

Seventh Annual Special Farm Improvement Magazine Number

FARM AND DAIRY & RURAL HOME

Canadian Bldg.
Dairy and Cattle Shows
1915
Gen. Comm.
Dec. 15



DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE



Peterboro, Ont., May 6, 1915



EVERYTHING THAT ADDS TO BEAUTY IS A FARM IMPROVEMENT.

ISSUED EACH WEEK

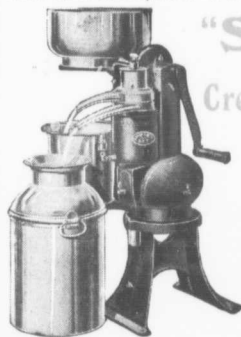
Rural Publishing Co., Ltd., Publishers

ONE DOLLAR A YEAR

What we have done for
others we can also
do for you!

HUNDREDS of our machines are being used by the dairy farmers of Canada, at a saving to them of time and energy. Both of these factors mean real dollars and cents.

Are you separating your milk with a hard-to-run, hard-to-clean, out of date separator. If so a



"Simplex" LINK BLADE Cream Separator

can do for you what it has done for scores of others.

A "Simplex" eliminates all back-breaking lifts, turns easier than most other Hand Separators, regardless of capacity, does the work in half the time, is easy to clean, and in fact is an all round boon to dairymen.

Don't buy another machine until you have given the "Simplex" a thorough consideration. If you are in the market for a Separator our Illustrated Booklet, free on request, will prove interesting to you.

Remember, too, that we are agents for the famous B-L-K Mechanical Milker and also all kinds Supplies for Dairies, Cheese Factories and Creameries.

D. Derbyshire Co., Ltd.

Head Office and Works: BROCKVILLE, ONT.
BRANCHES: PETERBORO, ONT. MONTREAL and QUEBEC, P. Q.
WE WANT AGENTS IN A NEW UNDEVELOPED DISTRICTS

Speed in Farm Machinery

Is What Our Farmers Want These Days

For you advertisers of up-to-date, labor-saving Farm Machinery, we have a real good buy through our

FARM MACHINERY SPECIAL

THE ANNUAL
OUT JUNE 3rd

The increased production of 1915 cannot and will not be handled by the slow-in-operation, out-of-date implement.

The number of your machines bought, depends on the strength of your publicity. Farm and Dairy is the only logical way to reach upwards of 19,000 of the dairy farmers of Canada.

"The early bird gets the worm," when it comes to copying, etc. Don't put off until the last minute the sending of your copy.

ADVERTISING DEPT.

FARM AND DAIRY - Peterboro, Ont.



Lazybones

H. Percy Blanchford, Hants Co., N.S.

YEARS ago: I remember a little chap about eight years old, who lived on Ram-out-Alley, accusing me with the question: "Is laziness a disease of the blood; or just lazy?" I was a law-student then in Windsor; and after a certain professional hesitation, replied that it might be in the blood; but that for small chaps strap oil was the cure. That question was probably the outcome of some domestic discussion to which the lad may have listened at the home and fireside.

But do we not, in the endeavor to avoid the implication of laziness, put too great a premium on physical activity? We will quickly discern the folly of the man who will insist on paying two dollars for what is priced at fifty cents. We give small credit to the man who occupies an hour in a ten minutes job. But the man who strains and almost breaks his back over a job which with a little thought, could be done with half the labor, is frequently praised; not a lazy bone is his body. But when a man gets to be fifty, he must take his choice; for it is either sore bones or lazy bones.

Time and again, we have something heavy, a bag of oats, a barrel of apples, lots of things to move here or there on the farm. Perhaps one can shoulder it, and stagger along. Or one is wise, and a rascal called "a very handy dish around the house" — the wheelbarrow. But a wheelbarrow differs from a locomotive, in that you do your own puffing. To harness up a horse with collar and harness, back saddle and all, and tackle him in the cart seems so disproportionate to the job in view that it is not attempted.

But I have now a ring I call the "Lazybones." A small drag, two wooden runners with a box or body 3 feet by 4½ feet, with sides about 8 inches high, is kept near the horse barn. It has a whiffletree that belongs to it; fast to it. An old brass strap and traces of a riding harness, and a black strap properly attached is at hand. When I want to use the outfit, it is simply to untie the halter rope at the manger, put the horse's head through over the breast strap, and two hooks fasten him to the drag. Then the black mare does the toting that otherwise would have wrenched my own shoulder, or have been performed with the mono cycle (vulgarily called a wheelbarrow), plus my own assisting arms. The load is moved and the mare is back in the barn again in the same time that one would have carried the burden himself and got his wind again. But it was a lazy way to do it, wasn't it? Now I have the assurance to say that it was nothing of the kind; it was simply practicing that praiseworthy virtue of economy; economy of muscle. Blessed be "lazybones," for it saveth a man many a grunt.

The Ideal Dairy Stable

GOOD stabling is a necessary accompaniment of good feeding in profitable milk production. The writer wish to emphasize the importance of light, well ventilated, hygienic stables," said Mr. Grisdale, in introduc-

ing his talk at a recent dairy convention. "Don't think because of these high sounding names that the stable need be expensively constructed. I have seen very costly barns possessing the greatest combinations of rotten features that could well be imagined. Here are the simple rules of good stable construction.

"Give lots of light and lots of air. Pure air will do more good than five pounds of meal a day if it is fed in place of cows breathing an impure atmosphere. The number of cubic feet of air space per cow in the stable is important. Hence the advisability of wider passages and higher ceilings.

"A stable sufficiently warm," continued Mr. Grisdale, can be built with two ply of boards and paper in between the studding and out. Such a stable will cost \$150 per cow. We have built a number of stables recently on our Experimental Farm, and find that a stable built in this way will withstand the coldest weather and also the warmest.

"The cost of good stabling," said Mr. Grisdale in conclusion, "should not deter any man from providing it."

For the Dairy Cow

S. Abbott, New Westminster, B.C.

THIS is not a eulogy of the dairy cow. It is a simple tale of experience, a statement of facts as told me by one of my neighbors who a few years ago came into his father's farm and proceeded forthwith to make some



What If Town Is Six Miles Away?

Here is one of Our Folks, Chas. E. Moore of Peterboro Co., Ont., astride a *Mopac*. This machine will make over 1 mile a minute if the roads are good and the driver reckless.

radical changes. One of these changes was the selling out of the Shorthorn herd and the buying of some good grade Ayrshires.

"Perhaps the first thing that set me thinking about dairying," said the young man to me, "was a thought that struck me when riding on top of a load of hay on which I expected to realize \$15. The road was heavy and the horses tired. It took me half a day to go and return. It occurred to me that if I were dairying that I would be carrying the value of that hay into town in the form of butter and that I would be carrying its value under the seat of our road wagon with my fast-stepping roadster in front of me and be ready in a position to enjoy life."

"After that," he continued, "I became a fanatic occupant of my figure out just how much easier I could market butter than the hay and grain or even the beef that we were then producing. As I thought on the matter other advantages of dairying began to come up. It did not take much figuring to prove that a good dairy cow would produce much more net profit than the best beef animal, and that the would maintain the fertility of the farm as well. Then the change was made."



We Welcome You

Trade Increases The

Vol. XXXIV

The

A MOST important

rural community yet attained to its full public school. A place in the education of the rural district there will develop a broader, more intelligent, more contented country school adapts needs of the community and prepares for life when it develops a love in the life and activity rather than a them; when it ministerial and intellectual whole community as well and encouraging activities, it will then stretch towards the spirit-reviving of the life districts.

A Progressive

Can the school do this can to a much greater is being done generally by what is taking parts of this country States at present. This on for the bringing to the children from district present school section the educational, social an imposing and pro-



The Consolidated
The three illustrations on
thriving rooms and
size of 3,000 people. The



FARM AND DAIRY

& RURAL HOME



We Welcome Practical Progressive Ideas

The Recognized Exposure of Dairying in Canada.

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

Vol. XXXIV

FOR THE WEEK ENDING MAY 6, 1915

No. 18

The Rural School as a Factor in Good Farming

RICHARD LEES, M. A., INSPECTOR OF SCHOOLS, PETERBORO CO., ONT.

A MOST important factor in the making of a rural community, and one that has not as yet attained to its full power and efficiency, is the public school. When the school fills that place in the educational, social and industrial life of the rural districts that it ought to have, there will develop a broader, healthier, more intelligent, happier and more contented country. When the rural school adapts itself to the needs of the community it serves, and prepares for life in the country rather than for life in the town; when it develops a love and delight in the life and activities of the country rather than a distaste for them; when it ministers to the social and intellectual sides of the whole community as well as fostering and encouraging its industrial activities, it will then be doing its share towards the spiritualizing and revivifying of the life of the rural districts.

A Progressive County

Can the school do this? That it can to a much greater extent than is being done generally, is shown by what is taking place in some parts of this country and the United States at present. The movement that is going on for the bringing together into one school of the children from districts much larger than the present school section, and the concentration of the educational, social and intellectual life around an imposing and properly equipped central school

building, is going further toward solving this vexed problem than anything else that has been attempted.

It was the privilege of the writer to visit quite recently some of the schools that are being conducted on this plan. In Randolph Co., Ind.,

people here are now convinced that the advocates of such a scheme should be locked up. However, there were a few clear headed souls with a vision. Among them was Mr. Lee L. Driver, who some seven years ago was appointed County Superintendent of schools for Randolph county. At the time of his appointment he was strongly opposed to the plan of concentration. The duties of his position led him to investigate and study what was being done elsewhere, and in consequence he became an enthusiastic convert, with the result that now his county leads the whole nation in the matter of progress.

Vocational Training in Schools.

In this small county there are 573 students attending 14 rural high schools, where they are being educated in the History, Literature and Mathematics of an ordinary high school education and in addition are receiving a scientific and vocational training along lines bearing directly on farm life and rural activities. In each of these schools are Manual Training and Domestic Science Departments under competent instructors.

In the former, boys are given a general course of instruction in the care and handling of tools, simple drafting such as is necessary for the planning and building of most articles that are made in an ordinary carpenter shop, and in the general prin-

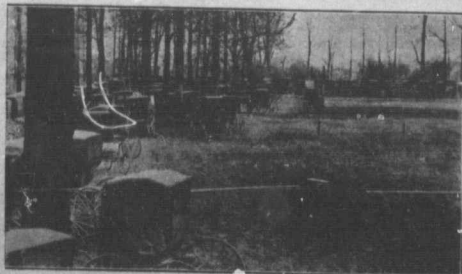
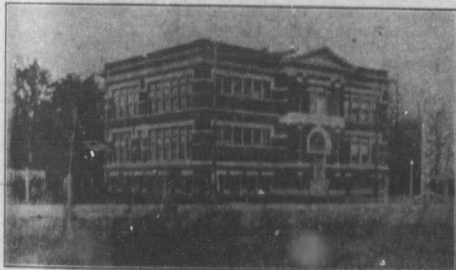
(Concluded on page 10)



The Girls Are Taught Sewing in the Consolidated Schools of Indiana.

The gowns worn by these young ladies at their graduating exercises were made at a cost of \$2.00 each in the sewing classes of the rural high school, illustrated below. Such valuable and practical training as this is possible in rural schools only through consolidation.

U.S.A., a county much smaller than the average Ontario county, containing only about 450 square miles, there are some 15 rural schools of this type. Ten years ago the plan was discussed there in an academic fashion as it now is with us. Most people knew that it could not be worked just as most



The Consolidated Schools of Indiana Are Social as Well as Educational Centres, They Excel the "Little Red School House" in All Departments.

The three illustrations on this page all centre around the one consolidated school and depict its usefulness. The schools in Randolph county are so arranged that by throwing rooms and hallways together accommodation is provided for 500 to 600 people. Five Farmers' Institute lectures in January last brought out an aggregate attendance of 1,700 people. The top buggies illustrated above testify to the interest of Indiana farmers in the summer institutes held at their consolidated schools. Educational facilities such as these schools afford are the greatest of all factors working for rural improvement.

Farm Management That Makes for Farm Improvement

A Few of Our Folks Offer Suggestions on This All Important Theme

The Value of Crop Rotation

J. H. Grisdale, Dir. Experimental Farms, Ottawa

ALL land on a farm should be under cultivation in a systematic way in order that it may produce in uniform quantities every year. There is hardly an acre in Eastern Ontario where corn cannot be produced. The same is true of clover, of oats, and of oat mixtures. If we grow all of these crops we are in a good position to feed dairy cows most economically on the products of our own farms. To grow all of these crops, however, we must adopt some systematic rotation. I am convinced of this because of all our work on the Experimental Farms, of which we now have 25. Without fail, whether East or West, rotation has proven a marvellous aid in increasing production. On the average farm a crop rotation will double yields as compared with the hit or miss method.

Not only do we increase returns by following a systematic rotation, but we reduce the cost of production per unit. The average bushel of corn, ton of hay or ton of ensilage, is produced on the average farm at a loss. This seems almost incredible, but it is true because we are satisfied to work for lower wages than we should get. We can change this condition if we will use a little bit of common sense and follow a systematic plan of crop rotation.

Improved Crops, Less Cost
Any rotation planned with common sense will increase returns and lower cost of production. No matter what the rotation may be, it should have in it these elements: Let the hoed crop follow the hay crop or pasture and let the grain crop follow the hoed crop. If these two principles are followed, I don't care how else the rotation is arranged, except for this,—don't leave the land too long in hay.

I have found in my work that a three-year rotation is the most profitable,—hay, hoed crop, grain seeded down. Under this rotation large fields are possible and we can do work much more cheaply in a few large fields than in many small ones. There is less turning and the possibility of using big implements to advantage.

Big implements are the implements of the future on Canadian farms. They should be today. At Ottawa we have found that the double furrow plow will reduce plowing costs 50 per cent. The wider seeder will reduce seeding charges almost 50 per cent., and with these implements we have the added advantage that we can get the crop in on time.

Consult C. E. F. on Machinery

There is a lot of machinery coming on the market that we all wish to try. I don't advise the farmer to attempt to try all of the machinery that attracts his fancy. Many ultimately prove to be useless. We can give information from the Central Experimental Farm on any machines introduced and it is one of the important features of our work to experiment with new machines. Take the traction engine for instance. We have tried it out thoroughly at Ottawa, and find that it is not satisfactory. We turned sod at the rate of 75 cents an acre, which

looked cheap, but when you take into consideration the short life of the engine, and its high cost, we found that it really cost us \$2 to \$3 to plow an acre of land.

Let me give you a concrete example of the effect of crop rotation. In spite of the increased cost of labor at the Central Experimental Farm, we have managed to lower our cost of growing an acre of corn, grain or hay as compared with 16 years ago. Then we had to pay \$150 for a horse; now it is \$300 to \$350. Labor then cost us \$1.25 a day; now it is \$2.25. And yet in the face of these higher charges, we have reduced the cost of production about 10 per cent.; that is on the acre basis. When we consider the cost per unit, that is per bushel or ton, we have cut the cost of production in half. This is due in large measure to following a rotation of crops and taking back to the land all the manure made on the farm.



Few Farm Improvements Are Equal to Well Bred Dairy Cattle as Profit-Makers.

The beauty of a good dairy herd on a farm is that it will pay for future improvements not in themselves directly profitable; for instance, a fine home and beautiful surroundings. If the cattle are pure bred so much the better,—if one has the experience necessary to handle a pure bred herd. The one here illustrated is that of M. L. Haley, Oxford Co., Ont. Mr. Haley, Jr., appears in the scene.

Economical Summer Feeding

Alex. Wallace, Norfolk Co., Ont.

OUR cows receive grain all summer. It is generally a mixture of oats, bran and oil cake in the proportion of five, three and two. It is our experience that heavy milking cows require grain both summer and winter, and when they are dry as well as when they are working. Of course the amount varies according to the milk produced and the luxuriance of the pasture.

The regular pasture is also supplemented by a soiling crop of thickly sown peas and oats. We make three sowings of this and it lasts until the early corn is ready. Like the peas and oats this forage crop is also sown thickly. In fact this is our practice with all soiling and pasture crops. As soon as possible in early fall a pasture crop of oats and rye takes the place of the corn. In spring the rye is again pastured, and then plowed for roots. By this method we obtain a great deal of feed from land that would otherwise be lying practically idle from the time the hay crop was removed until the roots were sown. Such practice, we believe, is in line with economical farm management.

How He Got Wise

By E. L. McCuskey

SOME of us search for the truth, and some of us have it forced upon us. This little sketch will deal with one of both classes, father and son. I do not wish to be disrespectful to the old man. He had purchased a farm on credit, paid for it, improved it, and brought up a family of half a dozen boys respectfully and honestly. The son was a chip of the old block. He wanted to go ahead of his father, even as the old gentleman had made a good stride ahead of his father. So when he bought the farm adjoining he started in for stock improvement. The old man objected. The stock with which he was willing to establish his son was good enough in his eyes.

A good grade Holstein cow was the first purchase made by the enterprising son. It made 70 lbs. of milk a day. The father wouldn't believe the report that reached him regarding the performance of his son's latest acquisition. Promptly at a quarter to five the next morning, the old gentleman was seated on his son's doorstep waiting for the milking hour. He requested the privilege of milking the new cow. He got the bucket full twice.

"Jim, you didn't milk the cow out last night," he said accusingly.

The following evening the old gentleman appeared at the milking time and again milked the new cow. Again he got the bucket full twice. Still he was unconvinced, even though the scales had told him that the four buckets of milk totalled 70 lbs. The next morning he was around again, the result the same, and he went home convinced.

On his way to his own fence, he took a trip through his stable, and looked over the grade Shorthorn cows that he had always considered great milkers. Accidentally he happened before he left the stable, he addressed some remarks to his old-time favorites that were not complimentary, and which would not stand repetition in good society. He wisely decided, however, that it was right and natural that his son should be able to make some improvements on the old man, and let it go at that.

The son has now passed the grade cattle line. He has bought some foundation animals of the pure bred kind and we predict that in a few years he will be known to other fanciers of his breed. His name? He does not wish to have it published yet. That will come in good time.

I AM not one of those forestry enthusiasts who advocate forests everywhere. I believe that the rich land of Oxford county will pay big dividends in clover and corn. On my own farm every acre of good soil is included in the rotation. But I have 10 acres in bush. This 10 acres supplies us with a good part of our fuel, and with building materials when it is needed. This 10 acres is inferior and sandy and rough. There is much similar land in Oxford interspersed here and there, that can be put to the same use, and made to pay bigger dividends from trees than it will from crops.—J. Bishop, Oxford Co., Ont.

Three-Horse

C. Gurney, On

SOME years ago, when I was an Oxford Co. man on an Oxford Co. excellent example of horse farming. My employment, which was to cultivate, was to work the men, my employer would hit three or four horses, I did not get acquainted with them until after spring experience as well as of Oxford county, I determined to experience as well as to go down the road to the to get the name of being as we were talking over that on that farm there cultivation. "How much

sked. "One man and three horses was the latter part of the rotation, and I intended to work on a 100-acre horse houses when four per acre on 80 acres.

"We plan to work three horses all the time," was the answer, when you had to go to the field in front of the three horses and plow three horses, turning two on each work as you and your horses. I have given you through that Mr. I have the ground quite as well. The 100-acre farm was in the buildings were in the use cows milked. It was good. The extra work was done for such work by means and bigger implements. Many examples of three-horse work were brought to my attention.

Shall We

L. K. Shaw, We

THE old idea in dairying was to hard all summer and feed the cows in winter. It was to rustle for themselves and get summer feeding, could have been a jokers. Now it looks almost as if we are to feed the cows in winter on bare pastures from where the winter crop was found that soiling to keep a much larger number of cows on the same farm, that it ensue supply when pastures are



Three-Horse Farming

C. Gurney, Ontario L.S., Ont.

SOME years ago, when working as a hired man on an Oxford county farm, I was given an excellent example of the efficiency of three-horse farming. My employer had 80 acres under cultivation, which was worked by two teams and two men, my employer and myself. In no case did we hitch three or four horses together.

I did not get acquainted with any of the neighbors until after spring seeding. As I was after experience as well as dollars when I went to Oxford county, I determined to learn by other folks' experience as well as my own, and took a stroll down the road to the next door neighbor's. He got the name of being a progressive farmer. As we were talking over spring work, I learned that on that farm there were 100 acres under cultivation. "How much help have you?" I asked.

"One man and three horses," was the reply. It was the latter part of the reply that caught my attention, and I immediately wanted to know how the work on a 100-acre farm was done with three horses when four horses had been kept busy on 80 acres.

"We plan to work three horses together practically all the time," was the explanation. "For instance, when you had two teams going in that back field in front of the house you put into us, my man was plowing that 25-acre field with three horses, turning two furrows all the time. The three horses and one man were doing as much work as you and your boss together with four horses. I have bigger implements all the way through than Mr. R. has, and hence got over the ground quite as quickly as he."

The 100-acre farm was neater than the 80 acres. The buildings were in better shape. There were more cows milked. It was a thriftier place all around. The extra work was done by one man set aside for such work by the use of three-horse teams and bigger implements. I have since seen many examples of three-horse farming. This was surely the first time the superiority of the method was brought to my attention.

Shall We Soil?

L. K. Shaw, Welland Co., Ont.

THE old idea in dairy farming was to work hard all summer and provide feed enough to feed the cows in winter. While provision was being made for winter, the cows were supposed to rustle for themselves and the man who suggested summer feeding, soiling so we call it, could have been a joker of the first water. To me now it looks almost foolish to work so hard to feed the cows in winter and allow them to starve on bare pastures right across the fence from where the winter crops are maturing. I have found that soiling the cows enables me to keep a much larger number of animals on the same farm, that it ensures a continuous milk supply when pastures are seriously affected by



Three Horses and One Man May in Many Farm Operations Replace Four Horses and Two Men.

Economy in human and horse labor is the watchword of efficiency in modern farm management. To use three horses teams and big implements to best advantage small irregular fields must be thrown into large fields of regular shape. Such worth while farm improvements are now in process of completion on the farm of W. G. Good, Brant Co. Ont., where this illustration was secured by an editor of Farm and Dairy.

drought, and that it increases the necessity of feeding a heavy grain ration and purchasing concentrated feeds.

Soiling, as I first practised it, had its disadvantages. Each day there was the work of cutting and hauling a supply of forage to the stable in which it was fed, thus interfering with the regular farm work. Occasionally, too, our plans went all away through unfavorable weather, and in seasons when the pastures were so good that we needed little soiling crop, we had far too much, and in excessively dry seasons the soiling crops as well as the pastures were retarded in growth, and the cows suffered anyway.

I have come around all of these difficulties, and I have done so by means of the summer silo. We are just starting our second silo, and it will keep the cows going right through till another silo filling season. With summer silage, we have feed always on hand and that without any additional work. It will keep for an indefinite period if properly prepared, so that an extra good crop this year may be carried along to supplement the short crop of another year, a thing that was never possible with a soiling crop of oats and peas. We find, too, that the cows relish silage quite as much as the old soiling crops.

Silage is conducive to man comfort as well as cow comfort. We do not have to go out, rain or shine, now to cut soiling crops. The silage is always under cover and right near the place where it is fed—in the stable. We believe that the summer silo affords the very cheapest way of summer feeding dairy cows.

Six Hints on Alfalfa

"WE find that alfalfa has been successfully grown in parts of every county in Ontario," said Prof. C. A. Zavitz in an address recently. "In the same counties you will find men declaring that alfalfa is largely a humbug and cannot be grown with any degree of success. The successful ones will be found to attribute their success to one or all of the following points:

- (1) A hardy variety.
 - (2) Good seed.
 - (3) Inoculation of the seed.
 - (4) They do not sow on land in need of under-draining.
 - (5) They seed to alfalfa following on hoed crop or summer fallow.
 - (6) They may sow in the spring on winter wheat if it is not too thick and the land is clean."
- Discussing spring seeding, Prof. Zavitz said: "One method is to sow the seed right on the snow over the wheat field. This method has given good results on many farms. Alfalfa may be sown with barley or spring wheat as a nurse crop, but the system that is best under most conditions is to summer fallow the land up to the middle or end of June, and then seed without a nurse crop. Success will depend more on the subsoil than on the surface soil.
- "Grimm and Ontario Variegated are both hardy varieties," concluded Prof. Zavitz. "The common variety of alfalfa, the one not desired, has purple flowers. The Variegated has flowers that are green, blue, yellow, also purple."



"Just Looking at You." Some Fine Specimens of Improved Horse of the Draft Breed of Scotland—The Clyde.

What is Your Opinion of the Silo?

"I'm Going to Build Another," Replies the Man Who Already Has One

"PEOPLE in our country ain't got no use for silos; they are only a darned bother," the seedy individual informed me. We stood in the crowd that usually surrounds the fall fair vendor of cheap wrenners, fountain pens, potato peelers, and so forth. The vendor in question was informing his audience in very slick and slippery language that he was giving "an indelible lead pencil, a penholder, six pen points, and a fountain pen, all for 25 cts., just to introduce our gold-pointed pen points, you understand." And the seedy individual seemed to find this class of entertainment very satisfactory.

I moved on to the dairy cattle judging ring. Holsteins and Ayrshires were both out, and the sight in the ring was one of interest and held the attention of any good dairyman. Between the judging of various classes I got talking with a prosperous-looking farmer beside me who was evincing continued interest in the proceedings in the ring. After both disagreeing with the judge on one placing and for the same reason, we became quite friendly. I learned that he had a silo on his farm, and, remembering my friend's seedy appearance, asked my new companion, "What is your honest opinion of the silo?"

Will Build Another

"Well, friend, I am going to build another next year," he replied. "Perhaps that is the best answer I can give you." And then he continued on what was apparently a favorite topic with him. "The money I put into my silo," said he, "is the best investment I ever made. I heard an Institute speaker once say that if we would make the most of winter dairying, we must 'imitate June conditions in February.' He talked up the silo at a great rate. There were none in our section at that time, and it was a winter dairy section, too. A few of us had some passably good cows, but we weren't getting the results that we felt we should."

A bunch of three-year-old Ayrshire cows was then brought into the ring, and for a time my companion was too interested even to talk silo. Finally he came back to the subject. "Well, sir, it looked like a lot of money, did that \$200 that I put into that silo. But I knew that it was money well spent before spending. My cows never did so well as they did that winter, and I fed them less grain than ever before. The ones that weren't giving a big flow of milk got along finely on good clover hay and ensilage alone."

"Funny, isn't it," he reflected, "the difference it makes in the way you supply water to the cows. I suppose there's about the same food in corn fodder that there is in corn ensilage. But if you feed corn fodder along with your hay, the hair goes dry and begins to turn the wrong way, and the animal looks generally out of condition. Just as soon as you begin to feed the water in corn ensilage, however, the whole system of the cow seems to be toned up. There are a lot of silos up in our district now, and we are not afraid of winter dairying. We've found that winter dairying with the silo is a profitable business."

"Have you tried the silo for summer soiling your cows?" I asked. I had been using the silo

BY E. L. McCASKEY

for summer feeding for

several years, and I knew its merits.

"Enough to know how well it answers the purpose and not enough to make the most of it," was the most regretful response. "We had some ensilage left over last spring, and it carried the cows part way through the dry season. The results were fine. That's why I'm going to build a new silo next summer—to feed the cows in hot weather."

Here two men met, in the course of one day, who represent two distinct and opposite types of farmers. The first man had his mind



A Big Factor in the Success of the Milk Producer in Suitable Accommodation for His Herd.

In recent months Farm and Dairy has illustrated many of the up-to-date dairy barns in Canada. Here is one that grows a dairy farm to the south of the border, Briscoe's Dairy Farm, Winona, Minnesota. Dairying anywhere in the north temperate zone demands a comparatively large outlay on proper housing accommodation. A feature of every really good dairy barn is the silo.

closed against every modern idea. He preferred the hot air of a fake vendor—to the instruction of the judging ring; and silos—perish the thought. What did he want to do with them? My friend of the ringside, however, was alive and alert for every idea that would help him to be a better farmer and a better stockman. And I have found it a convincing argument for the silo that most of the men of the latter class have at least one silo, and generally they are planning for another.

The silo has a wide use on the stock farm. I myself have fed ensilage with good results to

brood mares, idle horses in winter, to sheep and to hogs. Cattle, either dairy or beef, thrive on ensilage as they do on nothing else with the possible exception of roots. For my dairy herd, where I use the most of the silage, it is the basic factor in the ration.

More and Better Roughage Needed

The problem of the feeder nowadays, as I see it, is more and better roughage. Concentrates are expensive and ever becoming more so. If we can grow roughage on our farms that, fed in proper combination, will make a balanced ration, then we can afford to keep more stock and it will be more profitable stock. Common red clover, or better still, alfalfa, I have found, will furnish the protein end of the ration. Corn ensilage will provide abundance of the other ingredients necessary. A roughage ration, however, must

be very palatable if it is to produce good results, either in milk or flesh. The chief element in palatability is succulence, and this silage supplies. For adding both bulk and palatability I know nothing to equal well-cared corn ensilage.

Back of all profitable live stock farming there must be a good rich soil, and the live stock farm is usually a fertile farm. Corn and the silo enable us to keep more stock than we otherwise would, acre for acre, and it is because of this, I believe, that silo farms are richer farms, and thus the permanent prosperity of their owners is assured. I am reminded of a front cover that I noticed on Farm and Dairy some months ago of a big silo beside a well-built barn, and the catch-line underneath read, "Prepared for permanent prosperity." The editor never came nearer the truth. The farm with a silo is usually an improving farm, although, of course, there are exceptions to the rule.

Corn the Great Silo Crop

Silos may be filled with a great variety of crops—alfalfa, clover, soy beans, sunflower. (Continued on page 9)

Experience Fails; Inexperience Succeeds. Why?

Interest May Be of More Importance Than Knowledge.

INTEREST is the secret. J. FALKNER, NEW WESTMINSTER DIST., B.C. of success in any business. Knowledge alone never made a good farmer; nor a good farm. The farmers of this country have been attending Institute meetings and reading Government bulletins for years, but I fear that these educational factors have done but little when we consider the expense of the Institute and the wide circulation of the bulletins. It seems to me that the energy that has been used in amassing material and circulating it in bulletin form should have more to show in the line of results than it has. This paucity of results is due directly, I believe, to lack of interest. Here are a couple of instances to illustrate the point:

In my native county of Bruce, Ont., is a 100-acre farm owned by a man whom for convenience I will call Mr. Winter. He was brought up in a good community, he inherited a good farm, he attended Institutes every winter of his adult life. I know that his name was on the lists for bulletins from both the Federal and Provincial Departments of Agriculture. He was admitted to be as well informed a man as any man in the community, and yet his farm went backward. Crops decreased from year to year, the live stock de-

teriorated, and when I left Ontario some four years ago, even the farm buildings were going into disrepair. His failure as a farmer could not be attributed to ignorance. No man knew better than he the value of crop rotation, importance of conserving manure, and so forth.

An Uninformed Man Succeeds

The very antithesis of this man is my next-door neighbor in my new home in British Columbia. He is a young Irishman, a native of Dublin. He came to this country some six years ago, knowing absolutely nothing about farming or country life. He worked as a hired man for two years, and when I took up the farm I now live on, he rented the farm adjoining. "It was so green," he wailed my first cow didn't mistake me for grass," he told me with a laugh just a few days ago. Apparently he had all things against him—lack of knowledge and lack of capital. But he was a born farmer. He loved country life and he determined to thrive in it. He had an advantage, inducement to thrive in that he had induced a small little Irish girl to come out with him, and he had to do well for her sake. He is getting along splendidly.

(Continued on page 8)



THE ideal dairy man is one who wants his every energy through-ly in the thing; it is the very out his ideal the da-who 'was sure he was know just where.' drudgery; with it all us nearer the coveted ultimate goal will that will fit in well in cultivation; (b) that facilitates insur-agement of home a-tractive and satisfying

Layo In Glengarry county dairy farm, the arrange-ideal as could be ver- tion followed was a clover and pasture. right through the cen- big 25-acre fields on- buildings were situate- farm. The entrance- the barnyard or direc- barnyard. No lar- rangement minimized to the fields and in- small boy found the pasture on this farm

Of the several hundred this one alone is ideal arrangement might be prairies, but the east- on an improved farm- fences, lanes and div- contour, make the area- of years. The build- ed where they must al- ment of fields modifi- convenient to inven- The first point in in- decides the number of a plan may be sketch- that comes near to t- take years to attain it- in mind, every chang- ideal a little nearer. - The type of soil mu- all acquainted with the soil at one end and a



A Splendidly Improved Farmstead in the Land of Evangeline, that of Peter Innis, Cold Brook Farm, Kings Co., N.S.

Approaching the Ideal in Dairy Farming

The Goal is Reached Only by the Man with a Vision.

THE ideal dairy farmer is the man who dreams dreams, the man who has a vision of just what he wants his farm to be, and who bends every energy throughout the years to the accomplishment of that ideal. The vision is the main thing; it is the very essence of progress. Without his ideal the dairy farmer is in as sorry a plight as the police court subject up for vagrancy, who 'was sure he was going somewhere, but didn't know just where.' Without an ideal farming is a drudgery; with it all work is joy because it brings us nearer the coveted goal. In dairy farming the ultimate goal will include (a) a layout of fields that will fit in well with the rotation and efficiency in cultivation; (b) an arrangement of buildings that facilitates inside work or chores; (c) an arrangement of home and grounds that will be attractive and satisfying.

Layout of Fields

In Glengarry county some years ago, I visited a dairy farm, the arrangement of which was as near ideal as could be very well possible. The rotation followed was a four-year one, corn, grain, clover and pasture. The public highway passed right through the centre of the farm, making two big 25-acre fields on either side of the road. The buildings were situated exactly in the centre of the farm. The entrances to all fields were either in the barnyard or directly across the road from the barnyard. No lanes were necessary. This arrangement minimized the work in hauling manure to the fields and in the removal of crops. The small boy found the bringing of the cows from pasture on this farm a "cinch."

Of the several hundreds of farms I have visited this one alone is ideal in arrangement. Such an arrangement might be easily duplicated on the prairies, but the eastern farmer generally starts on an improved farm where the arrangement of fences, lanes and diversity of soil in type and contour, make the attainment of an ideal the work of years. The buildings, too, are generally erected where they must always stay and the arrangement of fields modified in places to make them convenient to inconveniently situated buildings.

The first point in planning the ideal farm layout is to decide on the rotation to be followed. That decides the number of fields and their size. Then a plan may be sketched out on paper of a plan that comes near to the farmer's ideal. It may take years to attain it, but if the ideal is clearly in mind, every change in fencing will bring the ideal a little nearer.

The type of soil must be considered. We are all acquainted with the fields that have a light soil at one end and a heavy soil at the other. This

F. E. ELLIS, B.S.A. EDITOR, FARM AND DAIRY

first soil is ready to work perhaps two weeks in advance of the latter. This makes efficient cultivation and cropping difficult. So far as possible, all of the soil in one field should be of much the same character. Perhaps the lateness of one part of the field may be due to lack of drainage, and here the striver after an ideal will plan for the drains that will give him a big field that can be uniformly worked. On some farms, too, soil erosion may be a handicap and fields here must be planned so that the banks are worked at right angles to the usual course of erosion.

Wide lanes, so wide that the widest implements may pass each other, are advisable, and if seeded to permanent pasture will not represent waste ground. These lanes will lead to the fields rotated to pasture and should also lead to a permanent water supply and shade for the cattle, as there are few farms on which both of these are available in every field to which the pasture may be rotated.

Arrangement of Buildings

A great proportion of the work on the dairy farm is done within the small space occupied by the buildings. Hence the importance of a building arrangement that facilitates chores. We have told before of a young man in Durham County who saved himself 72 miles of walking a year to and from the stables by cutting a door through the near side of the barn instead of walking around the end to the basement entrance, as had been the practice for many years. That young

man had the right idea of efficiency. The dairy farmer who has the building of his own barn has a golden opportunity to save labor in all of the years in which the barn will be used. When our plans have been completed, we should examine them critically, measure out just how far we must travel to complete each operation in feeding, cleaning the stables, bedding the stock and so forth, and see if we cannot save a yard or two of travelling here and there. When we are certain that we have achieved perfection in our planning, perhaps a neighbor can pick a flaw that has escaped us because of lessons learned in his own experience. Old barns can be re-arranged in the same manner. In both cases, have the plan completed on paper before the hammer and saw are brought into requisition at all.

I believe that in most cases it will be found that the ideal arrangement will bring all of the stock under one roof, but horses, milk cows, and calves all kept in separate compartments so that the odors of one will not penetrate to the other. Generally, we may say, that the barnyard will be on the sunny side of the stable, and the greatest window space to the south and south-east. The milk house will be convenient to the dairy stable; the drive house and implement shed to the horse stable door; all things will be arranged for labor saving, step saving efficiency. And if additions ever have to be made, they will not destroy the convenience of the plant, for they will have been arranged for in the first plan.

(Concluded on page 11)



An Ontario Farm Home That Owes Its Attractiveness to the Trees Surrounding It. Halton county has many beautiful farm homes of which that of Herb Bennett, here illustrated, is one. But what would it be without the trees? And how many hundred dollars do the trees add to its value? —Photo by an editor of Farm and Dairy.



A Crow can't eat corn treated with "Corvusine D.G."

In England—where Crows, Sparrows, and other birds are thick—"Corvusine D.G." is used by the best farmers.

They say that it absolutely protects the grain—and kills smut too—yet the treatment costs only a few cents per acre. No danger! A feeding treated grain to stock. There is no poison in "Corvusine D.G."—and your seeds germinate better for its use.

You can't afford to do without it especially when we make a

MONEY BACK GUARANTEE

If—after treating your grain as directed, with "Corvusine D.G."—you find it eaten by birds, we'll refund your money without hesitation.

Try a No. 1 Can to treat 16 bushels of corn. Sent prepaid for \$2.25. Cheaper in larger quantities. Free 24 page Booklet describes everything. Dealers wanted in Ontario.

McArthur, Irwin Limited

Established 1842. Chemical and Dr. Importers
324 St. Paul Street, Montreal, Que.



BOOK ON DOG DISEASES

and how to feed

H. CLAY GLOVER, V.S.

118 West 31st St., N.Y.

Mailed Free
to any ad-
dress by the
Author.

CORN THAT WILL GROW

Money back if not satisfied

Send for Price List

J. O. DUKE, RUTHVEN, Ont.

Experience Fails, Inexperience Succeeds. Why?

(Concluded from page 6)

didly. He will be a farm owner one of these days.

Here we have the informed man a failure, the ignorant man a success. The difference is in the interest and the enthusiasm that interest begets. A man with interest will soon acquire knowledge. Without interest it does not matter how much knowledge one has. If I were to drop a suggestion to our Departments of Agriculture, it would be to copy the treachers and farm editors and along with their information pour out some inspiration.

What is Your Opinion of the Silo?

(Concluded from page 6)

green pea straw and corn. I myself would never think of placing my dependence on anything but corn. It is the most dependable crop that we grow. I have had every other crop go back on me in exceptionally dry years, but I have never had what I could call a corn crop failure. The cultivation that it is possible to give corn and its extensive rooting system make it capable of feeding itself in the driest season. I have heard it recommended that second crop clover be cut into the silo along with the corn. I have never heard of this being done practically. It would be a lot of bother and I believe it would be better in the long run to cure the clover properly for hay and let the corn, as ensilage, supply the succu-

corn. I could add all kinds of practical testimony outside of my own experience as to the value of silage, but all I will give in this article is some experimental evidence. These experimentalists draw big pay from the farmer's community and we might just as well stick to their results and get the value of our money. At the Vermont Experimental Station, a field was divided into two portions, and the crop from one-half made into ensilage and the other cured as fodder. In the subsequent feeding experiments, it was found that 11 per cent more milk was obtained from feeding ensilage than from dry fodder.

Similar experiments were conducted at Wisconsin and Pennsylvania stations, and with similar results.

A Substitute For Water

I believe that the returns from ensilage on the commercial farm would be much greater. The cows at these stations were quartered in modern stables but the water in front of them all the time. In most of the stables throughout the country, however, perhaps unfortunately, perhaps not, the cows must be turned out to water each winter day. If the day is cold they are apt to drink less than they require, and hurry back to the stable. If they are fed ensilage they will get the water at feeding time that they didn't take from the trough, and consequently the milk flow will not suffer as it otherwise would. The difference between corn ensilage and fodder corn I should say is the difference between pasture grass and dry hay in milk making. To have a silo is the important thing on the dairy farm. The type of silo is of secondary consideration, so long as it is air-tight.

Paint pays, applied to machinery, implements and tools. It pays almost equally well applied to farm buildings, but if we may judge of the belief of practice, there are few believers in painted buildings.

Everything should be kept clean around the cows and milk. The stables should be cleaned every day and the cows well bedded. Milk or butter is very easily contaminated.—J. P. Fletcher.

A Safe Deposit Vault

In which you place your silage for carrying stock, through trees and from hills, at big profits—that's what the Natco Everlasting Silo is. It's safe because it can't decay, can't blow over, and can't burn.



Build a Natco. It preserves ensilage perfectly in all climates and once you know us, its hollow vitrified clay is impervious to air, moisture and frost, and its reinforcement steel bands laid in the mortar gives strength to resist wind and collapse pressures. The

Natco Everlasting Silo
"The Silo 15." Its *Lesser for Generations*—The Silo 15 is the only cost, quickly erected, convenient and attractive—the most valuable addition to your farm buildings. Write for the Natco owners in your province and Country.

National Fire Proofing Company
of Canada, Ltd.
Toronto, Ont.

FORD STARTER



Exclusive agents wanted to sell the "Sambro" Two Compression Starter. Different from all others. Every Ford owner a live prospect. For more information, write Dept. F, GEO. W. MACNEILL CO., 95 Richmond W., Toronto.

FOR SALE

A limited quantity of large, smooth white, shallow-eye Canadian Beans and Potatoes. Has yielded us 300 lbs. per acre. Originated in Muskoka. Also some Irish Cobbler's. Price, \$1.00 per bag, F.O.B., O.P.R. 40 O.P.R.
McGREGOR & PRITCHARD
Walkerton, Ont.



HAWK BICYCLES

An up-to-date High Gear Bicycle. Includes Canadian-made, New Departure Center Bush and Hubs, Detachable Tire, High-grade equipment, including Midguard, \$22.50. Pump, cap, and tools. Write for FREE 1915 Catalogue for 70 pages of Bicycles, Sundries and Repair Material. You save by your cycling from us at Wholesale Prices.

T. W. BOYD & SON,
27 Notre Dame St., West, Montreal.



Men of keen discretion appreciate the many differences which distinguish

Cutaway HARROW

Disk Harrows and Plows
CUTAWAY (CLARK) tools. Send for our catalog, and ask your dealer about them. If he doesn't sell them buy CUTAWAY (CLARK) farm implements. You should at least know we have no agents. There's a staple and also for you THE CUTAWAY HARROW COMPANY
165 Main Street, Hingham, Mass.

QUALITY LUBRICANTS for FARM MACHINERY

PRAIRIE HARVESTER OIL

the most durable oil for farm machinery. Reduces friction to a minimum. Will not gum or corrode. Unaffected by changes of temperature.

Standard Gas Engine Oil, an absolutely reliable lubricant. Suitable for use on the external bearings as well as in the cylinders of gas and kerosene engines of every type.

Capitol Cylinder Oil, manufactured expressly for steam engine lubrication.

Eldorado Castor Oil, a heavy oil, specially adapted for the lubrication of loose-fitting and worn bearings.

Arctic Cup Grease, made in seven grades to meet varying conditions.

These are the highest grade farm lubricants that can be manufactured—each intended to meet a particular requirement

Branch Stations Throughout the Dominion

THE IMPERIAL OIL COMPANY Limited

Made In Canada



Sarnia Corrugated Iron

Made from Rust-proof Process Galvanized Sheets.

ROCK BOTTLE PRICES

Special Price Art Kraft Metal Metal Sign Eave Tr Conductor Skylight Ventilator Metal Gate Etc.

If you have never Metal Products to start now. We tell you what you contemplate and we will send suggestions or we are in a position that will save you Dollars on your purchase.

THE Sarnia Metal Products Company SARNIA, CANADA

Sarnia Corrugated Iron

Made from Heavy,
Rust-proof, New
Process Galvanized
Sheets.

ROCK BOTTOM PRICES

ALSO

Special Prices on

Art Kraft Shingles
Metal Ceilings
Metal Sidings
Eave Trough
Conductor Pipe
Skylights
Ventilators
Metal Garages
Etc.

If you have never used Sarnia Metal Products it will pay you to start now. Write to-day and tell us what improvements you contemplate this season and we will send you prices and suggestions on materials we are in a position to furnish, that will save you many Dollars on your purchases.

THE

**Sarnia Metal
Products Co. Ltd.**

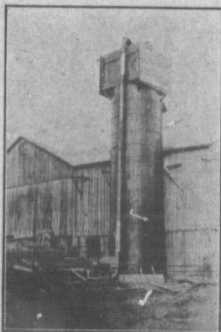
SARNIA, CANADA

Paint Up

L. K. Shaw, Welland Co., Ont.

"MARSHALS live just three farms down on the same side of the road from the one with the red barns. You can't miss it." With a "Thank-you, friend," my enquirer moved along. Had he asked for Taylor's or Williams', or any other of the neighbors down the county line, I would have based my directions on the painted barns of Neighbor Anderson. A couple of coats of paint on all the outbuildings have given a distinction to the old Anderson property. Only three years ago there was nothing to distinguish Anderson's place from any other place up and down the road. Now it stands out squarely from them all.

Who would not rather have his farm stand out as a land mark and have other homes pointed out in relation to



A Reliable and Popular Type.

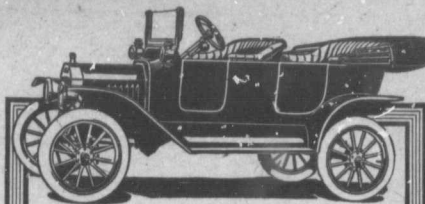
Of the many types of silos on Canadian farms, the old style silo more than holds its own in point of numbers. Properly constructed, the stave silo is economical in first cost and durable as well.

his, rather than have visitors directed to his own home because of its distance from that of someone else. Unconsciously it makes a man carry his head a trifle higher to know that he has a home that has attractions of its own. Nothing that I know of will effect an outstanding improvement in such a short time at comparatively so little expense, as will paint.

Paint Pays

I have heard the economy of paint on outbuildings debated again and again. I have always been convinced in my own mind, however, that paint pays. Examine a new barn when it first goes up. If the lumber has been well selected, every board is sound. Examine again in a couple of years. Every board is shrunken and warped. The wood has crept together, leaving millions of minute little cracks. Into these cracks the water finds its way and disintegration takes place fairly rapidly. Our own barn was painted within three weeks of the raising. That was many years ago, but the siding is as good to-day as it ever was and the barn will outlast my son as well as myself; that is, providing the paint is renewed at necessary intervals.

We always plan to paint in our spare time, do it all by our own labor and the expense is therefore not so great. We favor early in the spring as the ideal painting time, or long in the fall, as then farm work is not so rushing, the sun is not hot enough to blister the paint and there is less dust blowing. If it came to a choice between painting in mid-summer or not painting at all, we would paint.



"MADE IN CANADA"

Ford Touring Car Price \$590

Your neighbor drives a Ford—why don't you? We are selling more Fords in Canada this year than ever before—because Canadians demand the best in motor car service at the lowest possible cost. The "Made in Canada" Ford is a necessity—not a luxury.

Runabout \$540; Town Car price on application. All Ford cars are fully equipped, including electric headlights. No cars sold unequipped. Buyers of Ford cars will share in our profits if we sell 30,000 cars between August 1, 1914 and August 1, 1915. Write Ford Factory, Ford, Ontario, for catalogue F.



You Can Solve the Problem of raising young calves ECONOMICALLY by using



Gardiner's Calf Meal

THE PERFECT CREAM SUBSTITUTE

along with your separated milk, this is no experiment but has been proven successful by thousands of our customers.

One of the best uses of our Calf Meal which are coming to us every day are our best guarantee as to the value of our Calf Meal for raising calves. Our Calf Meal prevents scours, in fact we have several customers who have given us positive proof that our Calf Meal has cured bad cases of scouring in their calves.

If your dealer does not handle our meal write direct for our Sp. deal offer of a Trial Sack of 100 lbs. prepaid to your nearest station.

Save the Young Chick

One of the greatest sources of revenue in poultry raising is to be able to bring the maximum number of young chicks from the hatch onto full maturity. This can be done by feeding

Gardiner's Baby Chick Food

to the baby chicks for the first few weeks until they are old enough to take larger grain when they may be fed our Chick Food.

Put up in 5-lb. packages or in 25-lb., 50-lb., and 100-lb. bags. Ask for our sp. deal, prices of assorted orders of 500 lbs. of our Calf Meal and Poultry Food. Manufactured by

GARDINER BROS., SARNIA, ONT.

Heaves CURED

By removing the cause and not to stay cured a horse

Fleming's Tonic Heave Remedy full effect a cure of any case. We will refund the full amount if it does not.

Mailed on receipt of Price.

Scratches Disappeared Gentlemen—I gave a course of your Tonic Powder, which did the trick. My horse is in fine shape, and a touch of scratches has never returned.

One A. Miles, Osville, Ala.

Full information in Fleming's Vase Pocket Veterinary Adviser Write us for a Free Copy

FLEMING BROS., Chemists
83 Church St. - Toronto, Ont.

Powerful-Economical

His Engines develop more power on cheap oil than other engines of all makes. No extra fuel, no extra labor, no extra carbureting, less vibration, easy to operate.


ELITE ENGINES

are run on 25¢ fuel (low test) and guaranteed for 10 years. We do this because we know that Elite Engines are the biggest value for engine buyers. Thousands of enthusiastic users.

Made in vertical and horizontal types, either stationary or portable, from 1½ H.P. to 15 H.P. Our new booklet describes this modern engine.

ELITE ENGINE COMPANY
2827 E. Grand Boulevard, Detroit, Mich.

Poultry



Chicks Die Rapidly

A. C. Mculloch, B.S.A., Demonstrator in Poultry Husbandry, O.A. Guelph

"Will you please tell me what the matter with our chicks," writes a farmer poultryman, who hatched out 72, strictly following the directions sent by the incubator manufacturer, but who has been almost discouraged by the heavy mortality among the chicks. "We fed bread soaked in milk when young," he writes. "They looked strong and thrifty when hatched, but in a day or two they commenced dying. Do you think the trouble could be in the brooder?"

This is not at all an uncommon complaint, but we are somewhat at a loss from the meagre symptoms given to locate the cause of the trouble. I would think, however, it is one of two things, either white diarrhoea or feeding the chicks too heavily on concentrated foods for the first few days. If it is diarrhoea it is very likely the variety we call *Aspergillus* or *Leptospira*. This is caused by more or less unsanitary methods in handling eggs, incubators, brooders, etc. In the first place the hens' nests must be absolutely clean to prevent disease germs coming in contact with the egg shells and gaining access to the interior. The incubator should be thoroughly cleaned and disinfected with a ten per cent carbolic acid or sodium borate solution before use. If they spill any drinking water on the litter of their pen it should be removed and everything kept absolutely dry.

nips mashed up finely and dried off with oat middlings. To this add hard boiled eggs, one egg to ten 40 or 50 chickens, and at this time you may commence to give them buttermilk to drink if it is obtainable. For the first few days, however, mix it half and half with water.

This in general is the system we have followed with best results this spring, and is about the best we can suggest for this time. Perhaps you could substitute one feed of bran the first ten days with stale bread soaked in milk and squeezed dry. Be sure, however, that the bread is not mouldy.

An Old W

THE old Baker miles out of Westworth Co., but little resemblance to the original situation of hotel and for those days, however, acres with a second. The Local Option was over old Ontario did the principal sources of hotel, and it became only, one of the plain-lined, unattract are still to be found places. On my way to summer, I passed one place. It had been re-

CRUMB'S IMPROVED WARRIERS STANCHION

The standard of stanchions and accessories for a quarter of a century. Dr. Geo. Howard of Haver's Dairyman writes: "I have been very much impressed with the practical qualities of Warren's Stanchions."

Write for booklet and specifications of one of the simplest and sanitary stanchions in this country or send for a copy of the Dairyman's Stanchion Review to the Canadian branch.

WALLACE B. CRUMB, Ltd., Farmers' Hardware Co., Ltd.
Canadian agents 1150 Queen Street, West, Toronto, Ont.

All correspondence should be addressed to the home office. Make in inquiry if you prefer booklet in French or English.

FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER

NOW'S THE TIME—Eggs from Harshbarger's Indian Runner Ducks, 250-EGG strain, also English Pencilled variety, \$1.25 per dozen.—Edward Fenner, B. R. I., Carleton Place, Ont.

FOR SALE—Pure-bred Indian Runner Duck Eggs, \$1.00 for eleven.—George Cleland, Listowel, Ont.

WHITE AND COLUMBIA WYANDOTTES, LIGHT BRAMMAS, SC. WHITE LEGHORNS
Over 20 years a breeder.
Stock and Eggs for Sale.
Michael K. Boyer, Box 13, Hamontown, N.J.

S. C. W. LEGHORN DAY OLD CHICKS

from prize-winning cockerels and mated hens. Strong, vigorous chicks. Carefully shipped. Satisfaction guaranteed. Chicks, 100 or less, 10¢; 100 to 1,000, 12¢; over 1,000, 10¢.

EGGS FOR HATCHING. Taste 90% fertility. 10¢ \$1.50, 40 Eggs \$2.00, 100 \$5.00, 1,000 \$45.00. F.O.B. St. Marys.

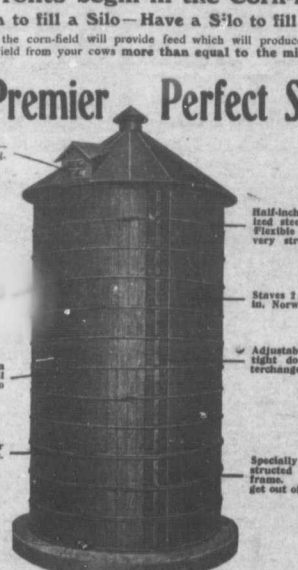
CARROLL CLIFF Poultry FARM ST. MARYS

Your Profits Begin in the Corn-field

Plan to fill a Silo—Have a \$10 to fill

The Silo and the corn-field will provide feed which will produce an increased milk-yield from your cows more than equal to the milk of a good cow.

The Premier Perfect Silo



- Doorer window handy for filling.
- Drop forged and coupling great strength.
- Threads extra long and well machined. Silo always tight.
- Double casters for the bottom rows.
- Half-inch galvanized steel cable. Flexible and very strong.
- Staves 3 in. by 4 in. Norway Pine.
- Adjustable airtight doors, interchangeable.
- Specialty constructed door frame. Cannot get out of shape.

Well Built—of the Best Material—Permanently Treated

The many excellent features of this silo will be better understood after reading our circular printed in colours. Send for it today. Address, Silo Department

THE PREMIER CREAM SEPARATOR CO.

TORONTO, ONT.

Branches: ST. JOHN, N.B. WINNIPEG, Man.

Post-Mortem Symptoms

The post-mortem symptoms of this disease usually show whitish, cheesy patches in the lungs by the fourth or fifth day, perhaps by the third day. Some times these patches are not as easily identified as at others. They may appear as more or less dark red spots such as you might expect in the case of pneumonia or inflammation of the lungs. Externally the chick does not appear to be thriving properly; the feathers seem to be more or less dried up and turned, the chick's body, instead of being long and well filled out, is often more or less round and dumplish, and very often the chick has a pearly, discoloured cry and stands in the corners or huddles up against the source of heat. All these symptoms are not observed in all cases but practically one or more of them is present in all cases.

As to feeding I would suggest that nothing be given at all until the chicks are about three days old. From then on for the first 10 days try giving them in the morning, at noon and the last feed at night one handful of chick feed to every 75 chicks. That is a handful which you can grasp by holding the hand with the palm down. This may seem like a pretty scanty feed, but it is better to keep them hungry and not overfeed on this. Between times, in the forenoon and afternoon, give them some bran in a shallow pan to pick out as they wish. Mix in the bran a desiccated alfalfa finely ground bone meal to a pint of bran. Give water to drink. After ten days gradually substitute the bran with a mash composed of boiled tur-

Feeding Young Chicks

OVERFEEDING is more dangerous to young chickens than underfeeding. Young chickens should be fed from three to five times daily, depending upon their experience in feeding. Undoubtedly chickens can be grown faster by feeding five times daily than by feeding three times daily, but it is not wise to be fed more than barely to satisfy their appetites and to keep them exercising, except at the evening or last meal, when they will be given all they will eat. Greater care must be exercised not to overfeed young chicks that are confined than those that have free range, as leg weakness is liable to result in those confined.

The young chicks may be fed any time after they are 36 to 48 hours old, whether they are with a hen or in a brooder. The feed may contain either hard-boiled eggs, Johnny-cake, stale bread, pinhead oatmeal, or rolled oats, which feeds or combinations may be used with good results. Mashies mixed with milk are of considerable value in giving the chickens a good start in life, but the mixtures should be fed in a crumbly mash and not in a sloppy condition.—U.S.D.A.

The Rural School as a Factor in Good Farming

(Continued from page 3)

cles of construction. Then they are given practice in the making of necessary articles for home use. As a single illustration in our school visited, a certain class had worked on gates, and every boy had a beautiful gate, scientifically planned, properly constructed and well painted, ready to take home when school closed. The girls are taught sewing and cooking chiefly. The lunches served to visitors testified to their efficiency in the latter and the dresses they wore, in some cases at least, in the former.

The science taught is all made to relate to agriculture and some of the schools are undertaking regular agricultural courses. Corn is the most important crop in that district, and in almost every school at the time of the visit, a good deal of attention was being given to testing seed. Our inquiry revealed the fact that this work was not being done merely for the pupils and their parents but practically for the whole community. The senior farm boys were doing it.

The School a Social Centre

The buildings in Randolph county are so arranged that by throwing class rooms and hallways into one, accommodation can be provided for from 500 to 500 people. The people of the township make the school their social as well as their educational centre. Meetings of the Farmers' Institute, Farmers' Club, School Fairs, parent-teacher meetings, Mothers' Clubs, Sunday School conventions, winter lecture courses and meetings that are purely social are held in the building. At five Farmers' Institute meetings held last January in five different buildings, there was an aggregate attendance of over 2,700 people. It would be hard to know if there were five such meetings held anywhere in Ontario last winter. The lecture courses differ and the attendance varies from 50 to 300.

Desirable

This Nation Co., Ltd. silo. The addition of steel mesh with sliding attractive

was one of the most seen during my travels than see the old hands of strangers, I who had later years belated States, took over and has made arrangements. Fortune has been Mr. Baker, and he co as he would with the building. Like most however, who have money, he knows how his money to advantage modelling of the old methods adopted that equally well to practice without great m who are thinking of homes.

Most of the improve are made plain in the with. The greatest house was the building across the front. The lines of the roof were

The old barn in construction proved in appearance by sliding

entire appearance of the by the addition of t above the verandah. painted white, with red addition to the usual e are seen the shingles a the verandah were stain A feature that attract of every passerby is t in which it also abe illustration. The best c of reconstruction my visit.

The barns were of beaten, unpainted kind covered with corrugate

An Old Wentworth Co. Farm Improved

THE old Baker property, a few miles out of Watertown, in Wentworth Co., Ont., now bears but little resemblance to its former state. Originally it was a combination of hotel and farm house. In those days, however, the farm of 50 acres with a secondary consideration. The Local Option was that has swept over Ontario did away with one of the principal sources of revenue of the hotel, and it became a farm house only one of the regular unpainted, plain-lined, unattractive houses that are still to be found on too many farms. In my way to Watertown last summer, I passed the old Baker place. It had been revolutionized. It

and over that a coat of red paint with white trimmings. This involved a greater expenditure than was absolutely necessary to make the buildings attractive, as a couple of coats of paint would have been almost equally effective. The improvements were made under the direction of Mr. W. M. Stevenson—F. E. E.

Approaching the Ideal in Dairy Farming

(Continued from page 7)

All farming buildings and their surroundings on the ideal farm are arranged with a view to attractiveness.



Desirable Additions Make Plain Houses Very Attractive

The Milton Co., Ont. home was once a combination farm house and country seat. The addition of the ornamental window above and a coat of fresh paint with shining stain of a reddish tint on the roof have made it a very attractive home for the 50-acre farm that goes with it.

was one of the most attractive that I saw during my travels that day. Rather than see the old home go into the hands of strangers, Mr. Geo. Baker, who had left years before for the United States, took over the old place; and has made extensive improvements. Fortune has dealt kindly with Mr. Baker, and he could afford to do as he would with the old farm and buildings. Like most moved men, however, who have made their own money, he knows how to dispose of his money to advantage. In his remodeling of the old home, there are methods adopted that should appeal equally well to practical men and women without great money resources, who are thinking of improving their homes.

Most of the improvements adopted are made plain in the illustration here-with. The greatest change in the house was the building of a verandah across the front. The severely plain lines of the roof were broken and the

The house will be situated where it commands the best views of the surrounding country commensurate with convenience. It will be located far enough from the road to give a measure of seclusion and freedom from auto dust, but not so far as to make the care of the lawn burdensome. The busy farmer has little spare time to put in behind the lawn mower and the ideally arranged farm lawn will be clipped with the hay mower by horse power. The main dependence for beautification will be placed on permanent vines, shrubs and trees, trees, trees. With these, the country house grounds may be given a park-like appearance and that on comparatively little space.

What have trees to do with making money on the farm? I have been asked. Perhaps nothing at all. But my ideal farmer does not live to make money; he makes money to live; and a big item in real living is a beautiful

The Farm Barns, too, are now Attractive

The old barns in connection with the house shown above have been greatly improved in appearance by covering the weather-beaten boards with corrugated steel siding and painting red with white trimmings.

entire appearance of the house changed by the addition of the window seen above the verandah. The house is painted white, with red trimmings. In addition to the usual painting that is given, the shingles and the roof of the verandah were stained a dull red. A feature that attracts the attention of every passerby is the roofed gate-way, which is also shown in the illustration. The lawn was just in process of reconstruction at the time of my visit.

The barns were of the weather-beaten, unpainted kind. They were covered with corrugated metal siding,

home and beautiful surroundings, where life may be the better enjoyed by the whole family. If I were to add a concluding word it would be: in all things consult the family. The ideal farm is a cooperative partnership affair in which all are interested, if all have contributed to the ideal, all will reap the more enthusiastically for its realization and rejoice the more in its attainment.

I would go a step further. Farmers are more dependant on their neighbors than are city folks, and the ideal dairy farm is located in the ideal dairy community. The ideal dairy farmer

has an ideal for his own farm and a vision for his community. The latter may be the harder to realize, but it too will come in time.

"Slicking-up" the Place

R. C. Waller, Victoria Co., Ont. OUR community is like most other rural communities that I have visited,—some places are tidy and neat and a credit to their owners, other places have nothing to recommend them. In the barnyards of some of the latter are collected all the discarded implements that have ever been used on the farm. The fences around the buildings are out of condition and, unless used to confine stock, are never repaired. The lavns are never cut, the houses never painted and a few of the worst places always send me of a Jew's junk yard. The strange part of it is that this shiftlessness is often in evidence on farms that otherwise are well run. I do not regard it as anything more serious than a bad habit.

The only way to make some of these people "slick up" is to shame them into it. It can be done. Here is a case: One of these shiftless farmers had a driving horse which he was very proud. I'll guarantee that it was the finest driver in the neighborhood, and I set great store by my own. A young lady, who was much interested in city improvement, our school teacher, offered to photograph that driver and the owner was tickled to pieces. It took her a long time to get that driver placed to suit her, but finally she had it arranged so that the photograph, when delivered to the owner, showed a broken down wagon, which had stood in the yard for 10 years, directly behind the horse, a scrap heap of old tin pails and so forth showing through underneath and an old binder right in front of him. The rest of the background was similar. The horse, somehow, looked out of place in such surroundings, and its owner was as quick to see the contrast as any. He bought not only the prints the "school marm" had made of his horse, but the film as well. Then he started to "slick up."

I believe the same purpose might be achieved on a larger scale by forming rural improvement societies. If these societies were made to take a prominent part in the social life of the community all would desire to be members and no one could be a member without catching some enthusiasm for "sliking up." I have never seen this tried, but if the improvement society has been so used I would like to hear of it through Farm and Dairy.

Items of Interest

FRUIT growers of the Niagara Peninsula have organized and raised a large sum of money for an advertising campaign in newspapers, and have called in Peter McArthur, the well known agricultural philosopher, to assist them in their publicity work. His essays were a popular feature of the apple campaign last fall. Similar essays will undoubtedly be forthcoming on the tender fruits, prose-poems on the singular succulence of the strawberry, the rare relish of the raspberry, the captivating charm of the cherry and the paramount perfection of pears, peaches and plums. The fruit growers are making arrangements to eliminate the profit-takers from the business and to place the fruit with local dealers throughout Canada at a price that will be within the reach of all consumers.

"Seasonable Hints" is the title of the latest publication of the Dominion Experimental Farms. The contents are exactly what would be expected from the title,—seasonable hints on the care of live stock, the management of field crops, work in the poultry yard and in the garden and orchard. A card to the Publications Branch at Ottawa will bring this pamphlet to you.

KEITH THE FARMER'S SEEDSMAN

SELLING GOOD SEEDS SINCE 1866

We pay railway freight in Ontario and Quebec on all orders of \$25.00 or more.

POTATOES

Empire State, registered	Per bag
Empire State	\$1.15
Davies Warrior	1.20
Empire	1.25
Gambler	1.30
Early Ohio	1.10

ALPALPA CLOVER

Ontario grown	No. 1	Per bus.
Ontario grown	No. 2	1.00
Ontario variegated, per lb.		50
Lyman's Grimm, per lb.		50

MILLETS

Siberian	Per bus.
Common	\$1.75
Hungarian	1.75

CORN FOR ENSILAGE

Best free on cash (70 lbs.) shelled	
Wisconsin No. 7	\$1.00
Golden Glow	1.00
Balley	1.25
Emp. Learning	1.50
Yellow Cap Y Dent	1.40
Longfellow	1.75
North Dakota	1.75
Compton's Early	1.75
Brown banded cinders	1.00
and 10 extra for each broken lot	

SEEDS

KEITH & SONS
127 KING ST. E. TORONTO ONTARIO

Ontario Farmers

have from 20 to 25% more wheat this year than in seasons past.

The danger season—frost, winter and spring killing is past.

At ordinary prices this will mean MILLIONS OF DOLLARS more to be spent in equipping their farms.

The prosperity of the farm controls conditions in every industry.

The coming few years should be bountiful ones in Ontario.

Let our Manufacturers prepare to be a part of it, publicity of their goods through the farm press will do it.

FARM AND DAIRY
PETERBORG, ONT.

"After reading Prof. Van Pelt's Cow Book through, it is my opinion that it is the most complete and instructive book on the Dairy Cow that one could wish to have. It is splendidly written by one who understands dairying to the last fine point."

This is an extract from a letter from one of the 50,000 dairy farmers who have read this book. The publishers have received 10,000 others very similar to this one. They all go to prove that

Van Pelt's Cow Book

is without an equal, and is recognized the world over as the best book ever published on the demonstration of the dairy cow.

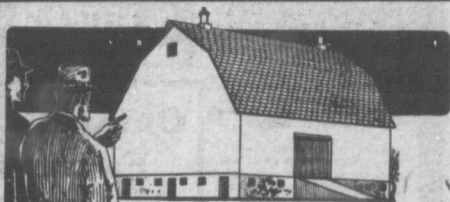
Professor Van Pelt is the recognized authority on the dairy cow, not only in America, but the world over. He has spent years in study, and in personal demonstration and lecturing in the United States. His book is his great dairy cow lecture—picture and print—and is so plain that a child could read and understand it.

Van Pelt's Cow Book is printed on fine coated paper. The numerous photographs illustrating the different points that the writer emphasizes, are master-pieces in live stock photography.

The accompanying reading matter is simple and instructive. No one can fail to get a complete grasp of the finer points of the dairy cow, and its breeding.

On receipt of one new yearly subscription to Farm and Dairy, and one \$, we will send you a copy post paid of Van Pelt's Cow Book

Farm and Dairy, Peterboro, Ont.



"20 years ago

I thought that roof mighty expensive

"It took faith, and lots of it, to lay out the money for that roof. Now I know it was the best kind of investment."

Leaving the economy of Preston Shingles out of the question, there are two main reasons why they stand high among the farmers of Canada.

1st—They are galvanized that will hang together during the most severe wind storm or even if the frame work below should twist or sag. That means a solid roof—

2nd—They lock together on every side—no lap joints, every joint a solid hook lock. They make a roof of solid metal

Good metal and good shingles—

Protection against leaks, and damage to crops and buildings.

The Metal Shingle & Siding Co., Limited, Preston.

Your Building Questions Answered

Send me books on Barn Building Free.

PRESTON SAFE SHINGLES LOCK

Before you make your plans—before you cut a stick of timber, get our big FREE book on Barn Building. Everything you want to know about the proof construction, sheet metal arrangement, window lighting and ventilation is clearly told. You will want these books. Send for them today. Place on the coupon.

The Metal Shingle & Siding Co., Limited, Preston, Ont.

Stable Improvement Up-to-Date

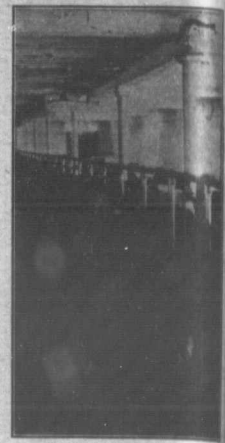
ONE improvement begets a desire for other improvements. It is natural to wish to have all things in keeping. J. & S. Callaghan, Victoria Co., Ont., decided on stock as their first improvement. Grade Holsteins then took the place of the mongrels that had preceded them. Now the grade Holsteins are being replaced by pure-bred Holsteins. Somehow this improved stock never looked right in the old stables. The Callaghans decided that good stock deserved good stables. It was decided to pull down the old ones and put up something befitting the new herd that was being developed. Today their stables are modern and up-to-date in almost every particular.

The first point that attracted my attention when I dropped in on the Callaghan boys a few weeks ago was the bright and cheery appearance of their stable as contrasted with the average stable of the neighborhood. The windows are not little four-pane affairs stuck up against the ceiling. They are four panes wide, but in depth they reach from near the nine-foot ceiling down to within two and one-half or three feet of the floor; and there are lots of them. The brightness and cheeriness of the stable is also enhanced by a liberal application of whitewash and the steel stanchions and steel partitions afford a minimum of obstruction to the light flooding the stables from the big south windows. The walls are of stone, plastered inside. Two and one-half feet of the wall next the floor is painted black; whitewash there would show every speck of dirt too readily.

A Simple Method of Ventilation.

The ventilating system has not yet been installed, but a very simple and convenient device is being used as a makeshift. The upper part of the stable doors are of slats four inches wide, with a three-inch space between each. A form similarly made, slats four inches, spaces three inches, is adjusted on top of this and the openings to the outside may be completely closed or the width adjusted according to temperature.

The general arrangement of the stable is for a line of cows the full length with box stalls on the other side and the feed passage between. The silo stands at one end of the barn, opening into the feeding passage. Near the entrance is a gasoline engine, attached to a shaft with pulleys adjusted to cut straw, pump water, pulp roots, in fact to do anything for which a small gasoline engine may be harnessed. As the illustrations will show, the partitions and stanchions are all of steel, while the manure pans are all of reinforced cement. Individual basins supply the cattle with water. A fine point in stable



Sanitary and Permanent Construction.

The manure pans are of reinforced cement, the rest of the construction entirely of steel in the new stable of J. & S. Callaghan.

Sanitary and permanent construction, but one which has made to do with the sanitary production of milk, is that the cement bottom to the gutter slopes back from the platform on which the cows stand. Droppings do not make a splash that rivets everything for a yard around.

Value of Litter Carrier.

Mr. Jim Callaghan pointed with particular pride to their litter carrier. They have a chance to appreciate the value of this labor-saving stable convenience at least twice a day. It is no longer necessary to trundle a heavy wheelbarrow or to push it through the snowbanks,—which were plentiful enough this winter. The carrier runs on its own overhead track, and when it is full, all that is necessary is to give a push through the door from which it runs out to the adjoining lot, a set and sanitary distance from the stable trips itself and returns to the stable empty.

"There is some satisfaction doing chores in our new stable," said Mr. Callaghan to me. "One takes a pride in his work. This is only the beginning of our improvements on the buildings. Already we have spent \$1,300 on them, but it has been money well invested."

LIST SIL



Made of Selected No. 1 Cement

QUALITY TELL

Staves side and matched and treated pressure with preservative.

No metal spline and break-away.

Sloping hatch more light into offers no wind resistance.

One piece doors changeable.

Hoops 3/4 and 3/8 run through special machine.

Door frame bevel rabbeted to fit door the best quality of wood and workmanship.

All up-to-date far erecting the patent silo (see front cover)

Write for Catalog

R. A. LISTER

Manufacturers of Lister Gasoline Engines, Grain Grinders, Lighter Lister Milling Machines, Melate Cream Separator

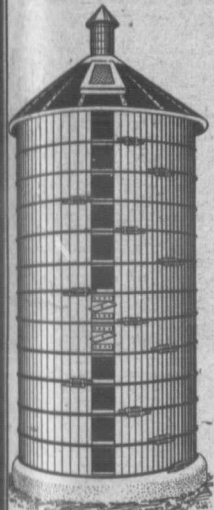
58-60 Stewart Street

Works: Durston, Eng.

"It is a Pleasure to Chore in a Stable Like This."

Such is the opinion of Jno. Callaghan, the senior member of the firm that set out their old stables to build the one here shown. The two brothers are now setting to fill the new stable with high-class pure-bred dairy cattle.

LISTER SILO



Made of Selected No. 1 Canadian Spruce

QUALITY TELLS

Staves side and end matched and treated under pressure with special preservative.

No metal spline to rust and break away.

Sloping hatch throws more light into silos and offers no wind resistance.

One piece doors all interchangeable.

Hoops $\frac{3}{4}$ and $\frac{1}{2}$ inches run through special bending machine.

Door frame bevelled and rabbeted to fit doors. Only the best quality of material and workmanship.

All up-to-date farmers are erecting the patent staves silo (see front cover).

Write for Catalogue K.

R. A. LISTER & CO.

Manufacturers of LIMITED

Lister Gasoline Engines, Lister Grain Grinders, Lighting Plants, Lister Milling Installation, Melotte Cream Separators.

56-60 Stewart Street, Toronto

Works: Dursley, England

HORTICULTURE

Grapes for All

There is a general opinion that the grape is a tender fruit and limited to some of the intensive fruit sections where the climate is favorable. It came as a surprise, therefore, when visiting Henry Glendinning at his home in Ontario country, far back from the lake front at Manilla, that he has been growing grapes for his own use very successfully.

"We have grown, all told, perhaps 40 varieties of grape in this vicinity," remarked Mr. Glendinning. "Out of these there were only one or two that did not mature, and last year the leaves hung green on the trellises up to November. I do not, however, advocate late varieties for a climate such as this. Some of the varieties with which we have had good success are Moore's Diamond and Moore's Early for early fruiting, and the Warton, Niagara, Wilder, Massasoit, Brighton, Salem, Agawam, Ludley, and Concord for the main crop. We have abandoned a good many varieties, and think that we are now growing the best for our conditions."

Mr. Glendinning informs us that Mr. Geo. Smith, in the village of Manilla, makes quite a business of grape growing for showing at the fairs, and has as many as 30 varieties producing successfully.

Manuring Raspberries

What is the best time to apply manure to black and red raspberries? Should it be applied in fall or spring, after bearing or before bearing?—Subscriber, Waterloo Co., Ont.

The scientific manuring of the raspberry is just in the experimental stage. As a rule, even in the best patches, no regular method is followed. But barnyard manure is the standby of all. There is a danger when this is used in quite large quantities—say 20 tons per acre every year—of producing an excess of cane or wood growth. The general practice where the land has been built up or is already in good heart, is to apply about 10 tons per acre of good manure annually. This adds a sufficient quantity of humus, and with commercial preparations keeps the soil in fair condition. Where the soil is poor a much larger quantity must be added at first. This may be applied and plowed under, either in the spring or fall or applied as a mulch in the fall and plowed under in the spring.

Commercial preparations are gradually coming into favor, but it cannot be said that as yet any number of growers have reached a standard and are applying them in regular quantities. Various quantities are applied, ranging from 200 to 600 lbs. or more per acre. This is usually in the proportion of two pounds of bone meal or superphosphate to one of muriate of potash. No quantity of nitrate of soda is used. The growers depend on manure largely for their supply of nitrogen, because, except in special cases, it is much cheaper. The following is recommended for a yearly application on soil that is in good heart, and it will replace in the soil the quantity of fertilizer constituents removed by 100 crates of fruit: 12 tons of barnyard manure, 100 lbs. muriate of potash, 200 lbs. bone meal.

The nitrate of soda cannot take the place of barnyard manure, but preparations other than those mentioned containing the same quantities of available potash and phosphorus may be used.—E. F. Palmer.

Can the door yard be improved by planting a few shrubs and plants there? Now is a good time to study the matter. Select those shrubs that have some attractive feature over a long season, such as lilac, peony, spiraea Van Houttei, and high-bush cranberry.

MAGIC BAKING POWDER

MADE IN CANADA

READ THE LABEL



CONTAINS NO ALUM

CONTAINS NO ALUM

Tonight

Plan when you will see about testing FARM AND DAIRY

SEED POTATOES

Early Eureka, \$1.25 per bag. MILTON TAMBLYN, ORONO, ONT.

Johnny-on-the-Spot

"Johnny-on-the-Spot," on skids or on truck, will take care of all your churning, pumping, separating cream, pulping, churning, washing, etc.

Stop wasting your time and energy in useless drudgery! Let "Johnny-on-the-Spot" do it—out of the famous Gilson "Goes Like Sixty" Line—a high quality engine at low cost. WRITE FOR CATALOGUE AND FULL PARTICULARS. ALL SIZES.

Gilson Manufacturing Co., Limited
2310 York St., Guelph, Ontario

\$47.50

A PERFECT TOMATO

Has been produced by us, and one which we want you to test. It is acknowledged by all who have tasted the fruit to be the finest in flavor they have eaten.

It is a great drought resister, a heavy yielder and does not revert to "types." You want to try a packet, so drop a postal RIGHT AWAY, and for particulars of premium offer, to HILSIDE FRUIT FARM, Dept. 5, SIMCOE, ONT.

How to Build a Dairy Barn

Build a Modern Dairy Barn

When you build or remodel your barn, do it right. Nothing will add so much to the value of your farm as a good barn, and it costs no more than a poor one.

This Free Book Tells How

It shows you how to build your barn, from start to finish. Tells how to lay the cement floors and walls. Gives proper measurements for gutters, cattle-stands and passages. Shows how to arrange the floors and walls to be handy and economical.

It describes the latest system of framing that saves a third the cost of ordinary methods.

It shows you how to make your barn more modern and sanitary. Explains all the fundamentals of correct ventilation, lighting and drainage. Tells about BT Galvanized Steel Stalls that are so much more comfortable for the cattle than old wood stalls.

The head of one of our Agricultural Colleges writes: "Your book is of inestimable value to anyone who is building or remodeling." This book may save you hundreds of dollars in building and equipping your stable. Yet it is free.

Simply send your name and address on a post card, telling when you expect to build or remodel, and number of cows you will keep. Address

-[BEATTY BROS., Limited

1463 Hill St., FERGUS, Ont.

422 (14)
FARM AND DAIRY
 AND RURAL HOME
 PUBLISHED EVERY THURSDAY

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

ADVERTISING RATES, 12 cents a line for 100 words, 10 cents a line for 200 words, 8 cents a line for 300 words, 6 cents a line for 400 words, 5 cents a line for 500 words. Copy received up to Saturday preceding the following week's issue.

UNITED STATES REPRESENTIVES
 STOCKWELLS SPECIAL AGENCY
 Chicago Office—700 La Salle Building.
 New York Office—Frisco Building.

CIRCULATION STATEMENT
 The paid subscriptions to Farm and Dairy stood 15,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 15,750 to 15,000 copies. No subscriptions are accepted at less than the full subscription rates.

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

OUR GUARANTEE
 We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

The Rural Publishing Company, Limited
 PETERBORO, ONT.

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

The Shaded Valley

THIRTY years ago one of Our Folks planted a row of Norway Spruce on either side of the cold, exposed drive that led from the public driveway to his farm home. The planting represented only a few hours of labor and a few dollars of expense. The protection of the trees during their growth took little time. To-day, fully 30 feet high, they form a beautiful avenue leading up to the farm home. Travellers on the C.P.R. passing through Locust Hill may have noticed this fine avenue of spruce right near the tracks; in fact, they could not very well miss it.

We know that Mr. Anderson has derived untold satisfaction out of the beautiful avenue planted with his own hands a score and a half of years ago. The community, too, has shared in his pleasure. The planting is a distinct addition to the beauty of his home district. Many other men of Mr. Anderson's generation were great tree planters. We want many more such men in the present generation. We want men to plant trees until there is not a windswept, bare-looking farmstead in Canada. It need not all be done in one year, a few trees this spring and a few next, and so on until the farm planting is complete, will give rural Canada a reputation for beauty such as it now enjoys by the finest sections of rural England.

A Labor Difficulty

DURING the past seven or eight weeks, about 500 people, including families, have been placed on farms in Western Ontario through the agency of the Ontario Government. In discussing this work of the Colonization Department, Mr. John Farrell, in a recent interview, stated that in many cases competent married men could not be placed because farmers were not in a position to accommodate and accept their families, and opined that the labor problem could not be satisfactorily solved until suitable accommodation be

provided for married men in tenant houses on the farms.

The need mentioned by Mr. Farrell is a very real one. The only satisfactory farm labor must be permanent labor, and permanent labor, as all large employers will testify, is married labor. The more attractive the cottage home provided the more permanent the laborer. The man might wish in time to move, but a convenient and comfortable home is an attraction that few women would care to leave, and they would prove a strong factor in retaining the services of their husbands for a reasonable employer. The erection of a cottage costing \$700 to \$1,000, which will be money well invested to the farmer who finds the labor problem his greatest source of strain and anxiety.

Wild and Extravagant

SHALL rural Ontario be covered with a network of radial railways, run by hydro-electric power? Sir Adam Beck is chief sponsor for such a move, and his propaganda seems to have the enthusiastic support of all city Boards of Trade and not a few municipal councils. As the scheme now stands, the Hydro-Electric Commission proposes to construct in Ontario 1,900 miles of electric inter-urban lines at the expense of the Ontario Government, guaranteeing the amount of the entire construction cost by the deposit of bonds of the municipalities served by these roads. A reasonable estimate would place the cost at \$30,000 to \$40,000 a mile, and the entire expenditure for the 1,900 miles when complete, in the neighborhood of \$64,000,000.

Wild and extravagant are the only words which fittingly characterize such a scheme. It is exactly in keeping with the policy long followed by the Federal and Provincial Governments and the councils of our leading cities of discounting future development for present construction. Construction of transportation facilities has been pushed far in advance of economic development. To such an extent has this policy been carried, that Canada presents the unenviable spectacle of a country having three transcontinental railways to support without economic development sufficient to fully use two. A large proportion of our people have derived their living from construction work conducted on borrowed capital. Our public borrowing power has been exhausted in all but one direction—our rural municipalities are still largely free from bonded indebtedness. They represent our last marketable public asset. Shall they, too, be exploited to keep alive a false prosperity?

Will Radials Pay?

THE prospect of an electric highway right at our door, or within easy reach, is one well calculated to excite the imagination of every rural dweller. It is a dream which, in time we believe, will be realized. If, however, these lines, built in the present on the credit of our own municipalities, are to be a continual burden to the Governments with expenditures greatly in excess of receipts, the electric service will in the end prove an expensive luxury to the rural ratepayer when he foots the bill, as he inevitably must.

Many of the proposed roads are through thinly settled districts. What chance do these roads stand to pay? In coming to a conclusion, we have the experience of the United States and of a few of our own Canadian roads to guide us.

United States experience is against all roads not connecting important commercial centres and running through populous districts and good towns. So disappointing have results been with United States electric inter-urban roads that New York bankers now decline to take up this class of proposition. In Canada the electric road between Brantford and Hamilton showed a deficit last year of \$41,018, although it connected two of our largest cities, and runs through a rich farming district. The Galt and Berlin electric

road, with the advantages of two live cities and two good towns and the important business of the Canadian Pacific system into Berlin, and this with only 18 miles of track, made a good showing in 1914, while the Chatham and Wallaceburg road showed a deficit.

The Farmers' Attitude

FARM and Dairy knows that Ontario farmers would appreciate radial service. We also know that Ontario farmers would prefer the Government to exercise the same caution in capital expenditure that they so wisely use in the management of their farms. The Ontario farmer is content to wait for radial service until real development will justify the expenditure. He knows that rural radials will then come naturally and with no danger of becoming a public burden.

Propagandists reluctantly admit that present development does not warrant such a great expenditure on electric highways as is proposed, and we in Canada have already mortgaged the future sufficiently to cause grave uneasiness to all sane and thinking men. Would it not be more advisable for the powers that be to devote a little study to how natural wealth production may be increased, rather than spend all their energies in finding ways and means of exploiting the credit of rural municipalities in order that construction shops and their employees may be kept busy.

Farmstead Planting

FROM the viewpoint of appearances," says the Journal of Agriculture, "travellers would classify our farmsteads into three grades—rare, fair, and bare." Our contemporary speaks for the state of Canada. The classification would be equally apt in Canada. God's county is naturally beautiful. Man's creations—houses, barns, and outbuildings—sometimes add to the attractiveness of the landscape, but more often they mar it. And yet we are willing to guarantee that there is not a farmstead in Canada, no matter what its architectural deficiencies, which could not be made beautiful with vines, shrubs, and trees, and that at a very little expense.

"What extravagance," remarked a conservative Nova Scotia farmer when he heard that a neighbor had left an order with a nursery firm for \$100 worth of trees and shrubs. It all depends on the viewpoint. We venture the opinion that this extravagant (?) farmer got more pleasure out of his home, which grew in beauty with every passing year, than his economical neighbor did in consulting his bank book with its growing cash balance. We know that the pleasure of his family in their attractive surroundings repaid that \$100 many times over. That man started with his steading in the "bare" class. A couple of years' growth brought him to the fair class. He now lives in one of those rare oases of beauty, a tree-embowered and vine-clad county home.

Cooperative Testimony

WE started our association, the Norfolk County Fruit Growers' Association over eight years ago with 16 members. Last year we had 400 members. During the past eight years we have sold \$600,000 worth of fruit, including considerable to the farmers' association of the west.—Jos. Gilbertson, Norfolk Co., Ont.

Education is now leading our farmers to look on cooperation much more sympathetically than ever before. We intend to give a square deal, and we want one in return. We do not want to antagonize any legitimate business man who is making a normal profit and giving good service in return, but we do not see why men who handle our products require a return of 50 per cent. for so doing. We do not wish to see middlemen become millionaires at our expense.—John Pritchard.

Aspects of

How Grades Affect Costs
 STEEP inclines are of any type of soil, but only higher grades are also higher for a steep grade—terrace work can be done on the entire road. For example, a force equal weight, he can draw pounds on a level grade the same force exerted, he can draw pounds continuously cent. grade, and 750 per cent. grade; load is limited over on which the grade is summed that a 1,300-pound draw 8,000 pounds over road, and that under tons he can draw on of 5,000 pounds on a grade which more than crete road.

Many attempts have fixed the load a horse ordinary wagon over



faces. The Department of the United States estimated weights which showed that on a muddy amounts vary from 700 for a smooth, dry surface vary from 1,000 to 2,000 gravel roads, amounting to 600 to 1,500 pounds roads, amounting to 1,000 pounds. These that if the speed of travel a horse will haul on a three to five times a mile per day as on earth roads.—If roads with easy grades, haulage at a low cost. If roads and grades can overcome tonnage costs will increase.

Financing Road

J. P. C., Hastings
 AM a good road. I last all the roads. However, always give with other good roads have a few ideas of how good roads should be. After ventilating them of my neighbors I held in which to experiment in this letter.

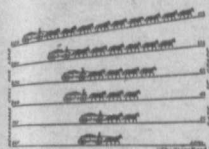
Dairy
 I would lay down a proposal that those who roads should be the them. This is a principle to which I hold object. If my readers in mind they will be with the idea that a Cities, I believe that good roads than do triets through which roads are commercial city, and every improvement means a greater the cities through in

Aspects of the Good Roads Problem

How Grades Affect Haulage Costs?

STEEP inclines on any section of any type of road represent not only higher cost of maintenance, but also higher cost of haulage, for a steep grade tends to limit the load which can be hauled over the entire road. For example, if a horse exerts a force equal to one-tenth his weight, he can draw a load of 2,000 pounds on a level earth road. With the same force exerted against the collar, he can draw about 1,000 pounds continuously on a five per cent. grade, and 750 pounds on a 10 per cent. grade; consequently the load is limited over the entire road on which the grade exists. It is assumed that a 2,000-pound horse will draw 2,000 pounds over a level earth road, and that under the same conditions he can draw continuously a load of 5,000 pounds on a level macadam road, and more than that on a concrete road.

Many attempts have been made to fit the load a horse can draw in an ordinary wagon over level road sur-



faces. The Department of Agriculture of the United States has determined weights which are reliable, and show that on a muddy earth road amounts vary from 700 to 800 pounds; for a smooth, dry earth road, amounts vary from 1,000 to 2,000 pounds; on gravel roads, amounts vary from 1,000 to 2,000 pounds; on macadam roads, amounts vary from 2,000 to 3,000 pounds. These figures show that if the speed of travel is the same a horse will haul on a macadam road three to five times as many tons a mile per day as on moderately good earth roads. If roads are level and with easy grades, hauling will be done at a low cost. If roads are fairly level, and grades gain over five per cent, tonnage costs will increase rapidly.

Financing Road Construction

J. P. C., Hastings Co., Ont.

I AM a good road enthusiast first, last and all the time. I do not, however, always get along amicably with other good road enthusiasts. I have a few ideas of my own on just how good roads should be paid for. After ventilating them for the benefit of my neighbors I now seek a wider field in which to express my sentiments in this letter to Farm and Dairy.

I would lay down as a basic principle that those who benefit by good roads should be the ones to pay for them. This is a principle of common justice to which I believe no one can object. If my readers will keep this in mind they will be more sympathetic with the ideas that are to follow.

Cities I believe benefit more by good roads than do the country districts through which they pass. Public roads are commercial feeders to the city, and every improvement on these roads means a greater prosperity to the cities through increased agricul-

tural production and greater stimulus to all industries. Road building increases the output of manufacturing concerns, especially those who deal in road making machinery and automobiles. Merchants will testify that good country roads draw greater country trade. The inevitable effect of a string of good roads radiating out from a city through the surrounding country is an increase in land values in that city. No one conversant with conditions would care to deny this statement. Hence I claim that towns and cities should contribute largely to the cost of constructing rural highways and that they should raise this revenue by a tax on the land values which benefit by the improved highways.

Rural Road Benefits

Who in the country benefits by good roads? I have been telling my neighbors that it is those who own the land. My assertions are not denied because we live on an excellent macadam roadway such as are quite common in this part of our county, and we all know that our farms are worth at least \$10 to \$15 an acre more than if the roads were mud beds during several months of the year. I have heard cases of where improved highways have increased land values to the extent of \$30 an acre. This favorable effect on land values will extend back some distance from the main highway, but when we get back a few concessions the improved road has practically no influence on land values. Hence I claim that the rural contribution to good roads should be levied on the land values of the farms that benefit in proportion to the degree that they do benefit. I have been told that in the cities it is quite a common practice to assess the property fronting on the street to be improved for the whole cost of the improvements and that the justice of this system is never questioned because the property adjoining always increased in value to a greater extent than the cost to improve it.

Double Taxation

The country merchant is another favorite character with those who have opposed my ideas in our Farmers' Club. I always reply here by stating that you can't tax a merchant's business because he simply adds the tax to the cost of the groceries, and we pay the tax in the long run. Have I made my point clear — that roads should be constructed by a tax on the value of the land affected by the roads?

Why George Chopped

WHAT'S the idea, George?" inquired Mr. Washington.

"Why do you chop down this cherry tree? Have you anything against cherry trees?"

"No, sir."

"May be you are in favor of deforestation?"

"No, sir."

"Doing this for a moving picture concern?"

"By no means."

"Then why chop down a tree?"

"I just thought of going on the stump," replied the future father of his country, and then Mr. Washington realized that George was a born statesman.—Kansas City Journal.

A ton of manure on the land is worth two in the stable; Spread yours in the fields as soon as you're able.—Exchange.



DE LAVAL

Cream Separators are not the mail order or farm implement kind

EVERY prospective buyer, as well as every user of an inferior cream separator, should always keep in mind that there is a very decided difference between the De Laval and either the so-called "mail-order" or agricultural implement kinds of cream separators.

DE LAVAL Cream Separators may cost a little more than other separators to begin with, but they save this slight difference as a rule the very first month, and go on saving it every month thereafter, while they last from ten to twenty years longer than other machines.

The differences are self-evident

THE differences between De Laval and other separators are not difficult to see or understand, and no one needs to be an expert to appreciate them. A De Laval catalog to be had for the asking makes them clear, and a De Laval machine itself, placed side by side with any other, does so better still.

EVERY De Laval local agent is glad to afford such an opportunity for comparison without cost or obligation to buy. If you don't know the nearest De Laval agent simply address the nearest office of the Company as below.

DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole distributors in Canada of the famous De Laval Cream Separators and Alpha Gas Engines. Manufacturers of Ideal Green Silos. Catalogues of any of our lines mailed upon request. MONTREAL PETERBORO WINNIPEG VANCOUVER 30,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

PEERLESS PERFECTION

Horse High — Bull Strong — Pig Tight

It's made right—from high grade material. In the construction of our PERLESS cast-iron horse and bull wheels, every detail of this process imparting are removed from the metal, then the finished cast-iron wheel is placed in the lathe, then the final touch of the hand comes for the final setting of the wheel. Because it is cast-iron and you machine, that's the reason you get every wheel, hand made to your order.

THE HAWFIELD-HORSE WHEEL PERLESS COMPANY, Ltd.
Windsor, Ont. Hamilton, Ont.



THE finest of all fine arts is the art of doing good, and yet it is the least cultivated.—*Talmage.*

When to Lock the Stable

By HOMER CROY

Copyrighted 1914, Babbs-Merrill Company

(Continued from last week)

THE kitchen porch was as methodically and carefully arranged as an office: the washing-machine with its wringer, the screws carefully loosened so that the rubber cylinders would not meet and flatten during the six idle days, was backed carefully into the corner; a broom stood on its handle that the straws might not flatten and on a nail in the wall, carefully protected from the weatherboarding, by pale oiled cloth so that the drippings would not show, hung a shining dishtpan. Not a spot, not a speck could give evidence against the mistress of this house.

Clem tugged at the white button on the screen door. Here and there a damp spot still spotted the freshly mopped kitchen floor and the odor of stove blacking still hung heavy on the air.

"Hilda, Hilda," called Clem, "see what I've got!"

"Be careful of your feet," came a muffled voice from the pantry. "Don't track everything up. I might know you'd be gettin' back just as I got all the work finished."

Clem paused in the doorway; on her knees, her outer skirt folded up and caught around her hips, a cake of scouring soap in one hand and a brush in the other, Hilda was making a mirror of the pantry floor.

With Hilda cleanliness was more than next to godliness, for who could hope to be godly without first being cleanly? A spot on the table-cloth made her lose her appetite and a speck on her Sunday alpaca made her positively ill. Her prodigal boss was that she was always prepared for company. There made no difference how unexpectedly they came she never had to scurry over the house shutting doors, tossing shoes into corners and pushing things under the bed.

"I got a surprise for you, Hilda," keeping his coat pulled over the mar-moset.

"No, you ain't—you're just as late as ever. There ain't a woman in Curryville that keeps her house in half as good order as I do—you can't put your fingers on top of a single door in this house and find dust—and you ain't here a minute more than you have to be to enjoy it. Just this day Mrs. Kiggins said to me, 'Miss Pointer, you are the best housekeeper I ever see in my life,' and what do I get for it? Nothing. Three meals a day and having to do the dishes myself. Shut that screen before the house's full of flies. Stand on the edge of that sink till the floor dries. Now, what you got?"

"A—monkey, Hilda," said Clem meekly.

"A monkey!" exclaimed Hilda, coming to her feet with an audible snap in her knees, and waving a hand on each hip. "A monkey!"

"Yes, Hilda. I thought it would be company for you while I had to be down-town."

"Company! A monkey company to me! It takes two monkeys to be company and Clem Pointer, I ain't a monkey. I hate 'em. I hate the sight of 'em."

Clem mounted it on his arm; the little thing wiped its face and turned its head to one side as if cleverly calculating, if it made a dash, how far its freedom might extend. Then suddenly it reached behind its ear and scratched.

"Take it out, take the thing out," wailed Hilda. "They'll drop on the floor."

Clem backed away.

"Don't get into that fly-paper, and be careful of that lamp chimney. Don't drop any of—of them."

"That ain't what you think it is," pleaded Clem. "That's just a habit. I looked it over carefully and it ain't got anything. It would be so amusing to have around on rainy days."

Hilda's arm shot out into a "commanding line, the finger straight in the door."

Clem edged through it slowly. Hilda put the back of her hand up to her mouth in hesitation, started to raise her voice, then checked herself.

Slowly an ellipsis of Clem's face cut into the rectangle of the door, growing until it was an ellipse, his nose pressed against the screen.

"Well, put it in the wood-shed then," said Hilda more kindly and turned back to her brush and soap.

"Might talk about the camp-meeting to-day, Clem?" asked Hilda as her brother came back, her voice softer.

"Yes, people are getting interested. It'll be a big success this year. Can I do anything to help, Hilda?"

"Yes, rub off the checker-board!"

Up went Clem's hand to his nose.

"There, that's better! You might help set the table if you want to right bad."

Clem turned to his duties with more willingness than skill and soon the red cover was spread, the dishes glistening on it.

"I guess we'd better fall to," Hilda

said, bringing out a plate of potato cakes, crisp and brown. They ate in silence until Hilda reached late at her side where a picher of milk was cooling in a pail of water, then resting the pitcher on the edge of the bucket until the last drop had splashed, she poured! Clem a second glass, and without lifting her eyes asked:

"What are you going to call it?"

The way she held on to the last word left no room for doubt as to what was meant by the last word:

"Garibaldi!"

"Why?"

Clem bent over his potato cake for a minute, then answered more as if thinking aloud than replying to a question:

"He was a great man—and—and a hero."

Clem finished and pushed back in his chair. Hilda interpreted the action.

"Now you just stay home to-night and be company for me. I guess they can play checkers down to the Owl one night without you. I can't understand why you want to leave a spick and span home and hang around an old filthy drug store. Man nature is beyond me!"

Clem turned back and silently helped clear off the dishes. He drew down the window shades, lighted the lamp and opened his paper. After she had dried the dishes Hilda drew her chair to the other side of the round, white marble-topped table, with a yellow crack running through it, and took up her Bible. She turned through it until she came to a book-mark that at first looked like a blur of red and blue yarn but, held right side up, spelled in fancy letters, "Love thy Neighbor," and began puzzling over where she had left off. With one elbow on the table she read the Holy Word, but after a time the Bible began sinking over and over, stopping suddenly and coming abruptly back into place, but each time falling a little below its former mark. Finally it dropped into her lap, struggled once or twice to rise and finally lay there peacefully, her broad thumb in the fold. Across the table, Clem's head turned limply sidewise,

the lines in his neck drawn tight, his lips parting to a low rhythmic intake. The paper, slipping farther and farther down his neck, at last worked over his knees and fluttered to the floor.

Suddenly the sharp insistent ringing of a bell broke over them.

Clem leaped to his feet. "It's a fire," he exclaimed.

A runner went clattering by on the sidewalk.

Clem hurried after his hat; Hilda opened the front door and stood in it with the lamp held high, lighting his way. "Don't catch cold, Clem," she warned as he clicked the front gate. "Ain't you'd no heavy lifting!"

After his first look away she came back and set the lamp over the yellow crack. Then she got out a pair of her brother's socks. "Like as not he'll come back wet and I want to change," she said, turning up the lamp and flattening the end of the thread between her teeth.

CHAPTER II.

A GREAT SOCIAL EVENT.

A fire in Curryville was a great social event. Everybody went. You would just see this of missing, with the free parade on circus day, with the clown who was always stumbling over his own feet and falling smack down on his face and coming up and rubbing the ground with his hands, afraid of falling to run to a fire. Rich and poor fought the flames together, working side by side; Judge Woodbridge, who wore the only genuine Panama in town, passing the buckets along to Rick Oddy, who made away with all the horses after they were too old and crippled to work. Give Rick two dollars and with a spade over one shoulder and the halter rope in his free hand he would lead the shambling old horse down the street, its hips sticking up under its hide like two bed-posts with a quilt thro' over them. Down past the ice-house he would lead him, then out of sight around Diedrich Bend. An hour or two later he would come whistling back, a line of clay across the bottom of the spade, heading straight toward Joe's place, the halter swinging empty in his hand.

Where is the fire, Renie?"

"Renie?"

"Renie?"

Renie had turned in the alarm.

Everybody turned in expectancy toward Renie. "I tell you I did some tail running. I bet there ain't another boy in town'd been here yet. I was asleep when he came running into my room and said there was a fire, but I have myself trained so I when I wake up I wake up all over."

"But where is it?" demanded the men in chorus.

"It jumped into my clothes and burnt my lightening and came tearing down to turn in the alarm."

Renie was bound to get the most out of his exalted position.

"You can't make the run with us if you don't hurry up."

"I guess I broke some records. I got out in the middle of the street part way."

Clem put his hand on Renie's shoulder.

"In the old 'Kamp house,' said Renie with the last nibble at the sweets.

(Continued next week)

TO obtain a

of the grande
acter, one sh
the whole of the
him. One can see
lonely, majestic f
with fiery passio
own generation, th
the same cause fo
Thundered forth,
message was: "Fa
vab only; fear Him
will be your safety,
viser, Judge, and
people. All of his
nected with Judah
phesias, however, I
of the actual presen
prosperity; the fort
strengthened; cast
considerable succ
With this arose m
Isiah's duty as a
come forward, gird
haircloth, with the
As Smith says:
"In spite of his
prosperity, Isiah v
laid waste, and Zio
in the vineyard. T
with their ritual wo
of innocent blood w
the weak were opp
bribery and corrup
istration of justice.



Company! A monkey company to me!

The Upward Look

Isaiah

TO obtain a comprehensive idea of the grandeur of Isaiah's character, one should read through the whole of the book named after him. One can see and hear that stern, lonely, majestic figure, denouncing with fiery passion the people of his own generation. As one reads, they realize that if he were here with our own generation, there would be much the same cause for holy incentive.

"Thundered forth, the keynote of his message was: "Fear none but Jehovah only; fear Him, trust Him; He will be your safety." Isaiah was Adviser, Judge, and Prophet of his people. All of his "Vision" was connected with Judah, but in his prophecies, however, he never lost sight of the actual present.

Under Uziah there had been much prosperity; the fortifications had been strengthened; castles had been built; considerable success in war gained. With this arose much evil. It was Isaiah's duty as a public reformer to come forward, girded in coarse, dark haircloth, with the divine message. As Smith says:

"In spite of his country's worldly prosperity, the fortifications had been laid waste, and Zion left as a cottage in the vineyard. They might go on with their ritual worship, but the stain of innocent blood was on their hands; the weak were oppressed; there was bribery and corruption in the administration of justice.

"Heathenism was flooding the land with charmers, with silver and gold, with horses and chariots, with idols. O my people, thy leaders lead thee astray, thy princes oppress; what mean ye that ye grind the faces of my poor?" with Jehovah. Look again at their ladies with their jewels and their headgear, and their fine dresses and their trinkets! Jehovah will take all of it away leaving to them only shame and sackcloth. Yes, Zion shall lose both sons and daughters (so many as they who offend), and bereaved of all shall sit on the bare ground.

"His denunciation of idolatry was prefaced by a vision of the exaltation of the mountain on which Jehovah dwells, along with all others, to become the source of light and moral transformation to all mankind."—I. H. N.

Things to Remember

IN making a flower bed, select those varieties of flowers in which colors will not clash.

Keep the garden free from weeds. Keep a dust mulch over the surface. Pick flowers every day and the plants will keep on blooming.

Protect the earthworms; they enrich and improve the garden soil, ventilate it, and act as miniature plowmen. Protect the lady-bugs; they destroy thousands of plant lice.

Protect the toads; they eat worms and many insects.

Protect the birds; they eat caterpillars and other insects in large quantities. Coax them into your garden by providing bird houses or a shallow pan kept filled with fresh water. The birds will help you. They are your friends.—A. A. F.

House Cleaning Days

With the Household Editor

THE word "housecleaning," at one time, was one of the most distasteful words in the English language. Such a word implied that a sort of cyclone had struck the home, from cellar to garret. All the rooms were upset at once, and papering, painting and whitewashing was the order of the day. And the meals! Well, the men-folk didn't look forward to having any fancy dishes during housecleaning time; in fact, a cold lunch that could be served in a hurry was often all they had to look forward to. During this time of confusion, the family were not in any too pleasant a frame of mind. The men and children disliked this season heartily, and the mothers and grown-up sisters didn't see why those who did not have to help with the housecleaning should raise any objections to the condition of things.

We don't clean house that way nowadays, though; we live in a more enlightened age. None of us are perfect, however, and suggestions passed on from one to another are always acceptable. For even in these days of various house-old improvements and labor-savers, things often crop up to tax the patience of the housewife to the uttermost.

How many of us pause to consider why we clean house anyway? Is it not that we may make life healthier and happier for the members of the home? We often lose sight of why we do things and thus allow our work to become distasteful to us. When we realize the principles of which we are working, our next thought will be

to try to do our housecleaning in the easiest way for ourselves and with the least disturbance possible.

A practical suggestion for the up-to-date homemaker is to consider the annual spring housecleaning as the annual stocktaking instead. It is necessary in every home to go over the household stock and decide where things can be eliminated, and where renovations are needed. If we are very businesslike, we will sit down and estimate the cost of these needed repairs and improvements and then choose between the absolutely necessary things and those that can wait over until some future time.

Of course, it is impossible to lay down hard and fast rules to be followed by all housekeepers at housecleaning time, for everyone has to adjust their work to suit their own circumstances, or as the old proverb reads, "They must cut their pattern according to their goods." Here are a few general principles, however:

Let us try to do just a reasonable amount of work in one day and not rush into housecleaning with the determination to strive with might and main to be finished before our neighbors. "Cook up" in advance so that the meals may not be neglected and yet will not require much preparation.

Let us not be afraid of trying new ways of doing the work and try to get as much pleasure out of it as we possibly can. We should also plan to add some labor-saving devices to our working equipment each year, for as one writer has said, "anything that saves the strength of the homemaker and oils the machinery of home life, should not be looked upon as a luxury."



Let's make a Jelly Roll—

With FIVE ROSES flour.

Its *Strength and Fineness* hold your batter together in the long well-greased pan.

Bakes *evenly*.

Smooth Texture—soft, golden Crumb, spongy, porous, yielding.

No holes, nor lumps to *peck* you.

And when you turn it out on the damp napkin hot and *savory*, and you spread the under side with "jell"—

It doesn't get soggy nor crumbly.

Roll it gently, carefully.

Not a crack—not a break.

Perfect Smoothness—a Perfect Roll—Years.

Bake anything, make anything.

Use FIVE ROSES—bread and pastry.

Making *pie*—Baby pie crust—crispy fillings—

tooth some rolls. *6*

FIVE ROSES for anything—*everything*.

Be flourwise.

FIVE ROSES Flour

Not Bleached



Not Blended

WE STILL HAVE A FEW COPIES of Gleason's Veterinary Hand Book and Making the Farm Pay

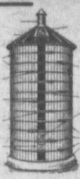
Each of these books retail at more than a dollar.

We will send you one postage paid for one new subscription to

FARM AND DAIRY Peterboro, Ont.

Mention Farm and Dairy when writing

The Model Feed Silo



One of our
30-foot Silos at
College Farm,
Guelph.

Send for cuts and
particulars, stating
size of Silo required.

Farm Silo Co.
Markham, Ont.

OUR HOME CLUB

More on the "Production Campaign"

WE have received an exceedingly interesting letter from "The Doctor's Wife" following up her last letter, and also the letter from "Uncle Ted" on the subject of "Production and Protection." "The Doctor's Wife" strikes the nail on the head so forcibly that we felt we could not do better than devote our Home Club to this week to her letter.

We have several new members to introduce to the club, who have sent in very interesting letters, so we will have these good things to look forward to at our next meeting.

The Canadian Government in War Times

I HAVE just received my Farm and Dairy for April 29th, and as usual I looked for the Home Club first. I was pleased that "Uncle Ted" had been thinking along the same lines as I was and I am glad that he had hit on the "More Production Campaign." I heard a farmer say just a few days ago, that the Government was no good to the farmer at all. The Canadian farmers have and are already producing all that their land will produce. And we must take into consideration this fact also that just as soon as there is a good supply of pork in the country the prices drop to so low a point that the farmer loses heavily. It is just the same in every time of farm production. This farmer said that if he were going out to lecture to farmers under present conditions, he would tell them to grow up and coughing and get higher prices, thus realizing just as much for less work and worry, and less help to hire.

For some years the Government has been sending men out to talk poultry to the farmers and their wives, and telling them what splendid money there was in it, and yet see how nicely they are doing that good man and his wife.

There have been very high prices to pay for grain for some time, but the Government has been in money in poultry, so the farmer has a large flock of hens, and when he has struggled along, feeding clear cash to his hens, for it really amounts to that by the time he counts the actual cost, then he has had a few eggs for the winter market, and the commission man that just buys and sells them, has more actual profit than the producer of these eggs. Then just as soon as the American eggs become cheap, what happens? Why our government allows American eggs to be shipped in in car-loads to be sold cheaper than the Canadian eggs.

Let Preachers Practice

I would like to see some of the men who have been preaching poultry and eggs to the farmers and their wives, sell their eggs in March at 17c, a dozen, and pay present prices for grain to feed their flocks, and see how quick they will get rich. Of course it is only the farmer who gets hit, and after all, when the government gives five dollars to railroads for every one dollar they give to the farmer, why should the farmer ever believe that the government ever intends to do what is of interest or benefit to the farmer.

Then the government says to the farmer: "Raise all the horses you can," and of course the farmer innocently goes at it to increase the horse power, and when he has two or three horses to sell, as most of them have this year (so I have been told) then what happens again? Instead of being able to sell the extra horses, and also the brains on a score of originality. This is it: "We scour the foreign yolk."

that he has no use for at a high cost. Why? Because our government stands directly in the way of the British Empire, and we are not allowed them to buy what horses the farmers do not need, and are anxious to sell. Why is this? I presume that the government has paid dear for some horses that were supposed to be for military purposes, but which I think will be used in book binding, etc., and they want to make sure there are enough good horses at a very low cost to send out with the third contingent.

If our government is going to do the farmer any good, let them protect them as they do the manufacturers of farm machinery, automobiles, and also the woolen industry. It is a disgrace to our government that farm machinery made in Toronto, can be bought in England by the farmers there, just as cheap as the Canadian farmer can buy it in Toronto, and in the case of autos, there is anywhere from \$500 to \$600 duty on an American-made car, and as usual. Of course this helps the manufacturers of Canadian cars to keep their prices high. Why not place just such duty on eggs, butter, and all farm products? do not wonder at rural depopulation. I am surprised that there are as many men on the farms to-day as there are.

We have heard it said that the reason there were not more farmers in the government was that there were not enough clever men among the farmers to run a government properly. Surely any man with ordinary thinking capacity could not be done better or more frequently than the men who are there at present.

A Suffragist Don't

Why are farmers' wives (already overworked) good enough to spend days and days making Red Cross supplies and helping to clothe the poor and clothe the unemployed of our cities, when our government is wasting millions of dollars by paying it to professors who are being changed to wool over the eyes of the committees who handle the contracts. Our Canadian women have won great prizes from the government for their help in war time, and then when Canadian women ask that same government for the franchise, they are told that they must go home and attend to domestic duties, and not be in the cradle; and that when they think women capable of voting they will consider the matter seriously, and report.

I say with all earnestness, that if women are good enough to be the wives of such dear good men, and the mothers of the future, they are at least capable of judging of what is right and wrong for their children to face when they leave home for school or business. Why, then, do the government of officers, and if it is possible to find enough honest men to run it, place them there by the honest hard working vote of the farmer? "The Doctor's Wife."

Visiting London

TWO Highlanders in London for the first time were great admirers of the heavy street traffic. While they were standing awestruck on the pavement a water cart passed spraying the dusty air with its horn. "They, my well, yelled Donald, running after the cart, 'ye're losin' a yer writer."

"'C me back, ye auld fule," called his companion, "Dae ye no ken that, 'ye kae the bairns frae sittin' on the back o' the cairt'."

Original Advertising

THE war has led to some good advertisements, but the following which is displayed in the window of an English egg merchant, will warrant some brains on a score of originality. This is it: "We scour the foreign yolk."

B High-Grade Flour

Direct From the Mill

MAKE the best bread and pastry you've ever tasted. Prices of flour and feeds are listed below. Orders may be assorted as desired. On shipments up to 5 bags buyer pays freight charges. On shipments over 5 bags we will prepay freight to any station in Ontario, east of Sudbury and south of North Bay. West of Sudbury and New Ontario add 15 cents per bag. Prices are subject to market changes. Cash with orders.



Cream of the West Flour

the hard wheat flour that is guaranteed for bread

GUARANTEED FLOURS	Per 90-lb. bag	Price
Cream of the West (for bread)	\$4.05
Toronto's Pride (for bread)	3.86
Queen City (intended for all purposes)	3.78
Monarch (makes delicious pastry)	3.70
FEED FLOURS	Per 90-lb. bag	Price
Tower	2.90
CERIALS	Per 10-lb. bag	Price
Cream of the West Wheatlets (per 6-lb. bag)35
Norwegian Rolled Oats (per 90-lb. bag)	3.40
Family Cornmeal (per 90-lb. bag)	2.50
FEEDS	Per 100-lb. bag	Price
Bullrush Bran	\$1.50
Bullrush Middlings	1.50
Extra White Middlings	1.50
Whole Manitoba Oats	2.15
Crushed Oats	1.85
Chopped Oats	2.15
Whole Corn	1.85
Cracked Corn	1.85
Feed Cornmeal	1.85
Barley Meal	1.90
Geneva Feed (Crushed Corn, Oats and Barley)	1.90
Oil Cake Meal (old process)	2.45
Cotton Seed Meal	1.95

These prices are not guaranteed for any length of time owing to the unsettled condition of the market.

Every bag of Flour ordered entitles purchaser to two bags of bran or middlings at 10 cents per bag less than the prices given above. Special prices to farmers' clubs and others buying in carload lots.

You can get a free copy of "Ye Old Miller's Household Book" (formerly Dominion Cook Book), if you buy three bags of flour. This useful book contains 1,000 carefully selected recipes and a large medical department. If you already have the former edition (Dominion Cook Book), you may select one book from the following list each time you order from us not less than three bags of flour. If you buy six bags you get two books, and so on. Enclose 10 cents for each book to pay for postage. Remember at least three bags must be flour.

BOOKS

Helmi's Babes	Beautiful Joe
Lorna Doone	Little Women and Good Wives
Mill on the Floor	The Story of an African Farm
Tom Brown's School Days	Black Beans
Adam Bede	Quo Vadis
David Harum	The Three Musketeers
Emmaus Abroad	The Nightingale
Robson of Sunbury Park	Mr. Potter of Texas
The Lilies Sunbonnet	Joe
The Scarlet Pimpernel	A Welsh Steiger

The Campbell Flour Mills Company Limited
(West) Toronto

A Farm in roven Kitchener

Mrs. J. Beemish, 176
WE have recently
vision to our kitchen
this department of
careful investment. It
this morning when
biscuits, that I might
of the good things
labor-saver. So here I
this letter post haste
use of the things
kind with the things
either coal or wood
you have seen these
used in various maga
I understand that
the market very long
just what a difference
would make in my w
are given to our fami
use an oven a great de
continual stooping to
wearisome. And not o
selieve on an average
a week I would burn
wrist when putting a
or when reaching to
more a pie.

There is a glass door
which is a great convenience
laking a cake in my oven
open the door a great
see how things were p
though I have always
letting a draught in to
apt to cause it to fall
to become accurate
and only open it when
turned. The thermome
useful in gauging the
has to become accurate
solve before they can m
properly without a therm

There is a warning
above the oven, which
useful in keeping the
is a handy place for
preparing a meal. On
close, above the therm

1854

Ye Old

Sugar Loaf

Can

The

Loaf

the f

"Red

ated"

the f

gran

of 19

intro

dian

new

of m

Get

2-lb.

A Farm Improvement for the Kitchen

Mrs. J. Bennish, Welland Co., Ont.

WE have recently made an addition to our kitchen equipment which is proving a very successful investment. It occurred to me this morning when making a pan of biscuits, that I might tell readers of this department of Farm and Dairy some of the good points about this labor-saver. So here I am sending off this letter post haste.

Our purchase was a new range, the kind with the high oven suitable for either coal or wood. Probably some of you have seen these ranges advertised in various magazines, although I understand they have not been on the market very long. I had no idea just what a difference that high oven would make in my work. As there are seven in our family, I, of course, use an oven a great deal. I found the continual stooping to tend oven very wearisome. And not only that, but I believe on an average of three times a week I would burn my fingers or wrists when putting a pan in the oven when reaching to the back to remove a pie.

There is a glass door on our oven which is a great convenience. When baking a cake in my old oven, I would open the door a great many times to see how things were progressing, although I have always been told that letting a draught in on the cake was apt to cause it to fall. Now I can watch the cake through the glass door and only open it when it has to be turned. The thermometer I also find useful in gauging the heat, for one has to become accustomed to a new stove before they can manage an oven properly without a thermometer.

There is a warming closet right above the oven, which proves very useful in keeping things warm and is a handy place to set dishes when preparing a meal. On this warming closet, above the thermometer, is a

cooking chart, which tells just what heat is necessary for various dishes.

When purchasing our new range, the stove dealer emphasized the fact that there were six pot holes. I rather doubted his word, however, as I could only find four on the top of the stove. To my surprise he showed me a pot hole in the warming oven and another in the open proper. These pot holes are directly heated by the fire, and are for use when cooking something from which we do not wish the odors to escape through the house, such as cabbage.

Another new feature about this range is the storage closet for pots and pans; this is in the place of the oven on the ordinary stove. It is also heated and serves as a warming closet.

But my letter is already lengthy, or I might go on enumerating the good points about my new range. If any who read this letter are planning to buy a new range, why not try one like mine? I don't think you will be disappointed. * * *

Twisting Things

TWO correspondents wrote to a country editor desiring to know, respectively, "the best way of assisting twins through the teething" and "how to rid an orchard of grasshoppers."

The editor answered both questions faithfully, but, unfortunately, got the initials mixed, so that the fond father of the teething twins was thunderstruck by the following advice:

"If you are unfortunate enough to be plagued by these unwelcome little pests, the quickest way of settling them is to cover them with straw and set it on fire."

The other man, who was bothered with grasshoppers, was equally amazed to read: "The best method of treatment is to give each a warm bath twice-a-day, and rub their gums with India rubber."



In the Dairy

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



PANSHINE

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

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

Peck, Kerr & McElderry

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

We have only a limited supply of those **Al Quality Heavy Boker Razors**. They are being offered for **One New Subscription to FARM AND DAIRY, Peterboro**

1854

Ye Old Sugar Loaf



1915



1880

Granulated Sugar



Canada's Favorite Sugar for Three Generations

The Redpath "Sugar Loafe" of 1854 was the first cane sugar refined in Canada. "Redpath Granulated" of 1880 was the first Canadian granulated sugar. "Redpath Cartons" of 1912 marked the introduction to Canadian Stores of this new and better way of marketing sugar.

Redpath EXTRA GRANULATED SUGAR

For Sixty Years Redpath Sugar has consistently led in purity, in quality, and in the appreciation of the thousands who use it. It is the product of a thoroughly modern refinery, operated by men of skill and experience, whose one aim is sugar perfection.

Get **Redpath** Sugar in Original Packages—it's well worth while!

2-lb. and 5-lb. Sealed Cartons. 10, 20, 50 and 100 lb. Cloth Bags.

CANADA SUGAR REFINING CO., LIMITED, MONTREAL.



MEALS ARE NEVER LATE

WHEN you have a NEW PERFECTION Oil Cookstove to help you with the Cooking.

It lights at the touch of a match—like gas, adjusts instantly, high or low, by merely raising or lowering the wick. It means "gas stove comfort with kerosene oil." NEW PERFECTION Oil Cookstoves are made in 1, 2, 3, and 4 burner sizes; if your dealer cannot supply you, write us direct.

ROYALITE OIL GIVES BEST RESULTS

NEW PERFECTION
OIL COOK STOVES

"NOW SERVING 2,000,000 HOMES"

THE IMPERIAL OIL COMPANY
Limited
BRANCHES IN ALL CITIES

Made in



Canada

Suggestions for Warm Weather

Farm and Dairy patterns shown in these columns are especially prepared for Farm and Dairy's Women Folk. They can be relied upon to be the latest models that include the most modern features of the fashion patterns. When sending Farm and Dairy your order please be careful to state bust or waist measure for adults, age for children and the number of patterns desired. Price of all patterns is One Dollar; for each address all orders to Pattern Dept., Farm and Dairy, Estabrook, Ont.



WEATHER such as we have been favored with recently, makes us feel that we have suddenly been ushered into summer, and in all probability the majority of us are not ready for summer, as far as summer wearing apparel is concerned. We feel the need of dresses of lighter material, and the children going to school can commence wearing wash dresses at any time.

Now that spring fashions are quite well established, there are no very noticeable changes in the styles. While many of the new waists show the high collar or military finish, as the warm weather sets in the open neck will be more preferable. In some models the neck is so arranged that it may be worn either closed or open. Yokes are a very prominent feature on the skirts. Sometimes they form the whole upper part of the skirt and in other designs are only on the front or back, or probably just on the sides.

1297—Girl's Dress: A pretty design for a wash dress for the small girl is here shown. It has a style all its own in the rolling collar and suspender belt effect and would make up nicely in any of the flowered materials. Four sizes: 6, 8, 10 and 12 years.

998—Girl's Dress With or Without Tunic: Another pretty style and one that is apt to meet with probably more favor than No. 1297 is shown in the illustration herewith. If preferred the tunic may be omitted, although by using it, the plain effect is taken away from the skirt. Contrasting material for collar, cuffs and belt will form a nice trimming. Four sizes: 8, 10, 12 and 14 years.

1298—Boy's Blouse Suit: We have not forgotten mother's little man in this week's designs, and herewith is shown a

neat suit for the warm weather. Kimono trousers are used here, instead of bloomers, which are so commonly shown. Four sizes: 6, 8, 10 and 12 years.

1297—Lady's Bib Apron: A style of apron particularly suitable to white lawn or muslin is the design herewith. The bib forms a protection for the blouse and the apron is not so warm as one that comes up around the armhole. Cut in three sizes: Small, medium and large.

998—Lady's Kimono: There are many occasions during the warm summer weather when a kimono does much to add to one's comfort. One of the prettiest styles we have shown for some time is illustrated herewith. The Empire effect is booming to the majority of figures, and the kimono could be fashioned from any of the pretty flowered crepes now so popular for negligees. Three sizes: small, medium and large.

1301—Lady's Dress: Long sleeves, high neck and wide skirt are the style features of this costume. If one prefers, the low neck, as shown in the small view, may be used. This skirt has the yoke effect, going part way round the skirt. Six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure.

1287—Lady's House Dress: Simplicity is the keynote in our house dress models. This design is no exception to this rule. The blouse has the long shoulder effect, with either long or short sleeves, and the skirt may be cut in either three or four pieces. The low, flat collar is most suitable for everyday wear. Six sizes: 34 to 44 inches bust measure.

When selecting your summer wearing apparel, don't forget to make use of our catalogue, which contains a large selection of styles of ladies', misses' and children's garments. An extra 50c enclosed in your order will take this catalogue to your home.



Keep a
Kodak Record

THE photograph of the young orchard—just as it starts the summer growth—then another photograph, say in October when the growth is ended and the wood is hardening, will make an interesting and valuable record. Such pictures become a real asset when used to show comparative growths of trees or crops that have had different treatments in fertilizers or in cultivation.

And picture making is very simple by the Kodak method, and less expensive than you think. Ask your dealer or write us for our new booklet, "The Kodak on the Farm."

CANADIAN KODAK CO., LIMITED, 588 King St. W., TORONTO

Why Plant

THEY add value to the hot sun. They protect the streets and the coast. They cool the air and radiate warmth in winter. They furnish homes for birds that help in the fight against injurious insects. They furnish homes for mammals that are useful and clothing. They help man in the fight for better sanitation. They furnish him with home and fuel for his

Pruning S

By R. A. M. THE task of pruning the home is more than attended to get the shrubs geometrical shapes and as freely as they did at wood accumulates and, and when it is at some pruning must found almost impossi

HOTEL



Why Plant Trees?

THEY add value to the property. They protect the pavement from the hot sun. They add beauty and comfort to the streets and the country home. They cool the air in summer and radiate warmth in winter. They furnish homes for thousands of birds that help man in his fight against iniquitous insects. They furnish homes for many animals that are useful to man for food and clothing. They help man in his fight for better sanitation. They furnish lumber for man's home and fuel for his fire.

Pruning Shrubs

By R. A. McGinty

THE task of pruning shrubs around the home is more often neglected than attended to. Following neglect the shrubs grow into unsymmetrical shapes and cease to flower as freely as they did at first. Much dead wood accumulates among the branches, and when it is at last decided that some pruning must be done, it is found almost impossible to do a satis-

factory job. The best way to avoid such a situation is to prune the shrubs some every year. It takes very little time and by cutting out a little wood every year, one is able to keep the shrubs in good shape and can avoid mutilating them by a severe pruning.

Shrubs which bloom early in the spring, such as bridal-wreath, lilacs and snowballs, should be pruned soon after they have stopped blooming. Pruning at this time stimulates the growth of new wood that season which produces flowers the next spring. Those which flower in summer or fall, however, such as hydrangea, coral-berry, and mock orange, should be pruned in the fall or spring while dormant. A few other shrubs, among them the barberries, require no pruning scarcely, except to remove the dead branches, or some of those where the bush is too dense.

In pruning shrubs, one of the main things to keep in mind is that some of the old wood should be cut out each year, and some of the young shoots allowed to develop, in order to renew the shrub. Cut out all dead branches, and do not allow the shrubs to become too dense.

**Anker-Holth
Cream Separator**

MADE IN CANADA

Ten reasons why you should own an Anker-Holth Cream Separator:

1. Because the bowl is absolutely self-balancing.
2. Because all bearings are self-oiling.
3. Because the discs do not have to be put in numerical order.
4. Because it is the easiest to clean.
5. Because a woman or a child can run it.
6. Because all parts of the bowl are interchangeable.
7. Because it contains a less number of different parts than any other.
8. Because it can skim colder milk than any other.
9. Because it is self-draining. No danger of freezing.
10. Because the bowl is located above the oil chamber, therefore no possible chance of the oil mixing with milk.

If interested, write us to-day

PERKINS WINDMILL & ENGINE CO., 90 KING ST. LONDON, ONT.

Write for THIS BOOK!

YOU will find in it the solution of your roofing problem. Every page is filled with useful and valuable hints on the best and most economical method of building for the adequate protection of your increased crops.

**OSHAWA
Steel Shingles**

are made from heavily galvanized steel of the best quality obtainable. They are GUARANTEED to be wind-proof, water-proof and storm-proof, on any roof having a fall of four inches, or more, to the foot. The size is 16x20 inches, and 45 shingles will cover a roofer's square of 100 sq. ft. In every box of Oshawa Shingles will be found an instruction sheet, giving proper directions for applying.

These shingles lock securely on 4 sides, making a roof that is absolutely water-tight and proof against the elements.

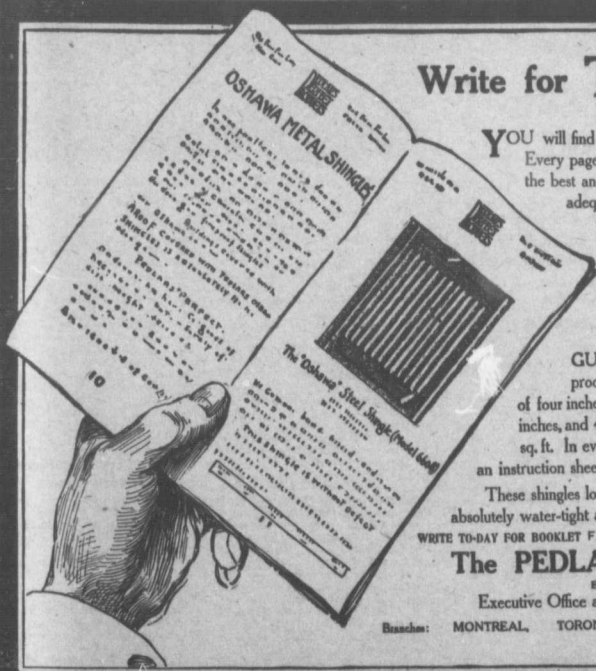
WRITE TO-DAY FOR BOOKLET F. D. ADDRESS BRANCH NEAREST YOU.

The PEDLAR PEOPLE, Limited

ESTABLISHED 1901

Executive Office and Factories: OSHAWA, ONT.

Branches: MONTREAL, TORONTO, OTTAWA, LONDON, WINNIPEG



HOTEL CARLS-RITE Opposite the Union Station / **TORONTO** | American Plan - 32.50 per day
 "The House of Comfort" This Hotel is the Headquarters for the Dairy Farmers, Horse Breeders and Stockmen from all over Canada

MORE MONEY FROM YOUR COWS

By shipping your Cream direct to Canada's Best Creamery. Splendid openings by wide awake men to act as Shipping Agents in Western Ontario Individual shipments paid for daily as received.

SILVERWOODS LIMITED - LONDON, ONTARIO

CREAM

Cheese is high; You hot. Butter is just as high; Bet again; It's safe. Grain foods are very high. Skim-milk will save your grain. Skim-milk will make real calves.

Ship us your cream. We furnish cans and pay express. A post card will bring you further information. Write me.

Belleville Creamery Ltd.

BELLEVILLE, ONT.

WANTED

Our prices have shown a steady advance for Good Quality

CREAM We are prepared to meet ANY competition. You should write us.

Toronto Creamery Co., Ltd. Church St., TORONTO, Ont.

PASTEURIZER FOR SALE

One 300-Gallon Wizard Cream Ripener or Pasteurizer, copper-covered, in good condition. Will sell at bargain. Apply Box No. 452, Farm and Dairy, Peterboro, Ont.

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

BOOKS at lowest prices you can get through our Farm and Dairy, including all the latest books on agricultural subjects. Write for our Book Catalogue.

EGGS, BUTTER LIVE POULTRY

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

Egg Cases and Poultry Coops supplied free.

The DAVIES Co., Ltd. Established 1854 TORONTO, ONT.



The Improved Massey-Harris Cream Separator is sure to Please You

Recent Improvements in this Separator mark a distinct advance in Separator Construction. We just wish to mention two of the Special Features and refer you to our new Separator Catalogue for full description.

NICKEL-PLATED BOWL AND PARTS

The Bowl and all its parts are Nickel-Plated over copper - making these parts easy to clean and affording effective protection against rust.

SPEED INDICATOR

Each Massey-Harris Separator is equipped with a Reliable Speed Indicator which makes it an easy matter to turn the Crank at the speed which gives the best results.



MASSEY-HARRIS CO., Limited.

Head Office - Toronto, Canada.

Branches at - Montreal, Moncton, Winnipeg, Regina, Saskatoon, Swift Current, Yorkton, Calgary, Edmonton.

— Agencies Everywhere —

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.

About Appearances

"Instructor," Peterboro Co., Ont. THE inside of the creamery or cheese factory is of first importance. It must be clean and sanitary, if the yard must be left a junk heap and the factory exterior weather beaten and bare. In our factories is handled the most sensitive of all food products, and in keeping that product clean, the maker has a big responsibility and many of them find that it takes all their time. There are few, however, who must not equate in a few minutes here and there to improve the outside appearance of their factories. I find that there is little community pride in our cheese factory.

of the so-called government controlled creameries. Considerable discussion was given to the subject of buying supplies cooperatively, and the proposition of one firm was accepted, whereby butter packages will be supplied during the coming year at a saving sufficient to amply repay all expense so far incurred by the organization. A committee was appointed to confer with the Minister of Agriculture on the question of grading cream and butter. At a banquet in the evening, addresses were given by Vice-President K. W. Anderson on "Butter," J. A. Calder on "Ice Cream," F. B. Palmer on "Production of the Raw Products," Milk and Cream," and Prof. K. S. McKay of the University of Saskatchewan on "Quality."

Combined Milk and Ice House

Selmdon we see a more substantial and pleasing structure on a dairy farm than the combined milk and ice house here illustrated. This building was erected in 1913 at Willowbourne Farm, near

It is anticipated to be sold in the spring when it will be bought and from all appearances strong demand for these lots dropped slightly. The following are quoted: Ont., C.W., No. 103; feed, 60¢; corn, 22¢; 50¢; corn, 18¢ to 20¢; 25¢; 26¢; buckwheat, 20¢ to 21¢; 25¢; making, 20¢ to 25¢. Montreal quotes: Ontario No. 1, 65¢; No. 2, 60¢; No. 3, 55¢; No. 4, 50¢; No. 5, 45¢; No. 6, 40¢.

MILL FEED Quotations on mill feed varied from last week. No. 1, 27¢ shorts, 25¢ to 26¢; No. 2, 24¢; No. 3, 22¢; No. 4, 20¢; No. 5, 18¢; No. 6, 16¢; No. 7, 14¢; No. 8, 12¢; No. 9, 10¢; No. 10, 8¢; No. 11, 6¢; No. 12, 4¢; No. 13, 2¢; No. 14, 1¢; No. 15, 1¢; No. 16, 1¢; No. 17, 1¢; No. 18, 1¢; No. 19, 1¢; No. 20, 1¢.

STRAWS AND HAY The situation locally is somewhat unsettled. No. 1, 27¢; No. 2, 25¢; No. 3, 23¢; No. 4, 21¢; No. 5, 19¢; No. 6, 17¢; No. 7, 15¢; No. 8, 13¢; No. 9, 11¢; No. 10, 9¢; No. 11, 7¢; No. 12, 5¢; No. 13, 3¢; No. 14, 1¢; No. 15, 1¢; No. 16, 1¢; No. 17, 1¢; No. 18, 1¢; No. 19, 1¢; No. 20, 1¢.

HIDES AND HIDE SKINS The quality of hides varies in the strong market. Hides quoted recently have been: No. 1, 25¢; No. 2, 23¢; No. 3, 21¢; No. 4, 19¢; No. 5, 17¢; No. 6, 15¢; No. 7, 13¢; No. 8, 11¢; No. 9, 9¢; No. 10, 7¢; No. 11, 5¢; No. 12, 3¢; No. 13, 1¢; No. 14, 1¢; No. 15, 1¢; No. 16, 1¢; No. 17, 1¢; No. 18, 1¢; No. 19, 1¢; No. 20, 1¢.

HOUSEKEEPERS' ESCURSIONS TO WESTERN CANADA Particular attention is directed to the remarkably low Round Trip Fares in connection with Housekeepers' Excursions to Western Canada via the Canadian Pacific Railway.

HOUSEKEEPERS' ESCURSIONS TO WESTERN CANADA Particular attention is directed to the remarkably low Round Trip Fares in connection with Housekeepers' Excursions to Western Canada via the Canadian Pacific Railway.

HOUSEKEEPERS' ESCURSIONS TO WESTERN CANADA Particular attention is directed to the remarkably low Round Trip Fares in connection with Housekeepers' Excursions to Western Canada via the Canadian Pacific Railway.

HOUSEKEEPERS' ESCURSIONS TO WESTERN CANADA Particular attention is directed to the remarkably low Round Trip Fares in connection with Housekeepers' Excursions to Western Canada via the Canadian Pacific Railway.

HOUSEKEEPERS' ESCURSIONS TO WESTERN CANADA Particular attention is directed to the remarkably low Round Trip Fares in connection with Housekeepers' Excursions to Western Canada via the Canadian Pacific Railway.

HOUSEKEEPERS' ESCURSIONS TO WESTERN CANADA Particular attention is directed to the remarkably low Round Trip Fares in connection with Housekeepers' Excursions to Western Canada via the Canadian Pacific Railway.

HOUSEKEEPERS' ESCURSIONS TO WESTERN CANADA Particular attention is directed to the remarkably low Round Trip Fares in connection with Housekeepers' Excursions to Western Canada via the Canadian Pacific Railway.

HOUSEKEEPERS' ESCURSIONS TO WESTERN CANADA Particular attention is directed to the remarkably low Round Trip Fares in connection with Housekeepers' Excursions to Western Canada via the Canadian Pacific Railway.

HOUSEKEEPERS' ESCURSIONS TO WESTERN CANADA Particular attention is directed to the remarkably low Round Trip Fares in connection with Housekeepers' Excursions to Western Canada via the Canadian Pacific Railway.

MARKET

TOBACCO, May 4.—Warm, dry weather is causing the market to a much earlier opening and a more active position on ground in Ontario, which fell towards the close of the week. The market is making a good crop this year. The United States authorities are making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

WHEAT It is now reported that the crop in last year was over 250,000 bushels. The market is making a good crop in the United States. The market is making a good crop in the United States.

CATTLE The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

PORK The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

LIVE STOCK The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

BUTTER The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

CHEESE The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

EGGS The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

POULTRY The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

GRAIN The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

COMMODITIES The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

MARKET The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

MARKET The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

MARKET The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

MARKET The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

MARKET The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

MARKET The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

MARKET The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

MARKET The market is making a good crop in the United States. The market is making a good crop in the United States. The market is making a good crop in the United States.

MARKET REVIEW AND FORECAST

TORONTO, May 6.—With the continued warm, dry weather of the previous week, the market has been making up to a much earlier completion than usual. The market has been very active in the north and in the west, and is now ground in Ontario. The warm showers, which fell toward the end of the week, proved very valuable in promoting growth, and unless a cold period sets in this week, prospects are very favorable for a good crop this year. The winter wheat crop in the United States is reported as good, although authorities claim that the frost in May is making its appearance. The market on wheat dropped slightly during the week, also on coarse grains. Live stock have strengthened and were firm at the end of the week.

WHEAT.
It is now reported that the Russian crop of last year was over-estimated, and it is believed that even at the opening of the Durumales before harvest, the shipment of breadstuffs would not materially affect quotations at least in the higher grades. The outlook seems optimistic. Quotations: No. 1 Southern, \$1.70; No. 2, \$1.60; No. 3, \$1.50; Ontario, \$1.46 to \$1.57.

COARSE GRAINS.
It is anticipated that more oats and barley will be sown in Eastern Canada this year than in any other year, and from all appearances there will be a strong demand for them. Quotations on the market are as follows: Oats, C.W. No. 2, 69¢; No. 3, 67¢; corn, 87¢ to 88¢; peas, 31¢ to 32¢; buckwheat, 80¢ to 82¢; rye, 31¢ to 32¢; maiting barley, 56¢ to 58¢.
MONTECAL QUESTIONS. Oats, No. 4, 67¢; No. 5, 65¢; corn, 85¢ to 86¢; barley, maiting, 56¢ to 58¢.

MILL FEEDS.
Quotations on mill feeds remain unchanged from last week: Bran, 52¢ to 57¢; shorts, 52¢ to 53¢; middlings, 53¢ to 54¢; feed flour, 52¢ to 53¢; Montreal trip is quoted 52¢; shorts, 52¢; middlings, 53¢ to 54¢; meal, 53¢ to 55¢.

CATTLE.
The situation locally is unchanged. Quotations here: Choice, \$17 to \$17.50; cattle bay, \$14 to \$14.50; beef steers, \$7 to \$8. On the Montreal market a quantity of the bay is a market feature. Dealers claim that \$25 can easily be had for a fresh cow, and \$30 for a cow, and a cow is quoted \$19 to \$23.50 and No. 2, \$18 to \$20.

HIDES AND WOOL.
The quality of hides now coming forward is better than in a long time. The market exists here, the price quoted recently have been lower on an average of the past week. Quotations are: Hides, dressed, 140 to 150; part cured, 25 to 30; raw, 20 to 25; sheep, 10 to 15; cow, 10 to 15; part cured, 150 to 200; No. 1 each, horse hides, No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10; sheep, 150 to 200; No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10; horse, half, 350 to 400 a lb. The market is quiet. The new clip is now appearing on the market, but in small quantities: Washed, coarse, 25 to 30; fine, 30 to 35; washed, 25 to 30; unwashed, coarse, 25 to 30; fine, 30 to 35.

HORSES.
The following are quotations on horses: Heavy drafts, young and sound, 1,400 lbs and up, \$775 to \$900; light drafts, young and sound, \$50 to \$60; drivers, \$120 to \$150; farm chunks, \$140 to \$175; serviceable sound, \$70 to \$140; good workers, \$30 and up.

DAIRY PRODUCE.
The tendency of the butter market is to lower levels, and as receipts increase, still lower prices must naturally follow. The market is now showing a marked increase in prices much higher than this time last year. The market is now showing a marked increase in prices much higher than this time last year. The market is now showing a marked increase in prices much higher than this time last year.

WHEAT.
The market is now showing a marked increase in prices much higher than this time last year. The market is now showing a marked increase in prices much higher than this time last year. The market is now showing a marked increase in prices much higher than this time last year.

WHEAT.
The market is now showing a marked increase in prices much higher than this time last year. The market is now showing a marked increase in prices much higher than this time last year. The market is now showing a marked increase in prices much higher than this time last year.

butcher steers, \$6.50 to \$7.75; heifers, \$6.25 to \$7.50; cows, choice, \$4.50 to \$7; common cow, \$4.25 to \$6.50; calves, \$4.50 to \$7; feeders, \$5 to \$7.50; stockers, \$4.50 to \$6; canners and sows, \$5.50 to \$7. Milk cows held firm, \$7.50 to \$10; being \$4.50 for good and \$4 to \$7 for medium. Calves were steady: \$7 to \$10 and from that down to \$4.50. Both sales brought \$1 to each head.
There were not enough small meats to constitute a market, and prices remained at the same level. Yearling lambs, \$10 to \$12.50; heavy to medium, \$7.50 to \$10; culls, \$7 to \$10; spring lambs, \$7 to \$11 each; ewes, light, \$7 to \$8; heavy hinds and bucks, \$7 to \$7; culls, \$3 to \$4.25.
Swine prices continue to edge up, packers quoting this week \$26 to \$28 a country point.

On the Montreal market, receipts of live stock the past week were larger than the week previous except in cattle. Trade was active, however, and the market firm. Cholera steers, \$8; good, \$7.50 down to \$6; butcher cows, \$4 to \$6; bulls, \$4 to \$7. The active demand for calves was the feature of the small meat trade, prices ranging from \$5.50 to \$10 a head, according to size and quality. The demand for spring lambs was also active, \$10 to \$12.50 a cwt. Owing to increased receipts of lambs, where there was an excess of requirements, the market was weaker, with sales of selected lots at \$2.25 to \$2.50, retained at special prices.

THE BROOKVILLE DISTRICT CLUB SALE.
The Brockville and 7th will see two of the strongest sales of pure-bred Holsteins that have ever been held in the Dominion. Both of these are in the Brockville district—the pure male of A. C. Hardy at Avondale Farm and the sale being held by the Brockville District Club breeders.

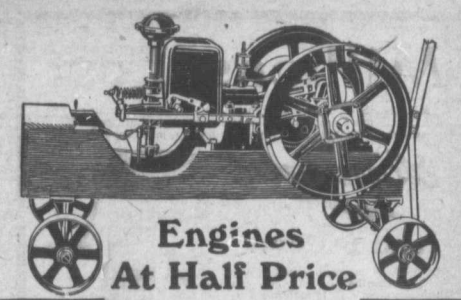
Some idea of the high standard that the Brockville Club is setting in their sales is shown by the fact that practically every animal offered will be backed by a production record or a record of \$100 or \$150 of backing. In these two sales there will therefore be more true animals offered than at any other similar sale in Canada. It is not only records alone in the standard herd, but the individual offering will indeed be worthy of a place in the sale.

Broken Breeds of Ign. will contribute 35 head. Every animal put up by them is guaranteed free from tuberculosis. The actor has never been known in the Ign herd, great many of the offerings are from that famous old sire, Count de Kol. The best of the offerings are from Arvon Brothers' herd, the head of which is McDonald College. Much of the younger stuff will be offered by the present sire, King Yarn.

The herd of G. A. Gilroy, of Glen Burn, will come in head. Most breeders will recall that at the head of this herd is King Fattie Arvon, the son of the well-known King Fustian Arvin. Canada, who heads the A. C. Hardy herd at Avondale.

Mr. Stewart, of Ign. contributes 10 head. They are nearly all females. This herd is in particularly good condition. It is particularly good for all the animals are particularly well developed. At the head of this herd is Waldorf of Koroyle, son of Bag Apple, Koroyle that brought \$800.00 as the dollar sale last winter. It means that this breeding will be of the very best.

Official Records of Holstein Friesian Cows for April 1 to 30, 1915.
1. Marion Koroyle, No. 1428, 57 lb. milk, 60.2 lb. milk, 21.1 lb. fat, 36.9 lb. butter.
2. Molly, May's Beebe De Kol, 1165, 57 lb. milk, 60.2 lb. milk, 21.1 lb. fat, 36.9 lb. butter.
3. Molly, May's Beebe De Kol, 1165, 57 lb. milk, 60.2 lb. milk, 21.1 lb. fat, 36.9 lb. butter.
4. Molly, May's Beebe De Kol, 1165, 57 lb. milk, 60.2 lb. milk, 21.1 lb. fat, 36.9 lb. butter.



Engines At Half Price
1 1/2 H.P., \$39; 2 H.P., \$46.50; 3 H.P., \$68; 5 H.P., \$13.50; 6 H.P., \$66.
Truck, \$60.00 to \$100.00 extra.
DIRECT from PAGE freight PAID
PAGE Engines GUARANTEED "Absolute Satisfaction or Your Money Back." Hundreds in use. Letters from users in every part of Canada praise the PAGE for its Power Economy, Cleanliness, Durability and Convenience. All the best features of high-class engines at less than one-half their cost. Buy your engine DIRECT FROM PAGE and SAVE HALF.
Write for FREE Illustrated Folder, and big PAGES and Special Merchandising Catalogue.
PAGE WIRE FENCE CO., LIMITED
Dept. 5-B, 1157 King St. W., TORONTO

RIDER AGENTS WANTED
everywhere to ride and exhibit a sample pure Hybrid.
Chiclets
We ship on approval to every territory. No stock required. Report and show **10 DAYS TRIAL** to all our customers. Orders handled after using Chiclets to trial.
DO NOT BUY of firms, large or small, who do not exhibit you our latest 1915 illustrated catalogue. The 100 pictures will give you a better idea of our product. Write us in a postal card and we will send you a sample to try. It is all well worth the trouble. Do not wait. Write us now.
HYBROS BROTHERS, Limited
Dept. 4 TORONTO, Canada

Chiclets
REALLY DELICIOUS
THE DAINTY MINT-COVERED CANDY-COATED CHEWING GUM

Improved Yorkshires
Borns and Sows from 7 weeks to 8 months old, sows in pair. Priced reasonable. Write for catalogue.
N. J. DAVIS - WOODSTOCK, ONT.
D. FROBE

Make a Corner Cosy
Collect the Cushion Cover Coupons with every Chiclet Package
MADE IN CANADA

KORNGOLD IMPROVED ENGLISH YORKSHIRES
Young Sows to farrow in April and May. Young Borns and Sows, three months old. Will book orders for younger sires.
F. J. McALPIN, Koroyle Stock Farm, GANANOQUE, ONT.

THE MAPLES HOLSTEIN HERD All closely related to the R.O.P. 2-year-old champion heifer, Duchess Wayne Calamy 2nd—1674 lbs. milk and 946 lbs. butter—93.36 lbs. as a 4-yr.-old 3-1/2 bull calves fit for service offered at present—one-half brother to Duchess and the third from a closely related 20-lb. cow. Could you seek for better backing? They are all splendid chubs. Write or come and look them over. **W.A. BIRCH, 1501 BAY ST., TORONTO.**

ATTENTION HOLSTEIN BREEDERS
RAISE YOUR OWN HERD SIRE AT A NOMINAL COST
The Twynstock Breeder's Syndicate has decided to accept a limited number of approved cows for service to their great and proven sire, King Lyons Henservold, whose 5 cows have produced an average of 32 lbs. the butter in 7 days. Every sire and dam in his wonderfully rich pedigree has been a proven transmitter, and he is proving no exception to the rule.
Service fee, \$20. For extended pedigree write. Watch this space.
N. BOLLEY R. R. NO. 1, TAVISTOCK, ONT.

HET LOO FARMS VAUDREUIL, QUE.
HOLSTEINS

Let us quote you prices on Heifer Calves from 4 to 8 months old, also high bred good individual Bull. Orders will receive from \$25.00 to \$75.00. We are short of cows and will price them low if taken soon.
DR. L. de L. NARWOOD, Prop. GORDON H. MANHARD, Agent.

"Clover Bar" Sires from R.O.M. and R.O.P. Dams
We have several choice sires 5 to 10 months old from the splendid sire, Count Mercedes Ormsby (sired by Paladin Ormsby). All are out of R.O.M. or R.O.P. dams, with records of 27-37-culls of 21.5 lbs. milk in 7 days. We are ready for service. They are nice fellows and priced reasonable. Write or come and see them.
P. SMYTH R.R. 3 STRATFORD, ONT.

Millions Lost

MILLIONS of dollars have been lost in Canadian dairies and MILLIONS more sent out of Canada to foreign countries. Why? Because the Standard cream separator was not made sooner. A

Standard and 6 Cows

will produce as much cream (butter fat) in 12 months as most other separators and 4 cows in 16 months, or the old method, and 6 cows in 20 months.

It is no longer necessary to buy a separator made in the United States or any other foreign country. The Standard separator, "Made in Canada," takes second place to none.

Money invested in a Standard is as safe as the bank. It earns 8% to 50% and being invested in a home product comes back to you in the form of better markets for your produce.

To everyone interested we say, try a Standard. Our catalog (yours for the asking) gives complete separator information. Send a postal for one to-day.



Made-in-Canada

THE RENFREW MACHINERY CO., Limited
Head Office and Works - RENFREW, ONT.
Agencies Almost Everywhere in Canada

Corn Planting Time

We grow all our SEED CORN on our own farms

Select it in the field. Care it by nature's process. (No artificial drying). And deliver it to you on THE OED neatly packed in crates.

Take advantage of our years of practical experience and increase your yield by planting our hardy high germinating varieties from pedigreed stock.

And we don't ask any fancy price. But We will give you fancy SEED CORN and make friends with you for your next season's supply.

On receipt of your post card we will send price list and valuable book FREE. "How to grow corn."

Pioneer Corn Growers, Chatham, Ont.

- 4. Rose-Tilla, 1907, 75 lbs. fat, 23.6 lbs. butter, George Oliver, Bright.
- 7. Flora De Kol Paster, 1905, 69, 20.9 lbs. 294; 586 lbs. milk, 17.56 lbs. fat, 21.71 lbs. butter. George H. Caldwell, Barr.
- 3. Woodland Queen B Co, 1907, 77, 20.04; 623 lbs. milk, 17.85 lbs. fat, 21.70 lbs. butter. J. Van Paster, S. C. Aylmer.
- 8. Kraswanah Pech 2nd, 1125, 67, 18m, 24; 455.8 lbs. milk, 16.90 lbs. fat, 21.23 lbs. butter.
- 14-day record 67, 10m, 7; 946 lbs. milk, 23.30 lbs. fat, 41.89 lbs. butter. J. M. Van Paster & Sons.
- 10. Della Johanna Kalmik, 1289, 77, 6m, 22; 480 lbs. milk, 16.81 lbs. fat, 20.84 lbs. butter. Archibald Miller, Scarborough.
- 11. Nancy Plesterie, 1294, 57, 10m, 13d; 423 lbs. milk, 16.45 lbs. fat, 20.36 lbs. butter. Peter Smith, Stratford.
- 12. Lotta Comelin D, Kol, 1033, 67, 8m, 15d; 512 lbs. milk, 16.33 lbs. fat, 20.2 lbs. butter. E. Terrill, Wooler.
- 13. Annie & Marie, 1907, 6m, 13d, 49.2 lbs. milk, 16.34 lbs. fat, 20.30 lbs. butter. Les & Clark, Verina, P. E. I.
- 14. Annie Abbekers Wagne, 1149, 77, 2m, 25d; 466 lbs. milk, 16.10 lbs. fat, 20.13 lbs. butter. J. Peter Smith.
- 15. Anggie De Kol Saracovic, 1246, 57, 3m, 8d; 397.4 lbs. milk, 16.03 lbs. fat, 20.03 lbs. butter. J. M. Van Paster & Sons.
- 16. Comelin Linda De Kol, 1266, 57, 10m, 4d; 487 lbs. milk, 16.03 lbs. fat, 20.13 lbs. butter. E. Terrill.
- 17. Minnie Abbott Wagne, 1148, 87, 6m, 4d; 466 lbs. milk, 16.00 lbs. fat, 18.13 lbs. butter. Peter Smith.

OUR FARMERS' CLUB

Correspondence Invited

ONTARIO

WELLINGTON CO. GNT.
ELOUR, April 25.—This month has been of the best we have known for many years; weather conditions wonderfully live, growth continues from the start; seeding nearly completed; early sown fields getting quite ahead of the winter wheat; magnificent pastures coming on fine. Scarcity of fodder and high prices for grain make these conditions generally valuable to the farmers. Many fields are well stocked already, owing to scarcity of feed in the barns. This may save the situation, but it is not the best for the field, not on the whole worse than in certain cases. The farmer, too, is certainly doing part of his work as prudent, and success in his work and enterprise.—G. W. HALL.

MILTON, April 25.—The farmers of Milton county smile a broad smile as they look at the clover and alfalfa fields, on the way to the spring seeding. The clovers and raves, and all the other plants, have wintered exceptionally well, and several old beds left over to ensure a fresh spring seeding, so good is the seed. An estimate as to all of the quantity of wheat sown here was placed at about double that of the year. The clover and alfalfa seed, and brilliant prospect large yields are prophesied. Only the best of the clover and grasses are being left for hay. Spring seeding in general and in some districts finished in three and four weeks earlier than last year. Spring crops are coming in splendidly, in addition to the preparation of a good hay and stock feed. There has been a brick demand for seed from the lighter land. Heavy frost, and rain would be appreciated, especially on the lighter land.—D. W. W. REPRESENTATIVE.

GREENVILLE CO. ONT.
DOMVILLE, April 27.—We are having extra nice weather. In fact almost too fine for this time of year. We have not had any rain for some time. People are getting in their gardens, and some high land is being put in. It was a very poor year for those having sugar bushes; a very small run; the smallest known. Cheese is averaging \$30. Butter, \$20 to \$25; eggs, 50c to 25c; oats, 65c to 70c; bran, 25c; shorts, \$20; winter feed, \$20; potatoes, 25c to 30c a bush; pork, live weight; dead weight, 15c to 18c.

BRITISH COLUMBIA
NEW WESTMINSTER DIST. B.C.
CHELSEA, April 27.—The weather during the first half of April has been very warm and dry. Farmers have been able to almost complete their seedling during the early part of the month. The fruit trees look beautiful. The new year's cherries are very large and green. The gooseberries are here in quantities. The fruit of the River is rising rapidly. Millions upon millions of tons daily send the Fraser River rising rapidly. Millions upon millions of tons daily sea came into effect on the 15th, and seems to be favorably received. The great cost of the way has been brought a little nearer home to the average man, and why should it not? The cost of the little water is on the increase. This is arising up on the fresh grass. The price of horses is on the increase. This of course is caused by the spring demand for horses.—N. G.

GUERSEY BULLS
A few choice young animals for sale. Built Oryington Kers for hatcheries. Write for particulars before.
R. B. BLAKE
Highland View Dairy, Amherst, N. S.

AYRSHIRES
Burnside Ayrshires
Winners in the show ring and dairy tests. Animals of both sexes. Imported or Canadian bred, for sale. Write for particulars. "A" in house.
R. B. NISS
HOWICK, QUE.

TANGLEWYLD AYRSHIRES
The Leading R. O. P. Herd
Large Cows. Large Tubs. Large Records. High Testers. Choice Young Bulls and Bull Calves and a few cows for sale.
WOODSIDE GRASS, R. & H. L. MORGENTHAU, ONT.

SUNNYDALE AYRSHIRES
Imported and Home-Bred, are of the choicest breeding of good type and have been tested by the highest authorities. "SUNNYDALE" Young Bulls dropped this fall, sired by "Wellington Hall Goodwill"—sire—(Imp.). As well as a few females of various ages, for sale. Write or come and see.
A. W. LOGAN, Newkirk Station, P. O. (Phone in house). 1-41

HOLSTEINS
FAIRMONT KINGSTONS
Herd headed by 88-lb. bull, King Regis Alcastra Calanuly, one of the very rich test bulls built the breed has exceeded. For sale one Bull, 13 mo. old, from 132-lb. dam. A dandy. Dark in color. First choice for \$75 takes him. Also Bull Calves from Bessie Banks Marcona, 15.5 lbs. butter at 35 mo. Her sire's dam is a sister to Valdeina Satt. First 41-lb. cow. Price, \$65. Satisfaction guaranteed to all buyers.
PETER S. ARBOGAST
R. R. No. 7 - MITCHELL, ONT.

LAKEVIEW STOCK FARMS, BRONTE
Breeders of High Class Holsteins, Offer for sale some choice young stock. Write for particulars.
E. F. OSLER, Prop. T. A. DAWSON, Mgr.

Lyndale Holsteins
Will contribute to Proof-Hill Dairy, District Holsteins Breeders' Franking Agent Sale, May 27th, 28, 29 and 30. A. B. O. and R. M. stock. Present offering 3 young bulls, choice young cows from Arla Canada, and out of high record cows. **BROWN \$805. LYR. ONT.**

FOR QUICK SALE
Two Registered Holstein Bull Calves, sired by King Henslow Korndyke, from extra fine dam, nicely marked, 7 weeks old. Should be worth \$100.00. Will take \$25 if you can use them.
JAMES MOORE
R. R. No. 1 - ALMONT, ONT.

REGISTERED HOLSTEINS
FOR SALE
Seven Bulls from 10 to 14 months old, at bargain prices. Also four grand-daughters of Pontiac Korndyke, 2 years old, due to freshen shortly, and this year's entire crop of Bull and Heifer Calves.
WM. HIGGINSON - INKERMAN, ONT.

There is vast difference between keeping Holsteins and just keeping cows. One Good Holsteins will give you the Work of 7 days in 3 or 4 ordinary cows. You save in feed, because it will last longer. You get more milk longer, more per year, and more per cow than any other breed. There's money for you in Holsteins.
W. A. CLEMONS, Sec'y H. F. Association ST. GEORGE, ONT.

FOR SALE
1. Holstein Bull, born July 17th, 1904. He is a 23.5 lbs. bull, sired by a 26-lb. cow. He was born on the 3rd day. His sister gave 12.5 lbs. milk a day and 3.5 lbs. of butter in 7 days. His dam, Spotted Lady De Kol, 27.50 lbs. milk a day and 3.5 lbs. of butter in 7 days. He is a 3.5% fat. Price \$150.00. Also Bull Calves by same sire. His dam gave 20.10 lbs. milk a day and 3.5 lbs. of butter in 7 days. Price \$100.00. Write for particulars and see them.
S. LEMOR
LYNDEN, ONT.

At Hamilton St. THE Hamilton Stock and Dairy Association, an almost ideal shore of Lake Ontario, mile from the centre of the group of farms, has the evidence that the owner prides in his business. "I had the shingle brushed before," said Mr. Tracy, the find that a roof tree will last almost twice as long as the shingle. "The subject of my crop, up. 'I have not stated Mr. Tracy.' duty in getting men who work in the field is part of the day's chore." Mr. Tracy has not been very long, but I am sure for himself and successful dairyman.—I. R. D.

Fat in Holsteins
THE fat test of Holsteins for a few cows. Geo. H. Barr, of son, Ottawa, when asked of Holstein-Friesians: "We must not allow fat in milk to crop a cow. We have been testing 1.2, 1.4 and 1.5 per cent. On the whole Holsteins testing to 5 per cent. These testing animals are the best we have." "We want you Holsteins," said Mr. Barr, "to get into many sections of our herd 3 per cent fat. Why? I am looking for the best of low testing breeding that section. You have heard that at the world will them for a breeding. 'We have when you are bred. 'When you get a young through your stock clearly as you ought pure line and best line. It is at the time increase we will pure-bred stock.'"

Why Build
THE Indiana experiment gives the fact that farms stock should build up are:

- 1. The silo preserves and accumulates the crop plant for winter feeding. It helps to make up crop plant.
- 2. The silo increases the size of the farm. Silage is a good sun pastures are short.
- 3. Because of the amount of space required for silage, it is an economical means.
- 4. The silo located near the silo is an assurance that it is at hand in store for winter.
- 5. The silo assists in fattening of stock in winter.
- 6. Silage greatly increases the amount of grain in fattening.
- 7. There are no stalks or waste when corn is silaged.
- 8. All should understand it is not a complete or will be a successful food, when converted with a silo.
- 9. Silage is to the creditable as to people.—

Canadian Patent... Money...

Dig this Potato

right out of the page and send it away to-day. The big potato growing nations are at war. Potatoes will command unheard of prices. Our new, complete book on Potato Culture ("Money in Potatoes") is a guide to sure success, and you should read it seriously. Think seriously of the big profit in potatoes. With O.K. Potato Machines you can handle potatoes now as easily as you can crop them. Other men are doing it. Our booklet will show you how. A copy FREE to you if you use the coupon.

OK CANADIAN POTATO MACHINERY

At Hamilton Stock Yards

THE Hamilton Stock Farms have an almost ideal location on the shore of Lake Ontario, about a mile from the centre of Cobourg. The group of farm buildings, with red walls and green roofs, are standing evidence that the owner takes unusual pride in his business.

"I had the shingles dipped and brushed before they were put on," said Mr. Tracy, the proprietor. "I find that a roof treated in this way will last almost twice as long as untreated shingles."

The subject of milking machines cropped up. "I have never used one," stated Mr. Tracy. "I have no difficulty in getting men to milk. The men who work in the stock barn do not work in the field. And milking is part of the day's work; not a chore."

Mr. Tracy has not been in the business very long, but he is making a name for himself as an enthusiastic and successful dairyman and breeder.

-T.R.D.

Fat in Holstein Milk

THE fat test of Holstein milk came in for a few comments by Mr. Geo. H. Barr, of the Dairy Division, Ottawa, when speaking at a banquet of Holstein-Friesian breeders.

"We must not allow the per cent of fat in milk to drop any lower," said Mr. Barr. "We have lots of records test 1.2, 1.4 and 1.6. We have records of whole herds that test less than three per cent. On the other hand we have Holsteins testing 4, 4.1 and up to 5 per cent. This shows that high testing animals are in the breed."

"We want you Holstein men," continued Mr. Barr, "to be more careful in the stock you breed and sell. We can go into many cheese factory sections and find herds running 2.9 to 3 per cent fat. Why? Because sires of low testing breeding have got into that section. You have them in your herd and you sell them. I wish you would kill them for beef."

Mr. Barr added a suggestion on breeding. "We have too much of a mixture in our breeds," said he. "When you get a good line running through your stock as strongly and clearly as you ought, keep to that pure line and best line. I am often afraid that as the number of breeders increase we will have more poor pure-bred stock."

Why Build a Silo?

THE Indiana experiment station gives the following practical reasons why farmers who keep live stock should build a silo. Here they are:

The silo preserves the palatability and succulence of the green corn plant for winter feeding.

It helps to make use of the entire corn plant.

The silo increases the live stock capacity of the farm.

Silage is a good summer feed when pastures are short.

Because of the small amount of ground space required by the silo it is an economical means of storing forage.

The silo located near the feed manger is an assurance of having feed near at hand in stormy as well as fair weather.

The silo assists in reducing the cost of grains in fattening cattle and sheep.

Silage greatly increases the milk flow during the winter season and decreases the cost of production.

There are no stalks to bother in the manure when corn is put into silo.

All should understand that silage is not a complete or balanced ration—it is a succulent food and should be supplemented with some balancing dry feed.

Silage is to the cow what canned fruits are to people,—delightfully palatable.

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

Removes Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from any Bruise or Strain; Stops Spavin Lameness. Always pain. Does not blister, remove the hair or lay up the horse. \$2.00 a bottle, delivered. Book 1 & K free.

ABSORBINE, JR., the antiseptic liniment for mankind. For Synovitis, Strains, Gouty or Rheumatic deposits, Swollen, Painful Varicose Veins. Will sell you more if you write. \$1 and \$2 per bottle at dealers or delivered. Manufactured only by W. F. FROST, P. O. 212, 128 Ryman Bldg., Montreal, Can. Absorbine and Absorbine, Jr. are made in Canada.

WELL DRILLING WELL PAYS

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

Williams Bros., 444 W. State St., Ithaca, N.Y.

Farmers of Ontario

We beg to draw the attention of the Ontario Farmers to the fact that we are in a position to supply them with

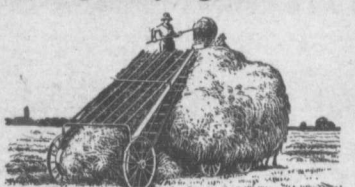
All Classes of Farm Help at Short Notice

If you require help write to

HON. JAS. DUFF
Minister of Agriculture
Parliament Buildings, Toronto

H. A. MACDONELL
Director of Colonization
Parliament Buildings, Toronto

Deering Haying Machines




ALTHOUGH the weather and the hay crop are beyond your control, your success at haying time in getting the crop safely into barn or stack depends largely on methods and machines.

Many years of trying out in many fields have proved that you cannot do better than to make your choice from the Deering line of haying tools—mowers, rakes, tedders, side delivery rakes, windrow hay loaders, etc.

Deering haying tools are carried in stock or sold by IHC local agents who can take care of you quickly in case of accident. It is their business to see that you are satisfied with the Deering haying machines and tools you buy from them.

Write to the nearest branch house for the name of the nearest dealer handling Deering haying tools, and we will also send you catalogues on the machines in which you are interested.



International Harvester Company of Canada, Ltd.

BRANCH HOUSES

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

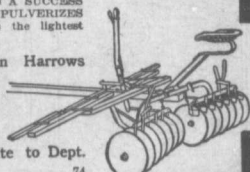
Prove the "BISSELL" by Its Work

Do the gangs on your Harrow crowd together and raise out of the ground if it is hard? They won't do this on the "Bissell." The "Bissell" is so designed that THE GANGS CANT CROWD OR BUMP together no matter how hard the ground may be.

Tough soil won't stick the "Bissell." It stays right down to its work and pulverizes the ground thoroughly.

We ask you to take a "Bissell" out into the field and test it beside other Harrows. Then you will HAVE PROOF that it is a SUCCESS ON HARD LAND—that it PULVERIZES THE BEST—and that it is the lightest draught.

Post yourself fully on Harrows before buying. We put our name on every Harrow so that you will know it is genuine. Ask your local dealer, or write to Dept. R for free Catalogue. 74



T. E. Bissell Company, Limited, Elora, Ont.

JNO. DEERE FLOW CO., LTD., 77 Jarvis St., Toronto, Selling Agents for Ontario and Quebec.

SWEDEN TURNIPS FOR WINTER FEEDING

Satisfactory crops of this splendid stock feed are assured by sowing Steele, Briggs' Seeds—the seeds tested for growth and vitality.

Any of the following will produce bountiful crops of large, sound roots:

- Steele, Briggs' "Durham"
- Steele, Briggs' "Select Purple Top"
- Steele, Briggs' "Unrivalled Canadian Gem"
- Steele, Briggs' "Select Kangaroo"
- Steele, Briggs' "Select Jumbo"
- Steele, Briggs' "Select Good Luck"

Sold by the Best Dealers in your Town and Through Canada.

CANADA'S GREATEST SEED HOUSE

STEEL, BRIGGS SEED CO., TORONTO LIMITED

HAMILTON WINNIPEG



See this Bow Lever



Light rigid steel frame. Boiled through rollers. Rust fast.

THIS is a special feature of the Maxwell "Favorite" Churn. No other churn has it. You can adjust the handle to centre, right or left, whichever is easiest for driving.

Maxwell

"FAVORITE" CHURN (with Bow Lever)

—makes churning a pleasure. It's so simple to drive—requires so little effort to produce the butter. Agricultural Colleges and Government Inspectors recommend it. Used in Denmark, Australia, New Zealand, S. Africa, and all over Canada.

Call at your dealer's and let him show you the splendid unique features of the Maxwell "FAVORITE." Sold by right alone.

MAXWELL'S LTD.

St. Mary's, Ont.

A BUILDING By FREIGHT

Want a building in a hurry—a fire proof—lightning proof building—for implements, carriage shed, granary? Tell us the size and style you want and we will quote you on just the building you need. Always ready to ship.

READY-MADE Buildings

Manufactured by

The Metal Shingle & Siding Co., Limited

PRESTON

Inferior Lightning Rods

Prof. W. H. Day, O.A.C., Guelph, Ont.

A GAIN I wish to warn the farmers of Ontario against inferior lightning rods. One of the same companies that banished the farmers with iron-centred rods last year is reported to be selling the same rod again this year. Watch out for them.

There is no difficulty in spotting these rods. The outside covering is a thin sheet of copper. Inside of the copper is a strip of galvanized steel or iron one-half inch wide and two No. 10. The copper sheath is twisted around the strip and wires giving the rod a corrugated appearance. The steel or iron will rust out in from five to ten years. For photograph of what happened to a rod of this kind in less than eight years, see Figure 34, Bulletin 226, which may be had by writing the Department of Agriculture, Toronto.

An Illinois firm is circulating the trade and others advocating the "Mast" Lightning Rod System. They declare that twisted cables are positively dangerous, claiming they act like "choke-coils," that tubes only should be used, that insulators must be used, etc. For concentrated essence of error these circulars surpass any thing else I have seen.

A Novel Water Tank

THE illustration herewith will give an idea of the style of water tank favored by J. H. Dent, of Oxford, Co., Ont. The storage tank is of circular concrete, eight or 10 feet high, and approximately the same in diameter, with a circular trough surrounding it. The flow of water from



A Self-Feeding Water Trough.

the storage tank to the water trough is regulated by a float valve.

"The biggest advantage of this tank is that it is self-operative," explained Mr. Tom Dent, whose chief interest is in his father's Holstein herd. "It has other advantages as well. You know that with an ordinary stock tank, the cattle are continually horning each other away, particularly those that try to get in from the opposite side. With this circular tank the cattle drinking do not see the others opposite, and very few of those on either side; and consequently they drink more quietly. The style is not common, I know, but it has given us immense satisfaction."

A windmill nearby forces the water into the storage tank.



Farm and Dairy

During the coming spring and Dairy, with one acquiring dairy farm kindly refer to

Auto Type T

MY auto would give luxury to the tyres. I farm auto owner some believe that excessive tyres, or rather, excess, would be avoided taken to have the tyres flat. One large establishment has published on how to care for tyres "Under-inflation: Its Bulletin states:

"It's the air cushion the car's weight, not tyre merely holds the tyre and makes the ride.

"About twenty pounds width is the proper sure for well-built tyre that amount will not the car's weight, and

Power Machinery for the Dairy Farm

Brantford

THE centre of a big shipping district and the home of 60 to 70 factories employing over 7,000 skilled artisans. It is particularly strong in industries employing metals. One of the most cities in Canada making farm machinery of all sorts, and in Dominion in the export of manufactured goods. One of the oldest and largest concerns—Goold, Shapley & Muir, Ltd., makers of many machines used by farmers.



Plant of Goold, Shapley & Muir Ltd., at Brantford, Ontario

Our Plant

THE size of our Plant is indicated by the bird's-eye view photograph shown. Our buildings and yards cover 6 acres of ground and 7 acres of floor space. Among many distinctions we have the largest galvanizing plant in Canada.

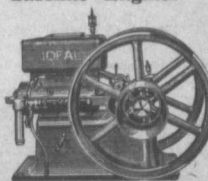
Brantford "Ideal" Windmills

THE steel windmill business in Canada was started by us. This means that we have had a much greater experience than any other maker of windmills in the Dominion. It also, that we are a N. S. A.

"Ideal" Windmills have every good feature that experience and invention have provided. So you are our Windmills that they are to be found in every civilized country on earth. If you want a windmill built with a conscience—one that will endure a lifetime and longer, buy an "Ideal." Send for our Windmill Catalogue.

Goold, Shapley & Muir Ltd.

Brantford Gas and Gasoline Engines



A Gasoline Engine That Endures

WE MADE gasoline engines 15 years ago. The great majority of gasoline engines are products of the last few years. The engines we made 15 years ago are still in use! Many engines on the market today are worth a \$5.00 bill at the end of 10 years, let alone 15. The reason why our Brantford "Ideal" Engines last and keep on doing their work year after year is because they are made with a conscientiousness made by Goold, Shapley & Muir. We have a man to keep in honor. We may be a little old-fashioned about some things, but firms with a big pride in their history, and in the things they make are good firms for any farmer to do business with. Our Engines are made in sizes from 1 1/2 to 50 H.P. Send for our Catalogue if you want a gasoline engine—one that you won't have to scrap in two or three years.

Tanks, Water Boxes, Steel Saw Frames, Power Spaying Outfits, Steel Towers, Concrete Mixers, etc.

Write for the Catalogue covering the line in which you are interested.

Goold, Shapley & Muir Ltd., Brantford, Ont.

Branches at WINNIPEG, REGINA and CALGARY



It Pays to Chop at Home

Brantford "Maple Leaf" Grain Grinders

35,000 in use to-day.

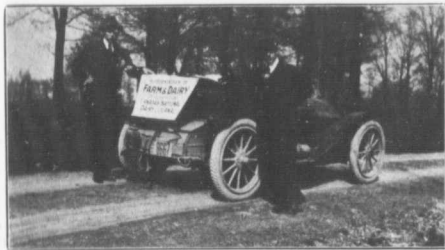
No. of bays	Height (feet)	Stays (inches)
6	40	22
7	40	22
7	48	22
8	42	22
8	42	16 1/2
8	47	22
8	47	16 1/2
9	48	22
9	48	16 1/2
9	52	22
9	52	16 1/2
10	48	16 1/2
10	48	12
10	52	16 1/2
11	55	16 1/2

No. of bays	Height (feet)	Stays (inches)
10	48	12
10	52	16 1/2
11	55	16 1/2

No. of bays	Height (feet)	Stays (inches)
10	48	12
10	52	16 1/2
11	55	16 1/2

Angle Steel Post Set Tools 25 lbs. Staples

Write for free copy of our catalogue as well as Home



Farm and Dairy's Circulation Manager Ready for the Trail.

During the coming summer, Mr. Harold H. Lees, circulation manager of Farm and Dairy, with one assistant, will travel through a few of our best dairy districts acquainting dairy farmers with this dairy journal. We bespeak for Mr. Lees a kindly reception from our folks should he call at their homes.

Auto Tyre Troubles

"My auto would be an inexpensive luxury were it not for the tyres." Thus spoke a farm auto owner some days ago. We believe that excessive wear on the tyres, or rather, excessive deterioration, would be avoided were more care taken to have the tyres properly inflated. One large manufacturing establishment has published a bulletin on how to care for tyres. The title is "Under-Inflation: Its Consequences." The bulletin states:

"It's the air cushion that supports the car's weight, not the tyre. The tyre merely holds the air under pressure and makes the air cushion possible.

"About twenty pounds per inch of width is the proper minimum pressure for well-built tyres. Less than that amount will not properly support the car's weight, and the tyre flattens

out at the ground. It is the continuous flattening out that weakens and finally breaks the tyre walls, just as one breaks a wire by bending back and forth.

"The bending in the tyre wall generates heat which deteriorates the rubber. As a result the piles of fabric separate from each other and roll up. Rubbing against one another after having separated finally cracks them. Then some point becomes too weak to hold the air pressure inside and a blow-up occurs.

"To save tyres on which damage from under-inflation has begun, are recommended inside tyre protectors, complete linings, made of several plies of fabric, and moulded to the shape of the casing, inside."

Corn land that is disked before it is plowed will make a much finer seed bed for planting. There will be no air chambers left under the furrows.

AVONDALE FARM

First Public Sale BROCKVILLE, MAY 26th, 1915

We are going to offer some of our best animals at this, our first sale. Time is too short to tell the good things we are going to put in, but here are a few:

KING PONTIAC ARTIS CANADA, 4 yrs. old, son of King of the Pontiacs and Pontiac Artis, Hengerveld DeKoll's best daughter.

AVONDALE PONTIAC ECHO, 15 months, son of the above bull dam **May Echo Sylvia** who has just made 36.33 in 7 days, and 148 in 30 days. She averaged over 120 lbs. milk for 30 days. She, her dam, and her dam's dam averaged 32.40 butter 7 days; each has over 700 lbs. milk in a week.

BELLE MODEL JOHANNA 2nd, 5 years old, butter 37.01 and 148 lbs. in 30 days. A daughter at 3 yrs. 31.08, just finished record 33.60 7 days, and 135 in 30 days.

PIETJE PAULINE HENGERVELD, at 3 yrs., 31.76 lbs. **SADIE KORNDYKE WAYNE**, 30.80, and her bull calf. Every female unblemished and nearly all young and bred to our great bulls.

SIX DAUGHTERS OF PRINCE HENGERVELD PIETJE, son of Pietje 2nd's Woodcrest Lad and Princess Hengerveld DeKoll 83.62, with records 24 to 31 lbs. as 3 yr. olds.

SIX DAUGHTERS OF KING PONTIAC ARTIS CANADA Jr. 2 yr. olds, records to over 19 lbs.

See further particulars next week. CATALOGUES issued May 1st.

Everything Sold Subject to Tuberculosis Test.

Sale at the farm, one mile from Brockville, 12 o'clock.

A. C. HARDY - Proprietor

PAGE FENCES AND GATES

WEAR BEST—SOLD DIRECT

PACE HEAVY FENCE				Prices in Old Ontario
No. of bars	Height	Spacing of horizontal's	Vertical's	
6	40	22	6 1/2, 7, 8 1/2, 9, 9	\$.24
7	48	22	5, 5 1/2, 7, 7 1/2, 8	..26
7	48	22	5, 6 1/2, 7 1/2, 9, 10, 10	..26
8	42	22	6, 6 1/2, 6, 6, 6, 6, 6	..29
8	42	16 1/2	6, 6, 6, 6, 6, 6, 6	..30
8	47	22	4, 5, 5 1/2, 7, 8 1/2, 9	..31
8	47	16 1/2	4, 5, 5 1/2, 7, 8 1/2, 9, 9	..32
9	48	22	6, 6, 6, 6, 6, 6, 6, 6	..34
9	48	16 1/2	6, 6, 6, 6, 6, 6, 6, 6	..36
9	52	22	4, 4, 5, 5 1/2, 7, 8 1/2, 9, 9	..34
9	52	16 1/2	4, 4, 5, 5 1/2, 7, 8 1/2, 9, 9	..36
10	48	16 1/2	3, 3, 3, 4, 5, 7, 7 1/2, 8	..41
10	48	12	3, 3, 3, 4, 5 1/2, 7, 7 1/2, 8	..41
10	52	16 1/2	3, 3, 3, 4, 5 1/2, 7, 8 1/2, 9, 9	..38
11	55	16 1/2	3, 3, 3, 4, 5 1/2, 7, 8 1/2, 9, 9	..42

PAGE LAWN FENCE			Not Painted
Height	Not Painted	Painted	
12 inch	6 c	6 c	
18 "	7 c	6 c	
30 "	8 c	7c	
36 "	8 1/2 c	8c	
42 "	9 c	9c	
48 "	12 c	10c	

PAGE POULTRY NETTING	
Size	Price
24 inch	\$.235 per roll
36 "	..3.00 "
48 "	..4.00 "
72 "	..5.60 "

SPECIAL POULTRY FENCE		
Not painted. No. 9 top and bottom. Balance No. 13. Uprights 8 inches apart.		
20-Bar 60-Inch	51c per rod	
18-Bar 48-Inch	46c per rod	

PAGE RAILROAD GATE		
Width	Price	Height
3 ft.	\$.230	36 inch
12 ft.	4.35	\$2.10
13 ft.	4.60	2.10
14 ft.	4.85	2.55
15 ft.	4.85	2.80
16 ft.	4.85	3.00
18 ft.	5.50	3.60
20 ft.	5.50	4.10
22 ft.	5.50	4.55
24 ft.	5.50	5.00
26 ft.	5.50	5.25
28 ft.	5.50	5.50
30 ft.	5.50	5.70
32 ft.	5.85	5.85
34 ft.	5.85	6.15

Write for free copy of the big catalogue, listing 150 different numbers of Farm and Lawn Fence and Gates, as well as hundreds of useful Farm and Home articles at wholesale prices.

Here are the lowest prices on the best-wearing Fence and Gates.

More PAGE Fence and Gates are sold than any other single brand. So our manufacturing cost must be low.

PAGE Fence and Gates are sold DIRECT from factory to farm (freight paid.) So our selling cost must be low.

PAGE Fence and Gates are made of the very best materials—by the pioneer fence-makers—with 23 years' experience in building fine fence. Every part of every PAGE Fence and Gate is made full size. Even our Farm Fence locks are all No. 9 wire. So that PAGE Fence and Gates last a lifetime.

For these reasons PAGE FENCES and GATES are the BEST and CHEAPEST to use.

Mail your order, with cash, cheque, bank draft, Postal or express order, to the nearest PAGE BRANCH. Get immediate shipment from near-by stocks—freight paid on \$10 or over.

Page Wire Fence Company

DEPT. 3 LIMITED
 1137 King St. West TORONTO
 857 Church Street WALKERVILLE
 805 Notre Dame St. West 39 Dock St. MONTREAL
 ST. JOHN, N.B.
 100 James St. East WINNIPEG

The Hinman Milker

Made in Canada by H. F. Bailey & Son, Galt, Ont.

One Man Can Milk 25 Cows in an Hour



"The New Hinman Milker"

WITH a Hinman Milker some men milk from 40 to 50 cows an hour! So 20 cows an hour is easily possible. Milking becomes almost child's play if your cow stable is equipped with a Hinman Milker. You, your wife, your daughter, your son, or your hired man will not have back-aches and heart-aches if a Hinman Milker is counted among your equipment.

You know how the labor of milking drives children from the farm, and makes it hard to get good help. And you know, too, that there is a lot of money in the milk business. And there you are—kept from making good money, just because of the labor of milking.

Well, you and money can get close together if you have a Hinman Milker. You can get men and boys to do the milking, or you can do it yourself—without hard labor. And you can get into the most profitable of all forms of farming—dairy farming—without any heavy investment—if you have a Hinman Milker.

It costs some money of course to buy a Hinman, but that is no reason why you should not have one. It is not what a thing costs, but what it will bring in, that you should reckon up. Money is not for hoarding, but for using, to be multiplied—not to be put in the bank at 3 per cent, per annum. And you can multiply money fast if you push your dairy farming, by cutting down your labor costs.

EACH Hinman Unit will milk from 7 to 9 cows per hour under ordinary conditions, and since the average man can easily attend to three machines you can see that it is quite possible for him to milk from 20 to 25 cows per hour.



"Price \$50 per Unit"

THE Hinman Milker is a one-cow method.

This is better than the two-cow method. It means that each cow's milk can be kept separate; it means less weight; it means a smaller pail; and it means no lost time. When two-cow machines are used often one cow is milked before the other. This means lost time. But you can use as many Hinman one-cow machines as you desire—by simply attaching them to the driving rod.

A complete Hinman Milker means one pump, valve chamber, claw, cups, nail and rubber connections. By the use of an extra nail, two machines will do practically the work of three machines without the extra nail.



"The Hinman has the Rapid Pail-changing Ideal"

One h.p. is ample to operate two or three Hinman Milkers. Where four or six machines are used, only 1½ h.p. is necessary.

ELECTRIC power will be found the simplest and most reliable, but gasoline is the power most commonly used. The fuel consumed in a reliable engine is less than one gallon of gasoline per h.p. for each 10 hours.

A careful estimate of the cost of keeping a Hinman Milker in repair for a year shows a cost of \$1 to \$1.50. The usual repairs consist of rubber mouth pieces and pump valves.

It is costing you more than the price of a Hinman Milker to be without it. If figures and arithmetic are any good at all, they will prove that it is extravagant to have no Hinman Milker on your farm, if you are milking more than 8 cows. It will be the biggest Farm Improvement you can add to your farm this year—a machine you will use twice a day for 365 days in a year. Write us. Ask for our new F.D. Booklet. In your letter tell us about how many cows you milk.

H. F. Bailey & Son, Galt, Ont.



"Unhooking Pump from Stanchion"

The Hinman has only two moving parts—the pump piston and the chamber valve. The Hinman produces a much better grade of milk than can be produced by hand-milking. Each machine is complete in itself.

And the one thing about the Hinman is that it costs less than any other milking machine sold in Canada—much less. This in addition to being lighter, less cumbersome and complicated, lighter, and constructed on more scientific lines.

THE Hinman Milker is fully described and illustrated in a very handsome booklet, which is sent free to all who ask for it. Send a post card for it. And we will send you at the same time much information concerning where you can see the Hinman Milker at work—on Ontario farms, and the names of farmers who have bought. Their experience and testimony will give you a hint of what your experience and testimony will be if you become a Hinman user.



"The Visible Milk Flow"