties that bound her to her old home.

"But it's my last real vacation," she whispered to herself. "And it's the first I ever took all for myself. I'll do better work next year because of it. And surely I am entitled to one royal good time before the actual business of life begins. Mother seems to feel that as well as I."

Yet all that last week while she was finishing her year's work and packing away the things that she intended to take to Janet's, Hester was not really happy. She could not have told whence it came—that little, haunting consciousness of wrong-doing that rose up with her in the morning and lay down with her at night. It seemed all the time as if there was a still, small voice

calling—calling to some hitherto unawakened sense of duty and loyalty within her.

School ended in the usual flurry of farewells and departures half gay, half regretful. Some of the girls were going not to return; their lifework was to claim them henceforth. Others, like Hester, were looking triumphantly forward to the next year as their last.

Hester and Janet walked to the station together on a morning all open and promise with its work of golden sunshine weaving earth and sky together.

"We change at the Junction, you know," Janet explained. "I always think that's such a nuisance." "It must be," Hester agreed. "But I don't know anything about it. You see I come right straight through from home. It's only thirty miles farther—"

She stopped, suddenly. For it occurred to her that when she was at the Junction she would be less than one hour from home.

"Hester, look! Those are real rural characters, aren't they?"

Hester looked and the color flamed in her face. The two passengers who had just entered the train were coming down the aisle looking for a seat. It was evident they were unused to traveling. They were old people, poorly dressed in old-fashioned clothes. He carried a rusty valise and an umbrella. She clung to a shabby handbag.

"Oh, dear," Hester thought uncomfortably. "I hope they won't see me or recognize me. It would be so embarrassing."

"Oh! Janet wailed. "It will spoil everything if you do that. And I've made such plans, I've laid up such hopes. And just think, Hester, what it's going to mean to you if you go home."

"I do," Hester replied, gravely. "I'm thinking too what it's going to mean to mother and the rest of the family. I'm sorry, Janet. But don't you see, I can't do anything else without hating myself always? As it is I haven't been on very good terms with myself ever since you asked—but I must be true. You must get off. Goodbye, Janet, good-bye. I'll write."

"Goodbye, Hester. Oh, I think you're the bravest girl, and the best. Good-bye."

Hester went to the door with Janet. Then as the train began to move on from the crowded station she waved her last good-bye and went back to the seat where the two old people sat.

"Mrs. Pingree," she said tremulously. "Will you let me go home with you?"

"Why, Hester, child, of course! What a question. And glad to have you. Pa, get up and let her sit down here by me. She looks real tired like. And for mercy's sake, she's crossed. There, there, child, don't do it. What I told you upset you, didn't it? I oughta knowa better. I told pa, but he wouldn't. But I thought you'd say 'I ought to have known. I would have, too, if I had been the daughter!'"

"It was wonderful how her heart lightened as she climbed the steep, stony road to the old gray home on the knoll. It was wonderful, too, how the home-spirit flew out to meet her and help her up the steps to the shabby veranda. She saw her suitcase down outside the door and turning the knob softly entered.

"I've got all the weeding and hoeing done," Emily said. "My arms are sore-broke." Elizabeth, an old white-haired woman, came in.

"Next time you must let me help you," Elizabeth replied. "That's what sisters are for—to help each other."

Hester rose to the door.

"Christ!" she breathed.

They turned and saw father. Their glad cry brought father and mother, father leaning on his crutch and mother in white, and Elizabeth trying to hide her weariness of countenance with a brave smile.

"Hester!" They murmured, looking at her as if they could not believe it.

worry you. Why, it happened about a month ago. Your pa was cutting down an apple tree and instead of falling straight as he expected, it toppled over against another tree and he got caught under it. His hip was thrown out of joint. Of course he laid up with it yet. As I said, it's made it pretty hard for your ma and me. Everything herself. And just in the spring of the year, too. Of course, the girls help, but they're young. The whole thing rests on her shoulders. She's a fine, noble woman and a good neighbor. But I shouldn't 'a' told you, dearie. Only I thought you knew."

Hester didn't answer. She sat straight ahead with her hands in her new gloves, crushed together in her lap. The old people after waiting a moment for her to reply went on to an empty seat.

"Hester," Janet leaned near. "It's too bad you had to hear that. You're white as a sheet."

Hester didn't speak. And Janet feeling that was intruding upon some kind of secret struggle, leaned back in the seat and turning her eyes resolutely away, watched the flying wheels. It was only when the Junction appeared that she dared to address Hester again. Then she touched her.

"Hester," she whispered, "we're at the Junction. Come, we must be ready to get off."

Hester looked at her with big, bright eyes.

"But I'm not going to get off," she said. "I'm going on home with Mr. Pingree. Don't you see, Janet? I can't do anything else after what I've just heard."

"Oh!" Janet wailed. "It will spoil everything if you do that. And I've made such plans, I've laid up such hopes. And just think, Hester, what it's going to mean to you if you go home."

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The Upwa

As Christ in the

“A” so I have love in my love, in my Father's love.”

Christ had taught us to abide in Him we love. The hour of night, and He cannot more to them. They have never seen what that abiding in love is. He anticipates their wishes, and gives life as the best command. As a consequence their abiding in His love to look to His abiding love. In the light of the Father, their union becomes clear. His life is the law of their life.

The thought is so clear as hardly take in, clearly revealed, that neglect it. Do we not see it? (ver. 17). “As I have even so, so shall we abide by me?” And that is so distinctly (John x) they may be one even in I and them, and Thou because the union of Christ and His life in the role of our thoughts as in regard to our living Him.

Think first of the Father of Christ in the Father, one—His in life and of His in His abiding in the room. Though dwelling He knew that He was Father, that the Father loved Him, and His love on this knowledge, abiding and His love would have impossible. And it is then cannot abide with Him—know that Thou Him—one in the only His birth He became a Thy nature that He is with thee. By thy nature comest one with Him, partaker of His Divine link that binds thee to and close as bound Father—the link of a Divine claim on Him is such an availing as was His of Thy union with Him is.

And as it is the union life, it is one of an infinite life of humiliation and the blessedness of knowing Himself the infinite love, and of dwelt the day; from His own eyes thee to learn that He secret of rest and abiding with Him: yield thyself loved by Him; let thy heart open to the love that presses in on thee on abide in His love.

Think then of the abiding in the Father, which is to be the law of keep my Father's command abide in His love.” His submission, and His love most blessed. To our praying nature the thought of and abjection suggests humiliation and servitude of love which the Son of God has had, and to which He in His secret of His abiding, the secret of His blessedness, not afraid of losing agn up all to the Father, so that the Father loves He have no intention of the beloved Son. He knows complete as is the dependent is the communication part of the Father of all F

(Concluded on page 15)

The Upward Look

As Christ in the Father

"As the Father hath loved me, so I have loved you. Abide in my love, even as I abide in my Father's love."—John xv. 9, 10. Christ had taught His disciples that to abide in His love is to abide in His love. The hour of His suffering is aigh, and He cannot speak much more to them. They would doubtless have many questions to ask as to what that abiding in Him and His love is. He anticipates and meets their wishes, and gives them His own life as the best exposition of His meaning, as example and rule for their abiding in His love, they have to look to His abiding in the Father's love. In the light of His union with the Father, their union with Him will become clear. His life in the Father is the law of their life in Him.

The thought is so high that we can hardly take it in, and is yet so clearly revealed, that we dare not neglect it. Do we not read in John vi. (ver. 37), "As I live by the Father, except men eat me they shall live by me?" And the Saviour prays so distinctly (John xvii. 23), "that they may be one even as we are one: I in them, and Thou in me." The blessed union of Christ with the Father and His life in Him is the only rule of our thoughts and expectations in regard to our living and abiding in Him.

Think first of the origin of that life of Christ in the Father. They were one—one in life and one in love. In this His abiding in the Father had its root. Though dwelling here on earth, He knew that He was one with the Father; that the Father's life was in Him, and His love on Him. Without this knowledge, abiding in the Father and His love would have been utterly impossible. And it is thus only that thou canst abide in Christ and His love. Know that thou art one with Him—one in the unity of nature. By His birth He became man, and took Thy nature that He might be one with thee. By the new birth thou becomest one with Him, and art made partaker of His Divine nature. The link that binds thee to Him is as real and close as bound Him to the Father—the link of a Divine life. Thy claim on Him is as sure and always availing as was His on the Father. Thy union with Him is as close.

And as it is the union of a Divine life, it is one of an infinite love. In His life of humiliation on earth He tasted the blessedness and strength of knowing Himself the object of an infinite love, and of dwelling in it all the day; from His own example He invites thee to learn that herein lies the secret rest and joy. "Thou art one with Him; yield thyself most to be loved by Him; let thine eyes and heart open to the love that shines and presses in on thee on every side. Abide in His love.

Think then, too, of the mode of that abiding in the Father and His love which is to be the law of thy life. "I kept my Father's commandments and abide in His love." His was a life of submission and dependence, and yet most blessed. To our proud self-seeking nature the thought of dependence and subjection suggests the idea of humiliation and servitude; in the life of love which the Son of God lived, and to which He invites us, they are the secret of blessedness. The Son is not afraid of loving aught by giving up all to the Father, for He knows that the Father loves Him, and can have no interest apart from that of the beloved Son. He knows that as complete as is the dependence on His part is the communication on His part of the Father of all He possesses.

Christ as the pattern and the promise of what his may be, learns to understand how the "Without me ye can do nothing," is but the forerunner of "I can do all things through Christ who strengtheneth me." We learn to glory in infirmities, to take pleasure in necessities and distresses for Christ's sake; for "when I am weak, then am I strong." He rises above the ordinary way in which so many Christians speak of their weakness, while they are content to abide there, because he has learnt from Christ that in the life of Divine love the emptying of oneself and the sacrifice of our will is the surest way to have all we can wish or will. Dependence, subjection, self-sacrifice, are for the Christian as for Christ the blessed path of life. Like as Christ lived through and in the Father, even so the believer through and in Christ.

Think of the glory of this life of Christ in the Father's love. Because He gave Himself wholly to the Father's will and glory, the Father crowned Him with glory and honor. He acknowledged Him as His only representative; He made Him partaker of His power and authority; He exalted Him to share His throne as God. And even as will it be with him who abides in Christ's love. If Christ finds us willing to trust ourselves and our interests to His love, if in that trust we give up all care for our own will as an honor, if we make it our glory to exercise and confess absolute dependence on Him in all things, if we are content to have no life but in Him, He will do for us what the Father did for Him. He will lay of His glory on us. As the name of our Lord Jesus is glorified in us, we are glorified in Him (2 Thim. i. 12). He acknowledges us as His true and worthy representatives; He entrusts us with His power; He admits us to His counsels, as He allows our intercession to influence His rule of His Church and the world; He makes us the vehicles of His authority and His influence over men. His Spirit knows no other dwelling than such, and seeks no other instruments for His Divine work. Blessed life of love for the soul that abides in Christ's love, even as He in the Father's!

What we only need is this: to take time and study the Divine image of this life of love set before us in Christ. We wish to have our souls still unto God, gazing upon that life of Christ in the Father until the light from heaven falls on it, and we hear the living voice of our Beloved whispering gently to us personally the teaching He gave to the disciples.

And if the thought with us sometimes come: Surely this is too high for us, can it be really true? only remember that the greatness of the privilege is justified by the greatness of the object He has in view. Christ was the revelation of the Father on earth. He could not be that if there were not the most perfect unity of the most complete communication of all the Father had to the Son. He could be it because the Father loved Him, and He abode in that love. Believers are the revelation of Christ on earth. They cannot be this unless there be perfect unity, so that the world can know that He loves them and has sent them. But they can be it if Christ loves them with the infinite love that gives itself and all it has, and if they abide in that love.

By constantly endeavoring to do one's best one acquires the power of doing that with spontaneousness and facility which was at first the whole effort of the mind. The reward is threefold, the satisfaction resulting from acting on a just principle, improvement in the art, and the pleasure derived from a constant pursuit after excellence.

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More Insurance Needed. The people of Canada purchased \$50,000,000 more life insurance during 1917 than they did in 1916. This is in keeping with a similar marked increase during the previous year. This increase is significant. It shows that the people realize (1) the lessons of the war that emphasize the uncertainties of the future; (2) the wisdom of investing increased earnings for future protection; (3) those already insured realize the need for more and more protection as the cost of living mounts upward, thus decreasing the amount of protection that dependents can enjoy from any given sum of money. These lessons of the times point to the wisdom of providing adequate life insurance protection. A Mutual continuous monthly income policy, under the endowment plan, would assure you of an income at the expiry of an endowment period of, say, 20 years. At least 240 monthly payments are guaranteed to yourself, or your beneficiary. If you survive the period the income continues for life. These policies are also issued on the Life and Limited Life Plans. Write for full particulars. The Mutual Life Assurance Company of Canada, Waterloo, Ontario.

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No More "Subtle" Tones or High-Topped Shoes

Farm and Dairy patterns shown in these columns are especially prepared for our Women Folks. They can be relied upon to be the latest models and include the most modern features of the paper pattern. When sending your order please be careful to state bust or waist measure for each dress and the number of the pattern described. Orders are filled within one week to 16 days after receipt. Price of all patterns to our Women Folks, 10 cents each. Address orders to Pattern Dept., Farm and Dairy, Peterboro, Ont.



It is interesting to note some of the changes in styles which the war is bringing about. We are told that there are to be no more "subtle" tones, for the duration of the war at least. By this we mean the unusual shades which are hard to produce and equally difficult to match when one comes to secure trimming for them. For instance, such shades as nutberry, horizon blue, crushed raspberry, etc., are to be banished. A shade which has been favored by many is fawn, and it is said to be one of the shades which will come under the ban, as it is one of the complicated sorts, difficult and costly to produce when dyes are scarce. There has been a great deal for the last two or three seasons in colored and extremely high topped shoes. Now we hear that shoes are not to be made more than eight inches high, and the colors are to be white, black and two shades of brown. If this is the case, it will not be hard for us to make a selection as far as color is concerned, and there will not be so any more worry about having shoes so match-every dress we possess, as has been the case of some who are very fond of being up-to-date in every respect. 2491—Girl's Dress—Dresses with bolero effects are usually becoming to the young girl and here is a design with a very summery look, which should prove acceptable to many of our home and dress-makers who are in search of an attractive style. Four sizes: 8, 10, 12 and 14 years. 2514—Set of New Sleeves—Herewith we show a set of sleeve patterns which are interesting. The Bowing Chinese type of sleeve like No. 2 is in vogue. Also there are besides the others shown, those which button snugly to the elbow where the sleeve is open to reveal a puffing of contrasting materials. The four here shown, however, are practical and stylish in appearance. Four sizes: small, 19 inches; medium, 22 inches; large, 24 inches; extra large, 26 inches; arm size.

Training the Children No. 4

Take Children Into Partnership

By Mrs. V. Oma Grace Oliver. PARENTS must not look down upon the child and treat him as petty, trials and sorrows petty; we must try to understand how sincerely they put all their hearts into their play and that the fine things seem so trivial to us are of great moment to them. We must learn to share all their experiences with them if we would develop the fine qualities we wish them to have at maturity.

Children must not be shut off in one part of the house to remain alone until a certain age, but ought to be with the child and to take the child as part of the family circle, sharing its joys, work and minor sorrows. It does not mean that children should be pushed before visitors, have all their meals at the family table or remain up all their elders retire, but there are times and places when it is the children's right and privilege really to be members of the family.

Even when they are very young, children can assume responsibility for certain light tasks about the house and as their age and strength increases more and more duties should be added. The great American idea has been to remove all responsibility from the child and to let him live in care-freedom in his childhood. I would not take one second of joy away from any child, but I would make it a joy for him to feel that he is in the making of it. He helps in the making of it by performing certain duties that need to be done for the comfort of all. The child of two can pick up toys, put away dishes and silver, help set the table, dust the furniture and run many errands upstairs and down, and he loves to feel that he is "mother's helper".

Children are so open-hearted and ready and respond so sweetly and quickly to faith and trust that they often miss great happiness by not sharing of their hopes and joys more freely with them.

If we keep the bond very close our home will become the great meeting place of all children and this love and companionship between parents and children will be like a powerful magnet whose attraction the children cannot resist.

So from these beginnings the home life will be so strengthened that we need never fear that the allurements of the world can draw our children from us, but can be sure that they will always return to the "center of deep repose."

Work of Western Women's Sections

NOW that our farm women in Ontario have in mind the organization of a Women's Section of the U.F.O., it may be interesting at this time to note the work which is being accomplished by the various Women's Sections of the Grain Growers' Association in Western Canada. For instance, there has been some agitation for free hospitals in parts of the West. The ladies of the Forest Bank Grain Growers' Association of Saskatchewan recently called a meeting to discuss the question. Several of the members had prepared papers on the working of municipal hospitals. After the matter had been thoroughly discussed, a resolution was sent to the council of the rural municipality asking that the village hospital might be made into a municipal one. While the councillors did not agree to enter into the scheme of joining with other neighboring municipalities as provided by the Municipal Hospital Act, they did vote to provide free hospital accommodation. The council does not pay for private wards, and maternity cases are limited to 21 days. The hospital in the district is in charge of the arrangement and send the accounts to the council of the municipality for settlement. The council is increasing the tax to meet this expenditure, which will work out to about three dollars a year per quarter section.

The Women's Section of St. John's, Man., is also doing in the spring they held meetings for sketching of the season's work. One session they worked was to sell their produce in Brandon on Saturday. A committee was organized to arrange and have a book of tested recipes of another committee. The women in the district who members and a membership was put on in June. The committee drafted a line of the income tax and farm tax, the single tax; June 1918 devices; July, opening nationalization of resources and public utility, the aim held in other churches and the association cooperation and community member, federal government, provincial government; Decem meeting.

This club adopted a cross which is worthy of praise: "Keep us, O God, from pride as we are large in thought, if deed. Let us put away pride and leave off self-seeking, put away pretense and be other face to face, without and always generous. Let time for all things and men grow calm, serene, gentle, to put into action our better straight-forward and unadorned to see it in the little things that create differences—that things we are one. May we touch and to know the good woman's heart of us a Lord God, let us not forget to

We can and will furnish a for the farm, our dairy, tobacco, the household or FREE. Ask the circulation department how to get it.

Advertisement for CANADIAN PACIFIC RAILWAY featuring the text 'Farm Harry' and 'Going Trip' with dates August 20th and August 29th.

children

Partnership  
Oliver.

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Children's Sections

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The Women's Section at Little  
Souris, Man., is also doing good work.  
In the spring they held a couple of  
meetings for sketching out plans for  
the season's work. One scheme which  
they worked was to sell home cooking  
and produce in Brandon on a certain  
Saturday. A committee was appointed  
to arrange and have printed a cook  
book of tested recipes of members.  
Another committee made out a list of  
women in the district who were not  
members and a membership campaign  
was put on in June. The program  
committee drafted a line of study for  
the various months as follows: April,  
the income tax and farm book-keeping;  
May, the single tax; June, labor sav-  
ing devices; July, open meeting;  
August, nationalization of natural re-  
sources and public utilities; Septem-  
ber, the aim held in common by the  
church and the association; October,  
cooperation and community work; No-  
vember, federal government and pro-  
vincial government; December, annual  
meeting.

This club adopted a creed last year  
which is worthy of passing on. It  
reads:

"Keep us, O God, from pettiness; let  
us be large in thought, in word, in  
deed. Let us put away fault-finding  
and leave off self-seeking. May we  
put away pretense and meet each  
other face to face, without self-pity  
and always generous. Let us take  
time for all things and make us to  
grow calm, serene, gentle. Teach us  
to put into action our better impulses,  
straightforward and unafraid. Grant  
us to see it is the little things of life  
that create differences—that in the big  
things we are one. May we strive  
to touch and to know the great, com-  
mon woman's heart of us all, and, O  
Lord God, let us not forget to be kind."

We can and will furnish any article  
for the farm, the dairy, the cheese  
maker, the household, or yourself  
FREE. Ask the circulation depart-  
ment how to get it.

Her Happiest Vacation

(Continued from page 15.)

they saw. "Our own oldest girl, Hester!"  
And then Hester found their arms—and hearts.

"You look fine, Hester," Janet declared when they met again at school in September. "You are browner and plumper, but that isn't it, either. I don't know what it is. Maybe it is your expression. You don't look as if you had had an unpleasant vacation at all."

"Janet," Hester said, earnestly, "that was the happiest vacation I ever shall have if I live to see ninety of them. If you could have seen how glad they were to have me at home! And I was just as glad to be there. Of course I worked hard, but aren't they all working for me? I never realized before just what an effort they are making to keep me in school. I learned such a lot, too, Janet. I learned that duty isn't disagreeable unless you think so, and the best kind of happiness is making others happy. So you see, Janet," Hester ended, smiling, "I am satisfied. And that's saying a great deal."—New England Homestead.

A Durable Whitewash

GOOD durable whitewash for garden fences, rockeries, etc., is made as follows: Slake one bushel of quicklime with twelve gallons of hot water. Dissolve two pounds table salt and one pound sulphate of zinc in two gallons boiling water. Pour this into the slaked lime, add two gallons skimmed milk and mix thoroughly. A pound of cheap bar soap dissolved in a gallon of boiling water and added to about five gallons of thick whitewash will give it a gloss like that of oil paint.

Be what your friends think you are.

HELP SAVE  
WESTERN CROP

\$12.00 TO WINNIPEG

From all stations, Sudbury, Milnet, Ont., south and east in Ontario and Quebec.  
Plus half a cent per mile beyond.  
Returning, half a cent per mile to Winnipeg, plus \$18.00

Comfortable Trains and Through Services; Special Accommodation for Women, Lunch service at moderate prices, and a Scenic Route when you travel C. N. R.

Through tickets by all lines. For further particulars see your nearest C.N.R. Agent, or write General Passenger Dept., 61 King St. E., Toronto, Ont. Ask for "Harvester Work and Wages" leaflet.

CANADIAN NORTHERN RAILWAY

WESTERN CANADA

That is a great market for Pure-bred Dairy Stock to-day. Why not plan to reach the Western Breeders through our

WESTERN CANADA NUMBER

which will be issued on

AUGUST 15

and we will send copies to all interested parties in Western Canada. Place your order now for what space you require. For particulars write to

Live Stock Department, Farm and Dairy



CANADIAN PACIFIC

Thousands of

Farm Laborers Wanted

FOR

Harvesting in Western Canada

"Going Trip West"--\$12 to WINNIPEG

"Return Trip East"--\$18 from WINNIPEG

GOING DATES

August 20th  
and  
August 29th

August 22nd  
and  
August 29th

TERRITORY

From stations in Ontario West of Smith's Falls to and including Toronto on Lake Ontario Shore Line and Havelock-Peterboro' Line.  
From stations between Kingston and Renfrew Junction, inclusive.  
From stations on Toronto-Sudbury direct line.  
From stations on Sault Ste. Marie branch.  
From stations on Main Line, Beauceage to Franz, inclusive.  
From stations Bethany Junction to Port McNicoll and Burketon-Bobcaygeon.  
From stations in Ontario West and South of Toronto to and including Hamilton and Windsor, Ont.  
From stations on Owen Sound, Walkerton, Teeswater, Wingham, Elora, Listowel, Goderich, St. Mary's, Port Burwell and St. Thomas branches.  
From stations Toronto and North to Bolton, inclusive.

SPECIAL THROUGH TRAINS FROM TORONTO.

Full particulars from Ticket Agents.

CANADIAN PACIFIC



### Contented Cows

**GIVE MORE MILK**  
Keep your cattle free from flies. The continual biting, tail lashing and snout rubbing drives them of flesh, blood and energy. Don't let the fly rob your milk pail.

**NO FLY-NEAR**  
A recognized germicide and disinfectant that protects cattle, horses, pigs and lambs. Write for free circular with full particulars.

Price: 1 gal. \$1.25; 5 gals. \$5.50  
**KENNETH McDONALD & SONS, Limited**  
OTAWA, Ont.

The New  
Out  
Minute  
Class



### Butter in a Jiffy

Makes like lightning  
—works perfect butter  
in from 1 to 3 minutes.  
Clean, sanitary, labor-  
saving.

**FREE** Write today for  
free descriptive  
literature. Will be shown  
at all leading Fairs the  
Fall. Watch for it.

### The Hamilton Automatic Churn Co.

41 King William St., Hamilton, Ont.

### THICK, SWOLLEN GLANDS

That make a horse Wheeze,  
Roar, have Thick Wind  
or Choke-down, can  
be reduced with



### ABSORBINE

Also other Bunches or Swellings. No blister,  
no hair gone, and horse kept at work. Economical—only a few drops required at an application. \$2.50 per bottle delivered. **Best 3 Hrs.**  
**ABSORBINE, JR.** the antiseptic liniment for man,  
kind, reduces Cuts, Swens, Painful, Swollen  
Veins and Ulcera. \$1.25 a bottle, at dealers  
delivered. Book "Evidance" free.

**W. F. YOUNG, P. D. F.,** 123 Lucas Bldg., Montreal, Can.  
Wholesale and Absorbine, Jr., etc. made in Canada.

### HYDRO-SILO

**Sweet Fresh Ensilage**

THE HYDRO-SILO is a  
fully air-tight. No frost  
or wind can enter. It  
keeps silage sweet and  
fresh. Convenient and  
simple to use. Adjustable  
without opening of  
Generalized Long Leaf  
Yew. Best to last a  
Season. Ready relief when empty.



AGENTS WANTED.  
Write to: **Hydro-Silo Co. Ltd.** 47 York St.  
(at)

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

### HARVESTERS URGENTLY NEEDED IN WESTERN CANADA.

When travelling to Western harvest fields, go by the Canadian Northern Railway, and thereby give loyal support to the People's Line.

Information of value to harvest hands is given in a leaflet entitled "Harvesters' Work and Wages," to be had from any C. N. R. Agent.

### For the Rail Fence

(Continued from page 11.)

animals no longer go into. In fact, I am almost ready to say that, given my choice, I would almost as soon have a new rail fence as a new wire fence, as we have all kinds of animals on the place to fence out—horses, cows, sheep, pigs and geese—and the rail fence effectually prevents these animals from going through it. I am not, however, ready to endorse an old rail fence when some of the rails become rotten or partly so. If the pickets are driven a foot in the ground and at least a few supporting cross-stakes or pickets, say, every second panel, this fence is good, without repair, for eight years. I have seen woven wire fence that look pretty "shaky" after eight years' use. The rails we use average five inches in the middles. The lower rail or rails may be six, while the top rail or rails are as small as four inches; but the average is five inches in middles. The stakes are three inches. The material is spruce and fir. The pickets will rot in the ground in eight years, but most of the rails, if not broken, will be as good as ever. The fence may then be rebuilt, sharpening the pickets anew and the fence is then good for several years more.

We have rail fences on this farm 20 years old, being repaired, of course, several times. In fact, an old rail fence must be repaired every spring. As to taking up space with our cheap lands I don't consider it. The fence occupies a space of 3 1/2 feet. This fence should not be compared to the old Virginia snake fence with horns, or angle six or eight feet and with cross-stakes, no uprights. True the rail fence is disappearing, and in most cases no wire fence takes its place. The average farmer has no rails growing on his farm, and wire is costly.

King's Co., Ont.

J. A. M.

### 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.

### Cheese in Western Ontario

DURING the course of a dairy meeting at Guelph last spring, J. A. Ruddick, Dominion Dairy Commissioner, gave it as his opinion that the increasing city population of Western Ontario would lead inevitably to a reduction in the output of cheese factories as creameries, as more and more milk would be diverted to the city trade and intimidated that the trend was already in this direction. Frank Hens, Chief Dairy Instructor for Western Ontario, rather took exception to Mr. Ruddick's statement and quoted the figures for the make from a couple of representative counties over a period of years. In Oxford county, for instance, the make of cheese in 1910 was 10,545,000 lbs. and in 1917, 10,315,000 lbs. In Middlesex in 1910 the make was 5,964,000 lbs. and in 1917, 5,427,000 lbs. These figures, Mr. Hens believed, will apply fairly well over all the other counties whose cheese is made, and all things considered the decline in production is very slight. At the same time, however, the output of creamery butter in Western Ontario has increased from 3,559,000 lbs. in 1907 to 21,000,000 lbs. in 1911. Taking butter and cheese together, therefore, factory production has been well maintained.

### Women in Cheese Factories

IN Europe a large part of the farm-made cheese is produced by women, who, judging from the excellence of their products, are as a class

well fitted for successfully converting milk into cheese. Any woman with natural ability as a cook and with a fitting appreciation for the necessity of cleanliness in the preparation of food possesses the fundamental requirements of a successful cheese-maker. The chief obstacle in more generally employing women in our cheese factories would appear to be the matter of physical strength. There are doubtless some women who could readily perform the full duties of cheese manufacture and factory operation, including the heavy work. But this will not usually be the case and for this reason the employment of women is likely seldom to be practiced in smaller plants which can be operated by one man.

But in factories large enough to require two or more persons during the summer there is unquestionable opportunity to more fully utilize female labor. Where a woman has the ability and the training she may be content to take charge, being provided with male help for the heavy work, or the helpers' work may be taken over by the woman employe, comprising the lighter operations, such as helping in the curd handling, book-keeping, etc.

We look for a very material increase in the number of women employed in our cheese factories if the war lasts through 1919.—New York Produce Review.

### Test of Sour and Sweet Cream

DONBS cream test more when it is sour than when it is sweet? This question has been asked many times, and many have been led to believe that by holding their cream until it is sour they would give a higher margin than possible under one condition," says G. Hanson, of the dairy husbandry division, University Farm, St. Paul, Minn., "and that is, if a can of cream is allowed to stand for a long time, or a rather high temperature, enough moisture will evaporate to increase slightly the percentage of fat, but it will be very slight and the cream will no longer be fit for food. It would bring no higher price, as the extra percentage of fat would only make up for the moisture that had evaporated.

"To illustrate: In 80 pounds of sweet cream, testing 20 per cent fat, there are 4 pounds of butterfat. If this cream were allowed to stand until five pounds of moisture have evaporated, there would be 75 pounds of cream testing 32 per cent fat. It also would yield 24 pounds of butterfat, and it is needless to say that the butter made from this 75 pounds of cream would not be fit for human consumption.

"How do you know that cream will not test more when it is sour?" In reply Mr. Hanson tested eight samples, sweet, of one pint each, using retested glassware and making the cream scales on the market, making the tests in duplicate. They ran from 16.5 to 38 per cent. They were then kept in air-tight bottles sealed with paraffin to prevent the escape of any moisture. They were held at approximately 80 degrees F. for ten days. They were then tested again, using the same test bottles to avoid any possible error, and were again tested in duplicate. On comparison, the two tests were found to be exactly the same.

It may be true that in some cases a higher test has been reported when the cream was sour, especially in thin cream. If a can of cream has been allowed to stand for any length of time and has become sour, the milk solids settle and become very sour and firm, making it almost impossible to get the cream thoroughly mixed, and the sample which is taken will not represent the contents of the can, but will be, practically no fat. If the milk solids, which are left un-mixed, are higher test is given it is neither fair nor accurate.

### Dr McKay on Oleomargarine

"The cry of the age is for fat and more fat," says Dr. G. L. McKay, secretary of the American Association of Creamery Butter Manufacturers. "The result is that many substitutes for butter fat have come into the market, including all right when used in connection with other foods, but they lack the vital principles of growth necessary for the maintenance of the health of the race. These words were but the preliminary to a lengthy address by Dr. McKay, when he visited Canada recently, and in his address he exposed the frauds perpetrated by the manufacturers of butter substitutes and made a strong case against oleomargarine. A few 'nuggets' from Dr. McKay's address are as follows:

"Physiologists tell us that there are two substances in butter which are necessary to the growth of the young. These are cholesterol and also 'fats' in the leaves of certain plants, called 'growth principles,' as they are called. These are not found in any of the so-called butter substitutes, and for this it is no wonder, oleomargarine is not considered a substitute for butter.

"If we follow the chemists in determining the value of foodstuffs, oil is more valuable than butter, and raw tallow, pound for pound, is far more valuable as oleomargarine. I suggest that oleomargarine is as valuable as any other fodder. But nothing but butter will do the work.

"Many leading scientists, such as Dr. Harvey B. Wiley, have stated that for growing children butter has the most valuable substance in it. 'Good Housekeeping' magazine, speaking of Dr. Wiley as to the value of nut margarine. Dr. Wiley answered that it would not feed his children either nut or margarine. He said that he was lacking in the principles of growth.

"To compare butter with margarine is like comparing gold with brass. If the margarine has the same value as gold, it would follow the price of gold as closely as they can. If the public was also for cooking purposes, let them by hard, tall and can condensed oil and mix them. Packers made a profit in 1911 of 47 per cent on the mixing.

"The manufacture and sale of oleo margarine has been accompanied by fraud. The largest manufacturer of oleomargarine in the United States is now under an indictment of two years in the penitentiary and a \$10,000 fine for fraud in connection with his business." Incidentally, Dr. McKay remarked that he had had oleomargarine for supper at the hotel that night, but no card was displayed stating that oleo was served as is required by the law. Evidently fraud has already started in Canada.

"France has the best laws governing the sale of oleomargarine. No margarine can be colored in France. Manufacturers of oleomargarine in France only, and the retail store must display a sign in letters a foot high 'Margarine Store.' In Belgium, however, margarine is sold in the same stores as butter and coloring is permitted. In England, too, I found more complaints of fraud than in all other countries combined.

"Does the lack of coloring prohibit the sale of margarine? No, but it does prohibit the sale of margarine as butter. In fact, margarine is not colored in Denmark and the people of Denmark are the heaviest consumers of margarine in the world. I hope the time will never come when this country will be made to follow its butter will be made from the intestinal flora of the hog and the cow."

The National Dairy Show will be held at Columbus, Ohio, October 19th to 19th. A very large part of the State Fair grounds at Columbus are being used for Military purposes, but the show, which the Dairy Show was held last year will be available for use again this year.

### The W

THIS shield was donated by a new heart and fits the...  
Holm Manor, Vancouver, British Columbia, was bred, born and raised in...  
associatively, before being shown in 1912 by D. G. Boyd...  
McLean, Arcola, Sask. No...  
When war was declared...  
and gave his life for...  
also of the shield in adv...

SCIENCE cannot kill war...  
sword to a sharper edge...  
new heart and fits the...  
cannot kill war, for progress...  
leads into bottomless quar...  
war, for law is nothing...  
and human nature when a...  
gates of God. Education...  
sharpening of the intellect...  
mastering of formulas and...  
new to become tenfold more...  
end war?

Each one numbers his victim...  
by her railroads and steam...  
side of the road along which...  
Science killed pestilence. The...  
pat, yellow fever, all have...  
These foes of mankind lie...  
which the world presses on...  
and not science, nor both...  
religion alone creates the ne...  
this world. Without God we...  
War is Teaching."

Legislature Horse Association...  
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to be decided upon by the...  
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the winner, which will beco...  
an exhibition at fairs wh...  
the shield will be competed...  
Exhibition, Toronto, 1918.

It is a magnificent piece...  
two and one-half feet wide...  
not appropriate, represent...  
sterile scenes in the home...  
could not be duplicated to-d...



We only have  
you get busy at on  
Gold Band or in Flo

All dishes are

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Please let us k  
so we can hold it f

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Address:  
Circulation Dept. FA



### The Watson Challenge Shield

THIS shield was donated in 1911 by Captain Geoffrey L. Watson, of Westholm Manor, Vancouver Island, B. C., for the best Clydesdale stallion. The shield is to be won three times in succession or five times non-successively, before becoming the property of the winner. The shield was won in 1912 by D. G. Boyd at Ottawa, and in 1913 at Brandon, Man., by Hugh McLean, Arcola, Sask. No Dominion Exhibition has been held since.

When war was declared Captain Watson volunteered for service at the front and gave his life for his country on April 21st, 1915. Realizing the great value of the shield in advancing the interests of the Clydesdale Horse, The

facturing concern in Toronto places its value at \$1,500. The miniature to be given to the winner by the Clydesdale Horse Association will be one-fifth the size of the original shield, made of sterling silver, and valued at \$25. It will be a prize that any Clydesdale exhibitor will be proud to own.

#### WHO CAN KILL WAR?

SCIENCE cannot kill war, for science has not the new heart, and whets the sword to a sharper edge. Commerce cannot kill war, for commerce lacks the new heart and lifts the hunger of covetousness to a higher pitch. Progress cannot kill war, for progress has no heart at all, and progress in wrong direction leads into bottomless quagmires in which we are swallowed up. Law cannot kill war, for law is nothing but a wretched rind round the arms of humanity, and human nature when aroused snags all wittnes asunder and carries off the sharpening of the intellect, the drawing out of the powers of the mind, the mastering of formulas and laws and dates and facts, education may only fit men to become tenfold more masterful in the awful art of slaughter. Who will end war?

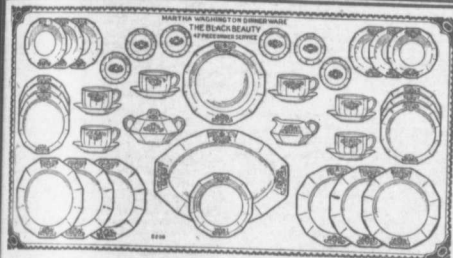
The world has had three historic scourges: famine, pestilence and war. Each one numbers its victims by the tens of millions. Commerce killed famine. By her railroads and steamships she killed it. It lies like a dead snake by the side of the road along which humanity has marched up to the present day. Science killed pestilence. The black plague, the bubonic plague, cholera, small-pox, yellow fever, all have received their death-blow. Science did the work, while the world pressed on to a higher day. Who will kill war? Not commerce and not science, nor both of them together. Only religion can kill war, for religion alone creates the new heart. Without religion we are without hope in War is Teaching!"

The Clydesdale Horse Association of Canada entered into negotiations with the promoters of the Estate, thus securing control of the shield, which will be held perpetually by the Association. It will be competed for at annual exhibitions to be decided upon by the board of directors. The shield itself shall not be in the possession of the winner at any time, but a miniature will be given to the winner, which will become his absolute property. The shield itself will be exhibited at fairs when competed for. Under this new arrangement the shield will be competed for the first time at the Canadian National Exhibition, Toronto, 1918.

It is a magnificent piece of the silversmith's art. It is three feet deep and two and one-half feet wide, and is of solid silver. The general design is not appropriate, representing, as the accompanying photograph shows, characteristic scenes in the home land of the Clydesdale in Scotland. The shield could not be duplicated to-day at less than \$1,000. A leading silverware manu-



leomargarine are in for fat and Dr. G. L. Creamery Bureau result is that butter fat have connection with lack the vitamin necessary for the season they are of our people." but the prelimi as by Dr. McKay da recently, and the frauds pe manufacturers of made a strong margarine. A few McKay's address is that there as butter which an th of the young and also "real plants. These they are called of the so-called for this. If a margarine cannot be for butter. Chemists in dete oodstuffs, oil is butter and ran and. In twice as margarine. I might. Or is this as ar. But nothing nthesis, such as have stated that butter has no fiber to "Good margarine cannot be of nut mas- sured that let dren either nut rine, as both principles at with margarine with brass. also have ab e of butter as the public was s, let them key ed oil and mix profit in 1917 fixing. and sale of ole anked by fraud. er of oleomarg is now under ars in the peo- line for fraud business" Inci- arked that we for supper at no card was eo was served w. Evidently in Canada, laws governing ne. No mar- France. Man- not make mar- stores head- in letters a ore." In Bei he sold in the In England, same stores permitted. In re complaints her countries rring prohibi o, but it does rine as be- Margarine is and yet the the heaviest in the world. ever come in Dr. McKay, made from the and the cow."



## THEY ARE FREE

42 Pieces in Set for Only 8 New Subscribers  
31 Pieces in Set for Only 5 New Subscribers.



We only have 100 Sets, so we would advise that you get busy at once. They come in plain finish with Gold Band or in Flowered Designs.

### EVERY HOME NEEDS THEM

Please let us know if you are trying to secure a set, so we can hold it for you.

#### START WORKING TO-DAY

Address: **FARM AND DAIRY** Peterboro Ont.  
Circulation Dept.

how will be October 1918 part of the Columbus are purposes, but Dairy Show be available

## THE WILD SUMMER HIGH FARM

The home of the highest priced Canadian bred Oxford ram ever sold in Canada, sold to a Missouri man for \$900. We have for sale \$250 Oxford ewes from 1 to 5 years old, 50 selected 2 yr. to 2 yr. rams for show or breeding purposes, 100 Rams and 100 ewe lambs of superior quality and a limited supply of ewes fitted for show purposes. Just sold a show flock to H. S. Currie, of Castor, Alta., which won 1st on ageds ewe, 1st on yr. ewe, 1st on ewe lamb, Champion ewe and Reserve, and first ewe of the breed from Ontario. They were bred and raised by this firm. Also we have for sale 40 Shrop. ewes and a stud ram, 2, 1, 3 yr. old, and 40 Shrop. lambs all recorded, Duroc Jersey swine of the best breeding, and recorded, young boars and sows ready to wean at moderate prices.

Address all correspondence to

**Peter Arkell, Bus. Mg., Box 454, Teeswater, Ont.**

## THE EDGELEY CHAMPION HERD OF JERSEYS.

Write us about your next herd. We now have sons of our present herd sire, Edgeley's Bright Prince, who is a son of Canada's champion butter cow, Sunbeam of Edgeley. Pay us a visit. Sunbeam of Edgeley is not the only high-record cow we have. We are pleased to show our herd at all times.

JAMES BAGO & SONS (Woodbridge, G.P.R., Concord, G.T.R.) EDGELEY, ONT.

## THE NOTED DON HERD

Are at present offering a few young bulls of service age and from R.O.P. dams. Also a few females, also younger stock. For particulars and prices write

D. DUNCAN & SON, R. R. No. 1, TADMORDE, ONTARIO.

## CHOICE YORKSHIRE HOGS AT RIGHT PRICES

Boars and sows, all ages, from best prize-winning strains—a few good bred sows, also younger stock. S. C. White Legehorns eggs for hatching—rover's 285-egg strain. S. S. Brown Legehorns, Barred Rocks, R. I. Reds, \$3 per pair per 100. Fawn and White, R. I. Duck eggs, \$3 per 100. Chinese goose eggs, 80c each.

T. A. KING, MILTON, ONTARIO.

## AYRSHIRES

If you want Ayrshires of the right kind, write us. Possibly we have what you want.

PALMER BROTHERS, NORWICH, ONTARIO

## PLEASANT VIEW AYRSHIRES—

Young calves, either sent several from R. O. P. cows. It will pay to come and see or write for prices if wanting anything in choice Ayrshires.

A. HENDERSOHN, R. R. No. 4, ATHENS, ONTARIO

## ELMCREST AYRSHIRES

Herd Sire—Glenhurst Torra Mast, sired by Leasesbrook Comet. Young stock for sale, all ages, at reasonable prices. One exceptionally good yearling bull. Write for prices.

SANDILAND BROTHERS, WILLIAMSTOWN, ONTARIO

## FOR SALE

Three Pure-bred Registered Ayrshire Bulls, nine months old, of fine quality. They are also open to buy 200 Rhode Island pullets, April or May hatch. Apply FARM SUPERINTENDENT, PRICE FARM, KENOGAMI, QUE.

## PEACH BLOW AYRSHIRES

Young Stock for sale, always on hand (both sexes), from high-tasting heavy producers. Good udders and large teats a special feature of my herd. Three fine young Sires ready for service. Get particulars of these as they need a sire. R. T. BROWNLEE, Peach Blow Farm, HEMMINGFORD, QUE.

TANGLEWYLD  
AYRSHIRES

The Leading R. O. P. Herd in the West  
Large cows, High Testers. Choice Young Bulls and Bull Calves and a few cows for sale.

WINDSOR, ONT. NORFOLK, ONT.

## TYPEWRITTEN PEDIGRES

with records up to date. \$1.00 a piece, including 2 extra carbon copies. Ten or more pedigrees in one order for catalogue work, including one copy only of each. The a piece.

Catalogue \$3.00 per page, complete, including making out of pedigrees.

Orders should be sent in early.

The Canadian Herd Sales Co.,

Simco, Ont.

Bell Phone 150.

## HEAVES SURELY CURED

with the old reliable Fleming's Tonic Heave Remedy. Cures Heaves, Coughs, Croup, and all ailments of animals' whole system. Full price 25¢. It is for sale by the Veterinary Dept. Copy of Fleming's Vet. Product. Vet. Adviser, FLEMING BROS., CHEMISTS 633 CHURCH ST., TORONTO, ONT.



REGISTERED HOLSTEINS

and the

**\$106,000 BULL**

is a brother as well as a grandson

of

**OUR SENIOR HERD SIRE**

for the past two years.

AVONDALE PONTIAC ECHO

We have only one of his sons left, the price is reasonable. Write today

**LYNN RIVER STOCK FARM**

Alex. Walker, Simco, Ont.

Books

Write for our catalogue of farm books. It is sent free on request.

Ask us for information on any books you require.

BOOK DEPT., FARM AND DAIRY

PETERBORO, ONT.

## U.S. AND CANADIAN HOLSTEIN MEEN CONFER.

FORTHOPE, Penn and Dairy.—I beg to acknowledge receipt your favor of July 31d, regarding the meeting between the representatives of the Canadian and American Holstein-Friesian Associations.

I can explain that practically ever since the establishment of the Canadian Holstein-Friesian Herd Book in 1891, we have been endeavoring to have the American Holstein-Friesian Association recognize the Canadian Holstein-Friesian Herd Book in the same way that we do theirs by simple transfer from one Herd Book to the American Herd Book. The members of that fact the Americans have not in spite required the registration of Canadian animals of any animal and so to the United States, straight back to the American Herd Book. This has been a very expensive procedure, costing as high as \$100 to record a single animal in the United States.

Some seven or eight years ago committees representing the two Associations met and discussed, but without success, but failed to come to an agreement owing to differences regarding the matter of registration fees. It was after this failure that the Canadian fee for import certificates was raised from \$75 to \$100 and \$10 for females of the American Herd Book. On July 19th, President of the American Association, a Canadian committee comprising Messrs. G. F. Tolson, M.P., Mr. R. W. E. Burnside and myself, attended the meeting of the Board of Directors of the American Herd Book at Detroit. We met with a very cordial reception and an understanding. President Aitken took the ground that the membership of the American Herd Book charged in each country should be left to the American Herd Book and the Association concerned, and that any disparity between those charged would be nullified by requiring that in future all animals born in Canada should be registered first in the Canadian Herd Book and American Herd Book, and that all animals born in the United States should be registered first in the American Herd Book before being eligible to registry in the Canadian Herd Book.

This position was entirely satisfactory to us and we will be able to make a trip to and meet with the Board of Directors of the American Herd Book, who passed a resolution recommending the recognition of the American Association of the Canadian Herd Book in view of this recognition, our committee will be willing to reduce our fee for import certificates to the same as that of the United States. We have also charged the charges for registration on animals crossing the boundary line in either direction will be practically the same.

The whole arrangement is, of course, subject to the approval of the Boards of Meetings of the two Associations. Both Associations are fortunate in having broad-minded, tolerant and fair-minded men and great credit is due to these gentlemen for the amicable understanding which was now arrived at.

Secretary Houghton and myself are arranging to have a meeting of our friends to each other progeny records of breeding females sold from one country to the other and minor details of that sort.—W. A. Clemons, Secretary.

## NEIDPATH FARM HERD SIRE

"W. E. I think we have a pretty good bull here," remarked W. W. Mainstone, as he drove up to inspect the Neidpath herd of Ayrshires recently. The bull in question is a two-year-old son of Dairy Bell sired from a cow owned by the Ontario Agricultural College and imported from Scotland by R. Nees. She has a two-year-old record in R.O.P. of over 12,000 lbs. of milk. The backing of this milk production is of the best producing strains of the breed. As an individual he carries lots of size, speed and endurance of constitution, as well as the straight lines which are so pleasing to the Ayrshire fancier.

Neidpath Farm has a possibly bred more sires of Record of Performance production than any other Ayrshires in Canada. The cows are of the type that go with production. They are good sized animals, of large capacity udders, and in the whole herd there is only one milking animal that has a small udder, and in the whole herd there is only one in this class the teats were not extreme. Unfortunately, the young cow was responsible for the Ballantynes to follow up semi-official test work as they would like to do.

## MR. KELLY'S HERD SIRE.

DESIRING a recent visit to the farm of Mr. Kelly, Callerton, Ont. as an editor of Farm and Dairy had the opportunity of seeing his new herd sire, King Alcarra Kallerton, the son of King Jesse Alcarra Spofford, owned by Levens and Purcell, Bloomington, Ill. This sire was sired by Harrow, a S. S. three-year-old. Mr. Kelly's sire has both the individuals and the backing to merit the place he holds at the head of this big Oxford County herd.

## STANDARD CATTLE AND HOG FEEDS.

A good deal of interest is being shown by Ontario farmers in an announcement of the Department of our last issue concerning the proposed sale of Cattle and Hog Feeds for Ontario farmers, which the Ontario Department of Agriculture has undertaken with the assistance of the Agricultural section of the Ontario Government. The Department, in order to avoid confusion farmers should take note that the proper party to write for information concerning this sale, is Mr. F. C. Hart, Director of Culture, Ottawa, Ontario, or to the Ontario Department of Agriculture, Toronto.

## NEW U. S. AYRSHIRE SECRETARY.

A meeting of the Board of Directors of the United States Ayrshire Breeders' Association, held at Manhattan Hotel, New York, July 5, 1914, James Q. Watson in charge of the Extension Articles of the Association, was elected Secretary and Treasurer of the United States Ayrshire Breeders' Association an successor to Mr. C. M. Windsor.

Mr. Watson is a Scotchman by birth. He is a graduate of the Iowa State College and has held the position of Secretary at that institution for several years. He filled a similar position with the American Ayrshire Breeders' Association of the Southwestern District at Kansas City in 1913. He has since that time he has been in charge of the Association's Extension Activities and now becomes its Secretary and Treasurer.

## AD TALK.

## DESIRABLE PUBLICITY AND HOW TO OBTAIN IT.

THE successful business man, no matter in what line of business he may be, intentionally or otherwise, counts his advertising results in two classes, namely, direct and indirect. He also counts his copy with a view to meeting the demands of his customers. He is so busy he has been in charge of the Association's Extension Activities and now becomes its Secretary and Treasurer.

The whole campaign works for a desirable familiarity on the part of possible buyers who are advertising at this rate. This renders quick satisfactory sales possible. The advertiser who continues his advertising in the line of advertising at the expense of the other, cannot expect to succeed in getting any business out of a properly balanced advertising campaign.

Consequently it is that in advertising as known as sales advertising, and publicity advertising. No firm can make an advertising campaign unless it has satisfactory publicity, and no firm can have satisfactory publicity unless they have made sales if they may expect to continue in business.

Their attention worthy to publicity. It is not necessary for the advertiser to know man merely state—"I have sold and such for sale at such-and-such a price. My natural reaction is that if combined in the ad. or for several previous to the appearing of his advertisement, there had been appearing a publicity which would naturally react with the alert for anything which he might have to offer.

In the case of live stock advertising, the average breeder believes in the selling of females sold from one country to the other and minor details of that sort.—W. A. Clemons, Secretary.

That when he has something to sell he can jump into prominence like a fire alarm bell, and in a small ad. for a few weeks, and then finally collapse and be forgotten. The advertiser who comes on. They fail to realize that the human race are apt to soon forget, and that the advertiser who is not up to the mark, will naturally react with the alert for anything which he might have to offer.

Take a look at the advertising campaign of a large company and you will see a large percentage of their advertising is in the form of publicity advertising. Call it hot air, if you like, but at any rate it melts the story of the advertiser's goods. It is a comparatively small part of their sales as compared to actually trying to sell something.

This shows the importance of the former class of advertising. The average livestock breeder does not list all things that way. Some of them are and they are the great part of sales things when they want to sell.

If it is to be any good, it must be as part of livestock advertisers that we do our gospel column. We do nothing of the kind, and we are not going to do it. They have to pay for their publicity. Even in the case of our livestock advertisers, the information we give us our gospel column is but a "drop in a bucket" compared to the amount of publicity during the course of a year by means of advertising, and additional advertising material, and the expense of it is small in the gospel column.

So now if you are planning to sell your goods, you will want to prepare the public mind for what is to follow. Start your advertising campaign during the course of a year by means of advertising, and additional advertising material, and the expense of it is small in the gospel column.

So now if you are planning to sell your goods, you will want to prepare the public mind for what is to follow. Start your advertising campaign during the course of a year by means of advertising, and additional advertising material, and the expense of it is small in the gospel column.

C. G. MCKILLICAN,

Livestock Department,

FARM AND DAIRY.

## MARKET

ONTARIO, Monday. A tonne head of the first grade hadersed the 72½ cents for the 1st grade, 71½ for the 2nd grade, 70½ for the 3rd grade, 69½ for the 4th grade, 68½ for the 5th grade, 67½ for the 6th grade, 66½ for the 7th grade, 65½ for the 8th grade, 64½ for the 9th grade, 63½ for the 10th grade, 62½ for the 11th grade, 61½ for the 12th grade, 60½ for the 13th grade, 59½ for the 14th grade, 58½ for the 15th grade, 57½ for the 16th grade, 56½ for the 17th grade, 55½ for the 18th grade, 54½ for the 19th grade, 53½ for the 20th grade, 52½ for the 21st grade, 51½ for the 22nd grade, 50½ for the 23rd grade, 49½ for the 24th grade, 48½ for the 25th grade, 47½ for the 26th grade, 46½ for the 27th grade, 45½ for the 28th grade, 44½ for the 29th grade, 43½ for the 30th grade, 42½ for the 31st grade, 41½ for the 32nd grade, 40½ for the 33rd grade, 39½ for the 34th grade, 38½ for the 35th grade, 37½ for the 36th grade, 36½ for the 37th grade, 35½ for the 38th grade, 34½ for the 39th grade, 33½ for the 40th grade, 32½ for the 41st grade, 31½ for the 42nd grade, 30½ for the 43rd grade, 29½ for the 44th grade, 28½ for the 45th grade, 27½ for the 46th grade, 26½ for the 47th grade, 25½ for the 48th grade, 24½ for the 49th grade, 23½ for the 50th grade, 22½ for the 51st grade, 21½ for the 52nd grade, 20½ for the 53rd grade, 19½ for the 54th grade, 18½ for the 55th grade, 17½ for the 56th grade, 16½ for the 57th grade, 15½ for the 58th grade, 14½ for the 59th grade, 13½ for the 60th grade, 12½ for the 61st grade, 11½ for the 62nd grade, 10½ for the 63rd grade, 9½ for the 64th grade, 8½ for the 65th grade, 7½ for the 66th grade, 6½ for the 67th grade, 5½ for the 68th grade, 4½ for the 69th grade, 3½ for the 70th grade, 2½ for the 71st grade, 1½ for the 72nd grade, ½ for the 73rd grade, 0 for the 74th grade, 0 for the 75th grade, 0 for the 76th grade, 0 for the 77th grade, 0 for the 78th grade, 0 for the 79th grade, 0 for the 80th grade, 0 for the 81st grade, 0 for the 82nd grade, 0 for the 83rd grade, 0 for the 84th grade, 0 for the 85th grade, 0 for the 86th grade, 0 for the 87th grade, 0 for the 88th grade, 0 for the 89th grade, 0 for the 90th grade, 0 for the 91st grade, 0 for the 92nd grade, 0 for the 93rd grade, 0 for the 94th grade, 0 for the 95th grade, 0 for the 96th grade, 0 for the 97th grade, 0 for the 98th grade, 0 for the 99th grade, 0 for the 100th grade.

The crop is barely an all of the quality is generally good, and was favored by the second crop of clover hay but the hay market is reported to be holding. Many farmers have already second crop of alfalfa.

Full wheat is turning out better than was expected, but quality is somewhat inferior early threshing has found good grain.

Considerable barley has number of counties and is well quality, although there are some of lower quality. In many parts of the province the hay market is reported to be holding. Many farmers have already second crop of alfalfa.

WHEAT. The wheat market has been in an appreciably weakened position. It was the intention of those who fix the maximum price to keep about the 22¢ level. The matter is now under consideration and the maximum will be fixed at 22¢. Representations have been made by the Ontario Wheat Producers' Association. W. A. Creer, Minister of Agriculture, is expected to visit the wheat market crop. It is the government will give a fixed price of 22¢ for the new crop.

Quota on eggs are still enforced. MacLain wheat—in stores, 100 lbs nominal (including 2½ lbs of shives) \$1.35; No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

COARSE GRAINS. The excellent weather of the week has been very dry, enough to keep the soil from becoming too dry from across the line of the province. Prices of favorable and unfavorable crops are shown as last week. Toronto and Ottawa are active in demand. Prices follow:

Oats—No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

MILK FEEDS. The tone of the market for milked remains very firm, limited inquiry for supplies, most of business is for local and country country. Quotes for milked—Carlots, delivered, freight, basis included: Bran \$14.00; Hay \$10.00.

HAY AND STRAW. There were no new developments in the hay and straw market. Hay—No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

POTATOES AND BEANS. Potatoes have no few been sold by the bushels, the whole crop, but the bushels have recently been included. Prices of early potatoes, counting greatly reduced. On the whole, however, the market is still in a steady state. Beans are in steady demand. Beans are quoted as follows: Kidney, 100 lbs, \$1.00; Broad, 100 lbs, \$1.00; Small, 100 lbs, \$1.00.

HIDES AND WOOL. City hides—City butcher hide, 100 lbs, \$1.00; Calfskin, green, 100 lbs, \$1.00; Horshoe, 100 lbs, \$1.00; Hide, 100 lbs, \$1.00; Lamb, 100 lbs, \$1.00; Sheep, 100 lbs, \$1.00; Goat, 100 lbs, \$1.00.

Country market—Beef hide, 100 lbs, \$1.00; Cow, 100 lbs, \$1.00; Horse, 100 lbs, \$1.00; Sheep, 100 lbs, \$1.00; Goat, 100 lbs, \$1.00; Lamb, 100 lbs, \$1.00.

Wool—Washed, fine and medium, 100 lbs, \$1.00; Unwashed, fine and medium, 100 lbs, \$1.00; Stained, fine and medium, 100 lbs, \$1.00.

There were no new developments in the wool market. Wool—Washed, fine and medium, 100 lbs, \$1.00; Unwashed, fine and medium, 100 lbs, \$1.00; Stained, fine and medium, 100 lbs, \$1.00.

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MARKET REVIEW AND FORECAST

TOBACCO, Monday, Aug. 6.—The intense heat of the past two weeks has hastened the ripening of spring...

The crop is practically all out and housed. The crop is barely an average one, but the quality is generally good...

Full wheat is turning out rather better than was expected, both as to yield and quality, although English reports that early threshing has found some rather thin grain.

Considerable barley has been cut in a number of counties and is yielding heavily, although there are some complaints of loss of ear.

WHEAT. The wheat market has been in a state of uncertainty...

The intention of the government to fix the maximum price of wheat so as to avoid the increased freight rates...

Questions are as follows: Manitoba wheat—In whole, Fort William nominal...

COARSE GRAINS. The excellent weather of the past week has been favorable for the crop...

MONTEAL FEEDS. The tone of the market for all lines of millfeed remains very firm...

HAY AND STRAW. There were no new developments in the market for hay...

POTATOES AND BEANS. Late potatoes have so far been less affected by disease than was feared...

HIDES AND WOOL. City hides—City butcher hides, green, 15c; cowhide, 16c...

Wool—Unwashed, fine and medium clean, 6c; 7c; medium and combing, 5c to 6c...

EGGS AND POULTRY. Shipments from the Western provinces to Montreal points last week amounted to 1,000 cases...

There is still no definite assurance of ocean passage for eggs for export to Great Britain...

The wholesale egg prices to the trade are No. 1 candied, 85c to 90c; selected new-laid, 60c to 65c.

DAIRY PRODUCE. The trade in butter during the past week remained quiet...

CHEESE BOARD SALES. Cornwall, July 26—4,654 28½c; St. Hyacinthe, July 27—400 at 21¼c...

LIVE STOCK. The features of the live stock market last week undoubtedly was the advance in hogs and lambs...

LAKE VIEW HOLSTEINS

Every male or female offered by us are either sons or daughters of these wonderful cows. No other herd in Canada has such a record.

MAJOR E. F. OSLER, Prop. T. A. DAWSON, Manager Lakeview Farm, Bronte, Ont.

CLOVER BAR STOCK FARM OFFERS

A few choice young bulls for sale, from heavy producing dams, sired by a son of P. SMITH.

His 2 Nearest Dams Average 38.82

His dam, sire's dam, grand sire's dam and great grand sire's dam, average 38.82...

Bull calf of Royal Breeding

Born Dec. 27, 1917. He is a beauty, a show animal. His sire's seven nearest dams average over 30 lbs. butter in 7 days...

Herdsmen Wanted

I am open to engage an experienced herdsmen to handle my well-known Holstein herd...

Avondale Farm

Offers for sale its fine herd sire Woodcrest Sir Clyde

Woodcrest Sir Clyde

THIS bull is one of the finest individuals in Canada—weighing about 2,700 pounds—has immense depth and length...

His Sire is Pictje 22nd Woodcrest Lad, whose dam, Pictje 32nd, has the highest record (31.62 lbs. butter 7 days and 13673 of milk in 6 months) of any cow ever imported to U. S. from Holland...

His Dam is Alma Clyde, 33.07 in 7 days, 126 in 30 days. She made over 22,500 milk in one year. She has one 90-lb. daughter, full sister to Woodcrest. Her sire is the famous bull Sir Clyde.

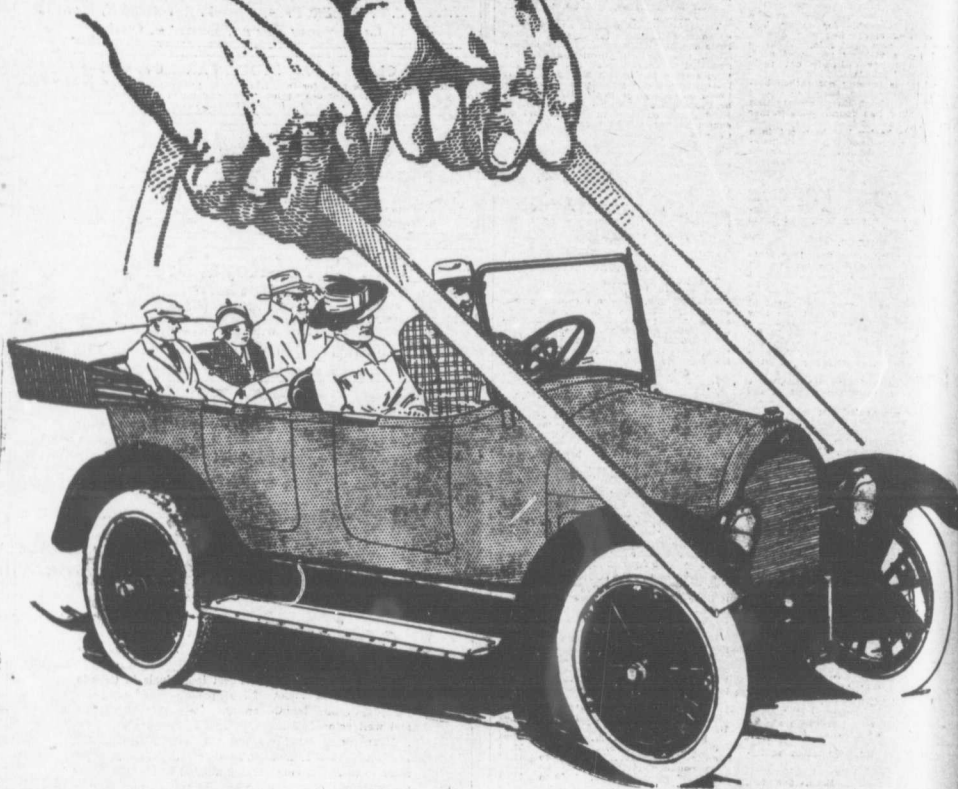
WE HAVE RECENTLY REPURCHASED THE OLDER SON OF MAY ECHO SYLVIA, and are therefore offering Woodcrest Sir Clyde for sale...

AVONDALE FARM

A. C. Hardy Prop. Brockville, Ont. H. Lynn Herd Supr.

# Overland

## The Thrift Car



# Reins or Steering Wheel?

**A** LONG, tiresome, time-wasting drive with horses is a short, pleasant, time-saving ride with an Overland.

Let an Overland perform innumerable work duties for you and in addition be an endless source of recreation and benefit for every member of your family.

Select this beautiful, roomy Model 90 and you save money in the first costs and maintenance.

You cannot get complete satisfaction from less advantages than it gives—

And you cannot get as much value in any other car for the low price of this Model 90.

It has a powerful, fuel-saving motor; narrow turning radius; rear cantilever springs; 106" wheel base; 31x4 tires, non-

skid rear; electric Auto-Lite starting and lighting and vacuum fuel system.

Because this Overland Model 90 gives every essential for complete satisfaction, the farmer's family can enjoy it as much as the farmer can employ it.

*Five Points of Overland Superiority*  
**Appearance, Performance,  
 Comfort, Service and Price**

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 Willys-Knight and Overland Motor Cars and Light Commercial Wagons  
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