

FARM AND DAIRY & RURAL HOME

Dairy and Cold Stor-
age Comm. Dec. 15
Canadian Bldg.

DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE

Peterboro, Ont., Aug. 19, 1915



ISSUED EACH WEEK **Rural Publishing Co., Ltd., Publishers** ONE DOLLAR A YEAR

The Western Fair Circuit

THE managers and directors of the western fairs received little encouragement to hold their fairs this year. They were told that their efforts were sure to meet with failure. They went forward with their preparations, however, and success has crowned their efforts in all the fairs to date. The leading fairs at Calgary, Regina and Brandon have all been marked by fairly full attendance and splendid displays of live stock. In some classes there was a falling off; in others the entries were of a higher standard of excellence than in any previous year; on the average the high standard western live stock shows was well maintained. The splendid exhibits of dairy cattle bore testimony to the strong continued interest in dairying in Western Canada. The Calgary Fair.

Holsteins were well up to the standard. Carlyle Bros., Calgary; Joseph Laycock, Okotoks, and Geo. Bevington were the principal exhibitors, and divided the awards fairly evenly. Carlyle Bros. captured first in a strong aged bull class with Sir Admiral Ormsby, but the championship went to Sir Fyne of Golden West, a two-year-old shown by Laycock. Jacoba Johanna was grand champion female, from the new herd of the Bevingtons. Taking all classes into consideration, the awards could not well have been more evenly divided.

Rowland Ness, 125 Winton, Alberta, had things very much his own way in the Ayrshire classes and exhibited a line of animals that would have done him credit in any company. His champion bull was the well known Morton Main's Planet. His first cow was Lessnescock Pansy 2nd. Laycock & McDonald, of Calgary, and A. C. Anderson, of Springbank, also exhibited and managed to secure some of the first money, but the Ness herd was outstanding. The Ayrshire classes were weakened by the absence of J. J. Richards, Red Deer.

At Brandon. Holsteins at Brandon were the best ever seen at the fair, and were deserving of a more liberal recognition in the awarding of prize money than among the breeds that they received. There was a long line of exhibitors: George Bevington, Winterburne, Alta.; J. H. Laycock & Okotoks, Alta.; Glennie and Sons, Macdonald, Man.; G. T. Prouse, Ostrander, Ont.; A. B. Potter, Langbank, Sask., and Hamilton Bros., Brandon, Man. Some of the Calgary awards, as given by Prof. Hutton, of Lacombe, were changed by W. H. Gibson, of Indian Head. The aged bull, Count Tensen A, shown by Bevington, was given the championship, the Calgary champion not even getting in first money. The grand champion female was old Molly of Bayham, winner all over the West and East last year, and shown this year by Prouse, the only eastern exhibitor of Holstein cattle on the western circuit this year. The western breeders more than held their own with their eastern competitor.

Rowland Ness was the main exhibitor of Avshires at Brandon. Wm. Bruid, Cook River, had a few in splendid condition, and R. H. Byers, St. Charles, Man., showed a few bulls. Ness got both championships.

Two Jersey herds competed—B. H. Ball & Son, Brampton, Ont., and Jos. Harper, Westlock, Alta. Usually the first herd has received practically all firsts. At Brandon, Judge Gibson gave Harper six firsts, and total awards were about equally divided. Both championships went to the Bull herd.

At Regina. Practically the same cattle were shown here as at Brandon. Prof. Geo. E. Day, O.A.C., Guelph, sprung a surprise on all when he left Molly of Bayham out of the money, stating

that she was out of condition for the showing. He placed the championship with Jacoba Tensen, a senior calf, shown by Bevington. The male championship was again left with Count Tensen A. In Ayrshires, Roland Ness won practically everything for which he competed, his one competitor being the late Earl of Pense, Sask., whose herd was not in show shape. In Jerseys, Bull did better under Prof. Day's judging, in some classes than under Harper, than they did at Brandon.

The dairy specials attracted much attention. For the best ten head of dairy cattle of any breed, Roland Ness was first with his Ayrshires, Bevington 2nd with Holsteins and Laycock 3rd with Holsteins. Special for best dairy animal, any breed, owned by member of Saskatchewan Cattle Breeders' Association—Madeline I. Kol, A. B. Potter.

Items of Interest

THE eighth and ninth annual reports of the British Columbia Dairymen's Association have been combined in one volume, which is just to hand. The volume is attractively got out, is well illustrated, and is a credit to the Dairymen's Association of British Columbia.

A. P. Westervelt, Clarkson, Ont., and Geo. Pepper, Toronto, have been appointed commissioners on the new Federal Live Stock Markets Policy. Their chief duty will be the organization of an intelligent system for the promoting of the live stock industry and aiding in the marketing of live stock produce.

Results of experiments in crop production and fertilizers are now being put out, and bulletin No. 84 from the Dominion Department of Agriculture, containing a summary of results with forage plants will be of general interest. It contains the results of experiments with all standard field crops on the Experimental Farms of Canada. It should be of material assistance to farmers, especially in selecting the most productive varieties of the various crops.

No stronger evidence could be offered for the patriotism of Canadian farmers than the way in which individuals and groups of individuals are coming forward with offers of machine guns. Just recently, for instance, the traveling staff of the local agents of the Cockshutt Plow Company of Brandon has signified their willingness to supply a machine gun and the president of the company has made similar donations. Other individuals and companies are coming forward with similar offers. Here is a great chance for a display of practical patriotism.

Clean Collars for Comfort

Jos. Armstrong, Wellington, Co., Ont. HORSE collars should be scrubbed regularly. The dirt and grease on the horses should be cleaned to match. I insist that my teamsters scrub the collars as often as necessary, especially in hot weather, at least a couple of times a week. Everyone who has driven horses knows the rough, dirty accumulations that come on the collars. Every teamster does not seem to realize what discomfort these accumulations are to the horse. The shoulders of my horses are washed off with cold water every hot day. I have known teamsters who wash the shoulders at noon with alcohol as the dirt is quickly. This may be a little superfluous.

Sweet pads placed under the collars to save the horse's shoulders do not do more harm than good. They too get hardened with accumulations of dirt that would otherwise go on the horse's collar and then the horse, Geo. E. Day, O.A.C., Guelph, sprung a strong brush with soap and water and a little elbow grease is necessary at frequent intervals.



TWO GREAT HELPERS

In the harvest season or in fact at any season, do you ever be-
vridge the time it takes you to do the milking and the separating. If so we have something to say to you.

With our

"Simplex" Link Blade Separator

the women folk can do the separating, and do it too without it being any strain on them. The low supply can and the ease of operation of the "Simplex" make it a favorite of the women folk and it is easy to clean and keep clean, too.

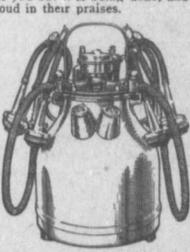
With a

B-L-K MILKER

a boy can milk the cows and can milk 90 of them in an hour. That may seem a little steep to you but it is being done, and the owners of the B-L-K are loud in their praises.

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We are also dealers in all kinds of these factory, creamery and dairy supplies.



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HATS OFF TO ONTARIO'S WHEAT FIELDS!

What looks like the largest wheat crop produced in Ontario for many years is now being harvested all over the province. There is a great increase in spring wheat. The weather has of an unusually low temperature has brought on the crop, and we do not believe there is a more smiling picture on the whole face of the globe than the wheat fields of Ontario at this moment, nor any sweeter music than the click of the four-horse binders at its work. All that is wanted now is for the rain to withhold for the next fortnight and thus to let every farmer get his reaper to work, his grain's stacked, then drawn to the barn.

Equally encouraging is the Ontario crop of all other grains and everything points to a bountiful gathering.

In spite of the war, in spite of the slow-down in the Canadian wheat from a real estate and speculative point of view, and of restricted orders from the farmers there, this is to be a great fall for business in Ontario, and the situation of this magnificent crop will be felt before the first of September all over the province.

Every citizen of Ontario should take off his hat to the wheat fields and thank an all-wise Providence that sent them.

OUR EXHIBITION ANNUAL

Is slated for Aug. 26th—in our readers' hands before the real opening of the Canadian National. Tell them of your exhibit. They will appreciate and you will profit. Last form closes Aug. 23rd.

Advertising Dept. Farm and Dairy, Peterboro

We Welcome Pro...
 Trade increases the v...
 Vol. XXXIV
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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. XXXIV

FOR WEEK ENDING AUGUST 19, 1915

No. 33

Building the Dairy Barn

With Special Emphasis on Stable Arrangement and Construction

SAM Slick once remarked that big barns and small houses on the farms of a new country were indicative of good business management and coming prosperity. Sam Slick, in public life was the genial old Judge Haliburton of Nova Scotia, was not a farmer, but he reasoned that the barn is a part of the farmer's working equipment and should help to earn the money to build a good house later on. This reasoning applies to almost any live stock farm. The dairy cow is a live stock which applies with double force where the live stock kept are mainly dairy cows. The dairy cow is more poorly equipped to resist severe climatic conditions than is her beef bred sister. The latter uses most of her food to cover her ribs, and incidentally affords protection against the coldest weather. The good dairy cow, however, delivers her food into the stall and trusts to us to provide adequate shelter. The most successful dairymen are those who live up to their end of the "deal."

A good dairy barn is a source of pride to its owner. It is also a wonderful source of comfort and convenience in getting the work done; it makes the difference between interesting work and chore drudgery. The writer has been in many stables that no one could be expected to take a pride in. Every owner of a barn with good stables will testify that his barn investment is a profitable one from every standpoint. A barn does not need to be unduly expensive; if it is sanitary, comfortable, and convenient it



Cow Comfort, Sanitation and Convenience, Are All Provided for in this Barn

A one-story barn like this can sometimes be built and properly equipped at less cost than to remodel the old barn. Note that there is a stall with swinging steel stanchion for each cow. This photo shows the interior of the barn at Lacombe Experimental Station in Alberta.

meets every requirement of the modern dairy barn.

Selection of Site

The selection of the site is important, and the drainage is the most important item in the selection. We do not want the barn so situated that there is drainage from the barnyard to the house or toward the well. On the other hand, we do not want the barn in a low place where the surroundings are damp and the barnyard a mud heap. There are few situations so favorable that

it will not pay to lay tile drains every 15 feet. It is most advisable to run the barn north and south, where the stables occupy the entire basement, with windows on both sides; the stables then get a maximum of sunlight. This arrangement also preserves the roof, as where one roof slopes to the north snow or moisture will remain there, being protected from the sun, and tend to rot the shingles or rust the steel roofing. On the other hand, a roof facing the south gets too much sun.

Place the barn so that it can be seen from the road. There may be reasons in the city for having the barn as much out of sight as possible, but any farmstead is improved in appearance by the addition of a well-built, well-painted barn. Have the barn about 200 feet from the house, but not much further. A good barn is an advertisement, and to many looks more attractive than a showy house.

Rectangular Barn is Best

The rectangular barn is the best. It can be built more cheaply and arranged more conveniently, both for the storing of fodder and the doing of chores in the stable. The ideal width is 36 feet. This allows for two rows of cattle with ample space both before and behind them. Many of the best stables visited by the writer are of this width, and many of the new dairy barns built at the agricultural colleges are 36 feet wide. When practical and professional agri-



Barn of Mr. Innes, Near Winnipeg. See How the Sunlight Floods This Stable. Mr. Innes Receives 12c More a Gallon for His Milk Than Is Paid to Most Dairymen Shipping Milk to the City of Winnipeg.

culturalists both adopt a certain width, you may believe that it is about right.

Should the cows face in or out? This argument has never been settled, although in practical construction the "outs" are in the majority. Those who value a cleanly appearing stable, and this includes all city milkmen whose premises are liable to inspection, will favor the tail to tail arrangement, as the walls are not then splattered with filth.

It is also convenient for driving a team or sled through and loading the manure directly; especially will this feature appeal to those who haul manure directly to the fields each day. Even though we do have to have two feeding spaces, the overhead feed carrier has so simplified the feeding operations that the extra work entailed by facing the cows out is not appreciable. The smaller details in the stable construction are so admirably described by Prof. Larsen in a recent number of Kimball's Dairy Farmer that we quote him as follows:

Details in Arrangement

"The 36-foot width of dairy barn is outside dimensions. This would leave only 34 feet 8 inches, or 17 feet 4 inches of actual space to be utilized for each row. This would be divided as follows: 4½ feet for feeding alley, 2½ feet for manger, 6 feet for stall for large cows, 1 foot 4 inches for gutter, and 4 feet for one-half of driveway, or total of 17 feet 4 inches. The manger should be smooth and have an even pitch toward outlet of about one inch in each 10 feet to permit the water to run away. The individual trough system of watering is probably not advisable in this north-west climate, and in the average dairy farmer's barn.

"The gutters should have a slight pitch toward the drain, and in addition, the bottom should tilt away from the cow about three-fourths of an inch. If the bottom of the gutter is level, too great a pitch is required to carry away the liquid manure. If the bottom slants away from the cow, the liquid manure does no spread all over the level bottom, but will run off much quicker.

Where the Cow Stands

"The floor of manger and feeding alley should be even. All the floor should be concrete with the possible exception of the centre part of cow stalls. Cork bricks are very satisfactory for covering stalls. I used plank frames in the new college dairy barn, but I would not use them again. I have used concrete with apparently no bad results. The ground was finished with cinders well tamped, then a four-inch layer of concrete troweled down to a rough surface. If the cows are well bedded, I believe such a stall is satisfactory.

"The stall should sit at about one inch towards the gutter. It is not a good plan to have cows stand in a slanting stall. This slant can be counteracted by making an inch depression in the front part of the stall to extend back from the manger about 14 inches. This gives the cow a level place on which to stand.

"The drop from the stall to the gutter should be from eight to 10 inches. If it is less, then the cow is more likely to stand in the gutter with her hind feet. This is also about the right elevation to make the cows show up well from behind. If the drop is much more than 10 inches, the cows are more likely to injure themselves in going in and out of the stall.

"The gutter should be 16 inches wide. If less than this, the manure piles too high overnight, and liquid manure does not drain away. It should also be wide enough to admit the use of a shovel of ordinary size. If the gutter is wider than about 16 inches, some cows are afraid to step across it. If the cows have to take too long a step across a gutter, they are so likely to slip in the stall when going in and out.

(Continued on page 6)

Raise More Good Cows

By "Herdsman."

ON various occasions I have been asked by prospective dairymen to go out and buy on commission for them herds of good grade milk cows. My experiences in this line have convinced me that buying the best cows in a man's herd is next to impossible. Dairy farmers are not selling profitable cows unless they are going out of the business. At the same time, the demand for good cows is increasing. Dairy farmers living near our cities on high-priced land are more and more going out of the raising of heifer calves and are planning to buy all of their milk cows. These dairymen are all convinced

Those heifers which promise to do best should be tried out for one lactation period, at least, in the home herd; then, if they fulfill their earlier promise, retained as breeders. They could be made to replace some of the cows that were getting up in years. I do not believe in keeping cows in any case until they are past marketable age. By following this plan, too, the herd would be gradually improvise, and better prices could be commanded for the stock sold. Of course, the plan would necessitate a well-bred, pure-bred sire.

If I were to add a further suggestion, it would be that the cows freshen so far as possible in the fall, as fall calves are easier to rear into cows of the right kind.

Treat Inflamed Udders Promptly

By J. B. Hadley.

GARGET makes an appearance every once in a while in cows which apparently are in perfect health. The milk in severe cases is either stringy or otherwise altered in character when drawn and collects a yellowish colored sediment on standing. In less pronounced cases there may be little visible change in the milk, but an examination would reveal a large number of germs.

Non-infectious garget is caused by bruises or other injuries, or by a sudden congestion of blood in the udder as frequently occurs in heavy milkers and in heifers at first calving. Affected animals usually make a complete recovery if given 1½ pounds of Epsom salts and their feed is restricted to that of a succulent nature.

The cause of infectious garget is a germ or germs. When many of them are present in the udder not only is the milk changed, as mentioned above, but the udder itself becomes hot and sensitive to the touch.

The importance of the infectious form of garget rests in the fact that it is usually not easily cured and has a tendency to recur. Furthermore, the disease is easily conveyed to healthy cows through the medium of the milkster's hands or contaminated material of any kind, unless precautions are taken to avoid the transfer of the germs.

Temporary relief may be given by bathing the udder with hot water for one half hour each morning and evening. After thoroughly drying the surface of the udder, warm cottonseed oil should be rubbed in with the palm of the hand.

A complete cure is possible in most cases only by drying the cow off at once so that her system may be free to fight the disease-producing germs that are present in the udder.

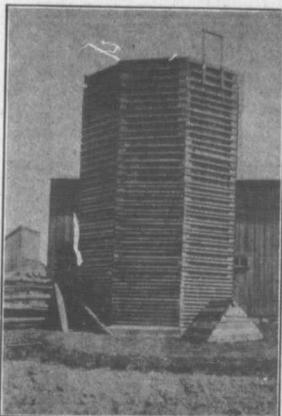
Trees for Waste Land

John Bishop, Oxford Co., Ont.

I WOULD not advocate the maintaining of forests on good land. There are, however, many acres of waste land that could well be devoted to tree growth.

There are indirect benefits from a proportion of bush over the land. The high winds which have done so much damage in this county in past years are due in no small measure, I believe, to the lack of bush. I have been told that south-western Ontario has a smaller proportion of land under wood than have any of the countries of Europe. Is it any wonder then that winds get a full sweep. I believe too that forests hold moisture and have a tempering influence on the climate. And then beauty counts for something. In those parts of Oxford where bush is interspersed here and there, the country has almost a park-like appearance that is beautiful to behold.

I would recommend pine or black locust for this upland soil. Elm and maple will grow well in swamp land. No kind of trees will grow well where the cows are allowed to pasture the woodlot. Most trees will die if the logs are given free range.



A Silo That Is Different.

Eight-sided silos of the type here illustrated are common in Dundas and Leeds counties of Ontario, but are seldom seen elsewhere. This silo, erected by J. G. Markley, is 15 by 34 feet, and cost \$139 for materials. At the bottom 5 x 7s are spiked 2 inches apart with four feet, further up, two rounds in three, and at the top three rounds in four are omitted. The inside is lined up with tamarack, tongued and grooved.

—Photo by ag. Editor of Farm and Dairy.

that poor stock does not pay, and they are all willing to pay a right good price for good heifers and cows.

This is a valuable market, and I am convinced that the raising of good heifers would be a profitable business in districts where good land is comparatively cheap, say \$80 an acre or less, and large quantities of good roughage could be produced with a minimum of cost. The market for good heifers will continue profitable for a long time to come.

The primary necessity for this line of dairy work is good foundation stock with which to start. Poor stock will not sell. One day recently on the Toronto market, when choice cows sold up to \$100 and a few went even above this mark, medium to common cows offering at \$40 to \$60 were taken back home unsold, because nobody wanted them. I have before me now figures from an agricultural college showing that it costs \$60 to raise a heifer to two years old. This is another argument for good stock, as only real good heifers can be sold for more than \$60 in their two-year-old form. I believe, however, that it will cost less to raise heifers on cheap land and with cheap food. I would plan to feed the heifer calves well the first year, but let them exist largely on good roughage and pasture during their second year, and then get them into first-class shape before they start to freshen at about two and one-half years old. It is at this time that they would be marketed.

Building a Fertile Soil

C. P. McKenzie, Peel Co., Ont.

A FRIEND of mine who bought a 120-acre farm a couple of years ago, recently asked me to go over the farm with him and inspect his new property. The soil is only moderately good naturally and has been in the hands of tenants for the past 25 years. The 60 acres contained in the workable fields was badly run out. That farm needed intelligent handling with a view of increasing fertility about as much as any farm I have ever seen.

The soil tends to be stoney and here my friend had done well. He had stoned the field as thoroughly as it is possible to do in one season. The great need of the soil, the addition of soil fertility, has been almost entirely neglected. On the day of my visit, a couple of teams were busy plowing down buckwheat for fall wheat. Buckwheat adds nothing to the soil except what it has previously taken from the soil, and while plowing it down may result in a bigger crop of wheat, the bigger crop itself will be simply that much more fertilizer taken from the soil. A part of the farm was in hay, old tough sod, that should have been plowed. Another field had been summer fallowed for alfalfa. Here a good dressing of horse manure has been applied, and here I found the one bright spot in the management of the farm. The rest of the farm is in oats, and these oats are not seeded down to clover, which means there will be another crop of grain taken from the same land next year. Very little stock is to be kept on his farm outside of horses.

A soil that is naturally the best will not last long under such management. The soil of this farm is a gravelly loam of only medium fertility and it is already played out by soil mining. It needs the very best of nursing. Either of two plans will restore the fertility. Fertilizer may be purchased in large quantities and applied directly to the land or the soil may be restored by in-

creasing the live stock and sowing to clover. This latter is the plan that I prefer and I know from experience that it is ideal for run-down soils.

I would seed legumes with all grain crops, even if the clover were to be plowed down before a single crop of hay were taken. Hoe crops should also have a place in the rotation as the farm is going badly to weeds. Through live stock, all the fertilizer taken from the farm in the form of crops should be returned to the soil in the form of manure, that is, minus a certain proportion of waste in the making. If along with the growing of legumes and the increase of live stock, a good four or five-year rotation of crops were adopted, I am prepared to guarantee that in a few years, this would be a fine productive farm.

Lightning Rod Protection

DO lightning rods protect?

The answer, says a bulletin issued by the fire commissioner of Saskatchewan, who voices the experience and conclusions of all the other fire commissioners and state fire marshals, must be in the affirmative, with a saving clause attached, viz.: that the installation of such rods must be thoroughly and efficiently done. Proper installation is the only guarantee of protection. Hitherto there has been much "scamping" of this feature and lightning rods have not protected. Result—distrust and suspicion of such systems in general. It may be interesting to know the results of a careful investigation by Professor Day, Ontario Agricultural College, in this regard.

In Ontario in 1912 the efficiency of rods was found to be 94.5 per cent and in 1913, 92 per cent. In Iowa an efficiency of 98.7 per cent was shown and in Michigan an efficiency of 99.9 per cent. These figures speak for themselves. That protection is afforded is undoubted, but that the installation may give satisfactory results the following suggestions are submitted:

1. Materials—Rods should be of soft drawn copper in the form of tape or stranded cable. Aluminium or galvanized iron may be used but copper has six times the conductivity of iron and is not so corrosive. Aluminium may prove as durable as copper, but for the same size of wire its conductivity is only one-half that of copper.

2. Grounding—Down to permanent moisture, and in no case less than eight feet deep. A copper or steel groundplate is helpful. See that the grounding is not "scamped."

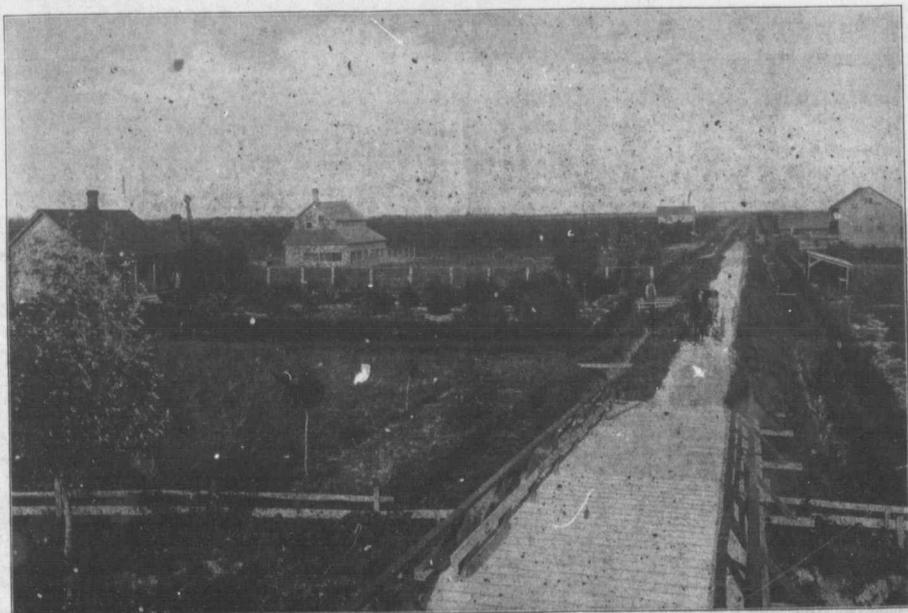
3. Location—Placing rods at diagonally opposite corners is best. Rods should be run along ridge and in no case should come near interior piping. Cables should be protected from ground for six or eight feet by nailing boards around them.

4. Points—Chimneys and cupolas should have separate points. Points should be from 20 to 30 feet apart.

5. Metallic Work—Roof, gutters, and all other exterior metal work should be connected with the cables or separately grounded. Metallic roof should be grounded at two or preferably four corners.

6. Do not use insulators for fastening cables. Farmers should ground all wire fences every 20 rods at least. A fence grounding should consist of a rod or wire connected with each lateral wire of the fence and extending at least three feet into the ground and projecting a few inches above the fence. These fence groundings should be made of same material as the fence wires. Many animals are killed annually through contact with ungrounded fence wires in thunderstorms. Such loss can be thereby avoided.—Fire Protection.

It's some time till silo filling, but it is just as well to be prepared. Start soon to arrange for exchanging of work and teams.



A Scene That Is Typical of Some Sections of Rural British Columbia: Jubilee Farm, The Delta, B. C.

At The Exhibition

at Toronto, stop at our silo booth and have a chat with us. We're located at the MODEL FARM, one hundred yards east of the Poultry Sheds. "The Silo that lasts for Generations" shows off splendidly there, and you'll be impressed with its look of strength and durability. Remember the date of the Exhibition—August 20 to September 13, and

Don't Fail to Visit The Natco Everlasting Silo Exhibit

See those hard burned clay tiles with their dead air spaces—fireproof, moisture-proof and frost-resisting. See those reinforcing bands laid in the mortar, holding the silo in a grasp of steel. Learn why the first cost of the Natco is the last cost and how it preserves sweet, succulent ensilage through coldest winters and driest summers. Talk it over with us at the fair—and send for our catalog 6 now.

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One Bell Blower mounted on trucks, shop worn, but has never been used.

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Also two 1 H.P. Engines, new, never having done any work at \$40.00, less than cost, bought in car lots.

The above machines are genuine bargains and are being sold at these prices to close them out.

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GENUINE HOME LIFE

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Make the very fullest inquiries before deciding upon the College for your boy or girl—our classes are presided over by the highest type of instructors and we guarantee practical, well-balanced courses in all subjects.

Send a postal to-day for illustrated, descriptive calendar and terms.

Fall term commences on September 6th.

ALBERT COLLEGE, Belleville [Ont.]

E. N. BAKER, D.D., Principal

7-18

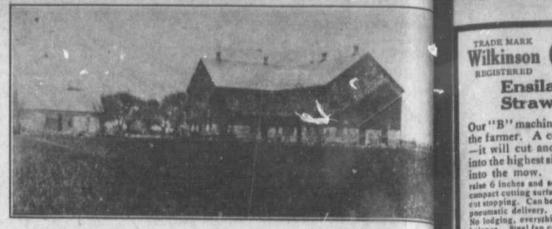
A Dawson Ditch Digger

Works at a cost of 70 cents to \$1.50 per 100 feet, providing for digging required depth, covering and labor complete. Will do the work efficiently, wherever tile is needed, whether in sticky or stoney soil. Price, \$35.00; freight prepaid.

Patented 1914

A Demonstration of the Dawson Ditch Digger at work will be given on the farm of Mr. Whitney Assiniste, Tamworth, Ont., August 24th and 25th. All interested are cordially invited to attend.

GEORGE DAWSON, Inventor & Manufacturer, NAPANEE, Ont.



These Buildings Were Made Necessary by an Electric Storm.

Three years ago the main barn on the farm of J. B. Hoffmeyer, Perth Co., N.Y., was destroyed by an electric storm. The new building, built, finished, and ready for use, is 35 feet, with an ell 45 by 55 feet and a post of 30 feet. On the far side of the ell is a cement tank 15 feet by 35 feet. Notice the roof of this new barn and the whole of the implement shed to the left are covered with metal; this is a combination further loss by fire—Photo by an editor of Farm and Dairy.

Building the Dairy Barn

(Continued from page 4)

"The depth of the gutter next to the driveway should not be over four inches. Every inch it is deeper than this makes it that much harder to take the manure out. If the gutter is not over four inches deep on this side, the driveway behind the cows is at least four inches lower than the stall on which the cows stand. An animal always shows up to better advantage under such conditions.

"Width of Drive
"The driveway should not be over eight feet in width. If more than this, it is necessary for the man who cleans the barn to step out of the gutter every time he loads a shovel full of manure on to the manure spreader.

"The stalls on one side of the barn may be made full length at one end, and gradually become shorter toward the other end of the barn. This permits of placing the cows according to size. In addition to this the stallions should be adjustable.

"A very important point in finishing the concrete floor of the driveway and alleys where cows walk is to see that the floor is not smooth. Use no surfacing coat. Trowel the ordinary concrete down well, then use a wide shallow creaser for marking the floor into blocks about four inches square. Do not use a creaser that makes a deep, narrow depression. It fills with dirt and is unsanitary."

Ventilation

So much for Prof. Larsen and his details. Now for ventilation. In Canada where the winters are cold and the cows closely housed, an allowance of 500 cubic feet of stable space should be made for each cow. This space will be sufficient where a proper ventilating system is installed. If the King system is adopted, a square foot of fresh air inlet should be provided for each five cows and the outlet should be a life larger. The Rutherford system, which admits the air near the floor and carries the foul air away through a flue from the ceiling, is easily regulated and gives complete satisfaction. The importance of a ventilating system cannot be emphasized too strongly, though lack of space here forbids a detailed description of either of the two leading systems. Lighting is almost equally important, and one-third to one-half of the linear wall length may well be devoted to window glass. Where certified milk is being produced, it may be well to have the milk room removed from the stable. From the standpoint of convenience it is better to have the milk room opening directly into the stable. Where the barn is well ventilated and the good of the milk room kept closed, a door sanitary product can be produced. The milk room is also a good place to store the small gasoline engine, providing the exhaust is piped to the outside of the building. The hot

water from the engine will conveniently for washing dairy stalls.

Cement or Frame?

In selecting materials with which to build the stable many will prefer concrete because it is more durable while others will build of frame construction, because such a stable drier and more sanitary. Both concrete and stone are conducive of dampness and it is conducive to tuberculosis. The difficulty may be overcome some measure by a good ventilating system. It is better, however, inside of the wall with mass siding, papered underneath, and dead air space of an inch or more between the paper and the wall.

The hip roof construction for the upper part of the barn is desirable, popular. It is attractive in appearance and affords a maximum of space capacity at a minimum of expense. The balloon or plank construction, where properly framed, are strong enough to resist winds we have in Canada, and are economical of material than the heavy beams, which were the building materials of our fathers.

What is the reward that comes

Many Thousand Men

Thousands of Men will be required from Ontario to help in the work of harvesting the Westerns and practically the entire task of transporting this great army of youngsters to the West will fall to lot of the Canadian Pacific Railway. Excursions from points in Ontario to Manitoba, Saskatchewan, and Alberta will be run, and special operated, making the trip in about thirty-six hours and avoiding the change of cars or transfers.

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August 24th and 25th—From Toronto and stations West and North of Toronto, including Stations on line North Toronto to Sudbury and Sault Marie, Ont.

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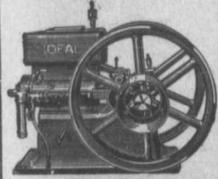
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the ownership of a model dairy barn built along the lines here indicated. Aside altogether from the financial advantage that comes from an increased milk production and convenience in doing the work, there is the knowledge that one is producing a safe and sanitary human food. J. W. Logan of Howick is a friend of the writer who has built stables on modern and up-to-date lines, and he received a reward recently, quite satisfactory to him, when his stables were scored 100 per cent. by the Montreal milk inspector. Is it not worth while to build the best when recognition such as this may be accorded?—P.E.E.

Army Horse Buying Again

EDITOR, Farm and Dairy—In a number of issues of Farm and Dairy I have noticed the fact mentioned that the authorities at Ottawa have hindered the buying of army horses in Canada. This seems almost incredible; still, I believe it is true. Here on Prince Edward Island there are splendid horses for sale on every farm, but very few have been bought, and at the present time horses are lower here than they have been for years, as the farmers cannot find a market for them at any price.

Can you give me any information why or how the Federal Government prevented all horses obtainable in Canada from being first bought, even if the price was higher, before any orders were turned over to the United States? We in Canada are the people that are bearing the brunt in the matters of men and money, and I say that it is almost criminal for the Government to not bid for the supply of these horses, to say nothing of putting obstacles in the way.—A. E. MacLean, Prince Edward Island.

Records of Pure-bred Cows

NINE years ago the Live Stock Branch of the Federal Department of Agriculture, in cooperation with certain record associations representing breeders of dairy cattle, began to record the performance of pure-bred milking cows. Each record association agreed upon a standard of yield for cows of its respective breed to qualify for registration, which the Live Stock Commissioner formulated regulations under which the tests were to be carried out. At the end of each year a report of the work has been issued, containing a list of the animals that qualified for registration during the year, their breed, age, ownership, milking period, production of milk and fat and other information as might reasonably be looked for in an official report. Each year the work has increased, until the seventh report, just issued, contains no less than 102 pages of information. During the year 413 cows qualified for registration, including 196 Holsteins, 123 Ayrshires, 36 Jerseys, 9 Guernseys, 14 French-Canadians, and 32 Short-horns. The highest records made were: Short-horn, 15,535 pounds milk, 940 pounds fat; French-Canadian, 10,767 pounds milk, 453 pounds fat; Guernsey, 11,445 pounds milk, 520 pounds fat; Holstein, 23,717 pounds milk, 834 pounds fat; Jersey, 15,211 pounds milk, 764 pounds fat; Ayrshire, 16,066 pounds milk, 700 pounds fat.

This report for the second year contains an appendix containing the records of cows which produced excellent milk and fat for several generations, but failed to calve within fifteen months after the commencement of the test, as required by the registrations. This report is of special interest to dairy farmers who are anxious to build up the milking qualities of their herds. Copies will be sent to those who apply for them to the Publications Branch of the Department of Agriculture at Ottawa.



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

Conservation of Soil Moisture

IT may seem almost irrelevant to talk of conserving soil moisture at this time when crops all over Ontario and to some extent in other provinces as well, have suffered from too much moisture. It is nevertheless true that the severe rains that damaged this season's crops may be made to add to the crops of 1916. It is only in an exceptional season that the rainfall during the growing season is sufficient to mature the crop and in the average season the rainfall provides only one-third to one-half the moisture required to mature a crop of grain or hay. Now is the time to start conserving the balance of the moisture, which must be stored up in the soil between now and next spring.

One effective way of storing soil moisture and at the same time destroying weeds is after harvest cultivation. The sod should be plowed as soon as possible and the land worked with the disk and/or drag. On stubble fields that have not been seeded to clover it is well to disk and cross disk as soon after the crop is off as possible. The soil is then in ideal shape to conserve the moisture already in it and absorb more moisture during the fall and winter. Next year may be as dry as this year has been wet, and we will then reap the results of the late summer and fall cultivation.

A Big Business Developing

WHEN the United Farmers Cooperative Co., Limited, was first organized, there were many who predicted nothing better than its quick failure and dissolution. At the present time, the standing of the company leaves no grounds for pessimism. Already one hundred and forty shares of stock have been sold. One

hundred and fifty organizations throughout Ontario have done business with the central company, although the greater part of the business is done by perhaps less than fifty of these. Altogether several thousand Ontario farmers have benefited financially because of the work of the United Farmers' Cooperative Co., Limited.

If fifty clubs can do a business of \$1,000 a day, which is the present average, this cooperative company promises to be one of the biggest cooperative ventures in the Dominion when the Province has been fully developed and organized. Ontario farmers owe a debt of gratitude to the men who gave their services unflinchingly towards its organization when its success was problematical. Now that success is assured the chief duty of the company in the immediate future lies along the line of developing the cooperative sentiment and maturing facilities for doing safe business on an extensive scale. The measure of this success, as of all other cooperative companies, is, of course, determined by the heartiness of the support accorded it by its farmer members. It is up to us.

Bankers and Farmers

AN unusual convention was held recently in Chicago. It was called by the bankers of the United States. The guests of honor were practical farmers. The object of the convention was to discuss the mutual interests of bankers and farmers. True, the date chosen was unfortunate and the farmer guests were few because the crops demanded attention at home. The significant thing, however, is that bankers should have called such a convention. It would seem that the bankers of the United States are awakening at last to the benefit of closer relationship with the great primary industry of agriculture.

Urban industries are conducted largely on credit. As the farm industry comes more and more under business management, the demand for farm credit becomes more insistent. Bankers, heretofore, have not been prepared to give terms suitable to the farm business; in fact, bank regulations prove that Canadian financiers have never seriously considered the farm field except as a source of deposits. It is to be hoped that they will soon awaken to their duty as managers of semi-public institutions, and cater to the real credit needs of the country. At the present time when agricultural production is of such vital importance to Canada and the Empire, the two classes should endeavor to understand each other better and render the mutual assistance that each can give. Why not a conference of Canadian bankers and representative farmers to discuss fully the question of rural credits?

A Surer Foundation

THE taxation of land values for all purposes would deprive land of its speculative value and retard advances in selling price due to a community development. The question for the farmer to decide then is whether the advantages of this system of taxation are sufficient to compensate him for the loss of that old source of profit, the increasing value of his land. Dependence on such an uncertain factor as increasing land values for returns for labor is unsatisfactory at best. The best claim we can make for the taxation of land values on a national scale is that it will place farming on a profitable basis through the tilling of the soil alone.

There is little community value in farm land. Community values are largely centered in the cities. Community values in Montreal have increased well over \$100,000,000 in the last few years. In Toronto there was an increase last year of \$35,000,000. All over Canada town and city land values have increased in greater or less proportion. Our mines and water powers rep-

resent great community values which at present largely escape taxation. In a system where all taxes would be raised from community values, the landlords of the cities and the monopolizers of valuable mine and water privileges would contribute most of the taxation for the federal and provincial purposes. Farm land would then be called on to bear little more than the municipal tax which is but a small part of the whole. It has been estimated by competent authorities that the farmer who works 100 acres good land pays \$900 to \$300 a year in indirect taxation, such as customs taxes. Most, if not all of this, he would save. If we capitalize the lower figure at six per cent., it amounts to \$3,333.33. It would take a farm sometime to increase in value through community development to such a figure as this. Hence the farmer would benefit directly by the substitution of a land value tax for the present form of indirect taxation. There would be indirect benefits that are even more important. With the tariff and all other shackles taken off, production, supplies of implements, building material, and so forth, would be cheaper. As less money would be invested unproductively in city and town lots, more capital would be available to the farmer at reasonable rates. Young men would be enabled to make a start on their own farms earlier in life. In short, agriculture would be made to appeal to the young men because of its economic profit, rather than its speculative or gambling futures. Is this more desirable?

A Great Soil Renovator

A FEW years ago careful farmers were getting out sweet clover with as much difficulty as perennial sow thistle. To-day many of these same farmers are such ardent advocates of sweet clover that they believe it will finally place alfalfa and red clover in popular esteem. Others still insist that sweet clover is only weed. Both views are extreme, and under certain conditions both may be right. On rich soil where clover and alfalfa produce heavily sweet clover may be nothing more than a weed. On thin gravelly soil where other crops fail, sweet clover may be a farm crop "par excellence."

Our attention was first drawn to the value of sweet clover when we saw it grow year after year on a gravel hill side which previously had grown nothing but burdocks. Finally the sweet clover was plowed down, and so well had it renovated that gravelly soil that a good stand of alfalfa has secured each year since. In this incident we have an indication of the way in which sweet clover may be used most extensively on Canadian farms—as a soil renovator. Its value in this capacity is increased by the fact that it incorporates the soil for alfalfa. Sweet clover is a comparative no-crop, and we cannot afford to be carried away by exaggerated claims either for or against it.

Which Shall We Have?

ARE there more autos than bath tubs in our country to-day? This may seem an irrelevant question. But is it? In there not a possibility that the money that is paid for the auto might have been expended with more all-round satisfaction to the family on a running water system and the conveniences that running water makes possible?

We have nothing against the auto. Surely no one deserves the good time that it can give, more than the farmer. No one could use it to better business advantage than the farmer. We extend, however, that any farmer who can afford an auto can afford modern conveniences in his home. Perhaps many who have an auto without the conveniences can afford both. We hope so.

Selecting

By Roy E. Neel

GREAT things are being done in the poultry business. This is a time to receive careful attention usually the means of a special farm.

The first question we pick out is the producer can the low profit safely say "Yes" leaves its market the highest producer and mail warranty. If self before the bird spring a great producing character appeared and in the dark.

Second, "How high production of the trapnest way of obtaining record of egg production the trapnest flock; with the study them as close acquaintance us to detect which always produces. Some are as follows:

1. Late moulted.
2. Pale shank.
3. Wide spread.
4. Can't carry to the two end of the breast.
5. Quality, thin breast, bone and fat.
6. Accurate fixing and last to the

1. Growing in eggs demand for food material.

It is evident make an unusable she must stop after that year. There are some flock that grow regularly at the very few flock in this capacity for breeding stock. It grows a new crop these hens be kept that they do winter production be very difficult that lay late in and begin to lose those that the producer must be clothes during and October.

2. We pick out shanks not because that way but matter has been decided.

The color usually is taken from production will break and ear where these parts. After a crop slowly return in the spring where a test in and October is



Selecting the Breeding Hens

By Boy E. Jones, Poultryman, Connecticut Agric. College.

A GREAT many people are asking the question, "When and how shall I pick out my breeding hens to improve egg production?" This question should rightly receive careful consideration as it is usually the deciding factor which means profit and loss on the commercial farm.

The first question is, "When shall we pick out the breeders?" Is there any one time of the year when a high producer can be distinguished from the low producer? I think we can safely say "Yes." Heavy production leaves its mark and we can select the highest producers in the late summer and fall with a fair degree of accuracy. If selection is left until just before the breeding season in the spring a great many of the high producing characteristics will have disappeared and we will be working in the dark.

Second, "How shall we pick out the high producers?" We must admit that the trapnest is the only accurate way of obtaining records. The trapnest does more than simply give a record of egg production. Without the trapnest we see our birds as a flock; with the trapnest we see and study them as individuals. It is this close acquaintance that has enabled us to detect certain characteristics which always appear in high producers. Some of these characteristics are as follows:

- 1. Late moult and rough appearance.
- 2. Pale shanks, beak and ear lobes.
- 3. Widespread pelvic bones.
- 4. Capacity full crop, distance between end of breast bone and pelvic bones.
- 5. Quality, thin pliable skin over breast bone and abdominal cavity.

- 6. Activity, first down in the morning and last to roost at night.
- 1. Growing new feathers and laying eggs demand practically the same kind of food materials.

It is evident then if a hen is to make an unusually high year's record she must postpone moulting until after that year has been completed. There are sometimes a few hens in a flock that moult slowly and lay irregularly at the same time but they are very few. It is safe to take a few days' disgust that is to be used for breeding the coming year and cull out all that are moulting or have grown a new coat of feathers. Should these hens be kept over with the belief that early moult means fall and winter production the results would be very disappointing. The birds that lay late in the fall often moult and begin to lay again as soon as those that moult early. The high producer must be found in her working clothes during August, September and October.

- 2. We pick out the birds with pale shanks not because they are naturally that way but because the color matter has been used by heavy production.

The color used in the yolk of the egg is taken from the body. Continued production will bleach out shanks, beak and ear lobes in all breeds where these parts are supposed to be yellow. After production stops the color slowly returns, consequently a test in the spring would be worthless where a test in August, September and October is very reliable. Even

though production was good it is probable that birds are kept on a good range with plenty of green feed would show more color than those kept in bare yards. However, the birds in any flock are comparable and all best layers are easily detected. All birds with bright yellow shanks and beak in August may as well be sent to market for in all probability they have not paid their board for the past year.

3. The pelvic bones in a bird are the long slender bones projecting back either side of the vent and between which eggs must pass.

The present laying condition of the bird may be judged by the spread of these bones, in cases of one, two, three and in some cases of four wide. The bird with a spread of two fingers or more may be picked out as a good layer provided other indications are favorable, while those with a spread of only one finger may be safely discarded. The best layers usually have slender, pliable pelvic bones while the poor layers have hard, rigid bones even though they are spread during production.

Appetite an Indication
4. The bird that is a high producer must have a vigorous appetite and a large capacity for converting food materials into eggs.

The bird with a large appetite can be picked out on the roost at night by the size of the crop. The capacity of a bird may be judged by the shape of the body. The jointed ribs allow the rear part of the body to expand downward, taking on a wedge shape as the digestive system and reproductive organs demand more room. This spread may be judged by the distance between the rear end of the breast bone and the pelvic bones. A bird spread from heavy production should not be confused with one spread from being over fat.

5. The high producer invariably shows what we might term as quality, that is, soft pliable skin over breast bone and abdominal cavity.

The skin of the non-producer or the bird out of condition will have a hard leathery or drawn feeling.

While the shape of the overfat bird may indicate capacity the body cavity is filled with fat rather than organs of digestion and production and the skin is lacking in that quality which appears in the high producer.

Activity and Production
6. The activity of a bird is a very good indication of production. The high producer must have more to eat of everything that a hen requires for production, consequently she is the first down in the morning and the last to roost at night. She will range farther and is always looking for something to eat.

The practical application of these methods of picking out the laying hen can be easily carried out by any one after a little experience. Do not depend on any one of them but look for them all in one bird and you will have a high producer. A very good plan is to go over the flock once a month in August, September and October. On each inspection put a band or some distinguishing mark on each bird that measures up to the requirements of high production with late moult, pale shanks, beak and ear lobes, widespread pelvic bones, large capacity and heavy activity. For the best breeding pen use only the birds that have measured up to the highest requirements.

Great size of an abdominal pouch in a goose indicates great age, a fact that is useful in purchasing breeding stock.

As a broiler cannot be secured on free range, and as it can attain the required weight in a given time only by a systematic feeding of pure food it carries with it a reputation and demand on account of its juiciness, tenderness and purity.

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NEXT winter when dairy products are bringing the best prices and your cows are practically dry because they have only dry feed you will realize how much you need a silo.

Why not put the silo up now? You still have plenty of time and when you bear in mind that the silo will actually pay for itself before the first year you can easily afford it. In fact, no man who feeds dairy cows, beef cattle or sheep can afford to be without silage.

Ask any man who is feeding silage and he will tell you his silo is one of the best investments he ever made. It cuts down his feeding costs, increases his profits, his stock thrive better and there is less work.

Let us have your order now for an Ideal Green Feed Silo. We can ship it promptly, and you will get it in plenty of time to have it erected and ready for filling this Fall.

Ask for prices, terms and complete information regarding this silo. You cannot buy as good a silo for less money and no matter how much you pay you will not get a better silo than the Ideal Green Feed.



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Sole distributors in Canada of the famous De Laval Cream Separators and Alpkem Case Engines. Catalogues of any of our lines mailed upon request.

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

Fire!!! Lighting

Protect your crops, your cattle—and your buildings. Any building you erect can be made better if you get our expert belt. No charge for plans. Ask for "Better Buildings" the best book of its kind on fire-proof farm buildings.

STEEL TRUSS BARN
PRESTON SHINGLES
A C O R N I R O N
READY-MADE BLDGS.

The Metal Shingle & Siding Co., Limited - PRESTON



MANY THOUSAND FARM LABORERS WANTED

FOR HARVESTING IN WESTERN CANADA

"GOING TRIP WEST" \$12.00 TO WINNIPEG | "RETURN TRIP EAST" \$18.00 FROM WINNIPEG

GOING DATES

August 19th and 26th—From Kingston, Thunder Bay, Sault Ste. Marie, Renfrew and East in the Province of Ontario and Quebec, including intermediate stations and branches.

August 23rd and 26th—From Toronto, Sault Ste. Marie, Ont., and East in the Province of Ontario, including intermediate stations and branches, but not East of or including Kingston, Thunder Bay, Sault Ste. Marie, Lake Huron, etc.

August 24th and 26th—From Toronto and stations West and North in the Province of Ontario, but not including stations on line North of Toronto to Sault Ste. Marie, Ont.

For full particulars regarding transportation west of Winnipeg, etc., see nearest C.P.R. Agent, or write—
M. G. MURPHY, District Passenger Agent, Can. Pac. Ry., TORONTO

FRUIT NEWS

Plums will be at their best the last two weeks in August. The first to get to market are the Dages and Burbanks. The Burbank is the best Japanese plum. Everybody knows the quality this season is unusually fine, and it will be well to put down an extra supply. Early River and Alexander Peaches are also ready. They are both supremely delicious sliced with cream. The Triumph is the finest yellow hashed peach, and excellent for canning. Better quality will be obtained both in peaches and plums if ordered early.



St. Lawrence Sugar
Home Jam-Makers

This hint may Save your Jam!

No matter how fresh your berries, nor how thoroughly the jam is cooked, nor how clean the jars are, preserves are absolutely sure to spoil if the sugar used contains organic matter.—Impurities—and many sugars do—

Home jam makers should profit by the experience of others and insist on being supplied with

St. Lawrence

Extra Granulated Sugar which has always, and for many years, given satisfaction.

It tests over 99.99 per cent pure and is refined exclusively from cane sugar.

Buy in retinery sealed packages to avoid mistakes and assure absolute cleanliness and correct weights—3 lb. and 5 lb. tins; 10, 20, 35 and 100 lb. bags, and your choice of sizes of grain. Use *any* brand, or course.

—A good dealer can fill your order.

ST. LAWRENCE SUGAR REFINERS, LIMITED, Montreal.



The Upward Look

A Sack of Worries

"P ERfect love casteth out all fear."

A wayfarer man carried a sack full of worries, and he was complaining unceasingly. From none could he take help or comfort. And as he slowly journeyed on, toiling under his burden, the Angel of Cheer came to him and spoke kindly, saying: "Brother, what carriest thou?"

"And the man made answer surlily, 'My worries.'"

The angel smiled pityingly upon him and said: "Let us look into thy bundle and examine thy worries." And so they looked in. But lo! the sack was empty.

"Why," cried the man, "there were two great worries, too heavy for man to bear. But—ah, yes, I had forgotten—one was a worry of yesterday, and so it is gone."

"And the other?"

"Well, that—that was a worry of tomorrow, and it—it is not yet here."

Then the angel smiled upon the man with infinitesimal pity, saying:

"Hearken. He who bows himself down under the worries of yesterday and tomorrow, wears himself out for naught. But he who carries only the worries of to-day hath need of a sack for his sorrows. If thou wilt cast this black thing aside, and give all thy strength and cheer and courage to the things of to-day, then real misfortune never can overcome thee."

Whereupon the man did as the Angel of Cheer commanded. And as he took up his journey and went lightly, swiftly on, his hands were free to relieve many other wayfarers of their burdens, and to pluck for himself weeds and flowers along the wayside. And by the time he was at the setting of the sun, it was with smiles and a song.—M.M.R.

Keeping Abreast of the Times

And this, *Peterboro Co., Ont.* An idea that I have lately, and which I considered a good one, may be of interest to some of your readers who are planning to make their kitchen as convenient as possible and with little expense. I pass along the idea for what it is worth.

In modern homes nowadays, a cupboard is built between the dining-room and kitchen, with doors opening into both rooms. Such a convenience may be installed on a smaller scale by having a kitchen table built against the wall, with drawers below. On the dining-room side, they have a shelf sideboard with drawer below, supported by iron brackets. The sideboard shelf and kitchen table should be on the same level, the broad opening is cut through the partition just over the table, and either a draw curtain or a sliding door put in the opening. The food and dishes can come into the dining-room through this opening, also the table cleared in the same manner.

A new invention which has interested me considerably, and which some of my sisters may have heard about, is a cabinet ironing board. It has been recently patented by a Utah man. This ironing board can be folded up inside a closet or behind the door when not in use. The end of the ironing board slides up or down into and out of position, to be used when turned outwardly, and locked into position. Strips that hold the bottom of the board in position when folded act as braces in supporting the outer end when opened and ready for use. A second part projects above the main board when it is used for the pressing of coats, skirts, and other garments not adapted to the flat board.

"As you like it"



TEA

SEALED PACKETS BLACK, MIXED ONLY. OR GREEN.

B 20

OUR HOME CLUB

The Other Side

WELL, at Well! at Well! as Punch and Judy says, so you are at sea as to how to manage the farmer and his hired men. There are hired men, and hired men, and you are a type. "Mr. Rolling Stone." Punch and Judy would settle you, as he did the Chinaman and the African and the Frenchman not long ago—lay them out and then make short work of them. It has been my experience that every man in town or city who is out of work, "hikes" away to the country and thinks he will get work with the farmers. It matters not whether he can tell a hoe from a rake or a cow from a very goat, and more, he demands the highest wages for his inexperience, and also the privileges of the home life on the farm. Do you know, Mr. Hired Man, or have you discovered that your travels that the farm is the only institution where the employe is as a rule received into the home life, and in most cases treated with the greatest consideration; and if they are not, in nine cases out of ten it is their own fault?

I recall instances of the greatest rudeness which some farmers' wives have endured for the sake of peace. The hired man's room referred to in some letters are but samples: No matter how suggestive of refinement and order it may be, the condition of it after a week or two is most discouraging, and the farmer's wife sizes up the occupant accordingly. Straws show which way the wind blows. You expect the best, and very best, from your employer: you get the comforts and the companionship of the home life; give your best in return and try to meet the demands of that home life. Do you know of a single instance where, if a hired man were not a gentleman, he was not treated as one, but I do know of cases where life became intolerable for the farmer's gentle wife, just because of the hired man's uncouthness.

Pearls Before Swine

A case was cited to me of a home where every effort was made to help and influence for good every one connected with it. The men of the family would put on slippers in the evening, as every man should on the farm, yet this big rough fellow sat evening after evening with his mud and muck-laden boots in the cosy living-room, and on retiring would leave them wherever he had been sitting. Needless to say, the little woman of the home resented this, but what could she do? Many bitter tears were shed in secret, but he was a stick! I know no better, did not value his privileges and worse, could not be influenced. A young Englishman hired with a farmer. He was very quiet and reserved. The farmer and his wife

were plain people and thought little of anything but making money. The husband was a machine, and this hired man plodded away, but very wrathfully sometimes, and as he afterwards admitted, when told to go and feed the pigs he would kick the pails all over the yard just for a bit of relief. He spent most of his leisure hours in his own room, and that room was a revelation of the man. He had books and books and he had travelled, too.

He said very little, but unconsciously his influence was felt. The farmer spoke in a kinder tone, he was gentler with his wife, and actually began to observe some of the little courtesies of life. In that, and in many ways, the hired man helped them to a broader and a richer life.

This hired man was respected and admired by every one, and in time he won the love of a neighboring farmer's daughter. They were married and went home to England, went home to one of the beautiful estates of England—an estate having a park as large as the farm on which he had been playing the hired man. One surprise followed another. A wardrobe filled with beautiful gowns for the bride and a maid to help her dress. She actually cried to think she had been so deceived; but her husband had always been used to it, and to him it was simply home. He had gone to Canada to study conditions there, and in the interests of his literary work. So you see we may be entertaining angels unawares, and after all it is a case of human nature. People must give expression to their life, but let it be remembered that true courtesy comes from a loving thoughtful heart, and such a heart cannot give offence. The best solution of the problem is the plan of providing a home for the employe or employees, and let them live their own life. No one is perfect, and in the intimate relationship of the home life the employer and the hired man see too much of each other. And never forget, Mr. Hired Man, that water will always rise to its own level.—"Dream."

A Bright Idea

"Please, sir," said an Irishman to a farmer going to the market one day, "would you be so obliging as to take me great coat here to B— wid' yer?" "Yes," said the farmer; "but how will you get it again?" "Oh, that's mighty easy, so it is," said Pat; "for shure I'll remain inside ur it!"

He Knew the Difference

"W HAT little boy can tell me the difference between the 'quick' and the 'dead'?" asked the Sunday school teacher. "Willie waved his hand frantically. 'Well, Willie?'" "Please, ma'am, the 'quick' are the ones that get out of the way of automobiles, the ones that don't are the 'dead.'"

Cooperative Marketing of Butter and Cheese

A History of Quebec Cheese Makers' Agricultural Cooperative Society

SOME five years ago 30 men formed themselves into the Quebec Cheese Makers' Agricultural Cooperative Society, each taking up one ten-dollar share—one dollar paid up. The reason given by Mr. A. Trudel, the manager of the society, for its formation was the poor quality of cheese made and marketed in Quebec; to put the situation in his own words, "the best cheese paid for the poor cheese." The work of the society was to improve the quality, and by doing this establish a market for the product that would enable them to pay the farmers more for their milk.

From the small membership of 30 the society has grown until to-day it is handling the output of over 200 cheese factories and about 123 butter factories. The membership has grown to 1,500, each holding a \$10 share. This year it increased its reserve fund by over \$10,000, and for the past two years in addition to paying operating expenses, has paid a six per cent. dividend. As each factory averages about 35 farmer patrons, the society practically controls the output of 11,375 farmers.

Products Are Graded
All butter and cheese received at the headquarters of the society in Montreal is carefully graded by men supplied by the Provincial Government, though this is the only help received from the Government. The society is entirely self-sustaining. Weekly or semi-weekly sales are held by the manager in Montreal, where the society has storage capacity for 10,000 boxes cheese and 6,000 butter. No products are exported by the society directly, all being sold at public auction. The amount of cheese and butter handled last year was \$3,619 boxes of white cheese, and 14,519 of colored cheese, which sold for \$1,120,221.32; and 39,678 boxes of butter worth \$569,933.79.

In addition to butter and cheese, to the value of \$3,335.92 and poultry worth \$3,087.34 were sold by the society, the eggs and poultry come from 20 poultry societies scattered throughout the province, that are affiliated with the larger cheese-makers' organizations.

A Great Handicap
According to the officers of the society the cheese-makers of Quebec are still suffering from the shortcomings of the cheese marketed many years ago. Quebec cheese is not favorably received on the British markets, even though

of late years the quality has improved. Over there the cheese is graded according to the locality in Canada from which it comes, usually as Ontario, Eastern Townships, and Quebec. As a result the cheese made in the latter province suffers in price, and though the quality is often the equal and sometimes the superior of the Township and Ontario cheese, the price it commands does not improve. It may be that the chief gift of the province will help to convince the Old Country buyers of the standard of quality now reached by Quebec cheese-makers.

The following extract from the 1914 annual report of the society is evidence of the improvement wrought by the work of the society.

Prices Higher Than Brockville

"You will notice that the prices realized this year for butter and No. 1 cheese are higher than the prices paid on the markets of Cowansville, Que., and Brockville, Ont. Before this Cooperative Society came into existence, the prices realized on these markets were from half to three-quarter cents higher than those of the average Quebec market. The prices paid by this cooperative society would be still higher than they are if the quantity of the products received was larger. This would be very easy if the society could count on the encouragement of a larger number of farmers and makers of butter and cheese."

The average society prices from May to November for cheese were: White No. 1, 13.76 cents; No. 2, 13.61; No. 3, 13.47; colored, No. 1, 13.83, and No. 2, 13.85. The average price at Brockville, Ont., being 13.65. Considering the poor opinion held of Quebec cheese when exported it seems strange that the dealers in Montreal are willing to pay more for it at public auction. It is learned on inquiry, however, that it is not a difficult matter to take off the "Quebec" printed on the boxes and substitute "Brockville" or "Ontario."

Pasteurized Butter

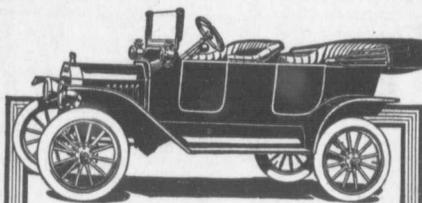
Of the 39,678 boxes of butter handled last year by the society, 6,742 come under the grade "pasteurized," and in a comparison of prices, it stands first, averaging 26.07 cents a pound. No. 1 selling for 25.67; No. 2, 25.24, and No. 3, 22.10. This difference in price is due to the better keeping quality of the pasteurized butter, it being strongly advocated by the dairy instructors at the various provincial dairy schools.

That the quality of cheese and butter has been influenced for the better by the selling through this cooperative society is beyond question. This is accomplished by the grader reporting to the maker any defects in his product, and suggesting how they may be remedied.

Farmers are beginning to understand the advantages secured by the dealings of the society, and it is some cases they have compelled their makers to become members, and to sell through its officers.

The scope of the society is being gradually broadened and this last spring 6,000 gallons of maple syrup and 25,000 pounds of sugar were received and marketed.—Journal of Agriculture.

Why should not competent inspectors be appointed to inspect the stables of patrons?—T. Thompson, Hastin's Co., Ont.



"MADE IN CANADA"

**Ford Touring Car
Price \$530**

**Ford Runabout
Price \$480**

**Ford Town Car
Price \$780**

The above prices f. o. b. Ford, Ont., effective Aug. 2, 1915. No speedometer included in this year's equipment, other wise cars fully equipped. Cars on display and sale at any Branch Manager—or write Ford Motor Company, Ltd., Ford, Ont., for catalog F.



In the Dairy

Use Panshine to thoroughly clean and shine all the cans, pails, shelves, etc. Leaves everything sweet-smelling and sanitary. Cleanliness pays—especially in the dairy. Use

PANSHINE

It's a pure, white, clean powder—doesn't scratch—can't harm the hands—odorless.

Sold in Large Sifter Top Tins 10c. At all Grocers.



When writing to advertisers mention Farm and Dairy.

POSITION WANTED

by a Danish Butter and Cheese-maker, this fall or next spring.

TEN YEARS EXPERIENCE

T. PEDERSEN
R. R. No. 1 TAVISTOCK, ONT.

A Brick Cheese Factory

For sale, in one of the best dairy districts in Western Ontario. Good dwelling, bank stable, hog pens, land orchard, a never failing spring running into factory. Pasture is fully equipped with up-to-date facilities for cheese and butter, making 15 cheese from 100 to 150 lbs. of butter a week. This is a good going concern, 1/2 mile from village with 2 churches, 2 stores, school, blacksmith shop. Good terms. Possession may be had this fall. Good reasons for selling. Address

BOX 1596

FARM AND DAIRY, PETERBORO, ONT.

HOTEL CARLSRITE

The House of Comfort
American Plan \$2.50 up
European Plan \$1.00
"Meet Me at the CarlsRITE"

TORONTO

SILVER'S Ohio Silo Filters

Patented Butcher Self-Feed Saves a Man
 DISCOVER how we are enabled to stage a man's work. Feed loads are organized in the Ohio "Butcher" silo. Cows draw out the feed as they please. We have a silo with 100 bushels of feed. It will hold for 100 cows for 100 days. We have a silo with 50 bushels of feed. It will hold for 50 cows for 50 days. We have a silo with 25 bushels of feed. It will hold for 25 cows for 25 days. We have a silo with 12 1/2 bushels of feed. It will hold for 12 1/2 cows for 12 1/2 days. We have a silo with 6 1/4 bushels of feed. It will hold for 6 1/4 cows for 6 1/4 days. We have a silo with 3 1/8 bushels of feed. It will hold for 3 1/8 cows for 3 1/8 days. We have a silo with 1 5/16 bushels of feed. It will hold for 1 5/16 cows for 1 5/16 days. We have a silo with 7/16 bushels of feed. It will hold for 7/16 cows for 7/16 days. We have a silo with 3/8 bushels of feed. It will hold for 3/8 cows for 3/8 days. We have a silo with 1/4 bushels of feed. It will hold for 1/4 cows for 1/4 days. 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We have a silo with 1/30223147262275753053184 bushels of feed. It will hold for 1/30223147262275753053184 cows for 1/30223147262275753053184 days. We have a silo with 1/60446294524551506106368 bushels of feed. It will hold for 1/60446294524551506106368 cows for 1/60446294524551506106368 days. We have a silo with 1/120892589049103012212672 bushels of feed. It will hold for 1/120892589049103012212672 cows for 1/120892589049103012212672 days. We have a silo with 1/241785178098206024425344 bushels of feed. It will hold for 1/241785178098206024425344 cows for 1/241785178098206024425344 days. We have a silo with 1/483570356196412048850688 bushels of feed. It will hold for 1/483570356196412048850688 cows for 1/483570356196412048850688 days. We have a silo with 1/967140712392824097701376 bushels of feed. It will hold for 1/967140712392824097701376 cows for 1/967140712392824097701376 days. We have a silo with 1/1934281424785648195402752 bushels of feed. It will hold for 1/1934281424785648195402752 cows for 1/1934281424785648195402752 days. We have a silo with 1/3868562849571296390805504 bushels of feed. It will hold for 1/3868562849571296390805504 cows for 1/3868562849571296390805504 days. We have a silo with 1/7737125699142592781611008 bushels of feed. It will hold for 1/7737125699142592781611008 cows for 1/7737125699142592781611008 days. We have a silo with 1/15474251392851836563222016 bushels of feed. It will hold for 1/15474251392851836563222016 cows for 1/15474251392851836563222016 days. We have a silo with 1/30948502785703673126444032 bushels of feed. It will hold for 1/30948502785703673126444032 cows for 1/30948502785703673126444032 days. We have a silo with 1/61897005571407346252888064 bushels of feed. It will hold for 1/61897005571407346252888064 cows for 1/61897005571407346252888064 days. We have a silo with 1/123794011142814691257777712 bushels of feed. It will hold for 1/123794011142814691257777712 cows for 1/123794011142814691257777712 days. We have a silo with 1/247588022285629825147554424 bushels of feed. It will hold for 1/247588022285629825147554424 cows for 1/247588022285629825147554424 days. We have a silo with 1/495176044571259650295108848 bushels of feed. It will hold for 1/495176044571259650295108848 cows for 1/495176044571259650295108848 days. We have a silo with 1/990352089142519300590217696 bushels of feed. It will hold for 1/990352089142519300590217696 cows for 1/990352089142519300590217696 days. We have a silo with 1/1980704178245386001180435392 bushels of feed. It will hold for 1/1980704178245386001180435392 cows for 1/1980704178245386001180435392 days. We have a silo with 1/3961408356490772002360870784 bushels of feed. It will hold for 1/3961408356490772002360870784 cows for 1/3961408356490772002360870784 days. We have a silo with 1/7922816712981544004721741568 bushels of feed. It will hold for 1/7922816712981544004721741568 cows for 1/7922816712981544004721741568 days. We have a silo with 1/15845633425963088009434823136 bushels of feed. It will hold for 1/15845633425963088009434823136 cows for 1/15845633425963088009434823136 days. We have a silo with 1/316912668519261717188696462727 bushels of feed. It will hold for 1/316912668519261717188696462727 cows for 1/316912668519261717188696462727 days. We have a silo with 1/633825337038523434377392925454 bushels of feed. It will hold for 1/633825337038523434377392925454 cows for 1/633825337038523434377392925454 days. We have a silo with 1/12676506740770468687547959109088 bushels of feed. It will hold for 1/12676506740770468687547959109088 cows for 1/12676506740770468687547959109088 days. We have a silo with 1/253530134815413737710959817817776 bushels of feed. It will hold for 1/253530134815413737710959817817776 cows for 1/253530134815413737710959817817776 days. We have a silo with 1/50706026963082747541919735635635552 bushels of feed. It will hold for 1/50706026963082747541919735635635552 cows for 1/50706026963082747541919735635635552 days. We have a silo with 1/1014120539261654950935947127111104 bushels of feed. It will hold for 1/1014120539261654950935947127111104 cows for 1/1014120539261654950935947127111104 days. We have a silo with 1/2028241078523309901871891454222208 bushels of feed. It will hold for 1/2028241078523309901871891454222208 cows for 1/2028241078523309901871891454222208 days. We have a silo with 1/4056482157046618193737837085444416 bushels of feed. It will hold for 1/4056482157046618193737837085444416 cows for 1/4056482157046618193737837085444416 days. We have a silo with 1/8112964314093236387476741710888832 bushels of feed. It will hold for 1/8112964314093236387476741710888832 cows for 1/8112964314093236387476741710888832 days. We have a silo with 1/1622592822786467277495482842177776 bushels of feed. It will hold for 1/1622592822786467277495482842177776 cows for 1/1622592822786467277495482842177776 days. We have a silo with 1/3245185645572934554990965684355552 bushels of feed. It will hold for 1/3245185645572934554990965684355552 cows for 1/3245185645572934554990965684355552 days. We have a silo with 1/6490371291145869089981931171111104 bushels of feed. It will hold for 1/6490371291145869089981931171111104 cows for 1/6490371291145869089981931171111104 days. We have a silo with 1/12980742582317178191976382342222208 bushels of feed. It will hold for 1/12980742582317178191976382342222208 cows for 1/12980742582317178191976382342222208 days. We have a silo with 1/25961485044634356383952664684444416 bushels of feed. It will hold for 1/25961485044634356383952664684444416 cows for 1/25961485044634356383952664684444416 days. We have a silo with 1/51922970089268712716795332913777776 bushels of feed. It will hold for 1/51922970089268712716795332913777776 cows for 1/51922970089268712716795332913777776 days. We have a silo with 1/10384594017753742533558666582755552 bushels of feed. It will hold for 1/10384594017753742533558666582755552 cows for 1/10384594017753742533558666582755552 days. We have a silo with 1/207691880355074850671151733411111104 bushels of feed. It will hold for 1/207691880355074850671151733411111104 cows for 1/207691880355074850671151733411111104 days. We have a silo with 1/415383760710114913422262822222208 bushels of feed. It will hold for 1/415383760710114913422262822222208 cows for 1/415383760710114913422262822222208 days. We have a silo with 1/8307675214202298226844514444444416 bushels of feed. It will hold for 1/8307675214202298226844514444444416 cows for 1/8307675214202298226844514444444416 days. We have a silo with 1/1661535042400459653689002888888832 bushels of feed. It will hold for 1/1661535042400459653689002888888832 cows for 1/1661535042400459653689002888888832 days. We have a silo with 1/33230700848009193073778057777776 bushels of feed. It will hold for 1/33230700848009193073778057777776 cows for 1/33230700848009193073778057777776 days. We have a silo with 1/66461401696018386147556115555552 bushels of feed. It will hold for 1/66461401696018386147556115555552 cows for 1/66461401696018386147556115555552 days. We have a silo with 1/132922803392036772295113111111104 bushels of feed. It will hold for 1/132922803392036772295113111111104 cows for 1/132922803392036772295113111111104 days. We have a silo with 1/265845606784073544590226222222208 bushels of feed. It will hold for 1/265845606784073544590226222222208 cows for 1/265845606784073544590226222222208 days. We have a silo with 1/5316912135681470891804524444444416 bushels of feed. It will hold for 1/5316912135681470891804524444444416 cows for 1/5316912135681470891804524444444416 days. We have a silo with 1/1063382427136334378360904888888832 bushels of feed. It will hold for 1/1063382427136334378360904888888832 cows for 1/1063382427136334378360904888888832 days. We have a silo with 1/212676485427272675672171733411111104 bushels of feed. It will hold for 1/212676485427272675672171733411111104 cows for 1/212676485427272675672171733411111104 days. We have a silo with 1/425352970854545351344342222222208 bushels of feed. It will hold for 1/425352970854545351344342222222208 cows for 1/425352970854545351344342222222208 days. We have a silo with 1/8507059417090907026886848444444416 bushels of feed. It will hold for 1/8507059417090907026886848444444416 cows for 1/850705941709090702688684844444416 days. We have a silo with 1/17014118834181813773773697777776 bushels of feed. It will hold for 1/17014118834181813773773697777776 cows for 1/17014118834181813773773697777776 days. We have a silo with 1/340282376683636275475475555552 bushels of feed. It will hold for 1/340282376683636275475475555552 cows for 1/340282376683636275475475555552 days. We have a silo with 1/680564753367272550950951111111104 bushels of feed. It will hold for 1/680564753367272550950951111111104 cows for 1/680564753367272550950951111111104 days. We have a silo with 1/1361129506734451011901902222222208 bushels of feed. It will hold for 1/1361129506734451011901902222222208 cows for 1/1361129506734451011901902222222208 days. We have a silo with 1/2722259013680202023803804444444416 bushels of feed. It will hold for 1/2722259013680202023803804444444416 cows for 1/2722259013680202023803804444444416 days. We have a silo with 1/5444518027360404047607608888888832 bushels of feed. It will hold for 1/5444518027360404047607608888888832 cows for 1/5444518027360404047607608888888832 days. We have a silo with 1/10889036054720080092120151311111104 bushels of feed. It will hold for 1/10889036054720080092120151311111104 cows for 1/10889036054720080092120151311111104 days. We have a silo with 1/21778072109440160184240302222222208 bushels of feed. It will hold for 1/21778072109440160184240302222222208 cows for 1/21778072109440160184240302222222208 days. We have a silo with 1/4



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DISPERSION SALE

OF 35 HEAD OF

Sunnybrook Holsteins

AUGUST 31, 1915

At ONE p.m.



Entire Herd of Pure-Breds will go to the other fellows at their prices. They will get value whether we do or not.

Four head are choice young Bulls nearly ready for service, sired by Segis Prilly Veeman, and from R.O.M. dams. The rest are first-class females, only one over 7 yrs. and 5 over 4 years, in excellent health and pink of condition; in calf to such renowned sires as Segis Prilly Veeman, Idylne Paul Veeman, and Grace May Fayne. Most of the milkers are tested, making R.O.M. records from 11 lbs. as jr. 2-yr.-old to 21 lbs. as mature cows.

Six extra good young Horses and a quantity of Hay and Oats will also be sold.

Prospective buyers can do no better than attend our sale and invest in as good stuff as the district contains.

Farm 30 rods from C.P.R. station at Straffordville. Train arrives at noon from Woodstock, Ingersoll, and Tillsonburg, connecting with all East and West bound trains.

Free Lunch on Lawn.

Catalogues now ready.

James and Cecil Nevill

Proprietors

STRAFFORDVILLE - ONT.

CAPT. M. MOORE, Auctioneer



Pure Bred Pigs

HAVE YOU GOT YOURS?

Your can secure one without any cash outlay by following our plan.

Read what some of our readers who have won PURE BRED PIGS this summer have to say about them.

"Just a line to let you know that I received my pure-bred Berkshire sow and that I am well pleased with her. She is indeed an excellent pig."

Jimmy Kelly, Neville, Sask.

"I now drop you a line to let you know that the Duroc Jersey pigs which you gave me for securing subscribers for Farm and Dairy arrived yesterday, and I am well pleased with them."

W. J. Steele, Newington, Ont.

"I secured a premium pig from you, and am so well satisfied that I am going to try for another premium."

Ray Davis, Barnaby, Ont.

"It is a pleasure for me to drop you a few lines to thank you for the pig you gave me for those new subscribers to Farm and Dairy. I am well pleased with the pig, and all those who have seen her say she is a dandy and wish they had one like her."

Clayton Shank, Selkirk, Ont.

"The sow you ordered for us arrived some time ago, and yesterday I received the pedigree. I am well pleased with the pig, and am sure that she is getting along well. It is a good advertisement for Farm and Dairy."

Geo. R. Upton, Dorion, Ont.

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Do you want one of our PURE-BRED PIGS? If so, just pick out the breed you want and write for full particulars—using the coupon—and we shall be delighted to send you full information and supplies with which to secure the subscriptions. As soon as you send the subscriptions to us, we will order your pig from a reliable breeder, who will ship direct to you, sending the pedigree papers. When you receive your pig, all you have to do is to turn it out and it will pick up practically all its living until winter. By next spring you will have a fine, full grown, pure-bred, revenue-producing pig that will be the envy of all your neighbors; and all this without any cash outlay. All we ask you to do is to secure NINE New Subscribers to Farm and Dairy at \$1.00 each, and we will start the ball rolling.

Write to-day, using the coupon. You will find it handy—and so do we

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Dear Sirs—

Please send the full information and supplies as I am determined to win one of your pure bred pigs.

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