

FARM AND DAIRY & RURAL HOME



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Toronto, Ont., June 14, 1917



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Another Success for the Ormstown Spring Fair

Purely Agricultural in All Its Features, Its Popularity is Well Deserved

"I HAVE attended this fair," remarked an Ontario visitor to the Eighth Annual Spring Show at Ormstown last week, "every year since it was first inaugurated, and the wonder of how such a small district can produce such a great fair has continually grown upon me." Perhaps the secret of the fair's success was explained by W. J. Black of the Dominion Resources Committee, who was making his first visit to the fair, when he spoke of "the live stock atmosphere" that seemed to pervade the place. The people of the Beauharnois district, here long been live stock men, and they are all interested in good stock, particularly cattle and horse. Hence the popularity of a show that is purely agricultural, with the judging of the various classes the main attraction.

The evening performance was the "drawing card" with the townspeople. It opened with a fine parade, dairy cattle, for there was not a beef animal on the grounds, that entirely filled the big judging pavilion, the white coated attendants leading the choicest cattle that the district could produce. The rest of the evening was devoted to horse judging, the most popular events being the lady drivers and "musical chairs" played by riders on horse-back. This latter feature was introduced for the first time last year. Montreal polo players being brought to Ormstown for the evening performances. Some local farm boys entered and won from the visitors, so this year the local boys were given the field to themselves. The game, which might be made a feature of our winter air's performance, is played exactly as is the old parlor game that we all know as "musical chairs," except that the players are riding and when the music stops the rider has to dismount and sit on his chair. When two riders were going at full gallop for one chair developments were always interesting.

The Horse Classes.

There were 150 draft horses and 165 light horses entered. The draft horses were all Clydesdales or Clydesdale grades, something to be expected in a district where the stockmen are almost all of Scotch descent. Some of the principal exhibitors were R. Ness & Son, Howick; W. J. McGeorge, Ormstown; Steele Bros., Howick; D. A. McCormick, A. A. Nussey, and W. Nussey, of Brysonville. Many others had from one to three or four head on hand. The grand championships all went to the heavy stables. Burton Stanley was best imported stallion, but more interest centered in Spencer of the Briars, a Canadian-bred stallion by Sir Spencer, and the grand champion at the late Ottawa Winter Fair. Ruby Jen, a beautiful imported black mare, generally recognized as one of the finest in Canada, was champion Clyde mare.

Both sheep and swine pens were but scantily filled. In the former, Ager & Son, of Bowmanville, Ont., had a good exhibit of Dorsets, Cheviots and Southdowns, but local entries were few, and most of the buyers came to Ontario. In swine there were a few Tamworths, Berkshires, Yorkshires, Durocs and Chesters. Altogether sheep and swine entries totalled only 110 head.

The Dairy Cattle.

But it is a dairy show that Ormstown is best known. Dairy cattle entries totalled 336 head, Ayrshires, Holsteins and Jerseys. There were a few of the first two breeds from outside points, but the greater portion came from within a few miles of Ormstown. The Jerseys were practically all from outside, one herd from Ontario and the other from the Eastern Townships.

Awards in the pure bred classes are given in full in this issue. The grade classes are worthy of special mention. Both Ayrshire and Holstein grade classes compared favorably with the corresponding pure bred classes; in fact, the Holstein grade milk classes were a more uniform and better bodied lot of cows than were the registered animals. These classes were a splendid argument for the use of good pure bred sires in grade herds.

Mr. W. W. Ballantyne, Stratford, Ont., placed the Ayrshires, pure-bred and grade; Mr. F. R. Mallory, of Frankford, Ont., the Holsteins; and Prof. H. Barton, of Macdonald College, the Jerseys.

The Ayrshire Classes

THE Ayrshire is at home in the Beauharnois district, and Ayrshires at Ormstown are always of outstanding merit. It is indeed questionable if any other fair in Canada ever had stronger classes than one or two that were seen at Ormstown last week. Many splendid individuals were left out of the money altogether, and from first to last, Mr. W. W. Ballantyne, who placed the awards, had his hands full. The uniformity of type, particularly in the milk classes, was wonderful. The exhibit was strengthened by the entry from quarantine, just before the fair, of one of the few importations from Scotland this year. This lot, selected in Scotland by Mr. Barr, of Archenburn, and imported by Mr. R. Ness, contained some of the finest young bulls ever brought to this country and several firsts fell to the new importation, among them the grand championship made award, which was won by Aberdeen Sir Andrew, a junior yearling, and as straight and nice an animal as one could well desire.

First place in mature bulls went to Gleahurst Terra Major, shown by Gilbert McMillan. He appeared in excellent fit, but won by only a small margin over Burnside Fannie Scusera, a bull with more quality, somewhat larger and more simply in the hind quarters, but without the substance and fitting of the winner. The two-year-old class brought out one of the Ness yearlings, a very growthy straight-bull, and by the great Perfect Piece, Sunnyside Masterpiece, in second place, had a great depth and was particularly good in the hind quarters. A very bred bull that was shown by McMillan in the senior section in Goldpiece, a combination of the blood of Masterpiece, Perfect Piece, and Piece-asal.

Some of the female classes suffered because of the season at which the fair is held, many of the best Ayrshires of the district being timed to calve for the fall fair circuit. Mature cows in milk, however, brought out fourteen entries and a grand showing they made. First honors fell to Chapman-Johnny, owned by R. R. Ness, with Gordon a good second on Stonehouse Paney. One of the finest cows shown was Lochengrae Cherry, a grand big cow and first in her class for three years in succession at Ormstown. This year she won in the dry class and was reserve champion. Cavers had a very shapely, sweet heifer in his three-year-old Orange Blossom. Graded Ayrshire herds were as usual the most impressive exhibit of the fair, with five herds out.

The exhibitors were R. R. Ness, Howick; D. T. Ness, Howick; Peter McKArthur, Howick; J. P. Cavers, Ormstown; J. & C. Bantyne, Ormstownville; Gilbert McMillan, Terra Major; Jno. Logan, Howick; Peter Dickson, Ormstown; Geo. Hope, Allan's Cove.

(Continued on page 5.)



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VOL. X

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FARM AND DAIRY & RURAL HOME



We Welcome Practical Progressive Ideas.

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

VOL. XXXVI

TORONTO, ONT., JUNE 14, 1917

No. 24

To Get Clean Milk With a Milking Machine*

It Involves Proper Solutions, General Cleanliness and the Proper Cooling of the Milk When Drawn

IN chloride of lime we have a cheap and effective germicide from which a very satisfactory solution can be made for sterilizing milking machine parts. One pound of chloride of lime (full strength 33 per cent. available chlorine) to 70 pounds (ten gallons) of water.

To make solution, mix in enamel pail, crock or wooden tub, one pound of chloride of lime to ten pounds (one gallon) water; allow to stand over night, giving an occasional stir; pour off the clear liquid and add sufficient water to make one hundred pounds (ten gallons). Full strength chloride of lime can be bought from any of the dairy supply houses, put up in cases containing twelve bottles, each bottle containing three and one-half pounds, with full directions for use. Price, about \$3.00 per case. That sold in pound and half-pound cardboard packages by drug stores is usually low in strength and high in price and is not recommended. Immerse rubber tubes and test cups in this solution, made up as above. It will be good for about two weeks in summer and three weeks in winter.

Caution.

Do not make the solution too strong by use of too much chloride of lime or too little water. As long as it will turn blue a strip of starch-potassium-iodide test paper dipped into it, its germicidal properties are o.k.; as soon as it fails to produce this change its germicidal properties have gone, and it must be thrown away and a new solution made.

Chloride of lime solutions made as above have been used at the Ontario Agricultural College dairy barn during last summer with every success.

These solutions have been found sterile at all times when they gave a blue coloration with the test paper, and the tubes were also found to be sterile on each occasion when a test was made.

We have found no advantage in adding salt to this solution, and have given up using it in our barn. Both the metal and the rubber parts appear to be well preserved after lying in a chloride of lime solution for the greater part of a year.

The addition of some salt may be necessary to keep the solution from freezing during the winter if the solution is kept in a very cold milk-house or barn.

Care must be taken not to make the solution too strong by using too much chloride of lime or too little water, or we shall find that the metal parts will become corroded and spoiled.

Now let us turn to the other factors which have an influence on the quality of the milk, besides the cleanliness of the test-cups and rubber tubes.

General Cleanliness of the Mach. e.

The metal parts should be thoroughly washed

and scalded each time after use, and then should be put in a clean place out of the reach of dust and flies, where they should remain until required again. The test-cups and tubing should be fitted on to the machine and well rinsed out before and after use every time; warm water should be used for rinsing before milking; to remove all traces of the chloride of lime; warm water and washing powder should be used first after milking, and then hot water, putting the tubes in the sterilizing solution again.

All test-cups should be taken apart at least once a week and given a thorough scrubbing with hot water and washing powder, and the tubing must be well scrubbed out with the brushes provided as well. They should then be rinsed in hot water before putting together and returning to the chloride of lime. If this can be done twice a week so much the better, but it MUST

be done at least once a week if satisfactory results are to be obtained.

A point that is often overlooked is the necessity for having the test-cups and rubber tubing completely immersed in the chloride of lime solution; a sufficiently large container and a sufficient quantity of solution must be used, as we do not get the required results if these parts, as we often see them, are sticking up out of the solution into the air. We must be careful to see that the solution fills the tubing, and not, as we find in some cases where the ends dip into it but the centre of the tube remains filled with air.

Cleanliness of the Barn.

Feeding, bedding, or brushing up should never take place within two hours before milking. The dust raised by these operations takes a long time to settle, and if these operations are conducted shortly before milking, a very considerable quantity will of necessity find its way into the milk cans and pails. For this reason, also, uncovered cans and pails, with or without milk in them, should never be left standing in the barn, but should be removed to the milk-house.

In barns where high grade milk is produced the tests and udder of every cow are washed before milking begins. This practice might well be adopted by milking-machine users, as dirt from the test and udder often gets drawn into the tubes, and we should avoid this if we can. The test-cups for this reason should also fit snugly, and not be so large that they are sucking air from the outside all the time. In case they fall off into the bedding, they should be thoroughly rinsed out before being put on a cow again.

Cooling of the Milk.

In spite of our best efforts we shall find that some germs will find their way into the milk after all, and it is only by promptly cooling to a suitable temperature that we can hold them in control. It is useless going to a lot of trouble to produce clean milk and then be careless about cooling it, as all our efforts are completely undone.

At the O. A. C. dairy barn, without adopting any unusual precautions, we have secured milk daily from a group of 10 to 15 cows, with a bacterial content of from 8,000 to 10,000 per c.c. Ten samples of machine milk secured from farmers in the neighborhood of Woodstock one morning averaged three and a quarter million bacteria per c.c.; the bacterial content of hand-drawn milk sent to the same factory that morning was less than a quarter of this figure. From this and from other evidence in our possession we have come to the conclusion that the quality of machine milk in Western Ontario can be and must be improved.

To produce clean milk with a milking machine is not as easy a matter as most people at first would suppose, but with proper care and attention to essential details it can be very certainly done.



The Hand Separator

THE hand separator is the greatest curse of the dairy industry." The speaker was one of the most extensive butter manufacturers of the Province of Quebec. His opinion, therefore, commanded some weight. "Why?" I asked. "Because I lost us the British market several years ago, and has so reduced the quality of our butter that we can't meet foreign competition on our own markets when it comes as come it will. Yes, I know we have the British market now, but I can keep it when the war is over? I know that we can't." "All the milk in these townships used to be skimmed at the creamery," continued this sworn enemy of the cream separator. "It was delivered daily and was delivered sweet. We had good cream and made good butter. Now the farm separator does the job. Usually it stands in the stable. Usually it is washed once a day. Usually the cream is delivered once or twice a week. We can't make good butter under conditions such as these."

It was the abuse of the cream separator to which this creamery man objected. Warm weather is now approaching and in warm weather abuses multiply. A word in season to all creamery patrons would be,—wash the separator twice a day, cool the cream immediately and keep it cold and ship to the creamery as at frequent intervals as possible. The cream separator has been a wonderful convenience. Let us not abuse it.—F. E. E.

* Part of address given at Western Ontario Dairy-men's Association Convention.

When You Buy a Cow

Some Exterior Indications of Milk Production

J. Hugh McKenney, Elgin Co., Ont.

I HAVE always banked on the scale and tester as the one reliable means of knowing the individual milking capacity of the dairy herd. It occasionally happens, however, that I wish to purchase an animal from a neighbor. Perhaps he has failed to keep any record of performance. In such a case one's judgment must be largely based on any indications of milking ability that her general conformation may bring to light. This may or may not be supplemented by the owner's acquired knowledge, but if so, it will be necessary to size up the latter as well as the cow. Eagerness to sell, sometimes leads to more or less exaggeration, intentional or otherwise. Then, there is the fellow who is as mum as a clam. All he will say is, "There's the cow, you can see for yourself." I am always suspicious of this kind. If a man has a good thing he can't help saying so, though in his enthusiasm he may forget to place proper emphasis on some of the weak points.

In looking over a dairy cow, the thought uppermost in my mind is, how much milk will she yield. That is what I am paying out my good money for; that is what I expect to feed her for. She must show promise of giving good results. With this idea foremost, the udder is naturally suggested first, because it is here that the actual milking of the milk takes place. Now, I favor a large udder every time, but want to know right at the start of what texture it is. Even though it has the appearance of that belonging to a 30-pound cow on test, yet if it does not milk out small and soft like an empty glove, with no sign of beefiness, I stop right there. Having been fooled once with a big meaty udder, I don't propose to be bitten again on that point. The shape too, is of importance. Development should have been made horizontally, rather than vertically, that is, it ought to be carried far forward along the belly and well up behind between the thighs so that a complete half circle is visible from a side view.

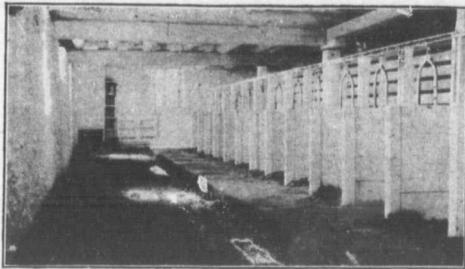
As the milk secreted in the udder depends on the blood conveyed thereto by the so-called milk veins, one on either side of the belly, rising from a hole in the abdominal wall, it is essential that these veins and milk wells be of good size in order that a liberal blood supply be furnished to the udder.

The Source of Production.

Next, I want to follow this milk-yielding blood back to its source. By what process is it produced and what indications are there of the degree of ability that a cow possesses in performing this function? To get a fair idea of her qualities in this respect I want to know if the respiratory and digestive organs have the best possible chance of doing their work properly. That may be the case, the chest should be deep and the ribs well sprung to insure a large lung capacity. The abdomen should be broader than the chest, and hips set well apart to provide for eating and digesting large quantities of food. If these two points are satisfactory, the cow in question will show a decidedly wedge-

shaped conformation common to most high producers. Such animals are likely to be veritable machines for manufacturing the food-laden blood and rushing it to the secreting tissues in the udder.

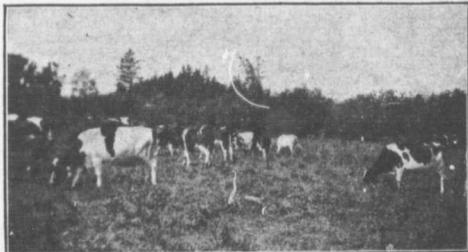
But this power to elaborate milk from blood is associated with another feature—that peculiar



A Stable that Meets with the Approval of the Health Inspector. The milk produced in this stable, that of R. J. Waller, Peterboro Co., Ont., is retailed in the city of Peterboro. The stable is therefore visited by the Health Inspector at frequent intervals, who gives it his unqualified approval. Notice the simplicity of the fittings. Lots of whitewash, plentiful lighting, and good care explain its desirability. —Photo by an editor of Farm and Dairy.

nervous temperament, the exact opposite of the placid character of the animal that turns its food into flesh. The nervous disposition one looks for in the good dairy cow shows itself in a bright prominent eye, the broad forehead indicating a large brain room, and, generally speaking, in the loose open character of the carcass as compared with the closely knit, compact frame of the ideal beef animal.

There are a host of other little signs that help one in a measure to discern the productive ability of a cow when resort cannot be had to a carefully kept record of her milkings. The trouble is one may be tempted to put too much weight on them. After all, a strong constitution, large



Uniformity that is the Result of Good Breeding.

Some of these cows, the property of W. F. Bell, Carleton Co., Ont., are pure bred. Others are Holstein grades. He would be a shrewd stockman who could accurately separate the two. Just another evidence of the fact that herds with a breezy appearance and good producing ability may be had by any dairy farmer who will consistently use good bulls of one breed.

digestive capacity, and a good udder with secretory powers sufficient to perform its peculiar functions, are the main points to look for. Personally, I pay little attention to the diameter of a cow's tail, the square inch area of her escutcheon and similar details. If bossie passes muster on the three important points mentioned in the foregoing, matters of less import have a way of falling into line.

Money is the idol of the age; plain living and high thinking the ideal.

How Your Time is Wasted

WITH labor as scarce and as high as it is at the present time every effort should be made to use the available labor, farm power, and all machinery in the most efficient possible manner. If 25 per cent. of the seed corn falls to germinate there will be but 75 per cent. of a stand. This means that one-fourth of the time of the men who plow the ground, prepare the seed bed, plant the corn and cultivate the crop will be wasted. If this is coupled with a deficiency of plant food in the soil there will be a greater reduction in the labor efficiency of all men, teams, and machinery employed in growing the crop. It is times such as these that compel everyone to take an account of stock. Certainly one of the most inefficient practices on the farm

is the constant cultivation of land that fails to produce its maximum because poor seed is planted or the ground is sour or water-logged or deficient in plant food, preventing large crops.—J. W. Henceroth.

Tractor Experience in Huron

And Something of Its Limitations

J. N. Kernighan, Huron Co., Ont.

SOME time ago Farm and Dairy asked for our experience with our gas tractor. I delayed answering until we could determine how it would work on the land in the spring. It has been a poor spring to work the land, as it never dried out properly, but the tractor proved that it could do the cultivating quicker and better than horses where the land was not too hilly.

In the first place, I would not advise anyone buying a tractor if his land is hilly, because good work cannot be done on hills, either plowing or cultivating, especially if the land is light, as the engine will slide. Our tractor is an 8-16 horsepower oil burning, and we find that it has power enough to draw three 10-inch plows, or a six and a half foot stiff tooth cultivator with the harrows behind, where the ground was level, but where there was a hill to climb the harrows were too much of an over-load for it. A 10-20 horsepower would work much more satisfactorily where the land is rolling, because you would have the extra power to carry it over the tough spots.

With the six and a half foot cultivator fifteen acres can be cultivated in ten hours with the eighty-rod rounds, and between four and five acres plowed.

We find that the coal oil gives perfect satisfaction in the engine. We have never had to clean ours since we got it, and also the engine runs smoother on the coal oil than on gasoline, and there seems to be as much power in the oil when the engine gets thoroughly warmed up.

It is rather hard to figure the difference between operating it and horses, but taking prices now, coal oil, 20 cents and oats 80 cents, it would cost for the engine, oil, 15 gallons per day, \$3.00; cylinder oil, etc., 50 cents, making a total of \$3.50. Figuring on a four-horse team, and I doubt if four horses would draw the cultivator, certainly not

the season at 80 cents in favor of the same amount. We find one gallon and three

WE had men them street. Less He is a young sured the two years at Holstein fence is all before start towards steins to rep under his father well worth with it the fa made what i clover, corn a put money t stored fertili father and s biased trail t

The soil near which the are wide stre to not have to most blow s rides running was on one of the Snowden under cultivat tated against attempted to grain as a suc income. Success come when d The first cow grades. But the system of agr cash crop ar on the place as manure. G improved, and nature of the hit the growi but good profits being grown. A is continually

"We started or five years Snowden, Jr. cow's milk night at the end of just what each us. Of course, ing for some ye had judged the appearance and o at the pall. figures influence Holstein, because ing of our Holst

A Start With Mr. Snowden, in registered cattle, sale of P. H. Jones made just 8,000 She is now (early a day, and she c Belleville sale, a more pure bred f Ornylde Pieterts

the season through, oats, one and a half bushels at 80 cents, \$1.20; Hay, \$1.00, a total of \$2.20; \$1.30 in favor of the horses; but you must feed them the same amount when not working.

We find it takes between three-quarters and one gallon to cultivate an acre, and between two and three gallons to plow, it depending on depth

and soil. The main argument for the tractor is, that it will stand up to the same amount of work day after day the whole year through, and does not get thin or sore shouldered.

We find that our tractor gives satisfactory power on the belt, and being throttle-governed, runs as steady as a steam engine.

A Start With Pure Bred Holsteins

And What Dairy Cattle Are Doing For a Poor Farm

WE hear of the majority of successful dairy-men after they have made a name for themselves and have moved on to easy street, Leslie C. Snowden is not of this class. He is a young man in his early twenties. He assumed the management of the home acres just two years ago. He purchased his first pure bred Holstein female at the same time. His future is all before him. But he has made such a good start toward building up a herd of quality Holsteins to replace the good grade herd established under his father's management that this story is well worth telling, especially when we couple with it the fact that the Snowden farm has been made what it is by dairying. Good dairy cows, clover, corn and a silo are a combination that have put money in many a farmer's pocket and restored fertility to worn out land. The Snowdens, father and son, have followed along this well blazed trail to success in dairy farming.

The soil around the Town of Bowmanville, near which the Snowdens live, is variable. There are wide stretches of excellent loam. One does not have to travel far, however, to find sand, almost blow sand, and occasionally there are gravel ridges running through the fertile sections. It was on one of these gravel ridges that we found the Snowden farm of 150 acres, 100 of which are under cultivation. The character of the soil militated against success when the elder man first attempted to farm it along general lines, with grain as a cash crop and the main source of income. Success really began to come when dairying was adopted. The first cows were very ordinary grades. But they represented a new system of agriculture, with milk as a cash crop and the feed produced on the place returned to the fields as manure. Gradually the fertility improved, and crops increased. The nature of the soil will always prohibit the growing of bumper crops, but good profitable crops are already being grown. And the Holstein herd is continually increasing.

"We started keeping records four or five years ago," explained Mr. Snowden, Jr. "We weighed each cow's milk night and morning and at the end of the year we knew just what each cow was doing for us. Of course, we had been dairying for some years before that, but had judged the cows on external appearance and what they seemed to do at the pail. Our first accurate figures influenced us to favor the Holstein, because of the good showing of our Holstein grades."

A Start With Pure Breds.

"Two years ago last March," said Mr. Snowden, in telling of his experience with registered cattle, "we bought our first cow at the sale of P. H. Jones on the Kingston road. She made just 8,000 lbs. of milk in her first period. She is now (early in May) making 40 lbs. of milk a day, and she calved on January 15th. At the Belleville sale, a year ago, we purchased three more pure bred females. The best of the three, Ornydite Pieterzse Korndyke, was fresh a month

when I got her, and in the next ten months she gave 13,000 lbs. of milk. We got \$245 for her milk alone. The next cow, that large white one, was just 500 lbs. behind the first and the third cow 500 lbs. of milk behind the white cow. We paid \$500 for the three, so you can see they paid for themselves the first year with their milk."

The animal of which Mr. Snowden expects the most, however, is a heifer that he bid in at the Belleville sale this spring for \$305. She is a half sister of May Echo Sylvia. Freshing at two years and one day, she was averaging 50 lbs. of milk a day when I saw her a month later.

A Small Herd.

The herd is not a large one. Usually nine or ten cows are milked. Last year the milk shipped to the Farmers' Dairy Co., Toronto, showed an average return per cow of \$172; over \$1,700 in all. Good breeding was probably the most important factor in this creditable production, but good feeding and good care also had an important influence. The buildings are old, but the cow stable had cement floors, the walls glistened with whitewash, the animals were all well bedded, and the milking herd gave evidences of a daily application of curry comb and brush. Corn ensilage, roots and clover hay supply the roughage. Home-grown grains are all fed on the farm and concentrates are purchased in addition.

Last year 13 or 14 acres were in corn. "We intend to fill our silo in the fall," remarked Mr. Snowden, "and then refill in January. This would



A Home-Made Stave Silo on Farm of Leslie F. Snowden, Durham Co., Ont.

fore chore time. Leslie was at the barns caring for the stock. Just as we were leaving his father came in with the team. Mr. Snowden, Sr., while he has turned the active management of the place over to his son, has not left the farm. He has built a house for himself on the place, and still takes an active part in the farm operations. Father and son are still partners. The development of the Holstein herd, however, will develop on Leslie, and we predict that in time this herd will make a name for itself in Record of Performance. This prophecy is based on the excellent foundation that has been laid in the first two years, and the enthusiasm and good judgment displayed by their young owner. I enjoy a visit with an enthusiastic young man quite as well as a visit with a successful older man.—F. E. E.

Dairy Development

ON the average dairy farm the heifers are bred to freshen when two years old or slightly over; sometimes slightly under. On a few farms here and there no heifers freshen for the first time until 30 months old or more. Given the same conditions of feed and care a comparison of the stock of herds following these two different systems of breeding, is illuminating. The herd in which there are no junior two-year-old milkers will invariably be comprised of cows of greater size and capacity and, therefore, breeding considered, the most profitable producers. Early breeding is one of the greatest mistakes of dairy farmers to-day. Its effects can be overcome in a measure by good feeding and care, but the best development accompanies later breeding. At the Ormstown Fair last week a young man remarked to us:

"Our cows would not stand a chance here. There are too many junior two-year-olds in our herd. Prof. Barton is right; you can't breed young and get development. We are going to carry our spring calves over to fall now and have them come in at 30 months."



A Cow that Paid for Herself in One Year.

This is one of the foundation cows in the pure-bred herd of Leslie C. Snowden, Durham Co., Ont. In the first ten months after her arrival on the farm she produced milk to the value of \$245. She and two others purchased at the same time paid for themselves in the first year.

—Photo by an editor of Farm and Dairy.

give us summer silage without going to the expense of putting up a summer silo. The crop was short, however, and we filled the silo just once and will have to depend on pasture this summer." The silo in question is 14 by 32 feet, of staves on a concrete base, and cost \$130 to erect, including the roof.

Retiring on the Farm.

I happened in at the Snowden farm just be-

TO SMASH THE HUNS WHEAT IS AS ESSENTIAL AS SHELLS

Canadian farmers who raise more wheat are fighting the Empire's battles as effectually as the man who risks his life in the trenches. The British Government says that but for the use of fertilizers the Germans would have been starved out before the end of the second year of the war.

USE SYDNEY BASIC SLAG

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We can ship promptly. Catalogs free.

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FEEDERS CORNER

Conducted by E. S. Archibald.

Feed for Cow Test.

I EXPECT my best cow to produce in June. She should make 70 or 80 lbs. of milk a day. We are going to put her on test. We will give her the best pasture for her and a couple of others also on test. The pasture is good clover. What grain ration would you advise in addition, all grains and concentrates having to be purchased at prevailing prices—D.C., Perth Co., Ont.

There are a number of excellent grain rations which might be successfully fed to cows on pasture, and if it is desired that the very best record be made, one of the following rations, even though slightly too expensive for regular commercial feeding, may be used advantageously. Grain ration No. 1 consisting of oats two parts, bran two parts, oilcake one part, dry distiller's grains two parts and cottonseed meal two parts, will be found satisfactory. Another ration very successfully used by many feeders consists of bran 200, dried distiller's grains 200, oats 125, sluten 125, cottonseed meal 100 and oilcake 100. A cheaper ration might consist of ground oats 200, ground corn 100, dried distiller's grains 200, cottonseed meal 100. Undoubtedly, at the present prices of grains and concentrates, such rich concentrates as condensed and dried distiller's grains are the cheapest per pound of protein, but it is necessary that a limited quantity of oats, bran or the like be used in order to keep the meal ration light and palatable.—E.S.A.

Alfalfa and Corn—No Grain

At an Institute held here last winter, a speaker contended that the most profit from dairy cows would be made by feeding good alfalfa hay, corn silage and a few roots. He advised feeding absolutely no grain. He advised feeding heavy milking cows. Was this good advice? Did I think that alfalfa would eliminate grain probably, I would make a tremendous effort to grow it.—Dairyman, Westchester Co., Ont.

Whether or not grain can be profitably fed to dairy cows depends largely upon the condition and quality of the cows, the amount of milk which they are capable of producing and the price of meals. Generally speaking, it does pay to feed a limited amount of grain to cows producing a reasonable amount of milk. The food requirements of the cow are twofold, namely—for a bodily maintenance and for milk production. For the pregnant cow there is the third utilizing of feeds consumed. The 1100 pound dairy cow requires 533 pounds of digestible protein per day for bodily maintenance. For the production of 30 pounds of milk containing 3.5 per cent. butter fat there is required 125 pounds of digestible protein, hence there is required for the 1100 pound cow giving 30 pounds of milk at least 1.88 pounds of digestible protein. With the feeds mentioned, there would be required 22 pounds of alfalfa hay, 40 pounds of corn ensilage and 20 pounds of mangels. It is quite probable that with the present feed prices, such a ration for the cow producing 30 pounds of milk might, under certain conditions, be more profitable than where grain was included. However, the writer would strongly advise that part of the alfalfa hay be replaced with about four pounds of a meal mixture composed of bran, ground oats, dried distiller's grains and cottonseed mixed equal parts. It must be remembered that the alfalfa hay contains double the amount of digestible protein of that contained in mixed timothy and clover hay, and over three times the amount of that contained in clear timothy hay. The quality of the

alfalfa hay also very largely would govern the advisability of feeding a greater or less amount of the above meal mixture. Generally speaking, alfalfa is worth nearly as much per pound as bran in the production of milk, and where this leguminous crop can be grown successfully every effort should be put forth to do so.—E.S.A.

Pasture for Work Horses.

I WOULD like some light on handling our working horses through the summer. Will need them for work on the farm, will do a little teaming business, there will be days at a time when they are not in use. Would it be well to turn them on pasture during that time, or should I keep them on dry feed, always hard and ready for work—J. F., Oxford Co., Ont.

Whether or not it is advisable to turn the horses on grass during idle days depends largely on the feed which they are getting and the amount of work which they are required to do when in harness. Above all, it is necessary that all changes in feed must be at all gradual and those which have been on regular hard work during spring and early summer should be let out on grass only for a short time until they are accustomed to this soft, succulent laxative feed. If these horses are to be idle five days or more it might be advisable to discontinue the hay ration after the second day. If, however, the idle periods amount to only one or two days, it would certainly be advisable to continue the hay ration and reduce the grain ration not more than one-third. Although the writer is strongly of the opinion that all horses are better from having two weeks or more on pasture each year, yet he would strongly advise against the practice of making the horses subsist largely on pasture for the remainder of the regular work. If the horses are to be always ready for hard work it is advisable that the ration should consist largely of dry feed.—E.S.A.

Millet Seed for Stock.

WHAT is the value of millet seed as a stock feed? To what classes of stock is it best adapted? It is an advantage. Please make particular mention of its value for horses.—Subscriber, Ontario Co., Ont.

Millet seed can be fed most advantageously to hogs or lambs. Experiments conducted with this grain show that in its feeding it could be successfully used, but that it required one-fifth more than either wheat or barley in order to make the same gains. Ground millet should never be fed alone with corn or with corn or barley or, better, with the richer protein meal, such as linseed oilcake or wheat middlings. If fed in any quantities it tends to produce a soft protein meal which has also been used to good advantage in the feeding of beef cattle, but about six per cent. more of this grain is required than corn in order to produce the same gains. There is here also a tendency to produce soft meats. Millet seed has also been used to advantage in the feeding of lambs. It, however, must be crushed and fed in combination with some other grain. Under these conditions it has about the same feed value as corn. There is no experimental evidence as to the value of millet seed in the feeding of horses, nor has the writer had any experience therewith. Whether or not there is the same danger in the feeding of millet seed to horses as there is in feeding millet hay is doubtful. However, there seems no reason why a limited quantity of wet seed, not exceeding twenty per cent. of the ration and mixed with oats or corn and bran, could not be fed successfully. If there is any appearance of stiffness or swelling of the digestive derangement the crushed millet seed should immediately be discontinued.—E.S.A.

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The Oil Gas Tractor--Its Possibilities--Part 2

Some Things to Consider When Purchasing a Tractor

By Louis Simpson, Ottawa

THE article published in Farm and Dairy of May 24 may induce some farmers at a future date to venture upon the purchase of a farm tractor. For this reason it is important that he should be fully informed as to the conditions that together, when using a farm tractor, make for monetary success, and that all should be warned against conditions that together spell financial failure.

Conditions That Make for Monetary Success.

The plowing and cultivation, especially the deep plowing, of large tracts of level land, free from stumps, rocks or stones. This land need not be under one ownership.

When seed land is underdrained. When such land is laid out in large fields, especially when the fields are square or oblong.

When a proper and full complement of agricultural implements is provided or is available, so that the full power of the tractor is utilized. Such a complement is described later on.

When the farmer owns a small threshing outfit, a small ensilage outfit, a grain hauling outfit, or a circular saw outfit to cut up cordwood, all or some of which can be operated by the power of the tractor when the tractor is not used for other purposes.

The cost of the tractor and of the outfit necessary to secure the possible financial benefit is considerable, therefore only such farmers who farm large areas of land would be justified in making the necessary consideration, but there is no reason why three or four farmers, farming adjoining lands, should not jointly provide required funds or credit, and use the tractor and machinery for their mutual benefit. As the tractor and machinery can be used 24 hours per day, such a combination of the necessary human element would permit the work being done during fine weather without any cessation, operating night and day.

The complete tractor outfit is, as follows, with acreage worked in 10 hours:

- 5-16 oil gas tractor.
- 2 14-in. bottom gang plow. 8 to 10 acres
- 2 8-ft. double disc harrows. 38 "
- 3 5-ft. tooth harrows. 38 "
- 2 grain drills, 8 ft. 38 "
- 2 7-ft. mowers. 33 "
- 2 8-ft. binders. 38 "

Conditions That Spell Financial Failure.

When purchased by a farmer who does not possess or who is unable to purchase or hire the implements necessary to make the operations of the tractor profitable.

When purchased by a farmer who does not plow or cultivate at least 40 acres of land per year and who has no reasonable expectation of being able to plow or cultivate for hire, land belonging to his neighbors.

When purchased to operate upon land that is full of tree stumps, or is broken up with rocks, etc., without these stumps and rocks being first removed, in which operation the tractor will be found to be of great assistance.

When purchased to operate upon land broken up with barren places, swamps or soft places (that is, badly

drained land), or where the cultivatable soil is very shallow. Also where the land is very rolling and with steep inclines.

Advantages That Accrue From Tractor.

Reduced cost of plowing and of cultivation.

The possibility of using deep plowing and also deep cultivation.

The making possible of the undertaking of the most arduous form of farm work (now only possible for strong men) by aged men and very young men, even by women without overtaxing their strength.

The possibility, when necessary through bad weather, of continuing to plow seed, or harvest during the night, thereby assuring the several vital operations that have to be successfully carried out by the farmer being so completed at the farmer is assured of reaping the largest possible financial return. In fact, the tractor gives such a flexibility of farm operation that it is now possible to have each of the operations completed at the right time.

To quote: "A tractor gives a man power to plow deep and to plow quick; power that is not stopped by hard frost, bad weather or flies; power that will run day and night; if necessary, and power in a concentrated form, so that one man can do as much work as two or more men with horses. Probably there is no kind of work for which the tractor has been found more satisfactory, outside of plowing, than for harvesting. The grain must be cut quick when it is just ripe, and it is then about the hottest time of the year. It is a wonderful satisfaction to cut your grain with a tractor, as you find it does not have to stop to rest, eat, or even sleep, as do horses. A tractor saves your grain after you raise it. In recent years it has been learned that the depth and time of plowing has a great deal to do with the size of the ultimate yield."

Lastly, "Most men who buy tractors find, after they have them, that they use them for many more kinds of work than they at first intended when they bought. They also learn that the extra power they have is of great advantage to them in doing their work."

Items of Interest.

According to a report which comes from Ottawa, rural free mail delivery routes in Canada, increased in number from 614 to 3,586 between Oct. 1, 1911 and March 21, 1917. The number of mail boxes served, increased from 16,015 to 165,042. In the same period 2,682 new postoffices were opened.

The York County Holstein Breeders' Club will hold their first annual picnic at Bond Lake Park on Wednesday, June 13. Prof. H. H. Dean of the Ontario Agricultural College and Mr. W. A. Clemons, secretary of the Canadian Holstein Association, will give instructive addresses and a practical demonstration of the strong and weak points of a dairy cow. A stock judging contest for men under 30 years of age, and sports for both men and women, will be other features of the outing.

Better Ensilage at less Cost with

The TORONTO Hip-Roof Silo

The comparatively low cost of wood staves—the quickness and ease of erection—and the extra capacity afforded by the new HIP-ROOF—make the TORONTO Hip-Roof Silo less expensive per ton of silage than any other standard type. Being absolutely air-tight, even to the doors, and having no tendency to draw the frost, it makes better ensilage than silos costing far more. Write for Booklet explaining its advantages. 14



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Pumps with Every Wind that Blows

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Write for our Illustrated Booklet telling all about them. 15

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and wall plates make very handsome, easily cleaned, fire-retarding interiors. Splendid for home, church, school, etc. Fix up your room and see how you like it. Get prices and illustrations from
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Our 272 Egg Kind free. L. R. Guild, Box 76, Rockwood, Ont.

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Particulars from Canadian Pacific Ticket Agents or W. B. HOWARD, District Passenger Agent, Toronto, Ont.

No business can be successfully conducted without outside help and suggestions. The business man has his business magazine, the lawyer his legal paper, and the physician his medical journal. For the same reason, the dairymen require Farm and Dairy.

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KENDALL'S SPAVIN CURE

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Ed. Hilstone, Jr., Halliburton, Ont., writes: "I have been a user of your Kendall's Spavin Cure for about 20 years, with good results. Could you supply me with your *Formula for the Horse*? Don't take chances with your horses. Keep a bottle of Kendall's handy, \$1.-60 per box. Our book "Treatise on the Horse" free at druggists or Dr. B. J. KENDALL Co., Enoesburg Falls, Vt. 119



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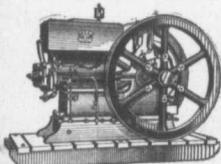
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Wheat Prices and Egg Quotations.

ONTARIO wheat now sells over the three-dollar mark. Western wheat is still high. Can the poultryman afford to buy it? Not long ago an Eastern poultryman in considering this question, decided to lay the case before Mr. F. C. Elford, Dominion Poultry Husbandman. Mr. Elford replied to the enquiries of our troubled friend as follows, and we pass on his reply for the benefit of other Farm and Dairy readers who may be similarly perplexed:

"I am not sure that I can help you out an awful lot," writes Prof. Elford, "but judging from our results this winter compared with last winter, I think that usually we can almost take it for granted that the price of the product raises relatively with the cost of the raw material. This is not always the case, but it has been the case with eggs. We find here, that taking the months January to May, 1917, the increase in cost of feed was 46 per cent., whereas the increase in price received for eggs was 60 per cent."

"It is what we call a commercial pox of pullets, and which laid about the same percentage this year that they

of course the cost of producing eggs depends very largely upon the egg yield. During this year, up to the first of May in the pen which I speak of, and which was not in any way phenomenal layers, the average cost of producing one dozen eggs for the various months was: January, 20.6c a dozen; in February, 23.7c; in March, 11c; in April, 13.6c. Our prices for these months were: January, 70c; February, 60c; March, 50c; April, 50c. At this rate there was money in eggs, even though the price of feed was high, and though we may have obtained a little higher prices for our eggs than most people, still eggs were sold on the Ottawa market at much higher rate than we charged for ours."

Leeds County Leads

THE poultry industry in Leeds County is booming. Walter H. Smith, district representative, writes that an executive meeting of the Lansdowne association was held on April 4th. At this meeting it was decided that the best means of improving the poultry stock of the county was by means of stock inspection. Then a special meeting was called with directors from South Lake, Caintown and Lansdowne present, and a pure-bred poultry association formed. 25 members of this association must first be members of the egg circle, and by paying an additional fee of 25 cents they will become members of the pure bred poultry association. By means of this association the branches will have any pure-bred flocks in the dis-

trict at their disposal to secure eggs for hatching. The Live Stock Branch at Ottawa is encouraging this movement and promises to supply a competent judge for doing inspecting work. Members owning pure bred flocks, by notifying the secretary of the Poultry Association, can have their flocks inspected. Members having flocks passing inspection will receive a premium on all eggs marketed to the egg circle. For all eggs sold for hatching they will receive an advanced price. Members of the egg circle requiring eggs for hatching may purchase these eggs, supplied as indicated above, at a very small advance over regular prices, by paying approximately 10 cents per dozen over the regular market price. As a further incentive to pure-bred poultry breeding, the Association guarantees an advance price of one cent per pound for all poultry marketed in the fall. Eggs of uniform color sell at a premium on

the market and pure bred flocks mean uniformly colored eggs. The chief reason for this is that stock comes value from the marketing of poultry. Pure bred poultry of proper utility type fatten more readily and make more economic gains than inferior stock. The economical gain in itself is of considerable advantage, but in the selling of dressed poultry, we find a most decided advantage in having most of our stock uniform in color. pure-bred stock, which uniform stock will bring from two to three cents more per pound on the market than a mixed pack of birds of uniform color.

Some of the other advantages of the pure-bred association might be noted. The school fairs and fairs associations have been demanding pure-bred eggs for hatching purposes and live birds for selling purposes. The pure-bred poultry association can supply these.

Wayside Cleanings

By "Burns"

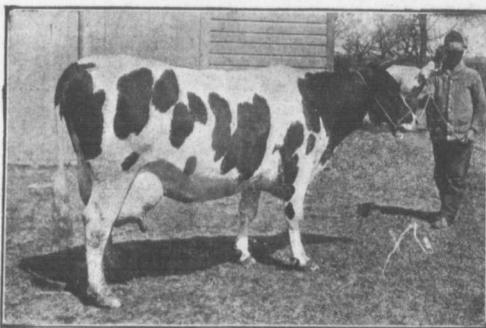
Look Ahead.

WE had the corn ground ready to be sowed and horses and men waiting, but what was to do the affairs the other day on the farm where we live. The men seemed to fight shy of the drill when it came to sowing corn, so I had to do the job myself.

Things went wrong in general for the first few rounds. The horses wriggle and twisted and the driver got excited, holding tightly to the reins and endeavoring to control every step the horses took, for we were so anxious to have those rows of corn straight. If twists or crooks appeared when the corn came up, we were sure to receive jest, and possibly sneers about it. A few times across the field made the perspiration appear on both horses and driver. After the first few rounds, however, there came a voice seemingly from somewhere, which said "look ahead!" How significant and full of meaning those words were, for as soon as they were put into practice the troubles and perspiration "disappeared" and the crooks gradually disappeared. Every one who has performed this duty knows how true it is that when the wheel mark is watched for some distance ahead it is much easier to keep the rows straight.

Experience has taught us that this is as true in other things. When we first got our Ford we bumped into things until we learned to "look ahead." The farmer who did not look ahead was bound to get his horse out in the winter or spring is getting behind with his work about now. The dairyman who has not sown something to supplement the pasture for the cows will find his milk cheques "dropping behind" after a while when these pastures get bare and dried up. The orchardist who neglects to spray will surely see the apple tree leaves disappearing when the worms appear, and will have plenty of cull apples to go to the elder mill or evaporator next fall.

We could soon enumerate quite a collection of things which are sure to happen if we do not "look ahead," but these will suffice. It must be remembered that the farmer's lot consists for the most part in planning for the future and thus progress is made. It is gratifying to know also that things run much more smoothly when the driver is "looking ahead" and careful, consistent planning of all things is one of the main factors of success.



A World Champion in Her Class.

Lady Segis Walker, a daughter of Count Segis Walker, in the herd of Purtefle and Leavena of Bloomfield, Ont., holds both the Canadian and the world's record as a "three-quarter" cow producing 10½ lbs. milk in 1 day. Her 7 day record is 8½ lbs. butter from 68 lbs. milk. Note the splendid veining. It was unfortunate that as a heifer she lost one quarter. Photo shows her as a 2-7-yr. old.

laid last, they gave us much higher revenue during '17 than they did during 1916, because of the relatively higher price of eggs over cost of the feed fed.

"We have not used as much wheat this year as usual, but have mixed in other feeds as they could be purchased. During the summer we will feed a good proportion of bran to all growing chicks, and mixed grains as we can buy them. In order, however, to cut down the cost we will market the cockerles throughout the season as the demand and price will justify. Much of the high cost of production is brought about because we do not get rid of our birds at the right time, and I think that good, plump broilers will be fairly high, and the more we can sell of the cockerles when they are plump, up to two or three pounds, the better. It will save feed and room for the pullets.

"Referring again to new-laid eggs,

The (Contd.)

W. G. O. J. Ayr

Agod bull
McMillan; 2,
R. Nees; 3, C.
don; 4, Hill
Hill, 5, Hill
Picoe, R. H.
Picoe, C. H.
Lozgar, C.
Dixon, G. M.
Gast, B. H.
Bull, senior
Master, M. C.
Heather, D.
Lead, Geo. H.
Bull, junior
Enbrin, S. A.
mark and
Neser, 4, Lord
Millan.
Bull, senior
Ian (Gib call
of Masterpiece
meat); 2, R. E.
D. T. Nees.
Bull, junior
Grand champion
Andrew, R. R.

Dry cows
don; 2, Loch
E. Catlin's Be
M. H. B. C.
Cavers.

Cow, 2 yrs. o
one 2nd, R.
house Meg and
don; 3, Violet
Heffer, senior
Nees; 4, R. R.
Morton, M. C.
Cavers, M. C.

Heffer, junior
R. Nees; 4, C.
Heffer, senior
3 and 4, D. T.
Heffer, junior
Arthur; 2, W. W.

Mature cow
Henry, R. H.
Gordon; 3, J.
Cavers; 4, A.
6, R. O. T. T.

Cow, 2 yrs. o
one 2nd, R.
Ian; 3, Woodside
4, Maple Valley
6, S. O. S. O. S.

Cow, 2 yrs. o
Cavers; 2, Elder
Grand champion
Henry, R. H.

Graded heds
T. Nees, Cavers
Junior herd; T.
Gordon, Cavers,
Four, get of a
D. T. Nees, Caver

Two, progeny
H. P. Millmald
Nes, H. H. H. H.
Burnside Post; 4
Four females
Cavers, Gordon.

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on the continent; the latter has been very successful at Quebec fairs. The Brampton herd was well represented, though, of course, many of their best animals are timed for Toronto Exhibition. The strength of the Ruiters herd was a surprise to all, and the money was fairly well divided all the way through. Both championships, however, remained with the Brampton herd.

In males, Ruiters' most notable win was in the senior class with Canadian Fairy Boy. In Brampton Radiator, however, Bulls had a two-year-old with depth, strength and character, and he was rather an easy champion. Another very nice animal was the first senior bull calf. Some of the cow classes presented many difficulties to the judge, owing to the diversity of type between the two herds. Of the championship, however, there could be no doubt, it going to Brampton Maitland B, a dry cow that gave all indications of being a great Jersey.

Jersey Awards, Male.
 Bull, mature: 1, Canadian Fairy Boy, Ruiters; 2, Brampton Burma King, Bull; 3, Bull; 2 yrs.; 1, Brampton Radiator, Bull; 2, Triad's Bull, Ruiters; 3, Jas. Winter, Ormstown.
 Bull, 1 yr.: 1, Bull.
 Senior bull calf: 1, Brampton Bright

Ontario Plans Improved Highways

Takes Newspaper Representatives on Trip of Inspection—More Centralization Contemplated—Many Types of Roads Inspected

THE provincial government has an ambitious policy regarding future road construction in Ontario. The Minister of Highways, Hon. Findley McDiarmid, and the Deputy Minister, W. A. McLean, outlined this policy to representatives of the press last week during a tour of inspection by road over several hundred miles of country roads. At present the policy in one of maintenance rather than of construction. The aim is to hold what has been already constructed. At the moment the highways department is organizing their resources and developing plans whereby they will be able to begin an extensive system of improvement over the country as soon as the war is over. The policy is one of cooperation and its success depends upon this. It is modelled after a system that is said to have proved successful in France.

The plans of the government, as outlined to the newspaper men, are as follows: The government wishes to cooperate with the county council and make county roads out of the principal thoroughfares in the county. This means that the county council will take over and improve certain main roads in the county determined by the county and subject to the approval of the government. These roads are classified as primary or secondary, according to the amount of traffic passing over them. The aid given is as follows: 50 per cent. towards construction and 20 per cent. towards maintenance of primary county roads, and 40 per cent. towards construction and 20 per cent. towards maintenance of secondary roads. The approval of the government has been spent on these county roads by the government and the county council. The policy is one of centralization, a gradual taking over by the county of the approval of the government. These roads are, in these, in turn, aided by the government, and possibly taken over. Thus the central authority would be the government. The county authority would be the county council and the district authority would be the township council. This policy is the one adopted in France, and which, it is said, has worked out satisfactorily.

Sam, Bull; 3 and 4, Ruiters; 3, Bull; Junior bull calf: 1 and 3, Bull; 2, Ruiters.
 Bull, champion: Brampton Radiator.

Female Awards.
 Mature cow, in milk: 1, 2 and 4, Brampton Lady; 2nd, Marcia; 3rd, Kathleen of Roslin Park, Bull; 3, Polette of Pinehurst, Ruiters.
 Cow, 2 yrs., in milk: 1, 3 and 4, Hilda of Roslin Park, Brampton Canary and Hilda, Bull; 2, Ghost of Pinehurst, Ruiters.

Heifer, 2 yrs., in milk: 1 and 2, Honeybee of Pinehurst and Fawn and of Pinehurst, Ruiters; 3 and 4, Bull.
 Mature cow, 1 yr., in milk: 1, Brampton Maitland B and Brampton Brieo, Bull; 2, Belle of Pinehurst, Ruiters.
 Heifer, dry 3 yrs. old: 1, Lady 2nd of Pinehurst, Ruiters; 2, Brampton Margaret K. 2nd, Bull; 3, in this class many would have reversed the decision. The second cow was a very broadly loined heifer with a very sharply udder, but was criticized as being a little too mature to allow of further development.

Yearling heifer: 1 and 4, Bull; 3 and 3, Ruiters.
 Heifer, junior calf: 1 and 3, Bull; 2 and 2, Bull.
 Heifer, junior calf: 1, Ruiters; 2 and 2, Bull; 4, Ruiters.
 Female champion: Brampton Maitland B.

Group Awards.
 Graded herds: 1 and 4, Bull; 3 and 3, Ruiters.
 Young herd: 1, Ruiters; 2 and 3, Bull.
 Set of six: 1 and 2, Ruiters.
 Produce of cow: 1 and 2, Ruiters.
 Four cows, in milk: Bull; Ruiters.

While this is true, it is likely to be some time before our Ontario farmers will be willing to give over fully the control of even main roads if it means that they will largely lose control of the rate tax as well.

Roads Inspected.
 At 3:30 p.m. June 6, the party of some 12 newspaper men, representing the farm papers of the province, including an editor of Farm and Dairy, as well as representatives of some of the city papers, assembled at the Parliament Building, Toronto, and proceeded on a tour, headed by the Deputy Minister, W. A. McLean, and later joined by the Minister, Hon. Findley McDiarmid. The idea was to travel over some of the improved or county roads and to compare them with certain township roads. The route was planned accordingly. The party first travelled north to Barrie, in Simcoe county. Both these counties have improved roads. There a detour was made southwest to Alliston, where the warden, Mr. Horrell, and some of his colleagues were met. The policy of the Simcoe council and their past experience along road-making lines was explained. From Alliston the party travelled southwest to Orangeville. In Dufferin county, was the road inspected. This was the only road inspected in Ontario that has not yet taken advantage of the proffered government aid. Immediately Orangeville was passed the roads improved and continued good all through Westmorland counties.

At Guelph the warden Mr. Dickson, and other officials were met in the evening. The next morning the party proceeded via Pushtick, Galt, Kitchener and Shakespeare into Oxford county. At Woodstock a pause was made for lunch, and later the warden of Oxford county met the visitors. From Woodstock the route continued through Brantford and stopped at Hamilton. In the evening, after dinner, the party returned over the Toronto-Hamilton highway to Toronto. On this tour good and bad roads were seen. The weather was rainy, and this condition was a handicap for measuring the various types of road, and the efficiency of the improved roads was fully demonstrated. Outside of Dufferin county, the town roads, with

out exception, were not what we came in contact with. The heavy rain did not have any effect on the improved county roads, but it converted the mud township roads into veritable bogs.

Objects of the Inspection.
 Briefly, the object of the inspection was to (1) compare county and township roads; (2) to study the different types of road, also the bridges and culverts; (3) to find the condition of repair and maintenance cost; (4) to meet the county road officials and confer with them on the way forward; (5) to note the type of county and its agricultural possibilities.

The county roads, without exception, were good. Those that had been taken over some time ago were better than some of those taken over recently. Many counties took over some stretches of road last year. These have not been improved much due to insufficient labor conditions. The township roads, in general, were in a poor state of repair. In ordinary dry weather the township roads would be quite passable, but heavy rains before and during our trip left them in poor shape. Continued heavy rainfall is the acid test of a good road. The township roads are, however, being improved. The township councilors and the warden of the county councils and spreading a good deal of gravel in their repair work, and also building more concrete culverts. Statute labor is not satisfactory. It will likely be discarded in the near future.

Types of Road.
 The type of road varied according to locality. Out of Toronto, going north, is a far-narrow road, has been constructed at a cost of \$6,700 a mile. The cost of upkeep is about \$100 per mile per year. This is a very good road. The tar is used to fill the voids in the road surface. For farm traffic it cannot be blown out by heavy traffic. Some broken stone road was encountered on the trip, mostly on township roads. It is a step in advance over the mud road. For farm traffic it is good. It is, however, pretty hard on automobiles, many of which are now owned by farmers. Gravel roads seem to be the most popular, when underlaid with a good base. In very good gravel road, from Tavistock to Woodstock, was in a fine state of repair after ten years' service. The cost of upkeep was very low. Gravel roads cost from \$2,500 to \$3,500 a mile. They are serviceable, easy to keep up, and the material, in many sections, is easily obtainable.

The concrete road was investigated. Unquestionably it was the best road passed over. It was the Ontario and Toronto-Hamilton Highway is a good example of this type. First cost for concrete is very high, and it is doubtful if many miles of it will be constructed in the interior. Heavy traffic and frost may crack it, and after a few years of service the upkeep will be high.

One very desirable thing I noticed was the large number of permanent bridges built by the county council. Erected in counties that have taken advantage of the government aid. Steel-frame bridges with reinforced concrete floors were very prevalent in Simcoe, Waterloo, and other counties. This permanency cannot be too strongly commended. Concrete is displacing steel wherever it can possibly be used. The narrower creeks are being spanned by all-concrete bridges.

Maintenance and Repair.
 The county councils are spending most of their money on maintenance rather than construction. All of the improvements were made for maintenance, considering the scarcity of labor. The split-log drag is used to good advantage in many sections. One problem (Continued on page 20.)

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Calfskins (curd).....30 to 35c per lb.
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SOME five weeks have recently been spent in seed inspection work in what is sometimes called New Ontario, or that part of Ontario north and west of North Bay. It was inspiring to find the motto, "Business as usual," in full operation, notwithstanding the effects of the war in boosting prices. Perhaps this is however an exhilarating effect and keeping the spirit of the producers hopeful. The prices to be paid come hardest upon the man who has but limited capital and no earning power, and upon men on salary where it is so fixed that there isn't much chance for a raise.

The fairly good crop of potatoes which was obtained in many parts of Northern Ontario was a great boon to the farmers last autumn, and a still greater one to those who could store them and put them on the market this spring. A price of \$1.50 a bag was freely paid in the field last fall, but this spring they sold for as high as \$3.25 a bag in car load lots. Some five years ago, when Mr. Collins, the District Representative of the Ontario Dept. of Agriculture, was located at Port William, the cities of Port Arthur and Port William were importing potatoes. Last year, besides supplying local needs, a good many car loads were shipped from these cities to points in old Ontario, and a number of car loads left this spring for the various towns and smaller representatives in the persons of Messrs. Collins and Davies were able to give the farmers of the Thunder Bay District; and it was worth while.

Potatoes of good quality. A very nice, smooth potato grown there on suitable soil, and is of good quality. This is also true of potato soils in the Rainy River, the Kenora, and the Temiskaming districts, where several carloads of potatoes were shipped out during the season. It will pay many Old Ontario farmers to look for their supply of seed potatoes from these regions. It will mean increased yields and earlier matured stock. I believe that this idea is worth considering by the farmers' clubs of Old Ontario.

Generally speaking, the seed supply seemed to be adequate for the farmers' needs, except in seed oats, for which there was a good demand. In some localities the farmers were handicapped in that they lacked the ready cash to buy the high-priced seed this year. They were afraid to pledge future credits in payment for fear they might not be able to make good this autumn. The quality of the clover and grass seed generally used, as found in the hands of the dealers, was No. 1. In some places the very best stuff the seed merchants put up was held to be none too good and was in demand.

Are Exporting Clover Seed. Several localities in this north country are now producing their own seed in such quantity that carloads are being shipped from the Temiskaming and Kenora districts. This is chiefly red clover and alsike and mixtures of these seeds with more or less timothy. The growing of the mixed crop seems to be rather a mistake for the seeds are offered separately. Considerable red clover seed was produced in the Thunder Bay tri-act last summer, one or two men having a ton of seed for sale. This is becoming another profitable source of revenue for the farmers of New Ontario. The purity of this seed ranks high but the general quality is more or less affected by the climate in that

the samples of red, especially, contain a considerable number of brown, dead-looking seed.

The seeding season was correspondingly late, with conditions both east and west. With the exception of the Temiskaming district, however, the crop was pretty well in by the end of the third week in May and in good condition, as the soil was generally dry, and worked up into a fine seed bed.

A very heavy fall of snow about Easter time in the Temiskaming district along with the cold, backward weather, kept the soil in rather a wet state, so that seeding is generally delayed from New Liskeard to Hearst. Ice and snow were leaving the north country rather reluctantly this season, and this in some measure accounts for the cold, backward condition which prevails all over Canada. With the advent of warmer weather in the near future there should be good prospects for the crops, even with this handicap.

It is quite evident that the preponderance of settlers taking up land along the T.N. and the National Transcontinental lines are French. My observation led me to believe that the boys and girls now going to school in these French-settled localities both underfoot and could talk less English than their parents. It would appear that there was something lacking in the opportunity for each French-Canadian boy and girl to secure a good English education, which is their right and privilege.

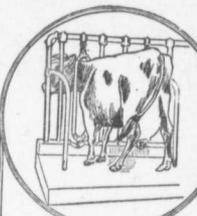
I believe that unless weather conditions are very bad that Northern Ontario will give a good account of herself along agricultural lines this year.

The Modern Gas Tractor.

THE Modern Gas Tractor, its Construction, Utility, Operation and Repair, is a practical treatise on the gas tractor by Victor W. Page, who is now one of the foremost American writers on all subjects in connection with the gasoline engine. His latest work revised and enlarged, covers every branch of up-to-date gas tractor engineering, drive and maintenance in an untechnical manner. The farmer tractor owner who is willing to study the pages of this work along with its hundreds of diagrams and illustrations, will be given a full understanding of the internal anatomy of the modern tractor and just how and what to do when accidents or stoppages occur. It considers fully all types of power plants, methods of drive and speed changing mechanisms, describes design and construction of all parts, their installation and adjustment, as well as the practical operation of tractors in the field. An interesting chapter deals with an attachment to the automobile, whereby the pleasure car may be changed into a farm tractor. "The Modern Gas Tractor" is a well bound book of over 500 pages. It may be had through Farm and Dairy for the regular price of \$2 postpaid.

J. A. Maharg, President of the Saskatchewan Grain Growers' Association and the Saskatchewan Co-operative Elevator Company, was last week nominated as the Grain Growers' candidate for the Federal constituency of Moose Jaw.

The impression prevails among many, that the presence of the male bird in the flock is essential to the production of a maximum number of eggs. This assumption has been proven, time and time again, to be absolutely without foundation.



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GREAT LAKES STEAMSHIP SERVICE.
The Canadian Pacific Railway will commence Saturday, June 2nd, operate Great Lakes Steamship Express trains between Toronto and Port McNicoll on the following schedule, with first-class coach and parlor car, running through without local stops.
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Southbound.
Leave Port McNicoll Mondays and Fridays 8:30 a.m., arriving Toronto 11:45 a.m.
Great Lakes Service via Owen Sound is now in operation Steamship "Manitoba," leaving Owen Sound at midnight each Thursday for Sault Ste. Marie, Port Arthur and Fort William. Full particulars from any C.P.R. Agent or W. B. Howard, District Passenger Agent, Toronto, Ont.

Farm and Dairy

AND

Rural Home

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The paid subscriptions to Farm and Dairy exceed 21,000. 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 22,000 to 25,000 copies. No subscriptions are accepted at less than the full subscription rates.

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

OUR GUARANTEE.

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid, no-advance subscribers, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of any contract that in writing, to advertisers you state: "I saw your advertisement in Farm and Dairy."

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

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

The Ormstown Spring Show

THE ORMSTOWN Spring Show, reported in this issue of Farm and Dairy, is one of the most remarkable live stock fairs of Canada. It is remarkable because of the number of the exhibits and exhibitors, considered along with the limited district from which they are drawn. At the fair of last week there were three hundred and fifteen horses, one hundred and fifty Ayrshire cattle, one hundred and eighteen Holsteins, fifty-five Jerseys, and a small exhibit of sheep, swine and poultry. A small percentage of this exhibit came from Ontario, a slightly larger percentage from other sections of Quebec, but a great part of the total came from the small district of Beauharnois and a good portion of these came from within a few miles of Ormstown. There are other sections of Canada of equal extent that might have produced as good a horse show or a better Holstein display; certainly many other sections of the Dominion could improve on the sheep and swine exhibit, and the Jerseys came from outside anyway; but we know of no other district that could reproduce a show so strong in all departments, and at no fair in Canada is competition keener in Ayrshires, for, be it known, this is the first home of the Ayrshire in America and still the great Ayrshire capital of the continent.

The Ormstown Show is the result of a system of agriculture that rests on the sure foundation of live stock farming. The fair and the district afford conclusive evidence of the profitability of good live stock and lots of it. Property is respected in the well kept farms and, more con-

clusively still, the splendid homes and farm buildings. And the Beauharnois District, in common with many other of the best sections of rural Canada, owes much to the dairy cow.

The Second Silo

THE silo manufacturers of Canada are rushed with orders. The greater part of these orders come from men who are building their first silo. "It is really astonishing, though," writes an extensive manufacturer, "what a large proportion of our correspondents tell us that one silo has proven so valuable that they have decided that two must be better, and they order a second for this season's delivery."

There are many arguments for a second silo. The value of silage for summer feeding is becoming more generally appreciated and corn is becoming a greater winter mainstay than it once was. The Central Experimental Farm at Ottawa have this winter come to appreciate fully still another advantage of lots of silo capacity on the farm—it affords the best possible method of carrying the surplus crop of flush years over to the leaner years and thus maintaining a stable live stock population on the farm without great expenditures for feed. At Ottawa there was also capacity to store the bumper corn crop of 1915. The surplus was carried over and has supplemented the short crop of 1916 to such good effect that the new crop silage was not touched until the early weeks of April, 1917. There will be no scarcity of corn ensilage at Ottawa this year. A second silo may seem expensive, but if cost is figured against storage capacity it will be found that this is the most economical method of carrying surplus roughage for future use. If the acreage and prospects justify it, by all means erect a second silo. Many who have two are now erecting three.

Why We Urge Production

THE following extract from a letter received by Farm and Dairy a few days ago explains itself:

"I notice that Farm and Dairy is howling at the farmers to produce more crops and isn't offering us any more assistance than are the city fellows who are strong on the same cry. Now let me tell you, the farmers are getting mighty sick of this hot air and they don't like it from you and the other farm papers. I advise you to cut it out."

Farm and Dairy can quite understand the attitude of the farmer toward the rivers of advice that he has been receiving gratis for many months past, much of it coming from parties who know nothing of the difficulties with which the farmer has to cope. We appreciate the great efforts that the farmer is making to maintain the nation's food supply; no class in the community are working longer hours or to greater purpose. But it is necessary that we have before us a clear conception of the great need for food, that we may leave no stone unturned to keep production at a maximum. Many countries in the world are already on the verge of starvation and the world's food supplies are exceedingly short. The call to produce is based, therefore, on both patriotic and humanitarian grounds. The farmer will respond to both appeals and Farm and Dairy has no apology to offer for the part it has taken in the production campaign. The quotation from the letter of our irate subscriber, however, should serve as a warning to many meddlesome organizations to keep their hands, and likewise their tongues, off the farmers' business, unless they first make themselves more fully acquainted with the real needs of the hour.

Labor for the Farm

WHILE it is true that many city organizations have proven more meddlesome than useful in the production campaign, this does not apply to all, and farmers should investigate very closely the motives of our city friends before we condemn their work. The War Production Club of Toronto has, so far this year, placed almost four hundred men for the whole season on the farms of the adjoining counties. They have a list of over one thousand men who are willing to assist with haying and harvest at military pay of "a dollar ten" a day. In addition one large factory is willing to free five hundred of its employees on full pay for three weeks for the same purpose. Work such as this is most creditable and very valuable with the labor situation as it is. In a smaller way, other organizations have done similar good work.

A great difficulty in applying this city labor to the extraordinary demands of the farm is that, through many years of labor scarcity, the farmer has learned to so regulate his system of farming that there is a uniform demand for labor through the entire season. This system cannot be changed at quick notice, and it has been a source of surprise to city organizers that the supply of short time labor seems to be greater than the demand. It may be that much of this surplus labor will be absorbed when harvest is actually on, but to properly organize the supply, city production clubs require in advance a definite idea of how many men will be needed and where. If this advance information is given, our city friends are confident of their ability to meet the demand.

The Hydro-Electric Purchase

PUBLIC ownership in Ontario has achieved a notable advance in the purchase by the Hydro-Electric Commission of extensive water rights at Niagara Falls. Heretofore the Commission has acted only as a middleman, distributing Niagara power to municipalities and corporations. It will now develop and distribute its own power. The purchase of the Ontario Power Company's water rights will be a permanent advantage to the people of Ontario.

But there is "a fly in the ointment." Of the millions of dollars paid over by the people of Ontario for their new property, at least seventy-five per cent. of the purchase price is for the water rights and not twenty-five per cent. for improvements. In other words, Ontario has been forced to pay millions of dollars to buy back one of its natural resources that, under a wise and far-sighted policy, would never have been surrendered to a private corporation. It is now too late to lament over the loss of these millions, but the transaction should carry with it a lesson for the future. There are many undeveloped power possibilities in Canada that have not yet been exploited. These should be retained in the possession of the Crown for the benefit of the Canadian people. If private corporations are allowed the privilege of developing these powers it should be on a rental basis only, and even then ninety-nine year leases are too long to be tolerated. Let us recognize that the water powers of the country should be an inalienable right of the public.

Cheese prices have been fixed for the season. While not as high as farmers were anticipating, they are such as to guarantee a reasonable price for our product. The element of speculation, too, has been removed. The farmer may lay his plans for the season and his plans need not be altered to meet the vicissitudes of the cheese market. For the dealers it means close figuring and competition may become so keen that country buyers will be done away with altogether and cheese be shipped direct to Montreal.

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The Government Announces the Price Set for Cheese

The Season's Price Set at 2 1/4 cents a Pound at Montreal—Purchases Now Being Made on That Basis—Grading Will be More Strict—The Rules Announced by the Commission

THE Government's announcement of the price to be paid this season for cheese, as well as the publication of rules adopted by the Cheese Commission, that are intended to govern the purchase of cheese, has gone far to clear up the very unsatisfactory situation that has existed for some time in regard to the buying of cheese in Canada. The first light on the new conditions was given by Hon. Martin Burrell in a speech made in the House of Commons last week. This was followed which will govern the purchase of cheese that have been drafted by the cheese commission and which were read on various cheese boards of the country. Following this the Montreal exporters gave additional light concerning certain other details on some cheese boards through their buyers. Since then the cheese commission has visited the Brockville cheese board and thus met with the factory men. While there are still some points on which our dairymen will seek for further light, the general situation now is about as follows: The British Board of Trade, acting with the approval of the British Government, has established a price beyond which cheese must not be sold in Great Britain. This price has been set at 28 cts. a lb. wholesale and 32 cts. a lb. retail. Once the British Government sets the price, the Cheese Commission, which was appointed to Montreal for all cheese that will grade as finest. As the freight and cartage from country points into Montreal, together with other charges, such as packing in accordance with the British Board of Trade requirements and all expense incurred at Montreal after the arrival of the steamer, and putting the cheese on the price, as well as the exporter's profit, the price in the country will run enough lower to cover these charges. At the cheese boards last week the price ruled at from about 20 1/4 cts. to 20 15-16 cts. a lb., this latter price having been paid at Madoc.

Grading Will Be Strict.

One effect of the new conditions promised is that cheese will be graded more strictly this year than ever before. If this proves to be the case, it should have a good effect in the stimulating improvement in the quality of our cheese. The Commission has decided that the prices paid will be as follows: Grade No. 1, 2 1/4 cts. f.o.b. steamer, Montreal; Grade No. 2, 2 1/4 cts. a lb. and Grade No. 3, 2 3/4 cts. a lb. Culls will be accepted by the Commission, but the price paid will be on the merits of the cheese. Graders have been appointed by the Commission, who will inspect and grade according to quality, every lot of cheese purchased for the Commission that goes to Montreal. In the past buyers have been in the habit, on a rising market, of accepting many cheese that they would not accept under other conditions. As the price has now been set for the season, it means that this practice will be practically eliminated and that all the cheese will be graded very sharply by the buyers. Makers who have been in the habit of taking poor milk in order to win patrons away from other factories, and who, in consequence, have had to turn out some poor cheese, which they have frequently

been able to get by the buyers on account of market conditions, will run the greatest risk if they try to follow this practice this season. Thus, the effect of grading the cheese at Montreal is likely to mean that the cheese will not only be graded more sharply at the factories, but that the makers will have to commence grading their milk to supply more sharply.

Effect on Home Trade.

The effect of the new conditions on the home trade cannot yet be determined. There is a considerable difference in the quality of cheese bought for British consumption and that which frequently finds favor on the Canadian market. Canadian buyers are not as discerning in the matter of quality as are many British consumers. The result is likely to be that quite a little of the second grade cheese will be sought for Canadian consumption. Canadian consumers will not pay more than the British price unless something unforeseen happens, but may purchase considerable second grade cheese at prevailing prices.

Figures of Expense.

Farm and Dairy has not been able to secure, as yet, the exact details of how the difference in price between the 28 cts. a lb. wholesale and 32 cts. a lb. retail is allowed to charge and 2 1/4 cts. that will be paid for Canadian cheese on board ship at Montreal, is made up. The figures have all been worked out carefully by the Commission, however, and we hope to be able to make them public shortly. Dairy Commissioner J. A. Ruddle advises us that those who are familiar with this phase of the business, estimate that there is very little margin left for those who handle the cheese on the other side. This may readily be assumed to be the case in view of the fact that ordinary freight is about three cents a pound, war risk is about 5 per cent. in addition to which there are charges for marine insurance, wharfage, switching and other similar work, to say nothing of a margin of profit to the man who handles the cheese. From the prices that have been set in Great Britain, it is evident that British retailers are allowed four cents to cover their cost for handling and profits.

In Canada the difference between the price that will be paid on the cheese boards and the price paid for the cheese by the Commission at Montreal, will be regulated by the competition between Canadian buyers for the cheese. It is altogether likely that this competition will ensure a full price being paid to the producer. In next week's issue of Farm and Dairy we hope to be able to give further information on the situation. Incidentally it might be noted that the price that has been set for this season will average about two cents a pound more than the average price paid factory men last year. A portion of the Hon. Mr. Burrell's address on the cheese situation appears elsewhere in this issue.

The Commission's Rules.

The following are some of the rules that have been announced by the Cheese Commission: No cheese will be accepted under ten days old.

Payment will be made in exchange for shipping documents accompanied with Invoices, Graders' and Public Weighmasters' Certificates, all shipping

(Concluded on page 20.)

Don't put off this silo question any longer

It's too important.

Letting things go until the last minute is a habit many of us have, and it's a mighty bad habit, because things that are put off either never get done at all or if done cost more in trouble and expense.

The wise man makes his plans ahead of time. He always has his buildings and other equipment ready before he actually needs them, and he never has to worry himself sick and hire extra help at the last minute to get things done.

There can be no question as to which of these ways is the better.

Lay your plans now for an IDEAL GREEN FEED SILO

Order it and put it up now, while you have plenty of time to get it ready. It will be the best investment you ever made.

It will mean 25% more milk in winter at 15 or 20% less expense. It will enable you to keep more cows on the same acreage and maintain the fertility of your farm. It will solve the problem of green feed for your cows when pastures fail in summer.

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THE UPWARD LOOK

The Power of Prayer

"On one occasion we arrived at the town of Ho Tr'un late in the afternoon, expressing to stay there over night and probably longer; but when we arrived we found the Christian whom we had sent to arrange for our visit, had failed to get a place for us to stay in. We were in serious difficulty, as it would be almost impossible to make the journey to the next place that night. While the animals were feeding and we were trying to eat our dinner in the midst of the crowd, Mr. Goforth said, 'Let us just ask the wants us to stay here.' We had scarcely finished eating when the Lord came up, saying, 'Praise the Lord a wealthy man has offered you a fine empty place which has just been fixed over and he says you can have it as long as you like, free of rent.' Here was surely one of the Lord's exceedingly abundant. For three days we preached the Gospel to many hundreds of men and women and a work was begun which has continued ever since.

"On one of the early visits a woman came with a little child whose foot was badly burned. The whole foot reaching some distance up the leg. The child was feverish and seemed in a serious condition. It happened on that trip I had forgotten to bring the simple remedies which I was accustomed to take with me, so I told the woman I could do nothing for the child. But again she begged so piteously that I could not turn away; and lifting up my heart in prayer, I asked the Lord to guide me if there was anything I could do. Even while I prayed the thought of a bread poultice came to mind. This remedy seemed an almost absurd one; I had never heard of such a thing being used before under like circumstances; but I resolved to try it. Twice a day the foot was cleaned and put in the poultice and it was really wonderful how that foot healed. We were there 10 days and when we left the foot was almost completely well. The mother, father, child herself and indeed, the whole family, became Christians.

"I give the following instance to show how impossible it was to know when one would run into danger. Going to a certain village for a day's preaching I took little Mary with me, then three years of age. We were waited on by a Christian woman who was most kind and attentive, bringing water and food for both Mary and myself. Being much taken up with preaching to the woman, it did not occur to me to ask this woman why she kept her baby's face covered, for the child was always in her arms. Just as we were leaving I asked her. She uncovered the child's face and to my horror I saw the child was covered with smallpox! For weeks I watched Mary's temperature, but nothing developed. It was through repeated instances of this kind that I came to see that Mr. Goforth was right when he said, 'The safest place for yourself and the children is in the path of duty.'

"As we began to prepare once more for our return to China after furlough, one serious difficulty faced us. Our eldest son could be left to face the world alone, but not so our daughter of 16. It was necessary that a suitable guardian should be found for her. I called upon three different ladies whom I thought would be most likely to realize some responsibility towards

the missionary's daughter, but all three declined to accept the responsibility. I then saw that it was not me to try to open my own doors, but that I must look to the Lord for this to return to China and to leave my dear child, to send me one to whom I could trust her. But a short time to pass when one day I received a visit from a lady whose life had been devoted to the training of young women. She was a most wholesome Christian character and ideal womanhood, made her the one above all others in whose care I could gladly leave my daughter. This lady told me how in her early years she had hoped to give her life to China, but the way had been closed. She now felt the Lord had laid it upon her heart to offer to take charge of my child. Years have passed since then and she has fulfilled my highest expectations of her. Rarely has an answer come more definitely from a loving Father than did the offer of this friend, nor indeed one that brought greater relief and help; her offer was an unmistakable proof that the Lord would keep my child as I gave her up."

Note—The above incidents are a continuation from last week of the experiences of Mrs. Goforth, and the power of prayer as published in recent issues of The Sunday School Times.

"Knee Deep in June."

WE are now well into June, the first month of summer, and it is certainly one of the grandest months of the year. The other day we picked up James Whitcomb Riley's poem, "Knee Deep in June", and while the majority of us are too busy about June to 'jes' git out any rest and not work at nothin' else," there is something refreshing in the sentiment of this poem. Our space is limited so we cannot publish the poem in full, but here it is in part:

Tell you what I like the best—
"Long about knee-deep in June,
"Bout the time strawberries melts
On the vine—some afternoon
Like to 'jes' git out and rest,
And not work at nothin' else!"

Orebard's where I'd rather be!
Needn't fence it for me,
And the whole sky overhead,
Sort o' so's a man kin breathe—
Ebbe he art and kind o' has
Ebbrow room to beezin' in
Sprawl out lenthwards on the grass
Where the shades thick and soft
As the kivvers on the bed
Mother fixes in the left
Allus, when they's company!

Jes' a-sort o' lasin' there—
S' lazy, at you break and peer
Through the waver' leavies above,
Like a feller 'at's in love
And don't know it, der don't keer!
Evert'ing you hear and see
Got some sort o' interest
Maybe find a bluebird's nest
Tucked up there conveniently
For the boy 'at's 'bout to be
Up some other apple tree!
Watch the waded skootin' past
'Bout as peart as you could see
Where the Bob-white raise and whis
Where some other's whistle is!

Name! If they ain't sompin' in
Work 'at kind o' good for me
O' convictions—'long about
In him especially!
Jes' a-restin' through and through
I could sit about w'head
Nothin' else at all to do
Only jes' see whishin' you
Wuz a' gettin' best like me,
And June wuz eternity!

Lay out there and try to see
'Ew low lazy you kin be!
Tumble round and some yer head
In the clover-bloom, er pull
Yer straws hat across yer eyes,
And peer through it at the skies,
Thinkin' o' old chums 'at's dead,
Maybe 'millin' back at you
In betwixt the beautiful
Clouds o' gold and white and blue!
Month a man can rally love
June, you know, I'm talkin' o'!



ROYAL YEAST

Makes the whitest lightest

Has been Canada's favorite yeast for over a quarter of a century. Bread baked with Royal Yeast will keep fresh and moist longer than that made with any other, so that a full week's supply can easily be made at one baking, and the last loaf will be just as good as the first.

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Curdalac* (Liquid Coagulator) and Spongy Pepsin for Cheese-making
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Are the original peptic coagulators. Are uniform and tested for curdling power. Are made by the best known pharmaceutical laboratory in the world. Have stood a full year's test in several hundred cheese factories, and are not an experiment. Used properly, give a full yield of cheese of prime consistence and flavor. Cost less than Rennet extract.

Don't delay or experiment with novelties. Specify "P. D. & Co." and get a reliable product. Ask your supply dealer for information and prices.

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PARKE, DAVIS & CO.

Don't Raise "Slackers"

SEND THEM TO THE BUTCHER

Nearly every herd of dairy cows has its proportion of "Slackers"—cows that eat as much as the best milkers, but give the least milk in return—both in quantity and quality. They are excellent workers at feeding time and splendid shirkers at milking time. How many "slackers" have you in your herd? Do you know them?

Test the milk and know which of your cows are profit producers, and which are merely good looking, and good natured "star boarders."

Farm and Dairy has a supply of Babcock Testers for its readers. You can get one without cost.

Just call on a few of your dairy farmer neighbors. Tell them about Farm and Dairy and how valuable it is to every farmer who owns a cow. You read it yourself, so you know its worth. Get their subscription to Farm and Dairy at the regular rate of \$1.00 per year, you, free of all cost to you, a four-bottle Babcock Tester, complete for testing milk and cream.

BOYS! Get busy right now. This is a splendid chance to show your worth. Go in and win the Tester, and put your dairy on an up-to-date basis. Others are doing it. So can you.

Yours for Better Dairy Herds,

FARM and DAIRY

Circulation Department,

Peterboro, Ont.

When You Write---Mention Farm and Dairy

Winning the Wilderness

(Continued from page 14.)

don't you do more of it?" Thaine asked.

The girl answered, smiling: "Just between us two, I hope to do a piece good enough to sell and help to lift the price of alfalfa seed a bit." "By the way, I brought the first load of seed over just now. Where's Uncle Jim?" Thaine asked, trying not to let the pity in his heart show itself in his eyes.

"Uncle Jim is breaking seed—weeds, I mean—for fall sowing. Wait a minute and I'll get you the money he left for you."

Thaine threw himself down in the shade beside Leigh's seat while she went into the house.

"I wish I didn't have to take that money, but I know better than to say a word," he said to himself. "Thank the Lord, the worried look is beginning to leave Uncle Jim's face, though. How could any of us get along without Uncle Jim?"

That little amount of money was worth so much, but it's the beginning of conquest," Leigh said as Thaine took the bills from her hand. "And it's a much more hopeful business to reclaim from boom and bust than from this lonely old prairie as it was when Uncle Jim and your father first came here."

"It is just the same old pioneer spirit, though, and you are fighting against the same old fight—loneliness, and besides, Asher Aydelot had Virginia Thaine to help him to keep his courage up."

A sudden flush deepened on his ruddy cheeks and he continued: "Of course you are going to the picnic? You'll have to start early. It's a goodish way to 'The Cottonwoods.' The Saturday lunch needs my talents, so I can't go with the crowd, but I may draggle in about high noon. I'll drive over in the buggy, and I'll try to make some prettiness out of the reasons to ride home with me when it's all over."

"Maybe the pretty girls will all be preempted before you get there," Leigh replied.

"I know one that I hope won't be," Thaine said.

Leigh was bending over her drawing board and did not look up for a long minute. It was her gift to make comfort about her while she followed her own will unflinchingly. The breeze had blown the golden edges of her hair into fluffy ripples about her forehead and the deep blue of August skies was reflected in her eyes, shaded by their long brown lashes. Thaine sat watching her every motion, as he always did when he was with her.

"Well!" Leigh looked up with the query. "And what's to hinder your getting the pretty girl you want if she understands and you are swift enough to cut out the enemy from a flank movement?"

"The girl herself," Thaine replied. "Serious! Tragical! Won't you give me that chrome-yellow tube by your elbow there?" Leigh reached for the paint and their hands met.

"Say, little Sketcher of Things, will you be missing me when I go to school next month? Or will your art and your ranch take all your thoughts?" "I wish they would, but they won't," Leigh said. "They will help to fill up the time, though."

"Leigh, may I bring you home to-morrow night? I'll go away the next day, and I won't see you any more for a long time."

"No, you may not," Leigh replied, looking up, and her sunny face framed by her golden brown hair was winsomely pleasing.

"Why not, Leigh? Am I too late?" "Too early. You haven't asked Joe and he'd be refused yet. But you are kind to put me on the waiting list."

Thaine was standing beside her now.

"I mean it. Has anybody asked you specially—to be your very particular escort?"

"Oh, yes. The very nicest of the crowd." Leigh's eyes were shining now. "But I've refused him," she added.

"Who was it?" "Thaine Aydelot, and I refused him because it was good taste for me to do so. It's his last day at home—and—oh, I forgot what I was going to say."

"I wish you wouldn't make a joke of it, anyhow. Tell me why you are so unkind to an old neighbor and lifelong pal," Thaine insisted.

But Leigh made no reply.

"Tell me why you insist when by all the rules you are due to snake the prettiest girl in the crowd of the wagon and into my buggy. Why have you insisted to make all the other boys envy you?" Leigh had risen and stood beside the rustic seat, her arm across its high back.

"Because it is the last I've done, because we've known each other since childhood and have been playmates, chums, companions; because I am going one way and you another and our paths may widen more and more, and because—oh, Leigh, because I want you."

He leaned against the back of Leigh's seat and gently put one hand on her arm.

The yellow August sunshine lay on the level prairies beyond the river. The shining thread of waters wound

time, my prince will wear a sprig of alfalfa on his coat."

"And a cockle burr in his whiskers, and cerulean blue overalls like mine, and he'll drudge along in a slow scarp with the soil till the soil gets him," Thaine added.

"Take it got your father," Leigh commented.

"Oh, he's just one sort of a man by himself," Thaine declared. "A pretty good sort, of course, else I'd never have recommended him to be my father's Good-by. I'll see you across the crowd tomorrow."

He turned at once and left her.

"The Cottonwoods" was a picturesque little grove grown in the last decade about a rocky run down which in the springtime a full stream swept. There was only a little ripple over a stony bed now, with shallow pools lost in the deeper basins here and there. The grasses lay flat and brown on the level prairie about it. Down the shaded valley a light, cool breeze poured steadily. Beyond the stream a gentle slope reached far away to the foot of the three headlands, the purple notches of Thaine Aydelot's childhood fancies.

The day was ideal. Such days come sometimes in a Kansas August. The young people of the Grass River neighborhood had made merry half of the morning in the grove, and as they gathered for the picnic lunch someone called out:

"Jo! Bennington, where's Thaine Aydelot? Great note for him to disappear when this Charity Ball was executed mainly for him."

"Better ask Todd Stewart. He's probably had Thaine kidnaped for this occasion," somebody else suggested.

"I tried to do it and failed," Todd

THE business survivors are the good advertisers. But good advertising is not chiefly the putting forth of strong advertisements. Advertising is worse than useless if the goods are not as strong as the advertising. Survival is founded on bedrock quality. Good advertising must rest on that. Test the advertising in Farm and Dairy against that severe standard, in actual purchase. We guarantee the integrity of every advertiser in this issue, and believe they will stand the test. Try them and see. When writing, say "I saw your advertisement in Farm and Dairy."

away across the landscape under a play of light and shadow. The clover grass at their feet was soft and green. The big golden sunflowers hung on their stalks along the border of the lawn, and overhead the ripple of the summer breeze in the cottonwoods made a music like pattering raindrops. Under their swaying boughs Leigh Shirley stood, a fair, sweet girl. And nothing in the languorous beauty of the midsummer afternoon could have been quite so pleasing without her presence there.

She looked down at Thaine's big brown hand resting against her white arm, and then up at his handsome face.

"It would only make trouble for everybody. No, I'm coming home with the crowd on the hayrack." She lifted her arm and began to pull the petals from a tiny sunflower that lay on the seat beside her.

"Very well." There was no anger in Thaine's tone. "Do you remember the big sunflower we found to send to Prince Quippi, once?"

"The one that should bring him straight from China to me, if he really cared for me," Leigh asked.

"You said that one was to tell him that you loved him and you knew it would bring him to you. But he never came."

"It's a way my princees have of doing," Leigh said with a little laugh. "If I were in China and you should send me a sunflower, I'd know you wanted me to come back."

"If I ever send you one you know that I do," Leigh said. "Mean-

Stewart assented. "I don't need him in my business. He can start to school to-day if he wants to."

"Well, you don't want him to go, do you, Jo?"

"Oh, I don't care especially. I'm going away myself, but not to the University, but I'm not going till papa's elected," Jo replied.

"And if papa's defeated we stay home all winter, eh?" Todd questioned.

"That all depends," Jo replied. "Of course it does. What is it, and who depends on it? Jo, I'll help you if you must defend yourself."

Thaine Aydelot bounced down from the rocky bank above into the midst of the company and became at once Jo's escort by common consent.

"Now, life's worth living, Thaine's here. Let's have dinner," the boys urged.

It was not Leigh Shirley's fault that Thaine should be placed between her and Jo at the spread of good things to eat; nor Jo's planning that she should be between Thaine and Todd Stewart. But nobody could be unhappy to-day.

In the late afternoon the crowd strolled in couples and quartets and groups up and down the picturesque place.

Thaine had been with Jo from the moment of his coming and Leigh was glad that she had not yielded to the request of the afternoon before. She had become a little separated from the company as she followed a trail of golden sunflowers down the edge of the wide space between the stream

and the foot of the headlands towering far beyond it. The sun had disappeared suddenly and the gleam of the blossoms dulled a trifle. Leigh sat down on a slab of shale to study the effect of the shadow.

"Are you still looking for a letter that will bring Prince Quippi back?" Thaine Aydelot asked as he climbed up from the rough stream bed to a seat beside her.

"I'm watching the effect of sunshine and shadow on the sunflowers," Leigh replied.

"It will be shadow if you wait much longer. The clouds are gathering now and we must start home."

"Then I must be going too. It's a lovely, lazy place here, though. Some time I'm going to the top of those bluffs, away off there."

"Let's go up now," Thaine suggested.

"But it's too late. I mustn't keep the crowd waiting," Leigh insisted. "It's a stiff climb, too."

"I can drive up. I know a trail through the brush. Let me drive you up, Leigh. It won't take long. There is something to see up there," Thaine insisted.

"Well, be quiet, Thaine. We'll get into trouble if we are late," Leigh declared.

The trail up the steep slope twisted its way back and forth through the low timber that covered the sides of the bluffs, and the two in the buggy found themselves shut away in its solitary windings.

"What a shadowy road," Leigh said. And see that cliff dropping down beyond that turn. How could there be such a romantic place out on these level plains?"

"It was my fairy land when I was a little tot," Thaine replied. "I came here long ago and explored it myself."

"I'd like to come here sketching sometime. See how the branches meet overhead. The odors from the bluffs are like the odors of the woodland back in the Clover valley in Ohio. I remember them yet, although it was so little when I left there," Leigh said, turning to Thaine.

He shifted the reins, and throwing his hat in the buggy before him, he pushed back the hair from his forehead.

"Leigh, will you let me take you home? I didn't ask Jo after all. Todd wouldn't wait long enough for me to do that, as I knew well enough he wouldn't. Don't be mad at me. Please don't," he pleaded.

"Why, I'm glad if you really want me to go with you, but you shouldn't have stayed away this morning."

"I did it on purpose. I knew Todd wouldn't let the other fellow—nor Jo either if I let him have it."

"You let him have it merely because you didn't want the chance to-day. Your kindness will be your undoing some day," Leigh said, with a smile that took off the edge of sarcasm.

Thaine said nothing in response, and they climbed slowly to the top of the bluff, and stood at last on the crest of the middle headland.

Below them "The Cottonwoods" and the winding stream whose course, marked by the dark green line of shrubbery, stretched toward Grass River, far to the southeast. To the westward a wonderful vista of level prairie spread endlessly, wherein no line of shrubbery marked a water-course nor tree rose up to break the circle of the horizon. Over all this vast plain the great headlands stood as sentinels. In the west the sunlight had pierced a heavy cloudbank and was pouring through the rift in one broad sheet of gold mist from sky to earth. Purple and silver and richest brown and green and grey and burnt orange, blended all in the

(Continued on page 18.)

AMUSEMENTS

Conducted by MARION DALLAS

Showers and Announcement Parties

SHOWERS and announcement parties have become so popular of late that one of the most interesting social questions to the June bride and her intimate friends, is some novel plan for publishing the happy news. There are so many ideas for such delightful affairs that it is merely the matter of making a choice.

An Announcement.

The spider-web idea was used by a hostess who wished to announce an engagement. After the guests had arrived, they were ushered into a room in which tiny white ribbons—or strings may be used—were hanging from the chandelier. Each took one and followed it in and out of many rooms. Finally, at the end of the ribbons were found articles suggesting wedding.

One guest came upon a package of rice, another a shoe, a third a little bouquet of artificial orange blossoms, and so on. There was a great deal of excitement as each made her discovery. And then the bride-to-be, who had purposely delayed her search,



Farm Foreman's Home on Roycroft Stock Farm.

The ordinary house on the farm need not necessarily be as elaborate as this one, but it should be just as comfortable. The farm foreman on the Roycroft Stock Farm, owned by Mr. W. H. Shaw, York Co., Ont., might well be proud of his attractive home.

discovered a large box (2) A vegetable and a concealed dude? (Potato masher). (3) A chain slipped on her finger amid the congratulations of her friends. Then the guests were ushered out to luncheon.

Letting the Cat Out.

Another surprise is arranged by letting the cat out of the bag in an unusual way. A large cat is cut from cardboard and on it the glad tidings is painted in contrasting color. This secretive pussy is enclosed in a pretty bag made of crepe paper which is further filled with rice or confetti. Ribbons for bursting the bag hang from it, and the receptacle is hung up in the arch of a doorway or above the supper table. When the time comes, the ribbons are pulled and amid a shower of rice, down comes the interesting news.

A Linen Shower.

A novel shower was given recently as follows: The hostess asked 12 friends to meet at her home informally at two o'clock. The bride-elect was asked to come at three. In this way the hostess explained her scheme, which was as follows: She had material for each one to make such articles as a dusting cap, three dusters, a broom bag, ironing holder, laundry bag, kitchen apron, clothespin bag, roller towel, and a case to wind linen. The entire cost was divided equally, and then each article was wrapped in tissue paper, tied with ribbon and hidden throughout the room. When the honored guest arrived the hostess announced that a fairy godmother had confided to her that there were packages of value concealed within the room, to be discovered only by bride-elect one corner.

and to the tune of bridal music. Whereupon the hostess sat down to the piano and played wedding marches while the bride hunted the hidden treasures, guided by loud or soft tones on the piano. All the packages being discovered, they were opened and the girls all set to work on whichever piece they chose. They pronounced this a "utility shower."

Two note-books—one for advice as to how to run the cooking stove, the other for hints on the management of husbands—were passed round and filled by the guests, and the affair ended by a ministerially appeared personage coming on the scene and issuing admonitions in such clever sermonic periods that everybody went home in a ripple of laughter.

Kitchen Shower.

Where you are entertaining both young ladies and gentlemen at a kitchen shower, have some singing and instrumental music. Try this contest, the answer in each case to be a kitchen utensil: (1) What a good workman has and to rent? (Skillet).

Fresh from the Gardens

of the finest Tea-producing country in the world.

'SALADA'

TEA B74

Sealed Packets Only.
Try it—it's delicious. BLACK GREEN or MIXED.

Save Steps-Save Work-Save Time

Put This Water System in Your Home

Empire Water Supply Systems are simple in design, compact, powerful, and give maximum service at minimum operating cost. They do all your water carrying about the house and for the stock in the barn.

You simply open a tap, and you have water instantly—anywhere, everywhere. Water in your bathroom—kitchen and cellar; under pressure for fire protection. The "Empire" brings you city conveniences, safety and comfort at little expense. Gasoline, electric and hand outfits.

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East London, Canada.
Branch Office:
119 Adelaide Street W., Toronto.

- (2) A vegetable and a concealed dude? (Potato masher).
- (3) A chain slipped on her finger amid the congratulations of her friends. Then the guests were ushered out to luncheon.
- (4) Member of baseball nine? (Pitcher).
- (5) What curcus people try to do? (Pump).
- (6) Impudence and a receptacle for pie? (Sauce pan).
- (7) When one has little color? (Paif).
- (8) A letter of the alphabet and a division of the house? (B-room).
- (9) An affectionate couple? (Spoons).
- (10) The branching of a river? (Fork).
- (11) The prevailing genius of the kitchen? (Cook).

Tell fortunes from tea-cups and pass around a small cake in which are a ring, button, key, small coin, and straw, each being an indication of coming fortune.

Granite Shower.

The simplest way to arrange the shower is to have all the parcels prettily wrapped up in tissue paper and piled in a large clothes-basket. Keep this in the kitchen until the guests have all arrived. Then arrange a game of "Jacob and Rachael," and lure into the ring to be betrothed as Rachael, have two of the guests arrange in the basket, which could be covered with the white paper and tied at each end with a hure bow of ribbon. Place it in the centre of the table, ring and remove the bandage from her eyes. When inviting the guests, each to write some little original verse or message, each of which she must read aloud as the parcels are opened. Then give each a square of chess-cloth, which he and she must hem neatly for dusters for the bride-to-be. When finished, each must embrace the initial of the worker in



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is the finish, the last word to beauty, protect and to enhance the value of your property. It safeguards your children, keeps out marauding dogs, animals and destructive chickens, protects the lawn, shrubs and flowers, and prevents trespassing.

Peerless Ornamental Fencing is built of strong stiff wire, heavily galvanized and coated with zinc enamel to prevent rust. It is highly durable, service and every feature combined to insure absolute satisfaction. The Peerless fencing is true to its name. It will not sag and cannot break down with ordinary use.

SEND FOR CATALOG. Shows many beautiful designs of fencing for lawns, parks, schools, churches, cemeteries, etc. DEALERS SHIP BY MAIL.
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SEED CORN "That Will Grow"

We can supply rail-cured corn, on the cob or shelled, from the following varieties:

Improved Leaming, Wisconsin No. 7, Early Bawley, White Cap Yellow Dent.

This corn was grown and cured by specialists in seed corn, and is therefore of a very superior grade of seed.

Let us quote you on all kinds of garden and field seeds, including mustard, sugar beet, turnip, carrots, butter beans, white beans, seed potatoes, buckwheat and field peas.

Cotton Seed Meal, Oil Cake Meal, Gluten Meal, Bran, Shorba, Flood Oats, Whole Oats, Pure Linseed Meal, Good Luck Brand Calf Feed, and a complete line of Good Luck Brand Poultry Feeds. Write, please, or wire for prices.

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HOME CLUB

The Educated Girl, the Ideal.

THE article on the educated girl versus the butterfly girl are rather amusing. In reading them one would think that all "A Mere Man" had to do was to select, choose, and demand the hand of any young lady. That is rather a primitive performance. What nuisance! In nine cases out of ten "The Educated Girl" positively refuses him because she considers him far from being a suitable life companion for her. There can be no doubt as to which would make the better wife for any man. The educated girl most decidedly would.

It is rarely that a young woman has gained her education by idleness. In the majority of cases she has had to work, and work hard too, in order to get her present standing. She knows the trials, the brain and nerve fag, the discouragements and worries which one encounters in dealing with the public in one's daily work. Is it not worth something to a husband to know that there is one at home who can give him the ready sympathy, which she shows in her work? Can the "butterfly" do this? Only those who have gone through like trials understand.

The educated woman has had ambition enough about her to want to earn her own bread and butter. She knows how to earn the penny and understands its real commercial value. As a consequence, she knows how to spend it to the best advantage. If she becomes the mistress of a home, don't you suppose she will know how to spend her husband's money carefully? She will put first things first. The faddy new hat and gown will be put aside without a murmur, for something more necessary in the home, or that a little nest-egg may be laid by for the rainy day.

As a Housekeeper.

In the business world the educated woman has been taught to keep accounts, to know when her expenses are running her cash accounts. This will be brought to bear in the home when she becomes a wife. Her whole life has been systematized. She moves, thinks, and works in an orderly manner. Her home will be run on the same principles. There will be no losing the head or nerves, when things become a perfect confusion, for the simple reason that they will never arrive at that state. The evenings will always be reserved for her husband and family. Any one capable of acquiring an education is quite likely to soon learn the art of housekeeping. It requires brains and common sense. "Who can find a virtuous woman, for her price is far above rubies. The heart of her husband doth safely trust in her, so that she shall have no trust in evil. She will do him good and not evil all the days of her life."

When the bread-winner is away among his fellows, he naturally is

getting new ideas, new views of old ones, etc. His mind is constantly developing. The average "butterfly" never dreams of keeping her mind abreast with that of her partner. Not so the educated girl! She is ever striving upward and onward, making home the ideal place for companions. The husband is proud to bring his friends to meet such a wife, for he is confident that she can entertain, whether as a musician, a brilliant conversationalist, or an attentive and sympathetic listener. Her thoughts are for the happiness of others and not settled on her own selfish vanity. Physical beauty fades with age, but mental and spiritual remain through life.—"Corinne Mae."

Men Not to Blame.

MAYBE I'm foolish, but I can't help busting into the interesting discussion in the Home Club about educated men and women. I'm glad to say the question doesn't bother me much for I feel like the would-be poet who wrote:

"Gee wh, I'm glad I'm free,
No wedding bells for me."

There! I read "Sister Molly" saying she reads this "sour grapes." Well, I might as well admit that I was stung—and by one of your "educated" girls, too. Of course it is all over now, but no more ventures for me. Suppose I might as well spin the yarn. Daisy (I'll call her that) and I, were brought up on nearby farms. About the time I was ready for an average start on a farm of my own, we had decided to unite our fortunes. Her dad, however, insisted that as we were both young enough and he could afford it, that Daisy should have a year and a half or two years at college.

I had to agree of course, but when Daisy finished her college course she decided that she would have a "broader outlook" on life in some other sphere than that of a farmer's wife and dropped me. I didn't blame her unduly for I had had much education, as a "left leaving public school I had to turn in and help dad on the farm. I have told this incident, just to show that some fellows would take an "educated" wife if they could get them.

Of course "Here's Hoping" is right to some extent. By all means let us have all the education possible for both men and women. But don't put all the blame on the poor men who have never had much of a chance and cannot hope to have this "super" class of girls smelt approvingly upon them. Most educated "girls" won't marry, except to men who are their equals as far as education goes. Besides, most of them get full falutin' notions when they so off to the city to finish their education and won't go back to the farm. And then "Here's Hoping" wonders why so many of these girls don't marry and, forsooth, blames the men. Just like a woman, isn't it? Did she stop to think that the average man can't finance a woman in the country are about equal as regards education. It is only natural, then, that the girls who are super-educated and who will accept only a super-educated hubby, should have fewer chances of marriage, and this is at least one explanation why some of them are left on the shelf.

There's one satisfaction about the ordinary sort of girl, even if she is the butterfly kind. While she likes a good time, she is usually willing to "take a man as he is, whether educated or otherwise, and does not feel that she is descending to the ladder if she does so. Yes, education is all right and let us have more educated men and educated women—but to tell the truth I've had about enough of the latter class to last me a lifetime.—"Brother Josiah."

Winning the Wilderness

(Continued from page 16.)

tones of the landscape, overlooking now by a storm-girded sky.

"This prairie belongs mostly to John Jacobs and it is just as it was when the Indians called it the Grand Prairie, and the old Pawnee came down here every summer to hunt buffalo. Some day, soon, there will be a sea of wheat flowing over all that level plain," Thaine said.

"And up here a home with nothing to cut off a fragment of the whole horizon. Think of seeing every sunrise and every sunset from a plateau like this," Leigh said, her face aglow with an artist's love of beauty. "It's farther to China than I used to think when I dreamed of a purple velvet home, decorated with gold knobs, beyond these three headlands."

"I always did want to live on the Purple Notches," Thaine said reminiscingly. "I'm glad we came up here to-day."

The sound of singing came faintly up from the valley far away.

"The crowd is mobilized. See the wagons crawling out of the grove and the civilians in carriages," Thaine said, like this," Leigh said, her face aglow with an artist's love of beauty. "It's farther to China than I used to think when I dreamed of a purple velvet home, decorated with gold knobs, beyond these three headlands."

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The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this department, to ask questions or to suggest subjects for discussion.

Light on the Cheese Situation

SPEAKING in the House of Commons last week on the cheese situation, another article concerning which appears in this issue, Hon. Martin Durrell, Dominion Minister of Agriculture, gave the following information. His remarks, in part, were as follows:

Last autumn the British authorities communicated with the Canadian Government with the idea of seeing whether it would be possible for them, in some manner or other, to secure the whole exportable surplus of Canadian cheese. We pointed out that as it was the close of the season it would be practically impossible to do anything, and that if they did wish to achieve anything in that way another season. It would be very desirable to commence in January or February, when the Government here felt it would be quite feasible to make some arrangement which would be satisfactory all round.

Nothing of that kind, however, was done in January and February, and meanwhile the British authorities had commandeered, through the New Zealand Government, the whole of the New Zealand cheese output at a price of 19 cents, f.o.b. In March, through the Prime Minister, who was then in England, there was a suggestion that we should secure the whole of the Canadian cheese output for this year by a process of commandeering. The Government, after thoroughly considering the matter, advised the Prime Minister, and through him, the Imperial Government, that we did not consider a process of commandeering cheese would be a very satisfactory method in regard to Canada, whose conditions were entirely different from those in New Zealand. We pointed out that New Zealand operated through a limited number of factories which were all not only manufacturing agencies, but selling agencies as well, and that this system was an entire contrast to that in this country, where we have 3,000 factories and where the whole trade is done through cheese buyers and an organized trade. Therefore we said it would not be practicable to commandeer the cheese. Some correspondence went on by cable, and it was then suggested that a commission should be appointed, on which the British authorities would have one representative, with the idea of carrying out the suggestion we had made, namely, that in any arrangement to secure the whole cheese production of Canada on satisfactory terms, it would be desirable to operate through all the existing trade channels that had carried on their business from time immemorial here. As a result of that, a commission of three was finally appointed. The British authorities appointed Mr. James McGowan, and informed us by cable that he was sailing for Canada. It was quite obvious that nothing could be done until that commissioner arrived from England. Speaking from memory, I think he did not arrive until the middle or end of April. Meantime the cheese market in Canada had opened, and though there was no heavy demand, as not much cheese was being manufactured, yet the maximum price that had been fixed in England permitted a condition to exist which allowed competitive bidding on this side for the small business that was offered, at a price even in excess of that at last fall, and far in



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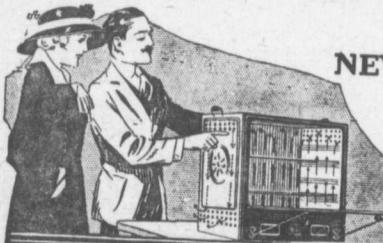
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Write to-day for folder on F & W Mower and Rakes, Side Delivery Rakes, Hay Loaders, etc. You'll get some profitable pointers on hay making.



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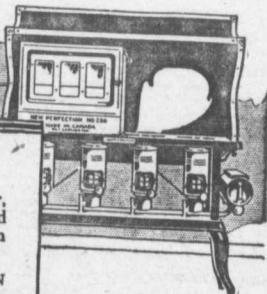
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excess of the price at which the Zealand output had been secured for the Imperial Government. Meantime the shipping problem was also growing very acute, and somewhat later the British authorities practically closed permitted to be taken up by Canadian cheese from Canadian ports. There were reports that American and Canadian cheese was going by British and United States ships through American ports, and I think it probable that to some extent these reports were true. At all events, we advised the British authorities of these reports.

Manufacturers of cheese and cheese buyers were by this time, well on in May, becoming very uneasy as to whether it would be practicable to set rid of their cheese at all if no export was to be given to it, and they were also uneasy as to the price, as one day it was 26 and 27 cents and later down to 20 cents simply because there was only a nominal market, and the whole situation was uncertain and vexing. They were beginning to store cheese; storage space was being secured up; they were inquiring whether to manufacture to a large extent, and in short, no one knew where he stood.

Then quite recently it was stated that the British authorities had decided to commandeer all cheese, whether from the United States, or Canada, or Australia, or New Zealand, or any other point, directly it arrived at British ports, and that they had changed their minds and were now putting on the market for civilian use, cheese at such a price as would permit it to be retailed at about 32 cents a lb.

So far as the Government is concerned, every fact connected with the matter has been placed before the British authorities. We have taken the ground that while we concede to be our duty to assist the Mother Country to get those food supplies which are so vital to Great Britain, it was also our duty to conserve, so far as we could on right lines, every lb. of cheese and fat that entered the hands of this country, and we wanted to achieve, if possible, both those objects. We pointed out also, that if so low a price as 19 cents was likely to be fixed by the British authorities for Canadian cheese, they must not overlook the fact that in the case of such a commodity a very low price would simply result in the diversion of the raw material for cheese to other forms of manufacture that might be more profitable, and although the British Government might get all the cheese manufactured for whatever time they paid, because there was practically no other market, there was still the question of the amount produced, as with too low a price, the manufacturers would divert the raw material to other uses. We showed that our conditions were not like those in New Zealand, and that our trade conditions called for entirely different treatment.

I understand that the British commissioner has been authorized to go out and buy for a time at a price as satisfactory as some of our cheese manufacturers hoped, is at least more satisfactory than the New Zealand price and is about 2 cents above the price to the factory for the same grade of cheese last year. Whether that condition will improve after a time, I am not in a position to say.

Why Not Omit Coloring?

EDITOR Farm and Dairy: In such strenuous times of war as we are passing through at present, I notice that your paper, in general, with almost all other papers, is preaching "Economy" and "merchandise reduction." I quite believe that all cheese factories are doing their best to encourage increased production, not only from patriotic motives, but also

because it is sound business to do so. But there is no matter regarding economy that perhaps your paper could do a great deal to encourage. I refer to the making of white cheese in place of the more extensive custom of making colored cheese.

The use of color is absolutely useless, and serves no good purpose. This could easily be dispensed with if the buyers and the consuming public could be brought to that way of thinking.

I do not suggest this, as a cheesemaker, from selfish motives. If the buyers would only ask for white cheese from this factory, I should be pleased to make it at a correspondingly lower price, which should go into the pockets of the patrons, but as this would mean very little to each patron individually, I would suggest that it should be handed over to some patriotic fund.

Perhaps, if you print this in "Makers' Corner" the suggestion might be serialized.—S. Adamson, Cheesemaker, Middlesex Co., Ont.

Government Announces Price Set for Cheese

(Continued from page 13.)

ping charges being prepaid by dealers. Quantities of 500 boxes (5 per cent. more or less) to each Bill of Lading and Invoice, will constitute a delivery.

Payment will be made only after documents have been delivered in proper order to the satisfaction of the Commission.

White or colored cheese, or cheese of different grades, or cheese known as Quebec and Ontario makes, must be invoiced and shipped separately.

In event of delays in shipment taking place exceeding three weeks and three days from date of Grader's inspection, payments will be made thereafter and the insurance certificates must accompany invoices.

Such cheese in all cases must be stored either in cold or ordinary storage, as required by the Commission, and approved warehouse receipts and all necessary certificates must accompany invoices. The dealer or dealers will ship such cheese at his or their own cost when instructed to do so by the Commission giving to the dealer a "Balance" receipt will be returned to the dealers on delivery of shipping documents. In event of the Commission requiring dealers to store and carry cheese beyond the period of three weeks and three days, the Commission will pay the current cost of storage, interest and fire, and the dealer will be co-operated to the satisfaction of the Commission and boxes clamped with iron hoops, as and when required, and shipped in good order and ready "boxed" will be graded lower.

Boxes are to be marked in such manner as may be directed by the commission, and each dealer will use a separate and distinct mark for each grade of cheese shipped by him, as may be directed by the commission. As graders can only examine samples of each delivery of cheese to the commission, the dealer shall be responsible for the weights and qualities of their respective shipments, notwithstanding inspection in Montreal, in the same manner as is now the case if cheese were sold *cif*. London rules.

Cheese to be free from any admixture whatever, and all deliveries must be fresh current receipts. Cheese held in factories or storage of any kind will not be considered a good delivery. All invoices and documents must truly represent the grade of cheese tendered to the commission. Any deviation therefrom on the part of any dealers will be deemed by the commission sufficient reason for discontinuing to purchase further cheese from such dealers.

Milk Producers Form Provincial Association

Twelve Ontario Local Organizations Were Represented at the Meeting Held in Toronto Last Week

THE city milk producers of the Province of Ontario have formed a Provincial Milk Producers Association. The meeting was held at Toronto on Friday last week when thirty delegates representing a dozen associations, and covering Ontario from Ottawa to Windsor, decided that such an organization is now necessary. A provisional directorate, whose duty it shall be to draft a constitution and then call a general meeting for ratification of the constitution and the election of a constitutional board, was appointed as follows: Chairman, E. H. Stonehouse; Secretary, Manning W. Dooley; H. J. Malton; R. F. Hicks, Newtonbrook; J. P. Griffin, Freeman; G. J. Cook, Beachville; S. Young, Guelph, and H. D. Rice, Welland. The objects and advantages of such an association and the results of a couple of hours' discussion, were admirably summarized by Mr. Stonehouse, in the following terms: "The Provincial Association will be a medium of communication between the several local associations. Under the central the province will be divided into distinct districts. It will guard the legislative interests of the producers generally. It will be a bureau of information on provincial milk conditions. It will be an instrument for mutual protection. Through it a uniform system of contracts and uniform dating will be possible. Traffic rates can be adjusted. It will carry on a work of publicity and education."

The Discussion.

All took part in the discussion of the afternoon, and all endorsed the idea of a provincial association. Mr. J. G. Smith, of St. Catharines, mentioned the tendency of dealers, when higher prices were demanded, to threaten milk importations from outside points, stated that in preventing such importations a central association could render signal service. Buying fed co-operatively and protection in case of tubercular testing were other functions of a central, according to Mr. Smith.

"Are they telling the truth when they tell us they can get milk elsewhere?" asked A. M. Shaver, of Ancaster. "With a provincial association we would know this for certain," Doherty suggested that all prices of locals should be submitted to the central for approval so that support, if needed, could be conscientiously given. A central association, he said: "It would be impertinent, perhaps, for a small local to go to the government on a provincial issue as we would represent such a small part of the people. But a provincial association would have status."

"Let us educate the public to the fact that milk is the cheapest article of diet to day," remarked A. Forster of Markham, who suggested such educational work as within the field of a provincial association.

Space forbids full mention of all the discussion of a conference that lasted from 9 a.m. to 11 p.m., but the motion approving organization, moved by J. P. Griffin, and seconded by G. J. Cook, was passed unanimously. At 7 p.m. the visiting delegates were the guests of the Toronto Milk Producers' Association, and the evening was spent listening to short addresses by everybody present. There was much plain talk done as to the conditions which militate against agricultural develop-

ment and all showed themselves well informed on the economic problems of the farmer, and were quite able to express their views forcibly and interestingly. The evening was rendered particularly enjoyable, because of the feeling of comradeship which existed between the farmers, and fraternized with their brethren from Middlesex, and all extended the hand of friendship to the visiting delegates from Montreal. A full list of those present, and the organizations they represent, is as follows:

Toronto.—E. H. Stonehouse, Weston; A. J. Reynolds, Hampton; E. A. Orr, Clarkson; A. Forster, Markham; Jno. Newhouse, Snelroev; R. F. Hicks, Wilton Grove; J. L. Crawford, Weston; Ottawa.—J. B. Long, Hintonburg; W. P. F. Hill, Millington; Middlesex.—Andrew Cornish and Robt. Brown, Wilton Grove. Oxford.—Jas. Fleming and F. B. Williams, Woodstock; Beachville.—G. J. Cook, Beachville; J. S. Nichols, Wentworth; P. Griffin, Freeman; J. A. Parker, Caledonia; Austin Smuck, Gleanford. Peel.—M. W. Doherty, Malton. Quebec.—S. Young, Bridgeville. Niagara Falls.—Wm. Bommer, Beamsville; J. G. Smith, St. Catharines, Niagara Falls.—Hugh Mitchell, Welland.—H. C. Rice, Ancaster (visitors). A. M. Shaver and W. E. Shaver, Montreal. S. E. Smith and Malcolm Smith, Lachute, United Farmers of Ontario, J. J. McArthur and C. W. Guernsey, Farm and Dairy.—F. E. Ellis.

Ontario Plans Improved Highways

(Continued from page 10.)

that county wardens have to face is that of unimproved local roads. Few men understand the value of good roads, and this hinders their work. The consensus of opinion seemed to be in favor of a patrol system for the summer months. Some of the counties have already attempted this. Ten miles is the maximum that one man can cover and keep up the road. These men receive 25c an hour, and are hired for the summer season only. The annual cost per mile for maintenance of the gravel roads is \$50 or less.

The county road officials were interviewed during the tour and furnished valuable information. They are in favor of the good roads movement, and invariably they were opposed to statute labor. All appreciated the government aid, and were anxious to take fuller advantage of it in the future. The patrol system is the ideal organization. These wardens and members of the various county councils deserve a word of praise for their untiring efforts to secure good roads. They have had a great deal of opposition to overcome, and continue to have; but, as one warden put it, "the good roads speak for themselves," and therefore their troubles are gradually decreasing.

In any province in Canada needs good roads it is Ontario, and if any section can afford good roads it is this province. Ontario is in the heart of the continent with good rail and water service to all parts. All it needs is good roads from the interior to its shipping points to complete its system. The value of good roads to a district cannot be measured in dollars and cents. It is estimated that the land value alone improved roads have increased 15% or more. It would be well for those counties that have not yet taken up the good road movement to consider it now and prepare for after-war development.

Doings of a

CONSIDER the demand in this section of the province of the principal of Windecker. While a Seedling is not an easy district, I am full in regard to the material of seed produced on a more or less might add a place in production of the year, when the county farmers growers seed a better grade of bush.—County Branch. After receiving the factory of the tractor in touch with I thought could find that many times more use have come date we have May 24th at running already jobs in July and ber. We think dications, it to procure two or in order to do well.—E. F. Branch, Simcoe.

During the placed several on the farm a few years ago at Toronto very much in every county, but their conditions even in the best conditions will think else during things.—H. C. Branch, Markham. We have done. We have the Gillespie, of Petrol enthusiastic and considerably in Mr. Gillespie's boys have been few applications for the Labor Bureau. In fact, the applications for help provided by the borough County.

The two farm tractors I have seen neither of them used so far. I of the owners of tractor every of tivating the land, no ill effects at ground. This is of the criticisms of the tractor of W. Stark, Peel County.

Included in our week was a letter from the St. of the Law, asking me to local company about the Montreal, three of water 2 p.m. This turned over to the Southern Counties Club, and when M. in Woodstock, had one cent of the Club officers of the rest of the order, they may be able to the number of catt Green, Oxford County stock.

The question of

HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA MEET.

THE 33rd annual convention of the Holstein-Friesian Association of America was held at Worcester, Mass., June 6, 1917. The association has been added since last year, 1,300 new members, and the membership to March 31, 1917, 58,981 animals have been registered. Of these 58,981 are males and 379,485 females. The association reports a five per cent increase in registration over last year. The Holstein-Friesian Association is the richest and oldest in America, having been established in 1871. The treasurer's report shows cash receipts to be \$222,323 and expenditures \$138,524, leaving a balance of \$83,794.

The president in his opening address dwelt for a time on the past history of the association and of Holstein cattle in America. An air of patriotism pervaded the meeting throughout. Increased production on the part of Holstein-Friesian increased milk production, rearing all of our calves and by eliminating wastes, we can aid much in the production campaign.

The financial condition, membership and publicity departments were discussed. The available records which Holstein-Friesian cattle have must be maintained. Future work along this line will be directed with the idea of interesting dairymen in the economic superiority of the Holstein-Friesian cow. This, the association expects, will have a positive influence towards creating a greater demand for Holstein-Friesian cattle, and result to a permanent improvement of the breed.

The desirability of maintaining the proper type was dwelt upon. Young breeders are branching out and the veterans must guide them at the beginning to mould their herds according to the true Holstein type. Many very successful dispersal sales have been held all over the country, and the prices have ruled high. The Advanced Registry Department has lent a great impetus to the work of the Holstein-Friesian Association. The increasing number of 40-lb. cows is in excess of the increase in the 30-lb. cows, but a short period back the future record cannot be prophesied. The 50-lb. cow, the 1,500-lb. cow and other records that were considered impossible and the limit no man can guess. The question of prizes or bounties, milk low in fat, is not advocated. Unpublished by the Committee will have future. The association, before breaking up, voted \$5,000 to be carried on the work of the National Dairy Council.

HOLSTEINS AT THE C.P.R. DEMONSTRATION FARM.

SUPT. Walker writes: "Our Holstein herd at present contains 117 cows, 35 females and 14 males. We have Holsteins, on an average, 45 pure-bred Shorthorns, Ayrshires and a few good grade of Ayrshire Shorthorn and Holstein breeding. Just a word in passing in regard to the nation our herd receives. I consider the silo leases for the silage for and supplying feed for the dairy cow. At present we have one silo sowing on this place, 16 x 30, erected in 1915. Of course, we have not the mature, well-served, we have not the farmers raise, but we can fill the silo with a fodder that stands next to good corn, vicia, green oats and good corn grown to maturity. One here, so far, has not yet matured. In 1915 we raised 100 tons of corn that produced 15 tons to the acre. Two acres of corn in the area of peas filled our silo, which was refilled three times this year of similar silage. In addition to this year of similar silage, we feed green oats in the silage, alfalfa hay, bromine hay, some oat straw. The meal ration is chiefly based about one pound of meal to three pounds of milk."

"We have done, and are doing, considerable testing in the Record of Performance and have made some creditable records. A few of the cows that have made good are as follows:

Holsteins	Class	Lbs.	Lbs.	Butter
DeWinton Princess	3-year	15,658	253.7	
DeWinton Lona	3-year	14,565	792.20	
July Henderson	3-year	15,032	798.75	
Lady Petrie	3-year	16,212	272.50	
Maple Fay's Queen	3-year	18,609	746.00	
Princess Vida Pieterje	3-year	16,230	635.00	

"The above records were made on this farm under fairly favorable conditions. The cows were milked three times a day, but we were not fortunate enough to have them handled by one man. They had several changes of milkers and as a result. As you are aware, you cannot get the best out of a cow who handled in this way. DeWinton Princess, at a four-year-old, made a record which I am under the impression is the record made by any of the Prairie Provinces in the four-year-old class, and possibly all places."

As a two-year-old, Princess Vida Pieterje heads the list in her class as a producer. DeWinton Princess, a cow of great producing ability, in her last lactation period, 1914, she produced 15,659 lbs. milk, with an average test of 3.4 per cent. This production was made with no special attention to extra feed. She was milked only twice a day and handled the same as the rest of the herd. We have this cow now entered in the Record of Performance showing she makes a good record. At present she averages 32 lbs. of milk per day. Please notice that we do not Record of Performance testing at all. It is our aim to obtain yearly records only, and I think this policy should be more followed by all dairymen. Seven years are good, no doubt, but yearly tests are much better. Having reference to our Holstein herd, Duke Wayne Mechthilde 2nd, would say that he is the son of Duchess Wayne Calamity 2nd, the 1-year-old champion in the Record of Performance, with 14,714 lbs. of milk and 945 lbs. of butter. As an individual, he is of superior merit. His progeny are a fine, thrifty bunch, the oldest of them now nearing two years of age, and are certainly a promising bunch of heifers."

THE SALE AT OAKVILLE.

A SALES of Holsteins that is attracting much attention amongst the Holstein breeders is that of the combination to be held at Oakville on Wednesday, June 27th. The offerings for this sale are being collected by several prominent breeders over the province—Gordon Goodwin, of Manor Farm, Clarkson; R. M. Holtby, of Port Perry; J. Alex. Wallace, of Simcoe; W. E. Oslar, Bronte; and J. A. Stansfield, of Waterloo. It is planned to make this sale an annual affair, and the contributions are therefore such as will insure a big attendance from year to year.

R. M. Holtby is consigning about nine head. One of these is a young bull whose dam is King Segis Pontiac Lad, a three-quarter brother to Artman's 540, 600 bull, and whose sire is brother to the world's record junior two-year-old heifer, Het Loo Pieterje, 30.33 lbs. and out of the 29-lb. cow, Roxie Concordia, with a record of over 129 lbs. milk per day. Every other animal from the Holtby herd will be a tested animal. One of these is the 29-lb. bull, Sir Aggie Beets Segis. Another is from a 28-lb. dam. All are sound and right. In younger females, there are two particularly fine heifers bred in August, one from a 21-lb. three-year-old. They are both particularly grovory and good condition to start record making.

From his herd at Clarkson, Gordon S. Goodwin is consigning seven. The two males in this consignment are sons of his best herd sire, King Segis Pontiac Poach, a son of Artman's 540, 600 bull. All the females offered are tested animals and the most of their sires ahead of them. One particularly good one is a 28-lb. cow, the daughter of Artman's 540, 600 bull. This heifer is 47.9 lbs. milk. Her average fat test is 3.76%. Included also is Lady Mercia Schulling, with 26.44 lbs. butter in 7 days. She is a large, strong, well-turned heifer, weighing 1,600 or more lbs. A show cow with the ability for hard work. Oslar's fat test is about 4%. Another fine one from the Miller Farm herd is Manor P. H. Canary, who with her first calf made 17.5 lbs. butter with a fat test of 4.26%. She will be bred to Mr. Regis Pontiac Poach.

J. Alex. Wallace, of Simcoe, will supply 15 head of the offering, the balance being from the herds of W. E. Oslar at Bronte, and J. A. Stansfield, of Waterloo.

STILL BETTER HOLSTEIN BLOOD FOR PRINCE EDWARD.

LEAVENS and Purtille, the well-known Holstein breeders, of Bloomer, Ontario, have recently made arrangements by which 11 of their best heifers in their herd will be bred to Mr. Hattie's herds to be bred to Mr. C. G. Pontiac, a son of the Champion Echo Sylvia Sylvia. These heifers are all daughters of King Segis Pontiac Spas and are sons of Leavens and Purtille, herd. This King is a son of King Segis Pontiac Alcarra, the Artman \$50,000 sire, and due combines in him the best blood of Sylvia Purtille. As we have combined blood here and Purtille are to be congratulated in their aggressive effort to improve the standing of their herds, and much to be well taken by breeders in noting the resulting records from this cross.

Good grade herds always have a first class pure bred sire and them. And if occasion the herd improves accordingly, but one breed must be subjected to consistently or progress will be negative.

Holtby's Consignment—

PRINCE CONCORD CREAMELLE (29876), a fine bull calf born October 12th. His sire is brother to HET LOO PIETERJE, 30.33 lbs. the world's record junior 2-year-old, being sired by PONTIAC KORNDYKE HET LOO, whose 2-year-old daughters are making the best average of any bull in Canada.

Dam of Sire is ROXIE CONCORDIA, 100 lbs. milk in 1 day, and 30 lbs. butter in 7 days. Dam of this calf is sired by KING SEGIS PONTIAC LAD, 3-4 brother to the \$50,000 bull.

FEMALES—SNOWBALL SEGIS, a daughter of the 29-lb. son of KING SEGIS, SIR AAGIE BEETS SEGIS, VIOLA DEKOL 2nd, an 18-lb. cow, dam of FAYNE SEGIS DEKOL, winner of dairy test at Ottawa, under 24 months, and of Guelph, under 36 months.

FRANCY DORNEGES VELSTRY, daughter of a 25-lb. cow, herself an 11-lb. yearling. MIDNIGHT KORNDYKE, MERCEDES 2nd, 11 lbs. Also 2 large, well-grown heifers due August 5th and 6th, one from a 21-lb. 3-year-old, the other from a 14-lb. 2-year-old, with a 20-lb. grand-dam.

SECURE A CATALOGUE and look up their breeding.

R. M. HOLTBY

R. R. No. 4

PORT PERRY, Ont.

World's Record Breeding WILL BE FOUND IN THE LAKEVIEW OF BERGS

At the first Annual Consignment sale, to be held at OAKVILLE on June 26th, four richly bred individuals, all tubercular tested, and fully guaranteed.

No. 1.—Emma Pauline DeKoi—Milk in 1 yr., as a 3-year-old, 14,291. Butter, 591.25. Av. test for year, 3.23 per cent, butter in 7 days, 26.66 lbs. Her last two calves sold brought \$350 each.

No. 2.—Edgemont Tottila—A very promising young cow of a strictly Dairy type. Her dam is Tottila of Riverside, the 1915 Canadian Champion year, cow, 24,094 milk. Butter, 1067.50. Av. test, 3.5 per cent. She is bred to Freshen Aug. 21st, 1917, to Dutchland Col. Sir Mona, sire of the Canadian Champion Sr. 3-year-old, 34.66 lbs. butter in 7 days. Av. test, 4.88 per cent.

No. 3.—Lakewick Colantha Sr. Wayne—(Bull)—His dam, G. & B. Calamity Wayne Rose, butter in 7 days, 20.38 lbs. Milk in 30 days, 1944.5. Butter, 100.46 lbs. Canadian record when made. He is sired by Dutchland, Colantha Sr. Mona.

No. 4.—Lakewick Count—(Bull)—A faultless individual, well marked and whose 10 nearest dams average over 28 lbs. butter in 7 days. He is three-quarter brother to Lakewick Dutch. Artis—Canadian Champion Sr. 3-year-old butter cow, 34.66 lbs. Av. test, 4.88 per cent. He is also three-quarter brother to Lakewick Hens. Wayne, winner of Ontario and Grand Champion at Toronto and London Fairs, 1916.

Lakewick Stock Farm BRONTE, ONT.

MAJOR E. F. OSLER, PROP.

T. A. DAWSON, MGR.

When You Write—Mention Farm & Dairy



King Segis Pontiac Posch

(As a calf.)

Our Senior Herd Sire

Several of the females will be bred to "King."

Females—

1. Lady Mercena Schilling made 26.44 lbs. butter, 524.30 lbs. milk 7 days in R.O.M., with average fat per cent. of 4.03. A large, strong, well turned heifer. She will be bred to King Segis Pontiac Posch.

2. Manor P.H. Gem This heifer made 19.61 lbs. at 2 years of age from 417.9 lbs. milk, with an average of 3.75 per cent. fat. She is a particularly straight, neat heifer, with a future ahead. She is just recently fresh and her bull calf by King Segis Pontiac Posch will also be in our offering.

3. Manor P.H. Canary with her first calf she made, butter, 17.71 lbs.; milk, 400.2 lbs. At 3 years, 14 days, butter, 35.03 lbs.; milk, 802.9 lbs.; fat, 4.2. Will be bred to King.

4. Manor P. H. DeKol She made 12.19 lbs. butter and 344.8 lbs. milk in R.O.M. as a

A Great "7" to Oakville Sale

FROM

MANOR FARM

2-year-old. At 4 years she has to her credit 21.01 lbs. butter and 497 lbs. milk. She is a particularly fine heifer and will be bred to King Segis Pontiac Posch.

5. Hengerveld Jewel Posch

Just a year old June 20. A clean, neat heifer, out of Jewel Cornelia Posch, with 23.963 lbs. milk and 940 lbs. butter in R.O.P.

Males—

1. A young son Manor P. H. Gem, 19.61 lbs. at 2 years, as above. This young chap is a son of our great herd sire.

2. Manor Segis Pontiac

Born Feb. 7. A particularly fine young sire, well marked, straight and clean. His dam is one of our finest young heifers with a record of 18.59 lbs. butter and 419.5 milk as a 2-year-old. Of course he is by our great Sr. herd sire, King Segis Pontiac Posch, a son of the great \$50,000 Arfman bull.

Gordon S. Gooderham Manor Farm Holsteins Clarkson, Ont.

THE SALE
OF
THE SEASON

Meet Your Brother Breeders
At the OAKVILLE SALE

WEDNESDAY
JUNE 20 1917

45 Head Registered
Record Animals

SALE BEGINS
1.30 P.M.

See the **GRAND HOLSTEINS** in the Offerings

CONSIGNED BY

Messrs. Gooderham, Wallace, Holby, Gies, and Osler

This sale promises to be one of the greatest Holstein events of the year. Quality and nothing but Quality will be there, in both young and mature stock. Forty head—and only five males. Every one of them selected for this sale—to fulfil the demands that such a strictly high class event like this calls for. Every one of the Breeders consigning is a recognized expert in the breeding and selection of stock—and each Breeds the Best Types and the Best Producers.

These cattle were not placed in the ring to find sale. They were obtained with difficulty. Each Breeder stated that he had "none to spare," that the demand was

greater than supply, however, when the object of the sale was explained, he decided to spare the number listed, confident that the result would be the establishment of a high class Annual

Event—an event that will be of great education and interest and value to both Breeder and Beginner.

Gentlemen! Plan to attend this sale on the 20th inst., at the Agricultural building on Oakville Fair Grounds. Seating capacity for 2,000 people. Oakville is situate on Lake Shore Highway, midway between Toronto and Hamilton, on Grand Trunk (and Radial from Hamilton). Sale starts at 1.30 sharp. Send for Catalogue. Study the merits of the animals, the value of their breeding. Join in on the occasion and get one or more of these good ones.



ONTARIO SALES & PEDIGREE CO. Col. Long Auctioneer 37 King St. E., Toronto Ont.