

Dairy and Cattle Section  
Age Comm. Dec. 16  
Dept. of Agri.

# FARM AND DAIRY

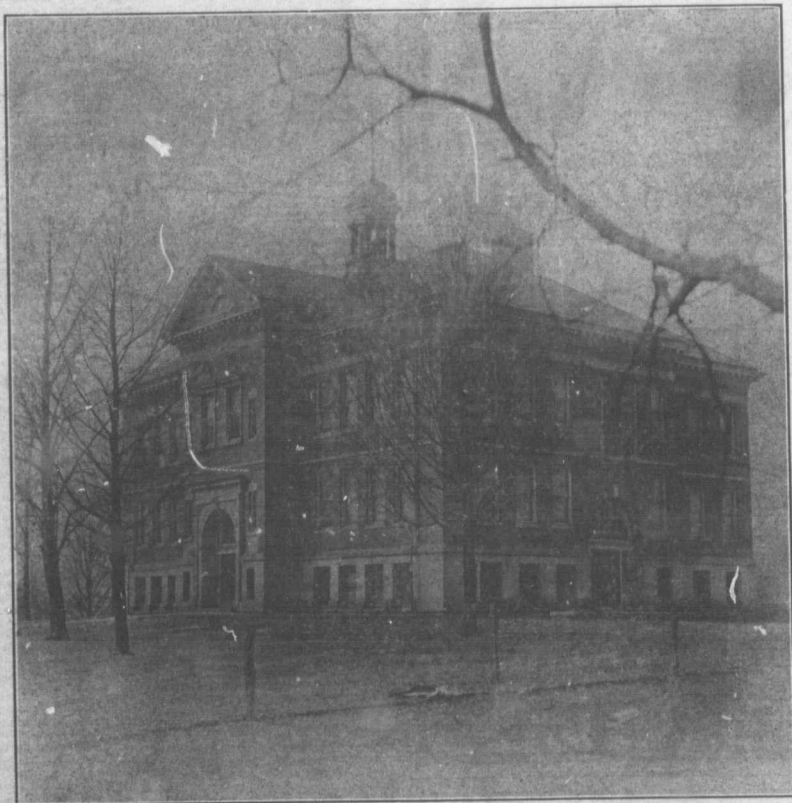
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**RURAL HOME**



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**BETTER FARMING**  
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COUNTRY LIFE



Peterboro, Ont., Jan. 27, 1916



A CONSOLIDATED SCHOOL IN RANDOLPH CO., INDIANA

This school was described in Farm and Dairy of Dec. 16, 1915.

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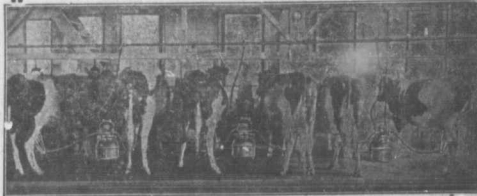
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## A Fine Live Stock Display at Ottawa

Another Successful War-Time Winter Fair

THE Ottawa Winter Fair held on Tuesday to Friday of last week was a success. The statement of its success, however, cannot be an unqualified one. The exhibit of live stock was good; in point of quality, the equal of any winter fair in Canada this season. All of the outstanding Guelph prize-takers were present at Ottawa. So much for quality. In point of numbers, there were no new records made. The stables were comfortably full, except in the dairy stables, where the accommodation has always greatly exceeded the entry, but there was no crowding.

Disappointment No. 1 must be registered in regard to the showing of local live stock. By local herds is meant the live stock of the more easterly counties of Ontario, say from Peterboro county east, and the westerly counties of the province of Quebec. A very large proportion of all the live stock shown came from Western Ontario, the western counties did not send too much. What is needed is more live stock from the east. Of course some eastern breeders did their duty well. They made displays that were a credit to themselves and to their districts, and all credit is due them. One eastern win of special merit was the sweepstakes of the dairy test captured by Mr. Knapp, of Merrickville. But there might well have been more local live stock. With the possible exception of fat cattle, there is much splendid pure-bred live stock in the Ottawa Valley and adjoining districts, and strong committees have already been formed to boost for greater local representation in representation.

Disappointment No. 2 has also to do with local support, this time from the standpoint of attendance. At Ottawa, there are splendid facilities for seeing the judging; the Howick pavilion is unquestionably the best winter fair building in Canada, and has the largest and most commodious arena. A trip to such a fair is as good as a short course in live stock judging. Then there was a splendid lecture series; instructive addresses on all phases of agriculture were delivered throughout the fair. Yet the people did not turn out. On Wednesday there was a good crowd. On other days the attendance fell off very decidedly, and the building would have accommodated three times as many people as were there. The encouragement of attendance is a matter that might be looked into before another fair is held.

### The Horse Exhibit

Clydesdales predominated in this section of the fair. There were a few light horses, a few cute little ponies that were always the centre of attraction for the children, seven Percherons, of which Walter Wood, of Cornwall, was the principal exhibitor and one Shire. Compared with the Clyde entry of over 100 head, however, the exhibit of other breeds seemed insignificant. The great Scotch drafters were as strong in quality as they were in numbers; practically all of the leading Guelph winners were on hand and to a large extent the honors were similarly placed. A feature worthy of more than passing notice was the high excellence of the Canadian-bred animals. Perhaps the outstanding individual of the Canadian-bred classes was Lady Bidand, a two-year-old mare shown by Graham Bros. of Claremont. She had splendid quality, the finest feet and legs of any Canadian mare we have ever seen, and with it all a big, roomy mare with lots of promise. She well deserved her position of champion Canadian bred Clyde.

The pick of the imported mares was the Guelph champion, Royalette,

exhibited by W. W. Hogg, Thamesford, Ont. This is an old mare, a little past her prime, but still a good actor, splendid quality of underpinning and carrying her conformation wonderfully well, considering her age. In acting out Boag's two-year-old, a mare with splendid quality and more bloom than Royalette, but perhaps a bit too tidy for a brood mare. In acting out the grand champion mare the judges had hard time in deciding between Royalette and Lady Bidand. The ring-siders, perhaps naturally, were anxious to see the championship ribbon passed for once to a mare of our own breeding, but it finally went to the older mare, on the form and quality which she carries with her greater maturity.

In the stallion sections, Graham Bros.' Lord Gleniffer was selected for first in the aged class on his all-round excellence of conformation and style. Smith and Richardson were in second place with Scott's Pride, and the quality of the entries was shown by the fact that John A. Boag & Sons got only third place. They had their champion, perhaps the outstanding animal of the stallion classes, however, was the three-year-old Baron Scott, champion at Guelph, and one of the finest specimens of stallions ever seen in the Canadian show ring. Other leading exhibitors were A. A. Scharf, Cumming's Bridge, Ont., A. Watson & Sons, Fergus, Ont., and R. Ness & Son, Howick, Que.

### Beef Cattle

Eastern Ontario is a dairying district. Live Stock Commissioner John Brigg summed up the situation when he remarked during the course of the fair, that if eastern Ontario people had to eat eastern Ontario beef, it would be of the best. It is hard variety. There are few beef herds in the east and in this year, as in past years, practically all of the beef steers were filled with western Ontario herds. The grand championship (best beef animal on the grounds) went to Riverjack, a two-year-old steer shown by Pritchard Bros., of Fergus, Ont. He was a nice, deep-bodied, thick-fleshed, low-set animal. He and the fancy butcher breed is always demanding and seldom gets. Riverjack was a pure-bred Shorthorn and Shorthorns and their grades largely predominated in the beef classes. The outstanding female of the breed was Meadow Queen, shown by Kyle Bros., Drumbo, Ont. Other exhibitors of note were John Black, Fergus; A. A. Armstrong, Fergus, and T. A. Russell, Downsview, Ont.

There was no competition in Herefords, W. H. & J. S. Hunter, Orangeville, Ont., having put out head. Pure-bred Angus cattle numbered only three head, but the grades of this breed were more numerous than ever and apparently growing in popularity. In addition to the breeders already mentioned, all of whom exhibited grade steers as well as pure-bred animals, was Jas. L. Denham, who brought a strong string of grades from Fergus.

### Sheep and Swine

The quality of entries was well up to the mark in the sheep classes, and there was competition in practically every class of every breed. Most of the breeders who have become well known on the larger fair circuits, were on hand. Three competed for Cotswold honors, E. Bryan & Sons, Ridgeway, Ont.; G. H. Mark & Son, Little Britain, and Jas. A. Campbell, Theford, Ont. In Lincolns, the two exhibitors were J. S. Gossell & Son, Hitchcock, Ont., and Joseph Lyden, Benfield, Ont. Leicesters were exhibited by E. Bryan & Sons, A. & W. Whitelaw, Guelph; John Kelly & Son,

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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. XXXV.

PETERBORO, ONT., JANUARY 27, 1916

No. 4

## Paying for Milk at Cheese Factories

There are Three Good Systems and One Bad One: The Latter is Most Common

GEO. H. BARR, CHIEF OF DAIRY DIVISION, OTTAWA

TO divide the proceeds from the sale of cheese accurately among the patrons of a cheese factory, each patron's milk would have to be made up into cheese separately. This, of course, is not practicable. It is, therefore, necessary to adopt some other method of dividing the money. In the early days of cheesemaking, there was no practical method of testing the milk from different herds to ascertain its cheesemaking value; a hundred pounds of milk from one herd was considered equally as good for making cheese as that from any other, so the method of paying each patron the same price per hundred pounds of milk was adopted.

The introduction of the Babcock test, however, gave a simple and practical method of determining the percentage of butter-fat in the milk; and it was found from experiments and regular factory work that when the fat in the milk increased, the yield of cheese increased also. Although it is now over 95 years since the Babcock test was introduced, and we have known all that time that one hundred pounds of four per cent. milk will make more cheese than one hundred pounds of three per cent. milk, we still find a large majority of the cheese factories in Canada paying the patrons the same price per hundred pounds of milk. No small amount of experimental work bearing on this subject has been carried out at the Agricultural Colleges and Experimental Stations in both the United States and Canada, and it was with a view to emphasize what has already been done rather than with the expectation of throwing new light on the subject that the Dairy Division attempted some further work along this line.

In 1913 the staff of the Dairy Division at the Finch Station, after considerable testing of milk with the Hart casein tester, found that it was difficult to get reliable results under ordinary factory conditions. A continuation of the work in 1914 gave the same results. The Walker casein tester was tried with better success, and it was used in making tests for casein in the experiments made in 1914 and 1915. In 1914 the milk from individual herds was made into cheese in small vats, the quantities varying from 350 to 800 pounds in each vat. The fat in the milk varied from 3.1 to 4 per cent.

The yield of cheese from 100 pounds of milk varied from 8.59 pounds to 10.75 pounds, or nearly 2.5 pounds more cheese from 100 pounds of 4 per cent. milk than from 100 pounds of 3.1 per cent. milk.

The yield of cheese per pound fat varied from 2.55 pounds to 2.81 pounds, just about one-quarter of a pound.

The yield of cheese per pound casein varied from 3.47 pounds to 4.63 pounds, almost 1¼ pound.

The yield of cheese per pound fat and casein, added together, varied from 1.47 to 1.73 pounds,

cents over and 3.5 cents under, a variation of 9.3 cents.

Fat + Calculated Casein Basis (the Babcock test with a sum added as recommended by Prof. Van Slyke) paid 5.7 cents over and 3.1 cents under, a variation of 8.8 cents, the latter being the nearest to the actual cheese made.

The work was continued in 1915 when the patrons of the Finch Station were divided into two groups. The high testing milk was put into one vat and the low testing milk into another and the cheese made as carefully as possible, our object being to make a comparison

between making the cheese in large vats and the work of 1914 when the milk from the individual patrons was used. I am pleased to say there is very little difference in the result. The variations from the large vats are not quite so great as in the small vats.

The table adjoining shows the value of 100 pounds of milk containing different percentages of fat and casein from the actual cheese made in 1915 and five different methods of paying for cheese milk.

Summary of the Two Years' Work: The pounds of cheese per 100 pounds of milk increases as the per cent of fat increases in the milk, although not always in the same proportion.

The pounds of cheese per pound of fat tends to decrease as the fat in the milk increases.

The pounds of cheese per pound of fat and casein tends to increase as the per cent of fat increases in the milk.

The surprising thing about this work is that dividing the money according to the fat and casein tests does not get any nearer to the actual cheese made from the milk than some of the other methods of payment, and it would appear as if there is not much to be gained by testing the milk for casein. We may, therefore, consider only the other four methods.

In making the cheese in the small vats in 1914, the fat plus calculated casein basis of payment came the nearest to the actual cheese made, straight fat, second, fat plus 2, third, and pooling, fourth. In 1915 when the cheese were made in the large vats, we find again that the fat plus calculated casein basis of payment came the nearest.

(Concluded on page 17.)

Value of Milk for Cheesemaking, Cheese at 15 Cents per Pound

Lbs. Fat in Milk.	Lbs. Casein in Milk.	Value of 100 Lbs. of Milk.										Difference between Cheese made on Pooling Basis.
		Lbs. Cheese per 100 Lbs. Milk.	Actual Cheese made.	Casein and Butter.	Fat + Casein.	Fat + Casein + Pooling Basis.	Fat + Casein + Pooling Basis.	Fat + Casein + Pooling Basis.	Fat + Casein + Pooling Basis.	Fat + Casein + Pooling Basis.	Fat + Casein + Pooling Basis.	
3.40	2.30	8.95	1.94	1.26	1.31	1.94	1.32	1.39				+5 cts.
3.50	2.00	9.02	1.35	1.31	1.35	1.35	1.35	1.39				+4 cts.
3.50	2.90	9.19	1.35	1.36	1.35	1.35	1.35	1.39				+1 ct.
3.60	3.10	9.00	1.35	1.36	1.38	1.39	1.38	1.39				+4 cts.
3.70	2.90	9.73	1.41	1.41	1.42	1.42	1.42	1.39				-2 cts.
3.70	2.35	9.64	1.45	1.44	1.42	1.42	1.39					-7 cts.
3.80	2.00	9.67	1.45	1.39	1.46	1.44	1.45	1.39				-6 cts.
4.00	2.90	9.83	1.47	1.50	1.54	1.49	1.51	1.39				-8 cts.
4.10	2.10	10.17	1.52	1.48	1.58	1.51	1.54	1.39				-13 cts.
Greatest variation with actual cheese made—		+3c	+7c	+4c	+4c	+5c						
37,071 lbs. milk used.		-4c	-3c	-6c	-4c	-13c						

or exactly the same variation as in the pounds of cheese per pound of fat.

Taking the actual cheese made as the correct basis for paying patrons, we compared this with five different methods of paying for cheese milk and found the following variations in the price of 100 pounds of milk testing from 3.1 to 4 per cent.

Pooling Basis (dividing the total money among the patrons at the same rate per 100 pounds of milk) paid 10.6 cents over and 14 cents under that paid from the actual cheese made, a variation of 24.6 cents.

Fat and Casein Basis (the actual amount of fat and casein in the milk as shown by the Babcock test and Walker casein test) paid 8.1 cents over and 6.8 cents under, a variation of 14.9 cents.

Fat + 9 Basis (the factor 2 added to the reading of the Babcock test) paid 6.2 cents over and 4.1 cents under, a variation of 10.3 cents.

Straight Fat Basis (the fat test only) paid 5.8

### A Novel Ice House

By Ben Blanchard, B.S.A.

THE ice house which I intend to describe has the engaging feature of being an ice house and cold storage room combined. It does away with a lot of labor that is generally required to dig out the ice during the summer and provides a suitable place for keeping meat, eggs, and dairy products.

The ice house in question is built into a side hill, and its outside dimensions are roughly: Length, 18 feet; width, 12 feet; height of post front, 11 feet; at rear, eight feet. At the front or lower end a room is built in extending across the full width of the building. It extends back about five feet and is about six feet in height. In the accompanying illustration this room is drawn in slightly larger proportion than should be. There are double doors to this room, one opening out, the other in. (The building has double walls filled with sawdust.) The remaining space, above and behind this room, is reserved for the ice. The floor of the rear part of the ice house is three feet higher than the floor of the refrigerator room. It has a slight slope towards this room, and a gutter runs along the rear wall. A pipe leads from the gutter through the wall into a tank. The floor of the ice house is made of concrete, with one inch slats on top. The ceiling of the refrigerator room is of the same material, and slopes towards the rear. The rear wall of the ice chamber is covered with zinc. The result is that all the water from the melting ice finds its way into the gutter and thence into the tank. The overflow from the tank is conducted out of doors. This tank is used for cooling milk and cream. Hooks are placed in the ceiling for hanging meats. The other features of this ice house may be seen in the drawing, which is self-explanatory.

### Ice on the Farm

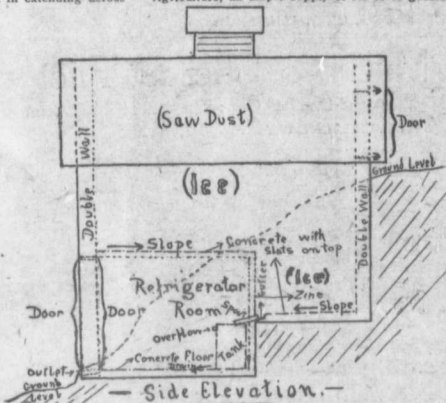
By W. L. Nelson

TO the family on the farm there can come no greater comfort than a sufficient supply of ice for the summer season. Ice is an appetizer, making more palatable many a food product. It is also a source of economy, preventing the souring or spoiling of milk, fruit, and vegetables. By its use the housewife may prepare in larger quantities various kinds of food and so make unnecessary continuous cooking. In the home where health ice is an economy and a luxury; when some member of the farm family is ill of fever, it becomes a necessity.

Once ice has been used in the home, no one is willing to do without it. Here is what one intelligent country woman says: "Nothing, I think, helps a farmer's wife so much as plenty of ice. Especially is this true of harvest and threshing time. The day before threshing, chickens may be dressed, fruit stewed, slaw, salad, and cottage cheese made, pie crust prepared, and boiled custard made ready and put on ice. Besides that, every evening the biscuit dough for breakfast may be 'made up' and placed on ice. The next morning while the oven is heating the biscuits are rolled out and placed in the baking pan. Any fresh meat intended for break-

fast may also be made ready. And what is better than a saucer of puff'd rice or wheat with the thick golden cream we may have when there is plenty of ice? Then for Sunday dinner, on a hot day, what a relief it is just to open the ice box, when we return from church, and get our dinner instead of having to perspire over a hot stove. In the refrigerator we perhaps have pressed chicken, tomatoes with mayonnaise dressing, baked apples, a favorite salad or pudding, and even iced tea. Then, too, there is the big freezer of cream frozen and packed before time for church going."

According to the United States Department of Agriculture, an ample supply of ice is of greater



An Ice House and Cold Room in a Bank

economic importance in the country home than in the city residence. City people can purchase perishable supplies as needed, but the remoteness of country homes from markets often renders it necessary to use canned, corned, or smoked meat products during the season of the year when the table should be supplied with fresh meats. Not only is ice appreciated because of its use in the preservation of fresh meats, butter, and other table supplies, but the production of high-grade domestic dairy products is almost impossible without it.—Missouri Bulletin.

### Labor-Saving Equipment

J. Carl Livingston, Dufferin Co., Ont.

I READ with much interest the various letters that appeared in a recent issue under the heading "Our Experience Meeting," dealing with conveniences in the dairy stable. Mr. McKay's description of a model dairy barn particularly appealed to me. There was one point in connection with its conveniences that I do not believe was emphasized as clearly as it might have been—that these modern stable conveniences are coming as a direct result of changing conditions, and we must have them if we are to keep up in the race. I can remember when good men could be had for \$10 a month in summer and their board in winter. Labor was then cheap. The stable equipment on the other hand, which is so often described in Farm and Dairy, was then costly. Our fathers had to do with a period when labor was cheap and machinery costly. It was more economical for them, therefore, to hire men to do the work in ways which to-day would involve great loss.

That condition has now changed. Labor is costly and labor saving equipment, comparatively speaking, is cheap. As a boy, it might have been profitable for me to take six or eight trips

with a wheelbarrow in cleaning a stable of a winter's morning. Now, I find it cheaper to fill the litter carrier a couple of times, push it out, and dump it in one-quarter of the time required for the old wheelbarrow operation. Also it is much more pleasant work.

The same applies to feeding. I used to feed with a basket in our stable. It required 20 trips with the basket twice a day. With our modern feed carrier, a couple of trips do the same feeding. These two devices, the litter carrier and the feed carrier, are the greatest conveniences that we have in the stable.

We first adopted the modern steel swing stanchion on the ground of humanity. I considered it cruel to keep the cows tied up without being able to lick themselves, in the rigid stanchions of our old stables. I had a choice of chains or steel stanchions, but on careful consideration I chose the stanchions. They give the cow almost as much liberty as the chain, keep her cleaner, and have a decided advantage in saving the feed. I have noticed that in stables where the cows were tied with chains, they could work the roughage out of the mangers and back under their feet. Where standing in stanchions, the roughage remains in the manger until it is taken out by the herdsman. The equipment for a modern, up-to-date stable costs considerable, I will admit, but it does not cost as much as the extra labor would do to look after the same amount of stock and give them the same care and attention.

### Largest Milk Bottle in Canada

(If not in the World)

THE bottle (it belongs to the City Dairy, Toronto), stands on a steel tower 75 feet high, it is made of boiler iron  $\frac{1}{2}$  inch thick, its diameter is 33 feet at the bottom and 6 $\frac{1}{2}$  feet at the top, and the top of the bottle is 107 feet from the ground. Four men can stand shoulder to shoulder on the top, and 24 men can stand on the balcony with their backs against the bottle. The bottle is 22 $\frac{1}{2}$  feet from the balcony to the top, and has a capacity of 25,000 gallons, and when filled the bottle and tower weigh 238,000 pounds. The tower and bottle is to provide a head of water for fire protection.

Managing Director Potter says that this is the only City Dairy bottle that ever contains water.



Canada's Greatest Milk Bottle.

# The Consolidated School and the Community

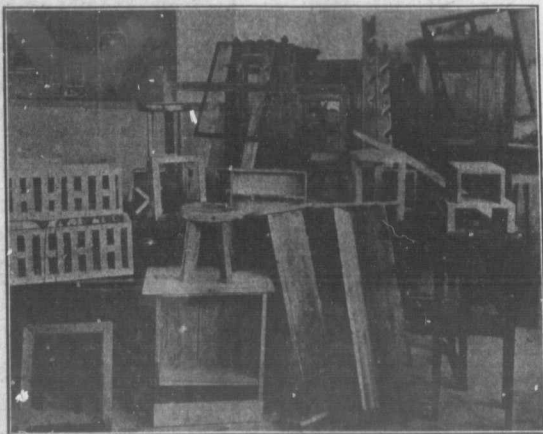
The Advantages of the Centralized School over the District School Clearly Shown.—By Richard Lees, M.A.

**A**LONG with the movement for the improvement of the rural school, is growing up the conviction that the schoolhouse should be the means of a larger service for the community than simply providing for the children certain branches of learning during some 15 or 30 hours each week for 40 odd weeks in the year. In most places the school is used for no other purpose than that to which it is devoted during the school days, and the question why it should not be used for other purposes, at times when school is not in progress, is being seriously considered. Some of the wider uses to which the school plant might be put are, the holding of night classes for the study of either the ordinary branches of learning or others more closely related to the lives of the people. Short courses in agriculture or kindred subjects might be taken up. Farmers' Institute meetings and meetings of Women's Institutes might find suitable and stimulating environment there. But as a matter of fact, we never think of using our school buildings for such purposes. They are too uncomfortable, dreary and uninviting. They make no appeal in any way to the community, and are not looked upon as being good for anything except what the law makes obligatory, and perhaps a Sunday school or a political meeting. The latter is not greatly favored by the authorities, because it often happens that the young men of the community make use of the occasion to show for the place the contempt they were restrained from showing in the days when they "went to school." So there is generally something wrong next morning, and repairs are necessary. It has been said that the surest and most efficient way of cultivating in children a respect for their surroundings is to make the surroundings respectable. That doubtless explains much of the lack of regard for our rural schools that is so common, as well as the impossibility of utilizing them for any supplementary educational purposes.

## What of the Consolidated School?

Here is one of the ways in which the consolidated school exhibits its superiority. The buildings are large, comfortable and suitable for community gatherings. They command the respect and admiration of the people whose interests they were intended to serve. They minister to a district large enough to make possible the holding of good institute meetings and furnish material for clubs or short courses. And, not of least importance, they command the services of teachers who have the capacity for leadership in these movements.

Throughout these articles it has been the purpose of the writer to refrain from theorizing and to deal only with what has been demonstrated by experience. Reference has already been made to the success of farmers' institute meetings at some of the consolidated schools of Indiana, where the average attendance was over 500. The girls of the school utilize the household science department of the school to supply lunches at these



An Exhibit of Boys Work in Manual Training Department of a Consolidated School.

meetings, a nominal charge being made and the proceeds devoted to increasing the efficiency and attractiveness of the school equipment. Some idea of the value of that sort of thing, entirely apart from the institute, can be gained if we think of a class of school girls, planning for and preparing a lunch for some 500 people, keeping strict and accurate account of all the outlay and proceeds, and devoting the surplus to school purposes.

We are happily getting away, in theory at least, from the idea that the exercises of the school should be removed as far as possible from the things of real life, and are beginning to realize that the very best training for boys and girls is to be found in learning to do properly the things they will be called on to do as useful citizens.

## Outside of School Hours

The Women's Institute, the Mothers' Club, and the parent-teacher meetings that are held in these buildings are also important factors in their service to the community. The question may be asked as to why the present schools cannot be used for all these purposes just as well as the school in the larger unit. Perhaps the only positive answer to that is that they are not being so used. While the Women's Institutes are doing a most important work along many lines, there has come to the knowledge of the writer in an experience of ten years, only one case in which the improvement of the school has received consideration at one of these meetings. Do the girls, like the boys, get so thoroughly disgusted with the school during the years of their attendance there that they want to have nothing more to do with it? Is it that the school is so unimportant a factor in the life of the community as to be unworthy of notice, or is it simply that they have no ideals along that line, have not had a vision of better things? Whatever may be the explanation, of one thing there is no shadow of doubt, and that is that the women of any rural community could not possibly devote themselves to any cause with greater opportunities or larger possibilities for magnificent returns. Let the wo-

men in the majority of our rural school sections hold their monthly meetings in the school, and for one-half day every month experience its discomfort, see its worn, dirty, unscrubbed floor, gaze on its bare, smoked, dust-laden walls, get out into the yard, and take in the beauties of the fences, sheds, playground and general surroundings. One can hardly imagine what the result might be even if they did no more than talk about it as women are supposed to be able to do when nothing else is possible. But, you say, school would have to be closed and the teachers would get a half-holiday with full pay. That might not, however, be so serious a matter as it looks. Perhaps the teacher would join the institute, and both she and the women might be benefited by getting together on common ground, and surely there ought to be plenty of common ground for teachers and mothers. As it is though, how many mothers

ever visit the school unless to find fault, quarrel with or abuse the teacher?

## Consolidated Schools Are Busy Centres

These and many others are things that we might have in our present schools, but have not to any extent so far. In the consolidated school, as the writer found it in Randolph Co., Ind., the Women's Institute meets in the school. Mothers' meetings are held regularly. Provision is made for these meetings without interfering with the work of the school. The girls of the domestic science classes serve lunches, the teachers and mothers meet in social intercourse and in consultation in regard to the interests of the school and of the children. The school becomes the chief social centre of the district, and in return is enriched by the interest, assistance, and cooperation of the people. In short, the school becomes a place of importance in a social sense. Not only is this so, but its enlarged equipment enables it to perform many other functions of vast importance in the life of the people.

Milk testing and seed testing are done there. The progressive farmer of the district finds there a library containing the latest available information on any branch of agriculture he may be interested in. There is at least one member on the staff who can direct and advise him when in search of information. Short courses in dairying, stock judging, and other branches are held there. With our schools even at their very best, such things are out of the question. Quite true, the objectors and theorists tell us that all this is impossible, that people will not go five or six miles to community gatherings of the kind indicated. The reply to that is that they actually do in numbers quite beyond anything we are familiar with for meetings of the same kind.

## Sanitary Arrangements

One respect in which the consolidated school is a great improvement on the ordinary district school, is in the provision made for the health and comfort of the pupils. While progress is

(Concluded on page 7.)





system over the old. The only objection that is of any moment is the transportation, and that can be overcome very largely by employing the best of drivers and getting your best patrons as a part of the system. The only ones who object are those who have no interest in the welfare of young people. Their cry is "too costly," but I was able to lower the tax rate last year and not mar the efficiency of our schools. Not five per cent. of our patrons would consider for a moment of going back to the old district school.

"Again, it stimulates road building, which in my judgment is one of vital interest to the people. I can see no reason why the boy or girl living in the rural community should not

have the same educational advantage as the city boy or girl. The system is here to stay in our county, and we believe will get better."

**Six Years With Consolidation**  
The second letter reads as follows: "I had six years' experience as trustee of Jackson township in Randolph Co., Ind., and built a concentrated school building in the year 1910. At first the opposition was great and at times it looked very discouraging, for we were threatened with all manner of prosecution, but it has generally died down as people became educated to see the advantages of a centralized school. This was brought about mainly by using the building as a community centre and having farmers' meetings, literary societies, Sunday

school meetings, lecture courses, school entertainments, musical concerts, and other things of a refined nature, and at these meetings we never failed to have a display of work done by the school children, such as drawings, paintings, sewing, cooking, manual training, music, art and paper cutting, together with many other things of credit found in the school, and I am glad to say that at this time, after four years of the school's existence, there are no objections, except among the most ignorant and the wealthy who think more of their dollars than they do of their children's education.

"The most serious objections that can be offered (I've had) come under my experience is the distance some

children have to be hauled, but this is being overcome by the use of more hacks, or the automobile truck hack which is coming in use more and more every day.

"Our best citizens highly approve the system, and I do not know of a single family in our township that would want to go back to the old way. This is shown in the fact that schools that were abandoned are being to alter the consolidated school at the beginning are now petitioning the trustee to be taken into the system and their children given the advantages of the consolidated school, and thus forcing the school officials to build more room to the building."

A noteworthy fact in this connection is that when a school is abandoned, the law of Indiana requires that it must be retained in possession of the school authorities for at least two years. Even at the end of that time it can be disposed of only on the petition of more than ten voters of the district. That gives ample time for testing and abundant opportunity for a return to the old plan were that desired. Of nearly 200 abandoned schools in the ungraded county, not one has been reopened, and of more than 2,000 abandoned in the whole state of Indiana, a very small proportion have returned to the old condition.

#### What the Children Think

Doubtless some readers will be anxious to know what the children think of it as compared with the old plan. A senior class, all the members of which had begun their school life in the ungraded school, were asked how many of them would prefer to return to that system. The question was greeted with laughter and treated as a joke. Having through the kindness of Superintendent Driver secured a bundle of letters, written by a junior high school class, giving reasons for preferring the consolidated school, a few quotations will indicate their attitude. While the children were told that they were to take either side of the question, the letters are all strongly on one side. One girl says: "There are many advantages in the consolidated school that are lacking in the district schools. The classes are divided and put in separate rooms, and in this way it gives more time to each class and each pupil. It has a large library that contains many books that are very helpful in the school work. The most essential of all are the manual training and domestic science. These cannot be brought into the district school." This girl attempts to give the other side and enumerate disadvantages, but apparently with little success. She can find to say that if contagious disease should break out, it would spread over a larger district. This is submitted for the benefit of some of our theorists who know the scheme is wrong.

This might be continued to an unreasonable length without any real advantage, but what is here given is sufficient to indicate the general attitude. No amount of written matter can carry the picture of happy contentment and satisfaction that was everywhere to be seen in these schools. It is only necessary to say in conclusion that though the writer of these articles had given the matter much serious and careful study, and considered himself pretty familiar with the situation, what he saw in and beyond his highest expectations. May the day soon come when like conditions will prevail here and the children of our rural communities will get what is their due, as good school opportunities as such children of any of our cities, or as the country children of Indiana, Manitoba, or any other region.

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Lock Each Separate Rafter

Each Separate Rafter Locked at Ridge with Double Steel Braces

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## Important Problems Dealt with by Ontario Fruit Growers

SELDOM if ever have the members of the Ontario Fruit Growers' Association held an annual convention more crowded with the consideration of important matters than the day to Friday of last week in Toronto. The attendance throughout was representative and at times large, and interest was maintained from the beginning to the close.

The program presented a remarkable contrast to the ordinary programs of a few years ago. Whereas in the past problems relating to the production of fruit have been paramount, there was only one paper on this year's program of that character. Instead, the interest of the convention centred around such subjects as the marketing of fruit, including the best type of packages to use, the necessity for the adoption of cooperative methods, the value of cold storage in increasing the carrying capacities of fruit and amendments to the Fruit Marks Act. A number of subjects relating to the production of fruit were dealt with, but they were brought up in the form of questions which speakers were asked to reply to briefly. Much helpful information was brought out in this way in a short time and many subjects covered.

### President's Address.

President Elmer Lick, of Oshawa, referred to conditions created by the war which have affected fruit growing adversely, showed that the prices of fruit in some lines have been dropping, until in some lines it is in certain seasons produced at a loss, mentioned the necessity for cooperation and better advertising methods, referred to the difficulty likely to be experienced this season in obtaining fruit help, and concluded by warning fruit growers to plan carefully, economize on labor and expenses, cooperate, pack and grade according to standard, and face existing conditions with confidence.

The report of the treasurer, P. W. Hodgetts, showed receipts of \$2,745, including a government grant of \$1,700 and expenditures of \$2,438, with a balance on hand of \$308.

The transportation agent of the association, G. E. McIntosh, of Forest, dealt at length with transportation problems as they relate to fruit growers and measures that have been taken to protect the interests of the fruit grower. Incidentally he showed that the railway companies having failed to obtain an increase in the rates for transporting fruit, had recently announced their intention of making a heavy charge for heated car service from Ontario westward. The Association decided to protest to the Railway Commission against this proposed increased charge.

### Packages Problems

The Wednesday afternoon session was devoted practically exclusively to the consideration of the best forms of packages to use in the handling of fruit. The speakers included E. B. Fairbairn, of Beamsville, J. W. Clark, of Cainsville, P. M. Clement, of Vineland, and O. W. Baxter, of Brighton. The fact that many different types of baskets are used for small fruit, varying greatly in their size and the quality of their materials was discussed, and it was decided that an effort should be made to adopt certain standard packages. A committee was appointed consisting of leading fruit growers and representative basket manufacturers to deal with the situation.

### The Fruit Marks Act

The convention practically placed itself on record as favoring an amendment of the Fruit Marks Act, which would more clearly define what constitutes a No. 2 apple. The discussion was opened by Dominion Fruit Commissioner D. Johnson, who sug-

gested that difficulties in enforcing the act might possibly be overcome were two grades of No. 2 apples established. The matter was discussed at great length in committee, with the result that the committee recommended that Mr. Johnson's suggestion should be adopted. The two grades recommended are as follows: No. 2 quality. Unless such fruit included no culls, sound, of not less than nearly medium size, and of fair color for the variety, and not less than 85 per cent free from scab, worm holes, bruises and other defects, and properly packed. Second grade, "Domestic," unless such fruit includes no culls, sound, of not less than nearly medium size and fair color for the variety, 90 per cent free from worm holes, but may be slightly affected by scab and other minor defects, but must be properly packed.

### Officers Elected

The following officers were elected: Pres., Dr. A. J. Grant, Theford; Vice-Pres., F. A. J. Sheppard, St. Catharines; Sec.-Treas., P. W. Hodgetts, Toronto; Executive, the officers: Elmer Lick, Oshawa, and R. H. Dewar, Winona.

### Resolutions Adopted

Resolutions adopted included expressions of regret concerning the death of the late Robt. Thompson, of St. Catharines, and Major Kimmins, of Winona. Expressions of thanks to

the Dominion and Provincial Ministers of Agriculture for valuable experimental work accomplished, approving of the adoption of a comprehensive plan of advertising domestic fruits, and warning fruit growers against believing too readily recommendations of their goods published in their catalogues by manufacturers, some of which recommendations it was shown, were 20 years old.

It was decided to amend the constitution and increase the membership fee for local associations from 25c to 50c. The President, Secretary and Mr. W. H. Bunting, of St. Catharines, were appointed a committee to lay facts relating to the fruit industry in Canada for the Dominion Economic Commission.

## The Dairy Test at Ottawa

(Continued from page 6).

ability. The first cow of the breed is owned by Alex. Hume & Co., Campbellford, Ont., a big cow, deep and strong, their well known Glen Shamrock Cnty. Again Spicy Lass, owned by the same firm, was in second place. Jos. Hudsons & Son, Lyn, had the first three-year-old in a heifer of Springbank breeding. On account of trouble with afterbirth, this heifer was not looking her best.

The two-year winner was the first in her class at Guelph, Susanna of Evergreen, shown by E. B. Palmer & Son, Norwich. The herds of R. R. and D. T. Ness were represented from Slowick Que., while R. T. Brownlee, of Henningford, Que., a

new exhibitor, had a very milky string of cows.

The grade classes were almost as well filled as the pure-bred classes, and largely from local herds. The productions in this class merely added a little more evidence to the efficiency of grading up with a pure-bred sire. Dairy Shorthorns were represented by one herd, that of S. W. Jackson, Woodstock.

## Age of Sheep

By T. G. Patterson

A lamb has eight small first-teeth on the lower jaw. When the animal reaches the age of about one year, the middle pair are replaced by two permanent teeth; at the age of about two, the teeth on either side of these permanent teeth, are also replaced with a permanent pair; at the age of three, the next tooth on either side gives way to a permanent tooth; and at about the age of four, the last or back teeth are also replaced.

Briefly then, a sheep with one pair of permanent teeth is a yearling; a sheep with two pairs, is a two-year-old; with three pairs, a three-year-old; with four pairs, a four-year-old. After a sheep is four years old, one cannot tell by the teeth about the age. However, one who is purchasing a sheep, says T. G. Patterson, of the Animal Husbandry Division, University Farm, should see to it that it has not lost any teeth or that the teeth have not become long and shoepeggy in appearance.

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We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid-in-advance subscribers, we will make good the amount of your loss, provided such transaction occurs within one month from date of its occurrence, and that we find the facts to be as stated. It is a condition of the contract that in writing to advertisers you state: "I am advertising in Farm and Dairy."

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

## Farm Health

THE open country is the healthiest place in the world, and country people should, like their surroundings, be healthy. We should be healthy, but are we? Statistics collected in the state of New York reveal conditions that seem to give this old conception of rural health a black eye. New York health authorities report that disease is as rampant in the country as in the city, and that rural school children have weaker eyes than have the children of the city. How can these things be?

We might mention many reasons why country people are not as healthy as their surroundings, but we will confine ourselves to two—insufficient ventilation of the homes and bad lighting. In the great majority of country homes the old fallacy that night air is dangerous, is still believed in. We fear that fully seventy-five per cent. of country people sleep during the winter months with their bedroom windows closed. The same air is breathed and re-breathed. The poisonous organic substances, which are exhaled by the healthiest people, are taken into the lungs again and again. The result is lowered vitality and consequently much sickness.

Weak eyes of rural children can be explained in large measure by poor lamps. The ordinary kerosene lamp does not afford sufficient light to study or read by, and should be replaced by more efficient lighting systems or by the high-power mantle lamps, which may be had for a few dollars.

The remedying of these two defects in our rural homes would make a big difference in rural health statistics. We are not altogether prepared to believe that country people are not already as healthy as city people, but we believe that, with conditions in the homes right, they would be much healthier.

## Manurial Value of Feeds

THE manurial value of feeding stuffs should not be overlooked in deciding the weighty question, "Shall I buy feed or shall I rough the cattle through on what I have on hand?" The manurial value of some feeds is so high as to warrant their purchase even if no profits at all were expected on the feeding. Valuing nitrogen at fifteen cents a pound, potash at four and one-half cents, and phosphoric acid at seven cents, a ton of wheat bran has a fertilizing value of \$13.40; corn meal, \$6.90; oats, \$7.88; oil cake, \$21.14; cottonseed meal, \$25.95; gluten meal, \$16; timothy hay, \$5.32; clover hay, \$8.02; and mangels, \$1.02.

As a general rule the dairyman will purchase feeding stuffs that are rich in protein, such as cottonseed, oil cake, and gluten meal. It will be noticed that these feeds also have the highest fertilizing value. In fact, in the southern states cottonseed meal is often used directly on the land as a fertilizer. We in Canada must first feed to stock. The stock to which the purchased concentrates are fed will retain from ten to 25 per cent. of the fertilizing ingredients in the animal body. More will be lost by fermentation and leeching of the manure, but from one-half to two-thirds of the manurial value of purchased foods should find its way to the land. This phase of the feeding problem should appeal to every one of Our Folks who recognizes the conservation of soil fertility as the basic principle of good farming.

## The Labor Situation

THE labor problem is with us again, and in a most aggravated form. If all signs hold true, it will be harder to get farm help, experienced or inexperienced, in 1916 than in any one of the last ten years. The surplus men of the cities, who might have been available for farm work now that English immigration has practically ceased, have joined the ranks. The rest are busy in munition factories. To a greater extent than is generally believed, the boys from the back concessions also have been volunteering for service abroad.

And now the call comes for 275,000 additional men. From where are they to come? "From the rural districts," answer recruiting officers in chorus. For the most part these recruiting officials are city men, absolutely ignorant of rural conditions. They do not realize that the cities have already swallowed up a big percentage of country boys, until now there is no surplus labor in the country, young or old. A recent census taken on one concession line, seven miles long, in the township of Peel, in Wellington Co., Ont.—and it was a good concession—discovered just three men of military age, unmarried and physically fit, and in all there were close to 30 families on the concession. We have it on good authority that in the county of Victoria, which is largely rural, there are only 2,400 men of military age, both married and single, and that if Victoria contributes its share to Canada's half-million soldiers, they will have to part with 1,400 men. In many rural sections, every rural young man who enlists leaves a 100-acre farm unworked or only half worked. Is it the part of wisdom to take these workers from the land?

## "Agricultural Production Important

THE problem is a two-fold one. In the first place there is the sustaining of Canada's national credit, and all seem agreed that the only way of accomplishing this is through the production of a great volume of farm products for export to meet our obligations abroad. It was the bumper crops of 1915 that saved Canada's business in the last year. The situation

will be no less serious and the need of an exportable surplus of farm produce no less pressing in 1916.

In the second place, is the most pressing demand for food or for men? When the Government launched its Patriotism and Production Campaign a year ago last fall, it gave us to understand that the man who produced bumper crops on his farm was doing his country quite as great a service as the man who went to the Front. Does the same condition still hold true? There is a general belief that the war will last at least twelve months longer and another big crop will be needed to stave off starvation. Our Canadian women cannot work our farms as German women are now working their farms. Where is the food to come from? This is a big problem and the Government must decide just how far it is safe to take men from the farms at the present time.

So much for the national side of the question. The farmer's own individual labor problem will have to be solved, if the present dearth of men continues, by planning a crop system that will call for a minimum of labor and doing as much work as possible in advance of the spring rush. Dairy farmers will have perhaps the hardest problem of all as the milking of cows calls for much hand labor. Perhaps the mechanical milker will solve this phase of the problem. On the whole, Canadian farmers in 1916 will have to make a larger use of machinery than ever before. But there is a limit to the production that is possible with the best machinery when manual assistance is scarce.

## The Union Bank Report

THE report of the Union Bank of Canada for the year ended November 30, 1915, shows that this institution has succeeded in maintaining its ability, already shown throughout the entire period of financial stringency followed by war conditions through which Canada has been passing, to earn sufficient profits to pay its full regular dividends and bonus, to make complete provision for depreciation in securities and other contingencies, to keep up its contribution to officers' pension fund, and this year to pay a heavy war tax of \$45,730, and not only to do so without reducing either its accumulated balance or its rest account, but to make a moderate addition to the accumulated balance every year.

The profits during 1915, in spite of the general shrinkage of bank earnings everywhere and the greatly increased quantity of liquid assets carried, were \$659,688 as compared with \$713,440 in 1914 and \$750,036 in 1913—which must be considered a very moderate reduction. They amounted to 13.2 per cent upon the capital stock, of which nine per cent was distributed in dividends and bonus, three per cent was appropriated to contingent account and most of the remainder was required for the war tax and pension fund. The profit and loss balance carried forward was increased from \$103,019 to \$106,976.

The increase in deposits has been positively startling—interest-bearing deposits rose five millions (from \$45,867,192 to \$50,685,304) and non-interest deposits four and a half millions (from \$17,878,733 to \$21,959,832) and this is reflected in an increase in total assets from \$1 1/2 millions to \$2 1/2 millions. The ratio of these liquid assets to public liabilities is 47.02 per cent, not only rendering the bank immensely strong to meet any possible strain which might arise, but placing it in a very advantageous position for dealing with the first requirements of the forthcoming commercial revival. The chief officers of the bank, Mr. John Galt, the president, and Mr. G. H. Balfour, the general manager, have certainly conducted its affairs throughout a long period of worldwide financial perplexity with the utmost skill and discretion.

## Propos

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## Proposed Constitutional Amendments by the United Farmers

TWO years ago, when the United Farmers' Association of Ontario was organized and its constitution drafted, the officers were lacking somewhat in experience. In the meanwhile good work has been accomplished. Approximately 100 local associations are affiliated with it, with several thousand members. Experience now indicates that the constitution of the central or provincial associations might be amended with advantage. Notices of proposed amendments have been given by members. These will be discussed at the annual convention of the association which will be held in Toronto, February 2nd and 3rd. In the meantime they should be carefully considered by the local associations.

### Notice of Reports

Notice has been given by Secretary J. J. Morrison that he intends to move that the constitution be amended so as to lessen the time required for submitting reports to Branch Associations as set forth in section 6, sub-section (a) of the constitution, so as to admit of holding the annual convention at an earlier date.

The constitution requires that all reports shall be mailed to the branch associations not later than one month prior to the opening of the convention and shall show a detailed statement of the receipts and expenditures, assets and liabilities. It has been found practically impossible to carry this out owing to the fact that the books of the association are closed on the 31st of December. It requires time to get the books in shape to be audited and more time still for them to be audited. If this rule is to be carried out it will make the annual meeting so late in the year that it will be inconvenient both to the association and to the locals identified with it. One way of getting the books to be closed earlier. Another is to require only two weeks notice instead of a month. These are points that will have to be discussed.

### Date of Convention

Notice is given by Mr. W. C. Good that he will move that section 8 of the constitution be amended. Section 8 requires that the annual convention of the central association shall be held at such a place and on such a date between December 1st and March 1st as shall be fixed by the Board of Directors. Mr. Good will move that April 1st be substituted for March 1st. This will give the officers of the association greater freedom in arranging the date for the convention. While it is desirable that the convention shall always be held as early in the winter as possible it may sometimes happen that the date set for the conventions of the western farmers' association or delegates coming from the western association to Ontario may make it desirable to hold the Ontario convention a little later to fit in with the arrangements of the western organizations. Such an amendment as this would give the directors of the association an opportunity to arrange the date of the convention accordingly, although it is probable that the convention would almost invariably be held early in the winter. This amendment will need to be considered carefully, however, as it adds strength to the association when the members know that the annual convention will always be held on or about a certain date, as it enables the locals to plan their arrangements accordingly. The directors are aware of this fact and the convention will have to decide whether or not it will be safe to trust the directors with this additional power.

Mr. Good intends to move that the

following be added to sub-section (b) of section 6. This section relates to the election of officers and auditors for the coming year and read in the constitution as follows:

"The business of the annual convention shall be to elect by ballot from duly accredited delegates present at the convention the officers and auditors for the ensuing year." "Mr. Good proposes to add the following to the foregoing clause: the election shall take place by three ballots, first, a nominating ballot, and secondly, two electing ballots. "The secretary shall have all the ballots printed in advance. \* \* \* After the nomination ballots have been distributed to all duly accredited delegates they shall be instructed to fill in one, only one, name for nomination in each species. After the ballots have been collected the scrutineers shall record the votes for the various prospective candidates on a separate tally sheet and select as nominee for further balloting the following number of those standing highest in the lists: Three for president, two for 1st vice-president, two for 2nd vice-president, seven for directors, and three for auditors. These candidates shall be announced and opportunity given for withdrawals. Any withdrawal shall be made good by the addition of the required number standing next in the lists on the tally sheet, and definite announcement made of the above mentioned number of candidates for election. These names shall be written plainly on a blackboard or otherwise so as to be visible to all the assembly. "Ballots for the election of president and vice-president shall then be distributed and the delegates shall be instructed to fill in one and only one name of those nominated, in each space. Those three receiving the highest votes in their respective classes shall be declared elected president and first and second vice-presidents respectively. Defeated candidates for the position of president and first and second vice-president shall then be included as candidates for the position of director, and a third ballot taken (schedule C) on which delegates shall record two, and only two, names in each of the spaces on the ballot. Those five receiving highest votes as directors shall be declared elected as directors, and those two receiving the highest votes as auditors shall be declared elected auditors. Other business may be taken up between the balloting in order to give the scrutineers time to count the ballots and record the results.

This is an important amendment. Nothing takes up so much time and is so hard to conduct satisfactorily as the election of officers. The amendment proposed, while it may seem cumbersome at first, is due to overcome some of the difficulties experienced in the past. It will be explained more fully at the convention.

Election by Ballot  
Mr. W. C. Good also intends to move that section 7 shall be amended by striking out the words "or standing vote". This amendment is in harmony with the previous amendment. At present the constitution provides that "the president, vice-president, directors and auditors shall be nominated and elected by ballot or standing vote of the whole assembly". The striking out of the words "or standing vote" means that it will be necessary to elect all by ballot. This, of course, is only in the event of the proposed new system for election of officers being adopted.

Mr. A. J. Reynolds, auditor of the company, will move that section 4 of the constitution be amended so as



The milk in the pail the cow kicks over is lost forever

AND the butter-fat that goes into the can through the skim-milk spout of a cheap, inferior or worn-out cream separator is just as surely lost as the milk in the pail the cow kicked over.

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every day you use it it will be paying for itself out of its own saving.

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We have an arrangement with De Laval agents which makes it possible for any reputable farmer to secure a De Laval on the partial payment plan—a small payment at time of purchase and the balance in several installments, so that a De Laval really pays for itself while you are using it and getting the benefit from it.

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

to restrict the number of delegates that can be sent to the convention by the locals. Section 4 of the constitution at present provides as follows: "The central association shall be governed by the annual convention, composed of delegates from each branch not in arrears to the association, elected thus: One delegate for each branch, and an additional delegate for every twenty, or major portion of twenty, over the first twenty members. All delegates shall be appointed annually."

Mr. Reynolds feels that there is a danger that the expense of bringing so many delegates to the central convention, especially should there be many locals formed at points distant from Toronto, might be so great as to far more than offset the returns to the association from membership fees and thus put the central association heavily in debt. At present, locals, whether they are near or far from Toronto, pay the central fifty cents a member and the central pays (Continued on page 16.)

## OUR FARM HOMES



NOT a day passes over the earth but men and women of no note do great deeds, speak great words and suffer noble sorrows.—Charles Reade.

### The Messenger Maid

BY HELEN WALLACE

THE mistress of Calderide stood at the high window of her drawing-room, gazing steadily down into the courtyard below. The old house had been built a century before, when, with a French queen upon the throne, French influence was at its height in Scotland, and Calderide might have been modelled from many a Norman chateau, whose steep-pitched, heavily-slatted roof and quaint pepper-box tourelles still peep out above the tufted orchards of that pleasant land. It formed two sides of a square, and on the third, across the court, stood a range of stables, from which came a clinking of bridles, a stamping of hoofs, and loud voices and laughter—most unusual, save on some great occasion, for a quiet country-mansion remote amid its fields and woods.

But it was no festivity which had filled the stables to overflowing and crowded every corner of the house even to the garrets high up beneath the steep roof. The Laird of Calderide had not, indeed, openly taken part in "the rebellion" that had sprung from loyal hearts, which had just been quenched in blood at Culloden. He was shrewdly suspected of Jacobite sympathies though, and half a troop of horse had been quartered on him to overawe the countryside and to watch for stray "rebels," who, with a price upon their heads, were now seeking the coast, in the hope of escaping to France. And the chief prize among these was the young Nigel Maitland, a near kinsman of Lady Calder's. He had been one of the Prince's right-hand men, and it was now believed that he was lurking somewhere in his own neighborhood.

Lady Calder was not consciously hearing the unwelcome noises, nor seeing the occasional dragoon who strode across the sunny flags beneath her high window, but both sights and sounds served to heighten the panic anxiety which possessed her. Some days, caught by chance, had left her in no doubt that the neighboring house of Ledington was to be closely searched, how soon she did not know, the illness of its aged mistress having alone saved it hitherto from more than a cursory inspection.

"We can't wait any longer; the old woman won't recover while there's a Jacobite to smuggle out of the country. She may have a posse of them behind the bed-hangings—Nigel Maitland himself, I am enough. Well, we'll have to ask her to change her bed for a day, or roust her out of it," Major Walsh had said with a laugh, and then the door which was shut, and then Lady Calder had heard no more.

But she had heard enough, and now who was to carry the warning to Ledington—that warning so urgently

needed—who? She and her husband were virtually prisoners in their own house—he might soon be a prisoner in reality. She dare not propose to ride to Ledington, nor could she commit such a trust to any of her servants. They were suspected, too, and while to the laird among them it might bring dire trouble, to the waverers it might be too sore a temptation. Yet the message must go, or young Nigel's days were numbered! With clasped



The Home-Like Home of a Reader of Farm and Dairy.

This is not a mansion. It is something better. It is the well-kept home of Wm. J. & Son, Oxford Co., Ont. The mes of the family are enthusiastic Holstein fanciers. Mrs. Jell is an equally enthusiastic and successful poultrywoman. Their farm was one of the winning ones in the last Prize Farms Competition conducted by Farm and Dairy.

—Photo by an editor of Farm and Dairy.

hands and unseeing eyes she stood gazing before her, desperate in her helplessness. Those men mounting below might even now be setting forth for Ledington. The warning must go, but how—in God's name, how?

A long, deep sigh of unbounded satisfaction and relief sounded through the stillness.

"I have finished my sampler, to the very last stitch," said a child's voice, and Lady Calder started and turned round. In the recess of a window at the further end of the room a child had been sitting, so still that it was no wonder her mother had forgotten her presence. Now she came across the room, a quaint figure, in her long-waisted, long-skirted gown, like a little old woman's, contrasting oddly with the pale, serious child-face round which the dark hair was dressed in heavy falling curls.

In her hand was a square of fine canvas—one of those wonderful "samplers," which their fortunate possessors are nowadays unearthing from the forgotten recesses of old chests and drawers, and which fill one with wonder and pity for the tiny hands which wrought them, and the young eyes

which must have pored so closely over them. The one now held up for Lady Calder's inspection was a marvellous example of its kind. Within the scroll-border of "flammi" work, as it was called, the alphabet was repeated again and again in every size and variety of letter. In the centre was a wonderful representation of the old house of Calderide, tourelles, steep roof, crew-stepped gables and all, in the midst of a grove of very Noah's Ark-looking trees, while underneath, in the most delicate, fairy-like stitchery, were the four lines:

"Isabel Calder is my name,  
Scotland is my nation,  
My parents they were very good  
To give me education."

Poor little nine-year-old Isabel, her education in life and the world was yet all to come, but she had already been to a hard school, and the dark eyes now lifted to her mother's face may have owed some of their wisdom to the long hours spent in fashioning those endless A's and B's and C's. But children were not consulted in those days as to their wishes, and as Lady Calder was a conscientious mother, Isabel had been so well brought up that she may never have consciously rebelled against the hours of sewing in summer sunshine or by the dim lamp in the long winter "fore-nights." Only as she watched her mother's face she heaved again that deep, unchildlike sigh.

Across Lady Calder's face a look

to say to her from me that there must be nobody left in Ledington to-night to be nobody but the one who belong to it," with slow emphasis. The bairn was wise and menseful (thoughtful) for her years; still she was but a bairn; she must not be burdened with a more direct message, thought Lady Calder, looking into the troubled young eyes. After a moment's pause she said, "If there's no chance of that you'll show her your sampler. She'll know fine I wouldn't send you at a time like this only to show a bairn work, and she'll be on the lookout. You'll tell her which of the letters you found hardest to do, and you'll point to this and that," swiftly touching one and another as she spoke, "till your finger rest a moment on this," pressing hers on a very elaborate G and then passing on to an O. "Tis a poor device," she sighed, "but I can think of nouse better, and if Major Walsh or any other one asks you, I'm sending you to Ledington, it's to show your sampler—only to show your sampler, Bell," with piteous insistence. "They musn't guess anything else, or it'll be bad for you." "They won't," said Isabel, her dark eyes kindling, and her little figure seeming to expand with the very might of her resolve. This was a greater trust than the marking of the blankets. "They'll get nothing from me."

A sharp rap on the door stopped the words on her lips. It was immediately followed by the entrance of a smart, middle-aged soldier.

"Your pardon, my lady, but I thought Calder was here," he said, in a loud, jovial voice.

"No, but I was just about to seek you, Major Walsh. My little lassie here has finished her sampler at last, and nothing will serve but she must show it to her granny-aunt at Ledington. I expect there was something promised when an' so forth," said Lady Calder, stroking the dark curls. "The bairn may go, mayn't she?"

"To Ledington?" said Major Walsh with an odd smile, while the careless bonhomie of his countenance seemed like a mask over some bent purpose behind. "Well little maid, come and show me this wonderful work, and we'll see about it."

He took the canvas from Isabel's hand, scanned it closely, front and back, then he thrust it into his pocket with an eye on Lady Calder's face as he did so. But if he looked to read disappointment there, there was no trace of it.

"Those little fingers must be tired after setting so many stitches. They deserve some reward, so I'll e'en take little Miss Bell myself, since she's so set on it, and I'll carry her sampler for her," he said with a grin. "Bring Isabel, and we'll go e'en now."

Isabel pressed close to her mother's side. "Must I go with him? I'm—I'm scared of him," she whispered. "You'll be a brave lass. You're the only one I can trust, I breathe'd her mother, as she tied on the scarlet cloak, and drew the hood over the dark curls.

But for all her pride and resolve it was a very white-faced child who was promptly perched up on the front of Major Walsh's saddle. She had been in the clutches of an ogre she could not have been more terrified, and to her he indeed seemed such. She had heard the story of Culloden, and was not Major Walsh here to hunt to death the ogre who had escaped from King George's vengeance, and was that that some one who was to "go" from Ledington. Even when her father was not safe from him, but the Spartan training stood her in good stead.

(Continued next week.)

## The Up

Travel S  
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ERVE the case before singing. One of the great San Diego was at its situation most corner of the heat to be not any of the time Pacific Ocean br ingly cool.

At the exposition grand open-air great heat and temperature of the clams can enjoy more its sweet, strong they sit there, joy of sunny-bird. Then the singing companion was er it was the voi ist, a trained, and present. Out this one could see the great ocean will

That organ will people of that city a much more into our lives. Just a beautiful leg and sent out with a bring back all the could find, the c thinking.

The first return time, with his full. The second late into the night bottom of his covered. In this lesson.

One of the best our gratitude and singing. Each and old hymns them to sing the ful songs learned do them good. If it would do other sing old songs; he will say with gr they never could time to try to be need to be a part of this soul-gratifying sweet, low humm merry whistling.

In the dark day filling more than of thankfulness it still stood. So if we and in the sad h grand organ and the Giver of all life.

## The C

THE crow black one or more a familiar of east of the Throughout the far north as southern extends Canadian province. Valley it is one ant of birds, great artificial groves a ber" which it forms also in parks and in considerable of.

The grackle is sins, such as stealing and robbing the an examination shows that its food consists of which are injurious eats a few snails, deters, small fish, mouse. The stom

### The Upward Look

#### Travel Series No. 7

##### The Power of Music

**"S**ERVE the Lord with gladness: come before his presence with singing.

One of the greatest surprises about San Diego was the wonderful climate. As its location was at the southernmost corner of California, I expected the heat to be almost unbearable in July, but was not even uncomfortable any of the time, while the nights, the Pacific Ocean breezes, were refreshingly cool.

At the Exposition, there was a great grand open-air organ, the first I had ever heard. Owing to the even temperature of the climate the San Diegans can enjoy most of the year round, its sweet, strong, beautiful tones, as they sit there, under God's own canopy of sunny-blue or star-lit sky. Then the singing to that organ accompaniment was a rare treat, whether it was the voice of a famous soloist, a trained choir or the rousing tones of the great crowd of those present. Out through the peristyle, one could see the grand stretch of the great ocean.

That organ will mean much to the people of that city. Music should play a much more important part in all our lives. Just the other day I heard a beautiful organ and I thought I would go out with a basket. One was bringing back all the request prayers he could find, the other all those of thanksgiving.

The first returned in a very short time, with his basket overflowing full. The second did not appear until late in the night, and even then the bottom of his basket was scarcely covered. In this there is a striking lesson.

One of the best ways we can show our gratitude and thankfulness is by singing. Teach the little ones our time old hymns of praise, encourage them to sing the many little beautiful songs learned at school. It will do them good. It will do your good. It will do others good. Sing yourself; sing old songs; learn new ones. Many will say with great conviction that they never could sing; then it is high time to try to begin. One does not need to be a prima donna, to express this soul-gratitude. There is also the sweet, low humming, the rollicking, merry whistling.

In the dark days our baskets need filling more than ever, with the notes of thankfulness for all the blessings still left. So if we do this in the glad and in the sad hours, think that a great organ will be joy and thanksgiving constantly being raised to the Giver of all good.—I. H. N.

### The Grackles

**T**HE crow blackbird or grackle in one or more of its subspecies is a familiar object in all the states east of the Rocky Mountains. Throughout the year it is resident as far north as southern Illinois, and in summer extends its range into the Canadian provinces. In the Mississippi Valley it is one of the most abundant of birds, preferring to nest in the artificial groves and wildbreaks near farms instead of in the natural "timber" which it formerly used. It breeds also in parks and near buildings, often in considerable colonies.

The grackle is accused of many sins, such as stealing grain and fruit and robbing the nests of other birds. An examination of 2346 stomachs shows that nearly one-third of its food consists of insects, most of which are injurious. The bird also eats a few snails, crawfishes, salamanders, small fish, and occasionally a mouse. The stomach contents do not

indicate that it robs other bird's nests to any great extent, as remains of birds and bird's eggs amount to less than half of one per cent.

It is on account of its vegetable food that the grackle most deserves condemnation. Grain is eaten during the whole year, and only for a short time in summer is other food attractive enough to induce the bird to alter its diet. The grain taken in winter and spring probably consists of waste kernels from the stubble. The stomachs do not indicate that the bird pulls down sprouting grain; but the wheat eaten in July and August, and the corn eaten in fall are probably from fields of standing grain. The total amount of grain consumed during the year constitutes 45 per cent of the food, but it is safe to say that at least half is waste grain and consequently of no value. Although the crow blackbird eats a few cherries and blackber-



ries in their season, and in the fall some wild fruit, it apparently does no damage in this way. Large flocks of grackles no doubt do considerable injury to grain crops, and there seems to be no remedy, except the destruction of the birds, which is in itself expensive. During the breeding season, however, the species does much good by eating insects and by feeding them to its young, which are reared almost entirely upon this food. The bird does the greatest amount of good in spring, when it follows the plow in search of large grubworms, of which it is so fond that it sometimes literally crams its stomach full of them.

### OUR HOME CLUB

#### A Back-to-the-Lander

**A**RE any Home Clubbers back-to-the-landers? I am, but this little story with which I hope to gain admission to your columns is not of my own experiences. It is that of a friend who is like myself, a back-to-the-lander. It should, I think, make many a country boy and girl more contented than some of them are with farm life.

This friend of mine worked in one of the machine shops in the city of Hamilton. He got good pay, lived in a decent house, fed in clothes, his family respectfully and managed to make ends meet, and by strict economy managed to save a few dollars a year. He and his wife had an ambition to own a little farm of their own, and three years ago he threw up his job and they came to our neighborhood and bought 50 acres. This city couple had their full share of discouragements, but this year, their third on the farm, they have rounded the turn and are simply jubilant over their success as farmers. Their strawberry crop was one of the best in our neighborhood and brought in a good many hundred dollars. In the meantime the men who once worked with this friend side by side in the machine shop in Hamilton are mostly out of employments and hardly know where the next meal is to come from. How much better off is Mr. L.—on his 50-acre farm?

Dear Home Club readers, I sometimes hear the old-fashioned everytimes hear the columns. The returns from the farm are not enough, we are told. Perhaps statistics showing only dollars and cents are not as favorable

as they ought to be, but let me tell you as one who has worked in the city and served under a boss that the independence of the farm is worth something. This surely is worth a lot; farmers are the last people on earth to starve and I am glad to be a "Back-to-the-Lander."

#### A Supporter of "Aunt Greta's" Views

**Y**OU are a champion of the woman suffrage cause all right "Aunt Greta," and I can probably best express myself in the old-time phrase, "Them's my sentiments." Your letter in the Dec. 2nd issue called to my mind a poem that I read not long ago on this subject. It was an adaptation of Kipling's "If" to the suffragist and runs like this:

If you can forge ahead when all about you are hanting back and criticizing you; If you believe yourself when Aunt's foot you keep it up till they believe it, too; If you can work and not be erim and grumph; Or being lied about, don't ever tell; Or being bossy, don't grow frayed and frumsh; And yet don't dress too smart nor look too well.

If you can learn to be a lifted eyebrow, If you can interest a doubting dame; If you can meet a Baby-sitter or High-brow, And treat those two imposters just the same; If you can hear the Cause in all 'its phases Mis-tated by the Ant's o'er and o'er; And listen to their hookeyed, worn-out shrames; And being floored—just up and take the floor.

If you can make one heap of household labor, And just by going at them get them done; If you can bear the gossip of your neighb'ors; And never breathe a word to anyone; If you can keep your heart and nerve reweaving; When Rumor says another chance is gone, And so hold on when there is nothing doing; Except the Cause that says to you, "Keep on!"

If you can talk to crowds and keep your listener's attention; Or walk with men, nor lose your woman's ways; If every wrong encounters your resistance, And every right receives your honest praise; If you can take the thread as Fate may spin it; And weave your web of life with right good-will— You'll get the vote and everything that's in it, And, what is more, you'll be a Woman still! "Sister M. c."

#### Valuable Lessons

**B**OY to Smaller Boy: You're a bloomin' fine soldier! 'Ere's me taught yer everythink I know, an' you stand there an' don't know nothink!

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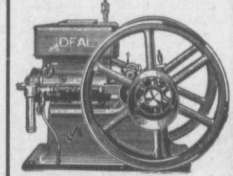
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# THE COOK'S CORNER

Conducted by LILLIAN CRUMMY

## Meat Dishes

### Savory Hearts.

**T**AKE lamb's or calves' hearts, fill with a dressing of bread crumbs, sage, salt and pepper. Bake in a quick oven until tender, about fifteen or twenty minutes. Cover with mashed potatoes, bake until brown and serve very hot with brown gravy.

Beef's heart is also delicious roasted with the above stuffing, but it should be cooked more slowly and it takes a much longer time to bake.

Take a cup of bread crumbs or stale bread, moisten with hot water or milk, add one egg, one teaspoonful salt, pepper, summer savory, or any desired flavoring. Mix well and put in breast of fowl.

### Goose Stuffing.

Take two teaspoonfuls chopped onion; one cup bread crumbs; one cup chopped apple; one teaspoonful sage; salt and pepper.

### Dressing for Turkey.

One pint of melted butter; two tablespoons sage; two tablespoons Summer savory; one teaspoon salt; butter size of an egg; pepper to taste. Apple sauce should be served with goose or duck, and should be unsweetened. Cranberry sauce is served with turkey. Red currants is served with chicken.

### Stuffed Spare Ribs.

We all know what a delicious treat is roasted spare ribs but how many have tried stuffed spare ribs? Below is the recipe:

Make a dressing as for fowl, using dry bread crumbled fine. Add a couple of large boiled, mashed potatoes, one medium sized onion, chopped fine, salt and pepper to taste and a sprinkle of sage. Dip down potatoes with enough water to form a loaf.

Put spare ribs in a pan and dressing on top with another layer of spare ribs on top of this and sprinkle with salt and pepper. Put one-half cup water in pan and keep ribs basted to prevent drying out.

## A Startling Announcement !!

**D**EAN Stanley was once visiting a friend who gave one of the papers strict orders that in the morning he was to go and knock at the Dean's door, and when the Dean inquired who was knocking he was to say: "The boy, my Lord." According to directions he knocked and the Dean asked: "Who is there?" Embarrassed by the voice of the great man, the page answered: "The Lord, my boy."

# Making Use of Last Season's Dresses

Farm and Dairy patterns shown in these columns are especially prepared for Farm and Dairy Women. They can be varied upon to the latest models and include the most modern features of the paper patterns. When sending Farm and Dairy wear order please be careful to state that you want measure for adults, age for children and the number of patterns desired. Price of all patterns is One Dollar, per each. Address all orders to Pattern Dept., Farm and Dairy - Peterboro, Ont.



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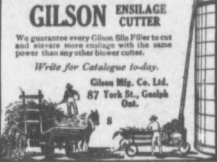


# BOOK ON DOG DISEASES

and how to feed.  
H. CLAY GLOVER, V.S.  
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**THE GILSON SILO FILLER** is the one filler that can be successfully operated with as little power as 4 h.p. There is a Gilson Silo Filler for every purpose—the individual farmer, for the producers, and our latest capacity machine for the custom jobber.



**GILSON ENSLAGE CUTTER**  
We guarantee every Gilson Silo Filler to cut and ensilage more ensilage with the same power than any other ensilage cutter.  
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Gilson Mfg. Co. Ltd.  
87 York St., Guelph Ont.

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

If you have Pure Bred Stock. Eggs for Hatching. List them in this Number. Write us for rates. Send along your copy NOW.

Last form close Monday, Jan. 31st, 10 a.m.

When writing to advertisers mention Farm and Dairy.

**T**HE majority of us no doubt this winter have been confronted with the problem of how to alter the narrow skirts of last season, so that they will be presentable. Very few of us can afford to throw away our last season's dresses and skirts, especially those that are not much the worse for wear. Here is a way that should help us out of the difficulty, to some extent at least.

When we wish to widen a skirt, it is quite permissible to set in plaits under the side seams or by putting in a panel of contrasting material. For instance, if we have a blue skirt, serge or mercurina, it will be almost impossible to secure an exact match for it in plain material, but it is not so difficult to get a striped or plaid material that would go with it nicely. If we have a whole dress of this blue material, a few touches of the plaid or striped goods on the waist will make quite a transformation. Why not try this idea on that dress that you had despaired of ever being able to wear out?

**1440—Lady's Shirt Waist.**—Collars of all sizes, colors and descriptions are being shown this winter and one can wear almost any style and not fear of being greatly behind the times. The collar on the blouse shown herewith is quite large, and if made from white material as illustrated will brighten up a waist that might otherwise appear plain. The cuffs, too, are very neat. Six sizes: 34 to 44 inches bust measure.

**1438—Combination Corset Cover and Petticoat.**—Here again is another opportunity of making use of the whitewear sales that are going on by securing material and making up a pretty outfit from the design here shown. This combination suit is for misses and small women, and is cut in sizes from 15 to 30 years.

**1439—Lady's Two-Piece Skirt.**—Here is one of the very popular circular skirt models. There are many pretty plaid ma-

terials this season from which such a skirt could be made to good advantage. This is a two-piece design, the seams coming in the centre back and centre front. The skirt measure about three yards at the lower edge. Six sizes: 22 to 32 inches waist measure.

**1442—Girl's Dress.**—Many and varied are the costumes shown for the young girl, and this one should not be overlooked as the style features are good. The long shoulder is a prominent feature and the pocket of the belt is quite chic. If desired the collar, cuffs, belt and piping down the front may be made of contrasting material. Four sizes: 6, 8, 10 and 12 years.

**1433—Girl's Gown.**—The costume here shown is rather striking in appearance and for those who are partial to odd styles, this model should rather appeal to them. The pleat of the skirt and waist might be made of black velvet or silk, and the outer portion of contrasting material. The collar, too, is quite stylish, with the dainty lace across the front. This design calls for two patterns, 10 cents for each. The waist is cut in size from 34 to 44 inches bust measure and the skirt from 22 to 32 inches waist measure.

**1442—Lady's Kimono.**—The kimono with the Empire effect is one that appeals to the majority of women, as it seems most suitable to the soft clinging material in the ordinary and homes should appeal to the girl who is always on the alert for something new. The plaited skirt also is a favorite. This suit is cut in four sizes: 10, 12, 14 and 16 years.

51

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# JOHN GALT,

## REPORT OF

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of the Bank.

Winnipeg, 26th

In the absence  
R. T. Riley, Vi

REPORT OF THE BALANCE SHEET OF THE CANADIAN BANK OF COMMERCE

51st Annual General Meeting, Winnipeg, January 12th, 1916

PROFIT AND LOSS ACCOUNT

Table with 2 columns: Description and Amount. Includes 'Net profit at credit of account, 30th November, 1914' and 'Net profit for the year, after deducting expenses of management, interest due on deposits, reserving for interest and exchange and making provision for bad and doubtful debts and for rebate on bills under discount, have amounted to'.

Table with 2 columns: Description and Amount. Includes 'Which has been applied as follows: Dividend No. 113, 2 per cent., paid 1st March, 1915' and 'Transferred to Contingent Account'.

LIABILITIES

Table with 2 columns: Description and Amount. Includes 'Capital Stock \$1,000,000.00', 'Unclaimed Dividends \$3,508,976.70', and 'Notes of the Bank in circulation \$1,717,609.00'.

ASSETS

Table with 2 columns: Description and Amount. Includes 'Gold and Silver Gold \$1,408,583.56', 'Deposit with the Minister of Finance for the purposes of the Circulation Fund \$90,000.00', and 'Current Loans and Discounts in Canada (less rebate or interest) \$89,136,386.31'.

JOHN GALT, President

G. H. BALFOUR, General Manager

REPORT OF THE AUDITORS TO THE SHAREHOLDERS OF THE UNION BANK OF CANADA

In accordance with the provisions of sub-sections 19 and 30 of Section 56 of the Bank Act, we report to the Shareholders as follows: We have audited the above Balance Sheet with the books and vouchers at Head Office and with the entries in the books of the branches.

T. HARRY WEBB, E. S. READ, C. R. HEGAN, Auditors, of the firm of WEBB, READ, HEGAN, CALLEIGHAM & CO., Chartered Accountants.

Winnipeg, 20th December, 1915.

In the absence of the President, Mr. John Galt, the Chair was taken by Mr. R. T. Riley, Vice-President.

THE VICE-PRESIDENT'S ADDRESS

In moving the adoption of the Report, the Vice-President, Mr. R. T. Riley, spoke in part, as follows: The statement which we have placed before you to-day discloses a condition of the Bank which would be most gratifying considering that we are in the midst of a location of the world's commerce and finance.

The finances of the Dominion have been conducted during the past year with comparatively little help from outside, and although we shall have to make further borrowings for war purposes, there need be no magnifiers as to our ability to repay such obligations.

Trade conditions in Canada have distinguished themselves for war material, and the decrease of foreign trade is now in our favor and likely to continue so for some time, as there is still a lot of grain to be exported from the crop of 1915.

Our share of the cost of the war has not yet fallen upon us, and it is the paramount duty of every citizen to be a private individual to exercise the strictest economy, both in public and private life, so that when we are called upon to pay our share we shall not be found unprepared.

Canada has every cause for thankfulness that we have been blessed with a bountiful harvest of wheat, and as a result the farmers of the West are to-day in a better and safer condition than ever before.

With reference to conditions in England, our London Manager reports that the effect of the war on general business in Great Britain has been decidedly unfavorable, and that while there have been no repetitions of the financial upheavals of the previous year, the various hostilities have caused great inroads into accumulated wealth, and further disorganized the complex industrial and financial system of the world.

The United States for the time being has become the money market of the world, and it is pleasing to note in this connection that the Canadian dollar has been received, as well as various Provincial, Municipal and Railway Loans aggregating in the total about \$2,000,000,000, from a Canadian financial institution to see that all offerings should be thoroughly sound, and of the highest character.

Our policy for the coming year will remain the same. We shall be conservative, at the same time extending to our customers as liberal treatment as conditions and sound banking will warrant.

General Manager's Address: The year just closed has been one of much anxiety to bankers, and we are pleased to have come through it in such a satisfactory manner. Reserves—Referring more particularly to the statement which has been presented to you, the percentage of total assets to total liabilities to the public amount to 47.93 per cent. as compared with 35.37 per cent. last year.

Profits—The profits for the year were \$269,228. The increase over the last previous year, which, under trying and abnormal conditions, and the maintaining of such large reserves must be regarded as satisfactory. They have been sufficient to pay the usual dividend of 8 per cent. and to contribute \$150,000 in a grant of \$10,000 to the Officers' Pension Fund, providing for \$45,730.77 War Tax on circulation, and act as a reserve for contingencies, besides having made adequate provision for all losses.

Circulation—Notes of the Bank in circulation have increased \$1,300,000. Deposits—Total deposits \$27,626,000 show a gratifying increase of \$9,340,000. Balances Due to and by Other Banks—Balances due to Banks and by Other Banks show an increase of \$3,650,000 over 1914. Gold and Silver Coin and Dominion Government Notes amounting to \$2,000,000, which is \$2,540,000 more than in the previous statement.

Cheques on Other Banks amounted to \$3,556,000, being \$1,120,000 greater than last year.

Investments—There is little change in the Bank's investments. The increase of \$15,000 represents the initial payment on the Bank's subscription to the Canadian War Loan of \$100,000,000. The amount

allotted to this Bank was \$986,000, which has since been fully paid for.

Call on Short Loans—Call and Short Loans in Canada are \$4,624,000 higher and are against bonds of a high order.

Current Loans—Current Loans and Discounts in Canada have been reduced by \$1,256,000.

Total Assets—Total Assets of the Bank have risen to the large amount of \$90,665,000 as against \$81,561,000 last year, an increase of \$9,104,000.

General Remarks—Enforced liquidation has been in progress throughout Canada for the past two years, but the situation has been lighter than was anticipated. This period will be critical and financial conditions are resumed, but the future is faced with feelings of hopefulness and every citizen should be fully cognizant of the fact that the lightening of our burdens are thrift, strict economy, the lessening of expenditures, and a capital account-balance of trade with Great Britain being in Canada's favor and beneficial to her.

The gratifying results of the past season's crops have enabled farmers to liquidate their obligations very largely, and every encouragement is being offered by Provincial Governments in Western Canada to more extensively into mixed farming.

Staff—It will be of interest to our Shareholders to know that 325 members of our staff have volunteered for overseas military service, and 285 are still on active service. Too much praise cannot be extended to the 1,476 reserves who have volunteered, and who are so loyally and cheerfully performing additional duties, and who are working hours whilst their fellow-clerks are fighting for the Empire.

The motion was then adopted.

Auditors: Messrs. Webb, O.A., E. S. Read, G.A., and C.R. Hegan, O.A., of the firm of Webb, Read, Hegan, Calleigham & Co., Chartered Accountants.

The following were elected the Directors for the ensuing year: Sir William Price, Messrs. John Galt, R. T. Riley, Geo. H. Thomson, E. L. Drury, F. B. Kenaston, Wm. Shaw, W. B. Allan, M. Bull, Stephen Hays, Major-General John W. Carson, C.B., J. S. Hough, C.O., B. O'Connell, Hume Blake, K.C.; E. O. McLaughlin.

At a subsequent meeting of the Board, the following were elected Honorary President: Mr. John Galt, President; Mr. Wm. Shaw, Vice-President; Mr. Geo. H. Thomson, Vice-President.

SAVE MONEY BUY YOUR SEED NOW

Get's Standard Per Bus. No. 1 Red Clover \$17.00, No. 1 Alyke \$14.50, 1 Timothy (Bright Seed) 6.90, (almost Extra No. 1 for purity) 5.65, 2 Timothy 5.65, (Extra No. 1 for purity) 5.65. We have a small quantity of Grimm or Varigated Alfalfa. If interested write for prices. Railway freight paid on all orders in Ontario. We are buyers of Red, Alyke and Alfalfa clover, and very attractive to our 1916 Catalogue. Write, Buckwheat and Daubney Oats. Buy and send large samples.

After the year has passed to the farmers of Canada we submit our 1916 Catalogue. In order to show our appreciation of our customers' interest in having many new customers, we are making our prices and terms very attractive to our 1916 Catalogue. Write, Buckwheat and Daubney Oats. Buy and send large samples.

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FREE to stockmen and poultrymen our 80-page illustrated booklet (containing 1000 illustrations) how to construct a house which will accommodate 100 turkeys, gives full measurements of every piece of lumber required. Deals with the common diseases of turkeys and the remedies. Tells how to cure run in four days. Contains full information about Royal Purple and Blue Pills. Write for free copy. The W. A. JENKINS MFG. CO., LONDON, CAN.

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**ABSOLUTELY ON APPROVAL**—Send a 10-cent stamp, money enclosed. Different from picture which illustrates our latest model. Shipments made promptly from **Windsor, Ont., Toronto, Ont., and St. John, N.B.** Whether in lots or small, write for literature this evening. Address: **AMERICAN SEPARATOR CO., Box 2393, Balabasco, N. Y.**

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If you wish your butter to be smooth and uniform, use the

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Adapted by the best dairies in Gt. Britain and Canada. Makes the butter firm—ever-consistent all through. Results in better butter and bigger profits!

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ENTIRELY a new book—new chapters—tells facts about every type of silage—made, slaw, brick, or moist, lime, metal, pit, etc. Tells best for your needs—includes a suggestion for making most profits. Pages: 100—Index—Copyrighted Nov. 1914, covers all silage crops. Send for one book it beats all previous silage books. Write today. Mailed with postage. Mention this paper. **SILVER 10c. SALE, 20c**

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Plan when you will go about taking **FARM AND DAIRY**

**Pull Stumps The Easy, Practical Way**

Clear your land the **KIRSTIN** way—the quick, easy, sensible, economical way—the way that has proven practical under all conditions. One man handles and operates the **KIRSTIN**—NO HORSES REQUIRED. And yet it is easier for a man to use the **KIRSTIN**—it is **LESS** and **EASIER** work than with any other Puller or by any other method. The improved double leverage **KIRSTIN**, the new short lever model, stands the extreme tests of the very hardest stump pulling. The **KIRSTIN**'s wonderful compound leverage principle makes any man master of the toughest stumps anywhere. In addition to its practically unlimited power, the **KIRSTIN**

**Changes Speed While Pulling a Stump**

No other stump puller at any price contains a similar device. With other machines you keep pulling at the same rate of speed even after the stump has broken loose and the hard soil is over. This is a big waste of time that the **KIRSTIN** Multiple Speed-Changing feature entirely overcomes.

Agents Wanted.

**A. J. KIRSTIN CANADIAN CO.**  
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The Quick-Disconnectable connections also mean a big saving of time. Furthermore, with the **KIRSTIN** you can

**Clear Over An Acre From One Anchor**

No time lost in having to re-set machines for every stump—no unwinding cables from a heavy drum—no driving round and round—no wasted time or effort at all. Just a steady, easy, back-and-forth movement of the **KIRSTIN** lever brings stumps out quick and easy. Small trees, logjacks, brush, etc., can be pulled in bunches. The **KIRSTIN** gives you unlimited power. It also has surplus strength in every part—and the right speed for every need. If you have any stumps on your farm.

**You Need a KIRSTIN**

Why the **KIRSTIN**? Because the **KIRSTIN** is the simplest, most practical, most efficient land clearing device ever invented. Lowest first cost—lowest in cost of operation. It weighs much less than any other, is a great deal stronger, and is covered by

**The KIRSTIN Iron-Clad Guarantee**

You cannot afford to start to clear your land before you get the **KIRSTIN** Catalogue. This will be sent you FREE and contains complete **KIRSTIN** Pulling, the **KIRSTIN** Engines, Burying and other information. We'll send you **FREE** and tell you the **KIRSTIN** is and does all we claim. Try a **KIRSTIN** on your land—open your mind to yourself. Write today—receive full details.



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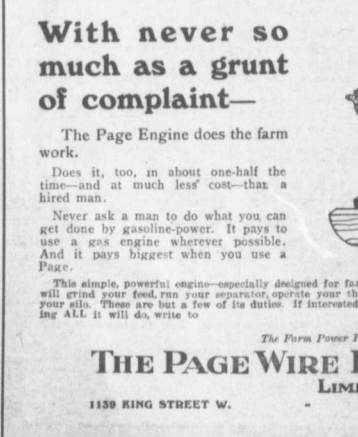
Does it, too, in about one-half the time—and at much less cost—that a hired man.

Never ask a man to do what you can get done by gasoline-power. It pays to use a gas engine wherever possible. And it pays biggest when you use a Page.

This simple, powerful engine—especially designed for farm work—will grind your feed, run your separator, operate your thrasher, fill your silo. There are but a few of its duties. If interested in knowing ALL it will do, write to

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**Note These Prices:**

1 1/2 H.P.	\$46.50	5 H.P.	113.50
3 H.P.	68.00	6 H.P.	168.00



**Proposed Constitutional Amendment by United Farmers**  
(Continued from page 11.)

The railway expense of the delegates from the local to the central convention. The expenses of delegates from locals near Toronto do not generally equal the fees they pay to the central. The surplus is used to offset the loss incurred in paying the expenses of delegates from locals living a long distance from Toronto.

The danger Mr. Reynolds sees as an auditor is that should more delegates be appointed from a distance than from near Toronto, a special effort might be so great as to practically swamp the funds of the central association. There are various ways in which this difficulty might be offset, such as by putting forth a special effort to organize locals near Toronto and to have them well represented at the convention, or by increasing the membership fees paid at a number of these.

This amendment will need to be considered with considerable care. Last year the present arrangement worked out satisfactorily. If it is found that the locals should keep in mind what Constitutes Membership

Mr. E. C. Drury will move that the constitution be amended so as to more clearly define membership in the central organization is an individual member of the local or is the local itself. At present section 12 of the constitution reads:

"The secretary of the central organization shall be elected by the secretary treasurer \* \* \* to keep correct minutes \* \* \* as well as a complete and correct membership roll showing date of joining and an account of each member, showing dues and when paid, and everything necessary to keep a record of each member's standing."

Hitherto the only record that has been kept has been of the local organizations, when they joined the central and paid 50c per member thereto. A record has been kept also of the number of fees paid by each local as this determines the number of delegates the locals can send to the central convention. As it is possible that some may expect from the way the constitution reads that the locals as are expected to send the names and post office addresses of each of their members to the central and that the central should keep a complete list of all the affiliated members to all the branches, and as this is not being done, Mr. Drury's idea is that the constitution should be amended so as to make it clear that this is not necessary. To send such a list adds to the duties of the local secretaries and to the secretary of the central. This list is constantly changing also which means that the work is continuous in character. On the other hand, there may be good reasons why it is desirable that the central should know who all its members are. Whether or not it will be necessary for this change to be made it will be for the convention to decide.

**United Farmers in Convention**

**T**HE Second Annual Convention of the United Farmers of Ontario, along with the Second Annual Shareholders' Meeting of the United Farmers' Cooperative Company, Limited, will be held in St. James' Parish Hall, 65 Church St., Toronto, beginning Wednesday Feb. 2, 1916.

Mr. J. J. Morrison has given notice that he intends to resign his office, but he so amended that the retiring directors shall not be eligible for reelection for one year after their term has expired. Mr. E. C. Drury will move that we consider the advisability of the reconstructing of the manage-

ment of the co-... also our by-law... the situation, nolds of Soling... grants on Wed... to educational... sions. Mr. A... along the line... on carload ord... will deal with... should support... Salt and Soda... defford will be... of 1916... "Labelling" Goods Hand... Morrison, "F... zations," by J... Profits, and... On Wednesd... o'clock will be... ing of the Un... tive Company... also occur... On Thursday... as follows:... tion: How?... ish Poultry Tr... ganized Mark... ("The Party of... City Consum... Movement," I... ling Tender an... F. W. Fisher... ments," by E... from Western... dress the conv... on Friday, ... will be devo... ness and the... directors' mee... Shareholders... paid by the de... come as deleg... then the railw... by the U.F.C... 1915, and the... clauses 4 and... The Ma... Butter and... vided to sen... department... matters relat... and to sugg... steo... Paying fo... (Continu... est to the ac... plus 2, second... pooling, four... In view of... discussions, I... written on th... factory men at... mit that in... the money man... rons at a unif... of milk, we ar... for which is... we ask, are t... for not adopt... payment for cl... first difficult... of qualified m... do the testin... most regrettal... our dairy ind... demanded me... testing, I be... well quality... Canada at the... a divided opi... method of pay... rons. I am fir... if our dairy a... gether on this... some one syst... at our cheese... makers, fact... rons would a... short time. I am not any one syst... milk, because... sent circumst... cided by a co...



ment of the company, as provided for in our by-laws. Mr. W. C. Good also has some changes to propose in the situation, as has also A. J. Reynolds of Solina. The afternoon program on Wednesday will be devoted to educational addresses and discussions. Mr. Anson Groh will speak along the line of developing business on carload orders. Mr. John Tolmie will deal with the question of why we should support the Ontario People's Salt and Soda Company. Other addresses will be given by L. H. Blatchford on "Taking the Lead by the Reins," "Labelling with Company's Name Goods Handled by Them," by J. J. Morrison, "Financing Local Organizations," by John Z. Praser and "Retail Profits," etc., by H. B. Cowan. On Wednesday evening at eight o'clock will be held the annual meeting of the United Farmers' Cooperative Company, Limited, at which will also occur the election of officers. On Thursday addresses will be given as follows: "Extending Organization: How?" by E. C. Tucker; "Jewish Poultry Trade," Mr. Coult; "Organized Marketing," F. C. Hart; "The Party of the Other Hand: The City Consumer and the Farmers' Movement," Prof. Sissons; "Handling Tender Fruit," C. W. Furney; "Farmers and Railroads Rates," W. F. W. Fisher; "Live Stock Shipments," by E. C. Drury. Delegates from Western Canada will also address the convention.

On Friday, the morning session will be devoted to unfinished business and the afternoon session to directors' meetings.

Shareholders' railway fares are not paid by the company, but if they come as delegates to the U.F.O., then the railway fares will be paid by the U.F.O., if the dues have been paid as provided for in the clauses 4 and 27 of the constitution.

**The Makers' Corner**

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

**Paying for Milk at Cheese Factories**

(Continued from page 5)

est to the actual cheese made, fat plus 2, second, straight fat, third, and pooling, fourth.

In view of these figures and the discussions, addresses and articles written on this subject, I think we mit that in continuing to distribute the money among cheese factory patrons at a uniform rate per 100 pounds of milk, we are deliberately choosing that which is wrong in quality. May we ask, are there any good reasons for not adopting the quality basis of payment for cheese milk. One of the first difficulties we meet is the lack of qualified men in our factories to do the testing, which is one of the most regrettable things we have in our dairy industry, yet if the trade demanded men capable of doing the testing, I believe the cheesemakers would qualify. Another point: In Canada at the present time there is a divided opinion as to the proper method of paying cheese factory patrons. I am firmly of the opinion that if our dairy authorities would get together on this subject and advocate some one system of paying for milk at our cheese factories, the cheesemakers, factory proprietors and patrons would adopt it within a very short time.

I am not here to-day to advocate any one system, of paying for cheese milk, because I believe under the present circumstances that should be decided by a conference of dairymen,

but I am here to say that paying for cheese milk at a uniform rate per 100 pounds is decidedly wrong, and unfair, and I am also prepared to say that there are three other methods of paying for cheese milk that are infinitely more accurate and just. I, for one, am willing to have the best method decided in conference and then go out and advocate it over the whole of Canada. I trust that the views I have submitted will help to bring into use an accurate and just system of paying for milk at the cheese factories in Canada at an early date.

**W.O.D.A. Winter Exhibition**

At the winter dairy exhibition held in connection with the W.O.D.A. convention at St. Marys, the exhibit of cheese was somewhat lighter than that of last year, but the butter display showed a slight increase in quantity. The exhibits on the whole were more tastefully arranged than on former years. A strong educational feature was a demonstration of butter made from degraded cream. Last August churnings were made from first, second, and third grades of cream, the butter was placed in cold storage, and placed before the judges without them having an inkling as to how the butter had been prepared. Their placing accorded very well with the grades of cream from which the product was made. That made from No. 1 cream scored 90.5, that from No. 2, 85.5, and that from No. 3, 85.5. In another experiment, two lots of butter, one made from a mixture of sweet and sour cream, both of good flavor and the other made from a mixture of first, second and third grades of cream, were judged side by side, the former being scored 94.5 and the latter 88.0—a difference of 6.5 against the mixed grades.

The following is a list of the prize winners at the Dairy Exhibition:

September White Cheese: 1 H. Youn, Lisleford, 95.2 (won on flavor); 2 P. Callan, Woodstock, 95.2; 3 H. E. Donnelly, Stratfordville, 95.6 (won on flavor); 4 G. J. Donnelly, Scottsville, 95.6; 5 F. E. Travis, Eden, 95.6.

September Colored Cheese: 1 P. Callan, 95.4; 2 P. E. Travis, 95.2; 3 H. E. Donnelly, 95.4; 4 C. J. Donnelly, 95.2; 5 H. Youn, 95.6.

October White Cheese: 1 J. K. Brown & Son, Brussels, 95.4; 2 P. Callan, 95.6; 3 H. Hastings, Britton, 95.9 (won on flavor); 4 Connolly Bros., Thamesford, 95.9; 5 Wm. Zulauf, Brunner, 95.3.

October Colored Cheese: 1 Wm. Zulauf, Brunner, 95.6; 2 G. J. Donnelly, 95.9 (won on flavor); 3 H. Youn, 95.9; 4 N. Bell, Ripley, 95.6 (won on flavor); 5 H. Hastings, Britton, 95.6.

Winter 50-lb. Box Creamery Butter: 1 W. B. Dinwiddie, Belmont, 95.50; 2 E. M. Johnston, Innesville, 95.15; 3 D. Doan, Southwood, 95.9; 4 J. Guthbertson, Stratford, 94.2; 5 J. E. Wilson, Forest, 94.3.

50-lb. Creamery Prints: 1 J. Guthbertson, 95.65; 2 J. E. Wilson, 95.3; 3 Carter Bros., Stratford, 94.2; 4 H. J. Neit, Tavistock, 95.1; 5 J. E. Wilson, 94.3.

50-lb. Box Butter: 1 Macb. Robertson, Belleville, 94.85; 2 H. A. Clark, Warwick, 94.3; 3 J. E. Wilson, 94.4; 4 W. G. Mead, Winchester, 94.48; 5 W. B. Dinwiddie, 94.3.

**Cheese Awards.**

September Stilton Cheese (10 lb.): 1 H. Hamilton, Theoford, 95.2; 2 H. Youn, 95.9; 3 Gerrard Dairy, Leamington, 95.9.

September Fiat Cheese: 1 F. E. Travis, 95.6 (won on flavor); 2 H. B. Hammond, Moordhead, 95.6 (won on flavor); 3 H. E. Donnelly, 95.6 (won on flavor).

Winter 50-lb. Box Creamery Trophy: 1 J. K. Brown & Son, Brussels, 95.49. Winner of Imperial Bank of Canada Silver Cup, Peter Callan, Woodstock, 95.3.

The O. A. C., Guelph, Ont., is planning to raise a company for overseas service in the form of the Wellington Battalion, now being recruited. During the term just closed there has been a very active interest in military matters at the College, and a considerable number of the students are thinking of enlisting. During the past year a number of the students and staff have been qualified as Lieutenants and Captains, and from these part of the officers have been chosen.

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Own a machine of your own. Cash or easy terms. Many styles and sizes for all purposes.

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H. FRALIGH, Box 3, FOREST, ONT.

WHITE AND COLUMBIA WYANDOTTES. LIGHT BRIMMAS, S.C. WHITE LEGHORNS. Over 50 years a breeder. Stock and Eggs for Sale.

Michael K. Boyer, Box 73, Hammonds, N.J.

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It's not a catalogue but a book of information—brim full of valuable, money-saving facts for the farmer.

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### Holstein Bulls of 20,000 Lbs. Breeding

We are offering the great bred bull, Pontiac Korndyke Plus, 2 year old, Sire, Inka Sylvia Beets Poch, the only bull in Canada with two daughters over 35 lbs. butter each. Dam Plus Pontiac Artis, champion 3 yr. old for B. O.P. work, with 29,900 lbs. of milk and 985 lbs. butter in 1 year; average test 3.5 per cent. fat. Also Plus Inka Artie, Grand Champion bull at Guelph by the same sire. Dam, Paney De Kol Artis, 84.7 lbs. butter in 7 days; she is dam of Plus Pontiac Artis. Another has four 20,000 lb. cows in his pedigree. Also a few good young Females. Write, or come and see them.

### S. LEMON & SONS

LYNDEN - - - - - ONTARIO

### GLENDALE STOCK FARM

offers for sale Six Bulls ready for service, sired by Woodcrest A. Aggie Lad (Imp.) His first five sons and daughters at an average age of fourteen months, sold in December, 1914, at Syracuse, for \$280. Dams of bulls carry 50 to 95 lbs. of the great 35 lb. cows "Wagon Echo Sylvia" and "Lulu Keyes".

Also entire cows of Winter and Spring Calves. Full particulars on application to

WM. A. SHAW R.R. No. 1 FOXBORO, Ont.

### VILLA VIEW HIGH-TESTING HOLSTEINS

The home of King Segis Alacorta Calamity, the 35 lb. bull sired by the \$50,000 bull. We have for sale two Bulls ready for service sired by our own Senior Head Bull, King Bethje Walker, also bull calved sired by King Segis Alacorta Calamity, from mature cows with records up to 23.6, 3 yr.-olds with 24.6, and heifers with first milks up to 23.9 lbs. butter for 7 days. Righteous cows and sifers, our entire milking herd, average 22.0 lbs. butter, 4.18 per cent. fat. If you want something good for type and production, better write us.

ARBOGAST BROS. SEBINGVILLE ONTARIO

### HAYBAY HOLSTEINS

Young Bulls, from four to eleven months. Richly bred and well grown; also a few females. Prices right. For particulars as to breeding, etc., write me before you buy.

L. F. BOGART, R.R. 3, NAPANEE, ONT.

### Lakeview Stock Farm, Bronte, Ont.

Breeders of high-testing Holstein-Friesian cattle, offer for sale a foundation herd, consisting of 1 male and 2 females, all bred in the purple and backed by officially tested dams. Terms to suit purchasers. T. A. DAWSON, Manager

### KORNGOLD IMPROVED ENGLISH YORKSHIRES

Sows bred to farrow in April; also a choice lot of Young Pigs, just ready to wean.

F. J. McCALPIN, Kanagold Stock Farm, GANANOQUE, ONT.

### MAPLE FRONT FARM

offers for sale a grand Young Sire to head any herd, the dam a 25 lb. 6 year old; sire, Ourville Sir Tokeo Columbia, of whom you have all heard.

Priced right by applying to

Wm. J. BALD, R.R. 2, MITCHELL, Ont.

### HORSES FOR SALE

A span of mares, well marked, three and four year old colts. Both half Clyde and Percheron, and fairly good roadsters. Well broken, single and double.

For particulars, write

MICHAEL CHAPUT R. R. No. 1 Chapeau, Que.

## MARKET REVIEW AND FORECAST

TORONTO, January 24.—The best news of the week is the renewed activity of the army home styling. French army officials bought freely in Toronto last week, taking about three hundred animals. In addition to buying, several Western British officials will also recommend buying, though this is not definite as yet. As a result of buying, Western buyers have been on the market and have operated quite extensively in the country districts.

The general farm market situation is strong. All lines of grain have advanced one to four or five cents. Hay and straw are firm, mill feeds have gone up and potatoes promise to reach a high level before long.

WHEAT.—The leading factor in the market continues to be the scarcity of grain for consumption in the allied countries. Another factor now assumes importance—cold weather in the winter wheat belt and an insufficient covering of snow. The result is an advance all along the line, Ontario wheat being held at one to two cents more than at last report, No. 1 Northern, \$1.27; No. 2, \$1.25; No. 3, \$1.23; Ontario No. 2, \$1.19 to \$1.15; slightly sprouted and tough, \$1.05 to \$1.10; sprouted or smutty and tough, \$0.95 to \$1.00; feed wheat, \$0.85 to \$0.90.

COARSE GRAINS.—Small advances are recorded in all the coarse grains. Advantages at this season of the year are common and seasonable. Oats are quoted C.W. No. 2, 47¢; No. 3, 45¢; No. 4, 43¢; No. 5, 41¢; Ontario No. 4, 42¢ to 40¢; commercial oats, 41¢ to 40¢; corn, American, 70¢; No. 1, 68¢; No. 2, 65¢; No. 3, 62¢; No. 4, 59¢; No. 5, 56¢; No. 6, 53¢; No. 7, 50¢; No. 8, 47¢; No. 9, 44¢; No. 10, 41¢; No. 11, 38¢; No. 12, 35¢; No. 13, 32¢; No. 14, 29¢; No. 15, 26¢; No. 16, 23¢; No. 17, 20¢; No. 18, 17¢; No. 19, 14¢; No. 20, 11¢; No. 21, 8¢; No. 22, 5¢; No. 23, 2¢.

MILL FEEDS.—The upward tendency noted on this market last week has now taken effect in a \$1 advance: Bran is quoted 82¢; shorts, 82¢; middlings, 82¢; feed flour, 84¢; 17% cake meal, 87¢ to 87.5¢; gluten feed, 82¢. Montreal quotes bran, 84¢; shorts, 82¢; middlings, 80¢ to 83¢; meal, 81¢ to 83¢.

HAY AND STRAW.—The hay market is exceptionally firm. Receipts at Montreal have been liberal, but to a very great extent these have been for the government. No. 1 hay is there quoted \$2.00 to \$2.10; No. 2, \$1.90 to \$2.00; No. 3, \$1.80 to \$1.90; rejected hay, \$1.70 to \$1.80. Wholesale quotations here

are: No. 1, \$17.50 to \$18.50; No. 2, \$15.50 to \$16.50; baled straw, \$6.50 to \$7.50. Hay and straw are strong as supplies have been largely drawn upon. On this market, specials are quoted: No. 1, \$18.00 to \$19.00; No. 2, \$16.00 to \$17.00; No. 3, \$14.00 to \$15.00; No. 4, \$12.00 to \$13.00; No. 5, \$10.00 to \$11.00; No. 6, \$8.00 to \$9.00; No. 7, \$6.00 to \$7.00; No. 8, \$4.00 to \$5.00; No. 9, \$2.00 to \$3.00; No. 10, \$1.00 to \$2.00; No. 11, \$0.50 to \$1.00; No. 12, \$0.25 to \$0.50; No. 13, \$0.10 to \$0.25; No. 14, \$0.05 to \$0.10; No. 15, \$0.02 to \$0.05; No. 16, \$0.01 to \$0.02; No. 17, \$0.005 to \$0.01; No. 18, \$0.002 to \$0.005; No. 19, \$0.001 to \$0.002; No. 20, \$0.0005 to \$0.001; No. 21, \$0.0002 to \$0.0005; No. 22, \$0.0001 to \$0.0002; No. 23, \$0.00005 to \$0.0001; No. 24, \$0.00002 to \$0.00005; No. 25, \$0.00001 to \$0.00002.

LIVE STOCK.—Old field, pound ... 120 to 130 to 135; Turkeys ... 120 to 130 to 135; Ducks ... 120 to 130 to 135; Geese ... 120 to 130 to 135; Hand picked hams are quoted on this market at \$4.50 and prices, \$4.20. Montreal three-pound pickers are \$3.90 to \$4.50; 6 lb. pickers, \$3.75 to \$3.80; under grades, \$3.60 to \$3.70.

THE HORSE MARKET.—Official quotations are as follows: Heavy draughts, 6 to 8 years and sound, 1,300 pounds and up-wards, \$165 to \$215. Lighter draughts, 6 to 8 years and sound, 1,200 to 1,300 lbs., \$130 to \$170. Expressors and wagon horses, young and sound, \$140 to \$200. Irish, young and sound, \$110 to \$170. Serviciously sound blooded, \$120 to \$125.

LIVE STOCK.—Receipts of cattle on the Toronto market numbered more than this past week and the week previous. Everything was well received, however, with prices steady. Handy choice steers, \$7.45 to \$8.15; good butchers, \$7.15 to \$7.65; cut to med., \$6 to \$7.15; heifers, \$5.75 to \$7.25; choice cows, \$6.25 to \$7; com. to good, \$4 to \$6.25; cullers, \$3 to \$6.75; steers, \$4.75 to \$6.50; canners and cutters, \$3 to \$4.50.

Milk cows were in active demand: Canadian, \$9 to \$10; med., \$6 to \$9; springers, \$5 to \$9. Calves ranged from \$4.50 to \$10.50. There was an active demand for small meats: Spring lambs, \$10.50 to \$12.50; lambs, \$7.75; yearling sheep, \$8 to \$9; light ewes, \$3 to \$5.50; heavy sheep and bucks, \$6 to \$7; culls, \$5 to \$4.50.

Swine receipts were nearly 4,000 head than during the previous week. Prices declined at the opening of the week but later firmed up and on the whole an advance was recorded. Packers are quoting for hogs fed and watered \$9.50 to \$9.65; light and heavy, \$9 to \$9.15, and f.o.b. country points, \$9.15 to \$9.30; corn, fed and watered, are quoted \$7 to \$7.15.

### PEACH BLOW AYRSHIRES

Young Stock for sale, always on hand (both sexes), from high-testing heavy producers. Good udders and large teats a special feature of my herd.

Three fine young sires ready for service. Write particulars of these if you want a sire. R. T. BROWNLEE, Scotch Breeze Farm, EMMINGPORT, O.T.

FOR SALE Five Ayrshire Bulls including Springhill Taxmaster \$2,200; aged. One of other three is a grandson of Hobland Masterpiece, sired by T. J. McCormick, West Flamboro, Ont.

TANGLEWYLD AYRSHIRES  
The Leading R. O. P. Herd  
Large Cows, Large Teats, Large Records, High Testers. Choice Young Bulls and Bull Cows and a few Cows for sale.  
WOODSIDE BROS., R. R. 1, MOUNTBLET, ONT.

SUNNYSIDE AYRSHIRES  
Imported and Home-Bred. Are of the choicest breeding of good type and have been selected by the late CHIEF of the Young Bulls dropped this fall, sired by Nether Hall Good-time—2894—(Imp.), as well as a few females for sale. Write or come and see.  
J. W. LOGAN, Howick Station, P.Q. (Phone in house). 1-41

## GRANDSONS AND GRANDDAUGHTERS

OF

Rauwerd Count DeKol Lady Pauline—29,017 lbs. in 365 Days

The Champion Cow of Canada for both Milk and Butter and the Champion Cow of the World for 8 months after calving.

Our offerings consist of several Sons and Daughters sired by HILLCREST ORMSBY COUNT one of the finest sons of Rauwerd Count D. Kol Lady Pauline. His sire, Sir Admiral Ormsby, Canada's Champion Bull, is the sire of JENNY BONERGS Ormsy; who holds the record of making 30 lbs. for 5 years in succession.

### COULD YOU ASK FOR BETTER BACKING ?

The Dams of our offerings are sired by Waldorf Pontiac DeKol a 26-lb. bull, and a grandson of old Pontiac Korndyke, the greatest of sires.

Here is a rare chance to secure a sire or foundation stock and backed by 29,000 lbs. record—fit for any herd in the Dominion.

Write us Early for Prices, Quotations, Etc.

JOHN WILLOUGHBY, RIDEAU STOCK FARM SMITH'S FALLS, Ont. Bell Phone R. R. 4

## HOTEL CARLISLE TORONTO

THE HEADQUARTERS  
All meetings of the Live Stock Association will be held here during the week commencing Feb. 1st. We would thank all members of the Association who intend to visit Toronto at that time for reservation at their earliest convenience.

GEO. WRIGHT and E. M. CARROL, Proprietors.  
After the night meetings, do not forget the Walker House Cafeteria. (The Home of the Baby Laker.)

SALE  
Dispersion sale  
O. E. Trebilcock  
142-10  
Norfolk Holsteins  
Feb. 26-27 at 3  
Sale of the owners  
James Priestman—  
Falls, Ont.  
Van Bette, of  
Holsteins by  
Olive and Bertha  
Oxford District  
Fifth Annual S  
Thompson, Wood  
Complete Disp  
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SALE DATES CLAIMED.

Dispersion sale of 60 head of Holsteins, C. E. Trebilcock, R. R. No. 6, London, Ont.

Northfolk Holstein Breeders' Sale, Simcoe, Feb. 25. W. A. Main, Secretary.

James Bettin, Norwich, Dispersion Sale of Holsteins by public auction, Feb. 29.

Complete Dispersion Sale of 100 head, pure bred Holsteins - W. C. Stevens, Philippsburg, May 3.

GUELPH CHAMPION BREAKS CANADIAN RECORD.

It was the subject of a great deal of comment when the fact became known that the 3-yr-old heifer, Dolantha Junior Girl, owned by M. H. Haley, Springfield, Ont., had won a sweepstakes in the dairy test over all ages and breeds, making the highest score ever made in the dairy test at Guelph.

CANADIAN AYSBIRE BREEDERS' ASSOCIATION.

THE annual meeting of the Canadian Aysbire Breeders' Association will be held at the Carle Brite Hotel, Toronto, Ont., on Thursday, February 2nd, 1916, at 10 a.m.

any business that may legitimately be brought before the meeting. All persons interested in the breeding of Aysbires are invited to attend. The Constitution and By-Laws will be presented for revision at this meeting.

A banquet will be held in the Carle Brite Hotel, on the evening of February 2nd, at 6:30 o'clock, and at which Dr. C. O. James, John Bright, Live Stock Commissioner, H. A. Strain, Director of Agriculture for Alberta, and other eminent speakers will give addresses.

THE ONTARIO CORN SHOW.

THE Ontario Corn Growers' annual show is again announced, and prize lists are before the public. This year the show and convention is to be held the Chatham Curling Club, on February 1st, 2nd, 3rd and 4th, and it is hoped the association will meet with many friends.

Of special interest is the list of speakers for the coming show. Prof. E. A. Moore, of the University of Toronto, has been secured as judge and special lecturer. Professor Moore has done a great deal to further the Corn Industry in America, and has originated the Wisconsin No. 7, and Wisconsin No. 13 Golden Gold varieties.

Mr. W. J. W. Lemox, Western Ontario Seed Inspector; Mr. W. V. Bondhouse, Deputy Minister of Agriculture; Mr. L. H. Newman, Secretary Canadian Seed Growers' Association; and others, will speak upon different phases of work interesting to the members.

AVONDALE HOLSTEINS

We are running our first batch in official tests and daughters of KING PONTIAC ARTIS CANADA. The first is making 23 lbs. as a 2-yr-old and five others over 15 to over 20 lbs. and have twenty more to freshen.

Address all correspondence to H. LYNN - R. R. No. 5 - BROCKVILLE, Ont.

FOREST RIDGE STOCK FARM

LOOK UP OUR CONSIGNMENT TO THE 5th Annual Southern Consignment Sale FEBRUARY 8th, 1916

We are consigning a show Bull, one year old, whose dam, sire's dam and sire's full sister at an average age of less than four years average over 31 lbs. butter in seven days.

R. J. KELLY Culloden, Ont. L. H. LIPSIT Stratfordville, Ont.

Head Your Herd With This Breeding

We are offering a male calf, nine months old, well-bred, well-marked, well-grown, of good type and conformation. His dam gave 1560 lbs. milk in one year. She is a half-sister of May Echo Verbeke, 29 1/2 lbs. butter in seven days.

JOHN DURRAN - R. R. No. 1 - CAMPBELLFORD, ONT.

Watch Our Ad. for the Next 6 Weeks OFFERING No. 2

Sir Pontiac Keyes, age 15 months. His DAM is a daughter of Pontiac Hermes. Her dam, a sister of Lulu Keyes. His SIRE a brother of May Echo Sylvia. A good combination of blood in a good individual. Price \$100, delivered anywhere in Ontario.

E. B. MALLORY, Bayside Stock Farm, BELLEVILLE, Ont.

HOLSTENS FOR SALE

Four or five Bulls ready for service Apple Korymbos 8th and several by King Segis Pontiac Duplicate - one of the best. R. M. HOLTYB - R. R. No. 4 - PORT PERRY, ONT.

"Sadie Mac" Stock Farm

Has for sale young Jersey Bulls, all solid color, fit for service, and several Jersey cows and sired by John Polo of Bleak House, an imported bull whose seven nearest dams averaged eight times the list of butter in 7 days.

H. H. GEE Bell Phone No. 4-14 HAGERSVILLE, ONT.

45 Head Sure You Will Come. You Cannot Stay Away From The Best Yet! 45 Head

Holsteins FIFTH ANNUAL SALE OF THE SOUTHERN ONT. CONSIGNMENT SALE CO. Holsteins

at Meharg's Feed Stable, TILLSONBURG, Ont., TUESDAY, FEB. 8th, 1916, at One p.m. sharp

Forty-five head of Choice Holstein Cattle, nearly all female; also a few Choice Bulls and Bull Calves, some of them good enough to head any herd.

Time up to eight months will be given responsible parties with interest at 6 per cent. Send for catalogue. Come to the sale, and enjoy yourself.

LINDSAY & POUND Auctioneers R. J. KELLY, Sales Manager CULLODEN, ONT.

FEBRUARY 10, 1916 IS THE DATE OF MY COMPLETE DISPERSION SALE OF MY ENTIRE HERD OF Registered Holsteins and all other Farm Stock Horses, Cattle, Swine, Poultry

At my farm, two miles from LONDON. As the farm has been leased for a number of years, every animal and all my farm machinery, will be sold without reserve. My fifty head of Holsteins are nearly all my own breeding, with the exception of a few foundation animals.

TERMS - Cash or 6 months at 5 per cent. on bankable paper. To reach my farm take Dundas Street Cars to Ayslum siding, where rigs will meet you. Send for catalogue.

C. E. TREBILCOCK T. MERBIT MOORE R.R. 6, LONDON, Ont. Auctioneer

## 70-Year Clocks

ACCORDING to Dr. Holmes, the human body is a clock wound up to run for three score years and ten, "barring accidents."

But we find that out of one hundred and twenty-seven thousand born, only thirty-eight thousand reach the age of seventy.

Eighty-nine thousand of the human clocks stop at earlier ages, only one in three surviving to hear the seventieth year ticked off.

What does this mean? That life is in the highest degree uncertain. It may fall at an age, and consequently life insurance is a practical every day necessity.

Mutual Life policies are not luxuries. They are necessities. Our life policies protect your dependents in case of your death. Our Endowments are payable to yourself should you reach old age.

The aim of the Company is to give as large an amount of protection as possible for the least possible outlay.

**The Mutual Life**  
Assurance Company of Canada  
Waterloo, Ontario

**PROTECTION  
FOR YOU**

To mention FARM AND DAIRY when writing to our advertisers. It insures you against loss.  
Note our Guarantee on Editorial Page

## McCormick



The Lily Bowl  
Gets the Cream

CREAM is worth too much to waste, yet it is being wasted by the ton every day by old-fashioned methods of skimming. Today there is no excuse for such waste. The Lily bowl gets all the cream it is possible to get, leaving only a drop or so to the gallon of skimmed milk.

Let's take a close look at this wonderful bowl. It is compact and convenient to handle. It lifts off the spindle, leaving the spindle in the separator where it belongs. It comes apart easily, but it can't leak. The disks provide a greater skimming surface than is found in other bowls. Combined with them are six cream gatherers—just twice the number other separators have. Separation begins the instant the milk enters the bowl, and there is always a clear passageway for the cream.

There is not even a cream regulating screw in the cream passageway. You make your cream thicker or thinner by regulating the amount of milk mixed with it, but thick or thin, you get all the cream when you use a Lily cream separator.

The bowl is not the only good Lily feature. The McCormick local agent, who sells Lily cream separators, will show you how every other feature is worked out just as carefully. See him or write us at the nearest branch house.

International Harvester Company of Canada, Ltd.

BRANCH HOUSES  
At Brandon, Calgary, Edmonton, Estevan, Hamilton, Lethbridge,  
London, Montreal, N. Battleford, Ottawa, Quebec, Regina,  
Saskatoon, St. John, Winnipeg, Yorkton

## SYDNEY BASIC SLAG

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