

# The CANADIAN THRESHERMAN AND FARMER

WINNIPEG CANADA

AUGUST  
NINETEEN FIFTEEN

BETTER FARMING — BIGGER CROPS — BETTER PRICES



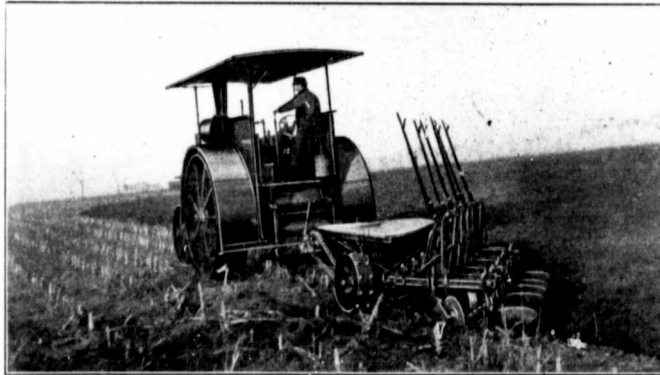
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Published Monthly by E. H. HEATH CO. LIMITED — Our Thirteenth Year

# FALL PLOWING NEXT IN LINE

## A Carefully Prepared Seed Bed Means Bigger and Better Crops—Bigger Profits

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 The Weather  
 is never too  
 Hot---  
 The Ground  
 never too hard  
 for this  
 Sturdy Horse  
 ~~~~~



~~~~~  
 Sun or Moon  
 it makes no  
 difference --  
 at your service  
 night and day  
 ~~~~~

Right after you have finished your threshing, get at your fall plowing. No other one operation on the farm is more important than deep, early fall plowing. It's the laying of the very foundation of your next year's crop. A perfect seed bed goes a long way towards producing bumper crops. To prepare this seed bed you must have power and lots of it.

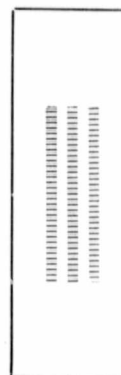
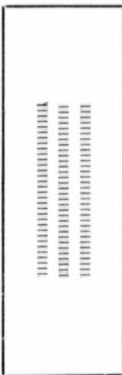
Plowing with horses is a slow, costly operation, and then the work is not done properly. Now is the time to dispose of these costly work animals at war-time prices and before winter sets in. The sum realized from the sale of these horses and the saving in feed would about cover the first cost of an

## AULTMAN-TAYLOR GAS TRACTOR

(The Tractor that never fails to satisfy)

At this time of the year the ground is hard and the weather hot, so that plowing with horses is an uncertain and tiresome job. Contrast this slow, costly and inefficient method with the Aultman-Taylor way. It's fine work to hitch a sturdy, reliable Aultman-Taylor Gasoline-Kerosene Tractor to your plows and go right along—plow as deep as you like—pay no attention to weather, hot or cold—plow day and night if you wish, nothing to hinder you. Make your fall plowing a matter of days instead of weeks—and, remember that an Aultman-Taylor Tractor not only saves you big money on your fall plowing, but it will do every power operation on the farm quicker, cheaper and better than it is possible to do it with any other available power. For belt work, such as threshing, silo filling, saw milling, etc., better power cannot be had at any cost. For road work the Aultman-Taylor Tractor is the acknowledged best everywhere. Plowing, discing, harrowing, seeding, harvesting—any job where power is required, you'll find the Aultman-Taylor Tractor a money maker and a time and labor saver.

The time to get on the inside on this tractor farming is right now—the time to buy a tractor is right now. We want you to learn the truth about the Aultman-Taylor. The truth is sure to boost this tractor of tractors. Go see one work or let us give you names of owners. Get in communication with us at once. A post card will bring you the desired information. Write to-day.



# The Aultman & Taylor Machinery Company

Lock Box No. 64, Mansfield, Ohio

BRANCHES: Minneapolis, Minn.; Great Falls, Mont.; Regina, Sask.; Calgary, Alta., Canada.

You saw this advertisement in this magazine. Don't forget to say so when writing.

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# THRESH FASTER—CLEANER— CHEAPER BY USING A MAYTAG-RUTH SELF-FEEDER

No slugging of cylinder—no breaking of teeth—no delays for this, that or the other thing when your separator is equipped with a Maytag-Ruth Self-Feeder. Your machine will hum a steady tune of bigger profits from the very day you attach a Maytag-Ruth.

No sheaves can slip through without the bands being cut—no grain lost by sheaves being carelessly fed sideways. The Maytag-Ruth is a self feeder in every sense of the word. It takes care of every detail of feeding. It's the one and only feeder that is perfectly regulated and so strongly built that it can't shake to pieces. Good for a life-time of use and a money-maker every day it works. Saves time—saves labor—saves grain.

The Maytag-Ruth has been on the market for twenty years and it's still the leader. Other self feeders have been devised but the original Ruth feeder made by Maytag is still the favorite with men who know the threshing business.

Will you let us tell you fully and frankly what the Maytag-Ruth will do for you? Will you let us submit the evidence of hundreds of experienced threshermen who say the Maytag-Ruth is the best investment any custom thresher can make?

**LONGEST LIFE**



**STRONGEST  
GUARANTEE**

**THE MAYTAG-RUTH  
SIMPLY CAN'T SLUG A  
CYLINDER OR BREAK A TOOTH**

Here is the guarantee we give you—a guarantee so strong, so plain, so complete that we wouldn't dare to make it if there was the least question about the quality or efficiency of the Maytag-Ruth. Could any guarantee be stronger than this?

**"WE GUARANTEE every Maytag-Ruth Feeder to feed any make or size of separator to its full capacity, with any kind of grain in any condition whatsoever, bound, loose, straight, tangled, stack burned, wet or dry, piled on the carrier any way you please, without slugging the separator cylinder or loosening a spike, and do a faster, cleaner and better job of feeding than any feeder manufactured by any other company in the world."**

Don't lose time in finding out all about the Maytag-Ruth Self-Feeder. Write to-day for our big illustrated circular which gives full details—shows pictures and tells about each part of the Maytag-Ruth separately—shows a diagram of how the trip-lever is operated to stop and start the raddle, the mechanism working in connection with the feeder cylinder and not the threshing cylinder. The Feeder controls the entire operation of feeding, and the separator cylinder does not have to be checked to stop the feeding. The Pickering Governor on the Maytag-Ruth is the most sensitive of any governor on the market. Just as quick as the feeder cylinder falls below the proper speed the Governor operates the trip lever, which stops the raddle until the mass of grain is disposed of by the feeder cylinder and retarder.

We handle everything that a Thresher uses except Separators and Traction Engines. Send for the Supply Catalogue. On the front cover it says: **WE NEVER HAVE AND NEVER WILL HANDLE ANY BUT THE BEST GRADE OF GOODS.** Our reputation in this respect is established. Another hobby with us is **PROMPT SHIPMENT.**

The new law in Saskatchewan which is called **THE FARM IMPLEMENT ACT**, provides among other things, that a Company selling machinery in that Province, must carry a stock of repairs in the Province. We are one of the very few who did not need a **LAW** to compel us to do what was right. For several years we have had a complete stock of repairs with **MR. H. A. KNIGHT**, at **REGINA**, and also a stock with **THE INTERNATIONAL HARVESTER COMPANY**, at **SASKATOON**. If these towns are nearer to you than **Winnipeg**, get them there. If you live in **ALBERTA**, send to **THE W. S. COOPER CO., CALGARY**, as they have a stock also.

**DO NOT PUT OFF WRITING FOR RUTH FEEDER INFORMATION. WE ARE BUSY NOW AS A TOAD UNDER A HARROW** and getting more so every day.

**The Maytag Company Ltd. Winnipeg, Man.**



A MAGAZINE FOR

# The CANADIAN THRESHERMAN AND FARMER

THE FARM AND HOME

Vol. XX.

WINNIPEG, CANADA, AUGUST, 1915.

No. 8.

THE evolution of the human brain is a process in natural law which seems to have been invested with an eternity of progress.

It is in keeping with every evidence of the Unchanging Love that this most wonderful of all His off-spring should have been enfranchised with possibilities of insight that, humanly speaking, are without limit.

Fragmentary remains of "lost" art that flourished thousands of years ago speak to us in the most conclusive terms of the fact that time is no dissolvent of human genius. Accord-

ing to the Old Record, everything in the garden of good things was freely permitted to man. One tree only (surely a modest reservation) was withheld, but the impish curiosity of man must get at the root of that tree as well, and his devilish ingenuity no less than his god-like endowments have been ceaselessly productive ever since.

The purpose of this article is not to encourage any disposition to sit down in drivelling, unproductive admiration of past achievement, but in the light of our wonderful attainments, to be up and doing; to strike into new fields in that great unexplored territory which is wider and deeper than anything that has yet been investigated.

As we write the great upheaval in Central Europe is screaming from the depths of its mad blood lust for the service of man's brain to the production of anything and everything that will facilitate the blasting of human life. On all sides, in every new organization for victory, the first line is delegated to the scientists, the presiding geni of the

## A "DEPARTMENT OF INVENTIONS" FOR CANADA

By the Editor

laboratory and workshop who are expected to concentrate the last capacity of their grey matter to what Sir Ian Hamilton calls "inventions of the devil."

Now we will not stay to con-

sider the product of the sweat of the soul, sometimes of the very life's blood of the penniless toiler. We find no partiality in the distribution of talents. "The ranks" come in for a no less generous

and the rascality and envenomed spite of competitors on the other, it is astonishing that so many of our labor-saving mechanical wonders ever materialized.

These records are part of our national biographies. Their story in some respects is not likely to be repeated in the lives of succeeding and more humanized generations. Men have now and will continue to hold a certain guarantee against infuriated mobs of workers who imagine they were being robbed of the only means of earning their daily bread by some "new fangled machine," but we

are still a long way from the point at which the penniless genius can depend on help rather than hindrance in his efforts to materialize.

It has been suggested that one of the greatest "planks" that could be inserted into a national policy would be the establishment of a "Department of Inventions." Money has been squandered to the extent



The binder makes a holiday of harvest compared to all it has superseded.

template this unthinkable perversion of God's greatest gift to man any longer than to ask the question: If nations are willing to spend what they are now lavishing upon the hellish business of devising new methods for the wholesale and quick destruction of human life, why in the name of that great God of Love will they in peaceful times grudge a bare fraction of that vast expenditure to encourage and facilitate inventions which are designed to help and to bless mankind?

The path of the inventor in times of peace has invariably been a thorny one. Monied men have done some remarkable things in the course of their leisured lives, but the really great things have

outpoured than "rank," which is but "the guinea stamp" and cannot buy an endowment of brains any more than its money can command a monopoly of health.

It raises a storm of indignation in the soul of decency to-day as it recalls how kings and governments and worse than all—"the great plain people"—treated those silent heroes of our industrial progress who knew nothing but penury and persecution till death befriended them.

It was bad enough in those heathenish times when the inventor with his great idea struggling for birth had to contend with a poverty of means, but when to this there was added the persecution of the mob on the one hand

and the rascality and envenomed spite of competitors on the other, it is astonishing that so many of our labor-saving mechanical wonders ever materialized. These records are part of our national biographies. Their story in some respects is not likely to be repeated in the lives of succeeding and more humanized generations. Men have now and will continue to hold a certain guarantee against infuriated mobs of workers who imagine they were being robbed of the only means of earning their daily bread by some "new fangled machine," but we are still a long way from the point at which the penniless genius can depend on help rather than hindrance in his efforts to materialize.

It has been suggested that one of the greatest "planks" that could be inserted into a national policy would be the establishment of a "Department of Inventions." Money has been squandered to the extent of millions by party politicians upon "public works," the utility of which never will be apparent and never will be admitted except by the coterie of grafters who have benefited by them. Imposing and costly structures furnished, decorated and equipped out of all proportion to the fitness of things have been reared, and if there ever was a certainty in the interpretation of motives, it is that the supreme purpose in all the extravagance was that of political advertising.

The husks, so to speak, of these splendid institutions, have been garnished and decorated with all the trappings of a travelling wax-work, while the kernel has been

the subject of continued and studied neglect. We know one institution of the kind in Western Canada where politicians have spent hundreds of thousands on



The back-breaking cradle used for 40 centuries, useless gew-gaws. They have squandered the people's money to this end with all the levity of constitutional spendthrifts, but when it comes to such an inconspicuous item as the salary that is due to a first rate educationalist or some detail of the real spade work of education in the community, they are the biggest misers on earth.

Till this rottenness has been got rid of there is no hope for the soul of education, still less for the idea of a "Department of Inventions." And yet these are the main things. What a blessing it has been for the people that the educationalists are not politicians. It is necessary that a man must be fond of his job before he can be successful with it, if it is only that of a second lieutenant in a shoe-shine parlor. There was a time when "Bobbie" had no choice. Because his father was the hereditary blacksmith of the parish, Bobbie, in spite of all protest, must keep the line unbroken. But this insane notion no longer prevails, and a wisdom born of experience has taken its place. In these days a wise father finds out the disposition of his boy and the drift of his mind, but he never attempts to drive him towards an occupation that he hates with all the cordiality of a boy's expansive soul.

The Lord "calls" a man no less to the plough than to the pulpit. There are not many "Weary Willies" in our workshops to-day. Every man seems to be happy at his job because he is following the bent of his disposition—he took up the sledge-hammer or the jack-plane because he felt that there was nothing on earth in the way of a life's employment that

he could like half so much as blacksmithing or carpentry, as the case may be.

Well, now; if men chose in such whole-hearted fashion and are so careful to observe the fitness of things in the manual arts, what shall we say of the "divine fervor" that seizes the educationalist and the born inventor, whose brain is his whole equipment? The fact is, no one who has not experienced the thrill that seizes the soul thirsting for knowledge and the luxury of imparting it has the means to comprehend the all-consuming enthusiasm of these men, these silent, subterranean workers who know not the value of advertising.

And yet always these have been the men who have saved the day when all else wallowed in corrup-

tion and rushed headlong to disaster. Unthinking, ungrateful fools that we are, while we have been yelling our plaudits to the tinsel and flim-flam of the sign-board, these men—the real body and soul of the institution—are rarely invited into the public view except for hostile criticism. A contractor gets anything he cares to ask for—even to millions—in "extras" for mere window-dressing, but let someone suggest an extra thousand dollars to purchase or encourage the best brains in the market, and he is instantly turned into a pillar of ice by the mere gaze of the "board" of political bosses sitting around him.

It is well for the country that the brains of the best of these educationalists and inventors have never been "in the market." Had they been as susceptible to the persuasive power of the dollar as they are devoted to the real spirit of their vocation, Manitoba to-day would be one of the most benighted and illiterate corners of civilization. But the men of brains usually have hearts that correspond with their brains. They seek and invariably find their reward in far else than magnificent equipages and the plaudits of the crowd. They are supremely happy men. You will rarely find an uncongenial soul among men who are plowing in the fields of knowledge. Every new discovery brings them its peculiar joy that is not complete until they have unloaded it upon their fellows.

We could fill this magazine ten



THE OLD WAY: An army of men needing unlimited time.

times over with historic instances of these men—most remarkable to the unthinking mob—who have scored a success in life complete and satisfying beyond all per-adventure and have died no "richer" than they were born. Yet it is cheering to note how long some of them were permitted to enjoy their happiness on earth and how young they remained long after time had whitened their hair and traced its lines upon foreheads that never knew the blush of dishonor.

**Sir William Crooks**

Think of Sir William Crooks, still with us at 85, a veritable "boy" in the exuberance of his soul and toiling night and day in his laboratory and workroom on behalf of his country in its hour

of need. Mr. Harold Begbie writes of this wonderful man:

"To be alive at 85 is a fine thing in itself, but to be very young and intellectually alive at this age and by the same token to be working for the nation in its hour of trial with every faculty alert, and wishing that there was more work to do, this is a thing so fine as heartening that we may all say 'Hats off!' to Sir William Crooks and in this salutation feel ourselves braced up to do still more in helping our country and the cause of the Allies.

"It would be dreadful if we had to record that this veteran science was a noisy optimist, a bustling worker, a patriot boasting of his age, and cackling with contempt of the enemy. Sir William is the reverse of this. He has always been one of the most modest as he has certainly been one of the most courageous inquires of our day; and the only effect of age noticeable in his mind is a deepening of this modesty, which shows itself in a more deliberate and careful manner of expressing his opinion and a certain snatching of the soul making for graciousness and consideration.

**His Work-Room**

"He told me that he is conscious in himself of no change of faculty during the last thirty or forty years. He can work as hard, he can see as well, he can hear as well, he can bear fatigue as well, and what is far more to the point he is just as interested in life now as he was then. Indeed, he is inclined to doubt whether he is aware in himself of any physical inhibition for more years than this. 'I feel,' he said, 'very much as I felt at thirty-five years of age.'"

The life history of Sir William Crooks incarnates the spirit of the real student, and one can easily read into it the no less remarkable story of the late Lord Kelvin. These splendidly endowed men were the least conscious of all around them that anything was "coming to them" in the nature of applause or public gratitude. They had one consuming thought in common, the discovery and elucidation of facts in the operations of nature and in what way or in how many ways these facts could be enlisted to the service of men. Men of this type



What the farmer rightly calls the finest music of all the seasons—the click of the self-binder.

are never a man who some brain who dictate like Kelvin most appreciate the humblest of them with their notion of what newly discovered one else lie of truth that than the for- alists and inventor. speak of re- such benef- scale as wa of the boor- inquired of artist at his her "intent business!" great humil be recogni country in a nally rece Post-mor judgments in monuments, odows or a are at their I confessions that's sense the fact that or would n the man's v state until h The archives ish Empire; with such hu missions of difference an- The born g chemical skill, an exceedingl He cannot ad self and is the ape of indivi bustling busi purpose of sta "business mar a moment of I nch counter place and his is that of th with his "Nex Furthermore, himself some on the subject command his; Unless the posing address orthodox busin interview is a one. We know case (not to sq



are never dictators. It is only the man who knows a smattering of some branch of natural science who dictates and dominates. Men like Kelvin and Crooks are the most appreciative listeners to the humblest student who comes to them with his humble contribution of what he believes to be a newly discovered fact, and if some one else has found a fresh pearl of truth they rejoice even more than the fortunate finder.

So it is with all real educationists and with the true-to-type inventor. It is as absurd to speak of regulating the worth of such benefactors by a salary scale as was the mental attitude of the boorish cheesemonger who inquired of the widow of a great artist at his death whether it was her "intention to carry on the business!" All the same these great humble heroes have got to

be recognized by their country in a way that no country has yet systematically recognized them.

Post-mortem acknowledgments in the form of monuments, pensions to widows or an thing else, are at their best but open confessions of the nation's sense of shame in the fact that it could not or would not recognize the man's value to the state until he was dead. The archives of the British Empire are crammed with such humiliating admissions of callous indifference and neglect.

The born genius in mechanical skill is usually an exceedingly quiet man. He cannot advertise himself and is the very worst

type of individual to call on the bustling business man for the purpose of stating his case. The "business man" of to-day hasn't a moment of leisure. The quick-change counter is his only resting place and his whole atmosphere is that of the bustling barber with his "Next! next!! next!!!" Furthermore, he has made for himself some remarkable "rules" on the subject of men who may command his attention.

Unless the visitor has an imposing address and can talk in orthodox business terms the interview is a remarkably short one. We know of more than one case (not to speak of the scores

of historic examples in our national biography, in which a man with a splendid conception of a new combination in mechanics has called upon the head of a big and reputedly enterprising manufacturing firm to invite co-operation in making and placing the device in the hands of the people. He looked a common hay-seed and the ass in the big office chair took him at his face value, with the result that the man came away cast down but by no means dismayed.

Some three years ago a case of this kind occurred in Winnipeg, with the result that the inventor took the advice of a friend in St. Boniface and his little contrivance to a big auto-engineering firm in France. There he met with the civility and ordinary politeness he was entitled to, but which was denied him in

The enterprise of competitive private firms does not in practice meet the case of a vast proportion of the fruits of inventive genius. It is necessary that these men and their ideas should be spared the oblivion that dogs the footsteps of so much in our industrial life. There is nothing "Utopian" in the idea of a "Department of Inventions" equipped with men of real ability and character whose impelling interest would be to promulgate rather than discourage the introduction of a new feature in applied mechanics.

Where would the self-binder be to-day and all that it has meant to the world had it not been that C. H. McCormick was, in addition to his remarkable inventive skill, a man of indomitable push and bull-dog tenacity? (Nor must we forget that he had

of a series of scissors fastened on the "knife-board" was followed for a long time. But what up-to-date business man of Bell's day or our day would seriously



The Virginia workshop where the first McCormick reaper was made in 1831.

consider any contraption that was fathered by a parson?

Another remarkable and quite recent contribution to agriculture in North America is the sheaf loader, a combination that bids fair to do as much for the ingathering of the crop as the self-binder has done for the cutting of the grain and binding it into sheaves. Any illustration of this machine cannot express the wonderful work it does in the field, if only in saving days of time, not one hour in any of which can be spared in these days of increasing crop areas and scarcity of labor.

And yet it was only by the merest chance that a couple of sensible business men came in touch with the modest inventor a year or two ago, felt the throbbing spirit of the great idea and decided to stake their all on putting it on the market.

Prejudice has done its worst, but the loader, like the reaper, has had the luck to ride out every tempest of criticism and to come into its own without one mouthful of aid from "the government."



The sheaf-loader clearing the field in a fraction of the old "time-table" with two men, four horses and a bundle team.

Winnipeg. In the end, a bargain was struck and the inventor, as well as the manufacturer, have made between them some half-a-million dollars, while Winnipeg lost the cream of a big industry.

No, the inventor usually needs help. He has been all his life a whole man to one thing—his machine. He is invariably a modest man but he is not always a "business man." If he has some faithful, well-fixed friend, he sometimes wins out, but if he hasn't and has no skill in "company promoting," he may as well take his models to a museum of abortive schemes.

a wife of extraordinary business capacity, which she devoted to the service of her husband and the interests of the harvester.) If the Scottish Board of Agriculture had been wise in its day, it might have secured to Scotland what subsequently has enriched America almost "beyond the dreams of avarice," for it was a Scotch parish minister who started the idea of the reaper.

The Rev. Patrick Bell, of Carmylie, Fifeshire, brought out the first successful machine in 1826. He worked for years at the making of it when a young man on his father's farm, and the principle adopted by him—that

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Individual Instruction		Write for particulars now

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 The only Business College in a Modern Office Block  
 Expert instruction in commercial subjects. School equipped with all modern office appliances. Our teachers have been trained under practical conditions and impart instruction both from a theoretical and practical standpoint. Special attention given to backward students.



What would our old fathers of the flail and threshing floor say to this?



# MIXED FARMING

MANITOBA - SASKATCHEWAN - ALBERTA

BY W.C.M. KILLICAN B.S.A.



No. 12

Beef Raising

**B**EEF raising will probably be for many years the chief form of live stock production in Western Canada, as it has been in the past. The West is primarily a grain-growing country and is likely to remain so. In choosing a kind of stock to fit in with grain growing, beef cattle have special claims to consideration. They require little or no attention during the busy summer season. They are able to make use of straw which is the main by-product in grain production, and also of wild oats or shrunken or frosted grain which may not be marketable at profitable prices. They are also specially suited to farms that are far from the railway. Two or three trips to town with bands of fat steers may market the whole season's crop, while with grain, the same value of output would require very much teaming, or with dairying, regular frequent trips must be made.

Importance of Good Stock

The very foundation of successful beef raising is good stock. It is not necessary that they be pure bred, in fact the beginner would be wise to start out with grades. But they should be of as good beef conformation and as thrifty as possible. There must be a natural tendency to lay on beef and to put it in the places where the most valuable cuts are. There must be good feeding qualities and good constitution. These qualities make an animal that will make the best use of its feed, will use up coarse feed, will keep healthy and in good condition, and when fed heavily for fattening will make good use of the larger, richer feed and fatten up quickly without going off feed.

The bull should always be a pure-bred, of one of the recognized beef breeds. The Short-horn, Hereford and Aberdeen Angus are the most commonly raised beef breeds and are all desirable breeds. A grade bull, even though he may be a good individual, has not the ability to transmit his qualities to his offspring that a pure-bred has. It is not sufficient, however, to simply get a pure-bred without regard to his breeding and individual quality. There are runts and

scrubs among the pure-breds as well as elsewhere, and one must be careful to get the animal right as well as the pedigree.

Raising Beef Cattle

The business of beef production may be divided into two ends: raising and fattening. Very often the two may merge into each other, but in other cases one farmer does the raising and some one else the fattening.

The greatest principle in profitable beef raising is to keep the cost of production down. Where no milking is done, the only crop from a beef cow in a year is her calf. If any money is to be made, the cost of keeping that cow for a year must be less than the value of the calf at weaning time. Now,

Heretofore, the object has been attained by pasturing the cow on unoccupied land in the summer and feeding her on hay cut from unoccupied land or sloughs in the winter. The only cost was the cutting and gathering of the hay. Here was cheap production indeed! And so long as this method is practical, it does not appear easy to improve on it. But the unoccupied land is being taken possession of and used, the hay sloughs are drying up and many of them can be plowed and made to grow more valuable crops. Consequently, in many districts it is no longer possible to raise cattle in the free and easy way of the past, they must be fed off arable land or not at all. The

farming and the grasses used in the rotation may be used for pasture after being cut or may be pastured the whole season.

For winter feed, the grade beef cow must be expected to use a large amount of straw. On the grain farm, straw is not considered to have any value, consequently the more straw the cow can use up, the more she cheapens the cost of her maintenance. However, no animal should be expected to live on straw alone. It is very bulky non-nutritious food. Cattle need such bulky feeds, but they cannot thrive without something more nutritious as well. What this should be will depend on other circumstances. When oats are cheap and a long haul is required to deliver them, they may be fed to breeding cattle, but often in more favorable locations for grain marketing, the feeding of marketable oats to breeding stock would be too expensive. Some of the millions of bushels of wild oats grown in the West might very well be used for this purpose. Shipped with wheat, these wild oats bring no revenue to the farmer, on the contrary they are a cause of loss through reduced grade, dockage and freight. If he fanned them out he would get more for his wheat and the wild oats would make very fair feed for cattle. Shrunken or frozen grain and wild buck wheat seeds can be used in the same way.

The use of corn makes possible the lessening of the cost of beef raising. Used as a substitute for summer fallow, corn makes such saving in farm operations that its actual cost may be counted as very low. It produces a heavy crop of fodder that is found to be most satisfactory for wintering stock.

Fattening

Fattening may be simply a continuation of the raising process and with good pastures sometimes grass-fed stock is turned off in very good shape. It may, on the other hand, take the form of most rapid finishing process through more liberal feeding of stronger foods. In the early days, grass finished cattle were, and in the outlying parts, they are still, the chief output, but as the country becomes more farmed and less ranching, the pasture is no longer good enough or cheap enough for fattening.



A Fine Prospect in Beef and Brain.

the value of an ordinary grade calf when it is weaned is not very much, so that if a man is to make any money off him, his mother's feed and shelter must not cost much. A pure-bred calf that will sell for a good price for breeding purposes will justify a more expensive style of care for the mother, and puts the whole plan of operations on a different basis, but the majority of farmers will not be breeders of registered stock so that they must figure on keeping each cow for less than the value of the calf. How is this to be done? It is not to be accomplished by starvation; many have tried it and have gradually destroyed the beefing qualities of their stock. Then, if the cow is starved the calf will be stunted and the price obtained for the cow's keep reduced so that nothing is gained. Clearly, cheapness of production is not to be gained by stinting the cow's allowance of feed. The cow must get plenty, but that plenty must be obtained at small cost.

question then is to provide them with suitable feed without much expense. On most farms there is a piece of broken or rough land that may be used to advantage as permanent pasture. The productiveness of this pasture can usually be increased by breaking up the best spots and sowing in Brome grass. But it is not advisable to be dependent on permanent pasture alone unless the area is very large. In midsummer it gets rather bare and dry. The summer fallow can often be made to help out in the providing of pasture. In moister districts it may be sown with oats and pastured, or sown with rape in rows for pasture. These practices are only permissible where there is a good supply of moisture. In dry districts the bare fallow is essential. However, the same system can be followed in growing pasture except that it cannot be considered as a substitute for summer fallow. Pasture may also be provided by growing grasses. Rotation of crops is needed in mixed

The age-tended dependence on farming. When they prevail get their full ten on the years. Next of the 5 years on similar to where they their own li about six m ing to bring other end of duction of 1 young calf from birth about a year with its tend Which type animal to tl is best, depe ing curcums. When fatt a different i must be adop the best for ance. Then keep the anim and in good must be forc fresh and com is required f fatten an exc assimilated a excess made t rains. In ma is to keep the good conditio little feed as p



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The age at which cattle are fattened depends on the type of farming. Where the ranching system prevails, the cattle gradually get their full growth and then fatten on the grass at about four years. Next to this is the growing of the steers up to about two years on conditions somewhat similar to those of the ranch, where they rough it and pick their own living, then a period of about six months of heavier feeding to bring them to a finish. The other end of the scale is the production of baby beef where the young calf is fed heavily right from birth and is marketed at about a year, fat and heavy and with its tender baby flesh still on. Which type of bringing the beef animal to the finished condition is best, depends on the surrounding circumstances.

When fattening is undertaken, a different standard of feeding must be adopted to that which was the best for raising and maintenance. Then the object was to keep the animal growing normally and in good condition. Now he must be forced so as to gain in flesh and condition. So much food is required for maintenance; to fatten an excess over this must be assimilated and the greater the excess made use of, the better the gains. In maintenance, the object is to keep the stock in reasonably good condition at the cost of as little feed as possible; in fattening

the object is to get them to make use of as much as possible. Not that the cost of feeding can be the object is to get them to make gains, a more liberal standard must be adopted, and if good gains are made a higher cost is permissible and necessary.

It is possible to fatten steers successfully and profitably on straw and grain. Repeated experiments at Brandon Experimental Farm have shown that oats and barley fed to fattening steers were marketed at much higher prices than could be obtained by selling these grains at the prevailing prices. Fattening cattle make the best use of grain if they are fed lightly at first and are gradually accustomed to digesting larger quantities. They should be started on about two to four lbs. each per day; this may be increased at the rate of one lb. more each week until the ration reaches about eight lbs. per day. It should then be increased more slowly or if the cattle are gaining well, it may be held at about that rate. To finish them into choice cattle, a daily ration of twelve to fifteen lbs. of grain is needed. These feeds are for steers of 1,000 to 1,200 lbs. While steer feeding is practicable with only straw and grain, better gains can be made and the cost of production lowered through the use of other feeds. Corn, being a cheaply grown feed, is a great help in fattening cattle. Especially if it is stored in a silo, the ensilage helps to keep the cattle in a thrifty, sappy condition, they are less likely to go off their feed and they make larger gains from the same feed. Succulence of some sort is a great help in feeding stock, and ensilage is the most successful form in which to feed it. Roots are another excellent form of succulent feed; they are fully as good as corn but cost more to grow.

Hay is a big improvement over straw as a feed for steers, considered from the standpoint of making gains quickly. However, the cost of hay makes the gains fully as expensive. It is probably best to use straw on account of its cheapness as much as possible, especially at first, and then use the hay for finishing off when the steers are beginning to get particular about their feed.

Alfalfa is a great feed for fattening stock, and wherever it can be grown successfully it will help to lessen the cost. It should be used to cut down the grain ration and not to take the place of straw or other hay. It is too valuable to be used as the only roughage, but, combined with straw, it makes better and cheaper gains.

**Time of Marketing**

The great bulk of the cattle marketed in Western Canada are shipped in the fall. The result is

(Continued on Page 14)



**Judge  
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**We Can Offer  
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Get our bids on wheat and barley. Premiums on early shipments are very good. Barley is now a good price and will likely go lower.

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Canvas Belt is fastened with bolts, so that it can easily be repaired at any time. No rivets to bother with. Duck is heavy and A 1 quality.

SIZE FOR	28in.	32in.	36in.	40in.
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**SOLDIERS WILL HELP**

Arrangements have been completed with the Military Authorities to allow soldiers now in camp at Sewell leave of absence for one month for the purpose of assisting Manitoba farmers with the harvest.

Farmers are urged to send in particulars at once as to how many men they will require, when they want work to start, what price they will pay for one month's work and the name of the nearest railway station. The railway fare of these soldier harvest hands will be paid by the Dominion Government.

Apply at once to the PROVINCIAL EMPLOYMENT BUREAU, Corner Main and Water Sts., WINNIPEG.

**TO HARVEST THE CROP**

You saw this advertisement in this magazine. Don't forget to say so when writing.

**YOUR "VOTE AND INTEREST"**  
respectfully solicited for the  
**"Canadian Thresherman and Farmer"**



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WINNIPEG, CANADA



(MEMBER WESTERN CANADA PRESS ASSOCIATION)

J. D. DUTHIE,  
EDITOR

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CHICAGO, ILL.

AUTHORIZED BY THE POSTMASTER GENERAL, OTTAWA, CANADA, FOR TRANSMISSION AS SECOND CLASS MATTER

August

1915

## BAD ROADS---WASTE LAND

### OUR GUARANTEE

No advertisement is allowed in our columns until we are satisfied that the advertiser is absolutely reliable and that any subscriber can safely do business with him. If any subscriber is defrauded E. H. Heath Co., Ltd., will make good the loss resulting therefrom, if the event takes place within 30 days of date advertisement appeared, and complaint be made to us in writing with proofs, not later than ten days after its occurring, also, and provided, also, the subscriber in writing to the advertiser, stated that his advertisement was seen in "The Canadian Thresherman and Farmer." Be careful when writing an advertiser to say that you saw the advertisement in "The Canadian Thresherman and Farmer."

**I**F AND WHEN THE NEW MANITOBA GOVERNMENT is able to recover some of that misappropriated million odds of the people's money, one of the first things they will naturally spend a substantial portion of it upon will be on the roadways of the Province. "Good Roads" has provided a lot of convenient flim-flam for many years—particularly on the eve of an election—but now there is in sight some real spade work and intelligent work. The condition of the road allowance all through the West is in some cases deplorable, and where it lends itself to adverse criticism in the more settled districts of Manitoba, the abortive experiments in improving the old trail have left things in a far worse plight than they were in before a road-grader was ever thought of. We have recently taken more than one extended trip, covering a few hundred miles by auto and are therefore not quite dependent on second hand evidence.

FIRST OF ALL, THE TIME HAS COME when it really looks as if a re-adjustment should be made on the space

that is squandered on our roadways. Ninety-nine feet or even sixty-six feet is an excessive and wasteful width of highly productive soil to be given up to what purpose? Practically no other than the fostering of weed crop, for rarely more than 18 feet of it is ever used for a road bed. And such road beds! As one contemporary has pointed out "thousands of miles of the best highways in England, France and Germany are only one rod wide, but if that seems too stingy for us, call it two rods and we are still throwing away two acres on each mile." Multiply these figures for the Province by its road mileage, and we have a few hundreds of thousands of acres of the best farming land in the world worse than wasted, for, as we have said, the greater portion of it that is not still under scrub is the undisputed reserve of the noxious weeds, each year producing enough seed to keep the neighboring farms perpetually supplied.

THE "PATRIOTIC ACRE" that has received so much publicity has not in every case been drawn from the farm proper but from the road allowance. This is by no means regrettable—rather the opposite, and we appreciate the common sense and industry of so many farmers as we bowled along and observed so many miles which had been rescued from the clutch of the weeds and wild flowers. Moreover, the character of the crop on these way-side bits of new cultivation far surpassed that of many of the fields on the other side of the fence. But that is something that can be gone into more leisurely than the very pressing matter of the road bed or that portion of the road allowance which is supposed to bear the traffic. Here is something

that "calls for instant redress" or that must be put in shape without any further hold up from political jobbery or the doubtful trafficking of local road-masters.

FATAL ACCIDENTS OF RECENT OCCURRENCE, involving the lives of several of our very best citizens, have stirred popular feeling to its depths. These in two specific cases we know of were due to nothing else than the rascally neglect or bungling of the parties who were responsible for the keeping of the road bed in a reasonable state of repair. Had there been abnormal weather, there might have been something to offset the blame, but for many weeks prior to these fatalities the soil was in perfect condition for road-making. In some municipalities the road was "a peach" and one's gratitude to the men in charge could not find adequate expression, particularly as we thought of what we had come through in the adjoining "parish." It was a perfect hell of torment from a constant fear of turning turtle or going headlong into a deep ditch or telephone pole.

POSSIBLY EXISTING LEGISLATION is quite sufficient, but unquestionably the law is not uniformly enforced. On inquiry and from voluntary statements made by responsible residents who accompanied us through some of these rocky experiences, it is perfectly evident that to a great extent the requirements of the act are lived up to or evaded according to the disposition of the roadmaster. If he cares to do as little as he may the chances are that he is a man of sufficient bull-dog influence in the neighborhood to guarantee him an immunity from the mild protest of fearful ratepayers. Why a fellow of that stamp is not got after without calling in the testimony of his neighbours is difficult to understand, but such is life in rural Manitoba. In one case the roadmaster had made the employment of his relations the first consideration; result: execrable roads and next year's appropriation mortgaged.

IS THERE NO OTHER METHOD of building a country road than the almost semi-circular design so greatly in vogue? The convexity in the centre is something alarming at any time, but in wet weather it is a perfect death-trap. On the top of the road there is positively no space for two automobiles or farm wagons to pass and the dip on either side runs down so precipitately that the ditch becomes a dead certainty. That is not the worst, for the absolutely vertical wall of from 56 inches upwards on the far side of the ditch means the smashing to splinters of any vehicle travelling at the most moderate speed, not to speak of what may happen to the occupants of the carriage. We would not harass "the new government" but—here's its chance!

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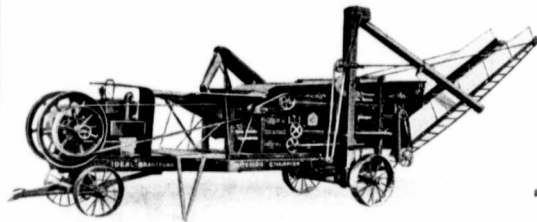
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## GET YOUR WORK DONE "CHAMPION" and "IDEAL" ON TIME WITH OUR COMBINATION.

It has won a place in the heart of the Canadian Farmer that is second to none, because it has NEVER DISAPPOINTED.

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our **Waterloo Champion Separator** is, first and last, a **GRAIN SAVER**



We have carefully studied Western field conditions and with a well equipped factory have produced an article that delivers the goods. It is simple, durable and easy to operate. It will thresh grain under all conditions and do a clean, fast job. A **WATERLOO "CHAMPION" SEPARATOR**, mounted with an "IDEAL" gas engine, makes an outfit that cannot be beaten. It is the best combination on the market to-day. Considering the **QUALITY** of this outfit, the price is the lowest. It will thresh to your entire satisfaction.

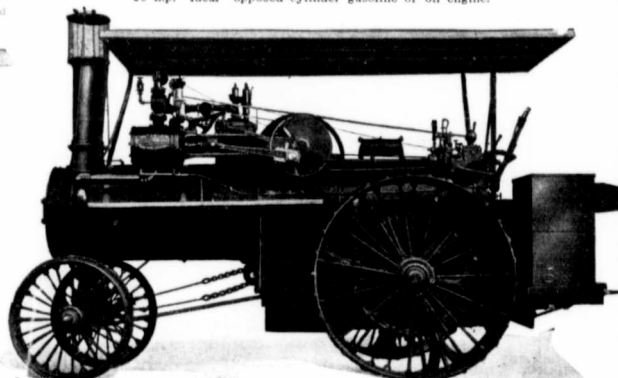
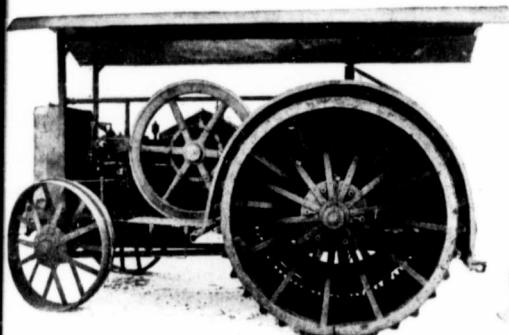
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- 24 x 36 Waterloo "Champion" separator—hand feed—with straw carriers and 10 h.p. "Ideal" gasoline engine.
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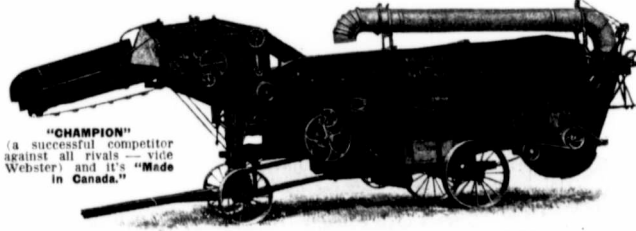
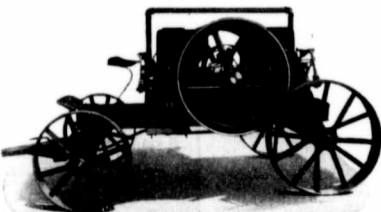
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"IDEAL" gasoline or oil tractors are built for long and unremitting service. Nothing has been overlooked in the construction of this tractor to make it the **BEST BUILT, BEST BALANCED and HIGHEST GRADE** machine yet produced. We have the plant, the machinery, the mechanics. We use the best material obtainable. The **TWO-OPPOSED CYLINDER** ensures a perfect balance with practically no vibration—giving the greatest power at lowest cost. "IDEAL TRACTORS" are in 2 sizes, 18-25, 25-50, with all modern appliances.

"WATERLOO" steam engines—portable and traction—are so well known everywhere in Canada they can be sold ON THEIR NAME, which is a positive guarantee for perfect service through a long life of strenuous work. Portables are in one size only—16 h.p. Threshing and plowing tractors can be had in sizes of 18, 22, 25 and 27 h.p. All "WATERLOO" engines are mounted on high-pressure boilers, meeting every detail of all the provincial boiler Acts. We make only **HIGHEST QUALITY GOODS**. We also have a number of rebuilt outfits equal for all practical purposes to new machines.—INVESTIGATE THESE.



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**DON'T FAIL** to see our "Champion" line of separators before ordering any other machine. Full information from our catalogue. It is more than a catalogue, it is a complete **BOOK OF KNOWLEDGE** on the subjects of threshing and power machinery. Note the sizes of separators: 24x36, 28x42, 33x52, 36x56 and 40x62. We stock the most up-to-date threshing machinery, accessories and supplies. Prompt and careful attention to all enquiries.

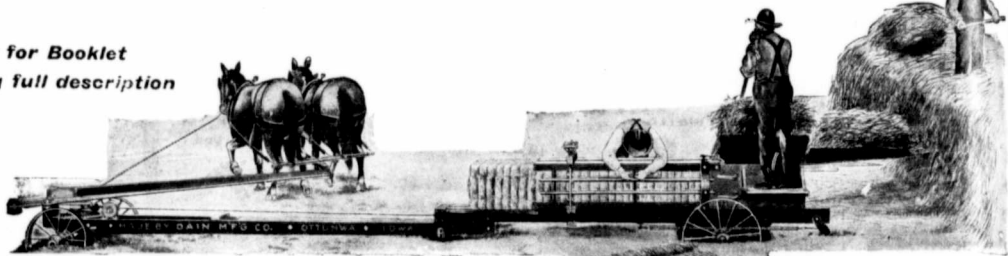
The half-tones appearing on this page are from actual photos, showing all machinery exactly as it is built. The "IDEAL-CHAMPION" combination outfit is positively guaranteed to be practically without vibration. Absolutely no special bracing or lifting jack required to steady the outfit in operation.

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## DAIN Pull Power

HAND or SELF-FEED

## Hay Press

Pull Power means that the plunger is drawn towards the horses—not pushed away from them. The step over is low down which makes it easy for the horses. Capacity is therefore increased. Bales are delivered in front, and do not interfere with placing the Press in the most convenient position near the centre of the stack. Delivery of the bales in front keeps them out of the chaff and dirt and out of the way of the operator. Large Feed Opening makes the DAIN easy to feed. The Automatic Tucker insures neat, smooth, square-ended bales. The DAIN Hay Press being all steel, no difficulty is experienced by warping when exposed to the weather or swelling when in contact with damp hay. Steel Bed Reach connecting the power and press. Plunger Head and Draw Bar are steel. This also means, in addition to the above advantage, that its construction is such as will stand the heavy strain a Hay Press is subject to.

**The DAIN Hay Press possesses many advantages by way of Construction, Ease of Operation, Low Cost of Maintenance.**

**John Deere Plow Co. Limited, WINNIPEG, REGINA, SASKATOON, CALGARY, LETHBRIDGE, EDMONTON**

You saw this advertisement in this magazine. Don't forget to say so when writing.

**B**RANDON and Regina held their fairs in July with much fear and trembling only to be agreeably disappointed by record crowds and record receipts.

One of the sources of anxiety had been the elimination of the Winnipeg Fair. It was feared that the absence of the very attractive prize list always offered by Winnipeg would reduce the number of exhibits and exhibitors. It is possible that a few did drop out on this account but in their place came a number of men with smaller studs, flocks and herds, which was a real advantage to both Fairs. There is no doubt whatever that in the case of Brandon at least the absence of Winnipeg improved the attendance. The smaller breeders coming in and securing a goodly share of the prize money, has laid an excellent foundation for next year. It is always better to have ten exhibitors with two animals each than two exhibitors with ten animals each.

At Brandon possibly the most notable feature was the increase of dairy cattle, while all cattle classes were numerically stronger, and higher in average quality than they have ever been before. Brandon also had a very fine Dairy exhibit, and while there was an absence of poultry ex-

## FARM PROBLEMS

By E. CORA HIND

### SUMMER FAIRS

Exhibits from the United States there was a distinct increase in Canadian Western exhibits. Brandon was an all round good fair, with a record attendance.

#### Homemakers

The outstanding feature of the Regina Fair was undoubtedly the exhibits of the Homemakers Clubs. The cattle were good, the horses were good; there was a fair exhibit of sheep and swine, but for the first time in the history of the West the industries of cookery, needlework, horticulture and dairying, as they are carried on in the farm homes of the province, were adequately represented. Fifteen Homemakers Clubs competed, and perhaps the best thing that will come out of it is the increased respect which the farm women will have for their own work, and the increased appreciation of the men of the farms for what the women are doing. There was an enormous quantity of exquisite needlework, particularly in the

line of house linen and lingerie. It was not only that there were elaborate pieces of work but there was beauty of design and exquisite execution. Nor was the needlework at all confined to the ornamental. There were many well made gowns for children, men's shirts, etc. There was much excellent knitting, good home-woven blankets and rugs, and many other things along that line. The variety and quality of the preserved fruits and pickles was a marvel. Of special interest being the native preserved fruits. There was excellent homemade soap both hard and soft. Butter, cheese, potted meats, home cured ham and bacon, eggs and bread, buns and cake galore. It was not only the high quality of the edibles but the tasteful way in which they were put up, which attracted attention. There was some very good art in the shape of pictures and crayon drawings, and some hammered brass work, but the

real love of art found its best expression in the beauty of the flowers, the taste with which they were arranged, and the artistic finish given to all the stuff shown. Regina is to be highly commended on giving space and excellent prizes to these exhibits, and it is to be further commended because, seeing the value and beauty of the exhibit, the Board decided to provide an entire building for women for next year. There is nothing perhaps which can give a greater stimulus to the women of the farm homes than to realize how well their work means

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3 1/4 x 4			
3 1/2 x 5 1/2	20	50	75
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4 1/2 x 6 1/2	35	80	1.25
5 x 7	40	80	1.40

The above prices are for glossy prints unless otherwise stated. Work returned in 24 hours from receipt.

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Order direct from this advertisement or write for catalog of information. High quality. Satisfaction guaranteed. The quality of every article we sell is of a character because it is a worthy value at the price. Our prices are strictly wholesale, and the lowest—when quality is considered. To get the best for what you pay is what you want. We give you the best at the lowest known prices. We can save you money by selling you supplies which will prove their value by the lasting qualities and the good service they give.



### ENDLESS STITCHED CANVAS BELTS

No. 6X41—Our "Reliable" Belts are the heaviest and most durable offered. They are made of full weight 32 oz. duck. They are filled with pure linsed oil, pressed with the new and improved hydraulic machine process, making the belt exceptionally pliable and durable. They are impervious to heat, cold, steam, gas or acid fumes. All belts will stretch some. The "Reliable" will stretch but little. It is made on a special weave of duck of proper width for each size belt, giving proper salvage and even strain on both edges. You will find our "Reliable" Drive Belts the best and most durable and pliable you ever used.

80 ft., 6 in. x 5 ply	\$18.25	120 ft., 7 in. x 4 ply	29.50	150 ft., 8 in. x 4 ply	43.00
100 ft., 7 in. x 4 ply	26.00	120 ft., 7 in. x 5 ply	37.50	150 ft., 8 in. x 5 ply	49.50
100 ft., 7 in. x 5 ply	32.00	120 ft., 8 in. x 4 ply	36.00	150 ft., 8 in. x 5 ply	63.50
100 ft., 8 in. x 4 ply	30.00	120 ft., 8 in. x 5 ply	42.50	160 ft., 8 in. x 5 ply	56.00
100 ft., 8 in. x 5 ply	38.00	150 ft., 7 in. x 4 ply	39.25	160 ft., 9 in. x 5 ply	77.00
		150 ft., 7 in. x 5 ply	45.50		



### RUBBER BELTING

We sell two grades of Rubber Belting, the "Star" and Premier Brands, and we advise you buying the Premier as it will stand more work and is a heavier belt than the star. All 2 and 3 inch is 3 ply, other sizes are 4-ply.

No. 6X45—Star Brand Rubber Belt—	Width, per ft.	2	3	4	5	6	7	8
No. 6X46—Premier Brand Rubber Belt—	Width, inches	1 1/2	2	3	4	5	6	7
Price, per ft.		10c	15c	20c	25c	30c	35c	50c



Telegraph us when in a hurry we will ship next train

### ACME LOW DOWN TANK PUMP \$5.75

Double acting, draws water on each stroke of lever, has 5 inch stroke, fitted for 2 inch suction, 1 inch discharge. The equal of any tank pump made. Price includes complete fittings, as shown in illustration. We furnish two-in wire lined suction hose, extra quality. Will withstand hard usage, has steel wire lining, made in lengths of 20 and 25 ft.

Buy your oil in steel barrels. Saves all waste and leakage.

- No. 1 Shipping Barrel ..... \$6.50
  - No. 2 Storage Barrel ..... 4.50
  - Harvester Oil, per gallon ..... .26
  - Castor Machine Oil, per gallon ..... .23
  - Steam Cylinder Oil, per gallon ..... .36
  - Gasoline Engine Oil, per gallon ..... .33
- When shipped in steel barrels, barrels extra at above prices.

### RED STITCHED CANVAS BELTING CUT LENGTHS

Width, inches	1 1/2	2	3	3 1/2	4	4 1/2	5	6	7	8
Price, per foot	8c	10c	12c	15c	16c	17c	18c	20c	25c	30c 35c



### GUARANTEED LEATHER BELTING

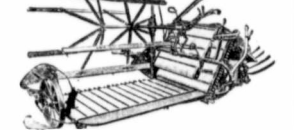
Width inches	Standard per foot	Extra per foot
1-in.	\$0.10	\$0.12
1 1/2-in.	.14	.16
2-in.	.20	.24
2 1/2-in.	.25	.30
3-in.	.30	.36
3 1/2-in.	.35	.42
4-in.	.40	.48
4 1/2-in.	.47	.54
5-in.	.53	.60

### BEST OAK TAN CUT LACING

No. 6X47—Made from the very best oak tan leather possible to procure, put up in packages of 1 lb. each in sizes 1/4, 3/8 and 1/2 inch.

Price per lb. .... \$1.20

### CONVEYOR CANVASSES FOR BINDERS



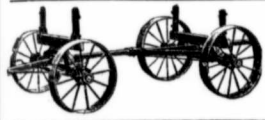
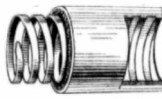
They are made of standard weight, size and construction. We guarantee them to be made of as good material as the original ones on a new machine and they will fit perfectly, if you will give us the correct number and sizes when ordering. To fit the leading makes of binders sold in Canada.

Upper Elevator Canvas, complete	\$3.50
Lower Elevator Canvas, complete	4.00
5-ft. Platform Canvas, complete	4.50
7-ft. Platform Canvas, complete	5.00
8-ft. Platform Canvas, complete	5.50



### YELLOW JACKET SUCTION HOSE

Same grade as sold by all leading supply houses. Length of 20 ft. .... \$7.25  
Length of 25 ft. .... \$9.00



### LOW DOWN STEEL WHEEL

No. 1 with wheels 28 and 30 in. \$27.50  
No. 2 with wheels 26 and 32 in. \$29.50  
All tires are 4 in. wide, 5/8 in. thick.

FINISHED AND FITTED PLOW SHARES  
12in., \$2.00; 14in., \$2.25; 16in., \$2.50

C. S. JUDSON CO. LIMITED

OUR PRICE ONLY 55 CENTS  
Wagon Set Complete, including eveners, heckyoke and whiffletrees painted red ..... \$2.50

WINNIPEG, CANADA

You saw this advertisement in this magazine. Don't forget to say so when writing.

### The Tractor on the Farm

There is no doubt in the mind of the writer that the gasoline or oil tractor should and does occupy an important place in present day agriculture. The smaller size tractors now being put out by manufacturers is reducing very materially the size of farm on which a tractor may be operated with profit. It is quite certain that a 16 to 25 horse-power tractor developing 8 to 13 horsepower on the drawbar can now be operated profitably on a 200 to 250 acre farm. The essential requirements on the part of the farmer who will own a tractor are: that he understand his machine thoroughly or employ skilled help to operate it; that he plan carefully the work so that the tractor can be kept at work at least as much of the time as horses would be; that he have only a little more power in the form of tractor and horses than he would otherwise have in the form of horses alone.

In the tractor it is well to look for tractive power with the least possible weight. Heavy tractors often have a bad compacting effect on the soil. The greater the

bearing surface, the greater the tractive power and the less the compacting of the soil. In general there are three types of traction wheels: the ordinary wheel with prominent grousers, the drum type, large diameter and wide wheel with small or no grousers, and the creeping type of tractions parts.

The reliability of the tractor can best be judged by machines of its make that have been observed in operation for some time.

Proof  
In a certain local store a lusty-lunged auctioneer was holding forth in flowing terms on the virtues of a particular brand of cigars he was endeavoring to induce his audience to purchase. Holding up a box of cigars, he shouted: "You can't get better, gentlemen, I don't care where you go, you can't get better!" "No," came a cynical voice from the back of the crowd, "you can't. I smoked one last week, and I'm not better yet."

## LOSS!

IN ANY FORM IS BAD BUT LOSS FROM HAIL

Means that an entire season's hard work, time and money are gone

### The Canada Hail Insurance Company

stands between you and loss with an insurance policy that

#### POSITIVELY PROTECTS YOU

and at a very low cost. A policy with us is not an expense but IS AN INVESTMENT that farmers all through this western country endorse very highly.

Full information from our Branch Recording Offices:  
P. O. BOX 366 REGINA P. O. BOX 232 CALGARY  
or our Local Agents

## Carson & Williams Brothers Limited

UNION BANK BUILDING, WINNIPEG  
General Agents for Manitoba, Saskatchewan and Alberta



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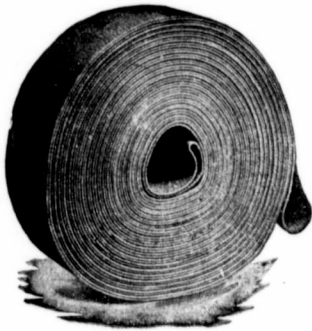
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RO-DIT  
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# The Thresher's "Dreadnought"



## Sewn-Canvas Thresher Beiting

NOW is the time at which every man who has a crop of grain in his fields should provide for the ingathering and threshing of what promises to be the heaviest and toughest harvest in many years. Your crop at threshing time is largely at the mercy of the BELT. Protect yourself against breakage and get a

### "Dreadnought"

We sell more "DREADNOUGHT" sewn-canvas thresher belts than any other concern in Canada. They are manufactured in England from the Highest Grade Cotton Duck to specifications called for by the Western Canadian Market.—We are the sole importers and carry a very large stock. All our belts are seasoned with non-freezing oil and will not harden in cold weather. Write at once for samples. Handled only by first class dealers. **Dealers Wanted Everywhere.**

**Perfect Satisfaction Guaranteed.**

**GENERAL SUPPLY CO. of CANADA Ltd.** 85 Water Street — WINNIPEG  
OTTAWA TORONTO

You saw this advertisement in this magazine. Don't forget to say so when writing.

#### THE REMINGTON ARMS PLANTS NOT FOR SALE

Mr. Samuel F. Pryor, vice-president and general manager of the Remington-Arms-Union Metallic Cartridge Company, says that no amount of money which anybody might offer would induce the owners to dispose of the plants and thus prevent the performance of existing contracts.

During the last few days there have been very persistent rumors to the effect that Germany was seeking to purchase American ammunition making plants, not so much on account of any shortage of ammunition for its own armies as with a view to putting an end to the tremendous shipments which are going forward to the Allies. The Remington-Arms-Union Metallic Cartridge Company and the Bethlehem Steel Company have both been specifically named as objective points of the German efforts.

But it now appears that there is not the slightest chance of Germany securing a dollar's worth of interest in either of these two great concerns.

Mr. Samuel F. Pryor, vice-president and general manager of the Remington-Arms-Union Metallic Cartridge Company, has been seen in regard to the persistent rumors that have lately been in circulation, to the effect that offers made by a foreign government for the purchase of the properties of that company were under consideration, and that the additions to the Iliou and Bridgeport plants, which are under construction, are intended to be merely temporary and made only

for the performance of special contracts entered into and are not intended for the permanent uses of the company.

Mr. Pryor was very emphatic in asserting that there was not the slightest foundation for these rumors; and he pointed out that one story necessarily destroyed the other, because, if a sale of the plants and properties was made, the additions would not be required for the purpose of enabling the company to perform its contracts for the supply of arms and ammunition.

Mr. Pryor stated that no sum which might be offered for the properties would afford the slightest temptation to the owner to dispose of them and thus prevent the performance of existing contracts. Mr. Pryor was equally emphatic in asserting that the additions to the plants did not constitute a mere temporary expedient, but were largely made in accordance with the general policy of expansion adopted by the company before the outbreak of the European war, and that this policy would not be interfered with even if the war were to come to an end to-morrow. The additions to the plants, now under construction, are of the most modern type and of the most substantial, durable and permanent character.

#### MIXED FARMING IN WESTERN CANADA

Continued from page 9

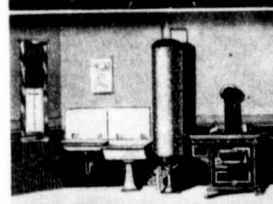
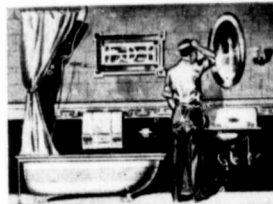
that the fall prices are always low. The Winnipeg market usually touches low level about December and usually touches the year's high water mark in May or June. The difference between the two is often quite considerable. Now, a large part of the stock that floods

and depresses the fall market is thin, unfinished or half-finished stuff. It seems almost indisputable that much of this would have been much more profitable to the raiser if it had been stall fed over winter and marketed on the high spring market. Of course, cattle that are fat in the fall should be

marketed then, as it will not pay to carry them over; also mean, unthrifty brutes should be disposed of at once at any time of year, but many of the thin cattle sold in the fall only need good feed to make them into a good finished article.

**Shelter for Beef Cattle**  
On a strictly beef-growing pro-

## AN IDEAL FARM HOME



may be secured at no greater expense and with no less facility than the most perfectly equipped city residence by the installation of

### The PARTRIDGE AND HALLIDAY System of Plumbing and Heating

THE greatest comfort of the city home is the complete water system with which all modern houses are equipped. The sanitary bathroom with its enamel bath tub and shower, the running water to supply the kitchen, the lavatory, closet and wash tub are features that appeal to country residents as ideal.

The pneumatic water supply system makes it possible to have running water anywhere in the house, stable or yard, for all domestic purposes, and for fire protection. The cost is so low that almost every country resident can afford to install it. The most striking features are the simplicity of the installation, its durability and the great increase in comfort and improvement in sanitary conditions.

The principle of the pneumatic system is simple. Water is pumped from any source into an air-tight steel tank located in the cellar, or in a small building erected over a well or even buried in the earth if desired.

The advantages of this system over elevated tanks are many, the pipes to the tank can be more easily made fire proof, the water will be cooler in summer; it is not open to the dust or light, and has the additional advantage of being hidden from view.

The amount of water required and extent of the system should govern the type of installation, and the outfit may include pumps operated by hand, windmill or power.

**OUR HEATING SYSTEM** by hot water is an innovation in the domestic economy of the farm. It surpasses everything else for comfort and economy. It is a luxury at the price of a common necessity.

It will cost you NOTHING to learn how moderate a sum you can have all the comforts of a city home. Write us for estimates. Old as well as new buildings installed with this system. Satisfaction guaranteed.

**PARTRIDGE AND HALLIDAY** 174 Lombard St. WINNIPEG

You saw this advertisement in this magazine. Don't forget to say so when writing.

28 in  
24 in

Made in

Buy

A full co

See what TIME.

A.

position, it good barns country. pure-bred s on a differ appear that is too high very elabor cattle whos half each. phase in th production. from cheap in woods o as good as show, that, the latter ca selves. Cer ner in beef to tie up a capital in bu

#### Soldiers in

Announce where in th iments have the military any soldiers to have a i sence for th farmers with splendid co farmers and of them will the opportu furnishing th ment Bureau full particula

The only hostile critics of this outfit are competitors who have copied me and would allege that theirs is the original

# A. STANLEY JONES THE ORIGINAL SMALL THRESHING OUTFITS

28 in. Cylinder Separator alone, all fittings - - \$317.00 28-in. Cylinder Separator, 8 H.P. Engine, all fittings, main belt and special 16 ft. reaches to mount as below. See page 6 of Catalogue - - - \$670.00

24 in. Cylinder Separator alone, all fittings - - \$284.00

Catalog with 28 photos of machines working everywhere in Saskatchewan and Manitoba, together with TIME TERMS, free on application.—Write for it.

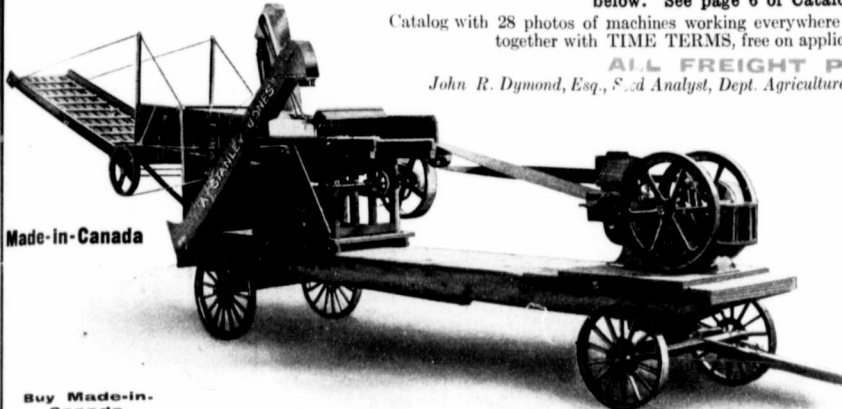
### ALL FREIGHT PAID

John R. Dymond, Esq., Fed. Analyst, Dept. Agriculture, Ottawa, writes me as follows:

"100,000 tons of screenings were lost to the farmers of the West, for which they not only paid \$650,000 in freight and charges, but after that got nothing for it owing to the fact that Threshing Machines as at present constructed

ORIOPERATED cannot clean grain satisfactorily. Almost every car at the Terminal Elevator was cleaned . . .

IF THE GRAIN COULD BE SATISFACTORILY CLEANED BY THE THRESHER IT WOULD EFFECT AN ENORMOUS SAVING TO THE WESTERN GROWERS, and mentions a suggestion to put a cleaner on the spout of the big threshing machine to take out screenings after threshed and weighed; adding that cleaning the grain in this way



Made-in-Canada

Buy Made-in-Canada Goods

### WOULD, OF COURSE, INCREASE THE COST OF THRESHING.

A full copy of this astonishing letter as to your losses in this way sent with my catalog.

### WHY NOT SAVE THIS WASTE TO FEED YOUR OWN STOCK AND SAVE YOUR THRESHING BILL?

See what users say regarding its work in Flax, Wheat, Oats, Barley, Timothy, Brome, Alfalfa, etc., all in the catalog. It will pay you this year to THRESH ON TIME, you can't afford to wait. Order early and get delivery. Can ship immediately on receipt of order. Immense stocks at North Battleford and every repair of every sort always carried for shipment by wire.

## A. STANLEY JONES, North Battleford, Sask.

position, it seems very doubtful if good barns are justified in this country. Always excepting the pure-bred stock business, which is on a different footing, it would appear that the cost of buildings is too high to justify anything very elaborate for the shelter of cattle whose yearly crop is one-half each. This is an important phase in the question of cost of production. The results obtained from cheap sheds and wintering in woods or bluffs are so nearly as good as the best stables can show, that, aside from appearance, the latter can hardly justify themselves. Certainly the new beginner in beef production is foolish to tie up a large portion of his capital in buildings.

### Soldiers in the Harvest Fields

Announcement is made elsewhere in this paper that arrangements have been completed with the military authorities to allow any soldiers now at Camp Sewell to have a month's leave of absence for the purpose of helping farmers with the crop. This is a splendid concession to our farmers and it is hoped that many of them will avail themselves of the opportunity provided by furnishing the Provincial Employment Bureau at Winnipeg with full particulars of their needs.

One of the first things taken in hand by Hon. Valentine Winkler when he assumed office as minister of agriculture for the province, was the question of an adequate supply of harvest help, and every effort is being made by the department to avoid any shortage of hands during the rush season this year. A special rate of one cent per mile was arranged with the railroads, and about 3,000 men have been sent out from Winnipeg by the Provincial Employment Bureau to date.

The offer of the Militia Department to grant leave of absence for a month to any soldier who desires to help with the harvest and to pay his railway fare from Camp Sewell to the farmer and back again shows the importance that is placed by the authorities upon the proper handling of this year's crop. Many farmers' sons, who have enlisted for service at the front, will be able to return home to give a hand; many other capable men will be ready to hire out to farmers needing their services for the busy month.

The Provincial Minister of Agriculture has been very prompt to act upon the offer of the military authorities and arrangements have been made to have a Manitoba government tent at Camp Sewell where applicants from the various regiments may register their names and receive their assignments to various farmers

needing their services. This tent will be in close touch with the Provincial Employment Bureau at Winnipeg, where the applications from the farmers are being dealt with, and it is anticipated that the plan will work out very satisfactorily.

To this end the Provincial Department of Agriculture is urging all farmers to send in at once their applications for help, stating how many men are required, when they are to start work, the amount to be paid for the month's work and the name of the railway station nearest to which the

farmer resides.

It is pointed out that the application from the farmer must be sent to the Provincial Employment Bureau, corner Main and Water streets, Winnipeg and NOT to Sewell. This is absolutely necessary.



### WINNIPEG BUSINESS COLLEGE (Established 1882.)

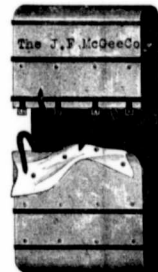
Canada's Greatest School of Business Training. Awarded First Prize at the World's Fair. Open day and evening the entire year. Over 1,000 Students annually. Visitors welcome. Catalogues free.

Address: WINNIPEG BUSINESS COLLEGE Corner PORTAGE AVE. and FORT ST

We have a Full Line of Seasonable Repairs.

"QUALITY AND SERVICE"

We are High in Quality and Low in Price.



Write for Prices on:

- Mower and Binder Knives.
- Sections. Guards.
- Guard Plates.
- Pitmans.
- Link Chain Belting.
- Leather, Canvas and Rubber Belting.
- Endless Thresher Belts.

Binder Canvases. Metal Truck Wheels. Evener Sets, Harrows and Packers, Plow Shares.

WRITE TO-DAY.

## THE JOHN F. MCGEE CO.

(Dept. C) 74 Henry Avenue, WINNIPEG, MAN.





# Why Buy American Made Machinery When You Can Do Better At Home?

Our lines are extensive. As we increase our output we will lower our price. Under entirely new management, anxious to get in harmony with the farmers of Western Canada. Give us a chance to prove that you can save money by dealing direct with the manufacturer in your own country. "The West."

You should begin to arrange for your threshing. We can save you money on portable Gasoline Engines, Belts, Windmills, Pumps, and many other things.

## OUR ADVANTAGES

Every article guaranteed against defective workmanship and material for ever.

Prompt shipment at all times. Special prompt shipment given to repeat orders.

In later years you will find no parts for Manitoba goods obtainable at the same old stand. Remember, the Threshers are continually changing their lines, because they can do better in the way of price with some other machine.

## TERMS:

One-quarter cash when outfit is operated satisfactorily for two days by our expert. One-quarter by note due Nov. 1st, 1915; one-quarter by note due Nov. 1st, 1916; 8 per cent interest; 5 per cent discount off from list price if paid in full before Jan. 1st, 1916; 7 1/2 per cent discount off if paid when outfit is run two days to customer's satisfaction.

### 14 H.P. PORTABLE, clutch pulley and Bosch magneto

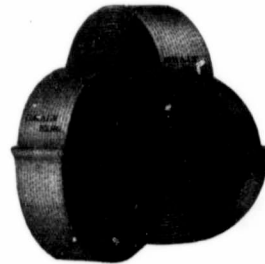
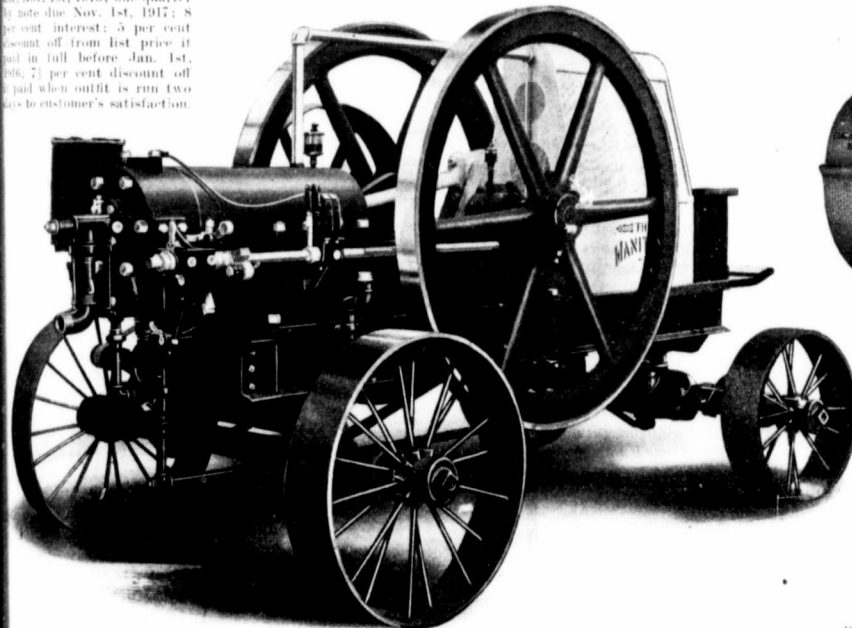
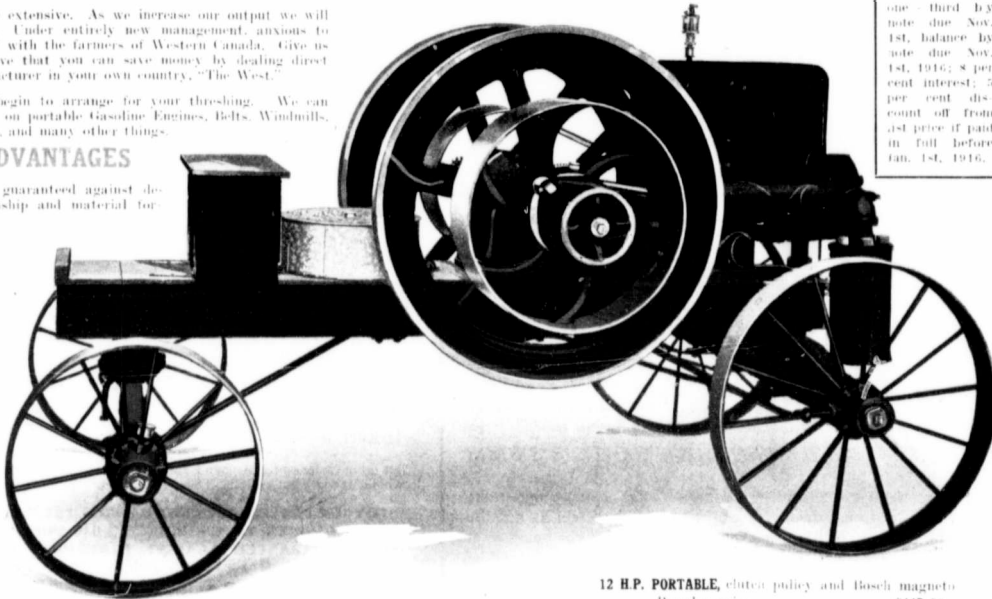
Brandon price ..... \$565.00  
Calgary price ..... 539.00  
(Weight 3,100 lbs.)

### 12 H.P. PORTABLE, clutch pulley and Bosch magneto

Brandon price ..... \$447.50  
Calgary price ..... 479.50  
(Weight 3,200 lbs.)

### 17 H.P. PORTABLE, clutch pulley, Bosch magneto

Brandon price ..... \$625.00  
Calgary price ..... 667.00



## Endless Canvas Thresher Belts

We have four re-built 25 h.p. engines, fully equipped as above, guaranteed good as new—  
Brandon price ..... \$850.00  
Calgary price ..... 725.00  
These prices effective Aug. 15th—Good for 60 days.

25 H.P. PORTABLE with Bosch magneto and friction clutch—  
Brandon price ..... \$ 850.00  
Calgary price ..... 925.00  
(Weight 7,500 lbs.)

30 H.P. PORTABLE with Bosch magneto and friction clutch  
Brandon price ..... \$ 950.00  
Calgary price ..... 1,032.00  
(Weight 8,200 lbs.)

These prices effective August 15th. Good for 60 days.

32 oz. Endless Canvas, Thresher Belts. Fully guaranteed.  
120 ft. 7 in. 5 ply ..... \$36.75  
150 ft. 8 in. 5 ply ..... 49.00  
At Brandon or Calgary. Other sizes correspondingly low.

**MANITOBA ENGINES LIMITED - Brandon, Man. and Calgary, Alta.**

You saw this advertisement in this magazine. Don't forget to say so when writing.

FARMPower—WHAT IS IT?

By Richard A. Haste

Continued from page 16

means work. ... folly. The only way to be able to buy a binder and mower is to buy and use the machines. It is just so with the other improvements about the farm. Buy them and they will pay for themselves. The man who goes without a barn because he can not afford to build one, and without a silo and feed carrier and a litter carrier and a manure spreader, or a hay loader or a windmill or a gasoline engine because he is afraid he can never pay for them, will always be handicapped—the world will

move away from him. His neighbor who has the nerve to make things work for him will ride by in his automobile with time to play while his own back is bent beneath the heavy load of human drudgery.

Farm power means not only the various forces that make the wheels go around, but every device that lessens human labor and increases the farmer's individual efficiency. Good fences, good barns, granaries, silos, are all expressions of farm power as much as is a gasoline engine to pump the water and light the house or a tractor to plow the fields and seed the grain.

What Science Does For Farm Crops

By HARRY SNYDER

Professor of Chemistry, College of Agriculture of the University of Minnesota

Modern science has done much to improve the lot of man through a better understanding of life processes. His diseases are being studied, and as a result of modern methods of sanitation, antiseptic surgery, and serum therapeutics many diseases that once were scourges are now controlled. A factor in the further betterment of the condition of man is the improvement of his food. It must be made cheaper, more wholesome, more nutritious; these are some of the problems that are being investigated, particularly by those scientists connected with the various universities and agricultural experiment stations of this and other countries.

The improvement of farm crops has been a gradual process of evolution extending from remote antiquity, when primitive man obtained his food from the chase and from such uncertain sources as the fruits and seeds that nature provided. In order to supplement nature's supply, man was forced to sow and garner seeds, and from this beginning dates the improvement of food plants. They have been domesticated in much the same way as farm animals, and in this man has greatly assisted nature. It is working in harmony with nature's laws and not against them that produces results. There are certain habits and characteristics of growth that have been acquired by plants through centuries and have become fixed, but not so rigidly as to resist all forces, particularly those that tend to improvement. It is due to the inherent tendency of plants to improve under favorable conditions that man is able to come to nature's assistance and aid in the improvement of farm

crops. In this achievement man, exalted as he may feel, is not the master but simply the servant of nature.

In many respects plants are like animals; they are subject to disease, preyed upon by insects, dependent upon food, and affected by climatic conditions. Plant diseases destroy large numbers of useful plants, greatly reducing the food supply, and in some instances causing famine, as in the case of the potato blight in Ireland over half a century ago. During recent years the diseases of plants have been extensively studied, and as a result they are now better understood. Many of them have been found to be due to specific fungi or to bacterial organisms, which either destroy the tissue of the plant or produce poisonous or toxic bodies. A knowledge of the causes of plant diseases has led in a number of cases to their control. The plant pathologist studies plant disease in much the same way as the progressive physician studies human diseases. The laboratories of plant pathologists form in reality the plant hospitals, and the results secured in them have been of great economic value. The tissue of a diseased plant is studied with the microscope. In some cases fungus bodies can be distinguished intermingled with the diseased cells. The fungus has fed upon the plant tissue, extracting nutritive substances and causing the diseased condition. In other cases the disease is brought about by bacterial bodies, which are distinguished with difficulty. Again, a chemical irritant or poison produced as a result of the activity of bacteria may be the cause of the disease. The separation and

The "Sawyer" Brand



is the very best of ENDLESS THRESHER BELTS that skill, experience and the highest grade of canvas can produce in a belt.

The SAWYER'S popularity was made and is maintained solely because of its splendid service and the fact that it is what it is SAID to be. It makes good every promise.

The Sawyer Improved Stitched Canvas Endless Belt is built of heavier duck than other belts. It has a double sewed taped lap and is stronger at the lap than elsewhere. It has a reinforced edge affording protection against fraying. It is stitched in rows one-quarter inch apart with the exception of the splice which is double stitched in rows one-eighth inch apart.

THE "SAWYER" REINFORCED EDGES ARE PROOF AGAINST ALL RAGGING FROM WINDSTAKES OR DEFECTIVE ALIGNMENT BETWEEN MACHINES

McCordick's Cut Lace Leather



Put up in cartons of one pound each. Every lace guaranteed. Tanned at Rawhide, in width 1/2 in., 5-16 in., 3-8 in., 7-16 in., 1/2 in.

IF YOUR DEALER DOES NOT HANDLE THE "SAWYER" GOODS WRITE TO US DIRECT NOW FOR AN INCLUSIVE GUARANTEE AGAINST THRESHING TROUBLES

E. B. PLEWES CO. WINNIPEG

BELTING AND THRESHERS' SUPPLIES. We are equipped to supply you with your complete outfit for threshing at prices that guarantee you a saving of 30 to 50 per cent. Also remember that we guarantee the quality of our merchandise and do not sacrifice quality to obtain price. Quantity purchases are what allow us to sell at lower prices than any other house. These are just a few of the many lines we handle. ORDER DIRECT FROM THE ADVERTISMENT AND SAVE TIME. Also send for copy of our

MIDSUMMER SALE CATALOG. It is a wonderful book of values such as have never been offered before. It shows a big line of Belting, Pumps, Packing, Lace Leather, Furniture, Stoves, Woven and Bag Wire and many other lines. Send a postcard to-day for copy.



Guaranteed Endless Canvas Belting

On account of the peculiar construction of this belting it is unaffected by atmospheric changes, uninjured by water or steam and may be subjected to a degree of heat ruinous to other belting. It is therefore the best belting for outdoor use and for wet, damp or hot places. Will stretch but little, is made on a special weave of duck of proper width for each size belt, giving a proper stretch and even strain on both edges. These belts are all sold only in the sizes given below, fully guaranteed.

Table listing various sizes of canvas belting and their prices, including 100 ft. 7 in. x 4-ply, 100 ft. 7 in. x 5-ply, etc.



Jacketed Suction Hose Wire Lined

20ft. length, canvas covered, wire lined, extra heavy and durable \$ 8.50

We also carry a large stock of Leather and Rubber Belting shown in our big Catalog. GASOLINE ENGINE, KEROSENE and LUBRICATING OILS. We can save you money on these articles and show here a few specials. Order direct from this advertisement, owing to unsettled market all prices are subject to change.

Table listing prices for various oil products, including No. 038-Highest Test Cylinder Oil, 45 Gal. Bbls. \$24.75, etc.

WE OFFER YOU THE BEST CANVASSES FOR ALL STYLE OF BINDERS. We make them for Frost & Wood, Massey Harris, Champion, John Deere, Deering, John McCormick. Can supply for any make if you give exact the exact width and length. When ordering give name, model or year it was made. State end length and width. Note these prices: Upper elevator canvas \$3.50 6 ft. platform \$4.50 Lower elevator canvas \$4.00 7 ft. platform \$5.00 8 ft. platform \$5.50

THE FARMERS' SUPPLY CO. LTD., 179 Bannatyne Ave., WINNIPEG

Vertical text on the right edge of the page, including 'August 1913' and various names like 'John REGINA'.

# MARSEILLES TUBULAR STEEL PORTABLE GRAIN ELEVATOR

Handles all kinds of Small Grain Satisfactorily. Capacity of 15 to 20 Bushels per Minute.

The Marseilles Portable Steel Grain Elevator is the newest, the simplest and most practical grain elevator in existence. Like every other "John Deere" product it is the "leader" in its line. Elevator leg is constructed of 3-16 inch well casing 6 3/4 inches in diameter, conveyor chain runs through this casing and is fitted with round flights which carry the grain. These flights are fitted accurately to the casing, carrying the grain to the elevator head, smoothly and without grinding or unnecessary friction.

**Horse or Engine Power.** Marseilles Portable Steel Elevator can be operated by our No. 255 Two-horse Hercules Triple Geared Power, horse power or gasoline engine. When operated by engine power our No. 724 engine attachment can be supplied with the necessary connections to be used with the horse power outfit.

**Adjustable Feed.** This elevator is equipped with adjustable feed which is a very valuable feature when operating with a small engine, the quantity of grain elevated can conform with the power of the engine and whatever quantity desired can be elevated.

**Easily Handled.** By merely turning a hand crank the elevator can be quickly lowered to horizontal position for transportation purposes.

**Stocked in Two Sizes:** No. 759 is equipped with a 23 ft. tube. No. 760 same as No. 759 but with a 28-ft. tube.

No. 724 Engine Attachment for Horse Power Outfit. No. 255 Two-Horse Hercules Triple Geared Power with 1 1/4-ft. Large Tumbling Rod, 1 Large Coupling, 1 Block Rest and Compound Coupling

Write for special booklet giving full details.

## John Deere Plow Co. Ltd.

WINNIPEG  
REGINA SASKATOON LETHBRIDGE  
EDMONTON CALGARY



Horse Power Outfit with Swivel Flexible Discharge Spout

You saw this advertisement in this magazine. Don't forget to say so when writing.

identification of the organism is often a difficult task, as it is associated with other forms of bacteria. The method followed consists in growing the organisms upon some appropriate nutritive substance, isolating individual colonies, and reproducing them until a pure culture is secured. The process is one of elimination. Each group of pure cultures is used to inoculate sound plant tissue until the disease is produced. In this way the specific organism is found.

There are a number of diseases, the smuts of wheat and other grains, flax wilt, potato blight and many of the fungus diseases of garden crops—that can be effectively controlled by the use of disinfecting agents and better sanitation. Plant diseases resemble human and animal diseases, and are controlled by the same general methods of treatment, such as improved sanitation and disinfection. The treatment of seed wheat with formalin and bluestone to destroy the smut spores on the seed, so as to prevent infection of the succeeding crop, has resulted in practically eradicating this disease in localities where the remedy had been thoroughly applied. Unfortunately, however, a general application of this knowledge is not made. There are a number of plant diseases that have been

brought under control, and from which there is no longer any need of heavy financial loss on the part of the farmer and the gardener if the proper precautions are taken in the treatment of the seed, soil and crop. Undoubtedly the time will soon come when laws will be passed with the view of controlling certain pestilential plant diseases, as is now the case with human and animal diseases.

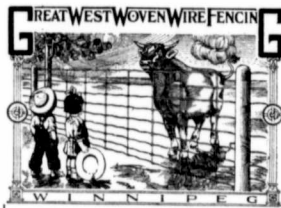
Plants often acquire a certain immunity to disease. When a plant has had a disease in a mild form it is believed that its progeny, as in the case of animals, may acquire a certain immunity due to the antitoxins developed in the cells as the result of the disease. It has been noted that during the years following heavy losses from wheat rust there is a tendency for the disease to be less severe, due, it is believed, to the seed having acquired a partial immunity. So far the development of immune varieties of plants can scarcely be said to have passed the experimental stage; this is, however, a line of investigation which promises to give fruitful results, and is being prosecuted by a number of experiment stations.

Not all bacterial affections of plants can be regarded as injurious diseases. The roots of clover, alfalfa, peas, beans and other members of the pulse family are

affected with bacterial growths which, from a pathological point of view, might be considered a diseased condition, yet the organisms working within these growths are of great assistance, aiding the plant by securing from the air free nitrogen, which undergoes fixation by the organisms and is then used by the plant as food. When the roots of the clover decay the soil is enriched with nitrogen compounds that serve as food for grains and other crops which are unable to assimilate directly the free nitrogen of the air.

Inoculation of the seed and soil with the specific organisms that carry on the work of acquisition of atmospheric nitrogen has been successfully practised for a number of years. Only a few soils, however, are in need of inoculation. The proposed method of distributing the bacteria in the form of dry cotton cultures, like a package of yeast, has been shown by bacteriologists to be a disastrous failure because the organisms are destroyed when the material is desiccated. Wide publicity was given to this method and it was the popular belief that it would be a great boon to agriculture; but it has been proved worthless, and the verdict of science is against it.

The improvement of crops has



The difference between a profit or a loss on your farm, may be only one thing—just the question of a proper Fence. Our Fencing is made to keep your own stock in and your neighbors' out. What you have you'll hold if you use our "GREAT WEST WOVEN WIRE FENCING." It is the greatest asset to any western farmer.

**The Great West Wire Fence Co. Ltd.**  
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Is the best by every test for running cream separators, washing machines, faning mills, or any light machinery. More cream separators driven by Strite Governor Pulleys than all others combined. THE BEST A REASON—ASK US.

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also been greatly facilitated by the selection of seeds. In the struggle for existence the weaker seeds succumb. When the stronger ones are given additional assistance, in the way of better food and better sanitary conditions, the individuality of the seed is able to exert itself.

To be concluded in September.

THE WEED PROBLEM ON DRY FARMS

By Dr. Frank S. Harris

When a dry farm is first taken up or purchased every effort is made to get it into a good state of cultivation just as soon as possible. All the farmer's energies are used in getting it cleared and broken and started to raising crops. Little thought is given to the permanent welfare of the field in the rush to start the land producing. This often leads to slipshod methods of farming which are likely to be continued later even after the breaking stage is over.

One of the disastrous results of these methods is the growth of weeds, the presence of which in any large quantity makes dry-farming sure to fail. In passing over the great dry-farming areas of the entire west one cannot help but be impressed by the abundance of these noxious intruders. They are found everywhere. True, there are farms here and there that are free from weeds, but the great majority of the fields are literally infested around the borders and on the uncropped pieces, as well as in the crops themselves.

"A Weed in Time—"

The weedy borders furnish a perennial source of seed to keep the entire farm foul. It is very much easier to get rid of the few weeds next to the fence before they go to seed than to have to combat during the next season the millions of young plants resulting from these prolific mothers. The old saying that a stitch in time saves nine might be paraphrased to read: "A weed in time saves a thousand."

It is absolutely useless to pretend to summer fallow if a crop of weeds is allowed to grow. The object of cropping only during alternate years is to allow the moisture of two seasons to be used in producing a single crop. If weeds grow during the year when there is no crop the moisture is used up just as completely as if a crop of wheat were raised. So, even if these weeds are not allowed to go to seed, they do harm by robbing the soil of its much needed moisture.

Even more serious than the above is the growth of weeds in the crop itself. They are usually more hardy than the cultivated

plants, and are more successful in the competition for water and plant food. The yield is not only reduced, but the quality of the crop is impaired, since the weeds interfere with harvesting and their seeds lower the market value of grain.

Kill the Weeds when Young

There are a number of weeds that are especially troublesome on the dry farm, and these should be carefully guarded against in order not to allow them to get a start. Among the worst of these are the Russian thistle and the tumbling mustard. Both of these produce thousands of seeds to each plant and these seeds may be scattered over a large area, due to the fact that when the plants are ripe they go tumbling over the fields with the wind, scattering their seeds all along the way. A yellow row of blossoming mustard a half mile long was once seen stretching across a field of grain, marking the path of a single plant on its journey of seed dispersion. The next year the field was a solid mustard patch.

In regions infested by Russian thistles it only takes a year or two of neglect for them to get complete control.

There is no single thing to do to get rid of all weeds. Each kind has its own weak point where it can be best attacked. The general rule, however, is to kill all weeds when they are young; better, just after they have germinated. Most any tillage implement will do effective work at this time, but if weeds are allowed to get old and tough no implement can make a perfect job and much hand work is necessary.

The weed question is perhaps more important in dry-farming than in any other system of agriculture. Its complete solution calls for the best ingenuity of practical farmers, implement manufacturers and experimenters.

Perhaps the place where greatest results can be had is in the better care of new land to see that it does not become infested during the period when more of the farmer's efforts are being given to getting the land under the plow than to the establishment of a good system of farming. A little work of prevention at this time will save much trouble later on.



Aged and Shriveled

Pat's boss was treating him to a thimble-size glass of his best old stock and, thinking to impress Pat with his liberality, he said:

"Pat, that whisky is seventy years old."

"Faith," said Pat, "if it is, it's dang small for its age!"

OILS

Gasoline Engine Kerosene Distillate Coal Oil Gas Engine Oil Automobile Oil Harvester Oil Machine Oil

Cylinder Oil Boiler Compound Greases, Etc. Waste

Highest Quality! Prompt Shipments! Fair Prices! Made in Canada!

Illustrated Catalogue—48 pages—Free upon request

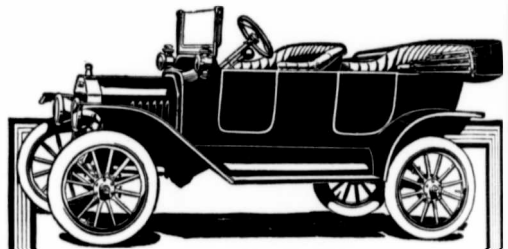


Canadian Oil Companies Limited

WINNIPEG REGINA CALGARY NELSON

BRANDON SASKATOON EDMONTON FERNIE

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"MADE IN CANADA"

Ford Touring Car Price \$530

Ford Runabout Price \$480

Ford Town Car Price \$780

The above prices f. o. b. Ford, Ont., effective Aug. 2, 1915. No speedometer included in this year's equipment, otherwise cars fully equipped. Cars on display and sale at any branch manager, or write Ford Motor Co., Ford, Ont.

WRITE FOR CATALOG B



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Q. Can any differ... required to... arators... seems to... run heav... have neve... that effect... nized aut... like to kn... lit in wet... bring. W... longer an... Does wet... dries and... the best b... preventing t... that will... What do... graphite?... A. So fi... parative... made with... different m... opinion th... machine th... ence in the... required to... r machines... some savin... coal before... the fine du... into the as... It also, wh... ties, appe... coal burn b... be wet befo... fire box. It... or the fire... the coal. I... compound... to the cher... the water y... find it satisf... determine if... a compound... to have a... made of the... pensive and... ing water f... territory to... pays. On a... ence in the... threshermen... cared to rec... pound. We... have better... and recomm... using the... mended by... Q. R.S... job of break... who had or... tilled. We l... tilled portio... finally one... at the oppo... he pointed... tilling, an... "Cross betw... two cows... we did. A... that 103 tiles... he wants m

# Questions and Answers

**Q.** Can you tell me if there is any difference in the power required to run the same sized separators of different makes? It seems to me that some of them run heavier than others but I have never seen any statement to that effect coming from a recognized authority. I should also like to know if there is any benefit in wetting the coal just before firing. Will it make the coal last longer and hold steam better? Does wetting the coal injure the flues and the fire box? What is the best boiler compound for preventing the formation of scale that will not injure the boiler? What do you know about graphite?

**A.** So far as we know, no comparative tests have ever been made with grain separators of different makes. It is the writer's opinion that for the same size of machine there is very little difference in the amount of power required to run any of the standard machines. There appears to be some saving effected by wetting coal before it is fired. It prevents the fine dust from sifting through into the ash pan and being lost. It also, when used in small quantities, appears even to make the coal burn better. The coal should be wet before it is thrown into the fire box. It doesn't hurt the flues or the fire box in the least to wet the coal. If you can get a boiler compound that is exactly adapted to the chemical requirements of the water you are using, you will find it satisfactory, but in order to determine if you are getting such a compound, it will be necessary to have a chemical examination made of the water. This is expensive and where you are changing water from one part of the territory to another it hardly pays. On account of the difference in the kinds of water that threshermen use, we have never cared to recommend a boiler compound. We believe you would have better success with graphite and recommend that you try it, using the quantities recommended by the manufacturer.

**Q. R.S.** Last spring I took a job of breaking 35 acres for a man who had one end of the field tilled. We had to go around the tilled portion for a while, but finally one morning when I was at the opposite end of the field he pointed down towards the tilling, and said to me, "Cross between where those two cows are standing," so we did. Afterwards he found that 103 tiles were broken. Now he wants me to pay damages.

Can he hold me responsible or not?

**A.** As we understand the case, the person for whom you worked had a tiled ditch at one end of the 35 acres. You went around the ditch until you were told that you might cross at a certain point. We do not believe you are liable for any injury caused to the tile for two reasons: 1, you kept away from the tile until you were told where you could cross the ditch; 2, having crossed the ditch at the place pointed out by the person for whom you were working, that person assumed the responsibility for any damage which came from crossing the ditch at that point.

**Q. N.S. 1.** I would like instructions for putting in a new boiler tube, using a roller expander. How can I keep the flue from turning while expanding it before it becomes tight?


**2.** What are the advantages of a Baker reverse gear over other makes?

**3.** Does an engine fitted with a Woolf valve gear have more lead at one end than at the other.

**A. 1.** In putting a new tube in a boiler you will have to have somebody at the opposite end to hold it in place with a heavy bar of iron. There is no trouble about the flues turning when you are expanding it. After the tube is placed in position, the expander is inserted in the end of the tube until the shoulder comes up against the end of the flue. The taper pin is then driven in fairly tight after which it is jarred loose. The expander turned about a quarter of a turn, and the pin is driven in again. There is in this way no turning effort on the tube at all, but simply a straight end thrust which is taken care of by the man at the opposite end.

**2.** The Baker reverse gear provides for a quick opening of the steam port and a quick closing. The lead is constant at all points of cut-off and it can be set for practically equal cut-off on both forward and return strokes of the piston. We have seen indicator cards taken from engines fitted with the Baker reverse gear that very closely resembled Corliss engine cards. The Baker reverse gear belongs to the class of radial gears which includes the Woolf Reeves, Springer, etc.

**3.** Engines fitted with a Woolf reverse gear have the valve set with a little more lead at one end than at the other in order to obtain equal cut-off.



**MASSEY-HARRIS LIMITED**  
TORONTO, CANADA

THE LARGEST MANUFACTURERS OF HIGH CLASS FARM IMPLEMENTS

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



**MASSEY-HARRIS LIMITED**  
TORONTO, CANADA

THE LARGEST MANUFACTURERS OF HIGH CLASS FARM IMPLEMENTS

**I**F 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 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 for ten to twenty years and are still giving the best of satisfaction.

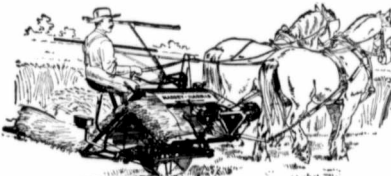
*If you have never used one, ask your neighbor who has, and profit by his experience.*


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**Weather Proof  
Vermin Proof**

Here is absolute protection for your grain—so strongly built that it can't bulge—and yet easily set up and taken down. The Johnston Granary has a big outside door with inside sliding sections to hold the grain at any height. As a granary or as ordinary storage, it is a firm, water, wind and weather proof building.

Johnston's Granary

**Ready to Erect**

All framework needed is sent from our factories cut to fit and ready to nail together. The galvanized sheets lock together. They are further strengthened with wide iron hoops drawn tight with tension bolts, a large 14-inch metal ventilator is supplied—a top man hole for loading and an iron fireproof door.

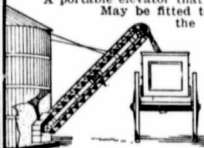
**Tight at Every Point**

Rain or snow cannot drive in at any joint in the whole structure. The Johnston Granary gives sure protection from the elements because every seam in roof and walls is locked tight. There is no opening for vermin to get in. No exposed part for fire to catch.

Coupon will bring full information.

**DINNEN GRAIN UNLOADER**

A portable elevator that can be used anywhere on the farm. May be fitted to the Johnston Granary. Mail the coupon for literature and prices.



The Metal Shingle & Siding Co., Limited,  
Winnipeg, Man.

**E**

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

Write me fully about Granary and Unloader.

.....

.....

PRACTICAL TALKS TO THRESHERMEN

Talk No. XCIV.

Conducted By PROFESSOR P. S. ROSE

Note.—The term "gas engine" in these lessons will be used indiscriminately in speaking about all internal combustion engines.

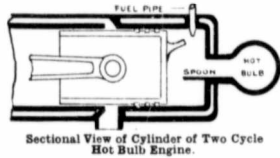
PETROLEUM is the source of most of the fuel used in all internal combustion engines. It is very widely distributed over the earth and with the exception of coal is more plentiful than any other fuel. In this country there are three great fields; the eastern field covers New York, Pennsylvania, Ohio, Indiana, Illinois and West Virginia; the mid-continent field is in Kansas, Oklahoma and Texas, and the western field in California. Besides these oil is known to exist in other states in considerable quantities. There are oil fields in Canada and very rich fields near Tampico in Mexico, South America, although not much explored, is known to contain vast oil fields. In Europe the greatest fields are in Galicia in Austria and around the shores of the Black Sea in Russia. There are large oil fields in India and vast unexplored oil areas in China and Siberia.

A few years ago many very sincere people were greatly alarmed that our petroleum resources would become exhausted in a few years. The period was variously estimated at from twenty-five to fifty years. Exploration and development work in the last two years in all parts of the world have revealed such immense stores of oil that those best informed now say it will be two hundred years before we run short of petroleum. It will probably last as long as the coal. Two hundred years is a long look ahead, and many things may happen before the human race is obliged to go south with the birds in the fall in order to escape the rigors of a winter without fuel. As long as the sun shines we shall have white coal, the waterfalls, and it requires no stretch of the imagination to conceive of a universal use of electricity for heat and power. But in the meantime the power of the world, that is the cheap, universal, portable power for the rest of your life and mine will continue to be steam and gas engines with a very rapid extension of the latter.

Three years ago everyone connected with the gas engine business was frightened at the rising price of gasoline. It threatened the automobile industry, the tractor business and the farm engine industry. The amount of gasoline that could be extracted from the crude oil under the old processes was strictly limited, Petroleum from the Pennsyl-

vania oil fields, having a paraffin base, yielded from ten to fifteen per cent of gasoline but that from the mid-continent and western fields yielded only five or six per cent. In producing the necessary quantity of gasoline the production of kerosene, fuel oil and other products reached an enormous volume. The relative cheapness of kerosene and the heavier distillates together with the high price of gasoline became a powerful incentive to devise some practical method of using these products in place of gasoline. Every conceivable kind of carburetor was tried and much experimenting was done with different types of engines, but despite all efforts and all claims to the contrary kerosene and the heavier distillates never gave the satisfaction obtained from gasoline.

Special carburetors were devised whereby hot gases from the



Sectional View of Cylinder of Two Cycle Hot Bulb Engine.

exhaust or hot water from the radiator could be made to pass around the intake pipe and heat the charge. In some cases the oil itself was heated. One of the earliest forms of oil carburetors boiled the oil under a few pounds pressure and used the resulting vapor. About the best results, on the whole, were obtained by using a moderate amount of heat to warm the air and then spraying the oil in a fine spray into the stream of air flowing into the cylinder. This worked quite well with kerosene, especially when the valves and ports were so placed that the unburned particles could escape freely at the exhaust. The most satisfactory results in using kerosene were obtained by using water in the cylinder. This was introduced generally with the charge in the form of a fine spray. In fact it is customary to use a double carburetor one side of which is for fuel the other for water. The action of the water seems to be quite largely mechanical. It keeps the cylinders quite free from carbon and reduces the heat in the cylinders and prevents pre-ignition. When kerosene is used without water the cylinders over heat much more quickly than with gasoline, and some means

must be employed to keep the temperature within working limits. The addition of a small quantity of water does this very effectively. The water is first heated, then turned into steam and the steam is then superheated. Water has a high specific heat—four times as high as the gases in the cylinder, weight for weight. Then after it is heated to the boiling point it absorbs twenty times as much heat as the other gases in the cylinder in reaching a temperature of 212 degrees and twice as much from that point on in attaining the same temperature as the burning charge. These figures give a pretty good idea of the heat absorbing qualities of water in an engine cylinder. It might be thought that the amount of fuel could be sufficiently reduced to prevent overheating, but apparently this is not possible. In order to obtain certain combustion with the heavier distillates in the ordinary four stroke cycle engine, the quantity of fuel burned is such that internal cooling is essential.

In burning the fuel oils, those heavier residues left after the gasolines, kerosenes and naphthas have been distilled off, poor success has been obtained with the ordinary gas engine. The successful utilization of these oils requires higher heat in the cylinder at the instant of ignition, and very fine atomization of the fuel. These requirements are met in the hot bulb type of engine and better yet in the Diesel engine.

The hot bulb engine is fitted with a cylinder head that is not water cooled. Instead of having a flat interior surface it is bottle shaped and the opening from the cylinder into the bottle, which constitutes the compression chamber, is quite small. Instead of compressing a mixture of air and fuel these engines take in a charge of pure air and compress it. Compression is carried considerably higher than in gasoline engines when it is compressed in the bottle in the cylinder head, which is not cooled, it becomes sufficiently heated to ignite the charge. The oil is not introduced until the instant for ignition arrives. Then it is pumped into the cylinder and discharged upon a metal spoon in the neck of the bottle. See Figure above. This spoon is hot enough to vaporize most of the oil and to ignite the gas. The spoon and hot bulb are kept hot with the compression and the

burning of the charges. In so doing, it is necessary to heat the bulb with a torch. This type engine also uses steam. Its purpose is to reduce the heat of the cylinder and to keep it clean. This engine is not used for a tractor motor, though some experiments have been carried out looking that end. It is necessarily heavy and the weight more than anything else, perhaps, prevents adoption. It is mentioned in connection merely to acquaint the reader with one of the types of burning motor.

The Diesel motor is without doubt the most successful burning motor made. This motor works something on the order of the hot bulb motor except that compression is carried much higher and that alone is relied upon to ignite the charge. There is no hot bulb and no hot spoon for oil to impinge upon. Fresh air is taken into the cylinder on the charging stroke. On the next stroke it is compressed to five hundred or six hundred pounds. At this pressure air becomes highly heated. When the piston reaches inner dead center on the compression stroke, the fuel pump begins to inject oil. This is accomplished by means of a jet of very high pressure air, which connection with a suitably formed nozzle breaks up even the most viscous oils in a very fine spray and mixes it all through the charge of air. The latter becomes exceedingly hot immediately causes ignition. Fuel is generally delivered during about one-tenth of the power stroke. Diesel motors have come into quite extended use on motor ships and power stations but not for farm tractor use because of their high first cost and excessive weight. The Diesel motor has been adapted for locomotive service and some experiments were carried out with a view of adapting to automobile and tractor service, but without much success.

While the mechanics were busily engaged in finding some and certain means of carbureting or otherwise utilizing heavy oil the oil chemists were working the problem in a different way. What they endeavored to do was to increase the supply of gasoline by breaking down the heavier distillates as nature must have done in the beginning. A little more than two years ago Dr. Barton perfected a process for the Standard Oil Company, and in the present year Dr. Ritter

Continued on page 40

Farg  
Kans

## When you buy your next Steam Traction Engine get one that will give you a service and wear that will make you money

You cannot afford to fool your time away bothering with an engine that is inefficient in any particular.

You can buy the old reliable Nichols-Shepard---made by a strong responsible company that has always devoted its energies to Threshers and Power to drive them.

No fussing about trying to develop lines wholly foreign, but all their work, time and effort being put into just the line you use and want.

You can make money by buying a Nichols-Shepard Steam Traction Engine, because it will make you less trouble than any other.

It will run right along all the season, furnishing ample power and give a steady motion that always insures the very best of results.

It will pay you to buy of the company that has the standing and resources behind it and the desire to build and furnish the best.

You don't thresh for fun. You want to make money and you are sure of doing it with the **Red River Special Line.**

### NICHOLS & SHEPARD CO.

(In Continuous Business Since 1848)

Builders of Red River Special Threshers, Wind Stackers, Feeders, Steam Traction Engines and Oil-Gas Tractors

BATTLE CREEK, MICH.

BRANCH HOUSES (With Full Stock of Repairs) At

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 Consolidated Wagon & Machine Co., Salt Lake City, Utah. Nichols-Shepard Sales Co., Dallas, Houston, Texas.

# BEE-KEEPING IN MANITOBA

By R. M. MUCKLE, Inspector of Foulbrood and General Apiarist for Manitoba. (Continued from page 16 July issue)

To this end, including of course the general propriety of the apiary, a little assistance in the fall is necessary. Most of our requeening is done in August and last year, because of the hail and drought in our locality, very little nectar was coming in at that time and the young queens were slow about starting to lay and some of the old queens had discontinued. Entrances were contracted and a point of half and half syrup fed daily for a few days. This started brood rearing at once. We also found several colonies at the point of starvation. In addition to the syrup, these were given some frames of sealed honey. Later in the season it was necessary to increase the winter stores and for this purpose an average of ten pounds of sugar per colony was fed as a syrup, and unusually large amount compared with the two or three pounds of normal years.

Plenty of young bees and ample stores are essential factors in successful wintering. Just before the hives are taken from the cellar in spring, we make up candy in pieces about six inches square and one inch thick. It is not advisable to make too much at once, as long boiling will spoil it. Granulated sugar is dissolved in a little water at the back of the stove and then boiled rapidly without stirring till it forms a soft ball when a spoonful is dropped in cold water. After cooling a few minutes, it is beaten till white and turned out in tins. The candy is placed over the cluster with a couple of little sticks above or below it, so that the bees may have access on all sides. The quilt is replaced and supplemented by two thicknesses of newspaper and a super containing a chaff cushion set over. In our own province we prefer this to syrup for stimulation purposes in the first chilly days of spring. As soon as a real warm day comes along, stores are equalized where necessary. If a hive is too heavy with honey, a couple of frames are taken out and exchanged for empty ones from a light hive. At the same time we examine to see if any queens have died during the winter. Too much sealed honey in the spring is not an advantage, as the queen may be cramped for room to lay her eggs.

A queen lays two kinds of eggs, fertilized developing into workers or queens, and unfertilized developing into drones.

There are three natural condi-

tions under which bees will set about queen rearing, when they wish to replace an old or failing queen or when some accident has rendered them queenless. In swarming and supercedure, the bees start some circular cells, the base covering about three times the space of the hexagonal workers cell, and the queen deposits an egg in each. In three days the egg will develop into a larva and find itself provided with a rich, predigested food, known as royal jelly. The building out of the cell will keep pace with the growth of the larva and royal jelly will be lavishly supplied. In eight days from the laying of the egg, the cell will be ready to seal and in seven or eight days more a queen will emerge. A queen is a queen by virtue of a layer cell and richer food while in the larval state, and if an egg is lifted from a queen cell and a worker egg put in its place, a queen will be developed in the time and manner I have just described.

In the case of a queenless colony having neither eggs nor unsealed brood, if a pannel of young larva is given them, they will enlarge a worker cell, provision it with royal jelly, and rear a queen in ten days.

There are several plans of rearing queens artificially, but we will consider only two, making use of a queenless colony and making use of the second story of a very strong colony, confining the queen to the brood chamber by a sheet of perforated zinc. In either case, the bees should be stimulated by giving them a little half and half syrup daily, beginning four or five days before they are to commence work on the queen cells. A queen rearing outfit may be had of any supply house and a choice breeding queen is necessary to supply the larvae. If no queen cells are available naturally, a queen may be removed from a colony and the bees allowed to start queen cells to provide the royal jelly. It is essential though that if this colony is to be used for queen rearing that all of these cells are removed before the grafted ones are given.

Attach twelve or fourteen cell holders to a cell bar and insert embryo cells. Have ready a supply of unsealed jelly and a frame of larvae from your best breeder.

Stir the jelly with your jelly spoon so that it will be of even consistency and put a dot of it in each waxen cup. Hold your



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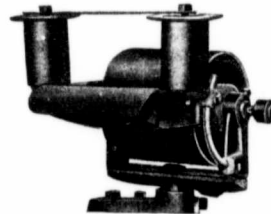
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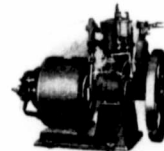
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frame of brood so that you can see plainly. Very carefully slip the transferring needles under the thinnest worker larvae, one just hatched from the egg, and place it on the dot of jelly. It is no longer a worker larvae, but an embryo queen. It is important that this grafting operation should take place in a very warm atmosphere. The top bar is then placed in the cell frame in the centre of the hive, and the bees will complete the building and the provisioning of the cells. It is far better where practicable to give the embryo cells to a strong second colony, placing these between two frames of unsealed brood as queenless colonies means a serious loss of bees and honey. In five days the cells will be sealed and the bar may be hung lower in the frame and another set of embryo cells given.

Ten days after grafting the first cells are ripe and must be taken out before they hatch. Very gently, without jarring or shaking, transfer them to the nursery cages, smearing a little honey on the tips of each so that the queens may get a taste as she is cutting her way out. Each cage is provisioned with queen candy made of powdered sugar and honey. This can be made up some days before needed and packed in a bowl. In a couple of days, more sugar may be worked in. It should be moist and mealy, not sticky or hard. These cages may be given at once to nuclei or placed in the nursery pawn and hung in a second story till wanted.

Anticipating the hatching of the queens, mating boxes and nuclei must be prepared. A full sized hive may be used, a division board contracting it to two frames, one of bees and brood, and one of honey. We use a mating box containing four one frame nuclei. Full-sized Hoffman frames are separated from each other by bee proof partitions. Any box or board longer and wider than this hive does nicely for a bottom, and alighting board, and little holes in ends and sides give each nucleus its own private entrance. At the end of the season six or eight nuclei are united and fed from a Miller feeder and we have a strong colony.

Unless nuclei are found of bees brought from a distance, it is necessary to fasten them in for three days by tacking wire cloth over the entrance to prevent the old bees from going home. To keep them in a flourishing condition, a little syrup should be fed daily, and to prevent robbing, they should be placed in a sheltered spot, away from the main yard.

The nursery cage is also a very convenient introducing cage, the bees eating out the candy stopper

and thus releasing the queen. A newly hatched virgin may often be introduced by simply placing her on the comb, but the cage method is better.

If nursery cages are not available, the cells may be put in West queen protectors and a cartridge full of honey or candy shoved in the bottom. If you have neither nursery or protector, take a piece of wire cloth, five inches square, pinch it up at the corners to form a two-inch box and ravel out a few strands along the edge, stick a pin in the side of the wooden cell holder and hang the cell on comb containing honey. Place the cage over it, imbedding the edges in the comb. When the queen emerges, she will find herself in a nice little room with plenty to eat. A good plan is to cage cell or virgin No. 2 in the nucleus, three days before No. 1 is removed. When No. 1 is taken out, No. 2 may be released. A queen usually commenced to lay when she is eight or ten days old or several days after she takes her mating flight.

While we are all willing to take pains to rear queens from choice mothers, it is not always sufficiently emphasized that to secure the best results the drones with which the young queens are mated should be from choice mothers also. For this reason, wherever practicable, the mating yard should be four to five miles from any other bees.

As soon as the young queen is laying, she may be sold or introduced to a full colony. It is essential though to be sure that the colony is really queenless or the new queen will likely be killed. When queens are purchased, they come in a Benton cage, having a little hole at one end plugged with candy for the queen and her attendants and a strip of pasteboard tacked over it. The cage is placed between two frames in the centre of the hive and the bees attacking pasteboard and candy from the outside, release the queens in a day or two. With home reared queens, the Miller cage is very convenient, the principle being the same as in the Benton.

Where a queen is to be introduced, so valuable that no chances may be taken, tack wire cloth over the entrance of an empty hive and put in two or three frames of hatching brood and one of honey, taking care to brush off every bee. Bring this into a warm room and release the queen and her attendants. In three or four days there will be quite a little cluster of bees in the hive and it may be set out and the wire cloth removed.

The smoke method seems to be much practised now. Three full puffs of dense cook smoke are blown in at the entrance, which is then tightly closed. In half a

## Cushman Light Weight Engine Saves a Team on the Binder



Fits any Binder

This is the one successful binder engine. Thousands are in use every harvest. Engine drives sickle and all machinery. Since horses have only to pull machine, two horses will easily handle 8-ft. binder in heavy grain. In a wet harvest Cushman Engine saves the crop, as it keeps sickle going when bull wheel slips—it never clogs.

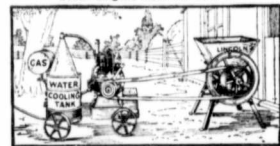
## After Harvest Does All Farm Work

Throttle Governed—Sizes 4 to 20 H.P.

Cushman Engines are very light weight and easy to move around from job to job, yet are even more steady-running, quiet and dependable than most heavy engines, because of Throttle Governor, perfect balance, and almost no friction nor vibration. 4 H.P., weighs only 190 lbs.—167 lbs. when stripped for binder; 8 H.P. weighs only 320 lbs., and 20 H.P. only 1200 lbs. The simple Throttle Governor releases just enough fuel to take care of the load at any moment, thus avoiding the fast and slow speeds at which most engines run.

While Cushman Engines are only about one-fourth the weight, per horsepower, of other engines, they will deliver as much or more steady, reliable power, per rated horsepower, than any other farm engine. Forced water cooling system prevents overheating. Equipped with Schebler Carburetor and Friction Clutch Pulley. May be run at any speed. Moving parts enclosed and run in bath of oil.

4 H.P. FARMER'S HANDY TRUCK Same Engine Used on Binder



E. W. Gasser, Sidney, Ill., says: "With a Cushman I cut 10 acres more a day with less horses. A binder will last 3 or 4 years longer with this engine." Cushman Engines are not cheap engines, but they are cheap in the long run. Ask for free Engine Book CUSHMAN MOTOR WORKS OF CANADA Builders of Light Weight Engines for Farm and Binder Use, Distributors of Reliable Power-driven Machines, such as Grinders, Saws, Fanning Mills, Washing Machines, etc. 286 Princess Street, Winnipeg, Manitoba

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A lighter oil than Standard Gas Engine Oil; the proper lubricant for the more expensive and finely constructed tractors. It will stand a zero cold test. Besides Polarine Motor Oil, there is a Polarine oil or grease for every running part of your tractor. The cleanest and cheapest way to buy Standard Gas Engine Oil and Polarine is in our non-leakable steel barrels with faucets attached.

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minute the bees will be rearing. The new queen is then run in, followed by another puff and the entrance kept closed for ten minutes.

Those of you who commenced with black bees as we did, will remember how proud and pleased you were when the first young Italian workers came out for their play spell.

One of the old Greek myths tells how Aristaeus, the shepherd, son of Phoebus and Cyrene, lost all his bees through want and sickness. Thoroughly disheartened, he visits Cyrene, his mother, in her river palace and tells her his troubles. She counsels him to go to the seer Proteus for advice and herself accompanies him. Proteus tells him that the loss of his bees is a sign of the god's displeasure because of a wrong done to Orpheus in his lifetime. Cyrene shows him a way to propitiate Orpheus and a two years' old steer was sacrificed of unblemished cattle in a shady grove. Nine days later he sends death gifts to Orpheus and revisits the grove with a heifer calf for further sacrifice. To his great joy, in token of the acceptance of his offerings, clusters of bees are hanging from the branches.

From this root, with perhaps some debt to Samson's riddle, grew a belief and practice of ancient times whereby a man might make a fresh start if he had been so unfortunate as to lose all his bees. Early in the spring he was to seek out a little secluded bower among the trees and vines and roof and wall it in, leaving open windows to the east, west, north and south. In this sylvan temple, a two years' old steel was sacrificed and strewn with sweet herbs. In a certain number of days, bees would swarm through the windows and cluster on the trees.

**Who Should Keep Bees**

In Manitoba we have a large number of men and women who are successful beekeepers and there is room for many more, as it would be hard to find a place where a few colonies of bees would not yield a fair honey crop during an average year. Every farm could have a few hives and thus obtain one of the most delicious and healthy foods at a very small cost.

Professional men, merchants, tradesmen, poultrymen and market gardeners, whether situated in a small town or in the city, can keep bees with profit and pleasure.

**A Live Stock Markets Policy**

Following the announcement which recently appeared in the press, announcing that the Hon. Mr. Burrell had initiated a comprehensive markets propaganda in the Live Stock Branch of his Department, an explanation respecting the details of that policy will be of interest. The scheme involves—

1. The Organization of an Intelligence System which shall provide for—

**(a) Statistics of Animal Population and of Production—**

Co-operation with the Census Branch of the Department of Trade and Commerce, and with the Provincial Departments of Agriculture in the collection and analysis of statistics of animal population. Gathering current data as to the exact situation in the country respecting breeding and feeding operations, the supply of feed, the condition of stock, when heavy marketing may be expected, the districts from which the largest supplies may be available and the districts in which a shortage exists.

**(b) Information regarding the Home Market—**

The collection of definite and reliable information regarding

market demand in the several provinces of the Dominion, with particular reference to current prices in the leading market centres, and to conditions governing inter-provincial trade in meats and other live stock products.

**(c) Information regarding the Foreign Market—**

Through agents of the Branch, through the foreign service of the Department of Trade and Commerce, and from such other sources as are available, the gathering of adequate statistics and data to make possible an intelligent interpretation of trade conditions in foreign countries, exporting and importing, with the view of assisting our live stock interests to develop foreign trade, to adjust their operations to the requirement of foreign demand and to take advantage of such outlets as may from time to time appear for the profitable sale of live stock products.

**(d) Distributing Information to the Producers—**

The dissemination of this information to the producers in such an effective way that they may be able intelligently to anticipate market demands, to

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HOYT'S NICKEL GENUINE Babbitt is especially designed for heavy duty gas tractors.

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Less than 28 lbs. ....	75c. per lb.	Less than 30 lb. ....	40c. per lb.
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Do not hesitate to send us your broken cylinders, cylinder heads, connecting rods, crank cases, engine beds, bull pinions, etc., and we will return them as good as new and stronger where mended at a great saving.

We do not attempt to repair certain castings on which a saving cannot be made in which case we sell it for scrap and return the proceeds to the customer, which helps to pay the freight.

Entrust the work to us, we have the oldest and largest Oxy-Acetylene welding works in the West.

Inquiries cheerfully answered.

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 62 1/2 PRINCESS STREET WINNIPEG, MAN.  
 Established in 1911.

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Will be the experience of every farmer in threshing his 1915 crop. Not for many years has there been such a weight of straw. It will put a tremendous strain on your separator but no part will feel it so much as **The Belting**. Do you want to have absolute security from break-down in your belt service. The only safeguard is **THE BEST BELTING THAT CAN BE MADE---the**



**Lion Brand**

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Endless Thresher Belt



You can get them from any thresher company doing business in Canada. They cost a little more than other fabrics that are a big risk from the day they are used in any power transmission, but we guarantee our goods against all disappointments from slippage or breaking. They are the "guards" that will never betray their trust under any pressure—at threshing time or at any time.

**Gutta Percha and Rubber Limited,**

Winnipeg, Fort William, Regina, Saskatoon and Calgary

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OR COMBINE

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seize opportune periods for the profitable disposal of their stock, to adjust successfully their operations to the trade situation as developed by local and foreign requirements, and to equalize production in the several provinces, thus providing against the alternate gluts and shortages which have, in the past, invariably tended to upset trade balances and defeat the expectations of the breeders.

2. The Organization of Farmers for Co-operative Action in the Sale of—

(a) **Their Eggs and Poultry—**  
The successful demonstration given in Prince Edward Island of the co-operative sale of eggs suggests the need and wisdom of extending the system now in operation to all the provinces of Canada, and of its further elaboration as required by varying local conditions, and in the development of inter-provincial and foreign trade.

(b) **Their Wool—**  
The policy to be pursued in this work must closely adhere to the principles followed during the past year, but it is hoped that means may be devised which shall secure to the growers the commercial advantages of deferred sale when the market

warrants the holding of the product.

(c) **Their Lambs, Hogs and Cattle—**

It is proposed to initiate the co-operative sale of live stock in accordance with the principles followed in the work already undertaken.

**Note.**—It should be made clear that in the prosecution of this programme it is not expected or intended to involve the Department in any commercial obligation, the farmers' associations, as a matter of deliberate policy, assuming full and complete responsibility in the transaction of their own business and, ultimately, in the executive administration of their own organization.

3. The Promotion of Sale by Grade and Payment according to Quality.

It is widely recognized that the sale of produce on a flat rate basis, for example in the case of hogs, invariably inflicts a penalty on the progressive farmer, and in effect provides a premium for low grade goods. Evidence is not wanting that a well directed effort by the Department would favorably influence buyers and merchants toward an acceptance of standards and the rating of prices on a basis of market merit. It is the ex-

perience of the Branch that a movement in this direction is fundamental to any advance which may be made in improving quality and in increasing production.

4. The Co-operation of all Interests in the Development of our Live Stock Trade.

Under a Markets Policy, the Department may usefully endeavor to have itself recognized as a medium for the adjustment of differences between the producer, on the one hand, and the packing, transportation and financial interests on the other, and an organization through which co-operation may be effected by these great industrial bodies in building up Canada's agricultural trade.

The Markets Policy of the Live Stock Branch, operated in accordance with the foregoing outline, will be administered under the immediate direction of Mr. H. S. Arkell, Asst. Live Stock Commissioner. The present organization of the Branch will be made use of to the fullest extent, the work being carried on through the chiefs of the several divisions, the cattle, sheep and swine, and poultry propaganda falling to the charge respectively of Mr. R. S. Hamer, Mr. T. R. Arkell, and Mr. W. A. Brown.

## Guaranteed Gas Saver



TRADE MARK REGISTERED

Automobiles, motor boats, trucks equipped with new Made-in-Canada Lesgass Device give three to five additional miles per gallon; enables Fords and all other cars to creep along at less than five miles an hour on high gear. The Lesgass Device gives any gasoline engine greatly increased power—from 10 to 100 per cent on low and medium speeds. Makes the noisiest engine comparatively silent.

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The Lesgass Device is simply inserted in the intake pipe. Once in place it never requires any attention, and, besides paying for itself each month in gasoline saved, and general engine efficiency, will last longer than the engine.

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We will forward, prepaid, a Lesgass Device on receipt of price, \$3.00. Try it for ten days at our risk; if it fails to do what we claim, your money promptly refunded. State diameter of intake pipe, or name of car on which test will be made.

Letters of endorsement and complete information concerning this wonderful invention will be mailed free upon request.

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The 10-20 and 12-25 mark the biggest advance made in small tractors today. They are absolutely dependable. Work under all conditions. Their upkeep is low. Plowing, threshing, discing, harrowing, running the ensilage cutter, operating the binder, are but a few things by which the small farmer makes farming more profitable.

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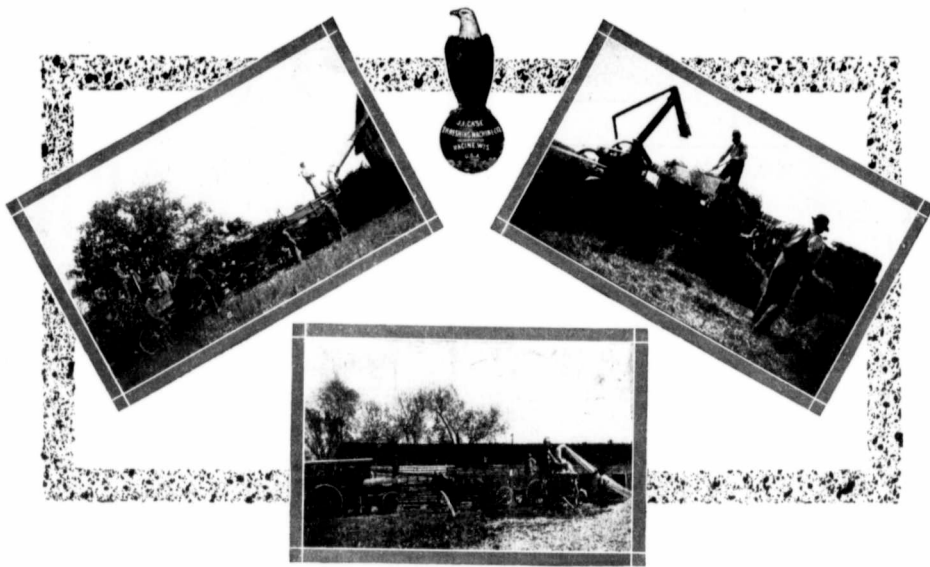
Steam Tractors range in size from 30 to 110 H. P. Today they stand as the nearest perfected steam tractor on the market. Send for our big General Catalog. Mailed free if you tell us you want it.

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## Husking, Shredding, Shelling and Baling

**T**HERE is no time to waste for the busy farmers. Soon you will be baling hay, husking, shredding or shelling corn. If that's the case **now** is the time to get your Case Baling Press, Husker Shredder or Corn Sheller. You might just as well do your job right while you're doing it. That of course means do it with Case Machinery. Keep your tractor busy. It will save you real money.

Speaking of Baling Presses, one of our Colorado users says, "It's not a question of how much a Case Baler will handle but how much you can get to it and take away from it." The Case is solidly constructed and with its large feed openings, it is a machine you need—one you should have on **your** farm.

The Case Husker Shredder is a revenue producer for the man with the power outfit. The snapping rolls can be turned to suit the kind of corn husked. The husking rolls do not in any way destroy the ears of corn. Besides like all Case Machinery it contains the element of safety. The operator stands five feet from the snapping rolls. The husker assisters make it unnecessary for the operator to reach in to clear rolls of clogged ears. You should demand all these things when thinking about Shredders.

Here again in the Case Corn Sheller is an opportunity to keep your tractor—your power plant—going in an otherwise idle season. Add to your yearly income by doing this work for your neighbors. With Case Products your profits swell.

For seventy-two years we've built to give service to busy farmers. Our name is world wide. In buying always bear it in mind. Tell us on a card you want our Catalog and we'll see that it is delivered to your door postpaid.

**J. I. CASE T. M. CO., Inc.**

741-791 State Street

RACINE, WISCONSIN, U. S. A.

Canadian Branches: Toronto, Winnipeg, Saskatoon, Regina and Calgary



THE FARM
A Beef Cattle Proposition for a Half Section Farm

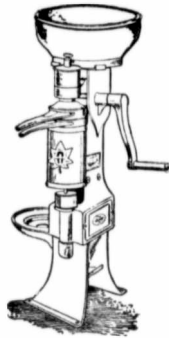
By W. H. PETERS, N. Dak. Exp. Station.

The great majority of farmers in this state are just beginning to think seriously of introducing cattle onto their farms. Most of them now have but a very few head of cattle or none at all.

To the man located in the country at some distance from a railroad, the man with practically no buildings and no money with which to build them, the dairy or dual purpose type of cattle will be found more difficult to establish than a straight beef breed.

Most of these men are of a type who are always buying stock when the price is going up and selling when the price is going down. The experience of a great many farmers throughout the United States leads to the belief that especially in the Northwest at present the type of farm that is proving the most profitable is the farm from which about one-half of the income each year is derived from the sale of crops and one half of the income from the sale of stock or stock products.

ARE YOU PREPARING



to capture the last dollar of profit from the record CROP of CORN you are raising this year? It will mean MORE MILK at a time when in former seasons you were short of feed.

MAGNET Cream Separator?

is the one machine in the field to-day that will extract the last ounce of butter fat at a speed and under conditions of ease and cleanliness that have scarcely been reached—certainly never surpassed by anything else in dairy machinery.

THE SEPARATOR of Extreme Simplicity

It is not the lowest priced machine made but it is the best value in any Cream Separator known. Quality, Character and the highest possible efficiency is first guaranteed by the severest tests, then a modest profit to the manufacturer is added over bare cost of material and construction.

The "Magnet" is made in Canada by Canadian engineers who have first of all gained their experience on Canadian dairy farms in all essentials to a separating machine that fits it perfectly and economically to every requirement.

We will easily prove what we say by showing you the MAGNET in your own dairy. The design and construction of the machine is what has compelled us to double the output of our factory this year.

The Petrie Mfg. Co. Ltd.

Head Office and Factory: HAMILTON, ONT.

Winnipeg, Calgary, Regina, Vancouver, Montreal, St. John, Edmonton, Lethbridge.

Klean Kwick Vacuum Washer For Hand, Gas Engine or Electric Power



TO accomplish best results in washing clothes, it is necessary to force the water through the fabric. Klean Kwick Vacuum Washer does this work perfectly, the air pressure and suction in the stamper accomplishing perfect results, and does not run any harder with the clothes in than with just the water.

Exclusive Selling Agents for Canada

Cushman Motor Works of Canada, Ltd.

Builders of Light Weight, High Grade Gasoline Engines for all Farm Power Work 286 Princess Street, Winnipeg, Man.



Dr. Thomas' Ectelectric Oil Relieves all Pain in Man or Beast 25 Cent Bottles at all Dealers

FURS! HIDES! WOOL!

If you want quickest returns and most money for your furs, hides, wool, etc., ship them to FRANK MASSIN Brandon, Man. Write for prices and shipping tags.

If grade cows are used the products must be sold for meat or as beef cattle. The tendency to market cattle at a young age and in condition for slaughter is growing rapidly in popularity with both producer and packer, and the practice of doing it is also growing rapidly. It must, therefore, be profitable. When marketing of young cattle as baby beef first began it was thought that it would be a practice that could be profitable only in the corn belt. However, experience has shown that young cattle can be grown and shaped for market at an early age just as economically in Manitoba as in Iowa, and that the underlying principles that warrant marketing cattle as baby beef in Iowa apply just as completely in Manitoba. Without doubt a much larger percentage of Manitoba calves could be marketed for better profits as baby beef than in Iowa.

The production of baby beef is a business suited especially to the mixed grain farm and many North Dakota farmers now undertaking to establish a herd of beef cattle on their farms will find this method of handling and marketing their produce more suitable to their circumstances, than the old method of growing everything to the age of two and one-half or three years and then marketing in high condition.

In answer to the third question it will be found that where one-half the income is derived from the sale of crops and the other half from the sale of stock the average half section farm in Manitoba will support a herd of from 20 to 25 cows and allow for the raising and fattening of their calves to the age of fourteen to sixteen months.

As to the question of buildings the principal item is that of economy. A herd of beef cattle can be carried through the winter just as successfully in a well built straw shed as in a barn built of pressed brick and cut stone, and until such time as the herd is showing sufficient profit to warrant the construction of a well built modern barn, the farmer will do well to make use of straw and cheap lumber in the housing of his stock.

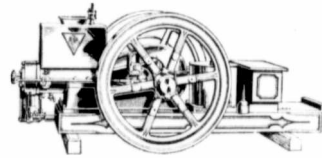
In answer to the first question, quality and topography of the farm must be considered. The following crop system, however, will nicely produce a sufficient quantity of suitable feeds for the herd of twenty cows and their calves on the average Western Canadian farm.--Wheat 120 acres; oats 40 acres; barley 30 acres; alfalfa, 40 acres; permanent pasture, brome or western rye grass

40 acres; corn 30 acres; farmstead 20 acres.

The permanent pasture and the alfalfa are crops that will be allowed to remain on the fields upon which they are seeded for a number of years or as long as they continue producing well while the other crops will be worked in rotation.

Either one of two methods may be used in handling and feeding the cattle on a farm as above outlined. The calves may be allowed to nurse the cows either allowing them to nurse twice a day or allowing them to run with the cows or the cows may be milked and the calves raised on skimmed milk. The first mentioned method is the one most used in producing baby beef. It requires considerably less labor in caring for the cows and calves and produces considerably the best calves. If, on the other hand, the farmer is fortunate in having a herd of high producing cows it will pay to milk the cows if the labor is advisable. In either case one principle is essential to baby beef production, that is, to keep the calves continually gaining and fattening as much as possible from birth to the time they are to be marketed. This can be done very easily where the calves are allowed to nurse but requires very careful and skillful feeding of skimmed milk fed calves. In fact experience indicates that if the cows are milked and the calves raised on skimmed milk the baby beef idea had better be given up and the calves carried until they are at least a year and a half old when they may be sold as stockers or carried still further to two and one half years and sold as feeders or be fattened on the farm and marketed. The latter method requires more pasture and more especially to sections where land rough feed for winter and is suited is plentiful and cheap.

In the production of baby beef it will pay to begin grain feeding the young calves as soon as the cows begin to go down in milk flow in the fall and they must be put in a group by themselves and fed heavily as soon as the grass is gone and winter feeding begins. Alfalfa, corn and barley should be the principal feeds used for the calves on the above farm. The corn may either be put in a silo and fed as silage or fed as dry fodder with the corn on it. Some additional corn may be husked and fed with the barley and the stalks fed to the old cows through the winter. An average grade calf sired by an average pure blood beef bull dropped in March or early April and allowed to nurse its mother through the summer will weigh from 400 to 500 pounds by November 1st. Such a calf



## Alpha Gas Engines

### Do Any Work--Use All Oil Fuels

An engine that will do the work you want it to do; that will operate without being continually adjusted and tinkered with; that will burn any fuel you wish, is one of the greatest conveniences you can have on your farm.

Alpha Engines entirely measure up to these requirements in every respect. You can always rely on them. They start and run on a simple, low speed magneto. There are no troublesome batteries to watch or fuss with, or wear out and frequently require renewing. Simply turn on the fuel, give the flywheel a turn, and the engine is good for a steady all-day run at any kind of work.

Eleven sizes, 2 to 28 horse power. Each furnished in stationary, semi-portable, or portable style, and with either hopper or tank cooled cylinder.

Alpha Engines are ideal for farm use, because any one can operate them. Your wife or boy or hired man can use one of these engines without the least trouble, and do easily many small jobs that would otherwise require a lot of time and hard work. Alpha Engines will save you money by doing quickly those time-wasting jobs that ordinarily take you away from field work that is demanding your attention.

Ask for the Alpha Engine catalogue. It will give you a lot of valuable information on the many superior and exclusive features of these engines, and will show you how to get more work done in less time and at less cost.

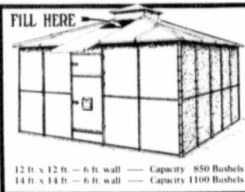
## DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA.  
Sole distributors in Canada of the famous De Laval Cream Separators. Manufacturers of Ideal Green Feed Silos.  
Catalogues of any of our lines mailed upon request.

WINNIPEG VANCOUVER MONTREAL PETERBORO

You saw this advertisement in this magazine. Don't forget to say so when writing.

## WE MAKE ANYTHING IN SHEET METAL



### GET OUR PRICES!

Our sheet metal products are best by every test. They have withstood the climate and usage tests for years.

The superiority of our products is proved by the fact that more farmers are calling for them every day.

Our factories are equipped with the most modern machinery, our workmen are efficient, and owing to our buying possibilities we are able to sell you the very best sheet metal products at very low prices.

Get Our Special Catalogue on  
**METAL SIDING**  
**ROOFING**  
**GRANARIES**  
**PORTABLE BUILDINGS**  
**CULVERTS**  
**WELL CURBING**  
**TANKS**  
**TROUGHS**  
**CEILINGS, ETC.**



Get our Catalogue. It tells all about our Goods and our Guarantee

### Send This Coupon Now

Mark an X in the square opposite the item you require information about. Remember in dealing with us you get rock bottom prices.

Winnipeg Steel Granary & Culvert Co. Ltd.  
DEPT. 17, WINNIPEG

Gentlemen: Send me particulars and prices on

- Square and Round Granaries, Tanks and Troughs.
- Portable Buildings.
- Metal Roofing and Siding.
- Culverts and Well Curbing.
- Ornamental Ceilings and Cornices.

NAME.....  
ADDRESS.....

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will require an average of 5 pounds of alfalfa hay, 15 to 20 pounds corn silage, 4 pounds corn fodder and 7 pounds of grain per day for the following six or eight months. Naturally less than this will be required in the beginning and more toward spring for the calves will grow rapidly and increase as well as in their capacity for feed from month to month through the winter. Fed in this way they will weigh seven to eight hundred pounds when fourteen to sixteen months old, and will very nearly always top the during the past few years hmt market when sold. Prices for such calves have ranged from seven to eleven cents per pound during the past five years at America's six leading markets.

The principal requisite to keep in mind in wintering the breeding herd of cows is to simply keep them healthy and in moderate condition which can be done with oats straw, silage or corn fodder and alfalfa hay requiring the use of very little or no grain. The cows should be bred to calve in March or April, so that the calves can be marketed as finished baby beef by the next June or July at the latest. None but a moderately good pure blood beef bull should be used as a sire for the production of baby beef calves.

The above method of handling the beef herd has been introduced on many corn belt farms also on a few farms outside the corn belt and is proving a more profitable method than the old one of raising all calves to the age of two and half or three years. There is every reason why the same practice should prove just as profitable to the farmers of the Northwest.

**Red Polled Cattle.  
The Ideal Farmer's Cow.**

The Canadian Red Polled Association has recently issued a little booklet setting forth the very strong claims this type of animal does offer to the stock-man or mixed farmer who is intent on handling a breed of cattle which will yield him "a good quantity of high quality milk, and whose steer calf will make a profit as a feeder." In other words "milk plus beef."

For the information of farmers, the annual membership fee in this association is \$2.00. Pure bred stock may be shipped at half rates to all points in Canada. The secretary of the association is Mr. George H. Greig, Chambers of Commerce (160 Princess Street), Winnipeg, who will be glad to give every assistance to any farmers interested in the Red Polled.

We have much pleasure in quoting the following passages

from the booklet referred to above and which should be in the hands of every farmer in these days. After giving the history of the herd it continues:

"The rational introduction of some kind of pure-bred or high grade live stock tends to interest the young folks and keep them on the farm. The Canadian Shorthorn Association is preparing to establish an advanced register to encourage the development of the dairy qualities of that breed. This only goes to show the trend of public opinion in that the breeders of that popular possessing dual qualities. In the Red Polled cow this dual purpose type of animal already exists, the term "Red Polled" and "dual purpose" being practically synonymous.

For baby feed purposes, the kind of meat required now by an exacting market, no breed is their superior, for the steers can be fully matured at two and a half years of age.

Under two years old Red Polls have at England's greatest fat stock shows proved superior to all other breeds. In 1909 at Ipswich a Red Polled heifer was placed first in the show, and at Smithfield was reserve female champion. In 1910 at Norwich a steer of this breed won the championship over all breeds and cross-breeds; again at Ipswich another championship of the show as well as reserve champion was placed to the credit of the breed.

**Slaughter Test.**

Slaughter tests of steers at International Exposition, at Chicago, years 1906, 1907, 1908, 1909, 1910, 1911, and 1912.

Of the 27 head that were sent from the show to the block in 1906, six were Red Polls. In the yield per cent, dressed weight, to the live weight: Two-year-olds, highest an Angus, 69.5; second, Red Poll, 69.2. Yearlings, highest Red Poll 67.5; second Hereford, 67.1; third Red Poll, 66.8.

**Dairy Qualities.**

It would not be expected that a breed of cattle, so able to give a good report of itself on the block, would excel in the production of milk, especially in these days of specialization; yet in English herds there are cows with 12-month records of 14,189, 14,068, 13,771 and 12,230 pounds of milk, whilst in some large herds an average production of over 9100 pounds is maintained. The percentage of butterfat, as given for all tests made of Red Poll cows, is very high. In a test conducted in England 27 cows gave an average of over five per cent. of butterfat.

**Why Breed Red Polls?**

Because they are unsurpassed as dual-purpose cattle.

Because of their ability to profitably turn feed into milk or beef.

Because, not being inbred, they are less liable to tubercular troubles—the bane of all dairies.

Because of their high average percentage of butterfat.

Because of their absence of horns and their propensity in breeding the horns off grade cattle.

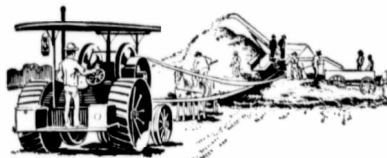
Because of their beautiful solid color, kindly disposition and hardy nature.

Because they best fill the requirements of the "farmer's cow."

**Two of a Kind**

A young matron, giving a dinner party, was nervous lest the new cook might not prove equal to the occasion. Going down to the kitchen at the eleventh hour, she exclaimed: "Why, Ellen! If we haven't forgotten all about the entrees!"

"Shure enough we have, mum!" replied Ellen, posing in mid-air a large platter she was wiping. "Ain't we the couple of blunder-headed mutts!"



**PRAIRIE HARVESTER OIL**

A most durable oil for binders, separators, disc plows and farm machines of all kinds. It is heavy bodied, yet free running; takes up the play and saves wear. Not affected by weather.

**Standard Gas Engine Oil**, an absolutely reliable lubricant for all types of internal combustion engines—either gasoline or oil burning.

**Capitol Cylinder Oil**, manufactured especially for the lubrication of steam tractor and stationary steam engines.

**Thresher Hard Oil**, a high grade cup grease for use on separators and other farm machinery.

**Eldorado Castor Oil**, a heavy oil for farm machinery, especially adapted for loose-fitting and worn bearings.

Ask for our lubricants in steel barrels equipped with faucets—the clean, economical method of handling oils on the farm.

Branch Stations Throughout the Dominion

**THE IMPERIAL OIL COMPANY Limited**

Made In Canada



You saw this advertisement in this magazine. Don't forget to say so when writing.

**Summer Holiday Trips TO EASTERN CANADA AND UNITED STATES**

Toronto, Niagara Falls, New York, Boston, Montreal, Etc. Combined

**RAIL AND FRESH WATER CRUISES**

in Exquisitely appointed trains and veritable palaces on water, insuring comfort and rest to the pleasure seeker.

**SUMMER SERVICE STARTS** with first train from Winnipeg Saturday, June 19, at 10.30 p.m. and every Tuesday, Thursday and Saturday thereafter, connecting at Fort William with S.S. "Naronic," "Huronic" and "Hamonic" respectively, and boat special from Sarnia. **DIRECT CONNECTIONS—BOTH DIRECTIONS.**

**DAY TRAIN from FORT WILLIAM** leaves immediately after arrival of steamer

See the *Scenic Wonders of Western Ontario* (The Nibigami District.)

**LOWEST Excursion FARES** LIBERAL STOP OVERTS

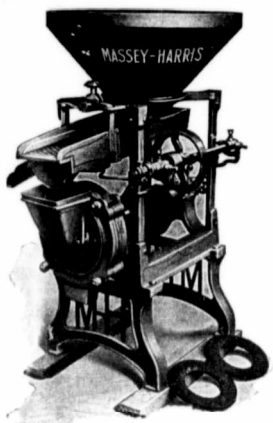
Your patronage is earnestly solicited. Literature furnished. Itineraries arranged.

**W. J. QUINLAN** District Passenger Agent, Winnipeg, Man.

You saw this advertisement in this magazine. Don't forget to say so when writing.



# It Pays to Grind the Feed for your Stock



**T**HE Increased Food Value of ground feed over whole grain is good reason for its use.

Many farmers claim that by substituting ground feed for unground, there is a saving of from one-fifth to one-third of the grain and at the same time it produces more flesh, more milk and cream, more rapid growth and keeps the stock in better health.

## Use a Massey-Harris Grinder

Because of its great capacity, economy of operation, high character of work done, and its durability. Grinds fine or coarse as required; has Safety Break Pin; Quick-Relief Lever—in fact everything necessary for a Reliable and Satisfactory Grinder.

Made in three styles and seven sizes, with or without Bagger Attachment, as desired.

**MASSEY-HARRIS CO., Limited.**

Head Offices—Toronto, Canada.

—Branches at—

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

—Agencies Everywhere—



DESCRIPTIVE CIRCULAR  
Free from the Massey-Harris  
Agent or mailed on request.

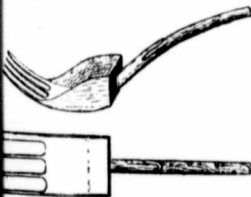
You saw this advertisement in this magazine. Don't forget to say so when writing.

### Watering Device for the Chickens

A safety watering device may be made from a 5½-bushel vegetable basket made over in the style pictured. Either the bottom is removed and a smaller one substituted or a larger sized circular in the basket to strengthen the top hoop is removed and the board or hoop is nailed midway. Staves may be given the desired spread to fit any pan by the position in which the middle board is placed. Two slats are brought to a point to prevent cows from perching upon this device.



**Shovel and Fork Combined.**  
The following illustration of an ingenious but simple contrivance for picking up small litter—straw, manure, stable litter, etc.—too large for the shovel and also too small to be forked up, is taken from the "Swiss Journal of Agriculture."



## Practical Pointers for Farm Hands

(Continued from July issue)

135. Help to keep down expenses. Stop the leaks. Act the part of a man and you'll never want for a place to work at the highest wages, and in a good home where you can get some enjoyment, while you are looking forward to the time when other men will be working for you.

136. Never lead a horse across a double tongue like some hay rakes have. If he should step between, you could not get men enough around him to get his foot out.

137. Have a place in the hay mow to keep the pitchfork. Don't leave it any old place sticking in the hay. You may lose a foot by it.

138. Don't neglect the hay manger. Clean it out clear to the bottom every day. Some horses have their mangers so full of sticks and refuse hay that they get only half a feed. Look at some of the mangers in the neighborhood and see.

139. Keep the crupper clean. Some horses suffer untold agony because dirt has been allowed to gather on the inside of the crupper until it has worn a deep sore underneath the tail. This sore is irritated continually by the pressure of the check rein, which jerks the backstrap at every step. Think of a horse being whipped along on a heavy pull under such

conditions day after day all the season through.

140. Don't get into the habit of going out evenings and Sundays without telling where you expect to go. Nothing will arouse suspicion and estrange you from the home so much as this one practice. Besides, if you should meet an accident no one would know where to find you.

141. When you want to quit your job, tell the boss so like a man. Don't sneak away and send him word. Tell him that you have a business matter which you wish to mention to him. Then face him frankly and tell him why you wish to make a change. If it be better wages or better buildings or better board or better

horses or nearer town or if you don't feel at home with him any more; if the women folks don't like you or you can court a certain girl more conveniently, or you are afraid you will not get your pay—whatever it is, tell him the reason. If you pass away mysteriously, he can say very little in your behalf to those who inquire. If you leave like a man, he will be very apt to speak well of you no matter what your disputes have been.

142. Don't be afraid to ask for your wages. Not many farmers pay monthly like business men do, because not many hired men want their money until the end of the season. When you need money, just tell him that you wish to draw a little on your account in a few days. If he always has ready money it is not necessary to tell him ahead. Some men do not know how to approach the boss for money and finally become dissatisfied with the place

### Thresherman's Wagon Tank and Engine Tender

WE PAY THE FREIGHT



Made of 20-gauge Galvanized Steel thoroughly braced and fully guaranteed.

SEND FOR CATALOGUE

Depth	Width	Length	Weight	Capacity	Price
2 ft.	3 ft.	10 ft.	335 lbs.	12 Bbls.	\$35.00
2½ ft.	3 ft.	10 ft.	385 lbs.	16 Bbls.	\$42.00

FREELAND STEEL TANK CO., - HALBRITE, SASK.

WE MADE TANKS FOR YOUR GRANDFATHER

when the boss has the money in the house all the time, and a few dollars spending money would have made them as jolly as a monkey.

143. Never set a machine in gear while it is in motion. The jerk will often break cogs and chains and other parts. Let the team start while it is already in gear and there will be no jerk.

144. When drilling seed grain, watch the dimples in the grain in the seed box. When a grain tube stops up it makes no dimple, and you can easily see which one it is inside the seed box, as all the others will have a dimple, caused by the grain running out below.

145. See that your drag harrow runs straight. If one end gets ahead it throws a lot of teeth in the same track.

146. Don't put axle grease into a hard oil box. It will not feed through and will soon form a thick crust at the bottom and run dry and hot.

147. Never grind a scythe blade on the bottom side. Keep that side as flat as possible to make it take the grass. Look at a new one and see the proper shape. Many a new scythe has been ruined by one grinding on the wrong side.

148. Watch the length of tongue on certain implements. Sometimes on a disc or drill or cultivator the hitch will get so far ahead that the horses on the tongue will bump their knees against the neckyoke half the time. This will happen in a four-horse team, if the outside horses get too far behind. When you hear the neckyoke rattle you may be sure that some horse's knees get a sharp rap.

149. Don't hit a horse's foot or kick it to make him lift them up or step around. They will not know what you mean. Slap the forearm or hip for that purpose.

150. In setting a post, tamp the first three inches of dirt in the bottom. That is what holds the bottom of the post, and unless that part is solid the post will never be firm no matter how much you tamp the top.

151. When you drive a fence staple into a soft post, always set it a little diagonally. If you set it straight with the grain of the wood, it will make a little split between the points and will not hold.

152. When nailing on boards, always drive the two outside nails fairly near the edge. It is the edge that turns up and makes a crack.

153. Don't take the wheel burrs off a wagon or buggy and lay them on the ground face downward. Whatever dirt or straw sticks to them will get into the wheel when you replace them again.

154. Don't leave the end-gates

out of a wagon box that is sitting around unused. Put them in to hold the box in shape.

155. Don't let sideboards, or any other boards, lie on green grass. The sun will warp them more in an hour than in a whole day where there is no grass.

156. Don't leave the cover off the axle grease. If dust or dirt gets into it, the grease will do more harm than good. Better throw it away.

157. Keep the neckyoke on the front end of the wagon when not in use. A little soil in the end and a little rotting will make the ring come off and then your neckyoke is ruined.

158. If the outer part of a singletree gets much worn by the wheel, turn it end for end before it gets too bad. Wear out both ends instead of one.

159. When a bot fly gets to scaring a horse in front, stop and kill it with your hands by slapping against the horse when the fly alights. No amount of jerking, whipping, swearing and slapping will make the bot fly behave any better. Don't forget that.

160. You can make a good salve for sore necks and shoulders by wetting some sulphur with all the turpentine it will absorb, and then adding enough fresh (not salty) lard to keep it from being mealy. This will usually cure without resting the horse. Shorten the hames at top or bottom to alter the draft to a different part of the shoulder. Always lower the pull to relieve the neck. The higher the tugs the more they pull down on the neck. The lower the tugs the more they pull on the points of the shoulders. A good rule is to move the tugs farther away from the sore. A small change makes a great difference in the draft. Don't overdo it.

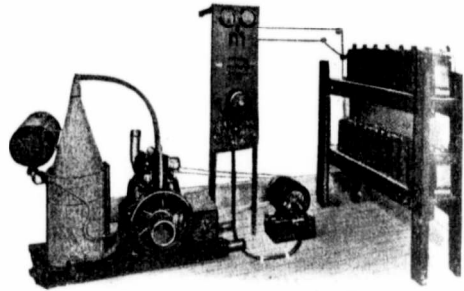
161. If you are not sure what to do, report to the boss. Don't be guilty of experimenting at his expense.

162. Don't carry edged tools so that the edges will touch each other or touch anything that will dull them. Don't haul them loose in a wagon so they can shake against the sides or against any metal. Put them in a pail or roll them in a sack or blanket.

163. Never pass a board or a stick which has a nail sticking up so that a man or a beast can step on it and get hurt. A rusty nail is worse than a dose of poison. Either turn it down or carry it to the scrap pile.

164. Look out for nails in the stall or manger which can possibly get into a horse. They seem to work out of lumber some way, both heads and points, and are responsible for many of the mysterious scars on horses which represent a lot of suffering.

CUSHMAN STORAGE BATTERY  
ELECTRIC LIGHT PLANTS



Engine shown in illustration is our 4 h.p. size, throttle governed and equipped with Schebler carburetor, ensuring steady, quiet operation of engine. Same engine can be used for grinding, sawing, etc., or on any grain binder for which we can supply full attachments.

CUSHMAN MOTOR WORKS OF CANADA, Limited  
Builders of Light Weight, High Grade Gasoline Engines for all farm power work  
288 PRINCESS STREET, WINNIPEG, MAN.

EXCLUSIVE SELLING AGENTS FOR: Fanning Mills, Smit and Pickling Machines, Vacuum Washing Machines, Lincoln Grinders, Lincoln Saws, Hoop and Universal Hoists, Automatic Cream Separators, Champion Cream Separators, Portable Grain Elevators, Wagner Hardware Specialties, Mountaineer and Little Giant Neck Yoke Centers.



All out-doors invites your  
KODAK

EVERYTHING that you are interested in is worth a picture. On the home place, at your neighbor's, at the picnic, on your fishing or hunting trip—wherever you go there are scenes and incidents that you can preserve for all time with the click of the Kodak shutter.

Ask your dealer or write us for a copy of "The Kodak on the Farm," a beautifully illustrated little book that not only tells about the new things in Kodakery but shows as well, by attractive pictures, the pleasures and the uses of a Kodak on the farm. It is free for the asking.

CANADIAN KODAK CO., LIMITED,  
606 KING STREET W. TORONTO, ONT.

Threshing Machine For Sale

FOR SALE, by private bargain, a Great West Thresher (with 32 in. cylinder, 56 in. body) with a four cylinder Sawyer-Massey 45 horse power Traction Gasoline Engine. In First Class condition, only purchased a year ago. Administrators must realize in order to wind up estate. No reasonable offer refused. On view at farm WJ of section 3, 3, 18, West of 1st., between Ninga and Killarney, Man.

For full particulars apply to  
THE STANDARD TRUSTS COMPANY, Administrators  
346 Main Street, WINNIPEG

165. Don't sharp on th can knock Most blind in this way might have 166. Don't stall partite horse to get made, don't it is fixed, some other 167. Don't newspapers barn unless Don't borro return. 168. Get when you a habit to b riddance to a called more childish. 169. Don't matches in there is stra much of a never pay tl 170. Whe clean the sto ally. Don' doing too m may get hurt to be taken c think of th breakdowns and hours c times. 171. If th don't hesita and a p which you from once a harass them to use these please them these requisi desire for th who does no behind his l hurt his feeli said. 172. Don't then or talk boss wants to you. Face hi take your or There is som ing to a man l time for joke; the boss has s to say. To be Conclu 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. War Story Nature ne children nor like, says Ra This story co several men, no duplicates, really the fat! Chief Sky, a who is respon

165. Don't have a harness peg sharp on the end where a horse can knock his head against it. Most blind horses are made blind in this way, and how easily it might have been prevented.

166. Don't have a crack in the stall partition large enough for a horse to get his foot in. If one is made, don't leave the barn until it is fixed, or else tie the horse some other place.

167. Don't take the family newspapers upstairs or out to the barn unless you bring them back. Don't borrow what you cannot return.

168. Get up in the morning when you are called. It is only a habit to be called twice. Good riddance to a man who has to be called more than once. It is childish.

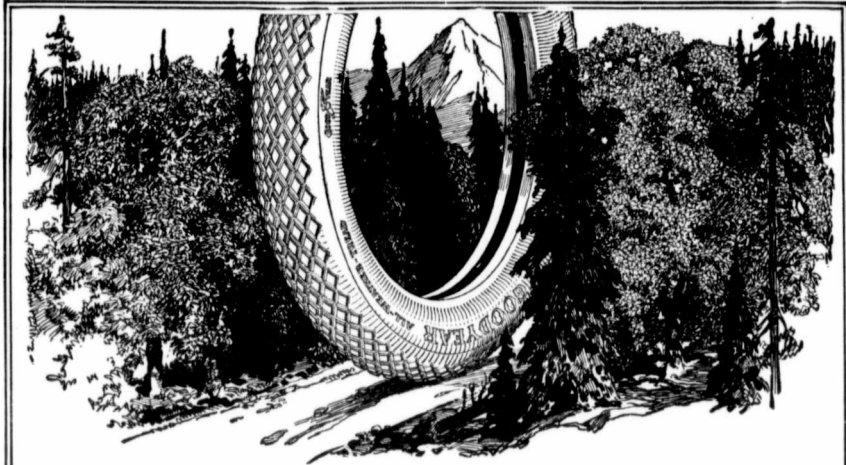
169. Don't smoke or light matches in the barn or where there is straw or hay. It is too much of a risk and you could never pay the loss.

170. When you are asked to clean the stove pipe, do so cheerfully. Don't act as if you are doing too much of a favor. You may get hurt or get sick and have to be taken care of yet. Anyway, think of the stormy days and breakdowns that gave you hours and hours of rest in the busy times.

171. If there is no bathroom, don't hesitate to ask for a wash tub and a pail of warm water, which you may take to your room once a week. It might embarrass them to have to ask you to use these things, but it will please them to supply you with these requisites if you show a desire for them. The hired man who does not bathe is talked of behind his back, and it would hurt his feelings to hear what is said.

172. Don't play with the children or talk nonsense when the boss wants to talk business with you. Face him like a prince and take your orders like a soldier. There is some satisfaction in talking to a man like that. There is a time for jokes, but it is not when the boss has something important to say.

To be Concluded in September issue



# The True Test of Tires Is Driving on Country Roads

Not smooth city boulevards, but rough country roads settle all doubts of which tire is best.

That's why Goodyear Tires have won with the farmers.

For they're built in perfect balance. The All-Weather Tread is made double thick and the "carcass" beneath extra-strong to support it.

And the beauty of Goodyears has made them the favorites on boulevards, too.

### Top-Place In Four Years

Four years ago we began in a modest way to build these tires at Bowmanville, Ont.

Car owners—many of them farmers—gave Goodyears a trial.

At first some ran a Goodyear with a rival tire on the opposite wheel. Those early Goodyears, by their records, sold the tires of last year—when men bought as many Goodyear Made-In-Canada Tires as there are cars in the Dominion.

Yet the Goodyears of today excel those earlier ones. For we have added betterments as fast as our experts found new methods.

### Protect in 5 Ways

Five great defenses are built into Goodyear Fortified Tires. They guard against the worst attacks a tire encounters—Against Rim-Cuts, Against Blow-Outs, Against Loose Treads, Against Insecurity, Against Punctures and Skidding.

These five features are all controlled by us—no rival tire has them.

They protect against all troubles except mishap and misuse.

### Prices Reduced 37%

Yet Goodyear Tires cost 37 per cent less today than they did two years ago when we did not make so many.

As our output multiplied, reducing factory cost per tire, we passed on the saving to Goodyear users. We gave a third reduction in spite of the war tax on all our raw material.

Some makes cost less because of cheaper methods and materials. Some cost more because of small output.

But figured on cost per mile Goodyear Tires cost the least.

Any dealer can supply you. Ask at once for our new price on your size.



**GOOD YEAR**  
MADE IN CANADA  
**Fortified Tires**  
No-Rim-Cut Tires — "On-Air" Cured  
With All-Weather Treads or Smooth

**THE GOODYEAR TIRE & RUBBER CO. OF CANADA, LIMITED**  
Head Office, Toronto, Ont. Factory, Bowmanville, Ont.  
Makers of Truck, Motorcycle, Carriage and Bicycle Tires and Rubber Belts, Hose and Packing  
The Goodyear Tire & Rubber Co. of Canada, Limited, has no connection with any other Canadian company using the Goodyear name (230)

## War Eagle Now Symbol of Peace and Success

Story of "Old Abe" Model for the J. I. Case Trade Mark Recalls Days of Martial Glory.

By B. M. PETTIT, J. I. Case Threshing Machine Company.

Nature never rhymes her children nor makes two men alike, says Ralph Waldo Emerson. This story concerns a bird and several men, of whom there are no duplicates. The man, who is really the father of this story, is Chief Sky, a Chippewa Indian, who is responsible for the trade

mark of a great modern manufacturing institution. This leader of his tribe, who never saw any threshing device save a squaw, was the advertising genius who unconsciously was responsible for one of the country's best known marks of trade—Old Abe—the Case eagle. Every Case car

S.H. Henderson, Pres. E. H. Dewart, Vice-Pres. C. D. Kerr, Treasurer

## The WAWANESA MUTUAL INSURANCE COMPANY

HEAD OFFICE: WAWANESA, MAN.

A. F. KEMPTON, Secretary-Manager

Amount of Insurance in force Dec. 31st, 1914 \$42,299,825.00

Assets over Liabilities \$710,596.60

THE NUMBER OF FARMERS INSURED, 31st. DEC. 1914, 27,175

The Largest Farmers Mutual Fire Insurance Company in Canada.

## Family Group Photos a Specialty

AT

**STEELE & CO., LTD.**

MAIN ST. AND BANNATYNE AVE.

WINNIPEG

carries a tiny picture of this famous bird.

Old Abe, the famous war eagle of Wisconsin, was captured by this chief during sugar making time in 1861 on the Flambeau River, near the division line of Ashland and Price counties. His birth place was a tub-like nest of mud and sticks in a tall pine which was felled by the Chipewas, who were trading down the river under the leadership of this son and successor Thunder of Bees.

Chief Sky was a good business man. Under his guidance his people prospered. So it is in order that the eagle, which he captured, was destined to be the emblem of a concern whose products bring prosperity to the people who use them.

While on the road, the young chief sold his precious bird to Daniel McCann, of Evil Point, for a bushel of corn. An old veteran with a bias for oratory thus describes the transaction: "And for this paltry sum was a noble bird sold from freedom to captivity; from barbarism to civilization; from the murmur of the pines to the crash of battle."

Daniel McCann carried the eagle to Chippewa Falls, where a regiment was just recruiting for the first Wisconsin Battery. The clouds of the Civil War were gathering heavily. Failing to dispose of his bird, he proceeded to Eau Claire and offered the eagle, now full grown and handsome, to what subsequently became Company "C" of the Eighth, or Eagle Regiment. Captain Perkins was very hesitant about accepting the volunteer, but finally agreed to take the austere bird to the front.

The eagle was christened Old Abe in honor of the man whom nature has never rhymed with another. The hearts and minds of all the people were centered on Abraham Lincoln, and it was a reflection of the esteem in which he was held that the eagle was named for him. Old Abe was duly sworn in. Around his neck they placed red, white and blue ribbons, and on his breast a rosette of the same colors. James McGinnis asked the privilege of being Old Abe's keeper. "There was no competition for the job," "Jimmy" McGinnis had the monopoly.

Old Abe was in thirty-six battles. At the sound of the regimental bugle he would draw in his head and bend it gracefully in anticipation of the coming shock. When the squadrons rushed into line he would tremble with excitement. When the crash came he would spring up and spread his pinions, uttering inspiring screams. The intense

excitement of the march and battle, the hurrying and frightened populace, roused all the native fire and inspiration of this military bird. His appearance was at all times magnificent and picturesque. He was in his glory during battle. It was then that his eyes flashed with uncommon lustre. Old Abe enjoyed war. The men of the eagle regiment said that he gave them new courage.

During the engagements he suffered but few slight wounds, and returned home to Madison hale and hearty. In 1880, when the soldiers' reunion, on a vast scale, was being held in Milwaukee, Old Abe attended, being carried in the procession. He was sleek and majestic, a complacent creature of the forest. General Grant and Old Abe were the honored guests of this military reunion. When the band played he uttered his battle scream, consisting of five or six wild trilling notes in quick succession. It was a great day for Old Abe. This was his last public appearance.

In the winter of 1881 a fire started in some old paints and oil stored in the basement of the Wisconsin State Capitol, where Old Abe spent his days. At the scent of the smoke and fire he let loose his battle cry, at first vigorous, but soon weaker and weaker. When the firemen at last reached him the eagle seemed injured by the smoke. His breast heaved. His heart labored heavily. His plumage was disheveled. Thereafter he ate sparingly. His eyes lost their wonderful lustre. His strength failed. On March 26, 1881, with a slight tremor, Old Abe expired in the arms of his keeper, George Gillis. It is but ironical, that, like the great Napoleon, Old Abe died out of battle.

Old Abe witnessed the saddest war in history, but to-day he is known and revered throughout the world as a sign of peace and plenty, the sign of industry. Business men know him because every Case machine bears his picture. Over the main door of the Case office is a gigantic bronze of Old Abe.

Old Abe had some striking characteristics, which make him the most individual bird in all history. Homaston, one of his bearers, said that Abe possessed a blending of caution and courage, an indomitable will, a love of the inspiring. Jerome I. Case, founder of the company which bears his name, had many of these characteristics. He was a pioneer with a far-seeing vision of the advance of American civilization. He takes his place in history as one of the great American business men.



### Less Money Spent for Coal

**What Makes It Possible**

-- is what the Hecla Furnace means for you. Its patented, steel-ribbed fire-pot radiates the heat so quickly that more of it is kept in the house and less goes up the chimney, six tons of coal do the work that would otherwise require seven.

**Joints Forever Tight**

The "fused joints," an exclusive "Hecla" feature, forever seal up the openings where gas or dust might escape into the house--they are guaranteed never to leak.

**Ease and Health**

"Hecla" Independent gratings save coal and eliminate the poker. The "Hecla's" large circular water pan supplies plenty of moisture to every room.

**Send for This Book**

"Comfort and Health," a book about furnaces and heating, will help your selection. We would like to send it to you.

**Use the Coupon**

**Clare Bros. Western Ltd.**



WINNIPEG, MAN.  
Successors to Clare & Brockert, Limited

**Coupon CLARE BROS. WESTERN, LTD., Dept. 1 Winnipeg, Man.**

3 C Send me your Booklet--"COMFORT AND HEALTH"

Name \_\_\_\_\_ Address \_\_\_\_\_



## When your "Think Tank" thinks Tank!

Write us for Tank Circulars and Prices

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SPECIALISTS IN TANKS

Saskatoon Saskatchowan

Manufacturers of Wooden Tanks of all kinds, Belt Guides, Grain Wagon Boxes, Big Bundle Carriers, The Caswell Automatic Binder Hitch

# UNION BANK OF CANADA



Money Orders issued by the Union Bank of Canada

are conveniently secured, safely forwarded, readily cashed and inexpensive. Issued for any sum up to \$50.00, at a cost of from 3c to 15c. Payable at any branch of any chartered bank in Canada. Yukon excepted, and in the principal cities in the United States.

Over 320 branches in Canada. Over 210 in the West.

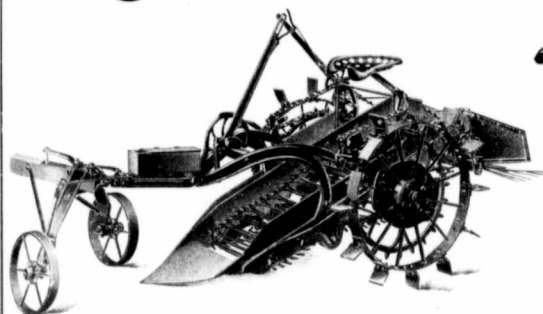
#### BRANCHES IN MANITOBA

Baldur, Bertle, Boissevain, Brandon, Carberry, Carman, Carroll, Clearwater, Crystal City, Cypress River, Dauphin, Deloraine, Glenboro, Hamota, Hartney, Holland, Killarney, Manitow, McCreary, Melita, Minnedosa, Minto, Vorden, Neepawa, Newdale, Nivra, Rapid City, Roblin, Russell, Shoal Lake, Somerset, Souris, Strathclair, The Pas, Virden, Waskada, Wawanesa, Wellwood, Winnipeg.

Head Office, Winnipeg  
Capital Reserve \$5,400,000  
Total Assets over \$50,000,000

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# Big Profits in Potatoes



## No. 334 HOOVER DIGGER

Strength and great capacity characterize this machine.

Equipped with a rear agitating rack and vine separator, which have a backward and forward motion, sift all dirt and rid the potatoes of all vines.

Get our booklet on potato diggers before digging time and find out about the best line of potato diggers on the market

**WHY BUY A SECOND RATE MACHINE? THE BEST IS THE CHEAPEST IN THE LONG RUN**

**THE BEST CAN ONLY BE GOT THROUGH A JOHN DEERE DEALER**

**John Deere Plow Co. Limited, WINNIPEG, REGINA, SASKATOON, CALGARY, LETHBRIDGE, EDMONTON**



## DEERE POTATO DIGGER

For the farmer who raises a small potato crop, this digger is suitable and can be obtained for a small outlay.

It has a flat blade with side wings, which guide the potatoes on to the grate. The grate is hinged at the front and is given an up and down motion by a sprocket wheel at the rear. This action shakes off the dirt and tubers from the potatoes. Being equipped with forecarrage insures steady running.

### A Bulletin on Swine Raising

The second edition of Bulletin No. 17 of the Federal Live Stock Branch, entitled Swine Husbandry in Canada, has been issued, and may be had on application to the Publications Branch of the Department of Agriculture at Ottawa. The interest in swine raising, stimulated, no doubt, by the high values of pork products, made such a demand for information on this subject that the first edition printed last year was quickly exhausted. This edition brings up to date statistics with respect to pedigree registration and the trade in hog products. It is shown that the total exports for the fiscal year ending March 31, 1915, amounted to 166,048,519 lbs., as against 27,561,140 lbs. the previous year. This bulletin covers the whole field of swine raising, giving the results of official experiments as well as the practices of successful farmer swine raisers. An interesting section describes the system to feeding hogs in Denmark, where combinations of food are prepared according to their food units in which one pound of grain, wheat, barley, peas, corn, etc., constitutes one food unit which is equal to 8 lbs. of mangels, 4 lbs. of boiled potatoes, 5 lbs. of alfalfa, 6 lbs. of skim milk or 12 lbs. of whey. It is

shown that the diet is varied in a definite way for pigs of different ages.

### Protecting Stock from Flies

During the summer months, when cattle are most likely to be bothered with flies, there are many people who wish to know what can be done as a preventative. There are a number of methods sometimes recommended for this purpose, some of which are supposed to keep flies off the animal by virtue of their bad odor or greasy nature, and some which are supposed to be sprayed on to kill the flies. Considerable doubt exists as to the benefits to be obtained from using any of these treatments, or as to the relative value of the different ways of combating flies.

For spraying the backs of cattle at milking time, there is possibly nothing more reliable than kerosene emulsion. The following recipe given by the United States Department of Agriculture is one of the best ways of making this: Dissolve one-half pound hard soap in one gallon of hot water, and while still at near boiling point, add two gallons kerosene, and emulsify by use of a force pump or agitator of some kind. Dilute with water, one part emulsion to eight parts water, and use a spray, dip or wash.

### Few Weed Seed Live Five Years

In a recent experiment seeds of French weed, Green foxtail, Kinghead, wild mustard, wild buckwheat and wild oats were planted at depths of 1, 2, 3, 5, 7 and 10 inches. The greatest depth from which French weed came up was two inches; Green foxtail, three inches; Kinghead mostly from two and three inches—a few from five inches; wild mustard, three inches; wild buckwheat, three inches; wild oats, a few from five inches. The next year a few French weed came up from the one and two-inch depth—no Green foxtail—a few Kinghead from the one to five-inch depth—no wild mustard or wild buckwheat—and a few wild oats from the two-inch depth.

In five years the seeds were dug up. None of the seeds at the one and two-inch depth were left. A few of the French weed seed at the seven and ten-inch depth grew. Of the Green foxtail, one seed from the five-inch depth grew. Of the wild mustard, a few of the seeds from the ten-inch depth grew. Of the wild mustard, a few of the three-inch depth and nearly half of those buried ten inches grew and one-quarter of those from the seven-inch depth. All of the wild oats and wild buckwheat were dead.

### MYERS COG GEAR TANK PUMPS

FOR HAND AND POWER USE

Are built with a patented cog gear head. This construction reduces the power required to operate almost one half. Valves are of the most improved type, located on top of the pump, each under an individual cap, which makes them easy to get at in case of repair. These and many other special features make Myers Tank Pump favorites with threshermen, farmers and ranchmen.



Write us for book let describing these and other Myers Pumps, and ask for the name of the Myers dealer in your town.

F. E. MYERS & BRO. Ashland, Ohio.

### GILSON

Johnson the Sport 1-2 H.P. engine, 18 H.P. A husky trouble chaser. Will run pump, washing machine, churn, cream separator, aridations. Write for circular and price. Gilson Mfg. Co. Box 501 Dept. C. Winnipeg, Man.



### Pace, Harrison & Millar, Ltd.

#### Winnipeg INSURANCE

LIVE STOCK  
Fire  
Accident  
Sickness  
Automobile  
Plate Glass  
Liability  
Bonds  
Tornado

WRITE FOR AGENCY

Pace, Harrison & Millar Ltd.

General Agents, Winnipeg



Winnipeg, August 3rd, 1915

The long continued wet weather across the winter wheat belt in the United States greatly retarded shipments to fill July commitments made in Chicago, causing scarcity of old crop for quick shipment and bringing a rapid rise in our July option, after a sensational decline which was forced by foreign selling. So slight has been the movement of new crop winter wheat that it is feared in shipping circles that there will be severe congestion, the bulk of winter wheat being still to move when there is an exceedingly great demand for space for spring wheat shipments. This is the greatest bear factor in sight unless one believes that the Dardanelles will be forced in the next few weeks. Our War Office issues no surmises, although military critics a week ago stated that Constantinople would likely be taken within a month. The opening of the straits would enable Russia to pour out vast quantities of new wheat, her crop being particularly good this season. Shipments via Archangel have been almost negligible, the port and railways leading thereto being badly congested with war supplies.

There remains a good demand for cash wheat which will likely continue until September as the visible stocks everywhere are greatly depleted.

For the purposes of comparison, the size of the last two crops is interesting. Inspections at July 31st the last two years has been as follows: Wheat, 1914-5 106,716,375 bus., 1913-4 154,397,850 bus.; oats, 1914-5 35,309,600 bus., 1913-4 66,391,655 bus.; barley, 1914-5 4,842,500 bus., 1913-4 15,562,800 bus.; flax, 1914-5 3,966,750 bus., 1913-4 13,994,200 bus.

From the foregoing it will be noticed that the crop of 1914-5 was a relatively small one but all indications point to our growing crop considerably exceeding the crop of 1913-4. Italy reports a small crop, which will have to be heavily supplemented by imports from America. Germany and Austria alone report crops above the average in central and western Europe, but it is likely they are endeavoring to deceive the Allies. Great Britain will have a crop ten to fifteen per cent less than that of last year according to present indications.

The American spring wheat crop is excellent, although a little late. There are various reports of black rust from some districts in Minnesota and South Dakota, but the cool nights and hot, bright days have prevented this spreading. Altogether, Expert Snow may not be amiss in his estimate of 995,000,000 bushels for winter and spring wheat crops in the United States. Our own Western wheat crop is the heaviest in years although in some districts quite late but given reasonable weather until September 5th, a huge crop of high grade wheat will be reaped, even though some districts suffered from frosts and some have already suffered severely from hail—there will be the yield in bushels, and with present high prices for all grades, the West may confidently count upon the best paying crop, by far, in her history. A wealthy farmer who can store his grain at home until mid-winter or later, will probably get a much better price and it would be a patriotic move on his part and so prevent glutting.

As usual, the early bird will again catch the worm this year, and the man who can get out his barley and wheat early will likely get by far the best price prevailing until mid-winter. Stocks of old wheat in the hands of farmers are almost nil, while country elevators have very small stocks too.

With every prospect of this terrible war continuing throughout another winter and with damage from drought in most European countries, aside from Russia, Canada may confidently expect Europe to take our surplus as rapidly as transportation will permit this fall, but it is most unlikely that ocean tonnage, now greatly depleted by withdrawals from service and loss from submarines, can keep up with rail movements to our lake terminals. Present statistics indicate a world's wheat crop of ten per cent greater than last year.

**Coarse Grains**

Kept strong by the demand for military purposes, our July oats held firm with a strong tendency toward the end of the month while October oats have sold from 41c. to 42c. The oat crop is generally good but in many places rather late, and warm, bright

**Important Information to the Farmers of Western Canada**

**F**OR the past few years before the beginning of the crop movement we have been giving the farmers of this country the benefit of our long experience in the grain business, by advising them as to the future trend of values, and in the rapid increase of our consignments from the country we can see that our good advice is fully appreciated.

We have been studying the flax situation and believe it worthy of a special letter before issuing our regular wheat circular. The increased acreage of both wheat and oats in the Canadian Northwest has decreased the flax acreage to such an extent that the small amount available this year will all be wanted. In our opinion, at much higher prices, and we would earnestly advise those who have flax to hold it and sell out everything else first, and then if you must sell your flax buy the option back in place of the cash stuff. We expect to see this commodity sell at \$2.50 and possibly \$3.00. You will remember a short time ago when October flax was selling at \$1.85 per bushel, the papers were all running ads. advising farmers to sow flax. This advice was apparently ignored when we look at the small flax acreage. The farmers the last few years have been forced to let their flax go at a loss on account of "poor demand" by crushers when the farmers had it for sale. We are taking this opportunity therefore to advise farmers who are fortunate to have flax to hold it for at least \$2.50 F.O.B. Port William or Port Arthur. This means in the neighborhood of \$1,000 to \$1,500 per car extra, and you cannot afford to lose this or even part of it. Don't sell a bushel at low prices, it is far too valuable to sacrifice. If you have any of last year's oats and wheat, rush shipment and get it sold before the new crop comes on the market. Write us for any information you may want. Watch our advertisements for market pointers, they will mean money to you.

NOTE—Any farmers who want to hold their grain we will give them big advances on each car.

**McBEAN BROS.**

600 GRAIN EXCHANGE

WINNIPEG, MAN.

**SHIPPERS**

Get in touch with us before the rush is on. We shall be glad to send you daily or weekly market reports free. Sample bags supplied on application. Personal attention given all cars. Make your shipping bill read: "Notify Central Grain Co., Ltd., Winnipeg." This insures prompt returns. We make liberal advances against shipping bill.

**Central Grain Company, Limited**

COMMISSION MERCHANTS  
706 Grain Exchange Winnipeg  
Paid Up Capital \$200,000

REFERENCE  
Any Bank or Commercial Agency.



**Storage on the Farm**

Be independent of labor shortage, scarcity of ocean tonnage and overcrowded elevators. This

**Portable Corrugated Granary**

has stood the test of service

Write To-Day for Full Particulars and Prices

**Winnipeg Ceiling and Roofing Co., Ltd.**

P.O. Box 3006 C.T. WINNIPEG, MAN.

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weather is needed. Cash oats will likely continue strong for some time to come and farmers having old oats on hand, should market same directly. Oats may pick up some strength this fall if the corn crop does not vastly improve as present indications are for a greatly decreased yield of corn in the United States.

New barley will likely be in good demand for the first month or six weeks, but the crop is fairly large and those who intend to market barley this fall, cannot act too quickly after they have the barley in the shock, as contracts for future delivery can easily be made.

**Flax**

There has been a marked depreciation in this seed due to the fear of war between Germany and the United States, also to cheaper Argentine offerings, permitting Argentine flax to be brought into the United States and under-sell ours. Yet the flax crop in both United States and Canada is comparatively light and the acreage small.

**Humus**

1. Humus is decaying vegetable matter in the soil.
2. It is the storehouse of nitrogen, most expensive and the most necessary of all plant foods.
3. It contains the food upon which the soil organisms live, whose function is to convert organic nitrogen into nitrates in order to be available for the use of plants. It also materially assists in decomposing the mineral constituents of the soil, such as potash and phosphoric acid, making them available for the use of plants.
4. It increases the power of the soil to hold water without becoming waterlogged.
5. It makes clay soil more open and friable. It also serves to compact sandy soil and increase its droughtresisting power.
6. It prevents washing to a great extent, thereby diminishing the loss of fertility by that cause.
7. Soil filled with humus more readily admits the air so necessary to all useful plant growth.
8. There appears to be a distinct relationship between the amount of humus in the soil and the amount of available nitrogen therein. It has also been observed that as humus disappears from the soil there is a distinct reduction of the ability of that soil to grow crops. Hence in practice in order to obtain the best crops we have to resort to barnyard manure and the turning under of vegetable matter rather than the use of concentrated fertilizers.

# For the Hardest Service use "RED WING" Thresher Belts



THE foundation of "RED WING" Thresher Belts is a heavy cotton duck of four layers, which are strongly stitched together. The whole is then thoroughly impregnated with oil, making a belt of remarkable strength, toughness and durability.

The fabric itself, and the coarse stitching, gives the "RED WING" Belt a splendid grip on the pulleys, and enable it to deliver a very high percentage of power, with a minimum of slip.

Thorough tests throughout the West have shown that "RED WING" Thresher Belts will stand up under service which is too severe for either leather or rubber belting. They have also proved very satisfactory for such

places as brick yards, cement plants and lumber mills, as well as for threshing.

"RED WING" Thresher Belts are made in Canada, and the name "RED WING" is stencilled on every belt, so that you may be sure of getting the real article.

## Canadian Consolidated Rubber Co., Limited MONTREAL

28 "Service" Branches in Canada, including

WINNIPEG REGINA SASKATOON CALGARY and EDMONTON



You saw this advertisement in this magazine. Don't forget to say so when writing.

### What's Dry Farming (By Charles Cristadoro)

Let us see. To the man who supposes that it is a method of growing abundant crops on a rainless desert, I want to explain that "dry" farming is just another term for the most modern, up-to-date, intensive, scientific, brainy farming known.

Here are Ten Commandments for the Dry-Farmer, and we'll enlarge same, commandment by commandment. Dr. Palmer, of the North Dakota Agricultural College, formulated these commandments, and they will stand memorizing even if they were written.

1. Thou shalt plow deeply. To explain why deep plowing, 10 to 12 inches, is preferable to the

three and four-inch kind would seemingly be a waste of time, but it opens the soil to the rain, prevents a run-off, gives more feeding.

2. Thou shalt keep the surface soil loose and level and lower soil compact. You prevent evaporation, and if you harrow your growing grain it will keep the surface loose. Keep down the weeds. Avoid ridges on your plowed land.

3. Thou shalt add organic matter to the soil. It holds moisture, furnishes plant food, keeps soil in good condition, helps make plant food available, lessens drifting and washing. Use stable manure, growing grass and legumes, and plow under green weeds.

4. Thou shalt summer-fallow when rainfall is less than fifteen

**I. X. L. VACUUM WASHER**

\$1.50 PREPAID

**Washes Anything and Everything**

From a horse blanket or oversize to the finest laces without injury. Washes a full tub of clothes perfectly in three minutes. Not only washes but rinses and bites. The ORIGINAL and only perfect vacuum washer.

**Agents Wanted**  
**UNITED MANUFACTURERS**  
Galt Bldg. Winnipeg

**MONEY BACK GUARANTEE**

inches. It saves two years of rain for a single crop.

5. **Thou shalt grow corn or a cultivated crop every two to five years.** It saves moisture, kills weeds and plant diseases, and is the best preparation for a grain crop, and furnishes stock food. Do not hill your corn.

6. **Thou shalt grow clover, alfalfa or some legume every few years.** They add fertilizer and organic matter, kill weeds, produce valuable hay and valuable seed crops.

7. **Thou shalt grow early maturing crops.** In the early summer, growing conditions are better.

8. **Thou shalt keep down the weeds.** Weeds waste moisture, 300 to 1,000 pounds of water to every pound of dry weed; waste plant food crowd the plants, shade the crops, retard growth and interfere with the working of the soil.

9. **Thou shalt keep stock.** Grain produce, sold in the form of stock, returns the most money. Stock on the farm means humus, fertility and prosperity generally. Nothing pays so well as dairying.

10. **Thou shalt plant trees.** They retard wind, prevent drifting, lessen evaporation, increase yield, temper hot winds, harbor insect destroying birds, furnish fuel and fenceposts; shelter stock, garden and fruit trees, and the less weeds on a farm the better the tree growth.

There is no farm heresy in any of the above, all tending toward better farming. Even do the rules as to cultivation, etc., apply to the one who employs irrigation. A little or a good deal less irrigation and much more cultivation is a desirable condition to bring about.

**Handling the Manure Crop**  
(By a Farmer)

With all our great farm papers and our agricultural experiment stations there are still some men who persist in hauling the manure to the fields and distributing it in small piles, going at a later time to spread it.

It seems strange that in this advanced age that any man should do the like. Common sense should teach him to do differently if he never looked at a paper or heard of an experiment station. Or he might watch the effect of this mode of distribution on his own fields, and then compare it with the up-to-date methods of his neighbor. This belated man's way was the old way, and how the way ever got started and became prevalent is more than the writer can understand. The rains come and wash out all the best fertilizing qualities into the ground at that particular spot,

while the great amount of acreage will be unfed with the fertility.

If you have a neighbor who does this way, have a reasonable conversation with him on the matter, and see if something can't be done to enlighten him in the way of modern agricultural methods. Of course, there are not many of these men left, but at least a knowledge of one man of the kind.

We are among that class of men who know that the sooner the manure can be taken to the field after it is made, the greater will be the good therefrom. We have men in mind who have their barns arranged in such a way that the spreader (we say spreader, for that is the only way), can be taken inside of the building, the animal fertilizer thrown into the bed of the machine and then hauled to the field and spread evenly and not too heavily in the places where it is most needed. It has been said that the manure on the farm is the best paying crop the farmer has, and it must be true. Being so valuable a one let us not waste one bit of it any more than we would waste the corn in the crib. Let us keep all the stock that we can in order to get all the good for our land that we can, and then let us spread this valuable product on the farm as carefully as possible in the way that will do the most good, and if it happens that in your neighborhood there is a back number farmer who goes about putting the manure in piles in around the barn to wait for some future time of distribution, speak to him in a kindly way and see if you can't teach him otherwise. Perhaps he is wiser than he seems, and a word to the wise is sufficient.



**Practical Talks to Threshermen**  
Continued from page 22

performed a somewhat different process and applied for patents in the name of the People of the United States. These two processes, which are said to be inexpensive, make it possible to transform practically all of the crude oil into gasoline.

In view of these discoveries it is not likely that we shall hear of any shortage of gasoline until there is an actual shortage of crude oil. Neither is there any strong probability that the efforts to devise means for carburetting the heavier oils will be continued except for engines of very large power. Tractors will either use gasoline or kerosene. The smaller machines will undoubtedly use the former and the use of kerosene will be restricted to the large units.

**Twelve Months of this Magazine for One Dollar**

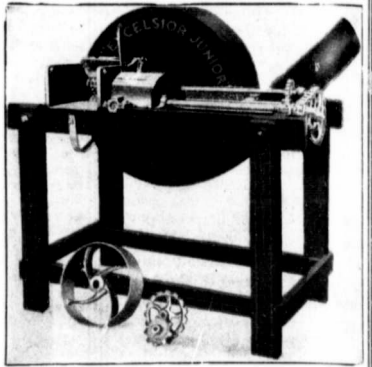
**Popular Because it's Reliable**

Stock feeding to get the best results is not a matter of guesswork, good feed properly prepared to aid mastication and digestion is the secret and the farm that is equipped with a

**WATSON'S Excelsior Junior Feed Cutter**

is the farm that will send the fat stock to market.

Watson's Excelsior Junior Feed Cutter is simple and reliable, built to use and built to last. That's why it's so popular. Made in seven styles and sizes. Cuts 1/2 inch to 1 1/4 inch and has a capacity of from 1/2 to 3/4 ton per hour. It is fitted with highly tempered English steel knives made specially for us, single lever for start, stop, or reverse. Can be operated by hand, horse, windmill or engine power. With power blower will elevate, or deliver to any part of barn.



If your dealer cannot supply you, write us direct.

**WE SELL** Channel Steel Harrows, Boss Wood Harrows, Harrow Carts, Pulverizers, Lawn Goods, Turnip Seed Sowers, Warehouse Trucks, Double-trees and Neck Yokes, Pole and Cordwood Saws, Wheel Barrows, Root Pulpers, Grain Grinders, Horse Powers, Straw Cutters, Header Evers and Janesville Plows.

*John Watson Mfg. Co.*

311 Chambers St.

WINNIPEG, Man.

**Fresh Seasonable Fruit**

Direct from Grower to Consumer

**PEACHES, Pears, PLUMS, APPLES, TOMATOES**

**B**EFORE buying any of the above mentioned fruits, it will pay you to secure our price list, as we know that we can save you money. We buy our fruit direct from the growers in British Columbia, Ontario, Washington, Oregon and California, and sell direct to the consumer in Western Canada.

We have just closed a contract with growers whereby they guarantee delivery to us of over ten thousand cases each of the finest Crawford and Elberta peaches, also Italian prunes and greengage plums. Our price list on these fruits is now out, and if you have not already received a copy, please send us your name and address, and we will mail you copy immediately and also have your name added to our mailing list so that you will receive copies of all price lists issued by us, which are sent out as the various fruits come into season.

In addition to the above mentioned fruits we are prepared to give you prices on request on any kind of fruit you want and which can be procured.

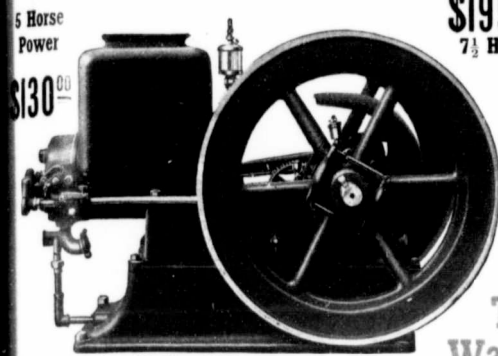
Our price list explains fully how our fruit is handled direct to the consumer and we already have hundreds of satisfied customers who tell us they never before purchased fruit of such good quality and low price.

We guarantee delivery of our fruit in good order.

**CONSUMERS SUPPLY CO.**  
Winnipeg Canada

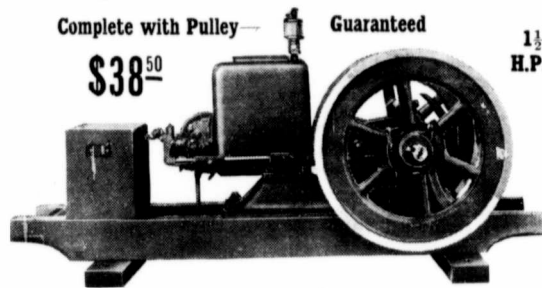


# You Can't Beat Stover Quality at Stover Prices!



5 Horse Power  
\$130<sup>00</sup>

\$195<sup>00</sup>  
7½ H.P.



Complete with Pulley—  
\$38<sup>50</sup>

Guaranteed  
1½ H.P.

## The Stover Power Washing Machine



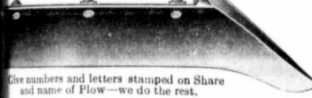
\$22<sup>00</sup>  
For Complete Power Washing Machine

### Plow Shares for Summer Fallowing

Each Share Each	\$2.00	Every Share Perfect and Guaranteed to fit.
Each Share Each	\$2.25	Shares for new make of plow.
Each Share Each	\$2.25	
Each Share Each	\$2.50	

This is the power Washing Outfit that has made the Canadian Stover name as great a favorite in Western homes as our agricultural machinery has made it on the farm. It is thorough in its work, built to last and saves time and worry out of all proportion with its cost.

Outfit consists of 1½ horse power Stover Gasoline Engine Washing Machine and Belt Complete.



Give numbers and letters stamped on Share and name of Plow—we do the rest.

550 feet guaranteed BINDER TWINE, 9c per lb., F.O.B. BRANDON

One second hand STOVER ENGINE, 22 H.P. with clutch pulley. In first class condition, guaranteed \$450.<sup>00</sup> One only second hand FLOUR CITY ENGINE, 20 H.P., in first class condition, guaranteed \$350.<sup>00</sup>

THESE ARE GENUINE BARGAINS

## CANADIAN STOVER GASOLINE ENGINE CO., LTD.

Eighth and Pacific Avenue, BRANDON

THE ORIGINAL FARMERS' COMPANY

WRITE FOR CIRCULAR

WRITE FOR CIRCULAR

### FORCING THE PULLETS

Methods in Selecting and Caring for Hens That Are to be the Winter Layers

As the nights become cool, the pullets that are expected to keep the egg basket full in winter, should be forced for that is in them. It is not advisable to have pullets begin to moult before the first of October, and pullets that start to lay before this, will moult, and winter will be little better as producers than old hens. In the writer's poultry experience, he had a bunch of early-hatched pullets that got going in August. The pullets laid a dozen or so eggs each, and started to moult. They did not start laying again until about March. The March and April-hatched pullets did not get to laying until October, but they laid all winter.

Early hatching, of course, is advisable, but it should be borne in mind that pullets that begin to lay in warm weather, are little better than old hens. March and April-hatched chicks, when grown under ordinary farm conditions,

should be laying by October, or early November, at the latest. The larger breeds, such as Plymouth Rocks, Rhode Island Reds, etc., ordinarily require six months to reach laying maturity. The smaller breeds will usually begin to lay when five or five and a half months old, and for this reason should not be hatched as early as larger breeds. The writer had pullets in his flock which did this, but in every case, it was noticed that the pullet that started to lay when but four months old, proved to be a very poor layer and never attained the size of those that started to lay when six months old or older. Early laying retards growth. Whenever pullets show indications of laying much before the show season, change their quarters and cut down their food allowance, with the object of retarding egg development. In like manner, the farmer should retard the development of pullets that show promise of beginning to lay in warm weather.

But when the days begin to grow cool, one may safely, and

should, force the pullets to their utmost. Eggs in October and November always bring a fancy price, and an egg laid at this time is worth two laid in the spring of the year. The pullets that are sufficiently developed to lay by early October, should be penned in comfortable, clean quarters, and fed foods especially rich in protein. They will develop much more rapidly if penned than if allowed the freedom of the place, provided, of course, that they are given an abundance of green food, grit, shell, clean water and foods rich in animal protein. Green cut bone, beef scrap or skim milk should be fed more liberally to the pullets than to the old stock, for the reason that the pullets are not fully developed, and the food must not only form eggs, but must also make bone and muscle. The pullets should be made to scratch in deep litter for all their whole grain.

Millions of dollars are squandered every year through the feeding of late-hatched chickens. The pullets that do not begin to lay before cold weather, will rarely lay before spring, and are kept

at a loss, since the eggs laid in the spring will not return sufficient profit to pay for the food they consumed during the fall and winter. The late-hatched, small and undeveloped pullets should be marketed as soon as one is certain that they cannot reach laying maturity before cold weather.

## Buy It Now!

Be an enthusiast in the "Buy-it-now" movement. Every dollar spent just now will have a far-reaching effect. Don't postpone that order.

Mail us an enquiry about anything you need printed or lithographed, and by getting the order placed help to hurry the return of prosperity.

**Stovel Company**  
Limited  
Printers and Lithographers  
Winnipeg, Man.

# OUR YOUNG CONDUCTED BY Cousin Doris FOLK

## Girls' Cozy Corner and Canadian Boys' Camp

**The Unreasonable Pa**  
My pa, he didn't go downtown  
Last evening after tea,  
But got a book an' settled down  
As comfy as could be.  
I'll tell you I was oful glad  
To have my pa about,  
To answer all the things I had  
Been tryin' to find out.


An' so I asked him why the world  
Is round instead of square;  
An' why the piggies' tails are curled,  
An' why fish don't breathe air,  
An' why the moon don't hit a star,  
An' why the dark is black;  
And just how many birds there are,  
An' will the wind come back?

An' why does water stay in wells?  
An' why do June bugs hum?  
An' what's the roar I hear in shells?  
An' when will Christmas come?  
An' why the grass is always green,  
Instead of sometimes blue?  
An' why a bean will grow a bean  
An' not an apple too?

An' why a horse can't learn to moo,  
An' why a cow can't neigh;  
An' do the fairies live on dew?  
An' what makes hair grow gray?  
An' then my pa got up—an', Gee!  
The oful words he said,  
I hadn't done a thing, but he  
Just sent me off to bed.

**A Spelling Match**  
Ten little children standing in a line,  
"F-u-l-l-y, fully," then there were nine.  
Nine puzzled faces, fearful of their fate,  
"C-i-l-l-y, silly," then there were eight.

Eight pairs of blue eyes, bright as stars  
Of heaven,  
"B-u-s-s-y, busy," then there were seven.



**HOLDER of the only WORLD'S GOLD MEDAL in CANADA**

**BECAUSE OF THE Superior Character OF OUR DENTAL WORK**

Every detail of extracting and fitting is effected without pain or bungling. Anyone who has been treated by us will state without qualification that what they had apprehended as a painful experience was attended by nothing but pleasure and comfort from first to last.

**Our Prices are moderate and we guarantee Perfect Satisfaction**

Languages spoken: English, French, German, Danish, Norwegian, Swedish, Polish, Russian, Rutenian, Galician, Bohemian, Icelandic.

**Dr. T. G. MOXNES**  
L.D.S., D.D.S., D.M.T.  
ALSO LADY GRADUATE IN ATTENDANCE  
Phone G 3630

626 1/2 Main St. (Entrance Logan Ave.)  
WINNIPEG, MAN.  
Office Hours: 9-6. Also open evenings

Seven grave heads nodding, in an awful fix,  
"L-a-i-d-y, lady," then there were six.

Six eager darlings, determined each to strive,  
"D-u-t-y, duty," then there were five.

Five hearts so anxious, beating more and more,  
"S-c-e-o-l-l-a-r, scholar," then there were four.

Four mouths like rosebuds on a rose tree,  
"M-e-r-r-y, merry," then there were three.

Three pairs of pink ears, listening keen and true,  
"O-n-l-y, only," then there were two.

One head of yellow hair, bright in the sun,  
"H-e-r-o, hero," and the spelling match was won!

—New Orleans Picayune.

**Dear Boys and Girls—**  
This is vacation time, and let us have one month together. I hope you all feel acquainted.

First—How many can describe the flags of different nations? Just now we should be familiar with the flags of nations.

To the boy who sends in a description of the most flags I will send a dollar. This offer is also to girls.

Second—Boys and girls are cultivating gardens this year. I will send a dollar to the boy who sends in the best description of his garden. The same prize is open to girls.

Third—How many have a camera? It may be that on your place or near by, there is some curiosity of nature, a cave, a queerly shaped rock, a picturesque river, or, it maybe, some relic of former days such as an old fort, a monument. Get a good picture of these. Write out whatever facts you can ascertain about the photograph and mail it.

Or perhaps you have a picture of a field or garden or animal on the farm.

For the most interesting photo taken by the sender of the photo I will give as a prize one dollar. This is open to both boys and girls.

Now boys and girls get busy. Let us see who will win. The competition will close 30th September, and the prizes will be sent as soon as the work is published. Send all communication to P.R.H., 983 Grosvenor Avenue, Winnipeg. Let us have a bright and interesting department for next month.

Best wishes to all.

Cousin Doris.

**Attention Boys and Girls**

Does a pigeon drink as does a hen?  
How does a squirrel come down a tree—head or tail first?  
Does a horse rise upon his hind feet or his fore feet first, after lying down?  
Does a cow rise the same way?  
How does a cow cut the grass she eats?  
Which crops the grass closest, a sheep, a cow or a horse?  
How many toes has a cat?  
What makes the difference in the track of a rabbit and a cat?

**Clothespinn Butterflies**

Take nice, clean clotheppins and cover carefully with tinsel paper or gold with gilt paint. Any bright color of tissue paper may be used for wings. Cut one

pair quite large and gather down the center. Then cut a smaller piece for top wings and gather as before. Decorate wings with small gilt or tinsel stars pasted on with glue. Place smaller wings on top of large ones and slip all up the slit of the clothespinn. These butterflies make gorgeous and showy decorations and can be used in large halls or school buildings for ornaments on public occasions.

E. H. R.

**My Best Chum**  
(By Stuart Taber)

I'm chums with all th' fellers around this end o' town;  
There's only one among 'em that ever put me down.

I'm fond o' Bill an' Lefty, an' Toots, an' all th' rest,  
But that don't make no difference; I like my dog th' best.

He never steals my marbles like other fellers do,  
An' when I get a lickin' he allus feels bad too.

An' when we go a-swimmin' he don't throw mud at me.  
An' never hides my jacket inside er hollow tree.

I'm friends with all th' fellers; they're fine fer playin' ball—  
But when it comes to chummin', my dog's th' best of all.

**THE HEART OF THE BRITISH "TOMMIE"**

"It is horrible having to leave one's horses; it feels like leaving half oneself behind, and one feels the dual responsibility all the time."

A Cavalry Subaltern.

\*\*\*

"I received a first aid outfit all right, and I hope my sisters won't be cross, as I use it for my old horse Peter, who had a nasty wound on his off hind leg.

"Thanks to the ointment he is nearly better. I would not like to lose him, as he is my best chum out here."

Private T. Green,  
Royal Irish Lancers.

\*\*\*

"The sad sight is to see refugees flying from their farms and houses. . . . I am writing this sitting outside a deserted farm. The people have not been gone long, but they left, as they all seem to do, their pigs shut up or their dogs tied up. I've had the pigs fed here, and shall let them loose in the garden and farm if the people don't come back before I go. . . . Found some cows abandoned yesterday and to-day and got them milked, poor things."

—Daily Mail, November.

\*\*\*

The "Animals' Guardian" quotes from a letter dated September 18th:

"Who but a British officer would stop on a bridge under a tornado of shell fire to put a bullet through a poor horse's head to end its suffering? Colonel — and I rode over the awful Vailly bridge, at the rear of his regiment. The noise of shell fire was so great that we could not hear each other. He stopped, pulled out his revolver, got off, and shot a horse. Then remounted. At other moments four shells at a time had struck that bridge. Yet whilst his act of mercy was being done, not one came near it; ten seconds later it was white with shell burst. Such is life."

An affecting scene was reported in Belgium after the first fighting near Liege. A machine-gun being a remnant of "Pattrasche" (the Belgian Flanders immortalized by Ouida in de la Ramee) the English soldiers wounded in the leg, and the same one of the gunners was wounded in the face and after the battle they were returning. The soldier had his arms and the dog was affectionately licking the wound in his master's leg.

Writing from northern France an extraordinary intelligence regarding the wonderful horses in the war. Bech Thomas thus gives his impression in the "Daily Mail":

"If war has no other virtue, it is the friendship of men and horses. . . . Many of these animals know mathematical exactness; the preparation of one gun from another. To the gun round at the due distance engrained as an instinct and perfect with the regularity of a ploughing when he turns at the headland of a field. If the driver, less skilful in the art, attempts to bring a horse too near his neighbor, the horse will throw the matter into his own hands with Olympian disregard of bit or whip. He will not disobey the regulation anyone."

**Like Owner, Like Stock**

An old farmer went to the show to exhibit a favorite cow, with which had high hopes of winning the prize. On learning the result, and his cow had been placed fifth, he knew no bounds, and, rushing into the ring, he attacked the judges.

"Why is my cow not first? What are her faults, I'd like to know?"

At this point one of the judges approached him and answered:

"Her faults, my good man, are what akin to your own. She lacks breeding."

\*\*\*

"Treat a dog like a man, and you have a noble animal; treat him like a dog, and you will have a dog. Some sight of the fact that your dog is more than you do. Proof: He understands your language; you do not understand his."

**Manitoba Hair Goods Co.**

**The Best of all HAIR GOODS**

Our special \$1.48 switches are 22 inches long and made of fine quality natural wavy hair.

The parted wave, made of 20-inch natural wavy hair, gives perfect satisfaction if your hair is thin or grey. Price \$5.00 and up.

Send us your sample. You cannot get better service.

Toupees and wigs \$15.00 and up.

Write for our Catalogue. Combs made up at 50c per comb.

**344 Portage Ave., Winnipeg**

The price reputable. S when you hals used in to stand up admit that greatest Sept

A 30-60 hair ban horse oil 7 driving. n. x 58in. har Sep — an o equalled st and Cl reshing.

Attri Re

The

# Watch the Stacks Melt Away



When the Fairbanks-Morse Oil Tractor and Farquhar Separator get to work. A better threshing combination than this does not exist, it is the ideal outfit.

The Fairbanks-Morse Oil Tractor is favorably known all over Canada, and is doing big work in every part of the Dominion. In the Farquhar we have a Separator worthy in every way of sharing the Fairbanks-Morse name and guarantee.

The Farquhar Separator has justly won the appreciation of Western Farmers and Threshermen for its simplicity of construction, lightness of draft and great efficiency in all kinds of grain. It is substantially built and stands on extra heavy trucks while the unusually long body makes it a great grain saver.

The principles of design which have made the Farquhar so popular are the results of nearly sixty years' experience in Separator building—the Farquhar was one of the first, as it is now the foremost Separator made.

The price of a Farquhar is as low as a reputable Separator can be sold for, and when you consider the excellent materials used in its construction with its ability to stand up to the hardest work, you will admit that it is, without exception, the greatest Separator value ever offered.

Price	33in. x 52in. Farquhar Separator with Self Feeder, Gearless Wind Stacker, "Perfection" Registering High Bagger, and Fairbanks Steelyard.	\$1000
	33in. x 58in. complete, with equipment same as above.	\$1060
TERMS—THREE EQUAL FALL PAYMENTS		



A 30-60 H.P. Fairbanks-Morse Oil Tractor driving a 33in. x 58in. Farquhar Separator—an outfit equalled for speed and Clean threshing.

## Attractive Bargains in Rebuilt Separators

We have a few rebuilt 33in. x 52in. and 36in. x 58in. Farquhar Separators on hand, each machine thoroughly overhauled and guaranteed, the very thing for the man who is looking for a high class outfit at a modest price. You had better write us to-day—these won't stay long with us.

**Backed by the Fairbanks-Morse Guarantee**  
**The Canadian Fairbanks-Morse Co. Limited**

Saskatoon

WINNIPEG

Calgary

# OUR WOMEN FOLK

CONDUCTED BY  
PEARL RICHMOND HAMILTON



### Everything Right in End

I want to believe in the happy old way  
That all will come right in the end some day,  
That life will be better and days will be sweet,  
That roses will carpet the world for men's feet,  
That love and affection and honor and trust  
Will lift us from sorrow and shadow and dust.

I want to go toiling with this in my heart,  
That every day brings us the joy of a start,  
Fresh with endeavor and duty and truth,  
As we swing to our tasks with the vigor of youth,  
Singing the music of love and of cheer,  
Till clouds drift apart and storms disappear.

I want to go trusting that this will be so  
As out to the toil and the tumult we go,  
That hearts will be kinder and life will grow bright  
With the blessing of labor that leads to the light;  
That troubles, like bubbles, will burst and go away,  
And all will come right in the end some day.  
—The Baltimore Sun.

### A Word of Cheer

Drop a word of cheer and kindness—just a flash, and it is gone;  
But there's half a hundred ripples circling on and on and on,  
Bearing hope and joy and comfort on each splashing, lashing wave,  
Till you wouldn't believe the volume of the one kind word you gave.

Drop a word of cheer and kindness—in a minute you forget;  
But there's gladness still a-swelling, and there's joy a-circling yet;  
And you've rolled a wave of comfort whose sweet music can be heard  
Over miles and miles of water—just by dropping a kind word.

**A Time Tangle**  
Oh, trouble is a thing  
Which many people borrow,  
And the flight of Time  
Gives other folk some sorrow,  
But it is a fact, my dear,  
Which to me seems very clear,  
That to-day will be  
Yesterday  
To-morrow!

### Queen Mary

In a recent number of The Saturday Evening Post, Mary Roberts Rinehart writes of her interview with Queen Mary of England. Many of our readers, I presume, have read it, but I feel that they who have not will be glad to know some of the beautiful characteristics of our good queen; these quotations from Mary Rinehart's article will please every British subject:  
"It has been my privilege to meet and speak with the Queen of England and with the Queen of the Belgians. In each instance I carried away with me an ineradicable impression of this quality—of a

"While he lived he was the Idol of a Whole Brave Nation,  
And when he died the Little Children Cried in the Streets."



## Canada!

YPRES: APRIL 22-24, 1915

grave and wearing responsibility quietly and simply, of a quiet courage buries its own griefs and a keen help.

"From the beginning of the war I felt a keen interest in the Queen of England. Here was a great queen chosen to be, first of all, a慰抚ing a queen with courage and a woman into her reign had come the tragedy war that affected every nation of the world, many of them directly, all indirectly. The war had come unexpected, unprepared for, England had become a camp. The palace in which the royal children housed was open to an attack by a brutal enemy, which added to the horror of this century the ethics of the ism.

"What did she think of it all? What she feel when that terrible Roll of the came in, week by week, that Roll of with its photographs of splendid young manhood that no Anglo-Saxon look at without a clutch at his eye.

What did she think when, one by one, friends of her girlhood put on the bereavement and went uncomplaining about the good works in which lay the guiding hand? What thoughts hers during those anxious days before Prince of Wales went to the front, like any other mother, she took every possible moment to be with him, and about arm-in-arm with her boy, taking everything but the moment of parting.

"And when at last I was permitted to see the Queen of England, I understood at least of what she was suffering. I had seen the army in the field. I had been right to the very trenches where the Prince of Wales was facing the enemy his country and doing it with high courage. And I had heard the rumble of the German guns, as Queen Mary of England must hear them in her sleep.

"Even with no son in the field the of England would be working for the house. It is a part of the tradition of a house. But a good mother is a mother all the world. When Queen Mary was crying the great work of the Needlework Guild one feels sure that into each direction has gone a little additional derness, because of this boy of her front.

"It is because of Her Majesty's part in the material well-being of the soldier front, and because of her most grateful gratitude for America's part in this being, that I took such pleasure in meeting the Queen of England.

"It was characteristic of Her Majesty that she put an American woman at her side, once, that she showed that American man the various departments of Needlework Guild under way, and she conveyed, in every word she spoke deep feeling of friendship for America her assistance to Belgium in this war.

"As she advanced toward us, she speak cordially to the various ladies carrying on the work of the Guild. I had an opportunity to see the woman who has suffered so grossly the camera.

"It will be a surprise to many to know that the Queen of England is very look at. So much emphasis has been placed on her virtues, and so I been written of her charm, that it is only fair to Her Majesty. She is perhaps five feet eight inches tall, with blue eyes and beautiful coloring. She is a rather wide, humorous mouth. There not a trace of austerity in her face or single feature. The whole impression of sincerity and kindness, with a trace of humor.



### A Pretty Hand-colored Handkerchief Holder and Sachet

YOU CAN HAVE ONE FOR THE ASKING

Just the thing to keep dainty handkerchiefs in, either at home or when travelling; they can be laid in the holder in long folds and so absorb the delicate odor of the sachet powder with which the sachet pad is filled.

Six handkerchiefs will go in it nicely; it is 9 1/2 inches long and 3 1/2 inches wide.

You can have one of these Sachets FREE OF CHARGE except for a 2 cent stamp to cover postage, if you will send us your name and address.

Mention the Canadian Thresherman and Farmer when writing.

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# PURITY FLOUR

Means full measure of value for your money both in quality and in economy of use.

“More Bread and Better Bread”

You saw this advertisement in this magazine. Don't forget to say so when writing.

## Mother's Corner

### To My Mother

Now I lay me down to sleep—  
Aw 'yean, don't want to sleep, I want to think,  
I didn't mean to spill that ink;  
I only meant to softly creep  
Under Pa's desk an' be a bear—  
Taint 'bout the spankin' that I care.

F' she'd let me 'splain an' tell  
Just how it was an accident,  
An' that I never truly meant  
An' never saw'd it till it fell,  
I feel a whole lot worse'n her;  
I'm sorer an' I said I were.

I 'spose if I'd took on, and cried a lot,  
An' choked all up like my Sis does,  
An' acted sadder than I wuz,  
An' sobbed 'bout the "horrid spot,"  
She'd said: "He shan't be whipped, he shan't."  
An' 'slobbered an' kissed—but, some-how I can't.

But I don't think it's fair a bit.  
That when she talks at you  
An' you wait patient till she's through,  
An' start to tell your side of it,  
She says: "Now that'll do my son,  
I've heard enough," 'fore you've begun

F' I should die afore I wake—  
Maybe I ain't got any soul;  
Maybe there's only just a hole  
Where 't ought to be—there's such an ache  
Down there somewhere! She seemed to think  
That I just loved to spill that ink.  
—Beaver Valley Gazette.

heard from a member of her own circle, that now and then, when during some court solemnity an absurdity occurred, it was positively dangerous to catch the Queen's eye.

Queen Mary came up the long room. As she passed and held out her hand, each lady took it and curtsied at the same time. The Queen walked, smiling as she spoke. There was no formality. Near at hand the lady-in-waiting who was in attendance looked, sometimes listening, sometimes joining in the conversation. The talk was all of supplies, for these days in England people think in terms of war. Certain things had come in; other things had gone and were going. For the Queen of England to-day at the head of a great business, one that in a few months has already collected and distributed over a million garments, all sewed, all practical, all of excellent quality.

She expressed a desire to have America supplied just what was being done with the supplies that are being constantly sent over, both from Canada and from the United States.

"Canada has been wonderful," she said, "They are doing everything."

The ready response of Canada to the demand for both troops and supplies appeared to have touched Her Majesty. She spoke at length about the troops, the discipline they had come, the fine appearance the men made, and their popularity with the crowds when they paraded on the streets of London. I had already noticed this. A Canadian regiment was sure to be seen wherever there were soldiers. Generally speaking, has ceased any but a silent demonstration over the soldiers.

"Have you seen any of the English hospitals on the Continent?" the Queen asked.

"I have seen a number, Your Majesty. Do they seem well supplied?"

"I replied that they appeared to be thoroughly equipped, but that the amount of supplies required was terrifying and that at one time some of the hospitals had experienced difficulty in securing what they needed. The hospital in Calais," I said, "received twelve thousand pair of red socks one week last autumn, and could not get a bandage."

"Those things happened early in the war. We are doing much better now. England had not expected war. We were wholly unprepared."

Already in the great analysis that is the answer to many questions. England had not expected war. Every roll of the man as the men of the new army march the streets, every readjustment necessary to a peaceful people suddenly thrust to war, every month added to the length of time it has taken to put England in line into the field, shifts the responsibility where it belongs. Back of all fine notions of diplomatic negotiation stands one undeniable fact. To deny it is to deny it is final.

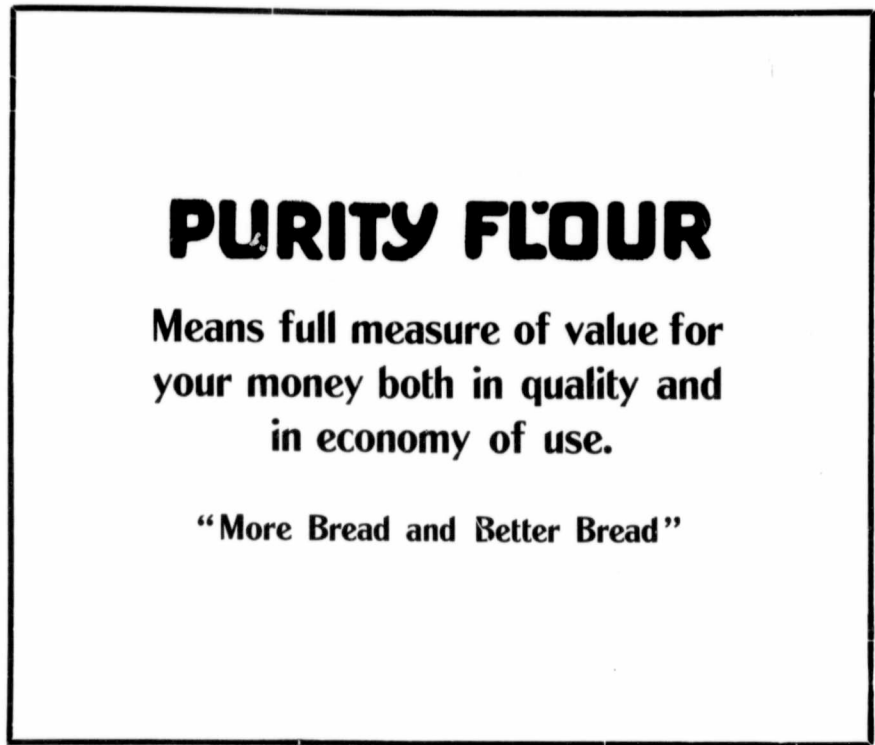
The Queen spoke of the ladies coming with the Guild.

"They are really much overworked," she said. "They are giving all their time after day. They are splendid. And any of them, of course, are in great need."

Already, by her tact and her simplicity of manner, she had put me at my ease. The greatest people, I have found, have a quality of simplicity. When she spoke of the anxieties of her ladies, I told her that I could have conveyed to her, in so many Americans, their sympathy for her own anxieties, so keen at that time, and so unselfishly borne. But the lady-in-waiting was speaking:

"Please tell the Queen about your meeting with King Albert. It had been unromantic, and the recital amused Her Majesty. It was then that I realized how serious her mouth was, how very blue to alert her eyes. I told it all to her, the King's insisting on slipping off my lap, and the King's picking them up; the old hope he gave me to make notes of the interview on; how I had asked him whether he would let me know when the interview was over, or whether I ought to get up and go home. And finally, when we were standing before my deparure, how I had suddenly remembered that I was not to be nearer to His Majesty than six feet, and had hastily backed away and extended, to his great amusement.

Queen Mary laughed. Then her face



"It is all so very tragic," she said. "Have you seen the Queen?"

"I replied that the Queen of the Belgians had received me a few days after my conversation with the King.

"She is very sad," said Her Majesty. "It is a terrible thing for her, especially as she is a Bavarian by birth."

"From that to the ever-imminent subject of the war itself was but a step. An English officer had recently made a sensational escape from a German prison camp, and having at last got back to England, had been sent for by the King. With the strange inconsistencies that seem to characterize the behavior of the Germans, the man to whom he had surrendered after a gallant defense had treated him rather well. But from that time on his story was one of brutalities and starvation.

"The officer in question had told me his story, and I ventured to refer to it. Her Majesty knew it quite well, and there was no mistaking the grief in her voice as she commented on it, especially on that part of it which showed discrimination against British prisoners. Major V—had especially emphasized the lack of food for the private soldiers and the fearful trials of being taken back along the lines of communication, some fifty-two men being locked in one of the small Continental box cars which are built to carry only six horses. Many of them were wounded. They were obliged to stand, the floor of the car being inches deep with filth. For thirty hours they had no water and no air, and for three days and three nights no food.

"I am to publish Major V—'s statement in America, Your Majesty," I said.

"I think America should know it," said the Queen. "It is most unjust. German prisoners in England are well cared for. They are well fed, and games and other amusements are provided for them. They even play football!"

### The Work of the Queen's Guild

From a close and devoted friend of Queen Mary I obtained other characteristics to add to my picture: That the Queen is acutely sensitive to pain or distress in others—it hurts her; that she is punctual—and this not because of any particular sense of time but because she does not like to keep other people waiting. It is all a part of an over-whelming sense of that re-

sponsibility to others that has its origin in true kindness.

"The work of the Queen's Guild is surpassing in its scope. In a way it is a vast clearing house. Supplies come in from every part of the world, from India, Ceylon, Java, Alaska, South America, from the most remote places. I saw the record book. I saw that a woman from my home city had sent cigarettes to the soldiers through the Guild, that Africa had sent flannels. Coming from a land where the sending, as regards Africa, is all the other way, I found this exciting. Indeed, the whole record seems to show how very small the earth is, and how the tragedy of a great war has overcome the barriers of distance and time and language.

"From this clearing house in England's historic old palace, built so long ago by Good King Hal, these offerings of the world are sent wherever there is need, to Serbia, to Egypt, to South and East Africa, to the Belgians. The work was instituted by the Queen the moment war broke out, and three things are being very carefully insured: That a real want exists, that the clothing reaches its proper destination, and that there shall be no overlapping.

"The result has been most gratifying to the Queen, but it was difficult to get so huge a business—for, as I have already said, it is a business now—under way at the beginning. Demand was insistent. There was no time to organize a system in advance. It had to be worked out in actual practice.

"One of the Queen's ladies-in-waiting wrote in February, apropos of the human element in the work:

"There was a great deal of human element in the start with its various mistakes. The Queen wished, on the breaking out of war, to start the Guild in such a way as to prevent the waste and overlapping which occurred in the Boer War. The fact that the ladies connected with the work have toiled daily and unceasingly for seven months is the most wonderful part of it all."

"Before Christmas nine hundred and seventy thousand belts and socks were collected and sent as a special gift to the soldiers at the front, from the Queen and the women of the empire. That in itself is an amazing record of efficiency.

After I had



Read what Mr. Thornton says.

Manitoba Universal Farm Tractor Co. Ltd. July 16, 1915.
I have been using your tractor for some time and I can say that it is the best tractor I have ever used. It is light, powerful, and economical. It is adapted to all kinds of belt and hauling purposes, and it can be used at a profit at all seasons of the year. I have used it for plowing, discing, cultivating, harvesting, and threshing. It is a most valuable piece of machinery for any farmer.

SPECIFICATIONS: MOTOR.—4 cycle double opposed, 5-inch bore and 6 1/2-inch stroke; magnet, force sight feed, oiler, water pump and governor are all gear driven and unit with the motor.
FRAME.—The frame is of heavy 6-inch channel steel, hot riveted together, with corner plates also hot riveted on all corners to insure rigidity.
WHEELS.—Rear wheel is 60-inch diam. with 26-inch face. Front wheels are 42-inch diam. with 6-inch face.
DRIVE.—The traction drive is through a chain, thus doing away with a train of gears, and at the same time increasing the tractive efficiency of the machine.
WEIGHT.—4000 pounds. Fuel tank capacity 16 gallons.

The Manitoba Universal Farm Tractor Co. Ltd.

WINNIPEG, CANADA

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Light Weight, High Powered, Economical, it is the ideal general purpose tractor. As it is adapted to all kinds of belt and hauling purposes, there is no dead expense attached to it and it can be used at a profit at all seasons of the year for

Plowing, Discing, Cultivating, Harvesting, Threshing, Road Work and for any form of belt work where power is required. It has no unnecessary parts, is made of the best material, is easy to handle and does not require the attention of an expert.

The Manitoba Universal has the greatest drawbar pull for the weight of any tractor on the market. It is the most substantially constructed and has fewer mechanical parts to wear.

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Please send me descriptive literature regarding your light weight tractor.
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When Mother Reads Aloud
When mother reads aloud, the past
Seems real as every day;
I hear the tramp of armies vast,
I see the spears and lances cast,
I join the thrilling fray;
Brave knights and ladies fair and proud
I meet, when mother reads aloud.

The Compensations of a Mother

In an editorial in "American Motherhood" last month, Mrs. Lutes gives an interview she had with a famous woman. Mrs. Lutes writes for mothers, and asked the famous woman to give her a message for them. The famous woman was an unmarried woman who had a beautiful home purchased with her own earnings. This is a part of the interview:
"I want you," I said, coming bravely to the front with my request, "to give me a message for my readers. I, too, have a great work, and for it I draw upon the accomplishment of those who have gone before. Tell me something out of your life which will be a message of inspiration to my friends who wait for the word of such as you."

The famous woman bent forward over the table and looked at me earnestly. She was very lovely, her white hair touched with the faint glow of the candles.
"Let me see," she said, "your readers are mostly women, aren't they?"
"Mostly," I admitted, "and mostly mothers. A good many young girls there are, too, and some men. But the great majority are women—young or old."
"Well," said the famous woman, pushing back her plate and clasping her strong, capable fingers on the cloth, "I have a message for those women, and I am glad to give it. Did you say they were mostly—mothers?"
"Mostly, yes, they are mothers."
"Do you think they are—happy mothers?" Again the little note of hesitant wistfulness.
I had to hesitate now and think. I had to go, in my mind, over the hundreds and thousands of letters I have had from mothers, and think whether the universal note was one of happiness—or not.
Finally, "I should say—not exactly

happy. They all love their children. They are all proud of their children, all glad they've got them, but I can't say that as a general thing, they seem really happy."
"What would you say"—the famous woman's cheeks were flushed now, her eyes shone with a deep and intent light—"what would you say was the greatest prohibitive cause to their happiness?"
Again I had to go inside and deliberate.
"Well," when I had summed it up, "I should say that care was the greatest restriction. In the first place they don't seem to know what to do with their children. They don't know how to feed them, clothe them, manage them—"
"In other words, they've got into a job they're not prepared for. Is that it?"
"Pretty much," I had to admit.
"Well," said the famous woman, "that's your job—to show them their profession is one worth training for, to help train them, and to prepare the generation that's coming on. I shan't meddle with that end of it. My message is different. Come in here."
We arose from the table and went into the lovely and luxurious library where a soft crimson light glowed from a distant table, and where every nook and corner invited you to comfort.
"Listen!" The famous woman laid her fingers on my arm and we paused. There wasn't a sound but the stately ticking of a big clock in the hall. "Still, isn't it?" There was a tone in the voice that took my eyes quickly to her face. As quickly they turned away, for I had looked upon a soul that suffered.
We went on into the room.
"Look about you." The famous woman's voice was low and there was a tense repression in it that shook you. "Look at that couch yonder." It was a marvel of comfort—cushions, a lamp at its head exactly where the rays would fall on a book or paper, a low table for magazines—books on a shelf overhead and within reach, flowers on the table.
"Wouldn't that be an ideal place," said the woman softly, "for a tired man to

stretch out on and read his evening paper?"
I looked at her wonderingly and nodded.
"Well," she said—rather shortly, thought, "there isn't any man." And she turned abruptly to the long, wide table where books and magazines, and a tray of pencils and paper cutters stood.
"See these books," she said, and pointed into my hands an exquisite copy of "Anderson's Fairy Tales," then another, "Robin Hood," another of "Robinson Crusoe."
"I keep these here," she said, "to beguile myself. I think how the children would love them. I invite children here to look at them. They come when they go. And when they are gone, the rooms are still—still. Nothing but the ticking of the clock, the purring of the cat, the rustle of my dog as he comes to meet me. There are no toys to pick up, there are no little shoes lying about. There are no—children. There is no man. There is no—family. It is a luxury because it is mine, but it lacks the touch of life. Oh, my dear, tell your mother-world to forget their cares and foolish worries, puny frettings, and rejoice, rejoice in

The booklet, "Helps for Expectant Mothers," will be sent free to any wife upon request. Address Pearl Richmond Hamilton, 983 Grosvenor Avenue, Winnipeg.
"Good-Bye, God Bless You"
I love the words—perhaps because
When I was leaving mother,
Standing at last in solemn pause,
We looked at one another,
And I—I saw in mother's eyes
The love she could not tell me—
A love eternal as the skies;
Whatever fate befell me;
She put her arms around my neck,
And smother the pain of leaving,
And, though her heart was like to break
She spoke no word of grieving;
She let no tear bedim her eye,
For fear that might distress me,
But, kissing me, she said good-bye,
And asked our God to bless me.
—Eugene Field.

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The Range that Lasts a Lifetime

Kootenay Steel Range

The Range that Lasts a Lifetime

**A Household Guide and Recipe Book FREE—**

A reliable source of information on domestic questions, with a mass of tested recipes that will make the KOOTENAY still more valuable to its users, has just been compiled for us from all the best available sources. We will gladly send a copy of this book (as long as the edition lasts), to ALL who fill in and mail coupon below.

**This is the Range with a Dust-Proof Washable Oven**

Invariably you dust your oven before baking. Isn't this the case? If you are a KOOTENAY user this duty is unnecessary—with old-style ranges it is almost essential. Did you ever wonder where this dust came from? Ovens that need constant dusting are made with seams and rivets in the top—over which smoke and ash-dust pass—heat loosens the rivets, and dust drops through whenever the stove is shaken. THE KOOTENAY OVEN HAS A SEAMLESS TOP. THIS IS NOT ALL—THE KOOTENAY OVEN CAN BE WASHED LIKE A CHINA DISH.

This Oven is made of Nickelled American Ingot Iron, that may be easily and thoroughly washed with soap and water WITHOUT THE SLIGHTEST DANGER OF RUST. The VENTILATED OVEN carries off all odors that arise from cooking or baking. The KOOTENAY OVEN is SQUARE, DEEP AND ROOMY. The Alumined CENTRE RACK adds greatly to baking space, as the baking is done equally as well on the rack as on the oven bottom. This BOTTOM IS REINFORCED to prevent buckling, and protected by asbestos. So the KOOTENAY Oven will wear easily five times as long as the incorrectly designed one of ordinary iron. THE NICKEL-PLATED OVEN MEANS GREATEST DURABILITY; therefore is most economical and radiation is even, thus giving best baking results.

You might easily overlook all these good points in the KOOTENAY Oven, because there are so many others in the rest of this range.

The FIRE BOX linings are made in nine pieces of heavy-weight Semi-Steel, which is practically indestructible. The HEAVY DUPLEX ROLLER GRATES have two faces—one for wood, one for coal—instantly interchangeable. The KOOTENAY has a DUPLEX DRAFT that ENSURES AN EVEN FIRE.

THE POLISHED TOP is a bright, smooth, easily cleaned surface (no black lead necessary).

And there is NO REACHING FOR Dampers, because the DAMPERS ARE IN THEIR PROPER PLACE.

Look at the picture and note the general "dress" of the KOOTENAY. Then ask your dealer to "show" you and try you the rest. You'll soon be as great a KOOTENAY enthusiast as we are.

**Remember—THE KOOTENAY is guaranteed**

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To the \_\_\_\_\_  
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Remittance—Send me FREE \_\_\_\_\_  
Copy of "Household \_\_\_\_\_  
Guide" \_\_\_\_\_  
C.T.



**McClary's**

WINNIPEG, CALGARY, SASKATOON, EDMONTON, VANCOUVER,  
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and pressed them to her eyes "tell them we lonely souls are sick with envy of them. Tell them that."

She lifted the hands from her face and I withdrew my eyes from the tragedy in hers.

"I do not let it embitter or spoil my life, you know." She was smiling now. "I am a very busy woman, and I have much to be happy in. I rejoice in my work, and in life. But, you asked me for a message, and I have given it to you. Out of the depths of my heart I have drawn the most sacred of my desires. Go tell your mothers, and the girls who are going to be mothers, what comes from the soul of a famous woman; she would gladly barter her fame for their chance at happiness. Tell them for God's sake to make the most of what they've got, for there's nothing better to be had."

And I am telling you.

**Home Economics**

This department will be pleased to publish the papers read at the H.E.S. meetings. They will interest other societies. Kindly send all communication to my private address, 983 Grosvenor Avenue (P.R.H.)

**A Thought for All Women**

I perceive that the world in which I live is running over with beauty, from the exquisite down on insect wings and the snowy heart of a crimson radish, to the wonder of the morning star and the melody of the vesper sparrow.

I believe that as beautiful as my privilege and duty to be as beautiful as possible in myself, in my surroundings and in every relation that connects me with things, thoughts and folk.

I perceive that when my spirit is beautiful within me I am better able to create conditions of loveliness and peace outside myself; that peaceful and attractive surroundings help to preserve this beauty of spirit within me.

I believe that it is my privilege and duty to be lovely and lovable not only in myself but in every relation of life.

Perceiving and believing these truths I hereby make compact with myself:

I will strive to be sweet and sensible; courageous and calm; loving and loyal; generous, just, patient.

I will strive to keep my body in good and beautiful condition through cleanly ways, wise food, ample fresh air, healthful exercise, sufficient rest, sensible and attractive clothing.

I will strive to keep my home in beautiful condition; clean, orderly, comfortable, convenient, hospitable, as attractive in furnishings as my means permit; a home which the family will ever be loath to leave, to which neighbors and wayfarers will ever be eager to come.

I will strive to bring orderliness and charm into every nook and space of door-yard and grounds; so shall it be easier to maintain a lovely attitude of mind as I come and go over the home threshold; so shall all who pass in and out find the day and the way fairer and better.

I will strive to discover beauty everywhere and in everyone; to carry beauty to everyone; to keep things, thoughts and folk as lovely as I find them; to

leave them, if possible, fairer than I find them.

Thus shall I multiply the sum of beauty in this fair world where I am placed.

**Manitow**

The June meeting of the Manitow H.E.S. was held at the home of Mrs. W.M. Falls, five miles from town. The day was stormy, so only about twenty members were present, every one there was glad she had braved the bad roads and threatening skies, for a most enjoyable afternoon was spent.

After settling several important business matters, a social hour over the tea cups followed, while the guests enjoyed the delightful lunch provided.

The meeting closed with a vote of thanks to Mrs. Falls for her hospitality, and this singing of the National Anthem.

On July 1st Manitow held its annual sports day. The ladies of the H.E.S. served lunch on the grounds and cleared a nice sum, which went to this Rest Room Fund.

On this evening a splendid concert of all local talent was given to a crowded house, the proceeds to be equally divided between the Rest room and the Red Cross. We are much pleased to find we had seventy-two dollars for each, and the H.E.S. felt this satisfaction which follows success.

Lillian M. Gwilliam.

**Swan Lake**

I wish to apologize to the Swan River Society. An excellent report was sent in, but was not delivered to me until too late for publication (P.R.H.) I am sure

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Winnipeg, Manitoba.

the paper by Miss Shirley will help every reader.

### Giving and Getting the Best in Life

(By Miss Etta Shirley)  
Paper read before the Swan Lake H.E.S., March 27th, 1915.

Living is the finest of all arts. To keep the edge of one's personality always sharp, requires infinite thought and

skill, and yet some are content to work in a sphere of highest service with dull tools.

Bring out the best in others. That sounds like beginning at the wrong end, but it is in drawing out the best in others, that the best in ourselves is developed. Our appreciation of good in others, is an expression of our better

selves. We are unconsciously at our best when we are helping others to be at their best.

Also, if we can only see the worst in our neighbors, then the lower side of our natures will come on top. The person who is always on the outlook for something to make fun of in others will in time lose the power to discern and appreciate that which is noble. Sneers as well as blessings come some to roost. Let us look for good in the sinner and not for sin in the saint.

Unless we are at our best, we cannot give our best to others. In each of us there is a three-fold being: Physical, Mental and Moral, so inseparable that one cannot exist without the other, and yet so distinct that one may be developed and the others left undeveloped. A booby however perfect, and a mind however thoroughly trained, will not suffice. They must be properly directed by the soul. Unless all three are developed and trained, we cannot give our best.

So many of us miss the best in life because we do not look for it in the commonplace things or in our everyday friends and neighbors around us. Be cheerful and smile at the people you meet and they will smile at you. Do not live in the depths of self pity and blame the world for your environment. Believe in the goodness of men and women and look for the hidden riches in them. We sometimes forget that the great things are often nearer when we stoop than when we soar.

It is well to remember that unless we are ready to give the best of which we are capable, we shall not get the best because we shall be unable to recognize it when it comes along.

### Portage la Prairie

We are pleased to welcome the societies.

Editor Canadian Thresherman—

I was requested to write and let you know of the Home Economic Society which we have started in Portage la Prairie. We organized in February and have had very good meetings on the fourth Saturday of each month. We have one hundred and fifty members. We had a dressmaking and millinery one of three weeks held in March, conducted by Miss Smith. Miss Gowell and I, of the M. A. College, which was very popular indeed to judge by the large numbers who took advantage of it. We have recently bought a piano from the McLean Co., Winnipeg, and all endeavors now are to pay for it. We have had one lawn social at which we realized thirty-nine dollars. As it was a cold evening we thought we had done very well. We propose holding one more during the summer, and besides tax each member 10 cents a month. The piano is paid for. We hold our meetings upstairs in the Municipal Building. Half of the hall below is the Ladies' room, which has supplied a long list. The ladies often saying they do not know how they had got along before. Altogether our Society is very popular and so far we have got along fine. We hope to see our Society among the best in the Province. Yours,

K. Brydon (Page la Prairie Correspondent)

### La Riviere

The regular meeting of the La Riviere H. E. Society took place at the home Mrs. J. Henry on Friday, June 25. The



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a fairly good attendance and one member was enrolled. More samples of the Ho-Mayde Powder bread was distributed, and those had used it reported that it was satisfactory. A letter had been received from the Farmers Supply Co. re "fruit in season" and asking that the names of the members be sent in. A programme was arranged for the two meetings, after which the president read a paper taken from the Alberta Horticulturist entitled "How to grow your own vegetable seed." Three books have been received from M.A. College, which were very much appreciated by those who had read them. It was decided to hold the next meeting at the home of Mrs. Wm. Wightman after the close of the meeting lunch served by Mrs. A. Henderson and Wm. Wightman.

Miss H. E. Wightman, Press Reporter.

**Miami H.E.S. Meeting**

The regular monthly meeting of the H.E.S. was held in the Rest Room on Sunday, May 22nd, with the vice-president in the chair. Miss McVie acted as secretary in the absence of the regular secretary. There were about forty ladies present and a splendid programme was given. Mrs. Kerr gave an interesting paper on the care of young chickens, their diseases and the best ways to prevent these, and the cure of eczema as it appeared. It was unanimously decided to have this paper published in "The Canadian Farmer." Mrs. Bond gave a paper on the care of young chickens, including the testing of the different kinds of food received when the chicks were very young. Lively discussions followed each paper and the women felt that an hour spent in this manner was of real value. It was decided to send for three books, viz., "House Flies and their prevention," "Canning Vegetables in the Home," and "How to Destroy Rats." Also a good discussion it was decided to send for three dozen samples of Home-made bread improver. Resolutions of peace largely signed. The presentation in cooking by Miss Crawford of the M.A.C. on April 23rd was enjoyed by the women. It was decided to have Miss Crawford give one presentation in cooking each week on her next if possible.

**Turkeys**

Written by Mrs. A. G. Kerr, and read at the Miami Society:— When the turkey-hen is sitting she should always be attended by the same person. The visit of a stranger may destroy the chances of success. During the first few days the feed of young turkeys may consist of a semi-dry mash of hard boiled eggs, boiled rice and corn meal, the whole being cut fine and stirred in milk. After the fifth day eggs and bread are gradually suppressed and onion tops, tender grasses, sprigged lettuce, bran, shorts, barley or oatmeal may be added. Pure water with a little sulphate of iron may be given for drinking. When the young look well a little ginger may be added to the feed. It is a very critical time in the life of the turkey when the shooting of the red takes place. It lasts about two or three weeks often a number of birds die. It is necessary that they should be kept during this time and in a dry place free from draughts. They should be liberally on stimulating food: ground linseed meal and finely chopped onion. It is well to add salt, pepper, cayenne and even raw garlic. Young turkeys suffer greatly from lice infestation. The mother bird should be kept in a clean place before the young are hatched. But the plumage at night should be treated with a good insect powder. Some lice

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**NOBBY BROWN TWEED NORFOLK SUIT FOR BOYS** Price Delivered **2.75**

This Boys' Suit Special is made of medium weight wool tweed, having a close hard weave and a soft finished surface; the pattern is a mixture of light and dark brown and will not easily show dust or soil, a very desirable feature for boys' suits; coat is Norfolk style with yoke and two pleats back and front; also all-round belt of same material. The knickers are very full, with wide lap outside seams, they have loops for belt, buttons for suspenders and inside waist band; are full lined, which helps hold the shape and also adds to their warmth and service; inside and crotch seams are double stitched and taped inside. Guaranteed not to rip. Well tailored throughout; a good example of some of the values we offer. **2.75**

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Boys' Suit-10E84999 Price Delivered **2.75**

are hard to see. A little sweet oil rubbed lightly on the head and throat will destroy them. Diarrhoea is caused in most cases by dampness, dirt or vermin. The best remedy is to remove the cause. Boiled rice with a small quantity of charcoal gives good results. It is recommended to give two parts of ginger, cinnamon, cloves, cayenne peppers, the whole well mixed with a mash; a teaspoonful for a dozen young turkeys. You can double the dose when four or five weeks old. The regular monthly meeting of the Miami H.E.S. was held in the Rest Room on June 19th. Fifty-seven ladies were present, including three ladies from Roland, where a H.E.S. has been lately organized. The president was in the chair. After singing "The Maple Leaf," the minutes of last meeting and of the directors' meeting were read and adopted. It was decided to avail ourselves of the offer of books from the M.A.C. Among the correspondence was a letter from

Portage la Prairie, who have lately organized, asking for information regarding conducting meetings and length of same. Mrs. Bond, who so often has delighted us with musical selections, accompanied the opening and closing odes on the auto-harp. The constitution and by-laws of our society, which were drawn up and submitted to the directors, were read and adopted, a copy of which is to be sent to Roland Society. As several societies in this province have asked for our by-laws, we shall be glad to send same, on application to our corresponding secretary, Miss Seip. It was decided to serve lunch on Fair Day, July 8th, a committee being appointed for same. The month's programme was two papers, one on "The Care of the Sick Room," by Mrs. Wilkins, gave an up-to-date idea of the work of a trained nurse. The second paper by our president, Mrs. McNevin, on "The Relation between the Home and the School," was well received and it was decided to have this published in "The Canadian Farmer." The Roland

ladies expressed themselves as well pleased with the manner in which our meeting was conducted. The meeting closed by singing the National Anthem.

**Recipes**

**Scalloped Celery**—Cut into pieces about one inch long and stew until tender. Make a paste with a tablespoonful of butter and one of flour; add about a cup of milk; butter a baking dish and put in celery and sauce. If there is not enough sauce to cover the celery, add enough more milk. Sprinkle the top with cracker crumbs and dot with chunks of butter, putting in salt and pepper to suit. Bake twenty minutes in a hot oven.  
**Graham Pudding**—Two cupfuls Graham flour, one cupful molasses, one cupful sour milk, one teaspoonful soda

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**Orange Sauce.**—Three-fourths cupful orange juice, one tablespoonful lemon juice, one-half cup sugar, one tablespoonful corn-starch, a few grains of salt, one teaspoonful butter, yolk of one egg. Put one cup of water or to boil, when boiling add the corn-starch which has been mixed with a little cold water, the orange juice and lemon juice, sugar well beaten yolk of one egg and the salt; boil three minutes; add the butter and beat until well mixed and smooth. Serve hot or cold. Pieces of stale cake or bread instead of orange puffs can be served with hot orange sauce poured over them.

**Green Pea Omelet.**—Two quarts green peas, shelled and cooked or 1 can of peas, 4 eggs, 3 tablespoonfuls warm water, 1 level tablespoonful butter, 1 level tablespoonful salt, 1 level teaspoonful pepper. Have ready the peas, cooked, hot, and seasoned. Break the eggs into a bowl; beat lightly with a fork, just enough to mix the whites and yolks. Put the butter into a saute pan. When melted, but not brown, turn in the eggs. Cook carefully over a hot fire, shaking the pan, so that the omelet will not stick or burn, and with a thin-bladed knife lift the edges, allowing the uncooked portion to run underneath. When the omelet is firm, but not overcooked, sprinkle with salt and pepper, add some of the peas, fold, and turn onto a hot platter. Garnish with the remainder of the peas and parsley, and serve at once. Time of preparation, 10 minutes, cooking 5 minutes. Number served, 4 persons.

**Scotch Potatoes.**—Peel and slice thin or flute enough potatoes to fill a kettle to about one and one-half inches from the top. Put in a layer about one inch deep. Add thinly-sliced onion and butter or any other fat. Add small cubes of salt pork and season with pepper and salt. Continue with potatoes, onion and seasonings until all are used, having potatoes on top. Add hot water until it just covers potatoes. Boil until potatoes and onions are tender.

**Three Birds with one Stone.**—A simple sponge cake, made from three eggs, a cup and a half of sugar, a half cup of water, and two cups of flour, sifted with two level teaspoonfuls of baking powder, may be put together in ten minutes and will furnish the basis for three excellent desserts.

When the batter is ready, drop a spoonful into each of eight or nine well buttered muffin tins, adding to each an English walnut meat, a few seeded raisins, or a teaspoonful of grated coconut. They will need no further decoration and served with fresh or canned fruit, with a simple boiled custard, or with a cup of hot chocolate form dessert No. 1.  
Spread a thin sheet of the batter in a medium sized bread tin, or a square layer cake pan, bake until done but not brown, turn out upon a clean cloth, and spread at once with grape, currant, or blackberry jelly. Roll carefully while still warm, wrap the cloth around it and set it away for dessert No. 2. When ready to use, cut into inch slices and serve with either caramel or cream sauce, hot.

The remainder of the batter may be baked in a single rather deep layer tin or pie pan, and may be used with whipped cream as a Charlotte russe, with boiled custard as floating island, or it may be split with a sharp knife and filled with crushed fresh fruit, strawberries, bananas, or peaches, and the whole covered with whipped cream. Or a thick custard cream, made with cornstarch may be spread between, forming a cream pie.

Of the three desserts, the small cakes had better be used first as they will dry out the most rapidly, while the jelly roll can be kept for the last, as even if it is a little dry, the hot sauce will freshen it.

**Blackberry Mush.**—Is an old standby, usually liked by everybody. Stew the berries with a little water; when they are very soft sweeten, and thicken with flour and water. This should not be quite thick enough to mold, and is eaten with cream, when it is cold.

**Dutch Cheese Daintily Served.**—Prepare Dutch cheese in the usual way, roll into hills as large as an egg and serve on individual plates in nests of parsley. Sprinkle a bit of chopped parsley and one chopped olive over the top.

Another way is to prepare the cheese with cream, seasoning, etc., then pat out flat, use fancy cookie cutter and cut in dainty shapes. Serve on small plates garnished with lengthwise slices, very thin, of cucumber pickles and rings of pickled pimientos. Stick a sprig of parsley and a ring of pimiento in the center of each cheese cake.

Chop one cup of English walnuts and

moisten with a little mayonnaise. Mix with one cup prepared cheese. Spread between thin slices of brown bread. Serve each sandwich on a crisp lettuce leaf.  
Chop one stalk of crisp celery and twelve pimiento stuffed olives, mix with one pint prepared Dutch Cheese. Serve on crisp lettuce leaves as a salad with a spoonful of mayonnaise on top or a dab of whipped cream may be used if preferred.

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The sole head of a family, or any male over 18 years old, may homestead a quarter-section of available Dominion land in Manitoba, Saskatchewan or Alberta. Applicant must appear in person at the Dominion Lands Agency or Sub-Agency for the District. Entry by proxy may be made at any Dominion Lands Agency (but not Sub-Agency), on certain conditions.

Duties—Six months residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres, on certain conditions. A habitable house is required except where residence is performed in the vicinity.

In certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$2.00 per acre.

Duties—Six months residence in each of three years after earning homestead patent; also 50 acres extra cultivation. Pre-emption patent may be obtained as soon as homestead patent, on certain conditions.

A settler who has exhausted his homestead right may take a purchased homestead in certain districts. Price \$5.00 per acre. Duties—Must reside six months in each of three years, cultivate 50 acres and erect a house worth \$500.

The area of cultivation is subject to reduction in case of rough, scrubby or stony land. Live stock may be substituted for cultivation under certain conditions.

**W. W. CORY, C.M.G., Deputy of the Minister of the Interior**  
N.B.—Unauthorized publication of this advertisement will not be paid for.—64388.

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We have pleasure in calling attention to the announcement on another page of a new system of plumbing, water supply and heating for the Farm Home by Partridge and Halliday, of Winnipeg. By this system it is possible to obtain at comparatively little cost all the convenience and comfort of the city residence in the matter of water supply and heating. The heating is by hot water, and as our friends states, it is "a luxury at the price of a common necessity." We are glad to bear testimony to the high standing of this firm, and to recommend our readers who contemplate making themselves cosy for the winter to get in touch with our friends. We will be glad to send their complete literature free to any address.

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A Little French Heroine

Amidst all the welter of blood, of savagery and crime, one meets, thank Heaven, deeds of self-devotion, intense humanity and the true spirit of the highest form of Christianity—the love of others and the effacement of self.

France has ever been a land of heroic deeds, men and women have given up wealth, position, even life to help their neighbors or their country. Let no one think that the days of heroes and heroines are gone. The noble deeds of the Red Cross nurses testify to the unyielding charity and devotion to the following of Christ's teaching ever present when the call for help is heard.

If France has produced and still produces and ever will produce heroes and heroines amongst its manhood and womanhood, the children of France have been numerous in all ages for their courage and heroism. A few months since a little girl of ten was standing in the front row of a terrified crowd watching the destruction of a house by fire in a provincial town of France. As is usual, several families lived under one roof, and the eager face of the girl heroine was seeking to find if all had been saved when she heard a mother with several children cry, "Where is baby? My God, she is in her cot!" She had to be forced back to keep her from entering the burning building. In the confusion a slim little girl rushed into the house, knowing where baby was, caught it up and rushed through the smoke and heat and placed it in its mother's arms.

During the present terrible war another little French girl has given proof of courage and devotion that has brought many a blessing on her fair young head. The tale is told by a private of the British Royal Artillery and we fancy that many a Canadian little girl of Madeline's age (the heroine's name) will not only read with interest this tale of her brave acts, but will think if, should occasion present itself, should I not also be a heroine?

Madeline is of course not the everyday girl of nine years of age, for her courage is as conspicuous as her kindness of heart. Just fancy a child of nine carrying hot coffee to the poor half starved

**"As you like it"**

**"SALADA"**

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**Guaranteed Goods**

We hear a great deal nowadays of "buying packed commodities"—goods with a guarantee. Excellent if the guarantee means anything.

**BLUE RIBBON TEA**

is trebly guaranteed.

Back of it stands a company with a twenty-year reputation for integrity and square dealing. The new double wrapper is a "guarantee" against the slightest deterioration by climatic or other conditions. Then there is the standing guarantee that any purchaser dissatisfied from any cause—even mere whim—may have the money back for the asking.

**Could Any Guarantee Be Stronger?**

**WANTED**

**NEW INVENTIONS**

Send for full list of inventions wanted by manufacturers. Get a copy of our new booklet "REFERENCE GUIDE FOR INVENTORS." It tells about how to obtain a patent and every inventor should have a copy. If you have an invention worked out, make a sketch and number the parts. Send it with a description of it in your own words, referring to the parts by numbers. Tell how it works and state its advantages. If you send model be sure it bears your name, so that we can tell by whom it is sent. Free search of Patent Office Records. It may mean your fortune. \$45,000 paid for some inventions. \$10,000 offered for others. Write us at once. Send names of others you know to be interested in inventions.

**HAROLD C. SHIPMAN & CO.,** Registered Patent Attorneys  
186 Hope Bldg., Ottawa Can.

**J. Pickles**

**Tent and Awning Manufacturer**

I am making special prices on the following tents to key thus:

The following are for 8 oz. tents. All 20 per cent for 10 oz. and 25 1/3 per cent, on tents only.

5 ft. x 7 ft. Wedge Tent, 5 ft. 6 in. high	\$2.00
7 ft. x 7 ft. Wedge Tent, 7 ft. high	4.50
7 ft. x 7 ft., 2 ft. wall, Tent 7 ft. high	6.00
8 ft. x 9 ft. 6 in., 2 ft. wall, Tent 7 ft. high	7.25
10 ft. x 12 ft., 3 ft. wall, Tent 7 ft. high	12.00

**BUY FIRST HAND**

For further prices on Horse Blankets, Tarpaulins and larger Tents. Write me.

**J. PICKLES, 310 HARGRAVE STREET - WINNIPEG**

**FLAX STRAW**

Farmers! Don't burn millions of Dollars again. Save only cents, but also Dollars. I pay, as you know, \$200.00 a ton cash. Winnipeg; \$195.00 Regina; \$190.00 Saskatoon. FlaxBrix, retted, basis 2K (according to grade), length from 26 inches, during the tiresome winter, for fibre; snatch the profit and make money. The longer the fibre and the better the quality, the better the price.

**LOUIS HARTVIGSEN, Flax Exporter, 12 Eddy Apt., 14th Ave., REGINA**

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Best for Baby

After many years' use by parents of all classes, in Royal Nurseries and humble homes, Savory and Moore's Food has the reputation of being a thoroughly reliable food for infants.

The experience of parents, nurses, and medical men all goes to show that babies do thrive remarkably well on this famous food, that it prevents infant ailments, and that it builds up a strong constitution, so important in later life.

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Savory & Moore's little Book "The Mother's Guide" is full of useful information on Infant Management and contains chapters on Feeding, Teething, the Toilet, and Ailments, and many other subjects.

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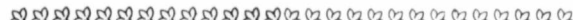
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and frozen soldiers in the trenches; but the terrible howling of shot and shell through which she has to pass to get to the trenches she heeds not. Many a man would not risk his life as Madeline has done daily on her mission of mercy.

Since the English press has given publicity to little Madeline's actions presents of all kinds have been showered on her, but it was the last thought, doubtless of this sweet little child that she was doing anything extraordinary, nor, we are sure, did she look for any reward, but would have been fully repaid by a kindly smile and a word of thanks.

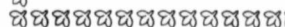
A Dog Who Knows the Value of Money

The Farm Journal says that one of its employees, while on her summer vacation, was introduced to Prince, a collie nine years old, a fine specimen of his breed. It is said of him that if you gave him a cent he takes it to the candy shop, puts the money in the attendant's hand, and begs until the candy is given to him.



AN APPEAL

Are You "Doing Your Bit" for Our Lads at the Front?



From many signs it seems hardly possible that we have yet realized in Western Canada what the great war means to us in our homes and in our national life—particularly what is the duty and privilege of those of us who for many reasons are compelled to "abide by the staff." There are so many valid reasons why men who are to all appearances "fit" cannot take their place by the side of those who have gone into the firing line, we will not presume to say what any particular individual's duty is.

But those of us who are palpably unfit, or because we happen to be women, are must stay at home, there is one way at least in which every one of us can do a big bit, and do it with a brimming heart. We can do a very great deal in sustaining the spirits, and in helping to alleviate the physical discomfort and suffering of those splendid man-folks of ours who have made the whole world ring with the story of their valor.

We have long desired through the columns of "The Canadian Thresherman and Farmer" to help in some way, but have shrunk from the responsibility of taking the step from the fear of encroaching upon, or duplicating one or other of the many fine organizations now at work for the boys at the front. Within the past few days, however, a representative body of young business men of Winnipeg have organized under the title of "The Winnipeg War Service Association," their purpose being set forth in the following circular which we take great pleasure in printing in full for the earnest perusal of our readers:

Winnipeg, 4th August, 1915. "Our boys who lived through the hell of St. Julien are now either in hospital or suffering the unspeakable tortures of a German military prison. If they have been spared these horrors, they are

Still Fighting for You in the trenches of France or Flanders. Do you realize that but for these brave lads—the very best and brightest of our citizenship—your career, your belongings in Canada would now be as "a scrap of paper?"

Between them and their sense of duty there is no doubtful interval but that they eagerly look for above all else is

to the ice-cream parlor, gives the money to the attendant, climbs up into a chair and begs and barks until they give him an ice-cream cone which he carries outside to eat. If they give him a basket to carry which is too heavy, he takes out some of the things and comes back for them! Isn't he a wonder?

COULDN'T BE PASTEURIZED

Mrs. B. had been getting poor milk from a certain dairy, and in hopes of bettering conditions she called up another milk company and asked if they had good milk.

"Yes, madam," was the reply, "we sell pasteurized milk and cream." "Now, you can't tell me that," she replied indignantly. "Everybody knows there isn't any pasture in Manitoba in January."

One Thing at a Time

Young Lady—How is it you don't come to Sunday school, Katie?

Katie—Oh, please, miss, I'm learning French and music now, and mother doesn't wish me to take up religion till later.

Your Moral and Material Support

The consciousness—expressed in tangible form—that they are never forgotten at home will do far more to cheer them in their lonely night vigils, to alleviate the mental anguish of their prison life and the sufferings of their shot-riddled bodies than anything in decorations for bravery or the kind words of strangers.

You Owe it to These Men

No less than to those of your own flesh, for they are spilling their last ounce of blood and patience to save your household.

This association has been formed to supply a continuous stream of comfort while Our Boys have a single need unsatisfied. 1. By getting in touch with Winnipeggers for men who recruited from Winnipeg, whether they are war prisoners, in hospital, or in the trenches; 2. to see that they are not overlooked in the matter of correspondence; 3. to send personal comforts—particularly to the injured and incapacitated; and 4. to serve as a channel to direct donations of every kind, so that they may reach their objective.

You Cannot Go?

Here is one thing you can do. You can give your dollars, and no citizen of big-hearted Winnipeg is a "slacker" when hearts are trumps. This is an affair of the heart.

In the personality of influential overseas friends, if human care and heartfelt interest may be trusted, not a single item sent will fail to reach its destination.

This is a personal message—you may take it from the boys themselves. They expect to hear from you.

Certainly We Do

Note—This effort is designed to cover a field that is not and cannot be effectively reached by any other War Service organization now in existence. It will not interfere with, but rather facilitate the work of the "Red Cross" and similar movements.

Need we add anything to this stirring appeal? We are glad to associate ourselves with this splendid idea. Any contributions will be gratefully accepted, and if addressed to the editor of our Woman's Department, Mrs. E. W. Hamilton, 983 Grosvenor Avenue, Winnipeg, they will be taken care of and duly acknowledged by her as well as by the Secretary of the Association. The following are the names of its officers and executive:

Hon. Pres., C. N. Bell, LL.D.; Pres., George D. MacVicar; Sec., Harry C. Ashdown; Treas., J. V. Nutter.

Executive: Charles C. Lindsay, Charles E. Dewry, E. M. Walker, D. R. Finkelstein, E. H. Bennet.

Makes Hard Cleaning Easy!



"MADE IN CANADA" Write to the Cudahy Packing Co., Toronto Canada, for our Booklet "Hints to Housewives."



Conducted for the benefit of Dealers, Threshermen and Farmers who have anything to sell or exchange. Five cents a word for each insertion.

**BARGAINS.**

One 30 H.P. double undermounted Avery engine, with Alberta and Saskatchewan boiler. This engine has been repaired and fixed up in first class shape. Can be seen at our Regina warehouse at any time.

One 30 H.P. undermounted Avery engine, with regular boiler, repaired and fixed up in first class shape. This would make a dandy threshing engine. Can be seen at our Regina warehouse at any time.

One 30 H.P. undermounted Avery engine, with regular boiler, revolving axle, repaired and in first class shape. This engine has been used but very little, and can be seen at our Winnipeg warehouse at any time.

One 18 H.P. double undermounted Avery engine, coil burner, is in first class shape at our Regina warehouse.

One 32 x 54 Avery separator, only been out 20 days, and is in first class shape. Can be seen at our Regina warehouse at any time.

One 36 x 60 Avery separator, complete with feeder, weigher, wind stacker; has only been out 30 days. Has been repaired and repainted, looks like new. Can be seen at our Regina warehouse at any time.

One 42 x 70 Avery separator, has run 28 days, has been repaired, repainted and overhauled, and is in first class shape. Can be seen at our Winnipeg warehouse at any time.

We also have a few second-hand, both Avery and Cockshutt, plows, in different sizes, from 5 to 10 bottoms.

If you are interested in second-hand goods, and none of the above suit you, let us hear from you, stating just what you want, and we feel sure that we can fix you out all right.

**CANADIAN AVERY COMPANY, LTD.**  
Winnipeg and Regina.

**FOR SALE.**

**LIST OF RE-BUILT SECOND-HAND MACHINERY AT OUR WINNIPEG BRANCH**

Steam Engines	Price
110 H.P. Simple Traction Engine	\$2,700
80 H.P. Simple Traction Engine	2,400
75 H.P. Simple Traction Engine	1,475
60 H.P. Simple Traction Engine	1,000
45 H.P. Simple Portable Engine	450
Gas and Oil Engines	
20-40 Gas Traction Engine	\$1,450
30-60 Gas Traction Engine	1,950
Steel Separators	
32 x 58 Steel Separator	\$500
32 x 54 Steel Separator	780
28 x 50 Steel Separator	545
24 x 42 Steel Separator	500
18 x 42 Steel Separator	475

All Separators complete with Feeders, Gearless Wind Stackers, Grain Handlers, Belts.

The above machinery has been rebuilt and repainted in our own shop and is in first class shape. For further particulars apply.

**J. I. CASE THRESHING MACHINE CO.**  
Princess and James St.  
Winnipeg, Manitoba.

**FOR SALE**—25 H.P. steam tractor in A1 shape. Would take part trade in horses. H. Peterkin, Winton Hill, Sask.

**FARMS WANTED**—We have direct buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property. Free. American Investment Association, 15 Palace Bldg., Minneapolis, Minn.

**POSITION WANTED** by two experienced men as engineer and foreman on threshing outfit in Edmonton district. Ed. Powers, Hotel Yale, Vancouver, B.C.

**WANTED**—Second-hand Sawyer-Massey Eclipse separator with sack tally and straw carrier complete. In good order. Allen, Lawton, Alta.

**MEN WANTED** in this and adjoining counties to show samples and distribute circulars for Canada's largest cut-rate grocery mail order house. Sample case free. Position will pay \$20 weekly. The Co-operative Union, Windsor, Ontario.

**ONE 10-FURROW 14 in.** Cockshutt engine gang, both stable and breaker bottoms, also Stewart sheaf loader, only run ten days, in good shape. R. A. Brodie, Pierson, Man.

**FOR SALE**—One J. I. Case steel separator, size 32 x 54; practically good as new. One J. I. Case 15 in. steam engine, old. Write R. D. Jacobson, Bathgate P.O., Alberta.

**FOR SALE** or trade for stock, one twenty H.P. American Abel engine in good condition. Address Patterson Bros., Birtle, Man.

**POWER OUTFIT**—20 H.P. Fairbanks-Morse gasoline engine, mounted on trucks, in first class condition, and 12-inch feed grinder. Cheap for cash or will consider trade for smaller outfit or live stock. B. M. Pauls, Daysland, Alta.

**FOR SALE**—One 32-inch Hawkeye self-feeder for sale cheap. Apply, Corona Lumber Co., Portage la Prairie, Man.

**FOR SALE.**

We have on hand at present a very full line of Rebuilt and Second-hand Engines and Separators, which we are offering at attractive prices. Write as fully what you are thinking of buying, when we shall be pleased to tell you what we have and quote prices. All our rebuilt goods are sold under same guarantee as new ones and engines are fully repainted and look exactly like new. If you write as at once we are sure to have the size you almost want.

**SAWYER-MASSEY COMPANY, LIMITED.**  
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**OXY-ACETYLENE WELDING**—Save your cracked or broken castings from the scrap heap. We weld cylinders, crank shafts, gears, levers, etc., retain original form and strength at a small cost. Metal added to worn-out parts. All metals welded satisfactorily. The Manitowish Welding & Manufacturing Co., 62 1/2 Princess Street, Winnipeg.

**CASH**—If you want to sell your threshing machine or other property, in any kind, anywhere write us. We bring buyers and sellers together regardless of distance. Buyers located free. Established 1893. Northwestern Business Agency, Minneapolis, Minn.

**MOTOR CYCLES**—New and second-hand, Cleveland wheels, made in Canada. Repairs for any kind of wheel or motorcycle, tires, pumps, horns and all accessories, wholesale or retail at Hall's, 1734 Cornwall St., Regina, Sask.

**SKIMMENT** Your Barns, Poultry Houses, Granaries, Machine Sheds, Fences, Bridges, etc. Costs only 65c per gallon. Better than oil paint. Is Fireproof, Weatherproof, Verminproof and Sanitary. Made in Red, Dark Red, Black, Slate, Green and White. Write for Sample.

**THE ROCK SPRINGS FARM**  
Box 5188, WATROUS, Sask.

**WANTED**—To hear from owner of good farm or unimproved land for sale. H. L. Downing, 106 Palace Bldg., Minneapolis, Minn.

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

**SECOND-HAND MACHINERY FOR SALE**—A fairly complete assortment of thoroughly rebuilt second-hand Gas and Steam engines and separators. Any person interested apply for prices and descriptions to The J. I. Case Threshing Machine Co., Regina, Sask.

**FOR SALE**—Stewart Sheaf Loader in good condition, been used only 2 seasons. Price \$300.00. Apply J. Ferguson, Gurnesey, Sask.

**FOR SALE**—Farm, 640 acres. Near Craik, Saskatchewan. Every acre under cultivation, fair improvements and as nice a section of land as there is in Canada. Not a knoll or pot hole on the entire section. Must sell quick. Cash price \$25 per acre. Address E. E. Bain, Downers Grove, Ill.

**FOR SALE**—2900 acres unimproved land near Davidson, Sask., Canada, in tracts of 160 acres and up. Will divide to suit. Every acre can be put under cultivation and is in one fourth cash, balance three to five pay quarterly. Address Wm. McDermott, De Kalb, Ill.

**33 in. by 52 in. Farquhar Separator**—cleanest and fastest thrasher built. We have always stocked heavily on this size of machine, a large number being sold with our 20-40 Oil Tractors. This year, our Eastern factory is so busily engaged on government contracts, they cannot supply us with this particular size of engine, consequently our stock of 33 in. by 52 in. separators is too large. For a limited time you can take advantage of the situation by purchasing one of these excellent separators at a discount of 20 per cent less than regular prices. Write to-day for full information and try to get in on this 50-50.

**THE CANADIAN FAIRBANKS-MORSE CO.**  
Limited Winnipeg

**WANTED** to hear of good farm or unimproved land for sale. Send description and price. Northwestern Business Agency, Minneapolis, Minn.

**HARNESSES**—You want it good, don't you? As poor harness is dear at any price. Send now for my free Catalogue A. It shows you 35 styles of the "Square Deal" Brand which is known from one side of the West to the other for its quality and is sold direct to you, the man who uses it—No agents. Thos. McKnight, Winnipeg, Canada.

**FOR SALE**—Complete threshing and plowing outfit in good order cheap. Dissolving partnership. Address Bluet Bros., Brock, Sask.

**WANTED** Second-hand separator from 22 to 30 inch cylinder with feeder weigher and blower. Jas. Groppe, Friedensthal, Alta.

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**SILVER STAR ENGINE KEROSENE**

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Mechanically perfect and guaranteed an absolutely accurate revolution counter. Can be used for any machine. A very handy instrument.



Cut out guess-work in figuring speed, and get every ounce of power out of your engine by using the exact knowledge this indicator will give you. You will carry out many tests hitherto unthought of, and see a real benefit in every cent. Equipped with a stop motion (which gives it accuracy) and having a capacity for a continuous count of 5,000 revolutions, this simple instrument will stand up under the most severe cases you are to put it to.

The indicator is very compact and nicely finished in black enameled polished steel dials. The simple mechanism and the ease with which the dials can be set at zero after a reading has been taken, are prominent features that appeal strongly to those who have little time to spend in adjusting a more complicated instrument.

**How to get the Speed Indicator**

The Canadian Thresherman and Farmer needs no recommendation here. It is just as Mr. W. A. Graham, of Claresholm, Alta., wrote us recently: "I would not be without your magazine if it cost \$5.00 a year." You cannot expect us to reduce the small fee of one dollar a year, but you want as much for that dollar as you can get, don't you? Take us at our word. Send for this speed indicator because we say you will find a very valuable addition to your tool box. Then with it beside you prove that we have told the truth. If you don't feel absolutely certain that you will get more value from it than what you pay for a full year's subscription to this magazine—send it back at our expense, and we will return your subscription price of one dollar. Don't put this offer down without acting. You are bound to need one when the busy summer comes. Secure one now—FREE. Get that coupon in the mails at once.

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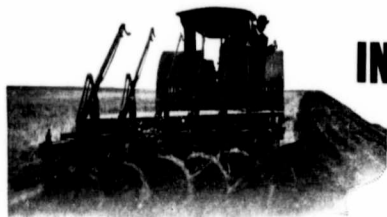
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WINNIPEG

I enclose \$1.00 year's subscription to The Canadian Thresherman and Farmer. Also me free one speed indicator as described in this advertisement at once. If I am satisfied with it after one use I will send it back at my expense and you are to receive it without question.

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**INTERNATIONAL HARVESTER**  
**MOGUL or TITAN Oil**  
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**M**ORE than ever this year that familiar combination, **International Harvester** tractors and **Oliver** plows is busy at work turning the soil of West Canadian fields. They have grown more popular steadily—a solid popularity based on satisfaction.

**Mogul** and **Titan** oil tractors give users the most power and the best steady service, least trouble in the way of care and attention, least difficulty in the way of breakages—and they prove by far the most economical power in the long run. They are built to meet every farmer's needs in style, weight and size.

**Oliver** tractor gangs are made up in 4, 5 and 6-base sections. The sections are joined flexibly, insuring plowing to an even depth. Levers are double-latched, truck wheels are swiveled, beams have the most rigid construction known. The **Oliver** plow, no matter how large, follows the lay of the land and plows evenly on irregular or rolling surfaces.

Write to the nearest of the branch houses listed below for catalogues. It will be to your advantage at this time of year to have in your possession more information as to what you can do this season with an outfit of **Oliver** plows and an **International Harvester Mogul** or **Titan** tractor.



**International Harvester Company of Canada, Ltd.**

**BRANCH HOUSES:**

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

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You're interested in the small farmer tractor we know. Like a lot more farmers you've wanted one built by a firm you could depend upon. A concern of world-wide reputation. One known for the quality of its Products.

Well—it's here. Just the tractor for the small farm. It is the CASE 10-20. Built, designed and tested by CASE. For over 72 years CASE has built the finest farm machinery. Three generations of successful farmers have endorsed CASE Products. That's why this tractor will interest you. You know it's a safe buy.

Built right? It's built to CASE Standard. Could you ask more? We've put into it the finest materials and the best workmanship that a small tractor requires. We understand your needs. This tractor has been designed to meet every small farm requirement.

It makes no difference whether it's plowing, running the small thresher, discing, harrowing, running the binder, hauling, etc., this CASE tractor will do it and do it right.

CASE Gas Tractors are also built in sizes of 12-25, 20-40 and 30-60 Gas and Oil. The sizes of CASE Steam Tractors range from 30 to 110 H. P. All built to do honor to the CASE reputation. If your farm requires a tractor, by all means demand CASE. Not built to sell on price, but built to give service, produce bigger results and make greater profits.

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Want our big catalog on General Machinery. Just tell us on a card you want it. It will be sent to your door postpaid.



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**THRESHING MACHINE CO.**

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