

FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

JUNE 5

1913



A FARMER'S BUSINESS ABILITY IS REFLECTED IN HIS IMPLEMENTS
The Double Cutaway Harrow, here illustrated, enables a man to do in one day as much work as he formerly did in two with the ordinary disk harrow. The same is true of the gang plow, the two row cultivator, the corn binder, and so on all along the line of improved farm implements. Why then complain of high wages for labor. If wages have increased, opportunities for employing that labor profitably have increased in even greater proportion. The business-like farmer, by using implements that are efficient and up-to-date, employs high-priced labor to his own and the laborer's advantage.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

ISSUED
EACH WEEK
Only \$1.00 a Year

Price
Five Cents
and
Cable
Five Cents
Per
Year

Summer Work

Cut in Two
For You

Now that your cows are all fresh and milking so splendidly and you have so much other work to do, you can save yourself greatly and make more money by having the two great helpers we have for you.



The favorite everywhere it goes. Note its heavy and heavy compact construction, with low-down, handy supply can only 3 1/2 ft. from the floor.

The Large-Capacity "Simplex" Cream Separator The B-L-K Mechanical Milker (Both Pronounced Successes)

Think how nice it would be now when you are so busy to be able to separate your milk in half the time you now do it with an ordinary hand separator!

The large-capacity 100-lb. "Simplex" Cream Separator, once it is at speed, turns as easy as the 500-lb. machines of most other makes. We will prove this to you. It will pay you to ask us for the facts. Send now for booklet describing "Simplex" Large Capacity, low-down, easy-turning cream separator.

What would you give to be able to free yourself from the drudgery of hand milking, and be able to milk all of your cows (and as many more as you wanted to put in), doing the milking thoroughly and successfully by mechanical means. A B-L-K Milker will milk your cows for you. Cost is not so much as you might think. Write for booklet describing it all.

You can send us a rough sketch of your stables, tell us how many cows you want to milk, say whether or not you have power available, or will require power, and WE'LL FURNISH YOU WITH AN ESTIMATE of just what it will cost you to put in your stable a B-L-K mechanical milker. There will be no obligation on your part to buy. It will interest you to have these facts. It will pay you, as it pays others, to have a B-L-K milker.

D. Derbyshire & Co.

Head Office and Works - - - BROCKVILLE, ONT.

Branches: PETERBOROUGH, Ont. MONTREAL and QUEBEC, P. Q.

WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

Famous Fleury Plows

Have done ALL the work on TENS of THOUSANDS of farms throughout Ontario over a period of fifty years. To-day their reputation is higher than ever before, and

IS FULLY DESERVED

We are the Original Makers of the Famous No. 21 Plow, and the only Manufacturers of the ORIGINAL NO. 21 PLOW—imitated by nearly every other manufacturer of Plows in Canada. In general, Imitations are Inferior—so it is in Plows. Buy only the Original.

When other manufacturers advertise a No. 21 Plow it is a Testimonial to

Fleury's Famous ORIGINAL No. 21 PLOW

Famous Fleury Plows

No. 21, "DANDY", No. 13, and No. 15A (One Horse) surpass all others in lightness of draught, ease of holding, quality of work in the field.

J. FLEURY'S SONS, AURORA, ONTARIO

JOHN DEERE PLOW CO., of Welland, 77 Jarvis St., TORONTO

Medals and Diplomas, World's Fairs, Ohio ago and Paris.



PUBLISHER'S DESK

ONE of our friends the other day asked us just what it cost Farm and Dairy to do without the revenue that it would derive from publishing its share of the unclean and objectionable advertising that is available. We told this friend that is the "cost of clean advertising"; this because all of our agencies know about our policy and that we will not do that the objectionable ads. Hence we do not send them to us. But a great number do get through to us, and some of these we reproduce in this issue on page 11 in order that you may see them, and know something more of how we fight for you and protect your interests in Farm and Dairy.

We were reading the May issue of Successful Farming the other day, and we noticed in it a personal letter to the publisher from one of his subscribers, Mr. H. R. Guthrie, an Ohio farmer. The letter read as follows:

Dear Sir:
I no longer reference in a recent issue to the fact that you do not accept liquor, tobacco, medical, or fraudulent advertising. I feel that you are to be especially commended, and that every reader of Successful Farming should show appreciation of such a stand by sending more and hand you herewith four subscriptions. This refusal of advertising on your part must mean a large financial loss; and it should be made us to you in some way that would be interested in knowing just what it means in the way of dollars and cents if you have no objection to telling me. Wishing you every success, I am,
Yours very truly,
H. R. Guthrie,
Ohio.

Mr. Meredith in his reply to this letter, gives out the information that from liquor, tobacco, medical, investment advertisements, etc., etc., they turned down on an average over \$250 a day, or over \$75,000 in the course of a year. Their rate is of course much higher than Farm and Dairy because of their much greater circulation, hence the great sum of money which represents the cost to Successful Farming of clean advertising.

But Mr. Meredith does not count that money as a loss. Neither does Farm and Dairy consider the unwholesome and objectionable business we turn away from these columns as a loss so long as our readers show

their appreciation as they have by patronizing the advertiser we do carry, everyone of whom we guarantee and stand back of absolutely.

Advertisers patronize those papers that pay them and every reader of Farm and Dairy can do us a great service by making their purchases through their dealers. If you wish to advertise of any concern you wish to patronize in some other paper look it up and see if it is in Farm and Dairy. If so, you can deal with them with every assurance that they are reliable. If you do not find them in Farm and Dairy, write us and we will be very glad to look them up and advise you as to their standing.

When you answer an advertisement be sure to use the exact street and room number shown in Farm and Dairy so that your letter will get to the right people, and always mention Farm and Dairy's positive guarantee of honest dealing and fair treatment from our advertisers.

All publishers as you well know do not favor the policy of Farm and Dairy in doing without the revenue of the objectionable advertising that is available. We noted recently upon a deal of interest an objection published in the columns of Health Culture to advertising which that journal has been carrying. The editor, Mr. Elmer Lee, M.D., replied: "The criticism of Dr. — is well taken but it would be impossible to publish Health Culture without advertising. If everyone interested in a magazine without an advertising department would aid in raising the circulation to a point where advertising would not be necessary, well as good. — I will be glad to prune the advertising department to his taste as soon as the moment arrives when the friends of Health Culture will supply the money to sustain it independent of promiscuous advertising."

Farm and Dairy does not ask "Our People" to do anything of this kind. We do appreciate, however, the way you have supported us in replying to our reliable advertisers and we do appreciate the hearty manner in which so many friends of Farm and Dairy have told their neighbors
(Continued on page 19)

Issued
Each Week

Vol. XXXII

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every operation striking the most crops, it one. The profitable production of a good crop have, how the inventive able men if we agree that corn or, corn harvest shields and Nov result is that child's play when strenuous job it ago.

The writer had in the corn crop. Recently while in the later season boy on a Quebec team and a tending the land struck by this ground in so far as are concerned.

The accompanying sure to make that of the land from laborious in those. It would also have

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Issued
Each Week

FARM AND DAIRY & RURAL HOME

Only \$1.00
a Year

Vol. XXXII.

FOR WEEK ENDING JUNE 5, 1913

No. 23

The Evolution of Corn Cropping Machinery

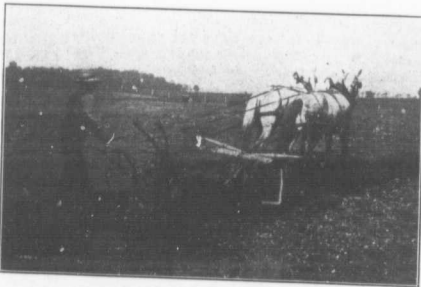
How Machinery is Eliminating Manual Labor in Corn Crop Management

J. H. Grisdale

CORN growing in Canada goes back many years. The profitable production of this crop, possibly even more markedly than in the case of any other farm crop, has always meant much labor. If the more thoroughly every operation is performed the more striking the crop returns, is true of most crops, it is doubly true of this one. The difficulties surrounding its profitable production in the way of the large amount of labor necessary to ensure a good return from the area under crop have, however, effectively attracted the inventive genius of not a few able men if we may judge by the progress that has been made in such implements as corn planters, corn cultivators, corn harvesters, corn huskers, corn shellers and mowers and shredders. The result is that corn growing to-day is as child's play when contrasted with the strenuous job it was some 30 or 40 years ago.

The writer has been actively interested in the corn crop for 35 years or over. Recently while thinking of those days in the later seventies when as a small boy on a Quebec farm I trudged behind a team and an eight-foot harrow, slowly getting the land into shape for corn planting, I was struck by this great difference between now and then in so far as implements used in corn growing are concerned.

The accompanying photos attempt in some measure to make that difference clear. The handling of the land from start to finish was slow and laborious in those days, a third of a century ago. It would also have been expensive had not wages



Two Days Work into One, and that easily

In the above scene, from a photograph taken on the farm of Mr. Geo. Birse, Huron Co., Ont., we have illustrated the whole trend of modern farm machinery development. The aim of all our best modern farm machinery is to economize on human labor. That too is the aim of all our best modern farm machinery. He who sees the light and follows it need have no difficulty in making the hired man earn his wage.

Through clay hub deep in the old tumbrel cart the manure was carted from the pile to all parts of the field and laboriously spread either from the cart or from the small piles dumped at well-judged intervals. One's arm and hand remember yet the heave and twist that ripped the forkful of shining "muck" from the steaming mass and sent it whirling and disintegrated to lie ready for the oncoming plow.

The little Canadian horses hitched to the one furrow cast-iron plow (as commonly used in that district) managed to do good work, and to do it fairly quickly, everything considered. The same team on an eight-foot harrow made but sorry headway against tough soil or hard clay, but perseverance finally won out. The ridging of the land with the double mould-board plow into drills three feet apart and the running of the old wooden marker across the same were the final operations before the planting by hand and hoe, or hand and foot as was often the case.

Cultivation was done with the old single walking cultivator. Harvesting saw the trusty sickle brought into operation and the corn set up to dry out in shock before being stored away on the top of the mow or in settling lofts, later to be fed long and dry to the hungry cattle.

Conditions to-day are different. Men demand \$2.00 a day instead of 50 cents as was paid near Montreal at that time. Horses have improved in size at least and implements are greatly changed. The manure spreader as it rolls across

the field, with its small cataract of fertility following, lessens labor and increases manurial values by thorough disintegration. The two-furrow plow with three good horses turns three acres a day. Using the heavy land roller or, better still, the packer, immediately after plowing, then pulverizing with the four-horse double cutaway disc and the 24-foot smoothing harrow makes a much better job at a good deal less than half the cost for manual labor than in days gone by in spite of higher wages. Rolling the land, then planting with the 20-inch marker seed drill or the regular corn planter on the flat saves time, conserves moisture and helps keep down weeds. Harrowing as the green points shoot up and then using the two-row cultivator every week or opener till the corn stands three or four feet high helps keep down the cost of cleaning and encourages the corn to grow. The hoe is still needed, but to a very limited extent only. The one-horse walking cultivator also still has a place and, if at all possible, should be kept moving up and down the rows long after the stalks rise above the horse's head.

The cutting of the corn, binding into sheaves and shocking,—all of them at one time heavy manual labor jobs—are now done by machinery for the most part. The corn harvester capable of cutting from five to eight acres a day not only cuts and binds, but greatly facilitates loading. The curing of corn in the shock, an expensive and

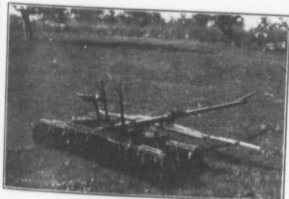


Corn Planting at Its Best

Large areas of corn are planted quickly and easily with the double-row corn planter here illustrated. The machine may be regulated to plant in either drills or hills. Any who have ever used this implement would not care to go back to any of the old-time methods of corn planting.

—Photo by an editor of Farm and Dairy.

uncertain method of preserving the crop, has given place to the silo, where practically every last pound of digestible matter is perfectly con-



Finds Favor Wherever Tried

The double out-away harrow here illustrated is one of the few owned in Canada. Mr. H. R. Nixon, Brant Co., Ont., is now using it for the first time. This implement is highly recommended by Mr. J. H. Grisdale who tells of it in an article, adjoining.

—Photo by an editor of Farm and Dairy.

then ruled so low as to make it profitable (while at the same time necessary) to do so much by hand or to expend so much man labor to produce the crop.

served and that in a form at once easily handled and highly acceptable to live stock of all kinds.

The utilization of the cut-box for filling the silo and the change to the blower and shredder is undoubtedly one of the most important lines of progress in modern agriculture on the American Continent, if one may judge by its effect in simplifying the problems and lowering the cost of cattle feeding, to say nothing of its immense influence in popularizing winter-dairying, or, one might say, in making dairying a really possible and profitable industry on this continent of short grass and brief grazing seasons.

Treat the Corn Right

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

Corn that is treated right will look thrifty from start to finish. The trouble is that farmers seem to forget the corn once the seed is in the ground and leave it to conduct an unequal fight with weeds and drought. Then we wake up again and turn ourselves and our men in a 10 or 20-acre field to fight the weeds with hand hoes. I believe that this expensive and laborious hand-

work can be avoided entirely if we start right at the first to do the square thing by the corn crop. I have grown corn for many years now and never yet have I had to use hand labor except in cut-

corn rows can be detected. We run the drag bar row cross ways of the rows. This harrowing does not pull out much corn and kills innumerable weeds that are just starting to germinate. Also harrowing makes a nice soil mulch. Sometimes this harrowing is repeated but more often I cultivate from then on.

This cultivating is not only half as much work as it used to be. Last season on Farm and Dairy's recommendation, I purchased a two-row cultivator that is giving the very best of satisfaction. The corn has to be planted in fairly straight rows to use this cultivator to advantage but that is comparatively easy when either the drill or the special corn planter is used. I use the former.

do not stop cultivating when the corn is so high that the machine will not straddle the rows; the single row cultivator is then brought into operation and we continue almost as if corn harvest.

I regard this late cultivation as of immense importance. Corn unlike any other farm crop takes most of its nourishment from the soil late in the season. One might almost say that other crops are in the barn before corn begins seriously to feed on the soil. Shallow cultivation, say ten inches, is my rule.



Which of these two men made the best investment? These two views are both from photographs taken in Huron Co., Ont., and within a short distance of each other. The man on the riding cultivator, covering two rows at once, can cultivate 14 acres in a day quite as easily as the man with the walking cultivator can cultivate seven acres in a day, even if it did cost more, the better investment of the two?

ting out the few thistles during the first year or two.

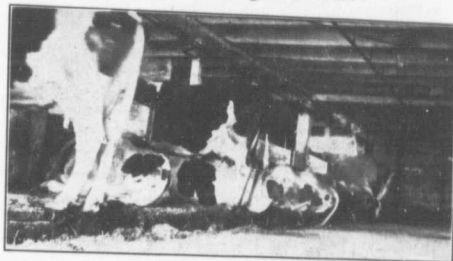
My first precaution after the corn is in the ground is to harrow with a light slant to both drag. It is alright to roll the soil down firmly around the seed but when the field is left with the surface packed hard, I find that the soil dries out more quickly than if harrowed immediately and that much moisture is lost to the crop.

The next harrowing follows just as soon as the

One Farmer's Milking Problem Solved

Machine Milking a Success

HOW to get the cows milked is a more serious problem in Elgin and Oxford counties than it is in most country sections. Hired help is just as scarce there as it is elsewhere; and there are more cows to be milked. The farmers of these up-to-date dairy counties do not milk a few cows as a sort of unimportant side line and thorn in the flesh of the hired man. They go into dairying in a businesslike way. If they cannot find a way to get their cows milked the main source of their income is cut off; hence the solution of the milking problem is a vital one with them. And some of them have already solved the problem. One milking machine agent recently sold over 60 milking machines in Oxford county alone. These machines were sold largely on the strength of the recommendations of other dairymen in Oxford and adjoining counties who have already successfully tested "milking by machinery."



In this Stable, Hand Milking is almost a thing of the past

Mr. L. H. Lippitt, Elgin Co., Ont. has pure-bred cattle only, and some of them represent a good stiff investment. None of them, however, are too good to be milked by machinery. In an adjoining article Mr. Lippitt tells of how the milking machine has enabled him to solve the question of how to get the cows milked.

—Photo by an editor of Farm and Dairy.

One of these experienced dairymen who strongly advocates mechanical milking is L. H. Lippitt, of Stratfordville, in Elgin county. Stratfordville is an awkward place to reach, there being but one train a day. So highly was Mr. Lippitt recommending his machine milker that an editor of Farm and Dairy decided that he must see Mr. Lippitt's machine at work and have a talk with him on the merits of this comparatively new system of milking cows. We know just how difficult it is to get hired help at all to say nothing of getting hired help who are also experienced milkers. Hence our interest in the "manless" milker.

MILKER UNBENIGNLY ENDORSED

It was no halfhearted praise that Mr. Lippitt bestowed on his new outfit. He has only had it a year, but he has tested the machine thorough-

ly and has not found it wanting in any particular. Mr. Lippitt has not jumped to conclusions that he will regret later. It took him a long time to make up his mind to give the machine a trial. He first investigated the efficiency of this method of milking in other districts where dairymen had already adopted the machine and when it was installed in his own stable, he said little about it until he had every reason to be dead certain that the machine was going to continue to "make good." Of course our main interest was to find how the machine was performing as a labor-saver.

TWENTY COWS AN HOUR

"A man can milk 20 cows an hour all by himself with this machine," said Mr. Lippitt. "I am not talking about the maximum possibilities of the machine; that's what we do, twenty cows

an hour every day the machine is in operation. This simply means that in a good sized dairy the farmer is not absolutely dependant on hired help to get the cows milked, but if need be can milk 30 or 40 cows himself."

"How about the cleaning?" we next asked. "We have been told that it requires a complete sterilizing apparatus in the stable to keep a machine clean enough to produce good milk."

"Well, we ship our cream to Stratton and Taylor in Guelph, and they consider it first class," answered Mr. Lippitt. "We have never had a complaint. Our method of washing may appear slovenly to some, but so long as our customers don't kick and we can never smell anything wrong, we are satisfied. I will wash the machine right now just to show you how easy it is done."

MACHINE WASHED IN ONE MINUTE

Suiting the action to the word, Mr. Lippitt pumped a bucket of water, attached the machine to the exhaust pipe, dropped the nipple into the water and let it go. A vacuum was created in a unit can, the water rushed through the rubber tubes from the bucket and the operation was completed. Mr. Lippitt claims that the water is sucked through rapidly enough to remove every particle of milk and dirt in the tubes and it only takes a half a minute, or a minute to complete the operation so far as one unit is concerned. The nipples and rubber tubes are then immersed in lime water until the next milking time.

At the time of our visit Mr. Lippitt was only milking five cows and a couple of them were being milked three times a day and hence at different hours from the remaining three. The machine, therefore, was not in use and had not been for

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CANADIAN

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Farmers Who Drive Their Own Automobiles

Experiences of Farm and Dairy Readers

CAN the farmer afford to buy an automobile? Well lots of them do anyway and get a heap of satisfaction out of their cars. It is estimated that one-half or more of the cars owned in the United States, are owned by farmers. At every country fair in the middle western states, the long string of automobiles that one will see there is not an evidence of the interest that wealthy or professional people in town take in the county fair; they are the cars that have brought the farmers and their families to their own show. In towns in those same states many of the automobiles seen around on market day are farmers' property. If one were to take a census of the personal property of farmers in many United States sections, one would find that a very large percentage of the land owning farmers own their own cars and use them.

Many of these cars are owned for pleasure only. And why should not the farmer have a car for pleasure as well as any other man? The great majority of the farmer owned cars, however, so their owners tell us, go a long way towards paying for themselves in the time that they save on business trips. And many more are considered a



Oxford County Dairy People Ready for a Joy Ride

Canadian dairy farmers are larger users of the automobile than many suppose. In the adjoining article the experiences of farmer automobile owners are given. In this illustration Mr. Jacob Mogg, Oxford Co., Ont., may be seen at the wheel. Beside him is Mr. H. Bolter's youngest daughter; and right behind is Mrs. Bolter. This scene might be duplicated on many dairy farms in Canada.

-Photo by an editor of Farm and Dairy.

well, we will let them tell their own story.

THREE YEARS' EXPERIENCE

"This is the third season that we have run our car," writes Mr. Harry Ketcheson. "On an average we have made 21½ miles on a gallon of gasoline and our repair expenses thus far have not exceeded \$2. We expect, however, to get an extra

tire soon to have in case of emergency. We have run nearly 6,000 miles now on the first set of tires, both on pleasure and business trips. We enjoy the car as it shortens the distance between us and our friends, markets and other places."

Mr. W. W. Draup tells us that his experience with the automobile has been short, only about a year, but so far he is well satisfied. "If a farmer of ordinary means wishes

to take a little out of life as he goes along, I do not know of anything he could invest in to give him more for his money than a car," writes Mr. Draup. And then he gives the following hints on selection:

"A farmer may expect that the heavier and more expensive his car is, the more expensive will be the up-keep, both for gasoline and tires. I am delighted with my car which is a light one. I live in a hilly country and the car always comes home smiling. For gas and oil it cost me one cent a mile last season."

"The automobile puts railway conveniences at the farmer's door, with the additional advantage that the time table is arranged to suit himself." Thus does Mr. Joseph Frappy sum up the advantages of his car. "I am not in favor," he continues, "of a heavy car as an additional one

thousand pounds weight is very destructive on tires and expensive on gasoline. The owner should be of a mechanical turn as 'hold-ups' are common at the repair shops."

Mr. Frappy believes that the automobile has a utility value. "Never buy a car for pleasure alone," he writes. "I can conceive of many instances where a motor car might be injurious to the younger members of the farmer's family, in cultivating a pleasure seeking spirit at the expense of nobler qualities. Wisely managed, however, a car may open up new spheres of usefulness and increase educational advantages. To the tired stay-at-home housewife the automobile is a boon."

MAKES LIFE A PLEASURE

A whole hearted advocate of the automobile for the farmer is Mr. G. I. Bailey, like all the others, a dairy farmer of Hastings county. "The

farmer's car makes farming more of a pleasure and farming less burdensome," he writes to Farm and Dairy. "When the day's work is done, I can take a drive of 20 or 25 miles in the evening and all in one hour. Such a drive lifts the cares and anxieties of farm life. Since I have gotten out until the afternoon. Then I can drive almost any distance I wish, transact my business and be back in time for milking and chores. I can go to market in one-quarter of the time I can with horses and soon be home again at my work. I bought my six-cylinder car in 1912 and can run it for \$75 or \$100 a season barring accidents or breaks."

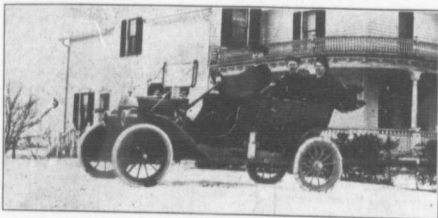
"This may seem somewhat expensive, but I do not think any one can have much pleasure without paying for it; and why should not the farmer take a little pleasure along with his everyday duties as well as our city consorts? I find that there is an excitement and fascination in driving a car and I for one get enough pleasure out of my car to make it profitable to myself and family."

"I built a small garage for my car, a fire-proof building 12 by 24 feet by eight feet high with a cement floor. The floor slopes both ways towards the centre and then towards the door, so that all mud and water run out immediately when I wash the car. My car cost \$2,350 so I think it is worth taking care of."

THIS CAR A BUSINESS PROPOSITION

Mr. Jerry Marshall takes as much pleasure out of his car as anyone, but at the same time he re-

(Continued on page 8)



Another Dairy Farmer who drives his own car

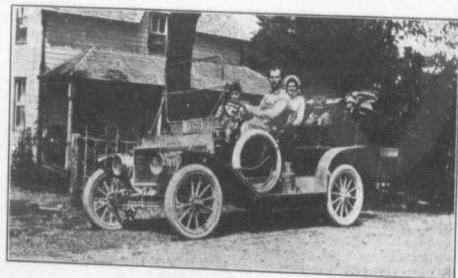
This is the way in which Mr. and Mrs. J. F. Ketcheson and their son Harry go visiting. Mr. Ketcheson also tells us that the car, as a business convenience, can be made to contribute largely to its upkeep. There are several cars owned by dairy farmers in his section of Hastings Co., Ont.

profitable investment from a purely business standpoint.

CANADIAN FARMERS ARE GETTING AUTOS

The "auto idea" is beginning to take hold among the farmers of Canada. Here and there in almost every good farming section of Ontario, and frequently also in Western Canada, will be found the farmer who is driving his own automobile. This is particularly true of the dairy and fruit sections. R. A. Pendale of St. Thomas, and J. W. Richardson of Caledonia, prominent competitors in the Prize Farms Competitions conducted by Farm and Dairy, are automobile enthusiasts. T. L. Dunkin & Son of Norwich consider the automobile an O.K. proposition for the business farmer. L. H. Lippitt of Straffordville, informed an editor of Farm and Dairy recently that he has already made his car pay for itself and that after only one year's ownership. Ed. Smith of Wooler in Northumberland Co., Ont., has owned an automobile for some years now to the immense satisfaction of himself and his family.

The auto idea has taken a strong hold on the dairy farmers of Hastings Co., Ont. One agent for one make of car sold as many as 18 automobiles in the vicinity of the town of Stirling alone. Practically all of these cars are owned by dairy farmers and well satisfied owners they are. Illustrations of a couple of these cars are given herewith. As to what the owners think of their cars;



All of the Family Appreciate their Auto

Mr. Jerry Marshall, Hastings Co., Ont., tells in the adjoining article of his auto experiences. One needs only to look at the happy faces seen herewith to know serving of the pleasures that an auto brings than an industrious farmer and his family.

Potato Culture As It Was and Is

B. J. Gibson, St. Johns Co., N.B.

I WELL remember when as a boy I cherished the keenest sense of resentment because my liberties were curtailed and my attendance at the "swimming hole" seriously interfered with, by arduous and paternally compelled duties in the potato field.

The work consisted of drawing earth up around the potato vines with one of the greatest torture making implements ever devised, the hand hoe. It was a caution how long those 100-foot rows used to seem to me. The first few feet would be bad enough, but by the time the 12-year-old boy had reached the other end, it seemed to take a cellar full of earth to bank up one vine properly.

Hoe bitter were my reflections as I followed up and down those rows. How apparently easy and lot of the city boy did appeal to me. I used to see them running around town almost every mar-



Just for Home Use

Mr. W. A. Waller, Ontario Co., Ont., may be here seen planting a small patch of potatoes, "just for home use." The commercial grower has found a cheaper and more expeditious method.

—Photo by an editor of Farm and Dairy.

ket day. Even Daddy came in for much bitter resentment.

THE SHOVEL CULTIVATOR

One night Father announced that our little quarter-acre plot of potatoes was to be increased to two acres. My troubles seemed to be multiplying. It would take a large book to tell about the schemes I hatched to get away from that work. All of them had the city in the background. But along with that increase in acreage came the shovel cultivator and Daddy did the work and I led the horse; that is until the horse got to know its own way around. The cultivating of the whole two acres was much less work than had been the work on the original quarter acre. My attitude towards the world in general and potatoes in particular then became more pleasant; that is until digging time. Daddy and the hired man did the digging and their temper was never any too good as they strained away with their hand diggers. My temper was worse as my back ached with the picking. The fact that the minister's sons were always in evidence kicking a football around the yard of the Manse, a short distance down the road, did not make matters any better either. If it had not been for those potatoes and similar jobs performed in an equally laborious way, I

might still be on the farm. But I left it long ago.

Several times during each season in connection with the business in which I am now engaged, I have found myself in Montreal. Last spring I read a little skit in a Montreal paper about a potato farm not far from the city, on which as much as 90 acres of potatoes were grown each season. This seemed almost incomprehensible to me. Potatoes had always been a profitable crop with us at home even if our methods of cultivating them had been slow and laborious, and I could understand a man wanting to grow a lot of them. Just how a man could get labor enough to cultivate 90 acres was beyond my comprehension. I had lost track of the progress of modern invention in connection with farm work. When I was told that the 90 acres were planted, cultivated and harvested by machinery, I immediately became curious to know something more about it and the result was a trip to that potato farm. The proprietor showed me and told me many interesting things.

It was potato planting time when I arrived on the farm. Instead of the laborious work of dropping seed by hand a man was driving a machine up and down the field. That machine opened the furrow, dropped the seed and covered it again, all at one operation. The proprietor informed me that he was thinking seriously of getting another potato planter that would sow commercial fertilizer along the drills in addition to the operations already performed by the planters he already had.

"I can understand the cultivating," I remarked, "but how about the digging?"

DIGGING BY MACHINERY

We were passing the implement shed at the

time. The proprietor took me in and showed me a machine that was new to me and told me that



Potato Planting Up-to-Date

that machine had made digging quite as simple as the planter had made the dropping of the seed. He explained that the machine digger is hauled by two horses and digs one row of potatoes at a time. A shovel like arrangement scoops right in under the drill and the vines, tubers and earth pass back onto a wire tread. The earth falls behind the tread and the tubers come out behind already for picking.

"And how about the picking?"

"There is a machine that collects the tubers as they are dug and drops them a bushel at a place," answered this most progressive potato grower, "but as our land is somewhat stony I do not believe that the picker attachment would be a success with us although it might work perfectly on a soil clear of stones."

If potatoes were profitable under the system that we used to follow when I was a boy, how much more profitable must they be now with such up-to-date machinery available for every stage of the work and potato prices higher than they were.

How We Get Pictures of Live Stock

Suggestions by an Editor of Farm and Dairy

THERE are very few commercial artists who understand the work of getting first class and suitable photographs to show up the points desired in animals of pure breeding. Years ago we always employed or endeavored to employ an expert photographer to get pictures for purposes of illustration in the columns of Farm and Dairy. We used to think that a great big camera worth from \$75 to \$300 and more, and producing prints that cost us \$1.50 to \$2 each, was necessary for the kind of work we had to do. We found it always difficult to get a man just when we wanted him and an artist who understood live stock. Therefore, we determined that our own editors should become expert at this kind of work and henceforth make us independent of commercial artists and able to get decidedly better photographs than most of them were able to produce. That we have succeeded in training our editors to produce the best in photographs is well known to all of you readers who follow

Farm and Dairy and take note of the wealth of superfine illustrations of the best in live stock, which we are constantly publishing in Farm and Dairy.

It is all so easy to get good photographs that we marvel now that we did not sooner realize our opportunity and prepare ourselves sooner than we did to take good photographs, especially of live stock. We meet many breeders from time



The Possibilities of the Small Camera are Here Exemplified

This splendid illustration of Aachenbrain Fennis 9th, the great cow owned by R. E. New, Howick, Que., is from a photo taken by an editor of Farm and Dairy with a camera costing \$15.00. Any breeder, by following carefully the directions given in the adjoining article, can do equally good work. A camera is a good investment for the breeder. A photo enclosed in a letter is the best sales argument possible. Breeders are catching on to this wrinkle in salesmanship. It's worth a trial.

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to time who desire to take photographs of their own stock, yet feel that the work is beyond them, so we have thought it well to give you the benefits of the inside secrets of success in running a camera to produce good pictures, especially of animals.

Our editors, in spite of the fact that we have available large-sized and very costly cameras, prefer to use small collapsible cameras taking pictures of post-card size. The special camera preferred in our work is the Fremo Fim Pack in postcard size, made by The Canadian Kodak Co. at Toronto, and obtainable in any city or town and in many villages. The particular machine our editors favor costs only \$12.50 and \$2.25 extra for carrying case.

To get the most perfect pictures of an animal and to be quite sure of success, we find it advisable to always use the camera on top of a tripod. We can then place the animal in position, make sure that all is right with the camera properly focused at the right distance, and, keeping our eye over the full size of the animal, touch the all is ready. Without the tripod one must depend upon the very small reflection in the finder on the camera. It is difficult to make certain that the expression is right, that the ears, legs, tail, etc., are in the position desired.

Having selected a suitable place to take the picture—the ground being level and clean, the background, if possible, a woods 100 rods or more

in the distance and placing open country intervening, (the back of the camera towards the sun because the picture is really the result of reflected light from the sun to the animal and into the camera) we put up the camera on its tripod and have the animal led out in position about 18 feet from the lens on the camera. The distance will depend upon the size of the animal and can be judged from the comparative showing in the finder. It is well to have the animal plenty far enough away so that there will be plenty of ground all around the picture of the animal in the finished photograph; then there is no danger of cutting off legs or ears or horns as is so often done in the average photograph taken by the

(Continued on page 14)

Hydro-Electric Power in Home and Dairy

A SMALL private hydro-electric plant at Greenwood, Ont., for several years has been demonstrating the value of hydro-electric power on the farm and in the country home. The owner of this plant is F. L. Green, farmer and miller. With the energy developed by his hydro-electric equipment Mr. Green milks 40 cows, lights all his buildings, runs the machinery in his model farm creamery, runs a circular saw and emery wheel in his work shop, and Mrs. Green's work in the home is appreciably lightened by electric devices.

The installation of Mr. Green's electric plant was considerably simplified by the fact that he already had water power available. When we first heard of Mr. Green's very complete hydro-electric equipment we feared that milling might be his principal business, with the farm as a side line, that his plant might represent an investment away beyond the reach of even well-to-do farmers and hence his experience would be of little value to Farm and Dairy readers. Mr. Green, however, is more farmer than miller. On a recent visit to his home, an editor of Farm and Dairy found that dairying is the principal business at Unadilla Farm, and that it takes more men to look after Mr. Green's splendid herd of pure bred Jerseys, than to run his mill. His hydro-electric plant is so simple and cheap that any farmer with power available could duplicate it for a few hundred dollars.

Mr. Green has a 10-horse power wheel to drive a five H.P. dynamo. His water wheel is fed from the main penstock, which feeds the large mill wheel. It operates under a head of 42 feet, running 800 revolutions a minute. His dynamo, which is a direct current 110-volt machine, is belted to the turbine. He uses no governor on the water wheel and any change of load is regulated by taking off or putting on more water. As the mill is running practically all the time the mill hands can tell by noticing the lights whether or not a change in speed is needed and regulate the wheel accordingly.

"If the wheel was isolated, as it would be were it on a separate installation used for no other purpose than lighting," remarked Mr. Green, "it would of course be necessary to have a water wheel governor to regulate the speed."

Mr. Green's specialty is fancy creamery butter. His "Unadilla" brand butter is used almost exclu-



This Farm House is Lighted with Home Made Electric Energy

sively by the Ladies' College at Whitby, and the balance is sent to Toronto where it commands best creamery prices. His farm creamery, if on a smaller scale, is as complete as the best cooperative creamery in the country. His electric power is used to operate the pasteurizer, drive the separator and turn the churn. A small boiler provides the necessary steam for heating water, pasteurizing the milk and ripening the cream. Mr. Green also has a small engine installed in connection with the boiler which can be used in case of emergency. Mr. Green regards electric power as the model creamery power in that it is noiseless, odorless and dustless.

One of the greatest burdens of the housewife, the weekly washing, has been greatly simplified for Mrs. Green. A room adjoining the creamery is equipped as a laundry with set tubs and steam pipes extending from the creamery for heating water. Mr. Green is now making arrangements to run the washing machine and wringer by electricity.

Mr. Green's farm workshop is one of the most complete that we have ever seen. He has a full

ing machine for a few years and finds it entirely satisfactory. The vacuum pump is located in the dairy building, which is over 150 feet from the stables. Pipes extend underground to the stable where the machine is used on pure bred registered Jerseys that represent a lot of money, but are not considered by Mr. Green too good to be milked by machinery.

The most appreciated feature of this hydro-electric plant, according to the testimony of both Mr. and Mrs. Green, is the electric lighting. The dynamo is used for lighting the mill, office, barns, stables, dairy building and the home. All the buildings are well lighted and the house exceptionally so.

"We have over 40, 16-candle power lights in the house and some 25-candle power Tungstens," said Mr. Green. "We generally have about half of these on and run the dynamo a little fast to give four or five volts above the marked voltage of the lamps so as to get a better and brighter light. From the steady and even speed of the wheel we get a very steady light. I have noticed that dynamos when driven by a gasoline engine sometimes give an unsteady light, which is hard on the eyes and the light goes up and down following the necessary changes of speed in the engine."

ADVANTAGES OF ELECTRIC LIGHTING

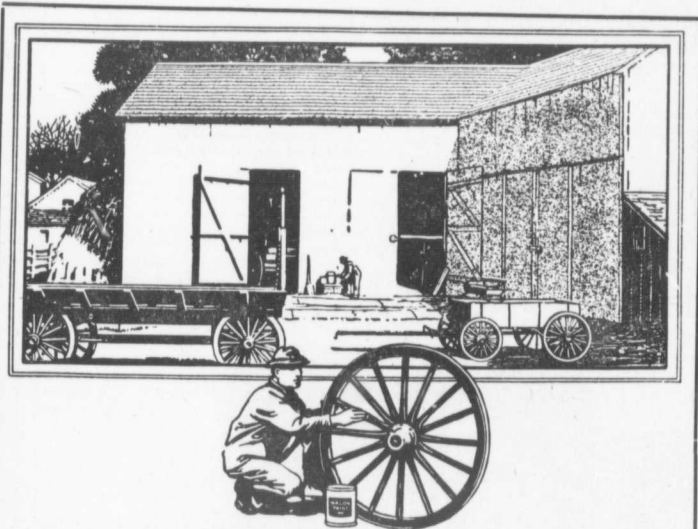
Fancy how nice it is when one goes to the stable on a cold winter morning, just to turn a button and forthwith the whole stable is flooded with light! No lanterns to get out of order or broken; no danger of fire through their careless handling. In the home there are no lamps to clean and fill. The Greens just turn a button and

(Continued on page 17)



A Model Farm Creamery and Laundry run by Hydro-Electric Power

—Photo by an editor of Farm and Dairy.



Keep your farm implements, wagons, and machinery well painted. Paint protects wooden and metal surfaces from the destruction of the sun, rain and storm. One dollar's worth of good paint now, will save twenty dollars worth of managed appearance. Besides that, it will give your property a prosperous and well managed appearance. When you buy paint, it is economy to buy the best; buy the paint that will give you the longest service. No matter what you want to paint, there is a Sherwin-Williams product that will give you lasting satisfaction at small outlay. Ask the Sherwin-Williams Agent in your town for color folders.

SHERWIN-WILLIAMS PAINTS & VARNISHES

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"EASTLAKE" METALLIC SHINGLES FOR YOUR HOME ROOF

"Eastlake" Metallic Shingles

Have been used for many years in preference to wooden shingles, and they are now rapidly replacing slate roofing. Why?

Because "EASTLAKE" METALLIC SHINGLES will not split, crack or wear out, neither can they warp or swell, and are not affected in any way by weather conditions.

They do not require heavy timbers to support them, thus lessen the weight of the roof to a considerable extent.

Barns and public buildings covered twenty-six years ago with "EASTLAKE" METALLIC SHINGLES are as good as new to-day.

We will tell you the cost, if you will send the measurements of barn, house or building to be roofed. Let us send you our free booklet.

588

THE METALLIC ROOFING CO. LIMITED

MANUFACTURERS - TORONTO & WINNIPEG

A Silo Filling Convenience

G. W. Elgin Co., Ont.
Any one who has ever worked inside of a silo at filling time will know something of the discomforts that are attendant on that job. When I got in a silo I like to have a good broad hat on, to keep the corn from pelting down on my shoulders, getting inside of my shirt, and also to preserve my eyesight. It was not so bad when we had the old tread filler, but now that the corn, in this county at least, is blown into the silo, the discomforts of filling have increased 100 per cent.

Invention, however, has now come to our aid. A device manufactured in the United States, that is meeting with favor wherever tried, is the one seen in the illustration herewith. It is composed of several sections of about the same diameter as the blower of a cutter but these sections hang inside the silo and the corn comes down through them right to the surface. The man in the silo, through these tubes, can direct the corn just wherever it is needed and it is claimed that the corn comes down with sufficient force as to make tramping almost unnecessary. As the silo is filled the sections are detached, thus making the device adaptable to a silo of any depth.

The company whose device I am acquainted with is the Silver Manufacturing Co. of Salem, Ohio. In a statement made by them recently they say, "This device has become extremely popular within the last year or two, and this year will probably form a part of perhaps 75 per cent of the equipment ordered."

I pass this suggestion on for the benefit of others who, like myself, appreciate the discomforts of silo filling when without some such device as this.

Farmers Who Drive Their Own Automobiles

(Continued from page 5)
guards it as a stratagem of investment. Notice the uses that he makes of his auto. "My auto saves me much valuable time," he writes. "If I am in a hurry I can be on the road with my car before I can hitch a horse to a buggy. I run all kinds of errands, go to market with produce of all kinds and in the case of butter can deliver it on the market on a hot summer's day before it has a chance to get soft. I can take 10 bags of potatoes in an ordinary five-passenger car, go 12 miles to market, sell and deliver my load and get back to the farm on one gallon of gasoline; the price of my dinner which is saved. I do not have to tie up my horse or have anyone to hold it. I can stop anywhere, nor do I have to pay 25 cents that it costs to put a horse in the stable. And then the horse that was left at home is fresh and ready for work in the afternoon."

"Pay the mortgage first," is probably good advice when one is thinking of buying a car. After one has the car paid for and is comfortably fixed there are many dairy farmers who will tell you, as have the ones whose testimony has already been given, that the best way to get the greatest pleasure out of life for everyone in the family is in the owning of an automobile.—F. E. E.

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Professor Smith was then well of the potato vines, which were completely destroyed by bugs and blight. He was surprised to find that the eggs were still green along the same vines, and he was not the only one who was puzzled. He then turned to the same questions, and sectioned the potatoes. Professor Smith's complete instructions for growing just as he grows his potatoes are given in the book.

In the preparation of the formula that our mixture is first dissolved in water, and then added to the very best of the water. It is in a bucket of a barrel to 20 gallons of copper sulphate solution, and it is decided by the amount of water we have. If we have four pounds of copper sulphate dissolved in hot water to the 20 gallons, I can stop anywhere, nor do I have to pay 25 cents that it costs to put a horse in the stable. And then the horse that was left at home is fresh and ready for work in the afternoon."

HOW WE SAFEGUARD OUR POTATO CROP

C. McGillivray, Picton Co., N. S.

WE spray our potato crop with Bordeaux mixture just as regularly as we cultivate. We do not spray during as long a season as we cultivate nor as often, but just as regularly; from four to six times a season the vines get a dose of Bordeaux. And why? Statistics prove that in four years out of every 10 we have a wet season. With the wet season comes potato blight, the cause of rot in potatoes. We know there is a prevalent idea that it is the wet soil that causes the rot, but nothing is further from the truth. The only thing that ever yet caused rot in potatoes is potato blight, and the spores that cause potatoes to rot are produced by the disease on the potato tops. Therefore we fight blight and avoid rot.

We got our first idea on the subject of potato blight on a trip that I took to the Nova Scotia Agricultural College Farm in the old days when

just how much we must dilute the concentrated solution to get a properly diluted solution for spraying.

To the Bordeaux solution we always add some form of poison to kill the potato bugs. A few years ago Paris green was the universal poison. We used one to one and one-half pounds to 40 gallons of water. For the last two or three years we have been using three to five pounds of arsenate of lead dissolved in 40 gallons of water. The arsenate of lead remains in solution much longer than does Paris green, does not scald the leaves if they get too strong an application and adheres to the foliage more tenaciously than the old poison. Likewise it has a white appearance, showing plainly where we have sprayed and where not. It is slightly more expensive than Paris green.

When we come to choose a machine we found that we could get anything



Equipment Such as This Makes the Bug and Blight Fight Easy

Blight causes more loss to potato growers than all other causes combined. It is a pest that makes potatoes rot. Potato bugs also do their share of damage. Both can be controlled by proper spraying. The horse power outfit here illustrated is suitable for the grower with a fairly large area.

Our courtesy The Canadian Potato Machinery Company.

Professor Smith was in charge. It was then well on in September and the potato vines at home were completely destroyed by a combination of blight and bugs. What was my surprise to find that the vines at the College were still green and growing. I was not the only one surprised. Others along the same day started to ask questions, and seeing that we were interested Professor Smith gave us complete instructions for spraying potatoes so that we could keep our crops growing just as he did his.

PREPARATION OF BORDEAUX
In the preparation of the Bordeaux formula that we use in making our mixture is what we call a 5-4-40 of the very best unsifted lime, slack it in a bucket of water and dilute in a barrel to 20 gallons. In preparing the copper sulphate solution our method is decided by the amount of time we have. If we are in a hurry the four pounds of copper sulphate is dissolved in hot water and then diluted to the 20 gallons. If we have lots of time we would start a day or so ahead, take four pounds of copper sulphate and dissolve it by suspending in a gallon bag in 20 gallons of water. We then pour both mixtures together into one barrel at one time, thus insuring their being thoroughly mixed. This combined mixture we strain through a fine brass sieve into our spray tank. A time-saving method is to dissolve as much bluestone (copper sulphate) as is needed for the season's operations at one time in a concentrated solution. By keeping track of the number of pounds of bluestone dissolved and the number of gallons of water used in dissolving it we know

to buy a knapsack sprayer worked by hand and costing \$6 to \$10 to a four-horse power machine costing \$100. The first required too much hard work and the latter we considered too expensive. What we did do finally was to buy a barrel sprayer costing \$25, take a couple of buggy wheels, erect a platform on it with shafts attached, and from the same company as supplied us with the barrel sprayer we secured a brass pipe with four nozzles so located on the pipe that they were directly over the rows, which were 27 inches apart. We prefer to have the nozzles located to throw the spray ahead a little rather than directly down on top of the vines, as it is on the under portion of the leaves that the bugs get in the most of their work. (One man can operate this outfit. The horse knows the way and the man operates the pump.)

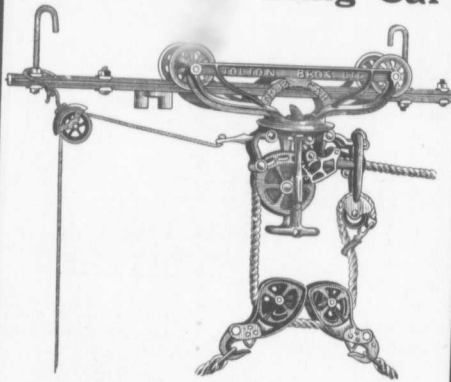
We make our first application when the tops are about six inches high and continue every 10 days or two weeks thereafter. We do not believe in prevention is better than cure. We find that it takes from 35 to 50 gallons of the mixture to the acre, depending upon the size of the tops. And does it pay? Two years ago we had a splendid crop of potatoes harvested in excellent condition. Our neighbor just across the way had six acres that were most promising in the early part of the season. The final yield was 100 bushels an acre of marketable potatoes. He lost at least 100 bushels an acre by rot. They were early potatoes and would have sold at 50 cents a bushel. His loss was \$300, or enough to buy three of the most up-to-date spraying outfits.



Put the rest in the bank. You'll find yourself in the best of company—your troubles lighter—your purse heavier—if you buy a Ford—and join the happy throng of those who know car comfort plus service satisfaction.

More than 275,000 Fords now in service—convincing evidence of their wonderful merit. Runabout, \$675; Touring Car, \$750; Town Car, \$1,000—f.o.b. Walkerville with all equipment. Get interesting "Ford Times"—from Dept. G., Walkerville Factory, Ford Motor Company of Canada, Limited.

The Tolton Sling Car



With the Tolton Car it is only necessary to raise the bundle up to the level of the mow, or high enough to clear the beams. Then, by means of a special trip you release the car from the stop block when the bundle is at any elevation.

The special trip operates a rope grip which holds the load securely after the car leaves the stop block.

In this way the Tolton Car saves all the time and work required to raise the load up to the car.

Works Easily

The Draft Horse on this car is twice the diameter of any other. For this reason the Tolton Car will lift as big loads with Double power as other cars will lift with triple power.

There are no springs in this car.

Built To Last

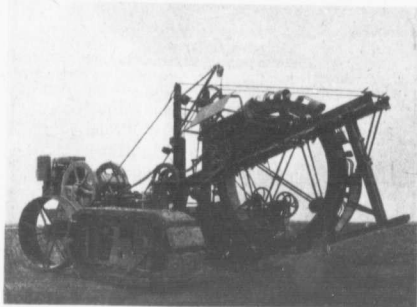
The Tolton Car has a one-piece malleable truck frame, and heaviest working parts throughout. Frame is strongly ribbed to prevent spreading on the track with heavy loads. The car weighs 68 lbs. and will carry a tonload.

It works equally well with fork or slings. We make it for both wood and steel tracks. Ask your dealer or write us for Catalogues on a Tolton Sling Outfit.

BEATTY BROS., Limited, 653 Hill Street, FERGUS, ONT.

BT stands for Best

Duty Free on Ditching Machines



PUT YOUR SAVINGS INTO A "BUCKEYE" TRACTION DITCHER

Money invested in tile drainage is well spent. Tile Drainage is more important than fertilizer or rotation of crops. By tiling your land you not only increase its productivity, but it enhances the value of your farm.

Ditching done by hand is a thing of the past. Hand ditching is not only unreliable, but it is slow work. Farmers in every locality realize this and are looking for machinery to cut their ditches uniform in size and depth, with the sides straight and smooth and to exactly the correct grade. In fact they are looking for

THE BUCKEYE TRACTION DITCHER

With this machine you can dig anywhere from 100 to 150 rods per day, depending on the soil. It is a machine that is easy to operate and economical to maintain. There are over One Thousand "Buckeyes" in operation throughout the United States and Canada. We would be glad to give you the name and address of the Farmer nearest to you owning and operating one of our machines.

Farm Drainage Machinery is now on the Free List up to \$3,000, which will mean a saving of from \$500 to \$700 on a machine. Why not take advantage of this, purchase a Buckeye Traction Ditcher and drain your farm?

Our Illustrated Catalogue B contains all the information you will need. Write for it to-day. It's free.

The Buckeye Traction Ditcher Co.
FINDLAY, OHIO, U.S.A.

HORTICULTURE

Owenship of Power Sprayers

John Beemer, Brant Co., Ont.
There are only four days in which it is possible to spray for blister mite. The eggs are laid in the fall and hatched out about the time the leaf buds are bursting. If spraying is not done at this time it is ineffectual. It takes me one and a half to two days to spray for the leaf blister mite. This is one reason why I do not favor the cooperative ownership of power sprayers. Did five or six of my neighbors have an interest in my sprayer we would all be wanting it at the same time and not more than two of us would have the spraying done properly. For later spraying, of course,

trees are particularly healthy.

The pear growing sections of Ontario and British Columbia report the condition very favorable as indicated by the bloom. The trees are particularly healthy, and no winter killing is reported. About the only pear grown in a commercial way in which has come through the winter in fine condition, and promises a large yield. In the Maritime Provinces only a medium crop of pears is expected. The Kootenay District anticipates a heavy crop.

PLUMS

Plums have undoubtedly suffered much injury from the late spring frosts. The plum, however, is very prolific in bloom and it is not at all improbable that a sufficient number of buds will be left to make a medium if not a large crop in the plum districts of Ontario. In British Col-



Modern Warfare as seen in a Nova Scotia Orchard

The secret of success in fighting insects is to get the spray on just at the right time. To cover a large orchard in the limited time available requires the very best of spraying machinery. The up-to-date method of conducting war on insects, as practiced by Mr. Manning Ellis, Kings Co., N.S., may be here seen.

there is more time and the same machine could be used on more orchards. Different varieties also should be sprayed at different times. Pears and peaches require to be sprayed at different times than apples. If five or six are claiming the sprayer there will be satisfaction for none of us.

Another practice that I have found to be not practicable is for the fruit grower to own a power sprayer and attempt to spray the orchards of his neighbors as well. Last spring I sprayed several orchards around here and I know that some of the first and last orchards sprayed will not show satisfactory results. When I was away from home spraying the work on the farm was neglected and the loss that I will sustain in a reduced crop through not having time to get the cover crop plowed down will be more than the amount I received for outside spraying. If we are going in for fruit growing we might as well plan to have our own machine for our own use.

Fruit Crop Prospects

The prospects for the 1913 fruit crop in Canada are summed up by the Dominion Fruit Branch as follows:

The reports of correspondents upon the apple crop are most optimistic. In British Columbia and Ontario the bloom is sufficiently advanced to show that it is especially heavy this year. Quebec and Maritime Provinces report that there is an excellent showing for bloom, and

umbia the crop will be heavy, though some deductions will probably have to be made on account of recent frosts.

PEACHES

In Southern Ontario it looks as if the peach crop would be the largest on record. The recent frosts appear not to have done any serious injury, and fall and winter conditions were particularly good. In British Columbia some slight damage to the early blooming peaches is reported, but it is all probability sufficient bloom has been left to make a full crop. Cherries share in the good conditions of the other tree fruits.

Grapes have come through the winter in excellent condition and it all probability will give a large crop, but the danger of frost is not yet past.

SMALL FRUITS

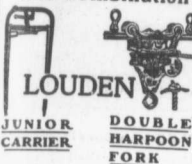
The stand for 1912 was excellent, and though the acreage has not increased much the good stand would in itself indicate a larger crop than last year. The winter conditions were very favorable. No correspondent has reported any serious loss, even in raspberries. Blackberries are looking well. Gooseberries and currants are in good condition. The blossoms of some of the earlier varieties have been injured by the frost of the last few days and consequently the first picking will be later than usual. It is doubtful though whether the frost will in any way materially reduce the quantity of the crop should conditions otherwise remain favorable.

**BURMAN'S
SAVES TIME**



B. & S. H. TH
Limited

You can't beat this Combination



LOUDEN'S JUNIOR CARRIER

—has proven itself by many years of test and by thousands of farmers to be the one perfect carrier. It is simply and strongly constructed of malleable iron, as well as made of superior quality. Its mechanism is perfect. Has large curved, positive lock and wide flaring mouth. Sold at a price within reach of everyone.

and the FORK
—when used with this carrier cuts down time and labour in handling hay. You can't beat this Louden Harpoon Fork. Material and construction insure strength as well as ease of operation. It locks both open and shut. Has convex points and is designed to carry a large load. Has a combination outfit that is well worth while. Ask a Louden dealer in your town to show you.

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POULTRY YARD

A Cause of Bad Eggs

"Did you ever see the children scurry away into the hay mow, under the barn, anywhere and everywhere that hens could go just as soon as the egg dealer is seen down the road?" asked Prof. F. C. Elford of an Eastern Ontario audience.
From the subdued expressions heard in the audience it was evident that such a scene was not uncommon in that district. Those eggs, good, bad



In a Hollow Tree

and indifferent, collected from nests containing from one to a dozen are sold at a flat rate to egg dealers and then shipped to central egg warehouses, where they are candled and the bad ones discarded. These eggs in some cases are not only stale, but are partially incubated, and for a customer to break a single one of them at the table is enough to spoil his appetite for eggs for the next couple of months. This dislike leads to reduced consumption and also to reduced prices, for people are not willing to pay a high price for eggs whose quality is not guaranteed. The illustrations given on this page give a fair idea of some of the causes of bad eggs on the market.

How can the hens be prevented from stealing away their nests? We have noted in our experience that hens are not so apt to steal away their nests where clean darkened nests are provided in the hen house. Likewise,



A Typical Wood Nest

hens that are fed regularly in the house are more apt to lay there. Any way, farmers who are good poultry men don't pretend to allow their hens to run all over the farm and lay wherever they like.

The action of the egg dealers of Montreal and Toronto in deciding to pay for eggs according to their quality should do much to make it worth the farmer's while to take the proper care of his eggs. Even with conditions as they are, producers cannot afford to market eggs that have been secured from stolen nests. It reduces both consumption and price.

I received in good condition the pair of pure-bred White Wyandotte fowl for securing five new yearly subscriptions for Farm and Dairy. They are certainly a fine pair of fowl, and I feel that I am more than repaid for the time which it took me to secure the subscriptions.—Lloyd M. Beckstead, Dundas Co., Ont.

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LIVE HENS

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FRATTS LICE KILLER
(powdered) murders lice and so increases greater profits.
Guaranteed.

THE PRATT FOOD CO., OF CANADA, LTD.
TORONTO, ONT.
100-Page Poultry Book, 10c.

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FOR SALE—Iron Pipe, Pulley, Belting, Rails, Chain, Wire Fencing, Iron Posts, etc., all sizes, very cheap. Send for list stating what you want.—The Imperial Waste and Metal Co., Dept. P. D., Queen Street, Montreal.

Baby Chicks

Order your baby chicks now from our splendid laying strain of SINGLE COMB WHITE LEG-HORNS
Utility Poultry Farm
T. G. DeLAMERE, Prop.
STRATFORD - ONT.

EGGS, BUTTER and POULTRY

For best results ship your live Poultry to us, also your Dressed Poultry, Fresh Dairy Butter and New Laid Eggs. EGG cases and poultry crates supplied.

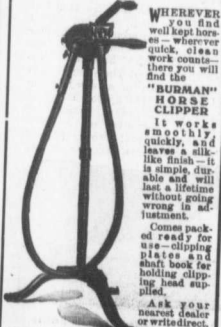
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Toronto, Ontario

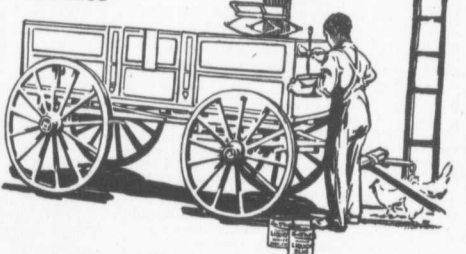
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are what you should use on wagons, implements and everything else around the farm that weather can rust or rot. With its sturdy protection your equipment will last three times as long as it will if unpainted.

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A "Snap" Showing the Haley Bros., at M. H. Haley's Farm

PRACTICAL FARMERS WHO HAVE MADE FAME AND MONEY WITH HOLSTEINS

By Chas. C. Nizon, B.S.A.

The Haley Bros. of Springfield, Ont., who in a few short years have bred and developed two noted herds of Holsteins—Noted for Show-Yard Winnings at Toronto,



M. H. HALEY



M. L. HALEY

Ottawa and London, and still greater in Practical Production Work at Official Record Making and in the Great Dairy Test of the Guelph Winter Fair—High Testing Holsteins Predominating—Photos and Information Secured by an Editor of Farm and Dairy two weeks ago While on a Special Visit to Haley Bros.' Farms

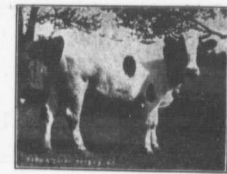
PROBABLY you have met the Haley Bros. You have found them, as we have always known them, to be two modest, practical, progressive farmers who breed the kind of Holsteins that are invariably on top or near the top in the showing at the largest fairs, and also make good in dairy test work. You have also found them, even as we have always found them to be, very reasonable (in fact, often too reasonable considering the quality of their stock) in the price for which they sell it. Having these things in mind we have felt for some time that "Our People," who read Farm and Dairy, would like to know more about the Haley boys and their noted Holstein cattle; therefore we arranged a trip recently to Springfield, Ont., in Oxford county, where these breeders both live on their respective farms, and also give our readers the benefit of it in this article.

If you have ever had that noteworthy experience of starting in with pure-bred cattle, representing the best available, you know much about just how the neighbors laughed at the Haley Bros. when they decided to go in for better stock and put their good money into a few choice Holsteins. You can imagine also how the laugh came down even more greatly on the Haley boys when some of their earlier purchases died on them! The first

nine to 16 calves they got were bulls. Once they had all but decided to give up the business. But these brothers had grit and perseverance, and they had a more or less clear vision of the possibilities of their favorite cattle, the Holsteins, and in spite of circumstances and considerable odds they continued on in the course they had chosen, and to-day, only nine years after their first start with Holsteins, they have achieved great success and note for their Holsteins as high testers in butter fat, as heavy producers, and as the correct type, which is sure to be at or near the top in the strongest of showyard company.

For several years these breeders did not realize just how excellent was their foundation stock. Some of their neighbors, who were experienced in showyard work, however, appreciated the superior excellence of the Holsteins, which the Haley boys were breeding, and on different occasions they bought and borrowed stock from these brothers to take to the larger shows. As these cattle invariably did well and frequently came off with the champion honors, the Haley Bros. came to the conclusion that they had better show their own stock. Acting on this conviction they fitted up their herd, and two years ago made their first appearance at Toronto in the show-ring of the Canadian National Exhibition.

The result of this forward step was a great surprise to the Haley Bros. themselves and to the public in general. Inexperienced as they were they had not expected to do so well, although they felt their stock was about as good as it is possible to breed it. Farm and Dairy readers will remember that at that first showing in Toronto the Haley boys were awarded first and second prizes on junior bull calves and champion young herd of one bull and



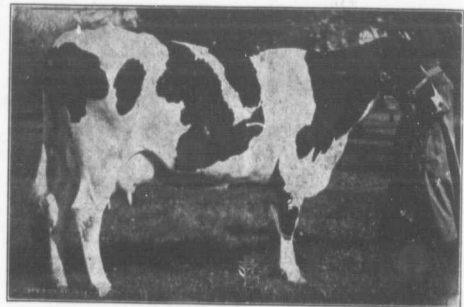
"What Do You Think Me for Type?"

four females also, those calves being the oldest got of the great "Grace Fayne" bull, an illustration of which appears in connection with this article. Then they secured also first, second, third and fourth on male calves of the Butter Baron stock. They got also first on yearling bull, which was also junior champion male; also first and third on milk cows and the senior champion female and grand champion, besides the first prize and junior champion female; third on dry cow; second on a three-year-old, first and second on heifers, one year old; first and fifth on heifer calves under one year and first and second



"I'm a Half-Sister, a 'Grace Fayne' Too"

first and second on junior bull calves. In females they had sold practically all the older stock before the day of showing, and were therefore without them to exhibit. Two of them won second prizes under other ownership. The Brothers retained, however, the great heifer, Grace Fayne Abbecker, which won first prize in her class and afterwards became grand female champion of the show (1912). (Her picture as we took it the other day is reproduced with this article). Then there was first, second and third for them on Holstein heifers, one year old; first on senior heifer calf; first and second on yearling heifer calves; first and



The New Canadian Champion Holstein Cow in Aged Class

Queen Butter Baroness, here shown, recently made in 7 days an official record of 31.7 lbs. butter; 52.3 lbs. milk testing 4.93% in butter fat. For the 30 days her milk averaged 4.92% butter fat; she made in the 30 days 2,984.7 lbs. milk, equivalent to 127.4 lbs. butter. This cow has a remarkably good record in public dairy test work at the Guelph Winter Fair. Read more about her as given in the article adjoining.—Photo and 10 others on these two pages all taken by an editor of Farm and Dairy.

second on four animals progeny of one bull under two years, owned and bred by exhibitor; first on young Holstein herd; second on cow and two of her progeny; second on Holstein herd; second on dry cow, four years old, etc., etc.

It is with regret that we announce that the Haley Bros. will not exhibit this coming fall on account of the poor health suffered for some time of late by Mr. M. H. Haley, he being afflicted with rheumatism. They would be in excellent shape so far as stock is concerned to keep right up to the big record and high standard, which they have set for themselves in the showing during the past two years. In this connection we ask Farm and

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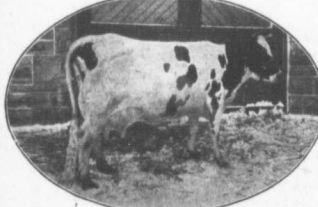
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Heswood Aggie-Marcas, Son of "Lady Aggie" This bull was raised by the Haley Bros. and sold and lately bought back to breed on their "Grace Fayne" heifers.



One of the Greatest of World, Besters Olantha 4th's Johanna, is the dam of the sire of Haley Bros.' great "Grace Fayne" bull; 31.2 lbs. butter.



A Noted Guelph Winter Fair Dairy Test Winner This is the great cow Lady Aggie De Kol, twice Grand Champion at Guelph and always a high tester. Much stock of her blood is in the Haley Bros.' herd.



Another of 31

Dairy readers to three individual which we took with. These are females now in herd, those 38 great "Grace Fayne" heifers. We know that before in for pure bred Holsteins. The Holsteins up to auction. They are bred raised on s. At the Guelph a number of years have really done started into the Dairy Test six years ago individual, a capturing first six or eight point



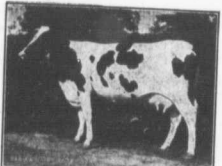
A Great

This bull as shown in herds of three other Ford, Ont. The blood great quantity of which shows opposite been in her milk 4.93%.

The next year the what has since developed famous Lady Aggie, everything before turning first prize. They also took along another pure-bred, Baroness, the cow was up to the great official butter in 7 days testing 4.93 per cent Canadian champion



A Show Bull Offered Westport Johanna Ltd. owned by the Haley Bros. was not showing here.



Another of 38 "Grace Fayne's"

"Me Too" Grand Cham, Toronto, 1912

Silo and Partial View of Barns at M. L. Haley's Farm

Dairy readers to note especially the three individual heifers, pictures of which we took and reproduce hereafter. These are but a sample of 38 females now in the Haley Bros.' herds, these 38 all being from the great "Grace Fayne" bull.

Our readers will be interested to know that before the Haley Bros. went in for pure breeds they had kept grade Holsteins. They had graded their Holsteins up to a high state of production. They always had used pure bred sires. Their success has thus been reared on solid foundation.

At the Guelph Winter Fair, now for a number of years, the Haley Bros. have really done wonders. They first started into the Guelph Winter Fair Dairy Test six years ago, showing but one individual, a two-year-old heifer, the capturing first in her class with six or eight points to the good.

The year following (1909) they again went to Guelph, taking Lady Aggie De Kol and Lanthe Jewel Meechilde 3rd, Lady Aggie again being the champion and the other cow getting second place. Queen Butter Baroness (heifer under 36 months) was also along and proved then her promise of what she has since accomplished. She was first in her class. In the three days she gave 169.69 lbs. milk testing 4.3 per cent in butter fat, gaining a total of 217.76 points, this being 36 points above the cow next to her.

Encouraged by this great record of success at actual production the Haley Bros. went to Guelph again the following year stronger than ever, taking eight head along. One of these was the sensational Calamity Starlight Butter Girl, the three-year-old that tested 5.5 per cent in butter

fat. And so these records have been piled up one year on top of another, and then another. There never were before exhibitors that had so little experience as had the Haley Bros. that have won so much. They were fortunate in laying their foundations good and strong in the beginning and afterwards building on good cattle that were good testers. Herein is a pointer for others to be careful to do

likewise. It is most interesting and encouraging to talk with the Haley Bros. and hear them tell about some of their earlier experiences. While each of them has his own individual herd and keeps his own females they have gone in together in buying and have used the same bulls. When they got the great "Grace Fayne" bull they felt that they really could not afford him. He has, however, paid them well. They have always acted on the principle of getting the best females they could afford; then buying the very best of males "regardless."

Of late since developing and providing such remarkably good stock in their own herds they have gone out and bought back again to their own herds sires, which they have raised and sold. One of these is a Butter Baron (picture reproduced with this article), recently gotten back after his dam, Queen Butter Baroness, made her exceptionally big record of 33.177 lbs. butter in 7 days, her milk testing 4.93 per cent. The Haley Bros. claim that this bull is the only one in Canada that averages over 30 lbs. butter for dam and sire's dam—both Canadian-bred—and that raised and developed by owners! Another bull which they have bought back is Homewood Aaggie Mercena, two years old, a beautiful, smooth, strong-hearted individual (shown with this article). He is being used on the "Grace Fayne" heifers. As we were taking down this information one of the Haley boys remarked, "We have found that we could not do much better than by our own stuff back again, at least in these two particular cases. We know what they are and what their stock has done, and our action in getting them back seemed wiser to us than to go over to the other side and pay big money for something we might not know anything about." This latter bull is out of the great Lady Aggie De Kol, and is sired by Prince Abbekker Mercena. With a string of dams and great dams on both sides of their breeding, knowing them to have good udders and knowing

them to be great producers—surely with a string of ancestors as good as these two bulls have—"They'll do!" The greatest individual in the herd is perhaps the "Grace Fayne" bull, shown at the lower right hand corner of these two pages, Grace Fayne 2nd from this bull that won the grand championship at Toronto the last two years and at Ottawa last year as well as at some important fairs out in British Columbia. This bull, as you will see from his photograph, is of great substance, long, open and deep. All of his heifers carry his great characteristics of depth and low-setness. In his pedigree you will find individuals of the deepest purple in the herd blood. Colantha 4th's Johanna (shown with this article) is his grand-dam on his sire's side; the 40-lb. cow, Johanna De Kol Van Boers, is a half sister to him! His dam, Grace Fayne 2nd, cut of which you see below, made 26.3 lbs. butter in 7 days and 107.32 lbs. butter in 30 days. She was the first cow to give 100 lbs. milk in one day. She is the dam of Grace Fayne 2nd Homestead, 35.55 lbs. in 7 days, and Grace Fayne 2nd Girl, 30.25 lbs. in 7 days. She has over 32 A. R. O. sisters. The sire of this great "Grace Fayne" bull is Colantha Johanna Lad, whose sire's dam is the famous Colantha 4th's Johanna—35.22 lbs. butter in 7 days, 138.54 lbs. butter in 30 days, 1.347.83 lbs. butter in one year; milk in one year, 27,482.50 lbs. Several of the sisters of this greatest bull in the Haley Bros.' herd have made world records as two and three-year-olds in yearly work. You may see from the picture of this bull that he is great stuff. They are bulls (and Haley Bros. show them) that will beat him in the show ring. As you see he is not as showy behind as some individuals. He is nevertheless great stuff, of wonderful quality, and he has a great head and front; moreover his stock is A1, and it is doing great work. His heifer calves all have great udders. Even the

(Continued on page 30)

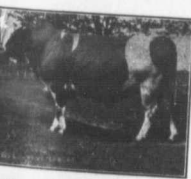


A Great Canadian-Bred Holstein from High Testing Stock

This bull as shown in the picture is not in show condition, he having been in the Ford, Ont. The blood back of him has proven itself most superior as producers of great quantities of very rich milk, almost invariably going over 4% in butter fat. The dam shown opposite being the Canadian Champion aged cow and with a butter fat sees in her milk 4.9%. You can see he is an excellent individual and would show to advantage were he fitted.—Photo by an editor of Farm and Dairy.

The next year they took to Guelph, what has since developed to be the famous Lady Aggie De Kol, she taking everything before her while capturing first prize and sweepstakes. They also took along a grade cow and another pure-bred, Queen Butter Baroness, the cow which recently rolled up the great official record of 33.177 lbs. butter in 7 days; milk, 638.3 lbs. testing 4.93 per cent in butter fat, now Canadian champion in aged cows.

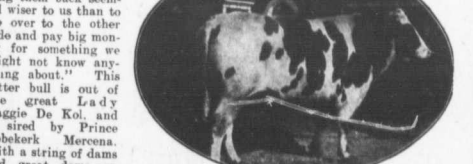
fat and captured the championship awards,—64 points ahead of nearest competitor. There is no mistaking in their cattle the blood, which produces cattle giving milk high in per cent of butter fat. The entire eight in the exhibit this time averaged quite a bit in their milk (4.13 per cent of butter than four per cent butter fat in their milk (4.13 per cent of butter exact); and the year before the cattle were well over four per cent, one of them testing 4.6, another 4.3 and still



A Show Bull Offered Now For Sale



Dam of the Great "Grace Fayne" Bull



A Proven Sire of Most Valuable Holstein Stock

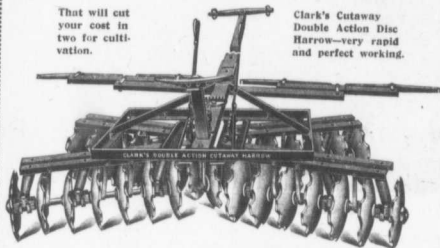
develop Johanna Lad, here shown, is not owned by the Haley Bros. this year because not showing. He's your opportunity!

This is the great bull Grace Fayne 2nd (Sir Colantha's Imp.). His stock has repeatedly won championships at Toronto. Moreover his stock is great on production.

This is The Machine

That will cut your cost in two for cultivation.

Clark's Cutaway Double Action Disc Harrow—very rapid and perfect working.



Used by Prof. J. H. Grisdale at C. E. F.

This Cutaway Double-action Disc Harrow is used and endorsed by Prof. J. H. Grisdale, at the Central Experimental Farm, Ottawa

Because it enables him to prepare his land for crops at a cost of 45c per acre, whereas with the ordinary old-style two-horse "Jumper" disc it costs him 90c an acre!

Progressive American farmers have this harrow in use on their farms. Every Ontario and Eastern Canada farmer can use it with great profit.

It'll pay you to be the first farmer in your district to own one of these Clark's Double Action Cutaways. We have a special proposition to make to the first farmer in any district who wants to use this money-making, time-saving, implement.

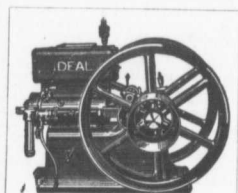
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You can use this implement to great advantage on your summer fallow and later on for early harvest cultivation and in preparing for Full Wheat.

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Our Double Geared Pumper has double strength.

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BRANTFORD WINNIPEG REGINA CALGARY

HOW WE GET PICTURES OF LIVE STOCK

(Continued from page 7)

amateur. For purposes of reproduction in the columns of a paper like Farm and Dairy, it is not so very important what size the photograph is so long as it is clear, sharp, and the subject in proper contrast with its surroundings. The small photo can very readily be enlarged, or the large photo be reduced by the engraver who makes the cuts (copper plates mounted on wood) from which the photo is reproduced in the publication.

EXPOSURE TO GIVE

When the sun is shining with almost any small camera a perfect picture will be secured for time and light when the shutter is working on "1" (instantaneous) the stop being at "8" or wide open. Should the day be cloudy, or it be late in the evening, or very early in the morning, one can figure from this approximately how much time and the opening to give for the amount of light available. The instantaneous on the small camera really means about a one-twenty-fifth of a second. Knowing this any practical person of ordinary intelligence can readily arrive at about how much light to give. The darker animal will require a little more light; less light will be required for white animals and in any case where snow is on the ground or there is a very light foreground. A little experience will soon teach anyone on this point and it is by your mistakes that you can learn most rapidly how to get perfect photographs.

For dairy animals where it is desired to show the wedge-shape of the body, heavier behind and lighter in front, it is well to place the animal closer to the camera with its hind quarters. This will make the hind quarters show up larger than the forequarters. Having this idea of perspective in mind it is possible for you to so place an animal as to make an unbalanced one look fairly evenly balanced; you can also cover up to some extent defects and bring out strong points as desired. By the proper placing of the legs you can show the udder of a cow as you want it; an uneven udder, say one slack in the forequarter, can be improved in appearance in the photograph by having the leg next the camera placed so as to cut off the view from the hind quarters. A study of photographs you see reproduced in Farm and Dairy will soon place you right on minor points in which you may err in your own photographing.

HAVE BACKGROUND ATTRACTIVE

It is always desirable to keep away from having a barn, a manure heap, or an unattractive rail fence, etc., for backgrounds. Get nice open views with a wood in the distance for a background and you will get an effect in the finished photo that approaches the three-way dimensions given in a stereopticon. Make sure that you have plenty of space around your subject so that it will all be there and missing no ears, horns or legs in the finished photo; make certain that the back of your camera is towards the sun, or at as big an angle as possible towards the sun; keep in mind that with your camera at stop "8" and running at one-twenty-fifth, or instantaneous ("1"), you will have about the right light providing the sun is shining brightly—figure to this should the sun not be shining, or if it is at a season of the year when the sun is not very strong, and you should get pictures that will delight you.

When you consider the great advantage that real photographs will be to you in helping you to make sales of your pure bred stock, you will want to have a camera and take pictures. You will use these to send out with your letters to prospective purchasers. You will also want to have the best of them reproduced in Farm and Dairy, going out to nearly 17,000 possible buyers of the stock you raise. Any questions you may have to ask about how to get good photos of your live stock will cheerfully be answered for you through the columns of Farm and Dairy.—C. C. N.

One Farmer's Milking Problem Solved

(Continued from page 4)

over a month. The nipples and tubes had been lying in lime water all that time and no odor whatever could be detected even with the nose close to the



"The Cow" Don't Object at All"

end of one. "The important point," explained Mr. Lippitt, "is to keep the lime water fresh and clean. We change the lime water every two days.

"How many cows will you be milking before you consider it worth using the machine?" was our next question.

WOULD USE IT WITH TEN COWS
"Just as soon as there are 10 cows milking our machine will be running and it will be worth while too. It would fairly give me cold shivers to look forward to this season's work on the farm with the old process of pulling teats at the commencement and end of each day's work ahead of me. As it is, we will get decided satisfaction in standing back and watching the machine do the work for us."

Although not using his machine regularly, Mr. Lippitt was so proud of the efficiency of his Sharpless milker, that he insisted on attaching it and milking a cow before our eyes just to show how easy it was done. The work was so easy and the time required so little that Mr. Lippitt did not mind—and the cow didn't either. She stood as quietly as any cow ever stood when being milked by hand. And every cow in the stable stands the same way, so Mr. Lippitt informed us. In fact, heifers take to machine milking much more readily than they do to hand milking.

WILL MILKERS RUIN GOOD COWS?
Just then it occurred to us that we heard breeders of pure bred dairy cattle object to the milking machine saying that it might be alright for a cheap herd of grade cows, but it would never do to risk ruining pure bred animals by machine milking, so we asked Mr. Lippitt if he actually attached that machine to the most valuable of his pure bred Holsteins for which he had paid long prices.

"I may have a cow some day that I will consider too valuable to milk by machinery, but I have not got her yet," was the prompt response. And if Mr. Lippitt isn't worrying about ruining valuable cows the rest of us needn't. How to get the cow milked is a solved problem so far as Mr. Lippitt is concerned.

Bo
In the
and Dairy
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Business "Farm and Dairy" Turns Away

¶ In the face of considerable immediate curtailment of our revenue we bar from the columns of Farm and Dairy: Patent Medicine, Electric Belt, "Something-for-Nothing," Liquor, Tobacco, and all forms of questionable advertising. ¶ Thus we protect "Our People"—Thus we are able to absolutely guarantee all Farm and Dairy advertisers to our readers. ¶ We make "no bones" about turning away this business. We are and faster. It is enough now for us to know that "Our People" appreciate the stand we have taken to keep all the fake and objectionable out of Farm and Dairy, and this your favorite farm paper is absolutely clean and a warm friend in your home.

Problem

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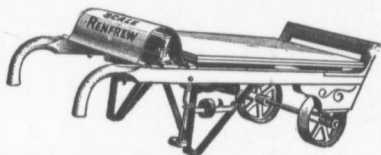
The collage features several prominent advertisements:

- Nervous Debility:** "The most common cause of nervous debility is overwork... Treated with Paralytic... Guaranteed to be cured."
- To Women Who Dread Motherhood:** Advertisement for a safe and effective method of birth control.
- Varicose Veins Cured:** "The only cure for varicose veins... Guaranteed to be cured... No more pain or swelling."
- Gray Hair:** Advertisement for a hair restorative.
- Nervous, Lifeless Debilitated Men:** Advertisement for a tonic to restore vitality.
- Men-You Need Nerve:** Advertisement for a nerve tonic.
- Your Blood is Tainted:** Advertisement for a blood purifier.
- Sowing His Wild Oats:** Advertisement for a seed or fertilizer.
- Free Magnificent Phonograph:** Advertisement for a record player.
- Work This Puzzle! \$50 Cash Prize:** Advertisement for a contest.
- Free \$100 Cash:** Advertisement for a prize draw.
- Free \$1000 to Sick Readers:** Advertisement for a health product.
- Free \$1000 to Sick Readers:** Advertisement for a health product.
- Free \$1000 to Sick Readers:** Advertisement for a health product.

Central illustration: A woman sitting in a chair, with the text "An Object of Pity" below her.

We know that you would rather not have ads. like these in Farm and Dairy, which is Always Absolutely Safe for your Daughters, your Boys and for Mother to Read

We do not say that all or any of these advertisements are frauds, or quacks. In appearance, however, they border on that line of the "unsafe" and unwholesome. Thus we refer to foreign the big revenue that is available from them and thus keep Farm and Dairy columns above even the shadow of suspicion. You can rely absolutely on all Farm and Dairy advertisements. We guarantee them absolutely. Read again our guarantee (first column editorial page), now superseding our older "Protective Policy," which for over 15 years has been the guaranty to "Our People" that advertisers in Farm and Dairy are reliable. You can depend absolutely on the advertisers admitted into Farm and Dairy columns



Are You Farming Half Blind? A HOG STORY

This is a serious question. No offence meant. Hundreds of farmers are going along to-day half blind to the possibilities of making more money off their farms. They do pretty much the same things they did 10 years ago in pretty much the same way, and are losing 25 per cent. of their profits, but they can't see it.

Take the case of the Ontario farmer the other day. He sold a load of finished market hogs to a buyer who "happened" along at the right time. This farmer had been selling his hogs to this same buyer every year at bulk price—so much a head as they stood. The farmer was perfectly satisfied. So was the buyer. The farmer got \$150.00 cash money for 12 hogs, \$12.50 a head.

This buyer drove the hogs in town a matter of three miles and shipped 'em off to the packing house but first he was careful to weigh each hog separately. He bought by the "head" but he sold by the pound, and the 12 hogs netted him \$193.00. The farmer lost \$43.50 by not seeing the value of selling his hogs by weight instead of by guess. If he had a Renfrew Handy Two Wheel Truck Scale on his farm he would have put his hogs on one at a time and got what they were worth or nearly so.

The Renfrew Handy Scale isn't an expense. It's an economy—a money maker. It will increase your revenue and your profits. It will pay for itself in short order if you use it every time you should. This means every time you sell or buy anything that should be sold or bought by weight instead of by guess.

Every "Renfrew" Handy is guaranteed by the Canadian Government to be absolutely accurate.

WRITE FOR INFORMATION

The Renfrew Scale Company
RENFREW, ONT.

Better Than a Hired Man

Geo. French, Oxford Co., Ont.
One of the most valuable implements around my farm is a four horse-power gasoline engine. The numerous uses to which I put this engine make it a labor saver and money maker of no mean order.

One of the uses to which I put my engine is in pumping the water that cools the milk. The water is forced directly from the well through the cooler, the milk being cooled down to 52 degrees as fast as three or four milkers can bring the milk to the cooler. The cooler cost me \$15. After the water leaves the cooler it runs into a cement stock trough, six by 16 by two feet.

I chop my own grain, thus saving the miller's bill, using a grinder with an eight-inch plate. I also get some

Home of the Best Hired Man

Mr. Geo. French, Elgin Co., Ont., regards his gasoline engine as the best hired man around the place. It is housed in this combination milk and engine house. Read of Mr. French's experience in the article adjoining.

additional revenue by chopping for my neighbors at six cents a hundred weight. I have a corn sheller run by the engine, and this spring I am going to run my fanning mill with it. Our grindstone is two feet in diameter and six inches thick; quite a heavy stone were it turned by hand, but the gas engine handles it readily. We grind bones for fertilizer. I own the power and my neighbor across the road the grinder.

POWER FOR SILO FILLING

Recently I have been filling my silo with this power. First we used our carriers on our cutting box with a 12-inch throat. More recently I put a blower on the box and the engine furnishes sufficient power to work it to perfection.

The buckwax has gone out of fashion on our homestead. Our engine can buzz through a stick 11 inches in diameter and do it easily and cut 35 or 40 cords of wood in half a day. Here is the complete cost of my outfit:

Four horse-power gasoline engine, \$300.

Pump jack, \$15.
Milk chopper, \$40.
Corn sheller (second hand), \$7.
Pump in 57-foot well, \$15.
My buzz saw I got second hand, it costing me \$8. I made the frame for it myself. I got the cutting box in a deal and we fixed it up ourselves.

A Profitable Cow

"That cow has made more money for me since she was 12 years old than most cows make for their owners in their life time," remarked Mr. L. H. Lippitt, Elgin Co., Ont., as we stood behind one of the old matrons in his herd, Netherland Pearl's Dolly, who at 15 years made a seven-day record of 17 lbs. butter.

"Daughters that she has given me since she was 12 years old I have sold for \$1,500. I have now a heifer calf 10 months old that I value at considerably more than the cow cost me in the first place. In addition, she is a heavy producer and has made the profits of two or three ordinary cows in milk produced alone, to say nothing of the value of her stock."

Does it pay to keep good stock?

Better Farming Coaches

The Ontario Department of Agriculture, in cooperation with the Canadian Pacific Railway is placing two demonstration cars and a staff of competent instructors at the service of the farmers along the C. P. R. lines in Ontario, beginning May 26th and continuing until July 11th. The stock car will contain good types of heavy horses, beef cattle, dairy cattle, sheep, swine and poultry to be used for demonstration and judging purposes. The judging of live stock will be emphasized from 10 to 12 a.m. and 2.30 to 5 p.m. each day. The public will be allowed to inspect the exhibits covering "Seed Improvement," "Alfalfa Growing," "Cultivation," "Drainage," "Insect and Fungus Diseases," "Dairying," "Poultry Raising," etc., any time between 9 a.m. and 5.30 p.m.

At practically all stopping points, evening lectures, illustrated with lantern views, will be given on one or more of the following lines:

- "Poultry Raising,"
- "Weed Control and Destruction,"
- "Live Stock Matters,"
- "Seed Improvement," etc.

The evening sessions will be most interesting and profitable.

A well qualified staff of instructors have been secured to take charge of the various exhibits and to deliver lectures at the evening meetings. The public is invited to visit the cars at any time and to ask questions upon such features as they are interested in. The ladies will be specially interested in the dairy, poultry and exhibits. The boys are urged to attend.

Place	Date
Galt	Thursday, June 6
Train arrives at Galt 9:55 a.m.	
Elmira	Friday, June 7
Godorich	Saturday, June 8
Train arrives at Godorich 9:30 a.m.	
Milverton	Monday, June 10
Train leaves Milverton 3:30 p.m.	
Streetsville	Tuesday, June 11
Brampton	Wednesday, June 12
Orangeville	Thursday, June 13
Shelburne	Friday, June 14
Chateworth	Saturday, June 15
Owen Sound	Monday, June 17
Fishersburg	Tuesday, June 18
Woodbridge	Wednesday, June 19
Train arrives at Woodbridge 10:20 a.m.	
Tottenheim	Thursday, June 20
Alliston	Friday, June 21
Oranburg	Saturday, June 22
Coldwater	Monday, June 24
Train leaves Coldwater 3:46 p.m.	
Orilla	Tuesday, June 25
Orillia	Wednesday, June 26
Lindsay	Thursday, June 27
Peterboro	Friday, June 28
Norwood	Saturday, June 29
Tweed	Sunday, June 30
Perth	Monday, June 1
Smith's Falls	Tuesday, June 2
Carleton Place	Wednesday, June 3
Sutcliffeville	Thursday, June 4
Ottawa	Friday, June 5
Kempville	Saturday, June 6
Windsor	Sunday, June 7
Lincoln	Monday, June 8
Apple Hill	Tuesday, June 9
Burkton Jet	Thursday, June 11
Claremont	Friday, June 12
Train arrives at Claremont 9:30 a.m.	

For fuller particulars, apply to

GEORGE A. PUTNAM, Esq.,
Superintendent of Institutes,
Department of Agriculture,
Toronto.

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Electric Power in Home and Dairy

(Continued from page 7)

have a light many times stronger than the best oil lamp would afford and that from power developed on their own farm. Mr. Green recently offered to light the church at Greenwood, providing the people will stand the expense of wiring it. To this they have joyfully agreed.

Mrs. Green derives other advantages besides a fine light from their hydro-electric plant. As will be seen in the illustrations in the Household Depart-



"Anything More?"

A scene in Brant Co., Ont., a photograph by an editor of Farm and Dairy.

ment of Farm and Dairy this week, an electric iron is now a valued part of the household equipment. An electric nickel-plated heater can be used for heating water and making tea and coffee. The heater can be attached by a wire to the chandelier in the dining-room and used for keeping the tea or coffee hot while standing on the table.

VACUUM CLEANER

The next convenience to be installed in the home is a vacuum cleaner. The same pump that milks the cows will also sweep and dust the house. Mr. Green has laid a pipe from the dairy building, where the vacuum pump is located, to the house. The pipes extend through the partitions with openings at convenient places for the cleaner attachment.

The advantages of Mr. Green's plant are self-evident. "What did your plant cost?" our editor asked as he was getting ready to leave.

"Exclusive of the power the plant cost me \$400," answered Mr. Green, "but that was some years ago and I don't believe it could be installed so cheaply to-day. In this estimate I include the dynamo, the motor and the lighting fixtures for the mill, house and buildings.

"Of course," continued Mr. Green, "the installation of this plant cost very much less than it would have had I had to build a dam and put in a water wheel just for the electricity.

Where a small water power is available there is no reason why a few farmers could not club together and put in a plant to supply them with light and power at a cost that would be very moderate compared to the advantages they would derive from it.

"There is no question in my mind but that electricity cannot be equalled for availability and ease of control in operation where the water power is available. Practically the whole cost of our plant has been the first investment. It has been little trouble or expense since."—F. L. E.

KEEP YOUR UP-KEEP DOWN

BY USING
"MINERVA" PAINTS

A specialty for every painting requirement

Your unpainted farm buildings, implements and vehicles rapidly decay and require a large cash outlay to restore them to usefulness.

MINERVA PAINT will save you money and protect your property.

Write us for painting information. If your dealer cannot supply you we will.

PINCHIN, JOHNSON & CO.
(Canada), Limited.
WINNIPEG VANCOUVER
Established in England 1834

TORONTO

CHALLENGE COLLARS

Advertisement to be the International Water-tight Collars made in Canada. All sizes and colors. All prices or direct for 25c.

THE ARLINGTON CO. OF CANADA, LTD.
68 PRINCE AVENUE
TORONTO

All "ARLINGTON COLLARS" are good, but our CHALLENGE BRAND is the best

FERTILIZERS

For information regarding all brands of mixed and un-mixed fertilizers of the highest grade write

THE WILLIAM DAVIES CO., LTD.
West Toronto Ontario

Buy It By The Carload

In the United States large hog raisers buy Digestive Tankage by the carload. It is recognized as the world's best food. In Canada

HARAB Digestive Tankage

is now used by many of the largest hog raisers, and is endorsed by Experimental Farms. Incomparable as a flesh-producer. Hogs fed on it very rarely suffer from hog cholera, rickets or other complaints. Write for Tankage booklet.

The Harris Abattoir Co., Limited Toronto

I H C Quality Shows in Service

WE could seal wagons for less money, but we don't care to sell that kind of wagon. We want your second order, and your third, and every order you give for a wagon. We can't be sure of getting those orders unless the first wagon you buy from us proves so satisfactory that you would not think of going anywhere else for the second. We have to tell you how good our wagons are to get your first order. After that, we expect the wagon itself to do the selling.

Petrolia Chatham

are made of selected, high-grade material throughout. Come with us to the works where these wagons are built, and see the tremendous sheds where the lumber is air-dried—seasoned out of doors—for three years or more before it is used. Do you know the difference between air-dried and kiln-dried wood? One process takes years of time, and leaves the fibres of the wood filled with and cemented together by the natural resins residue of the sap. The other requires only a few days' time, drives out all the sap, resin and all, and leaves the wood brittle and weak. Air-drying produces elastic lumber, wagon parts that bend and give under loads and strains, but that come back to their original position when the strain is removed. Try for yourself some day the difference in breaking strain between an I H C wagon axle and a piece of kiln-dried wood a third larger. Then you will know why we can hardly keep up with orders.

The I H C local agent knows which wagon is best suited to your work, and will give you catalogues and full information about the wagon he sells. See him, or, if you prefer, write

International Harvester Company of Canada, Ltd
EASTERN BRANCH HOUSES

At Hamilton, Ont. London, Ont. Montreal, P. Q.
Ottawa, Ont. St. John, N. B. Quebec, P. Q.
Built at Chatham and Petrolia, Ont.

FARM AND DAIRY

AND RURAL HOME

Published by the Rural Publishing Company, Limited.



1. FARM AND DAIRY is published every Thursday. It is the official organ of the Rural Publishing Company, Limited, Ontario, and Bedford, Ontario, and Western Ontario, and the Ontario, Quebec, and Maritime Provinces, and of the Canadian Farm and Dairy Association.

2. SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.20 a year. For all countries except Canada and Great Britain, add 50c for postage. Notices of the expiration of subscriptions are sent to all subscribers, who then continue to receive the paper until they send notice of discontinuation. No subscription is continued for more than one year after date of expiration. A year's subscription free for club of two new subscribers.

3. REMITTANCES should be made by Post Office or Money Order, or Registered Letter. Postage stamps accepted for amount less than \$1.00. On all checks add 5c for exchange fee required at the bank.

4. CHANGE OF ADDRESS.—When a change of address is ordered, both the old and new addresses must be given.

5. ADVERTISING RATES quoted on application. Copy charges added on Friday preceding the following week's issue.

UNITED STATES REPRESENTATIVES
STOCKWELL'S SPECIAL AGENCY
Chicago Office—Loop, 10th and Madison
New York Office—236 5th Avenue.

6. WE INVITE FARMERS to write us on any agricultural topics. We are always pleased to receive practical articles.

CIRCULATION STATEMENT
The paid subscription to Farm and Dairy exceed 15,248. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 14,120 to 17,200 copies. No subscriptions are accepted at less than the full subscription rates.

Sworn detailed statements of the 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 matter and because to protect our readers, we turn away all unimportant advertisements. Should an advertiser herein deal dishonestly with you as one of our paid-in-advance subscribers, we will refund the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is the condition of this contract that in writing to advertisers you state the name of your advertisement in Farm and Dairy.

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

FARM AND DAIRY

PETERBORO, ONT.

MACHINERY AND CIVILIZATION

The degree of civilization of a people is measured by their ability to multiply their physical power. Hence it is that our civilization is largely dependent on our machinery. So long as the farmer turned over the earth with a crude spade or a twisted branch of a tree, he was dependent altogether on his physical power for his existence, and it took him all of his time to make a mere living. As soon, however, as the wooden plow came into vogue, the farmer did as much in one day as formerly he had done in several days. Hence, he had more time for self-improvement, more produce to sell, and he was thereby able to buy better clothes, live in a better house and give some favored child the benefits of an education. Then came the steel plow, and a still greater multiplication of powers.

And so it is all along the line. The binder and mower in place of the sickle and scythe, the threshing outfit in place of the flail, the hay loader and the horse rake in place of the pitchfork, and power—electric, gas, steam or wind—in place of mere brown—all of these tend to elevate the farmer higher and higher in the plane of civilization. The inventor of an improved machine is worthy of all honor. He is deserving of a place among the great ones of the land.

AN UNEARNED HARVEST

We say that civilization tends to lift the farmer to a higher plane of civilization. But is machinery doing all for civilization that machinery should do? Is the toiler receiving the full measure of the increased returns of his labor made possible by machinery? We do not believe that he is. Another factor here enters that enables a certain class of the community to reap an unearned harvest and put into their pockets a large share of the wealth that machinery is enabling the laboring man to produce.

So long as land was tilled with the crude spade or the twisted branch, it had little value. All that land produced was necessary to support the life of the laborer who produced it. By the use of improved machinery whereby one man was enabled to produce several times as much as he required for his own personal use, land was immediately at a premium and became a source of profit to the man who owned it. The price of land advanced. The laboring man who formerly had only to go out and start to till a piece of ground, now found that certain private individuals had laid claim to the earth and before he could use it he must pay for it. The interest on the purchase value of the land was almost enough to make the difference between the value of what his labor could produce under the old conditions and the new.

So it is to this day. Every improvement in machinery that makes it possible for the farmer to produce more by his labor, is immediately reflected in the increased value of his land. The man who starts farming now-a-days must pay such a price for the privilege of using a part of the earth that the advantage that machinery would otherwise be to him is largely absorbed by the interest or rent that he must pay. Does not every machine introduced make it that much more difficult for the tenant farmer to become a freeholder, and for the young man without a farm to start farming at all? After all, are increasing land values such a boon to the community as we are sometimes inclined to think?

Many a battle has been won in the end by an army, badly beaten, but which would not give in, and stayed right with the fight. Many a farmer has won a success in the end because he never stopped to think of the failure he was making of things in the beginning.

AIM HIGHER

The average farmer may make a living. The really satisfactory profits come when our production is above the average both in quality and quantity. Farming needs individuality of character and purpose, just as the running of a store or a factory. And yet in this and every other country the majority of farmers seem to be quite content to be classed as "average."

Working on the level is monotonous. The farmer who milks scrub cows, depends on the dealer to select his seed for him, has no particular use for new inventions in the machinery line and in other ways gives evidence of his unprogressive tendencies, has "no kick coming" when his boys up and leave him. What is there to interest a boy in milking cows when it is just "milking cows," that, and nothing more.

Suppose, on the other hand, that that cow is a pure bred animal, and that the boy is trying to make a record with her. Will the boy be interested? Just visit some of our leading breeders and see for yourself the interest that everyone around a farm takes in the cows. Even pedigree grain gives the farm work added interest.

It is easy to get into a rut. Keeping out of it is a matter of ideals. Let us set a high standard for every product produced on the farm and then devote ourselves enthusiastically and energetically to the accomplishment of that ideal. Then will we hear less talk about lack of interest in farm work. Monetary returns will be greater and we and our children will be bigger and broader because of our ideals.

UNWHOLESOME AND REJECTIONABLE

The specimens of advertisements we turn away from Farm and Dairy, as grouped on page eleven this week, are but a few samples of the work that has come unsolicited to Farm and Dairy, but has been refused insertion in our columns. The revenue these classes of advertising represent is a sum so large as to be almost unbelievable. It is estimated that over 97 1/2 per cent of commercial advertising available is of this kind. One of our weekly contemporaries in a recent issue had over 40 per cent. of its commercial ads. made up of these classes of advertising, which is absolutely refused the use of Farm and Dairy columns. Another farm paper contemporary on one occasion this last winter, carried as high as 23 1/2 per cent. of its total commercial ads. made up of this kind of advertising! One Toronto daily, it is estimated, carries over \$40,000 worth of this business annually!

We draw these facts to your attention in order that you may still greater appreciate the battle we are fighting in your interests; also that other publishers of Farm papers and weeklies and the dailies may come to see the error of their way in publishing advertisements of the classes in question. There is a big moral

"Clean as a Whistle"

The Rural Publishing Co., Ltd.
Peterboro, Ontario

Dear Sirs,

It is a pleasure to look through the pages of your paper. Every one is as clean as a whistle, and each carries that air of sincerity, which is the basis of all salesmanship, whether personal or in print. My warm congratulations to you.

With all good wishes, I remain,

Faithfully yours, I remain,

Richard H. Waldo,

Advt. Mgr.

Good Housekeeping Magazine,

responsibility in this connection, which many people and publishers as yet have not come to recognize.

BIG BUSINESS ON THE FARM

Every class of business men in this country, except the farmer, have learned that business transactions must be conducted on a large scale if they are to be most profitable. Buying in small quantities is expensive; individual marketing of small quantities of goods is even more expensive. It is to take advantage of the extra profitableness of big business that many of our mergers and combines are formed. Almost every day we hear of several small business men in some of our cities who have combined their interest in a joint-stock company in order to reap the advantages that come through buying and selling in large quantities.

The joint-stock company, however, is not as adaptable to the country as it is to the city. When several business men join their interests together in a large joint-stock concern they practically give up control of their business. This the farmer does not wish to do. His desire to run his business independently is an inherited trait, and if the farmer would take advantage of "big business" methods he must find some other method than through the joint-stock company.

The cooperative concern, in which each farmer manages his own farm and combines with all his neighbors for the marketing of his produce and the purchasing of supplies, is the form of "big business" best adapted to rural districts.

Do big cities grow big men? The Christian Guardian recently made an investigation as to the

birthplace of the members of President Wilson's cabinet, and the

results of their analysis is in favor of the country. With one exception the President's advisers all began life in the country or a small town. In the Dominion Cabinet, out of 18 members, all but one were born in the rural sections or in small towns. Of the present provincial premiers in Canada not one was city born. It would seem that a childhood spent next to Nature inculcates more of the attributes that lead to greatness than do childhood days spent in the rush and roar of the city.

June 5, 1913.

FARM AND DAIRY

(19) 691

AD. TALK
LXXXIV.

It generally does one good to take a peep into the past and note a "Milepost" to discern how far and fast we have progressed.

Since 60 years ago, advertising has progressed most wonderfully. In those olden days newspaper advertisements were few; invariably small and inconspicuous; generally lacking illustration.

A fair specimen from those olden days is this now interesting ad reproduced herewith:

Phonix Foundry, July 27, 1853.

NEWCASTLE FOUNDRY
AND
MACHINE SHOP.

THE Subscribers would respectfully inform their customers and the public generally, that they have now on hand, and are still manufacturing, a number of Burrell's Reaping and Reekum's Moving Machines on various PATENTS.

They are also making several *Tramway Machines* of various kinds, of from Four to Eight Horse-Power, with *Clovers and Straw-Carriers* attached, which will be ready for the coming harvest.

TO MILL OWNERS

They would say that having lately made several important additions to their Machine Shop in the way of the best *Lathes, Tools, &c.*, and obtained the services has for many years been engaged in the business, both in England and in the United States; and that they are now prepared to manufacture *STEAM ENGINES, Steam Boilers, Mill Irons of all kinds, Lathes, Milling Slaws, &c.*

All kinds of *PATTERN MAKING* connected with the establishm^t.

The Public are invited to call and examine for themselves, as the subscribers are confident they can do as well by them if not better, than any other establishment.

Floaing, Cultivators, Hairers, Turbine Saws, &c., kept constantly on hand.

Thrashing Machines repaired with promptness and dispatch.

H. A. MASSEY, & CO.

Newcastle 31st May, 1853. 145w

REPRODUCTION OF AN ADVERTISEMENT IN THE NORTH AMERICAN, PUBLISHED IN TORONTO IN 1853.

All farmers and their friends will recognize the advertiser as none else than the old Massey Company, since grown to gigantic proportions, and known as the Massey-Harris Co., with an organization and a sales force covering practically the civilized world.

There is a characteristic about this old advertisement suggesting the rock on which rests the great success of the Massey-Harris Co. of to-day. It rings true. It savors of the sterling genuine. Any man on reading must believe!

Critics of to-day would tell you it lacked unity, it contains too many ideas and it occupies too little space.

But things were different in those days. This ad., it may be, was the beginning of the great things since come into fruition for the Massey-Harris Company. And who would care to criticize?

We all know something of how great the Massey-Harris Company has become. Advertising in its many forms and phases made it possible. Farm paper advertising contributed to their success.

They are coming more and more to sow to advertising and through it to reap and grow. Their ads. of now-a-days appear in F. and D.—

"A Paper Farmers Swear By"

Stable Cleaning by Machinery

The stable cleaning device of Mr. Geo. Robertson, Perth Co., Ont., described in the dairy number of Farm and Dairy, attracted so much attention among our readers that we wrote to Mr. Robertson for further details regarding his invention. He has replied as follows:

"We have patented our stable cleaning device, but that will not prevent a man from putting it in for himself. We use a closely woven wire screen which lies in the gutter all the time except when cleaning. This wire is attached to a roller standing about 15 feet from the barn, there is a slide from gutter to top of roller, a lift of about seven feet. When passing over the drum the manure falls into a spreader cart or sled. We use a two-horse power gasoline engine to do the work, it being attached to the drum by a cable.

"We clean 80 feet of gutter and it is all done in four minutes from the time we start the engine until the wire is back in its place again. The gutter is as clean as if it had been swept with a broom. If any one would care to visit me on my farm at Almonte, I would be pleased to let them see this device in operation."

Publishers' Desk

(Continued from page 2)

about Farm and Dairy, and have gotten them to subscribe. We appreciate also that a great many more of "Our People" intend to see their friends and get them to subscribe to Farm and Dairy. Perhaps now, while you are thinking about it, you would not mind calling up on the telephone two or three of your friends and neighbors about this important matter!

The next Special Magazine Number of Farm and Dairy in 1913 5th Annual series, will be our sixth annual great Exhibition Number to be dated August 29th. Already we have big improvements and many good things planned and in shape for it.

Right through the summer you will continue to find Farm and Dairy intensely practical and alive with good things that will help you in your business of farming, to live better and make more money. No matter how busy you are we know you always pick up and read Farm and Dairy, for the splendid results our advertisers have been reporting as getting from you, even through the summer time as yours gone by, proves to us that you appreciate and look for the coming of Farm and Dairy each week.

Tar Weakens Rope.—Rope is often tarred to protect it from the weather. This is a somewhat doubtful practice as the acid in the tar weakens the rope to such an extent that engineers estimate tarred rope to be only two-thirds as strong as clean, new rope. No kind of oil or other preparation has so far been found that will not injure the rope, except tallow. Tallow and graphite are used in making transmission rope, and for lubricating it when in use.—J. M. Drew.

Don't neglect the calves.

TRADE
in your old separator
on account of a new
DE LAVAL

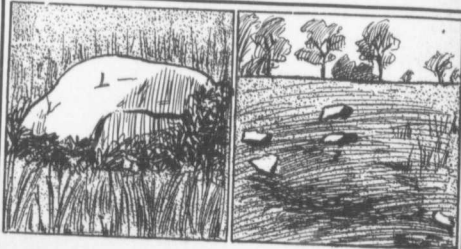
An up-to-date De Laval Separator will, on an average, save its cost every year over any other separator.

In addition to the actual saving in more and better cream there is also the saving in time of separation and cleaning, in easier running, greater durability and fewer repairs.

Because of these savings more than 40,000 users of inferior and worn-out separators of various makes last year took advantage of the De Laval exchange allowance and traded in their machines on account of De Laval's.

USERS OF OLD DE LAVALS, on account of the many improvements in the modern De Laval over machines sold 10 to 25 years ago, including closer skimming, easier running, better oiling, etc., will also find to their advantage to exchange their old De Laval for an up-to-date De Laval.

SEE THE NEAREST DE LAVAL AGENT. He will tell you how much he can allow on your old machine, whether a De Laval or some other make, towards the purchase of a new De Laval. If you don't know a De Laval agent, write to the nearest De Laval office giving make, number and size of your present machine, and full information will be sent you.

DE LAVAL DAIRY SUPPLY CO., LIMITED
MONTREAL PETERBORO WINNIPEG VANCOUVER

Boulder Before and After Blast

Are there Stumps and Boulders on your Farm? If so, why not use CXL Stumping Powder to rid yourself of them? The cheapest and quickest method known for clearing land. Also used for Tree Planting, Ditching, and Sub-Soiling. If interested, write to-day for our Illustrated Booklet; it tells you how to save time and money, and convert unproductive land into productive and money-making Harbors.

CANADIAN EXPLOSIVES, LIMITED
Montreal, Que. Victoria, B. C.



A Great Sire Worthy of the Notable Herd He Heads—The Manor Farm Holsteins

With a sister whose milk tested 6.02% in butter fat and making 44,152 lbs. butter in 7 days, at only 6 1/2 years of age and he himself so good individually and a getter of proven status, is in himself very attractive. You know that he is a son of that greatest of Kordyke's. The dam of this Manor Farm bull appears below. His world-testing sister you will see in the centre of this two-page spread. Note of the daughters of this bull are for sale at any price. This bull has for his sisters 13 cows that have broken world's records—the latest shown in the centre of these two pages.



Two Full Sisters From a Great Sire

Here you see Lady Carman Pontiac, born March 2nd, 1910, and some months ago made 15.4 lbs. butter in 7 days, best day's milk 40 lbs., and this on indifferent feed. Back of her you see her full sister, Het Loo Carman, at both in Dr. L. de L. Harwood's herd, at Vandrevill, Que., and both sired by Mr. Gooderham's great bull Prince Hengerveld of the Pontiacs. You should see the uniform bunch of female calves now in the Manor Farm herd, half sisters to these two. Not one of these heifers are offered for sale at any price.

ACTIONS and performance always speak more forcibly than words and since pictures convey to you an exact idea much better than it is possible to do with words, Mr. Gooderham of the Manor Farm, Bedford Park, Ont., has arranged to give the readers of Farm and Dairy this most excellent display of some of the good things that you will find in his herd of Holsteins.

It has been my privilege during the past year and a half to visit at the Manor Farm occasionally for the express purpose of looking over his Holsteins, keeping an eye on what they are doing and making you acquainted with the facts through Farm and Dairy. Readers of Farm and Dairy who have visited at the Manor Farm, will know considerable of what a pleasure it has been to be closely in touch with these cattle and to see the herd grow, develop and improve; for you know Mr. Gooderham is a very progressive breeder and he has his ideal set high. Others of "Our People," who as yet have not been privileged in getting out to see the Manor Farm Holsteins, will gain from this display a very fair idea of what they may expect when they buy from, or go to see, the Manor Farm Holsteins.

We have heard from quite a few of our people who have been at the Manor Farm, and most of them have expressed their delight at what they saw. From those who have bought of the Manor Farm Holsteins we have also had good reports; for instance, the following from a post card written to Farm and Dairy, May 3rd, by Mr. Kelly, of Vanessa, Ont., who purchased one of the bull calves recently offered in a Manor Farm advertisement: "I must say Mr. Gooderham is a very reliable breeder and one that the readers of your paper can rely on his word. He also has the goods. The bull calf in his ad, mate to the one I got, is a grand one and will be a good buy for the one who has the luck to get him."

Then Mr. Gooderham received a very nice letter dated May 13th, from Mr. John Anderson, Oxford Mills, Ont., to which the second bull calf to which Mr. Kelly refers. Here's an extract from Mr. Anderson's letter to Mr. Gooderham: "I'm writing to let you know that we received the calf all right. He is a fine animal—just as you described him. We are well satisfied. I am going to town to-morrow to send you a cheque for \$150 to pay for him."

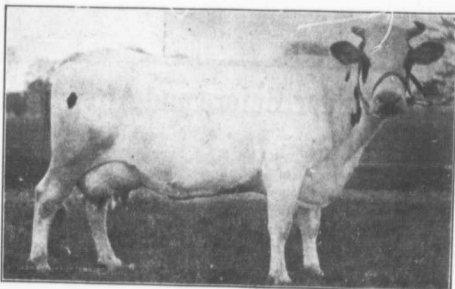
One thing we have always noticed about Mr. Gooderham with his Holsteins is that in selling stock he has priced it very reasonably. From some quarters we have heard criticisms that he should have obtained higher prices because he does so much advertising in Farm and Dairy. To this we have always replied, as we would have you know now, that quick and ready sales at reasonable prices with small profits are much to be preferred to big prices with much stock



What Better Cow Would You Want Than This One as a Grand-Dam to Your Holsteins?

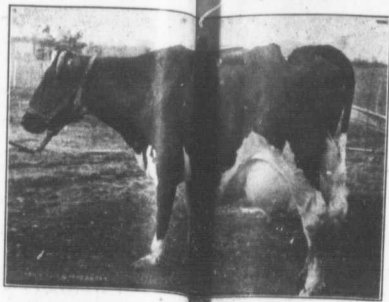
This is the dam of "Prince," the great bull shown immediately above. She is Pieterie Hengerveld Fraulien, bought by Mr. Gooderham last spring the paying big money for her in order to test her, but owing to her contracting a very acute attack of garget, which left her in a very bad state, he was unable to test her, early 30 lbs. next year. She is a daughter of Pieterie Hengerveld Count De Kol, 30 daughter of Hengerveld De Kol, 116 A. R. O. daughters, nine of them over 30 lbs., 49 A. R. O. sons. She sure is from a line of producers!

—Photo and six others on these pages all by an editor of Farm and Dairy.



A Wonderful Producer and a Very High Tester in Butter Fat

This cow is Jennie Belle, 27 1/2 yrs. butter in 7 days, from 520 1/2 lbs. milk, testing 4.3% in butter fat; 2,567 lbs. milk, 106.12 lbs. butter in 30 days. Her heifer calf was recently purchased from the Manor Farm by Prof. J. H. Grisdale.

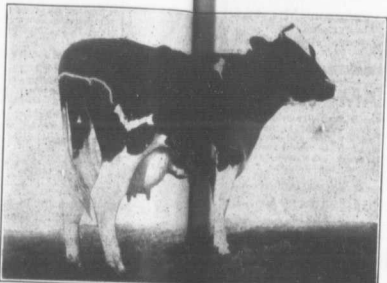


A Canadian Champion and Also a World Beater

This illustration shows Lady Vibron, who is in the Manor Farm herd. She holds the Canadian Championship record for a cow of her age and on three quarters only for 29.56 lbs. butter in 7 days, and the world's record of 29.56 lbs. butter in 7 days, on a milk averaging 4.1% in butter fat. Note that she is owned by an editor of Farm and Dairy.

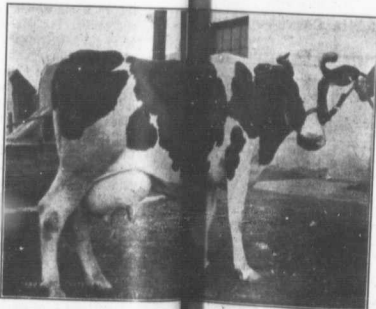
Manor Farm

A Few of Our High Testing Records We Have Tested Officially During the Winter
Gordon S. Gooderham Bedford Park, Ont.



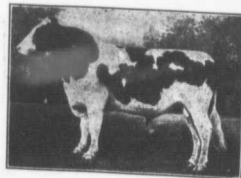
The World's Greatest, 44,152 lbs. Butter in 7 Days, 6.02% Butter Fat Sister to the Great Manor Farm Herd

This phenomenal cow, Spring Farm Pontiac Lass, 44,152 lbs. butter in 7 days, has made an A. R. O. of 44,152 lbs. milk, testing 6.02% in butter fat; in 30 days, milk 2,534 lbs., butter 161.13 lbs., recently sold for \$20,000. World's Champion, Sister to Mr. Gooderham's bull, "Prince Hengerveld of the Pontiacs," heading the herd of Holsteins.



Queenie L., One of the Best at the Manor Farm

Here is a truly wonderful cow, Queenie L., 6 1/2 yrs. 20 moos. 20 days, testing 5.2% in butter fat. This cow has been nothing but roots and timothy and it was dangerous to feed her. She is a candidate for world record for the dam of the bull calf bought by Mr. Kelly, Vanessa, Ont.



Highest Priced Bull Ever Sold at Auction

When only six months old this bull, King Segis Pontiac Alcartra, sold at public auction for \$10,000, he being bought by Mr. Arfmann, Manor Farm, has recently purchased a son of this great bull to cross on the stock he herd sire, Prince Hengerveld of the Pontiacs. One of the editors of Farm and Dairy saw this bull last summer. He is a sturdy, as he might well be, and commands readily a \$300 service fee.

hanging on one's hands to feed and eat their heads off. Then also with this announcement to you, and to more than 18,000 others like you in Farm and Dairy each week, he is giving you a message and the news about his herd in a manner that would not be possible in any other way at many, many times the cost. Thus his advertising is good business and it makes a money for him and money for you when you buy his stock.

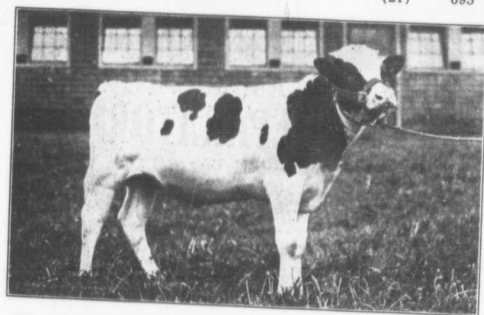
These pictures given on these two pages show you individuals of some of the most popular Holstein blood to-day. You will note from the facts given about each animal under the cut how rich they are in butter fat, that thing which every good breeder is striving for now-days, and wisely so.

One of these cows you will note as Queenie L., with a butter fat test in her milk of 5.2 per cent.

Then note also the truly wonderful butter production of the cow Spring Farm Pontiac Lass, 44,152 lbs. butter in 7 days; 172 lbs. in 30 days; this cow being a sister to Mr. Gooderham's senior herd sire, Prince Hengerveld of the Pontiacs, whose picture appears at the top.—This is the first on these two pages. This is the first time we have made public a picture of the dam of this great bull, Pieterie Hengerveld Fraulien. It is too bad that luck went against her, and that Mr. Gooderham after paying big money for her, was kept from making the big record on her that he had every reason to expect. Note and study her type carefully. Another time with luck in her favor you can expect something really good and at any rate isn't she just like to have as the grand dam of stock you might own?

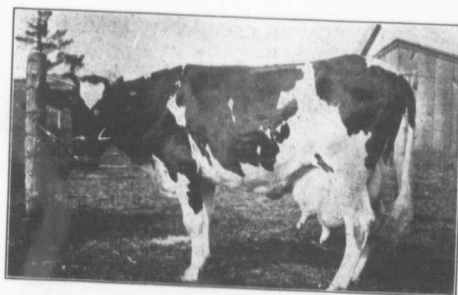
To enable him to continue to progress with his Holsteins, Mr. Gooderham has recently bought for the Manor Farm a son of the great \$10,000 bull, King Segis Pontiac Alcartra. A picture of this bull and his noted sire you will see at the upper right-hand corner of this spread. Note particularly the individuality of both of these animals and their richness of blood as represented in records of production and per cent. of butter fat in milk—the dam of this youngster averaging 5.01 per cent. fat in her milk. Surely with stock such as this coming available in the next year or two you will make a wise move in keeping an eye on the Manor Farm Holsteins and arranging to get, as it becomes available from time to time, some of this most richly bred Holstein stock.

Just at this time Mr. Gooderham has no stock in particular that he desires to sell. He is planning to sell a few, but it will be milking stuff only all of which will have been given official records. This past winter he was very successful in making official records on his stock, 11, including over 20 lbs. butter in a week, and six making over 25 lbs. butter in 7 days official.—C. G. N.



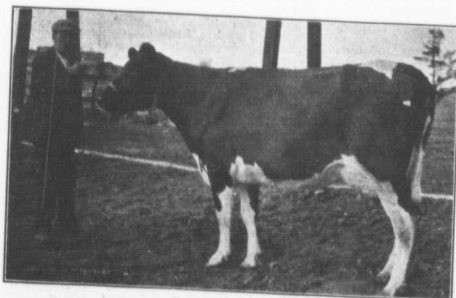
Where Can You Beat This Bull Individually? Also in Richness of Breeding?

Here you see a son of the \$10,000 bull, "King Segis Pontiac Alcartra," and out of Fairmont Netherland Beach, 29.61 lbs. butter in 7 days, within a few hours of being a 2-year-old, her milk averaging 5.01% butter fat. She is 7 hours earlier she would have to-day had the world's record as a 2-year-old. The sire of this calf was the highest priced bull ever sold at public auction; his dam made 30.57 lbs. butter in 7 days at 3 yrs. 9 mo. 19 days, milk testing 4.4% butter fat. Records of 10 of nearest dams of this bull average for the test, 28 lbs. butter in 7 days; records of his six nearest dams average 31 lbs., records of dam and sire's dam average 30.25 lbs. butter, both being 3-year-olds. Mr. Gooderham believes this bull to be the best in Canada today.



What Think You of This Manor Farm Heifer as a Coming Milk-Making Machine?

This heifer is Lady Sammersville De Kol, a three-year-old that was in very poor shape for testing when she was put through this last spring. Mr. Gooderham had just bought her when fresh, and on getting her home put her through the official test at once. In spite of this handicap, however, she made a record of 25.61 lbs. butter in 7 days, 574 lbs. milk, testing 4.3% in butter fat; 3.96% in 30 days she made 2,563 lbs. milk, equivalent to 101.41 lbs. butter. Note the general milky appearance of this heifer. Especially note her veins and the marked veining on her udder. Note this same characteristic on the udders of the other Manor Farm Holsteins. This photo and six others on these two pages all taken by an editor of Farm and Dairy.



Mercena of Campbelltown—Twice Proven, and Becoming Better

A three-year-old that increased her record from 15 lbs. as a 2-year-old to 33.57 lbs. butter in 7 days, 472 1/2 lbs. milk, testing in butter fat 3.9%, as a 3-year-old. She is dam of bull calf bought from Manor Farm recently by Mr. John Anderson, Oxford Mills, Ont.

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Our Twenty-Year Guarantee Protects You

Our wonderfully low prices and high quality on all sizes and generous terms of trial will attract you. Whether your dairy is large or small, do not fail to get our great and richly illustrated catalog, and *free* of charge on request, by the most complete stock and extensive Shipment made promptly from Winnipeg, Man., St. John, N. B., and Toronto, Ont. Write today for our catalog and see for yourself what a big money saving proposition we will make.

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It is no longer an unusual thing for us to get reports from farmers who have been using manure spreaders properly and consistently for periods ranging from three to five years, to the effect that the land on which the spreaders have been used is regularly raising so much more produce "The beauty of it is," writes one Ontario farmer, "that the increased fertility seems to be permanent. Dry weather has less bad effect on our crops now than it used to, the soil is much more easily worked, making the day's work easier both for the horses and for the men, it is less trouble to raise better crops, and we are a good deal surer of good returns since our soil was built up by the use of an

IHC Manure Spreader

IHC manure spreaders, Corn King or Cloverleaf, are made in various styles and sizes to meet any and all conditions. There are wide, medium and narrow machines, all of guaranteed capacity; return and endless aprons; in short, a spreader built to meet your conditions. IHC spreaders will spread manure, straw, lime, or ashes as required, high or down. The wheel rims will spread manure evenly on the level, going up hills, which provide ample tractive power without jarring the machines excessively. The apron moves on large rollers. The beater drive is positive, but the chain wears only one side. The IHC agent will show you the most effective machine for your work. Ask to see an IHC manure spreader. You can get catalogues from him, or, if you prefer, write the nearest branch house.

International Harvester Company of Canada, Ltd.
BRANCH HOUSES

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

Creamery Department

Butter makers are invited to send contributions to this department and questions on matters relating to butter making and to suggest subjects for discussion. Address letters to Creamery Department.

Gas for Creamery Power

Jas. M. Phillips, Haldimand Co., Ont.
I use a gas engine to provide power in my creamery. I find that it saves at least 30 per cent on the fuel bill. It may require a little more oil, and oil of a better quality and an operator with more mechanical experience than does steam, but that is a small item. Creamery men all need a boiler as well as power; but a much smaller boiler will do when one has the gas engine.

The first step I took towards reducing expenses was to buy a second-hand gas engine for \$160. I used it for two years in connection with the old boiler. I then discarded my large boiler, which was in good condition, and put in a small one. Steam and power now cost me about 25 per cent. of what it would be costing if I had not made the latter change.

One very good point about the gas power is that if I wish to churn in the morning (which I believe most of the boys do) I can start five minutes after my arrival at the factory. With steam power one would have to be on hand 30 to 50 minutes before starting. That half hour saved seems to have a great influence in getting the work done early in the day. I find that I have no trouble with odors from the gas engine as the odor is all confined within the pipes and the exhaust and burned gas all pass outside.

A "Beauty Contest"

"Butter Boy," Victoria Co., Ont.
I have just been reading in a United States paper of "Beauty Contests" that is being conducted by the Dairy Department of one of the State Governments. Unlike most "Beauty Contests" the ladies do not feature in this one. The prize is given to the Creamery Man who, in the estimation of the State officials, has done the most in the season to beautify the grounds around his creamery.

There is lots of room for improvements in the grounds around the average Canadian Creamery as any one conversant with dairy conditions in Canada well knows. Of the dozen or more creameries with which I am personally acquainted, only one of them has made any serious effort to beautify the grounds.

And why should the grounds not be beautified? I believe that attractive grounds around the creamery will give the creamery man more interest in his work, will give the patrons more pride in their creamery and will give the spirit that will result between maker and patron would ultimately lead to better understanding re quality of cream, etc.

This "Beauty Contest" is being well received on the other side of the line. Why not have one in Canada? The Ontario Government for instance, might conduct a contest. Farm and Dairy seems to be strong on good farms competitions. Perhaps they might devote a little energy to a creamery "Beauty Contest." What do other buttermakers think of my proposition?

The lack of "luck" of which many farmers complain, is of the same variety as the bad luck of a hunter who did not shoot a deer because his gun was not loaded.

It seems impossible to live now without Farm and Dairy as we find so many useful things in it.—W. H. Rutter, Hastings Co., Ont.



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Amalite does away with all roofing troubles and unnecessary expenses because it is made with a real mineral surface which needs no painting.

It is reliable, fire retardant, practical, economical, and does not require any special treatment.

Don't buy any other roofing till you look up Amalite. Write to nearest office for samples.

Creonoid Lin. Insulator and Gut Cover
Creonoid covers pipes keeps any fire from burning and does not melt.

Everjet Elastic Paint
Save money by using this black, fast-drying, and all-weather paint. It is for roofs, ceilings, and all exposed iron and wood.

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CREAM WANTED

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Interested you should write us.
Toronto Creamery Co., Ltd.
TORONTO

Highest Price for Cream

I—We supply cans and pay express charges.
II—Fast every shipment upon arrival and send a statement for same.
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It costs you nothing whatever to give our system a trial. Let us send you a can and enable you to try a few shipments.

For further particulars write
The Berlin Creamery Co.
Berlin - Ontario

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When buying new Dairy Apparatus and supplies see that they are stamped with the Beaver Crest. This Crest is stamped upon all that is best in Dairy Supplies and stands for the workmanship, quality and reliability of all Beaver Products. Send for our BIG CATALOGUE. Full of labor-saving devices for the Dairyman. Write for it FREE.

Write for it today
Address:
Dept. "B"

It requires a little extra effort and oversight or unsound judgment to give quantity of milk added costs more than the waste that we are saving to-day. We efforts towards the best. We want that will allow us

These brief paragraphs to the heart of things and address given by Chief Dairy Inspector at the organization of our County Cheese M.

WA DRUMMOND & CO
214 KING ST. EAST
TORONTO - CANADA

Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheese making and to suggest subjects for discussion. Address letters to The Cheese Maker's Department.

Nuggets from Mr. Pablow's Address*

There is no industry in Canada to which the people as a whole owe so much as to dairying. Moreover, I know of no phase of agriculture which will keep up soil fertility as will dairy farming. Dairying is a safe business to tie up with. There are no food stuffs that, in proportion to the nutriment that they contain, can be purchased as cheaply as dairy products. There will always be an increasing demand for dairy products of a high quality, and the farmers of Ontario can make no mistake in specializing in this sphere of agriculture. It should be the aim of every farmer to make his farm as better able to produce crops this year than it is last year.

Dairying, as we have it in the cheese industry, is the form in which we are more particularly interested. The future advancement of this industry will not depend so much on improved methods in the actual making of cheese, as on the quality and quantity of milk produced and the marketing of the finished product. One of the chief objects of a cheese-maker's club such as you have organized here to-day is to study the markets and create a demand for dairy products.

The increasing demand of our cities and towns for milk and cream is reducing the amount of milk delivered at our factories. To meet this condition our makers must cooperate with one another and with their patrons. They must strive to make a greater amount of cheese from a given quantity of milk—to do this the milk must be sound. Cheese-makers should convince their patrons of the necessity of delivering uniformly sound milk. And the production of the raw material is the greatest factor in the game.

The two requisites for the proper keeping of milk are a low temperature and cleanliness. It has been proved that if milk be kept absolutely free from outside contamination as soon as it is drawn from the cow and kept at a low temperature, it will remain sound almost indefinitely. Bacteria enter the milk as soon as it comes in contact with the air. The temperature of milk as it comes from the animal is the most favorable for the growth of bacteria. These bacteria which are a very minute form of plant life require for their growth the same conditions as plants of the higher orders, namely, food, moisture and a proper temperature. It is therefore imperative that the cattle be kept healthy and the housing conditions be clean and well ventilated. Far too few of our stables are in this condition.

It requires a larger quantity of overripe or unsound milk to make a given quantity of cheese than of good milk. Milk costs too much to allow the wastes that we find in cheese making to-day. We should direct our efforts towards the stopping of the milk. We want a souring in milk that will allow us to retain the ele-

*These brief paragraphs, each so right to the heart of things, are extracted from an address given by G. G. Pablow, Chief Dairy Instructor for Ontario, at the organization meeting of the Lankark County Cheese Makers' Club.

ments required in cheese-making with the least possible loss, and it is in the interests of farmers to produce sound milk, for they are the ones who will benefit most.

If we place our products on the market in a wholesome and appetizing condition the demand will always increase. There are some factors in the production of cheese that man cannot control; for example, weather conditions. But if we take measures to improve in things which we can control, then a remarkable change will take place in the products of this country.

In every district there are some patrons delivering milk that will make a cheese of poor quality. A few such patrons lower the quality of the total output of cheese. Who is the man that suffers? It is the one who is delivering good milk and who takes care in its production. No cheesemaker should allow any of his patrons to deliver unsound milk. It is this milk that spoils the reputation of our cheese. When a buyer notices that certain man is delivering extra good milk, it is not enough that he should merely compliment him on this fact. He should find out his methods of producing and caring for his milk and get the other patrons to adopt them.

I have noticed that the men who are producing the most milk are those who are keeping pure-bred sires.

I know of a well equipped cheese factory that was turning out poor cheese. Everything about the factory seemed to be O. K. On investigation I found that the patrons were not handling in uniform milk. No matter how much money is spent, dairy education will not result unless it is directed at the source, that is at improving the production of the raw material.

Points on the Scales*

A cheap 1,000-pound scale may have only 500 lbs. capacity for correct weighing.

The cause of trouble with two-thirds of cheese factory scales is corrosion. The scale does not wear out; it rusts out. Hence the important parts is to keep scales clean.

Remember that the bearings are the important part in getting correct weights. These may be well cleaned with a fine emery cloth. Rust should be frequently scraped off the pivots. Over-weights are frequently caused by weighing on the up-beam. Always weigh on the down-beam.

A drop level scale where the platform drops on the frame while the load is being put on, thus preventing the shock coming on the pivots, is the ideal factory scale.

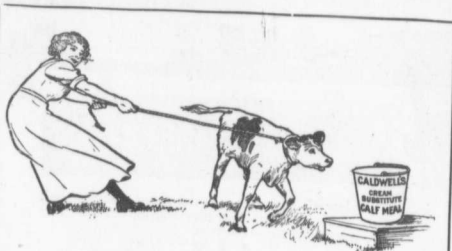
Scales in cheese factories should always be galvanized to prevent rust.

Makers and instructors should be brought face to face more frequently. There are no finer cheese instructors in the world than those in Ontario.—H. Hodgson, Montreal, Que.

Can an instructor do efficient work when the cheese are removed from the factory when one to two days old?—R. A. Pringle, Royal Cheese Commission.

I will admit that merchants sometimes make it difficult for instructors by passing poor cheese on a rising market. This difficulty might be obviated did instructors and buyers get together more frequently.—H. Hodgson, Montreal, Que.

*These notes are from an address by Mr. Higgins at the last E. O. D. A. Convention.



It isn't an easy job holding them back from

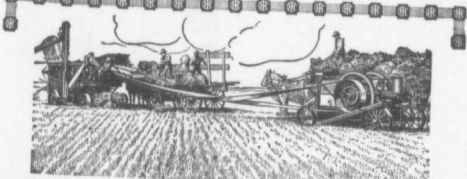
Caldwell's Cream Substitute Calf Meal

- it's the MODERN way
- the ECONOMICAL way
- the PROFITABLE way

of vealing up or raising calves for beef or to replenish your Dairy Herd and you can raise as fine calves with it as you can on whole milk. But—

Keep on selling the milk. Caldwell's Cream Substitute contains the same nutriment and costs far less. Ask your Feedman about it or write us.

THE CALDWELL FEED CO., LTD., DUNDAS, ONT.



You Will Need Extra Power

WHEN you buy your engine, get it big enough to do more than your present work. If it's an IHC engine it will last a long time. Your farm work is priced at another engine four or five years from now, by getting an engine a size larger than you need now.

Over-speeding and straining harm any engine. There is one correct speed for each IHC engine, a speed at which the parts balance and at which the engine runs without harmful vibration. When you buy an engine powerful enough to handle your work easily while running at the correct speed you add years to its life. Get your engine big enough and buy an

IHC Oil and Gas Engine

An IHC oil and gas engine will deliver 10 to 30 per cent above its rated horse power when occasion requires, but it gives the longest service when carrying a normal load. All parts are carefully, accurately Combustion is perfect and the maximum power is secured.

Sizes—1 to 50-horse power. Styles—stationary, portable, skidded, vertical, horizontal, tank-cooled, hopper-cooled, air-cooled. Fuels—gas, gasoline, naphtha, kerosene, distillate or alcohol. Kerosene-gasoline tractors, 12 to 60-horse power.

The IHC local agent will help you decide on the size of IHC engine you need. Get catalogues from him, or, write the nearest branch house.

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, Toronto.



THE law of Nature is, Do the thing and you shall have the power; but they who do not the thing have not the power.—Emerson.

Rose of Old Harpeth

By MARIA THOMPSON DAVIES
 ("Copyright, 1912, The Bobbs-Merrill Company")
 (Continued from last week)

I KNOW it needs fresh cold cream to make it heat up, and I haven't even any talcum powder. How's Louisa Helen and doth the widow consent still not at all? Tell Crabtree I say just walk over and try force of arms and not over—that force of arms is a good expression to use—literally in some cases. Something is the matter with my arms. They don't feel strong like they did when I helped Uncle Tucker mow the south pasture and turn the corn chopper—they're weak and—and sorer useless—and empty. Tell Stenie he could beat me bear-hugging any day now. Has 'Tobe discovered any new adventure in aromatics lately, and can little Potoot sit up and take notice? Help, help, I'm getting so homeseick that I'm about to cry and fall into the ink.

"Good night—with all that the expression can imply of moonlight ex-pressing over the head of old Harpeth, pouring down its sides, rippling out over the corn-fields and flooding over a tall rose girl thing who stands in the doorway with her 'nesties' all asleep in the dark house behind her—and if any man were lounging against the honeysuckle vine getting a last puff out of his cigar I should know it, and a thousand miles couldn't save him. I'm all waked up thinking about it, and I could smash—Good night!" M. E.

P. S. I don't think it at all square of you not to let Stenie sell me the little dogs. Women ought to keep out of business affairs between men."

And as she turned the last page, slipped it back into place and promptly began at the beginning of the very first one, Rose Mary's face was an exquisite study in what might have been entitled pure joy. Her roses rioted up under her lashes, her rich lips curled like the half-blown bud between the flower of her cheeks, and her eyes shone like the two first stars mirrored in a woman's pool of life. Also it is one of the mysteries of the drama why a woman will scan over and over pages whose every letter is cherished like one of the useful devices in the home of Mrs. F. L. Green, Ontario Co., Ont. Their hydro-electric plant is described in an article on page 7.

And this was a very wonderful woman Old Harpeth had cradled in the hollow of His hand, nurtured on the richness of the valley and breathed into her with ever-perfumed breath the peace of faith—in God and man, for to any but an elemental, natural, faith-inspired woman of the fields would have come crushing, cruel, tearing doubts of the man beyond the hills who said so little and yet so much. However, Rose Mary was one of the order of fostering women whose arms are forever outbeld cradle-wise, and to whose breast is ever drawn in

mother love the child in the man of her choice, so her days since Everett's hurried departure had been filled with love and longing, with faith and prayers, but there had been not one shadow of doubt of him or his love for her all-spoken as he had left it. And added to her full heart had been burdens that had made her hands still fuller. She had gone on her way day by day pouring out the richness of her life and strength where it was so sorely needed by her feeble folk, with a song in her heart for him and them and to answer every call from



Warm Tea Insured

An electric heater that may be attached to the chandelier over the dining-room table is one of the useful devices in the home of Mrs. F. L. Green, Ontario Co., Ont. Their hydro-electric plant is described in an article on page 7.

along Providence Road. Thus it is that the motive power for the great cycles that turn and turn out in the wide spaces between time and eternity, regardless of the wheels of men that whirl and buzz on broken cog with shattered rim, is poured through the natures of women of such a mold for the saving of His nations.

At last Rose Mary folded her letter, hesitated, and with a glint of the blue in her eyes as her lashes fell over, she stuck rosier tint in her cheeks, she a tumbled into the front of her dress and smoothed and patted the folds of her apron close down over it, then turned with praiseworthy energy to

the huge bowl of unworked butter.

And it was nearly an hour later, still, that the Honorable Gid boomed in the doorway under the honeysuckle vines, a complacent smile arranged on his huge face and gallantry oozing from every gesture and pose.

"Why, Mr. Newsome, when did you come? How are you, and I'm glad to see you!" exclaimed Rose Mary all in one hospitable breath as she beamed at the Senator across her table with the most affable friendship. Rose Mary felt in a beaming mood, and the Honorable Gid came under the shower of her affability.

"Do have that chair by you would and let me give you a glass of milk," she hastened to add as she took up a cup and started for the crocks with a still greater accession of hospitality.

"Sweet or buttermilk?" she paused to inquire over her shoulder.

"Either handed by you would be sweet," answered the Senator with praiseworthy ponderosity, and he shook out the smile veil until the very roots of his hair became agitated.

"Yes, Mr. Rucker says my buttermilk tastes like sweet milk with honey added over the tall jigs," he said, "because I always pour cream into it for him, and Mrs. Rucker won't because she says it is extravagant. But I think she's ought to have a dash of cream in his life. I just to make the poetry run smoother—and orators, too," she added as she poured half a ladleful of the golden top milk into the foaming glass in her hand and gave it to the Senator, who received it with a trembling hand and gulped it down desperately; for this once in his life the Honorable Gideon Newsome was completely and entirely embarrassed. For many a year he had had at his command florid and extravagant figures of speech which, cast in any one of a dozen of his dulcet modulations of voice, were warranted to tell on even the most stubborn masculine intelligence, and ought to have melted the feminine heart at the moment of utterance, but at this particular moment they all failed him, and he was left high and dry on the coast of courtship with only the bare question available for use.

"Oh, Rose Mary," he blurted out without any preamble at all, and drops of the sweat of an agony of anxiety stood out all over the wide brow, "I have been talking with Mr. Alloway, and I have come to you to see if we can't all get together and settle this mortgage question to the profit of all concerned. I lent him that money six years ago with the intention of trying to get you to be my wife just as soon as you recovered from your—your natural grief over the way things had gone with you and young Alloway. I have waited longer than I had an intention of doing, because I had begun on this political career I had begun on, but now I see it is time to settle matters, as the farm is running us all into debt, and I'm very much in need of you as a wife. I hope you see in that light, and the marriage can't take place too soon to suit me. You are the handsomest woman in my district, and my constituents can not help but approve of my choice." Something of the Senator's grandiloquence was returning to him, and he regarded Rose Mary with the pride of one who has appraised satisfactorily and is about to complete a proposed purchase.

And as for Rose Mary, she stood framed against the fern-lined dusk at the back of the milk-house like a maid startled as she emerged from her tree-bower. Quickly she raised her hand to her breast and just as quickly the pressure of the letter lying there against her heart sent a flood over her face that had grown pale and still, but she raised her head proudly and looked the Senator

straight in the face with a questioning, hurt surprise.

"You didn't make the terms clear when you lent the money to us," she said quietly.

"Well," he answered, beginning to take heart at her very tranquil acceptance of the first bombardment, "I thought it best to let a time elapse to soothe your disordered affections and cure your humiliation. For the time being I was content to enjoy colling



Ironing by Electricity

Mrs. F. L. Green, too, makes good use of the electric energy developed in their private hydro-electric plant. She may be seen operating her electric iron.

—Photos by an editor of Farm and Dairy.

the flowers of your friendship from time to time, but I now feel no longer satisfied with them, but must be paid in a richer harvest. We will take charge of this place, assure a comfortable future for the aged relative in your care, and as my wife you will be both happy and honored." The Senator was decidedly coming into his own, and smile, glance and voice as he regarded Rose Mary were unctuous in fact, though their siltis his eyes shot a gleam of something that was so hateful to Rose Mary that she aught her breath with horror, and only the sharp corner of her letter pressed into her naked breast kept her from retreating. But in an second she had her hand and her quick mother-aid was aroused to find out the worst and begin a fight for the safeguarding of her nesties—and the nest.

"Oh, I shouldn't want to do do what you want me to do," she asked, and she was even able to summon a smile with a tinge of coquetry that served to drape the wily Senator further than he realized.

"Oh, I feel sure you can have no objections to me that are strong enough to weigh against the promise suitably for your old relatives," was the bait he dangled before her humiliated eyes. "It is the only way to do it, for Mr. Alloway is too old to care any longer for the place, which has been run at a loss far too long already. We may say that in accepting me you are accepting their comfortable future. Of course you could not expect things to go on any longer in this impossible way, as I have need of the home and family I am really entitled to, now could you?"

(Continued next week)

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The Upward Look

A Lesson from Moses

Is there any Bible hero who seems to us more real, more life-like, than Moses? In our childhood, was not the story of the little baby in the bulrushes always one of our great favorites? It is difficult to think of a life containing more vicissitude, greater loneliness, keener anxiety, heavier responsibility, greater triumph, more bitter disappointment. We know him as a poor child of oppressed slaves, an adopted son of the royal house, a noted conqueror of Egypt's enemies, a lonely fugitive in long hiding, a God-called leader of a vast multitude, and lastly, an old man disappointed in the one great expectation of his life.

For forty years he had been director, law-giver, general, preacher, prophet of his people, always leading, planning, teaching, dreaming of that wonderful Promised Land; yet into which he was told that he himself would never enter. For the Lord had said unto Moses, "Get thee up into this mountain . . . and behold the land of Canaan, which I give unto the children of Israel for a possession. And die in the mount whither thou goest up. . . . Because thy trespasses against me . . . in the wilderness of Zin . . . thou shalt see the land before thee but

thou shalt not go thither. . . . And Moses went up to the top of Pisgah. And the Lord showed him all the land of Gilead, . . . and all the land of Judah unto the utmost sea, and the south, and the plain of the valley of Jericho. . . . And the Lord said unto him, "This is the

Paths to Happiness

1. Live the Serene Life.
2. Be in Love with the World.
3. Think and Speak the Beautiful Only.
4. Forgive and Forget Everything that Seems Wrong.
5. Seek the Ideal.
6. Develop the Whole Man.
7. Open the Mind to Beautiful Thoughts Only.
8. Be in Touch with the Harmony of Life.
9. Consecrate Every Moment to the Higher Life.

—Larsen in "Eternal Progress"

land. . . . I will give it unto thy seed: I have caused thee to see it with thine eyes, but thou shalt not go over thither. So Moses, the servant of the Lord, died there in the land of Moab, . . . and he buried him in the land of Moab. . . . But no man knoweth of his sepulchre unto this day." Last week the "Upward Look"

dwelt on "Trust in Obedience." This week the thought is "Trust in Disappointment." Moses did this in spite of his terrible disappointments these triumphant ones: "He is the Rock, his work is perfect: for all his ways are judgment: a God of truth and without iniquity, just and

right is he." Is your trust great enough to enable you to re-echo these words, you who are suffering now from some very bitter disappointment? It may be a failure in a carefully-prepared-for examination, losing a hard-fought position, the thwarting of a cherished ambition, the non-realization of a life-long vision. Have you trust enough to enable you to realize that some day you may thank God with a full heart for that very disappointment. By that same failure you may be led into some other work that will bring greater joy and more desirable results.

Here is a homely illustration: One recovering from a long illness had to spend her days on a sofa on a sunny balcony. To break the force of the wind one end was enclosed in glass. To her dismay she discovered that one pane was so imperfect that everything seen through it was so distorted that she looked as little as possible through it. But one day, by chance, her couch was moved, bringing her directly opposite it. To her amazement the foothills beyond the river had become lofty mountains so that now one of her great-

est pleasures is that view, as seen through that stained window. May the slight and the trivial, or the great and the bitter disappointments of each seemingly thwarted or scarred or saddened life become the cause of earnest heartfelt gratitude for a life of joy, work, service, passing all expectation.—I. H. N.

A Little Help

There's help in seeming cheerfulness
When a body's feeling blue,
In looking calm and pleasant.
If there's nothing else to do,
If other folks are swearing
And things are all awry,
Don't vex yourself with caring,
'Twill be better by and by.

There's help in keeping tally
Of our host of happy days.
There's never one thus dawneth,
But it bringeth cause to praise
The Love that ever watcheth,
The Friend that's ever near.
So, though one tryeth with sorrow,
One needs must dwell with cheer.

When troubles march to meet you
Salute them at the door,
Extend both hands to greet them,
Their worst will soon be o'er.
Beat down their stormy bugles
With your own rejoicing drums,
And, mailed in lofty courage,
Accept whatever comes.

Sleep with open windows.



"Uniformity is a big word, Bud."
"I 'spect it's because it means a lot, Rose."
Steady—Regular—Dependable Quality, there's the FIVE ROSES idea.
No bad dreams bakeday eves — the morning batch "flat" instead of "up."
So very exasperating, you know, to get less loaves this week than last from the same quantities.
FIVE ROSES is the sure flour — reliable, you see.
No wrinkling worries over bread, or cakes, or pies, or anything.
Bake things always up to the mark of your happy expectations.
Disappointment—never.
Four times Uniform—Strength, Color, Flavor, too, and Yield.
FIVE ROSES—trouble-proof flour.
Use FIVE ROSES always.

Five Roses Flour

Not Bleached



Not Blended

CANADIAN PACIFIC

HOMESEEKERS' EXCURSIONS

Each Tuesday, until October 23
WINNIPEG AND RETURN - \$35.00
Other Points in proportion.

Return Limit, two months
HOMESEEKERS' TRAIN leaves Toronto
2.00 p.m. each Tuesday, May to August,
inclusive. Best Train to take.

UPPER LAKES NAVIGATION

Steamers Leave Port McNicoll, Mon-
days, Tuesdays, Wednesdays, Thursdays
and Saturdays, for SAULT STE-
MARIE, PORT ARTHUR and FORT
WILLIAM.
The Steamer "Manitoba," sailing from
Port McNicoll on Wednesdays, will call
at Owen Sound, leaving that point
10.30 p.m.

STEAMSHIP EXPRESS

leaves Toronto 12.45 p.m. on sailing
days, making direct connection with
Steamers at Port M'Nicoll.

General change of time June 1st.
Particulars from Canadian Pacific
Agents or write W. G. McGRATH,
D.P.A. C.P.R., Toronto.

**Capable Old Country
Domestics**

Parties arriving June 4th
and weekly after

APPLY AT ONCE

The Guild, 47 Pembroke St., Toronto
and 71 Drummond St., Montreal

CONNOR

**Ball-Bearing
WASHER**

HERE is a washer that is fully guaran-
teed. A big manufacturing cor-
poration stands behind it. And
the dealers who sell it, pledged to re-
fund the full purchase price if any woman
who buys it says she is not completely
satisfied. Under these conditions, you
run absolutely
no risk in trying
the Connor Ball-
Bearing Washer.
If it doesn't do
the washing in
half the usual time,
if it doesn't wash the
clothes spotlessly clean
and without injury,
you don't need to keep it.
That's fair, isn't it?
Write for descriptive
booklet.



J.H. Connor & Son, Ltd., Ottawa, Ont.

**THIS WASHER
MUST PAY FOR
ITSELF.**

AMAN tried to sell me a horse once. He said
it was a fine horse and had nothing the mat-
ter with it. I was a fine horse, but, didn't
know a thing about
the man very well
either.

So I told him I wanted
to try the horse for a month.
He said "All right," and
I gave him my money. He
said "I'll give you the
horse for ten days. If you
like him let's all right."
I was afraid the horse
wasn't worth the money
I might have to waste
my money if I once parted
with it. So I didn't buy
the horse, although I wanted
it badly. Now I tell me
thinking.

You see I make Wash-
ing Machines—the "1000
Gravity" Washer.

And I said to myself, lots of people may think
of my Washing Machine as I thought about
the horse, and about the man who owned it.
But I'd never know, because they wouldn't
write and tell me. Yet see my Washing
Machines by mail. I have sold over half a mil-
lion that way. Yet see I can't be only half
enough to let people try my Washing Machines
for a month, but they pay for them just as I
wanted to try the horse.

Now, I know what our "1000 Gravity" Washer
will do. I know it will wash the clothes without
wearing or tearing them, in less than half the
time they can be washed by hand or by any other
machine.

I know it will wash a tub full of very dirty
clothes in Six Minutes. I know no other machine
ever invented does that, without wearing the
clothes. Our "1000 Gravity" Washer does the
work so easy that a child can run it almost as
well as a strong woman, and it don't wear the
clothes, fray the edges, nor break buttons, the
way all other machines do.

It just drives soapy water clear through the
fibre of the clothes like a force pump might.
So, said to myself, I will do with my "1000
Gravity" Washer what I wanted the man to do
with the horse. I only I won't wait for people to
ask me. I'll offer first, and I'll make good the
offer every time.

Let me send you a "1000 Gravity" Washer on
a month's free trial. I'll pay the freight out of
my own pocket, and if you don't want the ma-
chine you can return it to me. I'll take it
back and pay the freightage. Surely that is fair
enough, isn't it.

Don't let me prove that the "1000 Gravity"
Washer must be all that I say it is?
And you can get me out of what it saves you
too. I'll save five whole cent in a few months
and you can get me out of what it saves you
too. It will save 50 to 75 cents a week over that
in a month's trial. I'll let you pay for it out
of what it saves you. If it saves you 50 cents a
week, send me 50 cents a week, till paid for. I'll
take that cheerfully, and I'll wait for my money
until the machine itself pays for the balance.

Drop me a line to-day, and let me send you a
book about my "1000 Gravity" Washer, that
washes clothes in six minutes.

Address me personally:
T. E. MORRIS, Manager, 1900 Washer
Co., 37 Yonge St., Toronto, Ont.

SEND \$1.00
receive by mail 4 Shirt
Waists, one of White Lawn,
one of Pink, one of Blue,
Print, light, with sky de-
signs; all different; size 32
to 44.

STANDARD GARMENT
COMPANY,
LONDON, ONT.

NIGHT MADE LIGHT AS DAY IN A PETERBORO FARM HOME

A System of Lighting a Farm Home Installed by Mr. Stewart Brown, of Peterbor-
Co., Ont., after learning of this System through having seen it Advertised in
Farm and Dairy. Inspected at first hand recently by an Editor of Farm
and Dairy, who took the Photographs and Notes for this Article.

"SAY! Do you know we have the
finest light in our home now
that ever happened! There is
no more eye strain at night for us
now while we are reading. Would
you like to see it? There is no
day out of our house. There is
nothing hesitating nor half-hearted
about this praise bestowed by Mr.



An Acetylene Lighted Home

This fine Peterboro county home has re-
cently been improved by the addition of
an acetylene lighting plant. The adjoining
article tells how the acetylene light-
ing is appreciated by Mr. Stewart Brown
and his family, as the interior views
given herewith show how the gas fixtures
have added to the attractiveness of the
home.

Allan Brown on their new acetylene
lighting system which his father, Mr.
Stewart Brown, of Peterboro Co.,
Ont., recently placed in their farm
home. Allan was so delighted with
the system that he happened to in-
form us recently as to the foregoing
while he was in the Farm and Dairy
Office. We then talked more about
their acetylene lighting system, and
as we expressed a desire to see it, Mr.
Brown invites one of our editors to
come out to his place to see the whole
thing and to stay for the evening so
as to see what a fine light the acety-
lene gives. Of course we took advan-
tage of the invitation, and recently
one of our editors went out to Mr.
Brown's, and while there secured the
photographs and the information
given in connection with this article.
Mr. Brown got in touch with this
really admirable system of lighting a
farm home through seeing the adver-
tisement in Farm and Dairy last
December when he was in the Peterboro
Co., of Niagara Falls, Ont. One of
his boys wrote for the information as
advertised, and it later developed that
the Brown home became the proud
possessor of this modern system of
lighting a farm home.

When we got to the farm and start-
ed in to inspect the acetylene plant
our friend Allan said: "We shall in-
spect the generator first. We have it
down in the cellar."
"That is the generator over there.
You see it stands in a corner out of
the way and it occupies but little
space. It is automatic in its opera-
tion. You just put in the stuff and
the generator does the rest."
"We fill the receptacles for carbide
and water once a month, then the
machine generates the gas as requir-
ed. The whole thing is automatic.
There is no gas made with this ma-
chine until you start to use the gas that
is in the pipe, thus there is absolutely
no danger of explosion because there
is no gas about in any quantity suf-
ficient to give an explosion. This Davis
acetylene machine is a winner in this
respect."

"Our generator is large enough to
provide gas for 25 lights, each light
being equivalent to 25 candle power.
We did not put in the automatic or

electric connections for lighting the
gas on the burners. The manufacturer
you know have the whole thing
now in such shape where you simply
press a button and the light comes on
just as if it were electricity. We
shall probably put this extra on some
time in the future."

We were anxious to know just what
this entire plant cost. To our ques-
tion Mr. Brown replied: "The total
cost for generator, chandeliers, piping
and installation came to \$185.00. We
could have secured a man in town to
do the plumbing, in which case it
might have cost us less, but we pre-
ferred to get a man who was thorough-
ly up on this special line of work and,
accordingly, we had the Davis Co.
send us one of their own men."

"Is it as cheap as coal oil?" we ask-
ed Mr. Brown. He replied, "If we
were to use enough coal oil to seem
as brilliant a light as we get from the
acetylene, it would cost us much
more. The ordinary coal oil lamp is
of course cheaper. But just wait un-
til you see the light from our acety-
lene, and then you will know just why
we prefer acetylene, even though it
does cost a little more each month."

As the evening came on and dark-
ness settled down the acetylene gas
was lighted. We then had the great
pleasure of seeing a farm home better
lighted than any home we had ever
seen in the city lighted by electricity.
The acetylene light is stronger than
electric light. It seems to be of a
peculiar color, which is very restful
to the eyes. One's eyes can look at
the light without seeming to feel
any inconvenience, which you would

**An Attractive
Acetylene Chandelier**

Almost any article
is so good that
it is worth
to spend enough
to get them
illustration shows
it in its
or in reading the
journals, or in
that is required
this grand system
they have, is the
the generator; it
and requires only
to be replaced
every member of
hold. We could
with them in ma-
favor of acetylene
In order to get
under idea of just
the chandeliers ap-
home we took the
have reproduced
them. We also giv-
exterior of Mr. I
We feel about the
readers do that is
good for the farm-
farmers who read
can afford the best



A Thing of Beauty

The chandelier here seen constitute a
part of the acetylene plant recently in-
stalled in the farm home of Mr. Stewart
Brown, Peterboro Co., Ont.

experience on looking into an electric
light or even a light on a coal oil
lamp. The acetylene in Mr. Brown's
house seemed to light in the farthest
corner, and one could read quite read-
ily when sitting in the corner, most
remote from the light.

In order to demonstrate most clearly
the advantage of the acetylene
lighting plant one of the boys went
to the back of the house and re-
covered one of their old coal oil lamps. It

lighted it, but
until it was
light. Then
lone. The re-
in spite of it
was doing it,
who had had
same light for
years or more
paper he was
was doing it,
match was on,
and the acety-
the job, den-
wonderful sup-
lamp.

There are no
lamps to be
no home. There
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city in that ho-
their eyes at a

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**A Special Offer
Introductory Offer**

GOOD FOR 30 DAYS ONLY

We are cutting the price in half, and selling our KING ED-
WARD HAND-POWER VACUUM CLEANER for

EIGHT DOLLARS CASH

in order to introduce our celebrated Cleaner among the
farm homes of Canada. Thousands of satisfied users in the cities

testify to the merit of the KING EDWARD.

"This is one of the best offers ever made to the readers of
"Farm and Dairy." We want you to benefit by it, as the
regular price of this machine is \$16.00.

Satisfaction Guaranteed, or Money Refunded.
Cash must accompany order. Don't delay. Order To-day.

The GEO. H. KING CO. Limited

WOODSTOCK, ONTARIO

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advertised in
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lighted it, then turned the wick up until it was giving its maximum of light. Then he turned off the acetylene. The room at once seemed dark, in spite of the coal oil lamp, which was doing its best. Mr. Brown, Sr., who had been reading by that soft-same light for a couple of score of years or more, at once dropped the paper he was reading to wait until the acetylene was again turned on. A match was scratched, a button turned and the acetylene light was again on the job, demonstrating clearly its wonderful superiority over the coal oil lamp.

There are now no lamps to clean and no lamps to fill in Mr. Brown's farm home. There are no globes on lamps to drop and break. There is no necessity in that home for any one to strain their eyes at night over school lessons

He did not exaggerate. We find that when such a cleaner is frequently used, no moths can destroy carpets, as the eggs are drawn up, and less they required to be turned fully over with the cleaner before moving the carpet and it is practically clean.

There are several different designs of vacuum cleaners in this locality, and every one seems equally pleased with their make, and all agree that they have come to stay.

It would suggest that a few neighbors who have tried the vacuum cleaner would join together and secure one, then arrange for day and time allotted to each (cooperation); it would be used to great advantage. And I venture to say, as soon as possible each one would secure a vacuum cleaner for themselves. In this period of scarcity of help every labor-saving device should be used. Those who are accustomed to using a cleaner all declare: "I would not like to do without it now."

Conveniences in Farm Homes

Isaac Holland, Oxford Co., Ont.
We have used a small gasoline engine in the basement of our house for over four years. It is used in pumping water from a large cistern into a supply tank in the attic. This tank in turn supplies the bathroom and kitchen with a never failing supply of water, which may be drawn warm or cold as we wish.

This engine is also used for running the washing machine, it having power enough to pump water and run the washing machine at the same time. By means of a false or loose pulley on a small shaft the washing machine may be started or stopped without interfering with the motion of the pump.

SMALL COST OF OPERATION
In all the four years that we have used this outfit I do not believe that the cost for fuel to pump water and do the washing for a large family has been more than five cents a week. The only other expense has been for a few batteries for the engine. This small expense is a great deal easier to bear than the labor in connection with pumping and washing by hand.

Another convenience in our home is the acetylene plant, which was installed at the time of building the house in the year 1902. The cost of lighting with acetylene is probably a little more than with kerosene, but very little more if we take into account the amount of light provided. The machine is simple to operate, and a few minutes at once a week will keep it in working order.

The refrigerator is also a convenience that we could not do without. In it we keep meat, butter and milk fresh during the heat of summer. The ice is stored at small expense and with little labor when other work is not pressing.

Nails in Plaster

There is hardly a householder who has not been annoyed when a nail he has attempted to drive into the wall will not hold in the plaster. While he merits the sympathy and kindly consideration of all persons who have been similarly upset, there is a way out of the difficulty that seems so simple his fingers become absurd.

The nail to be driven into the plaster should be a notch filed in it near the end on one side and another notch a little further along toward the head on the other side. When the nail is to be put into the wall it should be dipped in liquid glue until it is well covered and then driven in place. As soon as the glue hardens it will become as firm as the plaster itself.



The Biggest Thing in the Clock Business

Big Ben is the biggest thing today in the alarm clock business.

He is only two years and a half old, but he's already getting more work from the Dominion than any clock alive.

In two years and a half time, 6,000 Canadian dealers have adopted him. Nearly half the families in Canada leave it to him to call them up in the morning; nearly half the families in Canada use him all day long to tell the right time by. He is really two good clocks in one—a crackerjack of a time-keeper and a crackerjack of an alarm.

Big Ben stands seven inches tall. He is triple nickel-plated and wears an inner vest of steel that insures him for life. His big, bold figures and hands are easy to read in the dim morning light. His large, comfortable keys almost wind themselves. He rings five minutes steadily or irregularly. If he is oiled every other year, there is no telling how long he will last.

Big Ben's price is \$1.00 anywhere in Canada. If you can't find him at your dealer's, a money order sent to Windsor, La. Safe, Illinois, will bring him to you, carefully packed and duty charges paid.

BIG BEN

NOTICE

WHEN GETTING TWO COPIES

Sometimes a renewal subscription is sent to you but the initials are given differently. In this way sometimes two copies are being forwarded to the same person.

Sometimes a subscription is renewed at a new address and the former address not mentioned. In this case we would send copies to both addresses and bills to the old address.

If you are getting a copy, or bills when you have paid up, there is some mistake. In this case please send a card giving as much information as possible, so we can locate the error. Labels from the two copies will often help us. Many Thanks for This!

FARM AND DAIRY

KEEP THE ICE BOX
Sweet and Clean—and Free from Odors—with
Old Dutch Cleanser
MANY VIEWS AND FULL DIRECTIONS ON LARGE SUFFER-CAN ID#

SYNOPSIS OF DOMINION LAND REGULATIONS

Any person who is the sole holder of a family or any male over 18 years of age may homestead a quarter section of available vacant land in Manitoba, Saskatchewan, or Alberta. The applicant must appear in person at the Dominion Lands Agency or Sub-Agency of the district. Entry by proxy may be made at any agency on certain conditions by father, mother, son, daughter, brother, or agent of intending homesteader.

Duties—Six months residence upon and cultivation of the land in each of three years. A homesteader who may live within at least 40 acres solely owned and occupied by him or by his father, mother, son, daughter, brother, or sister. In certain districts homesteader in good standing may pre-empt a quarter section alongside his homestead. Price, \$1.00 per acre.

Duties—Must reside upon the homestead or pre-emption six months in each year from date of homestead or pre-emption (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption may enter for a purchased homestead in certain districts. Price, \$1.00 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres and erect a house worth 100.00.

W. W. COBURN
Deputy of the Minister of the Interior.
N.B.—Unauthorized publication of this advertisement will not be paid for.

GRAND TRUNK RAILWAY SYSTEM
HOMESEEKERS' EXCURSIONS
To Manitoba, Saskatchewan, Alberta
Each Tuesday until October 29 inclusive
WINNIPEG AND RETURN \$43.00
EDMONTON AND RETURN \$43.00
Proportional low rates to other points. Return limit two months.
Through Pullman Tourist Sleeping cars are operated to Winnipeg without change via Chicago and St. Paul, leaving Toronto 11.30 p.m. on above dates.
Tickets are also on sale via Sarnia and Northern Navigation Company.
Full particulars and reservations from Grand Trunk Agents, or write to E. E. Hing, D.P.A., Union Station, Toronto, Ont.

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Advantages of a Vacuum Cleaner

"Reader," Chateaugay Co., Que.
Why did we get a vacuum cleaner?
To save labor.
We listened to a friend telling the advantages of a vacuum cleaner, of its wonderful gathering in of dirt, not only from carpets, rugs, couches, upholstered furniture, pillows, mattresses, curtains and walls but that it could be used with equal success on heavy overcoats after a dusty drive.

WOLBERT'S TURPENTINE
It's so easy
At all Dealers 10¢



The Vest Pocket KODAK

is a miniature in size—actually small enough to go into a vest or hip pocket—but a thoroughly capable, durable, practical and efficient photographic outfit.

A Kodak on the farm, not only means fun for the young folks, but has an everyday, practical usefulness as well. Tells the story of crops, new buildings under way—stock and poultry for sale, etc., better than any description.

And the Vest Pocket answers every outdoor need to perfection.

The size makes it as convenient to carry as a pocket knife or watch—the fine quality of the meniscus achromatic lens gives you pictures (size 1 1/4 x 2 1/2 inches) of splendid definition and as full of detail as the largest.

The Vest Pocket Kodak is made simple and strong—nothing to get out of order—is always ready for use, has a fixed focus—brilliant, reversible finder—Auto-time Scale—loads and unloads in daylight with Kodak film cartridge for eight exposures—lustrous black metal finish. Right as a watch in adjustment and the refinement of every detail.

Canadian Kodak Co., Ltd. TORONTO

Milk! Milk! Milk!

This is the cry of the city, but what about the young calf? Why, he's happy 'cause he's getting



That pure, wholesome substitute for milk, and you're happy 'cause you're making money as a result. For sale at all dealers. CRAMPSEY & KELLY Toronto, Ont.

GRANGE NOTES

Doings at Apple Grove

Apple Grove Grange, Middlemarch, County of Elgin, has had a remarkably successful season this past winter, partly due to a unique method adopted for getting the members interested, and having large and instructive meetings.

In January last it was decided to divide the members into eight groups. As there are 104 on the roll each contains 13 members. The captains chosen were Harry Palmer, Hattie Roblan Moore and Roy Gilbert. These leaders were allowed to choose an assistant after which they appeared on the books to each. Each group was responsible for one evening's entertainment and the program for the largest attendance during the three months was to be banquetted by the others. As may be surmised, the rural telephones were kept busy for a day or two before the Grange meetings by the captains and their assistants, and large turn outs were the order, and also good programmes for each vied with the other in doing their best. Each night the name of the group was called and noted on the blackboard prepared for the series and much enthusiasm was shown. Harry Palmer's group was, and were treated to ice cream the following evening.

This plan was so popular that a new set is now in progress, consisting of four groups, married and unmarried ladies, and gentlemen. As per cent. will be made of the close of the contest. The marriage of Mrs. P. Welter, at their night last Friday, brought nearly 60 per cent. of their number, and expect to do better.

COOPERATIVE BUYING

During the spring a carload of posts was shipped from Point Edward, and unloaded at Middlemarch in conjunction with Forest Rose Grange, Apple Grove being the usual carload of salt from the Grange salt well at Kincardin.

It is decided, and the plans are well under way towards the holding of a seed and corn show in December. The committee appointed by the Grange have resolved themselves into officers as follows: Hon. President, Mr. Henderson, Reeve of Southwell; resident, W. Wardell, Master of Grange; Vice-President, N. E. Burroughs; Secretary, R. W. Treasurer, Gordon Tufford; Directors, S. Curtis and J. N. Fletcher. The Township of Southwell has agreed to give the show, a grant of \$60. Besides the usual prize lists there will be specials by private individuals. Miss Robinson has offered one to the boy or girl under 12 years old showing the five best potatoes. A prize will also be offered to the best school garden exhibit, which is limited to the township.

A beef ring is under discussion and is strongly advocated by many of the members. The only difficulty found is in getting a competent butcher willing to undertake the task of killing and dividing the beef.

This Grange has always held a picnic during the summer. It was voted to join an excursion from St. Thomas this year and may visit to Niagara Falls and Queenston Heights. Mr. B. Steincombe was appointed to make the necessary arrangements for the picnic. The Grange car, Forest Rose Grange Hall being about the same distance north of the city as Apple Grove is west, the members have been invited to join for the festive occasion.

SPECIAL PATTERN SERVICE

We realize the great interest that all of our readers take in the new spring styles, and have therefore made all our arrangements to have the most able to give many more patterns in Farm and Dairy than usual during the next few weeks. We will illustrate many of the attractive spring styles. Should you wish patterns other than you see in Farm and Dairy, please write us and we'll do our best to get them for you. When ordering, please kindly give name and address, size and number of bust, waist, and Price 10c each. Address Pattern Dept., Farm and Dairy, Peterboro, Ont.

BLOUSE WITH BODY AND SLEEVE IN HOUSE GOWN OR NURSE'S COSTUME, ONE, 782



COMBINATION CORSET COVER, DRAWERS AND PANTS, 783



size will be needed 2 1/2 yards for the medium of insertion, 3 yards for edging and 2 1/2 yards of heading.

WAIST WITH OVER BLOUSE AND TUNIC, 786



GIRL'S BATHING SUIT, 788



yard 21 or 27 inches wide for the trim. This pattern is cut in sizes for girls from 4 to 12 years of age.



For the medium material 7 1/2 yards of material 27, 4 1/2 yards 36 or 4 yards 44 inches. For the large material 8 1/2 yards 27 inches wide for the collar and cuffs, 11 yards 44 inches wide for the skirt at the lower edge, 12 1/2 yards. This pattern is cut in sizes from 34 to 46 inches bust measure.

FOUR-PIECE SKIRT, 789



the high or the natural waist line is used. This pattern is cut in sizes from 22 to 30 inches waist measure.

CLOSED DRAWERS FOR MISSES AND SMALL WOMEN

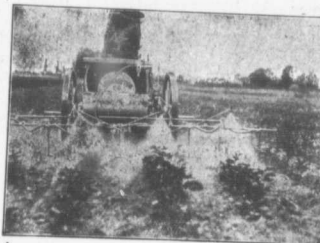


of 14, 16 and 18 years of age.

SHIRT WAIST OR BLOUSE, 785



Place a slice of bread in a tin and put the cake on top of the bread, and it will keep the cake fresh and moist for weeks.



Spraying Potatoes, both Vines and Tops at Once

Several kinds of Spramotor Apparatus are suitable for spraying potatoes. Our invaluable Hand Book

"A GOLD MINE ON YOUR FARM"

tells all about it. There is: (1) The Knapsack Sprayer, which you can use to fine advantage in your garden; (2) The Barrel Machine with the arrow sprayer for small patches; (3) The Barrel Machine as shown Fig. 17 of our Hand Book, with a size of hand spramotor to suit the number of nozzles in use; (4) The Horse-Power Machine that is with the spray nozzles arranged to spray three nozzles to a row.

You may get such a Spramotor as will suit the exact work you have to do. All Spramotors are ABSOLUTELY GUARANTEED to work satisfactorily; they are the very best obtainable for the price.

Full particulars and valuable instruction given in our Hand Book. Write me personally for it.

W. H. HEARD, Mgr.

SPRAMOTOR CO., 1716 KING STREET, LONDON, ONT.

Largest manufacturers of Sprayers and Accessories in the World

SAVE Your Potatoes From Rot this growing season Spramotors

Will Do It!

You know how your potatoes rotted and blighted last year! You can save yourself a loss like that and grow 50 to 100% more good saleable potatoes by spraying the vines and tops every week or ten days during the rapid growing season.

Practical Farmers Who Have Made Money with Holsteins
(Continued from page 30)

youngest calves have a remarkably milky showing. They look as if they were making udders ready to calve. They are great doers, and while not a curdy comb had been on them when we saw them two weeks ago they looked as sick as if they had been carried. Even these younger calves showed a veining quite remarkable. The Haley Bros. say they can tell a "Grace Fayne" call from all others, even though only two days born. Their muzzles and nostrils just seem to stick right out. He is a great bull for getting heifers. There was not a bull calf of his on the place.

The Haley Bros. have always favored using the older bulls. As they say: "We like using the older bulls. Many get us bigger, stronger stuff. Many breeders are making a big mistake in getting and using a yearling and disposing of him before another yearling. We find that by another yearling and feeding the heifers as they should be fed that we can breed them at a younger age and still retain the size and standard."

It is to be regretted that the Haley Bros. have decided not to come out to the fair this coming fall. They never before had so much good stuff, and it in such good shape as now. At the time we visited them two weeks ago they had set aside much of their good stuff, it having been purchased by Mr. E. M. Bredt, a noted stock farmer near Regina, Sask. Mr. Bredt came east after a herd of Holsteins that when taken west would be second to none out there. In his selection of stock from the Haley Bros., herds he is most assuredly "in right."

If we were to offer any criticism to the Haley Bros. regarding their Holsteins it would be that they have been selling their stock too cheaply. They realize, however, that when they sell their stock reasonably and it goes out and does well, it does much to advertise them and thus make their business grow better and better. It is always a joy for a breeder to get letters from a fellow to whom he has sold telling him how well the stock has done. Haley Bros. have received their big share of such letters.

When it is good stock and the best in Holsteins that you want, either males or females, and either of the Haley Bros. have it available for you, it is a safe proposition for you to look it over and if it suits you, to buy it! The breeding of the stock is right, it has an enviable reputation, and the Haley Bros. have an enviable reputation for using people right.

A Difference in Plows

What is the difference between the stubble and sod plow?—A. MoB.

The plow may be looked upon as a wedge of such shape that it will shear off the furrow aisle, pulverize and invert it. The function of the sod plow is merely to cut the sod with the minimum amount of resistance. The stubble plow, being designed to pulverize, is a blunter wedge whose steepness of mold-board depends upon the condition of the soil and the amount of pulverizing that can be done at the expense of a reasonable amount of power.

Warranted to Give Satisfaction. Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Cuts, Sprains, Swells, Galls, Sores, Burns, Scalds, Tetter, Eczema, and Itch, and all Injuries from Spavins, Ringbones and other heavy lameness. Cures all skin diseases or Parasitic Diseases. Disinfects. Removes all Scabs from Horses or Cattle.

As a Hygienic Remedy for Rheumatism, Sprains, Galls, etc., see, if the above is Warranted to Give Satisfaction, see if it is not. It is a safe, speedy and positive cure for cuts, sprains, swells, galls, sores, burns, scalds, tetter, eczema, and itch, and all injuries from spavins, ringbones and other heavy lameness. Cures all skin diseases or parasitic diseases. Disinfects. Removes all scabs from horses or cattle.

The Lawrence-Williams Co., Toronto, Ont.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER

FOR CHESTER WHITE SWINE, 6 to 8 year old, apply S. A. Caldwell, Billings, Ottawa, Ont.

YOU CAN BE SAVED FROM ALL WASHDAY DRUGGERY



I.L.X. VACUUM WASHER

Price, \$2.50

Washes Anything and Everything from a Wife's Skirt and Overalls to the Forest Lawn with No Boxy

coupon Below Saves You \$2.00

Washes a Full Tub of Clothes in 3 Minutes Perfectly

Washes and Squeezes out all the Water

SENT UNDER A MONEY-BACK GUARANTEE

Farm and Dairy COUPON

Cut out and mail coupon with your name and address

to I.L.X. Vacuum Washers, Ltd., 1000

4211 Main Street, Winnipeg, Man., and you will receive

one I.L.X. VACUUM WASHER, with full literature, prepaid

anywhere in Canada on condition that you give the name

of the Washer used, not do so that is incorrect

F. G. JAMES, BOWMANVILLE, ONT.

Breeder's Directory

Cards under the head inserted at the rate of \$4.00 a line per year. No card accepted unless you give a line not for less than six months, or 10 insertions during twelve months.

YORKSHIRE PIGS, all ages, either sex. Choice Young Boars, fit for service. Also Sows of all ages, bred and heavy with pig—H. C. Benfield, Woodstock, Ont.

FOR SALE—3 Sons of King Fayne 800s Clothide, from E. C. P. sires. Also three Clyde Fillies and 3 Stallions, Yearlings. R. M. Holtby, Manchester, Ont.

The Massey-Harris Trademark gives a feeling of security when Harvest Days draw nigh.

If your Binder bears the Massey-Harris Trademark you can rest assured that your Harvesting operations will be completed ON TIME and to your entire satisfaction.

Harvest days are Busy Days—every minute counts, and a delay in the completion of the cutting may mean serious loss. You can't afford to take chances—it's better to be sure than sorry.

The Massey-Harris Binder

is known the world over for its Reliability. This is no idle Statement but it is backed up by the experience of thousands of Farmers all over the World, many of whom have Massey-Harris Binders which have been in use from ten to twenty years and are still giving the best of satisfaction.

If you have never used one, ask your neighbor who has, and profit by his experience.

MASSEY-HARRIS CO., Limited.

Head Offices—TORONTO, CANADA.

—Branches at—

Montreal, Moncton, Winnipeg, Regina, Saskatoon, Yorkton, Calgary, Edmonton.

—AGENCIES EVERYWHERE—



The operations in engine, saw, winnowing article, such as a saw, only four or five. The first case of gasoline engine with steam. The upkeep of connection with that has been us as our first-related seven years. This is due to the factory, under dry place. My engine is storey stone barn. The building and is used as a center shop. In one corner of aisle with the overhead shaft by a pulley on the edge of the connected by the lathe, hand saw grinding. We for our own grinder by the a lot of hard work to turn out handles, pulleys, emery is used—cultivator teeth, iron straw cutters, chisels we grind them a little with them on the grinding the edge of the damaged by the out as an emery machine to the engine to the barn on hangars, two floor. An inch from the end of

WHAT A GASOLINE ENGINE DOES ON ONE FARM

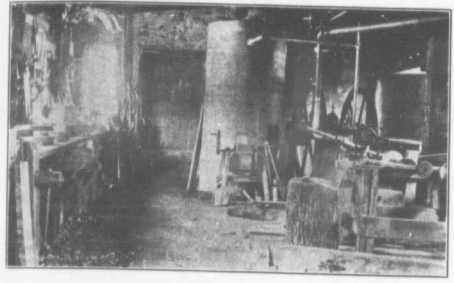
W. C. Barrie, Waterloo Co., Ont.

PREVIOUS to 10 years ago we used a steam engine to do all our threshing, grinding, feed cutting, etc. At that time it cost \$2.00 a day to hire a man to run the engine, and we would burn about \$1.00 or \$1.50 worth of wood. We also had to spend a lot of time and trouble drawing water. As labor was getting scarce and the rough wood not as plentiful as it once was, we decided to buy a gasoline engine.

After some consideration we purchased an 18-horse power stationary gasoline, and have had almost perfect satisfaction with it. We find that it will run to the full capacity for 10 hours on from 18 to 20 gallons of gasoline. We pay 18 1/2 cents a gallon for the barrel, making an expenditure of a little over \$3.50 for a full day's work. When running small machines,

for 150 feet further through the barn. The shaft runs on roller bearings and very little power is wasted. The reason that the first 60 feet is of two-inch shafting is that we have the heaviest running machines near the front of the barn, and a heavy shaft is necessary to prevent twisting. At present we had a little trouble with a small shaft, but have had none since we put in the two-inch. On the shaft are pulleys that drive the different machines in the barn.

While doing our threshing the engine has to drive a threshing, grain elevator, chaff blower, straw carrier, straw cutter and blower. We are able to thresh 80 bushels of wheat an hour, and only three men doing the work. We do our own chopping with a 10-inch Vessot chopper and find



A Combination Farm Workshop and Power House

The operations that Mr. W. C. Barrie, Waterloo Co., Ont., performs with his gasoline engine are many and numerous. He tells all about them himself in the adjoining article. We have here an interior view of Mr. Barrie's power house, showing his work bench as well as his engine.

such as a saw or fanning mill, we use only four or five gallons. The first cost and the repairing on a gasoline engine is much less than with steam. The principal expense in the upkeep of a gasoline engine is in connection with the batteries, but that has been a very small item with us as our first batteries (six wet cells) lasted seven years without being renewed. This small expense for cells is due to the fact that our engine is stationary, under cover and in a very dry place.

THE FARM WORKSHOP

My engine is situated in a one-story stone building 30 feet x 20 feet. The building is 30 x 20 feet, and is used as a blacksmith and carpenter shop. The engine is situated at one corner of the shop and is parallel with the front of the barn. An overhead shaft in the shop is driven by a pulley on one of the engine flywheels. On the shaft are pulleys connected by belts with a turning lathe, hand saw, emery wheel and a grindstone. Whenever we kill pigs for our own use we run the sausage grinder by the engine, and this saves a lot of hard work. We use the lathe to turn out neck yokes, singletrees, handles, pulleys and fence posts. The emery is used to grind plow shares, cultivator teeth, etc. When sharpening straw cutters, knives, axes and chisels we grind them back from the face a little with the emery, and finish them on the grindstone. In this way the edge of the knife or axe is not damaged by the temper being taken out as an emery is apt to do.

A two-inch shaft 60 feet long runs from the crank shaft of the engine to the barn, and is suspended on hangers, two feet below the barn floor. An inch and a half shaft leads from the end of this two-inch shaft

that size quite large enough for our engine. We clean our grain with a large fanning mill, which has a scourer connected with it. We can clean 200 bushels an hour, and do better work than with a hand mill. While cleaning grain we run the chopper at the same time and wash gasoline in that way.

We fill our two silos with a corn cutter, driven by the engine. We have also used the engine to run a hay press. We have a rip saw in the barn, and when it is necessary to rim a board or make a wagon tongue we can start the engine and have it saw running in less than a minute. Our wood shed is 250 feet from the engine at the opposite end of the barn. When sawing wood we start the engine in the morning, and do not get near it until noon. We chop and start the saw by means of a slip jack.

EXPENSE VERSUS LABOR SAVED

I believe that a gasoline engine does away with a lot of the drudgery on the farm and makes the work more pleasant. We hardly notice the expense in connection with the oil and gasoline when we take into consideration the labor saved.

Some people advise the use of a windmill for pumping water, but I do not agree with them there. Nothing could do the pumping cheaper than a windmill that is properly attended to.

Many people make the mistake of buying a three or four horse power engine and expect it to do work that requires a six or eight horse power engine. I would advise any one who intends buying an engine to cut feed and do chopping to get an eight or 10 horse power engine. It is better both for the engine and the machine driven to have a little extra power.

Ontario Wind Engine & Pump Company's LINES ARE SUPREME

Buy Service, Not Cast Iron

When you buy an Engine you want power; a Well Drill, water; a Feed Mill, ground feed; a Windmill, something that will stand and give you service; the Tank that is tight; a Water System guaranteed to supply water.

Our business is the manufacturing of these lines. It has taken time, money and brains to produce what we are listing in this ad. It will pay you to get our catalogue.

If your dealer does not handle our lines, write the **ONTARIO WIND ENGINE & PUMP CO., Ltd.**, at Montreal, Toronto, Winnipeg or Calgary.

Economize on the Milk



Raise Healthy Calves Like These RAISE THEM WITHOUT MILK

You can do it with CALFINE

"The Stockman's Friend" (Made in Canada.)

Now that milk is so high in price and sells so readily, it will be wise to feed Calfine and sell the milk.

Calfine has been most successfully used at Macdonald College and has given excellent results wherever it has been tried. It is now in use in some of the largest and best equipped dairy farms in Canada.

It will pay you to try Calfine. Ask your dealer for a 100-lb. bag of Calfine as a trial. You will soon be back for more. If your dealer does not handle it write us direct.

NOTICE:-

If you would like to try Calfine, and cannot secure it from your dealer, send us a money order for \$2.75 and we will ship you 100 lbs. as a trial and pay the freight on same to any station in Ontario south and east of Sudbury.

Compare this price with that asked for other calf meals. (Surely ours is worth a trial.)

Feeding instructions will be sent each reader of this paper who applies to us for them. Write us today and learn how to raise your calves at much less expense than it has been costing you in the past.

Remember Calfine is made in Canada. You may no fancy price for it like you do for calf meals of foreign manufacture. There is no duty to pay when you buy Calfine.

BUY CALFINE and try it on those new-born calves of yours. It will pay you big to use Calfine for them.

DO IT NOW

Canadian Cereal & Flour Mills, Ltd. TORONTO, CANADA

Advertisement sidebar containing various small notices and text fragments, including 'Satisfaction', 'Competitor', 'ADVERTISING', 'WITH ORDER', 'LINE, 6 to 8', 'WELL, Billings', 'WASHER', 'ABELS', 'ry', 'ed at', 'ar. No', 'our', 'ry', 'the', 'ed. Also', 'get with', 'Out.', 'ne Regis', 'on three', 'ourings'.

High Quality Builds Big Telephone Business

THIS business was organized to manufacture telephone equipment for independent local and municipal systems. Right from the start our equipment made records for efficiency. It did not take long for our goods to acquire a reputation for quality and reliability. As a result our business has grown by leaps and bounds.

It is a well-known fact that we have been securing over 80 per cent. of the new telephone business in Ontario. The business too, has been secured with less effort than business secured by competitors. The satisfaction our telephones and equipment have given under all conditions has paved the way for easy business getting.

To judge how fast our business is growing, you'll remember we stated in a previous announcement that our business last year doubled that of the year before. Well, this year the first two months' sales total more than twice the 1912 sales for the same period. More and more it is being recognized by those in the local telephone business, that we are the legitimate people to deal with. There are those in the telephone business who are interested in depreciating the success of the independent telephone movement and the development of municipal systems. On the other hand our business lies wholly and directly with the independent telephone systems, and it is to our own best interests to look after these systems well, as their success depends the growth of our business.

If you would like a list of the large independent telephone systems built in Ontario during the last twelve months, just drop us a line. We would be glad to send you a list of the systems, with the make of the telephones they are using. In fact, if you'll name over the large independent systems built during the last year in Western, Northern and Eastern Ontario, you'll find that nine out of every ten are using our telephones and equipment.

You are absolutely safe in equipping your system with our telephones. We guarantee them as regards material and workmanship. In fact, we guarantee all our equipment and materials. And in addition, we offer to send our telephones for **FREE TRIAL**, so you can test and compare them with others right on your own lines before risking a dollar.

Ask for our No. 3 Bulletin—containing the latest information about building telephone lines—Also No. 4, describing our magneto telephones, is free on request.

SEND FOR A COPY

Canadian Independent Telephone Co., Ltd.
24 Duncan St., Toronto, Canada

IT IS DESIRABLE TO MENTION THE NAME OF THIS PUBLICATION WHEN WRITING TO ADVERTISERS

CANADIAN Industrial Exhibition

WINNIPEG
JULY 8th to 16th, 1913

THE WEST'S PREMIER
Live Stock Show

FAIR RULES AND GENEROUS PRIZES
\$75,000.00 in Prizes

PURSES AND AMUSEMENTS
ENTRIES CLOSE JUNE 21st

Great Frontier Day's Exposition

The best attraction ever brought to any Western Exhibition or Fair. Bucking Bronchos—Out-law horses—Roughriders. The violent, the startling, Thrilling Indian scenes. See this thrilling spectacle at the

WINNIPEG EXHIBITION

SIR WA. WHYTE F. J. C. COX W. H. EVANSON A. W. BELL
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A capable man with at least a year's experience. Wire or write particulars to

TORONTO CREAMERY CO., Ltd., TORONTO.

Clydesdale Fillies and Stallions

We have a choice selection, prize-winners, and stock of approved conformation and the best of popular breeding. Write for descriptions, price lists. Takealot savings of our many years of successful experience with breeders and importers.
Smith & Richardson, Columbus, Ont.



MOLASSINE MEAL

Take your worst horse, the one that eats its head off and yet doesn't gain flesh, feed it for a month with

MOLASSINE MEAL

cut down the oats by half and replace that half with MOLASSINE MEAL well mixed with the oats. Do this regularly 3 times a day for a month and see what a change it will make. Try it on your cattle in the same way.

Milch cows will give more milk and for a longer period. Pigs will be ready for the market three weeks earlier than when fed on any other food.

Livestock fed regularly with MOLASSINE MEAL will fatten quicker on less feed. Working horses will do better and more work and will cost less from the harness as much.

Be sure you get the Genuine MOLASSINE MEAL. Every bag bears this Trade Mark.

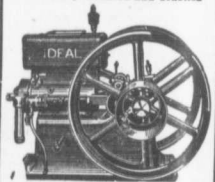
Ask your dealer, or write us direct.

THE MOLASSINE CO. OF CANADA, Limited
ST. JOHN, N. B., MONTREAL AND TORONTO

THE STOCK BEST FOOD

GASOLINE ENGINES

11 to 40 H. P.
Stationary Mounted and Traction



WINDMILLS

Grain Grinders, Water Pumps, Steel Saw Frames, Pumps, Tanks, Etc.
GOULD, SHAPLEY & MUIR CO., LTD.
Brantford, Winnipeg, Calgary

STOP

Do you want a strong, durable horse that holds its strength, animal power, and is fit to do any kind of work? Buy the Cutaway from the Finest and most reliable source. You will appreciate me to be the same and Address 1011 RAY'S A.D.

OUR Stallions

Acquire protection. Competing conditions, having conditions in the horse no more merely in Companies do.

THE GENE

43⁰⁰

BUY A 1913 MOWER



FREIGHT PAID
TO YOUR
NEAREST
RAILROAD
STATION
IN
ONTARIO

70-335, 5-ft.
Cut Mower

four driving pawls on main wheels,
reduced to an imperceptible point.

43.00

70-336A, 6-ft.
Cut Mower

46.00

70-335, 6-ft.
Cut Mower

45.00

70-335A, 6 ft.

48.00

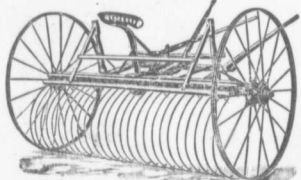
DELIVERED AT YOUR STATION IN ONTARIO

DELIVERED IN QUEBEC OR MARITIME PROVINCES

THE CUTTER BAR—One of the most important parts of a mower is the cutter bar. No expense has been spared in making it on this mower the best we can obtain. The bar is made of cold-rolled steel, finished in such a way that it is impossible for it to get out of shape. It is manufactured with a smooth top, the top of bar enables the light grass to slip over it without causing. **THE CUTTER BAR SPRING**—One of the improvements of this mower is the counter-balanced spring to assist the driver in handling the bar. When the bar drops into a hollow the full force of the spring is exerted in bringing it out again to assist the driver in handling the bar. The bar can be locked in any position, or by the use of the link on the end of lever it can be arranged not to engage in any of the ratchets, and thus the bar will be left free to float on the surface of the ground. **THE PITMAN** is longer than on most mowers, and gives as direct a motion as possible to the knife. We use a hickory pitman, with steel jaws and brass boxing. **DRAFT CONNECTION** is attached above the inside shoe of cutter bar, and extends to the shifting doubletree, and absolutely overcomes side draft. **THE MAIN SHAFT AND GEARING**—The shaft is made of the very best cold-rolled steel shafting. The main wheels are of good height, and broad on face, giving increased traction. The gearing has six gear wheels, and taken in connection with the four driving pawls on main wheels, the result is that when machine moves the knife moves, the best motion being reduced to an imperceptible point. Machine will stop and start in the heaviest grass even without backing.

THE ROCKING TILT is one of its best features. The bar can be locked in any position, or by the use of the link on the end of lever it can be arranged not to engage in any of the ratchets, and thus the bar will be left free to float on the surface of the ground. **THE PITMAN** is longer than on most mowers, and gives as direct a motion as possible to the knife. We use a hickory pitman, with steel jaws and brass boxing. **DRAFT CONNECTION** is attached above the inside shoe of cutter bar, and extends to the shifting doubletree, and absolutely overcomes side draft. **THE MAIN SHAFT AND GEARING**—The shaft is made of the very best cold-rolled steel shafting. The main wheels are of good height, and broad on face, giving increased traction. The gearing has six gear wheels, and taken in connection with the four driving pawls on main wheels, the result is that when machine moves the knife moves, the best motion being reduced to an imperceptible point. Machine will stop and start in the heaviest grass even without backing.

**STRONGLY BUILT
STEEL SULKY RAKE**



An Improved, Strongly-built Rake, up-to-date in every way. It has steel wheels, dodge spoke, in either 8 or 10-ft. widths. The 8-ft. width has 26 spring steel teeth. The 10-ft. width has 32. Where the teeth are attached angle steel is used. The shafts are so constructed that they can be used for either one or two horses as desired.

70-335A, 8-
ft. width

22.00

70-339A, 10-
ft. width

25.00

DELIVERED TO YOUR STATION IN ONTARIO

70-335A, 8-
ft. width

23.25

70-339A, 10-
ft. width

26.40

DELIVERED IN QUEBEC OR MARITIME PROVINCES

**BINDER
TWINE**

MANILLA AND SISAL
AVERAGING 550
FEET TO LB.
PRICE PER 100
LBS. **10⁰⁰**

DELIVERED IN ONTARIO

PURE MANILLA
AVERAGING 650
FEET TO LB.
PRICE PER 100
LBS. **12⁰⁰**

DELIVERED IN ONTARIO

FOR DELIVERY IN QUEBEC AND MARITIME
PROVINCES ADD 30c PER 100 LBS. TO
ABOVE PRICES.

**HAY
LOADER**



It is not an untried loader. It is made for us by manufacturers who have made a success of this particular style of implement. We would strongly advise 2-wheel loader is cheaper, but does not do the work as well, nor will it last as long, as the 4-wheel loader. It affords extra support for loader. Only the best materials are used in the making of this loader. Owing to the scarcity of farm help every farmer should have one.

70-224A. Price **56.50**

DELIVERED TO YOUR STATION IN ONTARIO

70-224A. Price **59.00**

DELIVERED IN QUEBEC OR MARITIME PROVINCES

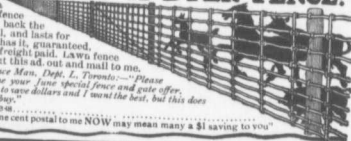
**WE GUARANTEE
PROMPT SHIPMENT**

THE T. EATON CO LIMITED
TORONTO CANADA

**SATISFACTION OR
YOUR MONEY BACK**

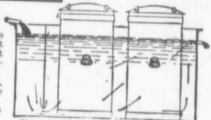
"STOP! HERE'S A DYER FENCE!"

Do you want a strong, durable fence one that holds back the strongest animal, and lasts for years? DYEK has it, guaranteed, 17c per rod up freight paid. Latta fence 7c ft. Cut this ad, out and mail to me. **DYEK** the Fence Man, Dept. L, Toronto. Please send me your fence special fence and gate offer, I want to save dollars and I want the best, but this does not obligate me to buy. Name and Address. **DYEK** says: "A one cent postal to me NOW may mean many a \$1 saving to you!"



**MILK-COOLING
TANKS**

This Tank of our making is perfect as a Milk-Cooler. It enables you to deliver milk to factory in the best condition, is strong and light. Never gets water-soaked. Is CLEAN, SANITARY, DURABLE. Can be moved from place to place, or stored away, or used for other purposes. Makes a good storage tank for sap.



We make a Specialty Cooling Tank for keeping Cream in good condition for shipping.
STEEL TROUGH & MACHINE CO., LTD.
6 James Street, Tweed, Ont.

Note construction. Made in a size. Send for Price List of this and other "Tweed" Steel Equipments.

OUR Stallion Policies, covering against loss by Death through Accident or Disease, are more liberal and afford more protection to owners than any issued by Competing Company. They contain no vexatious clauses, having been drafted to cover the special conditions met with in this Country. They cover the horse no matter where he might be and not merely in his own stable, as certain Companies do. This is very important during

**STALLION
INSURANCE**

the Breeding Season as the horse might die while being on the road. Do not take any chances by insuring with others, insure with us; The insurance premium represents only a small proportion of the service fees earned. Better risk the loss of the premium than the purchase price of your beast if it dies without insurance. **Better have and not need than need and not have.**

All kinds of live stock insurance contracted.
THE GENERAL ANIMALS INSURANCE CO. OF CANADA, Head Office: 71a ST. JAMES STREET. MONTREAL, Que.

We are now offer
month to 7 month
total record dam
of the greatest bo

Brown Bro

SPRING

Holsteins and

Herd headed by
son of the best son
Dan, Fairview Kor
old butter record
in 30 days. This
bull had his brother
and sister "Lena",
size of the
140 lbs. butter in
30 days. For sale
soon old, mostly
No bullers for sale
get a Kornyke or a
BRESLAU. A. C. H.

PURE BRED HOL

1 Young Bull, 1 y

of 1911 from Brant
is very easy. We
room for other stock
GEO. A. ROBERTSON
Line 2. R

James

"The tendency to buy
is the worst I know
difficult to convince
when they once realize
not to making money.
The same principle that
being steel rails has

KING SEGIS PON

to lead our herd. No
good. Life is too short
Service for \$25.00

J. ALEX W
Lynn River Stock F

RIVERVIEW

1 Young Bull, pro
sired by King Isabel
sister of his dam, and
average for the
C. M. and H. O. P.
P. J. SALLEY, LACH

ELMDALE DAIRY

FOR SALE—Two choice
sired by Faldin Ormsby, et
sire, 17 months old, 10
120 lbs. butter in 7 days.
1 Dam, R. O. H. 10
100 lbs. Full sister to
100 lbs. milk, 18 lbs
No. 2 Dam, C. O. M. 10
100 lbs. Full sister to
100 lbs. butter in 7
FRED GARR - BOX

YOUNG COWS A

HOLSTEIN

help in calf to a son of
of the Best's Buttes 2
Also Yearling Heifers
Full Calves for spring
for prices.
W. W. GEORGE.

Avondale St

A. C. HARDY, 1

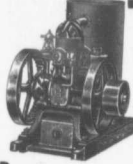
HERD OF

Prize Hangerford Pl
Sire, Filds, Stud Y
Dam, Princess Hung
100 lbs. 100 lbs.

Highest record daughter
100 lbs. 100 lbs.
King Pontiac Artie
Sire, King of the
Dam, Pontiac Artie, 1
days, 147 lbs.

Daughters of Hange
and high record
total number of cows
No better calf will be
address all correspond
E. LORE LOAN, Mgr

This Engine Runs on Coal Oil



Every farmer can afford an Ellis Coal Oil Engine. They give far more power from coal oil than other engines do from gasoline. They are safe, as well as cheap; no danger of explosion or fire.

The strongest and simplest farm engine made; only three moving parts; nothing to get out of repair. Any one can run it without experience. Thousands of satisfied customers use these engines to grind feed, all kinds of saw wood, pump, thrash, run cream separators, and do dozens of other jobs. Cheaper than horses or hired men. Fill up the tanks and start it running, and no further attention is necessary; it will run till you stop it.

FREE TRIAL PER 30 DAYS. You don't have to take our word for it. We'll send an engine anywhere in Canada on Thirty Day's Free Trial. We furnish full instructions for testing on your work. If it does not suit you send it back at our expense. We pay freight and duty to get it to you and we'll pay to get it back if you don't want it.

Absolutely guaranteed for 18 years. Write for free catalog and opinions of satisfied users. Special offer in new territory.

5 to 15 horse-power
We pay Duty and Freight

Ellis Engine Co., 90 Mullett Street
DETROIT, MICH.

PUMPING



With a "GOES LIKE SIXTY" Pumping Outfit

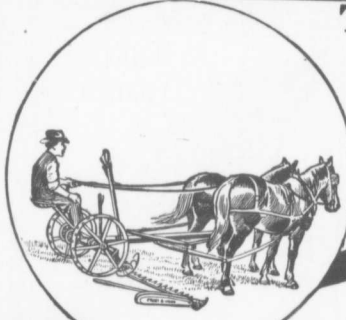
No more backaches. No more waiting for the wind. The Gilson GO SPED is the ideal pumping engine. It "GOES LIKE SIXTY". It is a portable power house, ready to operate your wash machine, cream separator, churn, electric light, wood saw, feed cutter, grinder, pulper, etc. It is mounted on wheels, complete with line shaft, five inter-changeable pulleys, and universal pump jack. The only engine, fully equipped, ready to yield 100% service. A powerful, durable engine, built to last a lifetime. The simplest engine on the market. A child can operate it.

Write for full particulars and also catalogue of pumps, pump jacks, wood saws, etc.

Gilson Manufacturing Co.
302 York St., Guelph, Ont.

Say you call up a neighbor now and ask him to subscribe!

This Year Own These Haying Helpers



Decide that you'll no longer labor under a handicap at haying time. Secure the services of these Frost & Wood Haying Helpers—Giant 8 Mower and Tiger Auto Dump Rake. For twenty years and more these efficient haying implements have saved time, money, labor and horseflesh for thousands of progressive Canadian Farmers. Think of the next score or more haying seasons.

Frost & Wood Giant 8 Mower Tiger Rake

The Frost & Wood Giant 8 Mower is not merely a "fair-weather" machine. It's right there with the power and cutting ability when other mowers are apt to fall down. Put it to work in a heavy or tangled crop and watch how easily it handles the job. You can start it anywhere in the field and the knives will begin cutting the instant the horses move forward. "Flying straws" are not necessary.

The Giant 8 has great driving power because of the simple and compact arrangement of the gears. Smooth-running and light draft are assured by a plentiful supply of large roller bearings. The cutter bar is protected against wear by steel plates. Large bearings—not pins—are used for the connection between cutter bar and main frame.

At every point, in its construction, is put the skill

and knowledge gained in over 70 years' experience in building farm machinery to meet Canadian conditions.

The Tiger Automatic Dump Rake is the best sulky rake made. It has given satisfaction for many haying seasons. The teeth are shaped to do the most efficient work. They are made of a special grade of steel, that has proven by test, the best adapted to withstand heavy work and severe usage.

Strongly constructed throughout, is the Tiger Automatic Dump Rake. It is a rake that will pay you large dividends of satisfaction at haying time. When you require anything in the way of farm equipment remember our agents can supply your wants. We have catalogs describing and illustrating the different lines; they are cheerfully mailed free for asking. Let us send you one to-day.

For Sale in Eastern Ontario, Quebec and the Maritime Provinces by
The Frost & Wood Company, Limited, Smith's Falls

In Western Ontario and Western Canada by
Cockshutt Plow Company, Limited, Brantford, Winnipeg

"Branches and distributing warehouses in all the larger centres."

"Ask our local agent, or nearest Office for further particulars."

HOLSTEIN

Lynde Holsteins

We are now offering Bull Calves from 1 month to 7 months old. All are from superior record dams and sired by some of the greatest bulls in Canada.

Brown Bros., Lyn, Ont.

SPRING BROOK Holsteins and Tamworths

Head headed by Sir Korndyke Boom, one of the best sons of Pontiac Korndyke, dam, Fairview Korndyke Boom, Jr. 477-lb. milk record, 22.17 lbs. in one week, 19 in 30 days. Average test, 4.85% fat. This bull and his dam are both half-brother and sister to "King of the Pontiacs" sire of the world's record cows, 42.4 lbs. butter in one week, 172 lbs. in 23 days. For sale, a fine rich bred bull, 9 mos. old, mostly white, Well grown, tested dam, a few good cows to offer, no buyers for sale. Come at once and get a Korndyke or a good foundation cow.

A. C. HALLMAN, PRESLAU, WATERLOO CO., ONT.

PURE BRED HOLSTEINS

1 Young Bull, 1 yr. old, also 4 Calves of 1913 from first-class stock. Priced easy. We have to get more room for our stock.

GEO. A. ROBERTSON, ALMONTE, ONT. Line 5, Rural Phone.

James J. Hill

"The tendency to buy anything as cheaply as possible is the worst kind of economy. It is difficult to convince some men of this fact but when they once realize it, they are on the true road to making money."

The principle that governs a railway in buying steel rails has been applied to buying KING SEGIS PONTIAC KONINGEN to head our herd. Not high cheap, but low good. Life is too short to use a poor bull. Service for \$200.00 to approved cows only.

J. ALEX WALLACE, Gars River Stock Farm, Simcoe, Ont.

RIVERVIEW HERD

7 Young Bulls, from 5 to 12 months, sired by King Isabella Walker, whose dam, 4 months officially tested, dams sire of his dam, and no sire of his sire average for the eight 30.4 lbs. from 100 lbs. and 800 P. dams.

F. J. SALLEY, LACHINE, RAPIDS, QUE.

ELMDALE DAIRY HOLSTEINS

FORESALE—Fourteen Bull Calves, light colored, bred by Faldin Umbry, sire of 10 R. O. M. daughters, 50 lbs. in 7 days.

FRED CARR, BOX 115, ST. THOMAS

YOUNG COWS AND HEIFERS

HOLSTEINS of different ages

able to find a son of the great bull De la Motte's Butter Boy the first. Also Yearling Heifers and Heifer and Calves for spring delivery. Write for prices.

W. W. GEORGE, CRAMPTON, ONT.

Avondale Stock Farm

A. C. HARDY, PROPRIETOR.

HERD BIRDS

Prize Hens: Pouter, 220 (No. 282), 1st, Plain 2nd Wadset, 2nd (No. 281), 2nd, Princess Hens: 2nd (No. 282), 2nd, C. R. K. Highest record daughter of King Hensford De Kol. King Pouter: Arctic Canada, 1912 (73.94) sire, King of the Pouters. Dam, Pontiac Arctic, 1st, lbs. butter 7 days, 1.078 lbs. 48% fat. We are offering the best of the best and high record dams, and also a limited number of eggs in call to them. Hatter calf will be sold at very price. Address all correspondence to: L. BERT LEEAN, Mrs. BRIDGEVILLE

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the official organ of The Canadian Holstein-Friesian Association. Its members are readers of the paper. Members of the Association are invited to send items of interest to Holstein breeders for publication in this column.

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS, May 1 to 15, 1913.

Full Age Class.

1. Jenny Bonegrace Ormsby, 6216. Thirty-day record, 9y. 2m. 16d., 2,350.0 lbs. milk, 103.36 lbs. fat, 129.29 lbs. butter. Owner: D. C. Platt & Son, Hamilton, Ont.

2. Queen Inka DeKol, 8907, 6y. 11m. 25d., 4,022.0 lbs. milk, 22.02 lbs. fat, 27.53 lbs. butter. Thirty-day record, 5y. 11m. 25d., 3,055.4 lbs. milk, 92.36 lbs. fat, 111.70 lbs. butter. Owner: Lakeview Farm, Bronte, Ont.

3. Lakeridge Hatler, 11595, 5y. 3m. 5d., 639.4 lbs. milk, 21.60 lbs. fat, 26.35 lbs. butter. Owner: Lakeview Farm, Bronte, Ont.

4. Capitola DeKol Pauline, 19369, 7y. 1m. 3d., 474.4 lbs. milk, 12.17 lbs. fat, 23.97 lbs. butter. Owner: J. W. Richardson, California, Ont.

5. Idna Posh, 7012, 7y. 2m. 9d., 493.9 lbs. milk, 16.60 lbs. fat, 23.35 lbs. butter. Owner: D. C. Platt & Son, Hamilton, Ont.

6. Bessie DeKol, 10510, 5y. 1m. 25d., 414.0 lbs. milk, 17.86 lbs. fat, 22.33 lbs. butter. Owner: J. W. Richardson, California, Ont.

7. Capicola Bawndina, 19367, 8y. 10m. 23d., 250.1 lbs. milk, 12.70 lbs. fat, 16.35 lbs. butter. Owner: D. C. Platt & Son, Hamilton, Ont.

8. Lakeridge Daisy, 12061, 5y. 10m. 1d., 354.3 lbs. milk, 16.96 lbs. fat, 21.30 lbs. butter. Owner: Lakeview Farm, Bronte, Ont.

9. Winnie Win's Gem, 5217, 6y. 6m. 4d., 445.2 lbs. milk, 16.28 lbs. fat, 20.36 lbs. butter. Owner: J. H. Thoms, Scotland, Ont.

10. Belle Wayne DeKol, 10353, 5y. 9m. 4d., 428.2 lbs. milk, 16.21 lbs. fat, 20.30 lbs. butter. Owner: Matt. Richardson, California, Ont.

11. Flamboro's May Flower, 5609, 9y. 2m. 10d., 316.0 lbs. milk, 15.01 lbs. fat, 18.77 lbs. butter. Owner: G. S. Gooderham, Bedford Park, Ont.

12. Princess Lillian of Harlan, 6230, 7y. 10y. 25d., 535.0 lbs. milk, 15.00 lbs. fat, 18.75 lbs. butter. Owner: Jos. Kilgour, Eglinton, Ont.

13. Lily DeKol of Minster Farm, 4661, 9y. 2m. 14d., 470.0 lbs. milk, 14.52 lbs. fat, 16.15 lbs. butter. Owner: Wm. Pollock, Wellman's Corners, Ont.

Where Can You Beat Him? Or Elsewhere get his like?

(An advertisement by Chas. C. Nixon)



Both on his Sire's side and on his Dam's side this great bull, King Lyons Hengerveld, has the greatest of breeding.

In his pedigree you find a very fair history of practically all of the best in Holstein blood.

Through his Dam he traces three (3) times to Johanna DeKol Van Beers—one of the greatest cows that is, — she having made over 40 lbs. butter officially in 7 days.

On His Sire's Side

This great bull, King Lyons Hengerveld, has Blanche Lyons De Kol, 33.13 lbs. butter in 7 days, as his grand-dam (average fat 4.38%), she being the dam of Nadine Lyons De Kol, 37.71 lbs. butter in 7 days (average fat 4.65%); his great grand-dam, Blanche Lyons, dam of Blanche Lyons De Kol, 33.13 lbs. butter; Blanche De Kol Hengerveld, 33.18 lbs. butter; and Konig Blanche Lyons, sire of Bettie Lyons Hengerveld, 34.71 lbs. butter, and Blanche Lyons Hengerveld, 34.36 lbs. butter in 7 days.

Then his sire is a grandson of Hengerveld De Kol, sire of 116 A.R.O. daughters, 8 with over 30 lbs. and 49 proven sons; and his grand-sire is Abby Harter Clothilde, 31.19 lbs. butter, and dam of Addie Harter Clothilde, 25.36 lbs. in 4 years.

On His Dam's Side

This great bull, King Lyons Hengerveld, has Blanche Lyons Hengerveld (his dam), at 3 years, 24.45 lbs. butter, she being dam of Betta Lyons Hengerveld (his grand-dam), 24.36 lbs. butter. His great grand-dam is Kate Olden Hengerveld, dam of Blanche grand-dam is Konig Blanche Lyons, sire of Betta Lyons Hengerveld, 34.71 lbs. and Blanche Lyons Hengerveld, 34.36 lbs. butter in 7 days.

Moreover, in addition to all these 30-lb. cows, this great bull King Lyons Hengerveld traces to big noted cows, not shown in his pedigree, including Colantha 4th's Johanna, the world's record yearly work cow, and Johanna DeKol Van Beers as mentioned in the foregoing.

The calves from this great bull you can spot amongst a hundred wherever you see them. They are carried out in width wonderfully behind—have great strength and depth—are long and open, and of very superior Holstein type.

They are breezy looking individuals. You see they have the excellent individual. These calves must make good even as their dams and sires have made good.

This bull, as you see above, cost us a lot of money. Several of us, however, went in together and got him. Our company owning this great bull includes: Clarence Bollert, J. Leuzler, Elias Ruby, Jacob Mogk, and H. Bollert, of Maple Grove Farm, favorably known to leading Holstein men for the past generation.

A few calves from this great bull, King Lyons Hengerveld, we offer for sale. We can send you what you want from amongst our members, and save you time and money.

Come to Tavistock if you want the BEST and ask one of us to show you around. (Don't come unless you can use the best, and are interested in it!)

Write for particulars on what you want, or MAKE AN APPOINTMENT for one of us to meet you and show you around.

H. BOLLERT, R. R. TAVISTOCK, ONT.

(Continued on page 38.)

HOLSTEINS

LYNDEN HERD

High Testing Holsteins for sale. One 2 year old Sir's dam, Lulu, 257 lbs. butter 7 days. Dam a richly bred, intimated 2-year-old. Price \$65. Also Bull Calves from Joyce record dams at \$40 and upward. Also two 2-year-old heifers in milk. Write or come and see them.

S. LEMON, LYNDEN, ONT.

**HOLSTEINS FOR SALE
FERDALE STOCK FARM**

1 good Koradyke Bull left, also 1913 Calves which will comprise our last lot of Koradyke K. Schillars's whose heifers are doing nicely. We have 15 extra good grade heifers for sale. This lot is nicely marked and in fine condition. Will freshen from now on. Come and see them! FIEHELLER BRGS. MT. ELGIN, ONT. Tel. Phone 167 R. 12. C.P.R. Station.

Lakeview Holsteins

Bull calves only for sale for the present, sired by Count Hengervold Payne De Kol or from his daughters and sired by Dutchland Colanitha Sir Mann. Write for extended pedigrees of these bulls, or come to Bronte and see the herd. Visitors always welcome.

E. F. OSLER, BRONTE, ONT.

Elmcrest Stock Farm

Present Offering
Bull—No. 1. Born April 6th, 1913. Nicely marked. Dam, Netherland Favorit, 3476 Canadian Champion—39 day senior two-year-old. Record, 2 yrs. 9 mos. 7 days, milk 456 lbs., butter 21.65; 14 days, milk 325, butter 42.70; 30 days, milk 1394, butter 29.65. Sir's, son of Olive Schulling Push, 690—27.50 in 7 days. Also sweep-stake cow, Quailth, 152. First calving 1220 gets him f.o.b. Also two other fine Bull Calves, closely related to No. 1. Proceed moderate. Send for photos.

W. H. CHERRY, GARNET, ONT.

HOLSTEIN BULLS

2 Bulls, plus 2 yrs. grandsons of Pontiac Koradyke, and 3 rising 1 yr. old from other sires.

Also Bull and Heifer Calves. Females, all ages.
WM. HIGGINSON, INKERMAR, ONT.

North Star Holsteins

Bull ready for service, from H. O. M. dam, sired by a son of Notoye De Kol, th. record of 2:12 lbs in 7 days, 106.53 lbs in 30 days, and nearly 53 lbs in 7 days eight months after calving—largest record in Canada.
Also females, any age, excepting heifer calves.
J. W. STEWART, LYN, ONT.

Ourvilla Holstein Herd

Bulls of serviceable age all sold. If you want them from here we would sell them to you very young. Only two Colanitha Sir Abbebekir and from 2217 calves left. Both sired by Dutchland and 2306 the 4-year-olds. Grand individuals 4 months old.
LADLAW BRGS. Avimor, Ont.

**HAMILTON HOUSE
DAIRY FARM**

The Home of Lulu Keyes, the World's Record Senior 2 Year Old Cow

WE SELL BULLS AND BULL CALVES ONLY

and offer now

A Bull Ready for Service

Write or come to see him. His Pedigree showing High Records sent on request.

THE PRICE IS RIGHT
D. B. TRACY
COBOURG, ONT.

-We Won't Appear Again-

Evergreens Keyes



Velstra Keyes



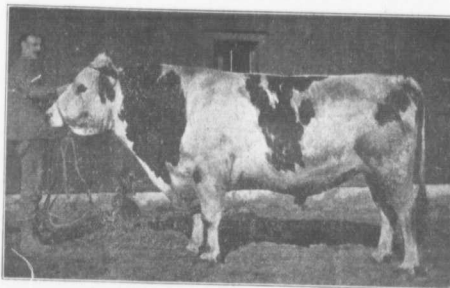
WE

14.85 D.O.M. as a Yearling
Handsome IS & Handsome DOES

Just—18.02 at 2 yrs.
Sweet, Neat & Productive

Velstra Triumph—"The Proven Sire"

**A
R
E**



**H
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S**

"Ha! Ha! Right at Home in the Heart of the Family!"
"My Daughters will Tell, For How Much I Should Sell!"

De Kol Triumph



Velstra Triumph De Kol



Daughters

15.25 in 7 days, at 1 yr. 11 mo.
"I'm Shy—Except at the Pail!"

"Who said 40-lb. Cow?"

**YOU
KNOW**

**HISTORY
REPEATS**

N.B.—Catalogue gives full information. For accommodation of visitors by train free 'bus visit to "Evergreens" profitable and happy. Every effort will be made to make your BREEDER. The 'one' you want is here. Bids 'wired' or by mail to any of the following will receive same consideration as if buyer were present.

"May Echo" in her prime was priced at \$150, as a 10-year-old she brought \$1475 at public auction. "May Echo Sylvia" sold as a yearling for \$75, as a 2-year-old for \$1000. The great "Pontiac Rag Apple" was a \$250 heifer; but as a 4-year-old she sold for \$8000, while an initial outlay of a modest \$125 by young Mr. Jones, secured the dam of "Spring Farm Pontiac Lass" while carrying the \$10,000, 44-lb. world-record beauty. "Each multiplied the original price by making a record of phenomenal production."

Take a Tip—Size up this "Velstra Triumph" Bull. Come to the Geo. W. Anderson Dispersion Sale on June 12th. See Velstra's Daughters and Gr-daughters. When they have impressed you, also, with their ability to deliver the Goods—BUY!!! BUY IN ADVANCE OF THE RECORD! DECISION means WEALTH!

Geo. W. Anderson, Prop., Rossmore, Ont.

NORMAN MONTGOMERY, Auctioneer
WOOLER, ONT.

G. A. BRETHEN, Sales Manager
NORWOOD, ONT.

OUR FARMERS' CLUB

Correspondence invited

PRINCE EDWARD ISLAND

PRINCE GEORGE, P. E. I. KENSINGTON, May 26.—The weather is very cold and backward. Seeding is about completed. There are prospects for good hay as clover wintered well. Stock are going on grass in better condition than usual. Beef cattle are scarce and high priced, 5 1/2c per pound live weight for best. Little pigs are very scarce; many people unable to get them. Cows 28c to 30c; potatoes, 12c; Hay, \$12 to \$14. The people are starting an egg circle going to ship their own eggs.—T. G.

RICHMOND, May 26.—Farmers are backward with their seeding on account of the cold and backward weather. Grass is slow in starting, very little clover coming. Feed is plentiful. Mr. Teifer, of the Sheep Division, gave an address to our Institute. He spoke on breed, feed and care of sheep pointing out the necessity of dipping. Arrangements were made for a dipping demonstration some time in June. His address throughout was of great educational value.—J. D. M. L.

QUEBEC

RICHMOND CO. QUE. DANVILLE, May 13.—We had some very warm weather the last of April, but lately it has been cold, with occasional frosts. We have had fine dry weather for putting in the crops. Pastures are doing well, plenty of feed for cattle outdoors now. The esterillars are very thick on soil. The apple trees are very thick on soil. The apple trees are in blossom. Hay is selling for \$11, butter, 30c; eggs, 12c; pork, 22c.—M. D. B.

ONTARIO

NORTHUMBERLAND CO. ONT. WICKLOW, May 25.—The spring has been very favorable for doing spring work. Stock has wintered well, fodder being plentiful and cheap. Many of the farmers are sending their milk to Toronto, instead of the cheese factory. Orders appear to be blowing well, and more attention is given to spraying than formerly. Many beekeepers have lost nearly their whole stock from foul brood.—B. B. H.

OXFORD CO. ONT.

WOODSTOCK, May 27.—The weather is keeping cold with considerable rain. Crops are not growing fast but are taking good root. Nearly all stock is on pasture. Cows are milking fine. A great many feed night and morning. Veal calves are selling at 7c; hogs, \$2.50 a cwt.; fat cattle are very high at almost anything a person can sell. Mellison Company is Beschville takes in about 6000 lbs. of milk on Mondays.—A. M. G.B.

ELGIN CO. ONT. TALBOTVILLE, May 26.—The country looks beautiful. Everything is growing, while a little more hot weather. It will start things jumping. The stock have left their winter quarters and are out on the grass, where the bite is satisfactory. The mowing so far a couple of weeks is a sign of an abundant yield. On Dodds' farm near here is a grand field of alfalfa, and soon the mower will be humming in it. The corn is nearly all in the ground, and a large acreage was put in. Most of the potatoes planted were purchased from the University at Toronto on the cars; and therefore this will make a good change of seed. The hens are laying splendidly.—J. E. C.

SIMCOE CO. ONT.

ALLISTON, May 25.—The season is unusually advanced so far as growth is concerned owing to the very warm days during May and the absence of the cold weather has prevailed with frosts at least a few times. The alfalfa is doing well. The demonstration cars of the Ontario Department of Agriculture in cooperation with the Canadian Pacific Railway on Friday, May 24th with the evening lectures in the Town Hall which is freely placed at the disposal of the Department.—W. L.

BRUCE CO. ONT. WARTON, May 26.—Growth is behind the average, with seeding completed about the 25th. Pastures are fair, but wheat average medium promise; fall wheat above average. Not any serious damage from heavy dews. Alfalfa suffered heavily from heavy dews. Probably wild strawberries and pumpkins have been damaged to some extent. Repairs to buildings still occupy the time of many farmers. Potatoes are doing well and plentiful, selling at 10c per bushel. Practically no change in price of other grains. Pears down to 25c.—G. S.

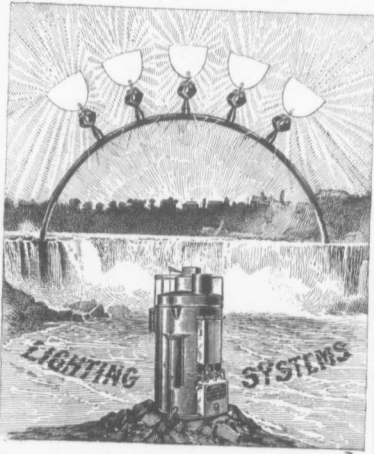
MIDDLESEX CO. ONT. APPIN, May 25.—While a large portion of the corn is in the soil yet the rains and cool weather have retarded growth, and what is out is almost as well ripened as that planted. Farm labor is still the serious problem. How can we stop this fearful rush of labor to the towns and cities? Evidently the crowd is in for a good time even if living does cost high.—C. M. M.

NIAGARA FALLS, ONTARIO, IS WHERE THE FAMOUS Davis Lighting Systems

ARE MANUFACTURED

ACETYLENE

AS MADE BY THE "DAVIS"



The Wonder Light. No home too small to participate in its benefits.

No building too large to light well and economically.

Safer than City Gas—Brighter than Electricity and cheaper than either

Always ready to be lighted in every room day or night.

No lamps to fill. No chimneys to clean. No wicks to trim. No smoke. No odor.

A beautiful, soft, health-giving and eye-saving light.

More important to the home than a furnace, because used the year around.

Booklets telling all about Acetylene and Davis Systems sent free for the asking.

Estimates furnished for complete installation.

For Lighting and Cooking in the Farm Home Safest Light in the World

The little machine shown in this picture can be placed in one corner of your cellar, and will supply beautiful light to beautiful chandeliers in every room of your house, as well as to your barns, in enclosed globes; also supply gas for cooking, the same as in any city home.

BE INDEPENDENT—have YOUR OWN system for lighting and cooking. Costs no more than the value of a horse to instal one.

Write us to-day

State how many rooms you have, and we will tell you exact cost to instal a System, also send you one of our illustrated booklets.

Lights anywhere by merely pulling a chain or pressing a button, the same as electricity—no matches necessary.

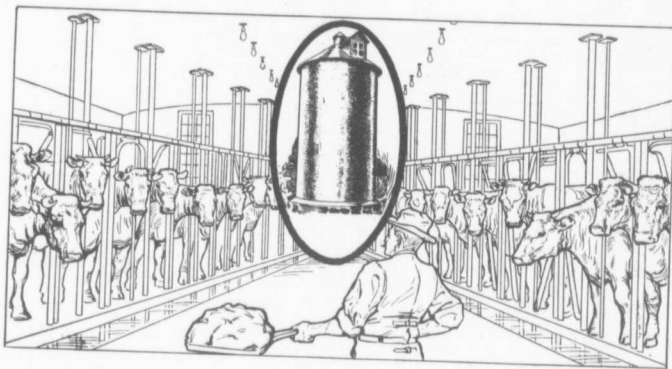
Write TO-DAY while it is on your mind. Address:

DAVIS ACETYLENE COMPANY

NIAGARA FALLS

ONTARIO





Feed ensilage—it makes fat stock

STOCK like ensilage—their instinct tells them how good it is for them. They thrive and grow fat upon it—and, once fattened, ensilage will keep them in that condition until a favorable market makes their sale most profitable.

Dairy cows, fed on ensilage, give more and better milk, because the silo retains all the fresh succulence of the undried fodder, preserving its natural juices in the same proportions as they are found in green pasturage.

A Concrete Silo makes money for its owner

by giving his stock a balanced, healthful ration the year round—and keeping them in good, thrifty condition.

by preserving all his feed in the condition in which it contains the greatest amount of animal nourishment. Dried fodder has lost many of its most valuable constituents.

by keeping his feed in the form most convenient for

handling, and preserving it from all forms of deterioration.

by enabling him to keep stock always in good condition, so as to be ready to take advantage of the highest market.

by making him independent, to a large extent, of inflated grain prices. With a silo he is no longer dependent upon grain for fattening feed in winter.

A concrete silo will pay for itself, in actual feed saved, in a very short time—after that the annual saving is clear profit. And all the time there are other profits from its use—in the greatly improved health and condition of the herd, in greater convenience of feeding, in safety from the danger of fire—which might destroy feed stored in barn or granary—and in the increased value of

the farm that the possession of a concrete silo gives it.

Concrete silos, as well as scores of other improvements of concrete, are fully described in the book, "What the Farmer can do with Concrete." It tells how to build them, and gives full instructions for successful concrete work of all kinds. A copy will be sent to you free, upon request to

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When you buy Cement for use on the farm, be sure to get Canada Portland Cement. You will know it by this label on every bag

