

1

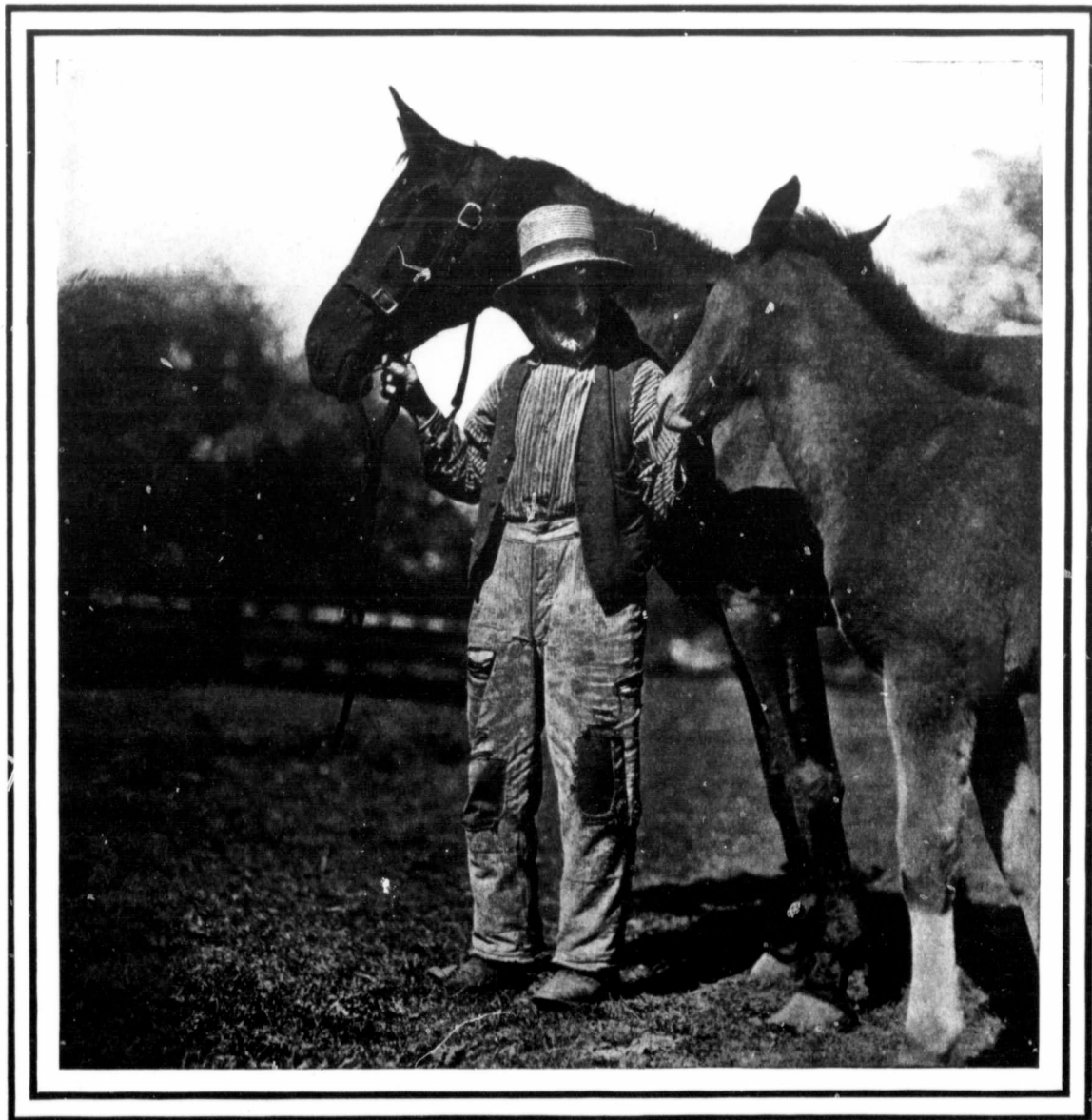
P. 4.6

The CANADIAN THRESHERMAN AND FARMER

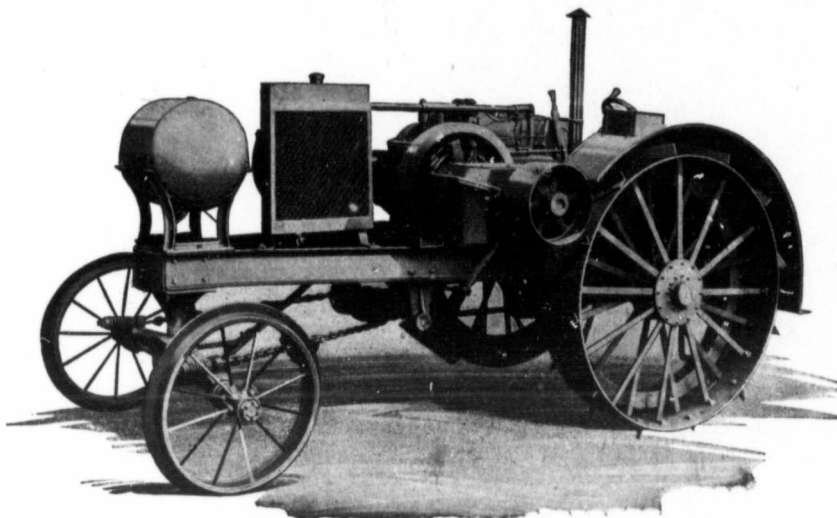
WINNIPEG CANADA
JUNE
NINETEEN SEVENTEEN

JUL 21
P. 11

BETTER FARMING — BIGGER CROPS — BETTER PRICES



Published Monthly by E. H. HEATH CO. LIMITED ~ Our Fteenth Year

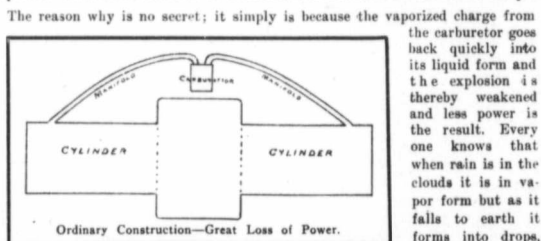


The Heart of a Tractor is its Engine!

If the Engine is not properly constructed from a power producing point of view, you cannot get your full money's worth out of your Tractor.

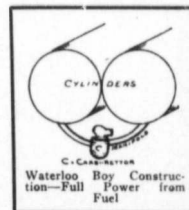
Experts Agree That *Kerosene* Gives More Power Than *Gasoline*

—and to get full power from kerosene requires a better constructed engine. It is a proven scientific fact that kerosene gives off more heat units (power) than gasoline when it is properly used. The proper construction of an engine for developing power from kerosene is to connect the carburetor as close as possible to the cylinder, and heating the vaporized fuel with the exhaust.



The reason why is no secret; it simply is because the vaporized charge from the carburetor goes back quickly into its liquid form and the explosion is thereby weakened and less power is the result. Every one knows that when rain is in the clouds it is in vapor form but as it falls to earth it forms into drops,

the same thing exactly occurs in the case of kerosene burning engines, only that kerosene returns to its liquid form much quicker than water; if the vaporized charge has a long distance to travel before it reaches the cylinder, it returns to its liquid form. Notice in the illustration on the right the short distance from carburetor to cylinder, this means perfect combustion and greatest power; while the illustration on the left shows a connection, often used, which is so long that it is impossible to draw the charge into the cylinder in its complete vaporized form, consequently less power is produced.



The Waterloo Boy ^{ONE MAN} Kerosene Tractor

—is built on the one correct principle for successful operation on kerosene fuel—twin cylinders cast en bloc connected to carburetor through a short manifold. The incoming charge is conveyed to the cylinder in a jacket cast around the ex-

haust which thoroughly heats and vaporizes the mixture of kerosene and air and deposits the mixture still vaporized in the cylinder, thus producing all the power possible from the fuel. Fill in the coupon for more information.

WATERLOO BOY 24x46 SEPARATOR

A small successful machine that operates at a great saving of money and labor. It gets all the grain out of the head; gets it clean for market, does its work quickly and with the least effort on the part of man. Grain check plate immediately behind the grate insures thorough separation—this is only one of the features that go to make the Waterloo Boy the most efficient Separator you can buy.



Mail the Coupon for Folder which tells all about it.

INFORMATION COUPON

Waterloo Boy Kerosene Tractor of Canada, Limited, Winnipeg

Gentlemen:—Kindly send me full information regarding item marked below with an X. I expect to buy about

month

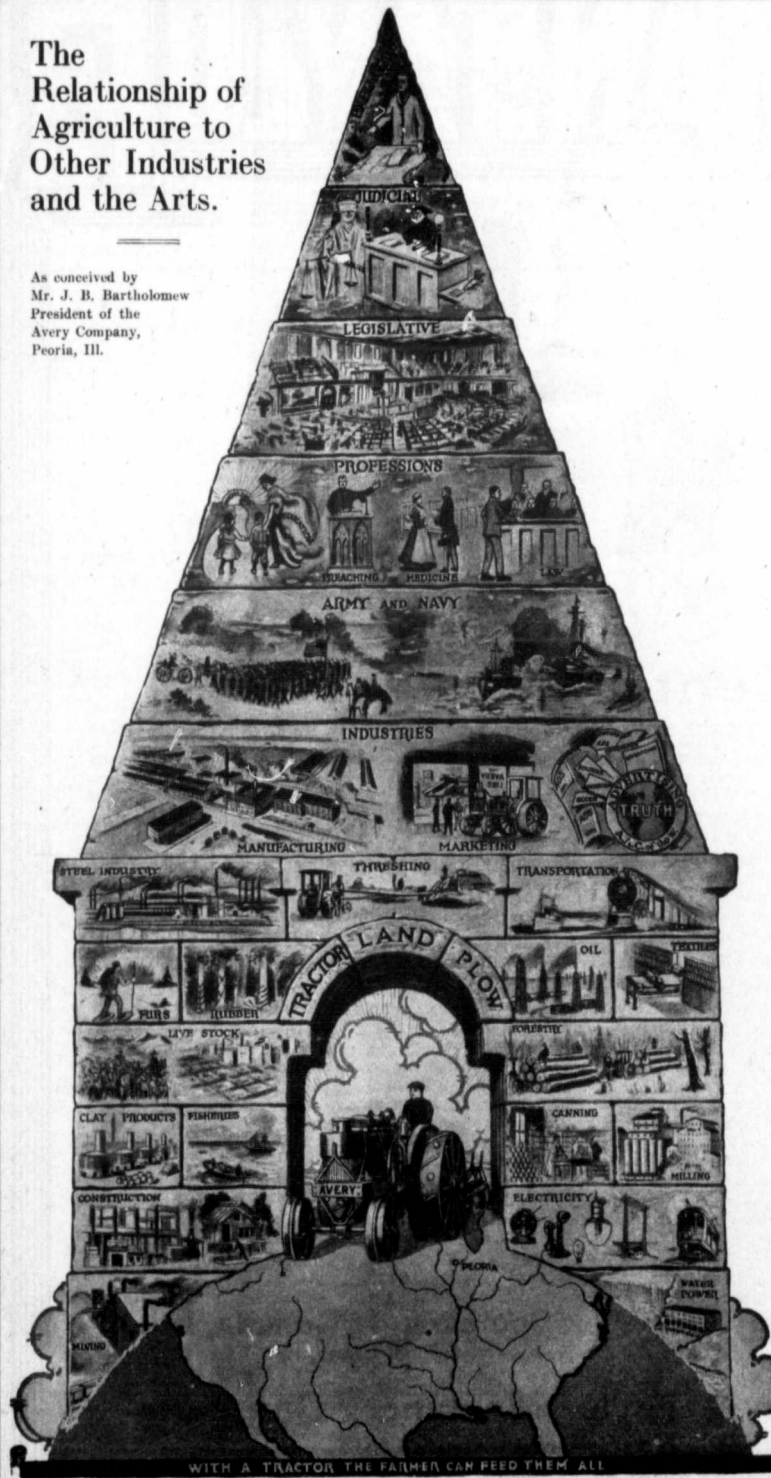
- TRACTOR Name
- SEPARATOR Address

Mail This Coupon To-Day

Waterloo Boy Kerosene Tractor
Dept. B Of Canada Limited WINNIPEG

The Relationship of Agriculture to Other Industries and the Arts.

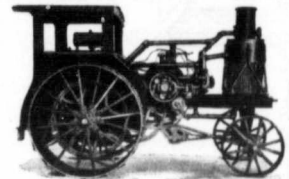
As conceived by
Mr. J. B. Bartholomew
President of the
Avery Company,
Peoria, Ill.



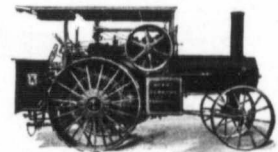
WITH A TRACTOR THE FARMER CAN FEED THEM ALL

AGRICULTURE IS THE FOUNDATION UPON WHICH ALL THE BRANCHES OF CIVILIZATION MUST REST
• The TRACTOR • • • The LAND • • • The PLOW •
Avery Tractors and Plows are Making Good at doing their part in Feeding the World
AVERY COMPANY • PEORIA ILLINOIS

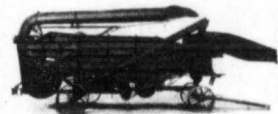
These Avery Machines will help you "Do Your Bit" by Raising More and Saving More



Gas and Oil Tractors
6 sizes



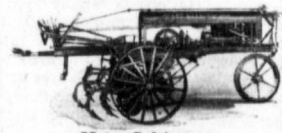
Steam Engines
3 sizes



Grain Threshers
8 sizes



Engine Gang Plows
8 sizes



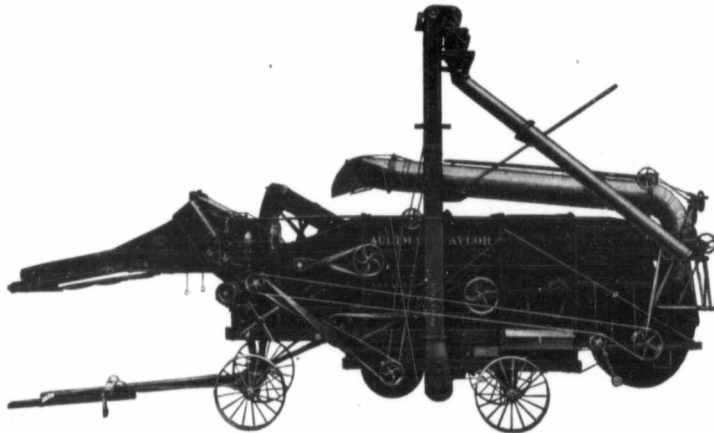
Motor Cultivators

If you haven't a copy of the interesting 1917 Avery Catalogue drop us a line on a post card or in a letter and we'll send you one at once. Or call on any Avery Agent, Jobber, Branch House, or at our Home Office and see samples and let us talk over your requirements.

AVERY COMPANY
685 Iowa St., Peoria, Ill.

Canadian Avery Co. Ltd.
Western Canadian Distributors
WINNIPEG REGINA

AULTMAN-TAYLOR



New Century threshers

THAT'S THE ANSWER TO THE CALL FOR THE CONSERVATION OF THE NATION'S GRAIN CROP

America must feed the world. The millions in the trenches and in the cities must look to the U.S. and Canada for their food supply. The American farmer has most nobly responded to this national emergency with quick action for increased food production. Every available acre is under cultivation. This year's harvest will open the eyes of the world. Some startling records will be established on America's food production.

Aultman & Taylor feel their sense of obligation in this great conflict and are lending every possible aid to the American farmer; supplying him with machinery of a superior quality with which to increase his production and conserve that which is about to be produced.

Thousands of threshing machines will be needed to thresh these record-breaking crops. You can rely on Aultman-Taylor furnishing many of these machines, for the demand for New Century threshers will be tremendous—because they save the grain—everyone knows it—and that's what counts, especially in such a crisis as this.

IT'S A PATRIOTIC DUTY TO SAVE EVERY GRAIN—YOU CAN DO IT WITH A NEW CENTURY

Under existing conditions it would be little less than a crime to waste grain. You must save—waste not a kernel. Thresh with a New Century and make clean, quick work of it. Get all the grain out of your crops—you can do it with a New Century.

Harvest is rapidly approaching and these bumper crops must be threshed and converted into food quickly to feed the awaiting millions at home and abroad. New Century owners will be able to render an invaluable service to their country and at the same time make big profits. The man who operates a New Century is going to be busy every minute. Long ago farmers learned that the New Century saved the grain better than any other machine and now, because of the high figures at which all grain is selling, they will want and are going to insist on having their crops threshed by a machine that really saves the grain—the New Century, so now is your opportunity to make a mint of money in the threshing business by operating a famous New Century thresher.

New Century machines are built in seven sizes. The 20 x 32 and 23 x 36 are ideal machines for use with the small tractor. They are light in weight and in draft; large in capacity; the quality of the work is of the highest; the cost of maintenance is unusually low. For custom work, the larger machines meet every requirement and are well and favorably known throughout the world.

Do your "bit" in this world war by helping to conserve the nation's grain crop by threshing it with a New Century machine. CATALOGUE SENT ON REQUEST.

The International Harvester Company of Canada, Ltd.,
Canadian Sales Agents for New Century Threshers, or

The Aultman & Taylor Machinery Company
Lock Box No. 64, Mansfield, Ohio

Branch Houses: MINNEAPOLIS, Minn.; GREAT FALLS, Mont.; REGINA, Sask.; CALGARY, Alta., Canada





Vol. XXII

WINNIPEG, CANADA, JUNE, 1917

No. 6

"THE World's Bread Basket!" That headline stares us in the face in bright, yellow letters on a sky-blue background. The combination is a fine piece of printing art applied to the special purpose of advertising Canada to the outside world. It's certainly a big mouthful, but as it is a government production, no doubt it is all right.

It came off the press in the piping times of peace—some two or three years before the war when everybody boosted. They simply couldn't help it. It was in the boom days when all sorts of things were being discovered in Canada, greatest of all being the fact that she was hereafter to be known as "The Bread Basket of the World."

Well, if this is no bottomless boast but a solid, economical fact, having not only the sanction of "Government" but of the Powers that can drive all governments as chaff before the wind, now is your chance, Canada! If ever one had a chance, an opportunity altogether unique in the history of great occasions, to the farmers and manufacturers of Canada these times have simply thrown their fate entirely into their own hands.

A writer in an American Journal says: "The world has become a cavernous, hungry mouth. It must be fed. We are the only nation capable of raising a mighty surplus above our own needs. It is up to the American farmer to stave off what would become a greater calamity than any issue that has so far attended the world war."

Not so much the winning of the war as a world-wide food shortage is fast becoming the all-absorbing concern of thoughtful people everywhere.

And yet there is a general belief that a state of peace and the consequent breaking down of all barriers to free interchange of commodities would quickly restore the food supply to normal conditions.

There's nothing that was not foreseen or expected in the present topsy-turvy condition of

:- Feeding the World :-

By the EDITOR

the world's market as we find it to-day. It is but the natural outcome of a state of things which human stupidity alone has brought about. "The Divine Hand" was had nothing whatever

Well we would fight and for this purpose have called in to the ring untold millions of skilled labor from those fields and factories whose sole business was the production and preparation of



A REAL ALLEGORY

"La terre ne meurt pas"—the earth does not die.

This fine picture by the celebrated French artist (Lucien Jonas) is typical of what is actually taking place in France to-day. The old man is sowing the crop within sight of his sons in the trenches. They are also "sowing in tears," but their soul's harvest is no less assured.

to do with it. It was human stupidity "butting in" to the great and beneficent system of the "Divine Hand" which started a crop of sorrows that has an extraordinary capacity for reproducing itself.

the wherewithal necessary to feed the world.

If so many millions (some 60 millions in Europe alone) are thus suddenly withdrawn from productive work and their skill for three solid years is concentrated

on de-structive operations, what else can be looked for than the starved aspect of the world as we now begin to realize it, not only in belligerent centres, but in every peaceful state?

Another feature of this great holocaust has been the swallowing up by the sea of millions of tons of food stuff on its way from the source of supply, and the destruction on various battlefields of great stores of provisions, which, by "the fortunes of war" have gone up in smoke.

We will not speak of the part which is certainly being played by profiteering scabs in every country affected in "cornering" and thus doing their big bit to create a fictitious shortage. This last is a thing we can help if we have but the spirit of a bantam. That it is permitted and protected in the most unlooked for quarters is the very worst disgrace of our political life.

Taking the main causes which we cannot get rid of while a state of war exists—the diversion of labor, the destruction in overseas and other transit, we've got to set in operation at once some other than the jog-trot methods of production we have been accustomed to pursue in peace times.

Women have been doing marvellous things that they never did before. All honor and thanks to them, their heroic efforts in these times cannot be overstated, but the importation of female labor into the strenuous work of the farm will be a sorry substitute in more ways than one. And while the combined efforts of the young folks will prove by no means an "insignificant contribution," that will in the long run prove but a drop in the bucket.

For what is ahead of us, of the outside world which in addition to ourselves we've got to support, there are two factors which have got to be kept in sight all the time and considered before all else; these are **quantity and time**. The problem is how to produce the necessary quantity in the time within which it will be of real value.

No man can do more than he

can do, but who is to set out a cast-iron table of human limitation? Napoleon said he "trampled on impossibilities," and while even he fooled himself, he did things in his saner moments that the complete coalition of his own day

that crop off the fields and into stack or storage in time.

Whether it is or is not detrimental to the crop, no one contemplates with satisfaction the idea of his stooks remaining in the field all winter. Many thous-



One man and two horses twenty years ago

couldn't or wouldn't attempt. What "impossibilities" have been got rid of within the past three years—since the war started? Had we prophesied in these pages some of the things which have been done in that brief interval by the soft hands and indomitable spirit of our women folk alone, we would have lost the support of our last subscriber.

At this point of time pretty well all the seed grain and other soil products have gone into the soil that can be put in for a 1917 harvest. Human skill can do little more than it has done till the grain fields are ready to cut, but we are concerned not with this year's harvest alone but with the crops of many years to come.

But for the moment we think of the crop that is now sprouting on the prairies and ask ourselves whether we can reasonably see our way to harvest that crop, thresh and get it to market without any waste or delay that human foresight can prevent or the rapacity of unscrupulous dealers and politicians can create.

It would seem that in spite of all precautions and efforts that when it comes to harvesting the 1917 crop, the one monumental obstacle will be the shortage of labor. It is all very well to talk of this make-shift and the other, but the point of it all is in getting

ands of acres of unthreshed grain were exposed in this way during the past two winters, just because it was impossible to obtain the labor necessary to cut and thresh it before it was snow and frost bound.

The outlook certainly points in the most impressive way to the necessity of securing in time every labor-saving piece of machinery that can be employed on the great in-gathering. In these days there's a stack of money in free circulation in western Canada, such as probably never existed at the most rosy point of the past. The very best use to which a great part of that money could now be devoted would be in the purchase of farm machinery.

This is not a thinly disguised boost for the manufacturer of farm implements but an earnest attempt to arouse men's minds to the fact that even under normal conditions unaided human labor is no longer equal to the task of covering the ground in time. The "ground" has become so vast, the hungry mouths have so tremendously multiplied, and the human ranks engaged in the business of covering that ground and feeding those multitudes have been so depleted, there can be no relief to the situation outside of mechanical power.

This plain piece of first hand evidence has at last found a lodgment in the brain of phlegmatic old John Bull. For the immediate needs of his own household he has been making or importing gas tractors and all manner of agricultural tools in immense quantities and as fast as the exigencies of war will enable him to get them. Throughout the whole seeding season, night in England and some parts of rural Scotland has been turned into day by the relief shifts with high-powered luminants, plowing the fields and game preserves that have been "preserved" as such for centuries.

Here in Canada, "The Bread Basket of the World," we have not been so busy. The thing hasn't come home in the same way because we are not feeling it in the region of the stomach—as they are beginning to realize it in Europe. We have been dividing our time between politics (that is the politicians have) and getting in on the ammunition deal in that part of the organization which concerns the machinery manufacturer.

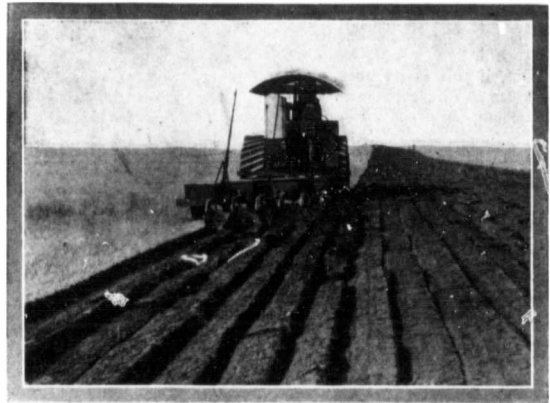
The 1916 crop in hand at country elevators or "visible" somewhere else, the prices which have been chalked up from day

This, of course, is the general aspect but there is to it not a few honorable exceptions.

The effect is that from one excuse or another, the wheat area for 1917 will be somewhat short of 1916 instead of being very greatly increased—as it could easily have been, while the acreage sown to coarse grains is slightly above that of last year's figures is very far short of what it ought to have been.

Were there no war; were it not our first business to provide for the men (and their dependents) who are fighting and dying to preserve our lives and our homesteads; were there no unusual food shortage in Europe (which is our one market after our own maws have been filled), we would still stand on a pedestal of humiliation with our "Bread Basket of the World!"

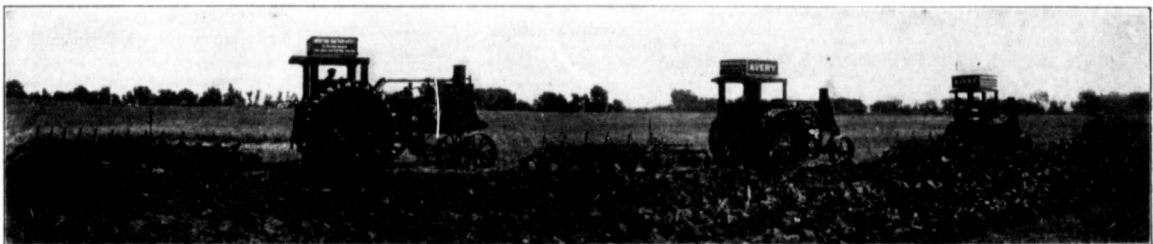
Is there any more insufferable neighbor than the habitual blow-hard? And yet what else is Johnny Canuck in the eyes of the world if the world is to measure him up by this finely printed government broadside as compared with his actual deliveries in the open market. True, when the sum total of these deliveries is regarded by itself it makes a



One man and the power of 40 horses to-day

to day on the blackboards of the wheat pits have kept the nerves of the farmer on the jump or lulled him (according to his disposition) into a comfortable sleep of satisfaction and a glorious frame of indifference to the distant if not immediate future.

rather impressive column of figures, but when comparisons are made with what the rest of the world is doing in "bread basketry" and how little Johnny is delivering according to his means, there's nothing left to blow about. The folks across the line have



been keenly sensible to the realities of the times and are moving solidly. The American writer referred to above states the case to his countrymen in the following forceful terms:

"The 1917 food crisis is the greatest in the history of the world. The vast majority of our people refuse to realize the emergency. They express alarm over rising prices, yet assume that the first peace move will bring relief. **IT WILL NOT.** Sixty million workers have been withdrawn from normal production in Europe. Reserve stocks of meat, grain, butter, eggs, canned food have been steadily sagging below the danger level.

"Europe has bought for future delivery, 300,000,000 bushels of 1917 wheat. Unless Federal regulation intervenes, wheat may sell at \$3.00 or even \$4.00 a bushel. It is up to the American farmer to stave off a graver calamity than any that has so far attended the world war."

And Mr. J. Ogden Armour of meat packing celebrity has this to say:

"We face catastrophe in an unregulated food shortage. We must have increased production to avert catastrophe. There is an

obligation upon every American who owns a tillable acre, and who can somehow command labor for the work, to grow foodstuff. I have plowed up every tillable acre on my estate at Lake Forest, and on the remainder I shall graze cattle and sheep. I know of many men who will do likewise. I am getting word from all over the

country of a quick response, but the demand calls for millions of additional acres under cultivation, not thousands. If we can only drill home the fact of the pressing need there will be a greater response, a really effective response."

Now if that is the attitude of America, is it not peculiarly Canada's business to move body and soul in the same direction? We forget for the moment the aftermath of the war, but to the actual war we pin ourselves down solidly and seriously as men whose hearts are alive to a sense of decency and whose souls cannot cool off while our sons are on the fighting line and there's a single obligation unfulfilled.

The war may end unexpectedly at any date, but the probabilities are that it will be many months yet until it is fought to a finish. Optimism and faith in ultimate victory, even in a speedy victory does not burn more fiercely in any Briton than it does in the heart of the writer, but if he or any one would dare presume on this mere intuition to "ease off," that act would earn the undying condemnation of every one of those fighting brothers, the most heroic souls the world has ever known who

—every minute of their lives—the last risk a man can take for his friends.

Mr. Farmer, if you are not fighting, you ought to be feeding the men who are fighting for you. With our millions of rich sod-covered acres that have never felt

withheld until you've done your job and are able to take your place with us again on the old farm."

It seems sheer nonsense in this connection to talk about "organization to our farmer friends. As our American friend says:



"Old Times"—but much slower than an old time funeral

the plowshare, with our untold ability to produce, with not a single embargo or handicap that does not begin and end with our own indolence or cursedness, what punishment would fit the crime if it turned out that these splendid men had to throw up their hands to the enemy because we would not back them up with the ordinary necessities of life?

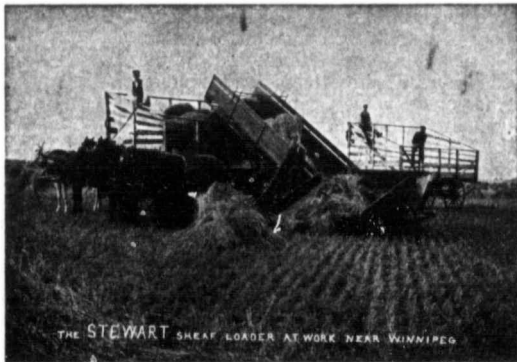
He (the farmer) must have the labor to assist him; he must be assured of the labor to assist him. Some inflexible, compelling force must provide the labor to assist him. There is only one such force—that is the Federal Government, and unfortunately the Government cannot rush to the farmer's assistance with the speed the emergency calls for."

The political situation at this date is quite beyond us. While our men are banking on us "to the last man and the last dollar," the political chiefs are quabbling like fish-hawkers and we are nearly 200,000 men short of our promised supply. No doubt every reader of "The Canadian Thresherman and Farmer" has his own hot moments as he contemplates the position of these political quacks and opportunists at such a time and when he is next asked to go to the ballot box it will be in a frame of mind and with a purpose he has never known before.

This is precisely the case in Canada to-day. We can say, however, that if any farmer will redouble his efforts and make good on his boasted "enterprise" to purchase or obtain the use of the machinery that will do in **time** and **quantity** what human hands could never accomplish—even if they were available—he will be doing the finest thing he can do in his own interests, and he will be doing the very best, if not the only thing he can do for his absent friends and compatriots in the trenches.

Meanwhile, and until those job-hunters can reconcile their differences or get out, there is one thing only the farmer can do and that is to step over them, so to speak, and grasp the hand of his brother or son on the firing line and say in effect: "My boy I will stand by you while I am above the sod. Nothing that my brain, brawn or 'brass' can do shall be

It's a duty no man can escape; except to his own moral ruin, in these days. It is idle to talk of the disorganized state of our marketing. **The one thing** is to get the stuff, to raise the food in cereals and live stock on our farms and if we can't beat the market crooks, we haven't the business instinct of a common pedlar and will by and by stew in our own juice.



THE STEWART SHEAF LOADER AT WORK NEAR WINNIPEG

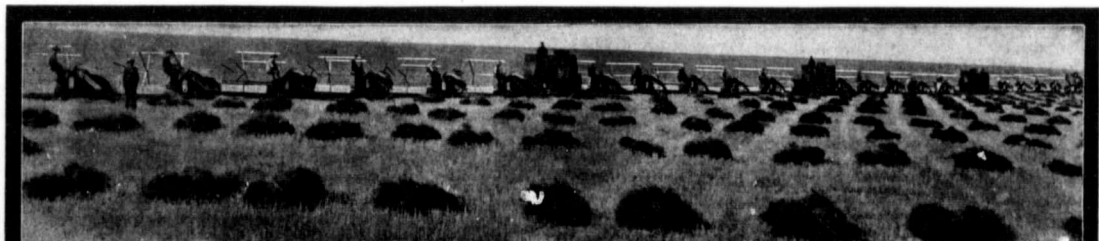
A gleaner that saves an army of "hands" and many hours in one season

are seeking to preserve our people from slavery and the world from stagnation.

There is only one attitude that any honest man can adopt in these times and that is one of forgetfulness to all else outside of his own preservation that does not **do something** to cheer and support those men who are taking

are seeking to preserve our people from slavery and the world from stagnation.

There is only one attitude that any honest man can adopt in these times and that is one of forgetfulness to all else outside of his own preservation that does not **do something** to cheer and support those men who are taking



THE CANADIAN THRESHERMAN AND FARMER.

CANADA'S LEADING AGRICULTURAL MAGAZINE

E. H. HEATH
P. ESIDENT
E. W. HAMILTON
MANAGING DIRECTOR
F. C. BRAY
TREASURER



PUBLISHED MONTHLY BY
E. H. HEATH COMPANY, Limited
WINNIPEG, CANADA



J. D. DUTHIE
EDITOR
J. L. MIDDLETON
CIRCULATION MANAGER

(MEMBERS CANADIAN PRESS ASSOCIATION)

Authorized by the Postmaster General, Ottawa, Canada, for transmission as Second Class Matter

June

John Tamson's Bairns

1917

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 90 days of date advertisement appeared, and complaint be made to us in writing with proofs, not later than ten days after its occurring, 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."

THE first real enemy a man is called upon to attack and the last one he is able to subdue is himself. As a matter of fact there's only one foe he need ever fear, and that's himself. *"Nothing can work me damage but myself; the evil that I sustain I carry about with me, and I am never a real sufferer except by my own fault."* That is a quotation from one of the old classics which has been printed more than once already in this magazine. The man who first penned the statement knew nothing about gyroscopes and gas tractors, but he knew human nature better than most men now living. He, of course, had more time to study his subject and to contemplate it amid fewer distractions. He is dead, but his progeny is with us to-day, still bearing the stamp of the old man, wiser in some things but less wise in many more things.

* * *

One of the weeds of the human heart that worried old St. Bernard more than all the others was the weed of selfishness. Like every man who has followed him, he found it to be the "sow thistle" of that royal garden, but the sow thistle is "not in it" with this perennial of the soul. For downright persistency, uncontrollable ubiquity, cussedness and reproductive genius, cantankerous self has the sow thistle beaten and battered out of all recognizable shape. It is at the bottom and the top of every trouble that is vexing the earth to-day. Certain combinations of strategic genius might silence the last gun on the battle front of Europe before this ink is dry, but the war will never end until every man throws up his hands and claims "Kamarad" to himself.

* * *

"We're a' John Tamson's bairns," is one of those pre-historic Scotch phrases that seeks to remind us that we are all the children of the one real or traditional Adam. That there is not one man or group of men who can claim to be "it," and that all others are foreigners and have no rights except what "it" is disposed to dole out to them. There are no "foreigners." The smallest child of civilization and the most degraded Hottentot know in common what hate and love mean; they have known fear and what it is to be without fear. Kings, prime-ministers, warriors and washerwomen are all in one common melting pot to this extent, but here, approximately, the family stamp of "John Tamson" ends. See that family of six boys and girls, mixed, of a common parentage. They are brothers and sisters with a strongly marked family stamp on every face, but in character, disposition and ability, what a wonderful variety!

The most wonderful of all the wonderful things in this world is God's amazing variety. "Not like to like but like in difference" is the color scheme and the musical theme everywhere. Individuality is carried out in everything down to the last blade of grass and there is no monotony. Individuality is known and appreciated by every man who owns a few horses. No two of them from the same sire and dam have the same characteristics. Same all through the human race. Every one of "John Tamson's bairns" has an individuality that is its greatest if not its only real inheritance, and the fool or the knave who seeks to rob it of that possession is about to commit the unpardonable crime. But he never succeeds. All the crime in the world is committed by the men and women who forget that they cannot force their individuality on even the next in line to them.

* * *

An editorial note is supposed to embody something of the nature of advice. Nothing easier than to give advice—nothing so difficult as to make that advice take the form of counsel on some matter of terrific import about which the editor knows absolutely nothing. That is just where we are at the present moment. Who has the temerity in these days to address himself to the farmers of Western Canada and tell them specifically what they ought to do in their private or public capacity to help to win the war, to settle all political problems, to bring to an end all the labor strife and bitterness that is seething in the world's caldron to-day? Frankly, we are here on a dead level with the most "highly ignorant" reader of this paper. No human genius can clean up this awful welter of sin and human stupidity.

* * *

There is, however, one bit of advice we would venture on without misgiving because it is on a point on which we have real experimental knowledge. It is that every farmer or cowboy who reads this would try the experiment in his own little field of influence of finding just how a little less of looking after "number one" and doing a bit for number two would work. This is something we are entitled to speak about. We have seen other fellows at it; their performances were strongly infectious and where we tried it out on our next door neighbor the result was wonderful—the delight of the thing was amazing! Practical counsel! You couldn't conscript the wealth that would begin to pay for this advice. Carried around the world as a living principle, it would settle every dispute without the aid of diplomacy or the intervention of arms because it is the body and soul of "The Golden Rule."

SUBSCRIPTION RATES

Postage prepaid, Canada and Great Britain,
\$1.00 Per Year. Single copies 15 cents.
Postage prepaid, United States and Foreign Countries,
\$1.50 Per Year.

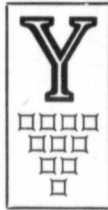
Falling to receive paper, you should notify the office at once, when mistakes, if any, will be corrected immediately.

All Subscriptions must be paid for in advance and no subscription will be accepted for a shorter period than six months.

Advertising copy in order to secure good position should be in our hands not later than the 15th of the month preceding date of issue.

Advertising rates furnished on application.

Our Message to You:—



OUR DUTY TO YOUR COUNTRY demands the conservation of every resource at your command.

That you make use of every available acre of ground at your disposal.

That you produce the maximum.

That the utmost care be taken in preparing the ground, in selecting the seed and in sowing and growing it.

That every stalk of grain shall be harvested and that every kernel possible shall be saved, that the food supply of our nation may be conserved.

It is our duty as manufacturers to build threshing machinery that will save the grain.

The RED RIVER SPECIAL SEPARATOR has the reputation in every grain-growing section of the country as a GRAIN-SAVER.

The business of this great Company, which has far exceeded the ambitions of its founders in 1848, is confined to and based upon this one thing.

Embodying the only correct method of separating the grain—the "BEATING-OUT" process, and incorporating the "MAN BEHIND THE GUN" and the BEATING SHAKERS, the RED RIVER SPECIAL SEPARATOR is doing its duty in SAVING the grain.

You cannot afford at this time to accept the work of any inferior machine.

The RED RIVER SPECIAL excels and saves enough of the farmers' grain and time over other makes to make good the claims we make for it.

It Saves the Farmers' Thresh Bill

Our new 1917 catalogue has just been received from the printers and is free for the asking. An inquiry addressed to anyone of our branch houses listed below will bring prices and full particulars.

Ask for your copy of the Home Edition of the Red River Special Paper.

NICHOLS & SHEPARD CO.

In Continuous Business Since 1848

Builders EXCLUSIVELY of THRESHING MACHINERY

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

BATTLE CREEK, MICH.

BRANCH HOUSES (with Full Stock of Repairs) at

REGINA, Saskatchewan

H. P. NORTON COMPANY, CALGARY, Alberta

WINNIPEG, Manitoba

MISCELLANEOUS



LOADING LOGS

WHAT characteristic of the tractor which must have made the most lasting impression upon the mind of him who has had most to do with one is its versatility. Being able, because of draw bar and pulley, to transmit power in two directions, direct and rotary, the tractor may be applied to so many of the jobs common to the farm that in effect it is the most universal and efficient source of power ever offered to the farmer. Those who still maintain that no mechanical power unit ever can compete in flexibility with the power offered by the horse are right, but only to a limited and qualified extent. No one presumes to doubt the flexibility of animal power and the ability of horses to rise to an emergency of exertion. But even so, while admitting that gasoline or oil power has no elasticity it must be admitted that it can be applied to the task in a more direct way than is possible with horse power.

This it is in large part which commends the tractor to the farmer who diversifies. Its capacity for work to the utmost of its power, its ability to maintain its maximum efficiency for an indefinite period, its ease of application to almost any mechanical combination which the farmer may devise, all these give it an advantage over the horse as a power unit which only the farmer who has become familiar with the operation of both really and truly can appreciate. It will be noted that no advantage is claimed here for the unwearied qualities of iron and steel as compared with muscle, nor for the mechanical accuracy of the engine over the instinctive vagaries of the horse. Nor is any reference made to the difference in the care and feed demanded by the horse of flesh and blood and the horse of steel and gasoline. The respective limitations are not all comparable and never should they be considered in apposition save from the economical point of view.

It is when the farmer gets outside the ordinary farm operations and applies his tractor to tasks which ordinarily are not considered as being within its province that he begins to realize and appreciate what a really wonderful piece of mechanism he has had committed to his care and which he can summon at will to his aid. There are demands upon many farms for power which are not strictly agricultural, but that seems to make no difference to the tractor. Whatever demands may be made upon it will be met to the limit of its power capacity.

In such sections of the country as there still is timber, logging operations to some extent, must be provided for. This takes

power. With the tractor logs may be dragged, loaded or handled easily and quickly. In sections where stones abound there always is use for crushed stone. The tractor will haul stones from the field to the crusher, will furnish the power for crushing and will haul the product back to road or fill. In sections where the life giving qualities of water are required for the success of agricultural operations, the tractor will furnish the power to pump it in unlimited quantities. The man who spreads manure knows no more heavy burden can be laid upon his horses than the hauling of the spreader. However this is light work for the powerful and tireless tractor. The hoisting of hay into the mow—all these things mean nothing of specialization to the tractor the sole function of which is to deliver the power at draw bar or belt, leaving it to the directing intelligence of the farmer to apply that power whithersoever he will and to whatsoever purpose he will.

And this introduces naturally still another quality of the tractor, which, in diversifying its application, is well worthy of serious consideration. This is that always it is easier and more economical to bring the power to the job than to take the job to the power. Self propelling, as is the tractor, this condition is fully met. No matter where or what the job may be, the tractor can get to it. Likewise, when necessary, it can haul the necessary equipment to the place where it may be needed and can there operate it most advantageously.

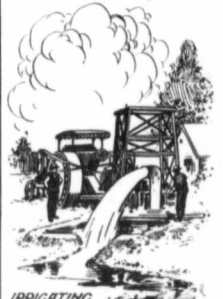
The fact is, the utility of the tractor is so multifarious and so dependable that hardly any farmer as yet has realized a tithe of its possibilities. It likewise is true that these possibilities seem to grow with the use of the tractor. It has been that way with the gasoline engine, and it is destined to be that way with the tractor. As one becomes familiar with it, one begins to devise ways and means for increasing its usefulness. On the draw bar it is likely that about all of the possibilities of the tractors have been imagined, but on the belt there is an infinity of things that yet are to be thought of. It is but natural, perhaps, that the man who is new to tractor operation will regard his machine as more or less unwieldy. He hardly will realize, until he has become thoroughly accustomed to handling it, how easily it is manipulated and moved from place to place and what a flexibility of usefulness it has. The man who becomes an expert operator will do things with a tractor which will rival the most expert performance of horses.



SPRAYING



CRUSHING STONE



IRRIGATING



ELEVATING CORN



MANURE SPREADING

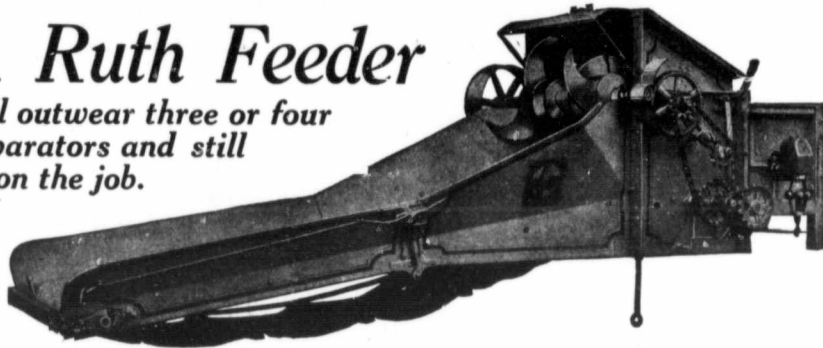


MAYTAG Co. Ltd.



A Ruth Feeder

will outwear three or four Separators and still be on the job.



The Price of the Ruth has been reduced considerably.

Write for the new price and terms.

We handle everything a Thresherman uses except Separators and Traction Engines. All kinds of Oils and Greases—Rubber and Canvas Endless Drive Belts—Canvas-covered, Plain and Solid Rubber Suction Hose—Suction and Discharge Hose—Lace Leather, both in the hide and cut, put up in one-pound boxes—Canvas and Rubber Belting in any length needed—Pulley Lagging—Full line of Madison-Kipp Lubricators and Oil Pumps—Tank Pumps—Gasoline Pumps and Hose for same (this pump is used for pumping oil or gasoline)—Headlights for Traction Engines—Belt Guides—Morris Improved Beading Tool—Barth Lifting Jacks—Adjustable Inside Flue Cutters—Flue Cleaners—Spark Arrestors—Cylinder Wrenches—The Best Power Washing Machine in the World—The Best Hand Washer Ever Made.

This Guarantee Protects you for 3 years—Read It!

Here is the strongest guarantee ever given with any self-feeder. Such faith have we in the Ruth Feeder that we guarantee every 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.

Repairs and Extras

While it is an undisputed fact that the Ruth Feeder requires less repairs than any other feeder in the world, the cost per machine for repairs during the past 10 years averaged less than \$2.00, an occasional piece is needed, and when the accident does happen it is wanted quick. We understand this and in order to make it more than ever to your interest to buy a Ruth, we are doing something that no other Feeder Company has ever done, and that is we will have a good stock of repairs this year and in all the years to come at central points throughout Canada. This year you can get them from H. A. KNIGHT at REGINA, and INTERNATIONAL HARVESTER at SASKATOON, SASK. The W. S. COOPER CO. at CALGARY, and THE MAYTAG CO. at WINNIPEG. Feeders are also stocked at Winnipeg, Regina and Calgary.

The Maytag Ruth *stands up* under your work—under the heaviest work. Buy a Maytag Ruth with absolute confidence that it will save grain for you—that it will save money for you—that it will save time for you. There are no delays over mechanical troubles. **THE MAYTAG RUTH CANNOT SHAKE ITSELF TO PIECES**—it prolongs the life of your entire outfit indefinitely.

The Maytag Ruth feeds perfectly. Every band is cut and every bundle is thoroughly loosened up and pulled apart before it can pass to the separator cylinder. The grain is fed to the separator high on the threshing cylinder with no opportunity for it to lodge in front of the cylinder.

WRITE US FOR BIG COLORED CIRCULAR

The MAYTAG Co. Ltd.
WINNIPEG, Manitoba

RUTH

The SELF-FEEDER with an Established Reputation

ADVANCE-RUMELY

means satisfied customers

Guess work has no place in the purchase of a threshing outfit these days. The old, firmly established Advance-Rumely line has been on the market so long that its name is sufficient guarantee of satisfaction.

In reality, it isn't the Company that sells the goods—it is satisfied owners who know, and who in turn have satisfied customers who stick to Advance-Rumely season after season.

It is a plain case of good business

judgment when a man buys an Advance-Rumely outfit. He is getting just what he is looking for—machinery that will easily and economically do what it is built to do—an outfit that will establish and maintain his reputation for delivering satisfactory, continuous service.

Advance-Rumely machinery is sold strictly on what it actually does—not on what it is claimed to do. There are Advance-Rumely owners in your own neighborhood—talk it over with them

Five Sizes of Ideal Separators

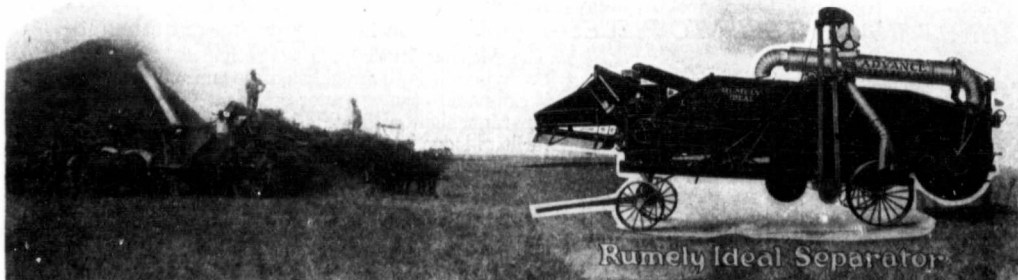
Last month in this paper we stated that over 18,000 threshermen owned and operated Rumely Ideal Separators. That's almost sufficient proof of Ideal superiority. But don't take our word alone for it—ask an Ideal owner. The Ideal is built in five standard sizes—24x44, 28x48, 32x52, 36x60 and 40x64. For rice, special models are offered in convenient sizes.

Ask for copy of our 1917 general catalog of threshing machinery and tractors.

ADVANCE-RUMELY THRESHER CO. Inc.

LaPorte, Indiana

Calgary, Alta. Saskatoon, Sask. Regina, Sask. Winnipeg, Man.



ADVANCE-RUMELY

gives lasting service

Advance-Rumely does more than just sell dependable machinery—it stands back of every outfit that bears its name, with sure lasting service—the kind that you can bank on.

One of the many dealers who will handle nothing but Advance-Rumely machinery, hit the nail on the head when he recently said, "One reason I prefer Advance-Rumely is because they give me real service and that means service to my customers. I can telegraph today and my order of parts or

supplies reaches me by the first train tomorrow."

Of course, express and train service govern the dispatch and receipt in different localities, but the point is that Advance-Rumely maintains convenient branches and warehouses with a complete line of machinery, repairs and supplies always on hand for immediate shipment.

Advance-Rumely delivers the kind of service you must demand with the outfit you buy.

Steam Engines in all Sizes

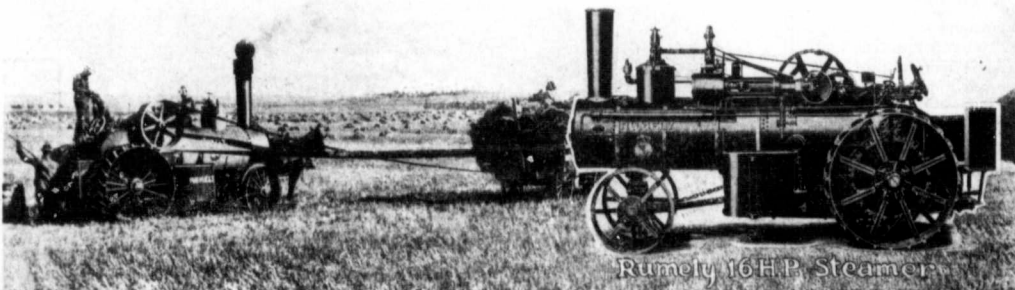
The Advance-Rumely line of steam engines offers a range of choice to meet all needs. There are the two standard, long established lines to choose from—Rumely and Gaar-Scott—each a proved success. Either line offers you a dependable, economical power plant in the size you prefer, from 16 to 25 h. p. single and double cylinder.

You'll find our 1917 general catalog worth the post card it costs to ask for it.

ADVANCE-RUMELY THRESHER CO. Inc.

LaPorte, - Indiana

Calgary, Alta. Saskatoon, Sask. Regina, Sask. Winnipeg, Man.



Rumely 16HP Steamer

Rumely's and the Liberty Loan

Uncle Sam loves his ease as dearly as any other man who has had to "find a way or make one" for himself. His is naturally a peacefully-disposed soul, but when his indignation is heated to boiling point, he will boil and boil over just like any other red blood on earth. And when it comes to the point at which the pot lid will no longer be quiet, like the celebrated Irish divine, he "would not get behind the man who stepped in front" of him in expressing his feelings and, if necessary, getting them home to the world at the bayonet's point.

Now he is on the warpath he is going to be a whole man to one thing at a time and see it through before he plays another game of billiards or baseball. As an evidence of how the spirit of this thing is permeating all ranks of American life, we cut from a southern newspaper the following particulars of how the employees of the Advance Rumely Company are lining themselves up with the great "Liberty Loan" movement to provide the sinews of war, not only for the American Republic, but wherever it is necessary for her Allies in the great War of Liberation.

Not only has the company made a handsome response itself, but steps have been taken to interest the thousand or more employees in the purchase of bonds, thus giving to every man an opportunity to do his bit.

The following patriotic appeal has been made to the employees: "Employees, Attention!"

"Only a few of us can become soldiers and defend our country against its enemies on the field of battle. It is, however, the duty of every one of us to do something for our country and those who cannot become soldiers can assist financially.

"The secretary of the treasury has announced that subscriptions will be received until June 15th for \$2,000,000,000 of the bonds authorized by congress for the purpose of the war. The bonds will be dated July 1st, at about which time it is expected that they will be deliverable.

"The bonds are in denominations of \$20.00 and upwards and all those who wish to purchase any can receive information or assistance at our main office, where subscription blanks are also to be had.

"In conclusion let us repeat that this is everyone's opportunity to lend to the country voluntary, prompt, definite and efficient aid and to obtain by so doing an investment which is safe beyond all doubt and the possession of which will bring lasting pride and satisfaction to those who subscribe."

WHY SHOULD I OWN A Stewart Sheaf Loader

That's the question you should ask yourself. You as a farmer and a business man will want to know just cause as to why you should own this LOADER. The best reason that we can give, and to make a like comparison, is the same reason that you are using a binder to-day instead of the old-fashioned cradle.

The STEWART SHEAF LOADER is a time saver—a labor saver, and a big money saver. It saves time at a season of the year when every minute counts, and it is saving labor to-day, when the country is drained of men. It is making possible the threshing of your grain this year when the price of wheat is at its topmost point, and labor is at its minimum. Those men that you have had to employ in former years can be replaced by the STEWART SHEAF LOADER, and in a more

efficient way. All the field pitchers, about half the number of stook teams can be done away with. Driven by one man it picks up the sheaves from the stooks, elevates and loads them into the rack accompanying it alongside. There is no time lost at the separator when the STEWART SHEAF LOADER is in the field. Not only does it speed along the threshing but it does the work cleaner than it is possible to do by hand. There is a wastage of grain from the most careful field pitchers. With a STEWART SHEAF LOADER there is no waste. It does so much of the work connected with harvesting and threshing that it frequently saves its cost in one season. Yet it is so thoroughly well planned and built that it is good for years and will eventually earn its owners thousands of dollars.

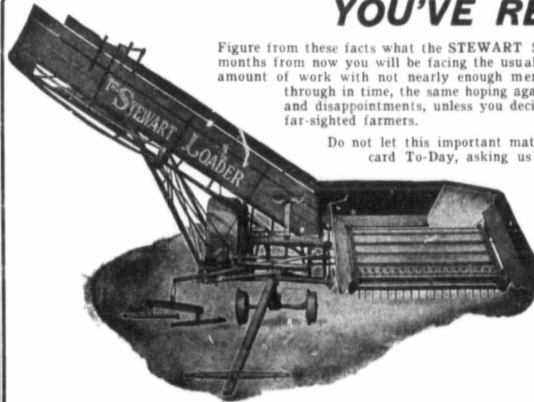
YOU'VE READ THIS:

Figure from these facts what the STEWART SHEAF LOADER would mean to you. Four months from now you will be facing the usual harvest problem, the same overwhelming amount of work with not nearly enough men to do it, the same old worry of not getting through in time, the same hoping against hope for fine weather, the same delays and disappointments, unless you decide NOW to follow the lead of hundreds of far-sighted farmers.

Do not let this important matter slip your memory, but write us a post card To-Day, asking us for Booklet which tells the experience of farmers who have used the STEWART SHEAF LOADER.

Material for manufacturing is difficult to get this year. The number of machines we can supply is limited. Order early so you can have one for the coming harvest.

We Manufacture THRESHING SEPARATORS and STAUE-MAKING TRACTORS. Farmers who buy these Machines through our Agents are assured of getting Prompt Deliveries, and Repair Parts are always on hand at our Winnipeg Factory and Western Warehouses.



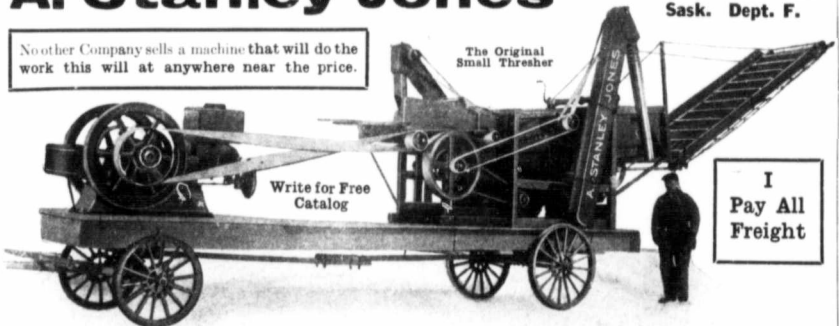
Stewart Sheaf Loader Co. Limited
Winnipeg, Manitoba

A. Stanley Jones

NORTH BATTLEFORD
Sask. Dept. F.

No other Company sells a machine that will do the work this will at anywhere near the price.

The Original
Small Thresher



Write for Free
Catalog

I
Pay All
Freight

28-INCH SEPARATOR, 9 H.P. Engine, Trucks and all Fittings	Cash \$748	24-INCH SEPARATOR, alone, all Fittings	Cash \$355
24-INCH SEPARATOR, 7 H.P. Engine, Trucks and all Fittings	\$672	28-INCH SEPARATOR, alone, all Fittings	\$388

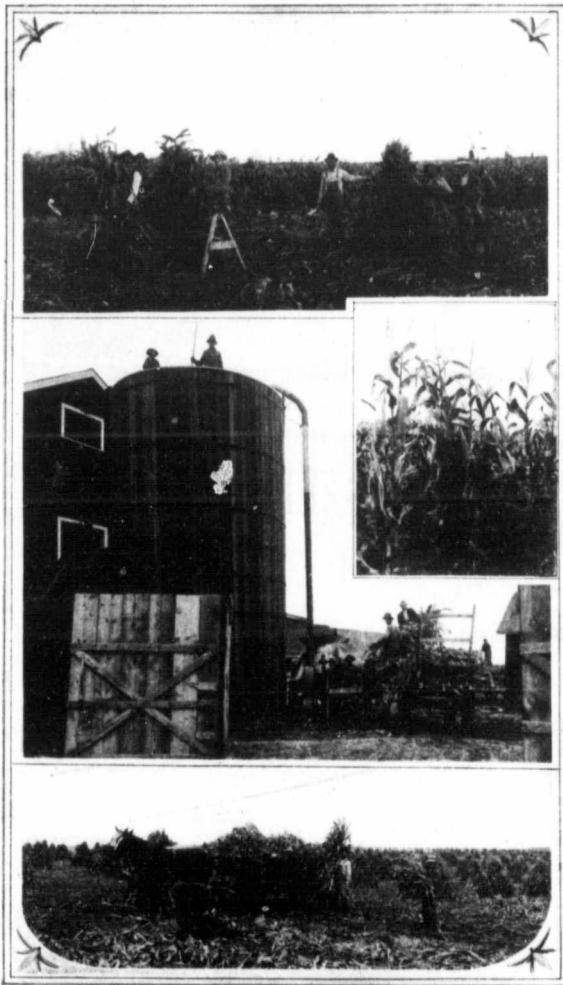
AS USED BY THE DOMINION GOVERNMENT, MANITOBA AND SASKATCHEWAN, ETC.

Alberta's Educational "Drummers"

THE Alberta Department of Agriculture is one of the brightest spots in Canadian life. It's clean administration, it's splendid enterprise conducted along common sense, generous, but never extravagant lines has so impressed itself on the farmers of the Province and the business

time to do as you have been doing.

In this issue we cannot do more than direct particular attention to the announcement on page 42, of an elaborate itinerary which has been planned by the Department of Agriculture. The Alberta government in this big undertaking



IN "SUNNY ALBERTA"

FODDER CORN HARVESTING IN 1915—MEDICINE HAT DEMONSTRATION FARM

men who hang by the farmers that they have sent it back to business again for another term of years.

The recent election is an impressive example of how the plain folks of the country are able without political clap-trap to perceive and appreciate a clean government and without noise or a single discordant note of scandal to say to its executive chiefs—"As you were!" and we'll back you to the limit while you con-

receives substantial assistance from the Dominion Department as well as from the two railway lines which "feed" the districts to be covered.

All details as to dates and programmes of subjects to be handled in this "Complete Half-day Course on Mixed Farming" will be found in this announcement, but beyond the Departmental heads, it modestly refrains from naming the splendid educational staff of men and women (specialists in

The Happy Farmer made good at Brandon last year.



It will make good at Brandon this year—July 17, 18, 19.

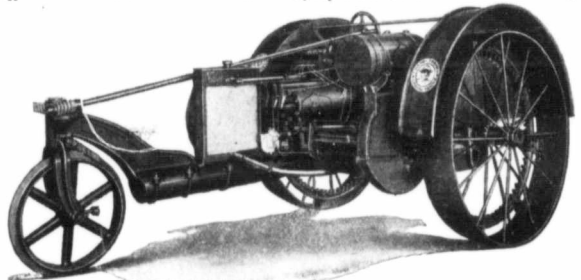
The Happy Farmer

Can Make Good on Your Farm, Too

Heavy Tractors are passing, the 5,000 lb. Tractor is passing—now, the ultimate type is the

Happy Farmer Tractor

HERE are little tractors with big records. At demonstrations and in the field they have plowed and belted their way into the limelight of success. Cut out the idle horses who are not earning their board. A Happy Farmer eats only when it works—and it is known as a "light eater." It offers you simplicity of design—highest quality material (nearly all steel)—88% of its weight is on the drive wheels—it turns square corners, right or left—is self-steering in the furrow. If you didn't see the demonstration at Brandon last year, ask us for official result—you'll be surprised—**IT SURPRISED US.** Get the actual facts about the Happy Farmer. And don't fail to be at Brandon, July 17, 18, 19.



STRONG, SIMPLE CONSTRUCTION

Those three words give you the secret of the 12-24 Kerosene Happy Farmer (Model B). It's built to stand the strain—and does it. Built to burn kerosene or distillate—and does it. Built to give you 2,000 lbs. draw-bar pull (or three plows)—and does it. Built to deliver 24 hp. on belt work—and does it. It simply does what it was built to do. Nothing wonderful about that, but its performance backs up our claims. Work it an hour or 24 hours a day, it gives you continuous good power service, humming along, halting at nothing within reason. Hitch anything to its draw-bar—belt it to any farm machinery from separator down—pull the throttle and there you are. No wonder it's called a Happy Farmer. It makes you want to take off your hat to it. Tell us your problems, we've helped others. Perhaps we can help you.

LOW IN FIRST COST AND UPKEEP

Economical power—that's what you get in a Model A, 8-16 Happy Farmer Gasoline Tractor. Smaller than Model B—weighs just 3,500 lbs., carries 3,080 lbs. of that on the traction wheels. Never before has a small tractor had such grip, such pull, such stick-to-it-iveness as this little Happy Farmer. Light enough for the softest ground, yet strong enough to give 1,500 lbs. constant draw-bar pull. One farmer says, "My 8-16 filled my silo in two hours less than my neighbor with his 12-24." We could show you scores of letters praising both models. Ask us for specifications.

Don't turn this page until you have written us—you'll be glad you did.



J. D. Adshead Co.

Limited
CANADIAN REPRESENTATIVES
Winnipeg, Man.

See the Work of The HAPPY FARMER, Brandon, July 17, 18, 19

their own fields) who will accompany the train.

"Mixed Farming, Alberta's Ideal" is the provincial slogan, and working up to the highest standard of efficiency in this high ideal, many of the recognized leading experts in Canada are to be found among the officials of this province's agricultural professions, selections being made on the grounds of fitness alone and never from personal or party considerations.

Calgary's 1917 Exposition

Prospects for a successful Calgary Industrial Exhibition were never brighter than they are for the forthcoming exhibition, to be held June 28th to July 5th. The prize list, which is a generous one, may be had by writing E. L. Richardson, the manager of the exhibition, Calgary.

The live stock at the last Calgary Exhibition made the finest display ever collected in Calgary, and as there will be a number of new herds on exhibition this year it is anticipated that the live stock display will far surpass last year's. The industrial exhibits will also be more numerous and more attractive than ever before.

The exhibition management has been particularly fortunate in the selection of an attraction programme which will be very greatly appreciated. Altogether, the exhibition will provide an opportunity for a most pleasant and attractive holiday. There will be single passenger rates in force from all Saskatchewan and Alberta stations, good going June 27th to July 5th and returning up to July 7th. The entries for the exhibition close on the 15th of June. The accompanying cut is one of the many interesting attraction features at the Calgary Exhibition.



NEW PERFECTION OIL COOK STOVE

BOTH SUMMER AND WINTER

The NEW PERFECTION OIL COOK STOVE will do more work than a clumsy coal or wood stove of twice its size.

The Long Blue Chimney—that's the secret. All the heat goes into the cooking and the visible flame "stays put."

NEW PERFECTION STOVES come in many different sizes—there is one for your family.

With Royalite Coal Oil a New Perfection cooks the meal for from 5 to 10 cents.

THE IMPERIAL OIL COMPANY
Limited
BRANCHES IN ALL CITIES

The English House of Lister

War at its worst will never stampede the inborn grit of British pluck. Every memory and fresh incident of the great cataclysm only serves to throw this great fact into a more brilliant light and we have lots of "home-grown" testimonials to its world-wide influence.

One of these is the case of the R. A. Lister Company of Dursley, England, who have had a branch for several years in Winnipeg for the distribution of its several

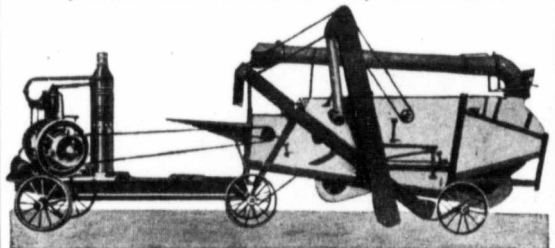
This is the Outfit

And where can you duplicate it? Where can you buy a threshing outfit that is built as strong, that will do the work as clean, as quickly and will save you the big money that the "Lister" outfit will? It's safe to say not in Western Canada.

Look at the 6-wheel Truck!

This eliminates the vibration and allows you to save all the grain. This 22x32 Ideal Separator with Windstacker is operated by our famous British-made 9 H.P. Gasoline Engine.

Now, Mr. Farmer, drop us a card to-day! Let us go into the facts carefully. You'll need this outfit this fall. No extra help required to do your threshing. Think what this will save you in time and labor. Now is the time—to-day—write us at once.



See our Peoria Tractor at the Brandon Light Power Tractor demonstration, to be held during July 16th to 20th.

WATCH THE DEMONSTRATION CAREFULLY. SEE HOW THE "PEORIA" LIVES UP TO ITS PAST REPUTATION

R.A. LISTER & Co., LIMITED

Wall Street, WINNIPEG, Man.

Twelve Months of this Magazine for \$1.00

products in Cream Separators, Threshing Outfits, Gasoline Engines and particularly their famous electric lighting plant for the farm.

Simply in response to the constantly increasing demand for these specialties, this company has recently completed a fine warehouse and office building with convenient spur-track facilities on Portage Avenue, and at the moment of writing its ample floor-space is filled with a fine display of Tractors and Threshers.

Advices have recently been received from headquarters in England stating that British made goods are enjoying a popularity and sale in Canada such as they had never experienced in pre-war days, and at the conclusion of the war it is the purpose of the firm, to enlarge the present fine building to the extent of at least two additional stories, provision for this having been made in the foundation plans.



D. N. JAMIESON
Manager, R. A. Lister Co., Winnipeg

The Western branch of the R. A. Lister Co., is under the management of D. N. Jamieson who held the position of sales manager for the company in Toronto for sixteen years. Since coming from Toronto two years ago to handle the western trade, the business has made its record advance, and with his no less energetic assistant (Mr. Lytle) and the increased facilities the firm have had the wisdom to place at his disposal, it is confidently expected that in a brief space the R. A. Lister Company will not take a second place to anything in its line in Western Canada.

"Trust in the Lord," said a suffragette to a sister in prison, "SHE will help you."—Ex.

EATON'S MID-SUMMER SALE CATALOGUE

**BE SURE
AND
GET YOUR COPY**



**FREE
SEND
FOR IT**

EATON'S MID-SUMMER SALE CATALOGUE

is a book of bargains, one that you need more than ever in this season of high and increasing prices.

Generally difficult as it now is to procure regular stocks of goods from the manufacturers, it is a considerable achievement for us to be able to offer the big selection of Household and Farm Goods that we do in this latest of our Annual Mid-Summer Sales.

There is something show: in this book of interest to every one in the family—Wearing Apparel, House Furnishings, Paints, Hardware, etc.—a collection of seasonable, useful goods at much lower than general prices.

You can have a copy of this book for the asking. Make sure your name is on our list. Send it in now. The Catalogues will be mailed around the middle of June.

THE T. EATON CO. LIMITED
WINNIPEG - CANADA

Special Dairy Prizes

Again this year two creameries in the maritime provinces have come to the fore with herd butter fat competitions extending over twelve months.

Very simple rules have been framed: One intimation is that it is intended to repeat the competition, but in 1918 the entrants will be expected to keep individual records of all cows.

In addition to four good prizes to patrons, the special prizes are

of peculiar interest. A silver trophy is offered at each creamery by the provincial dairy superintendent; a bank manager offers ten dollars to the rural school, a student of which presents the best essay on the value of cow testing in building up a dairy herd. A manufacturer, a breeder and the creamery manager each tender a five dollar prize.

Besides these specials, the dairy recorder who is employed by the dairy division, Ottawa, to look after cow testing in the district, offers ten dollars in books to the school library of the section sending in the largest number

of complete herd records. School teachers in the vicinity are also offered by him sketch outlines of six lessons, "Five minutes talk on Dairy subjects." Commenting on them, the director of rural science for the province says, "They combine good history, geography, arithmetic, and agriculture in a way that is simple and striking."

It is thus seen that cow testing appeals to a wide circle besides the actual herd owner. If you do not at present keep individual cow records, write to the Dairy Commissioner, Ottawa, for blank record forms.

People of Alberta

No apology is necessary or will be expected from the Government of Alberta in presenting to the people of the province a statement as to the work being done by the principal spending departments of the Government. It is becoming more and more the practice of democratic governments in all countries to take the people of the country into their confidence in regard to all the measures they undertake, and in accordance with this progressive tendency the Liberal Government of Alberta deems it advisable to present to the people of Alberta for their consideration and criticism an outline of the work of the different Government Departments. The work of the Attorney-General's Department and the Provincial Treasurer's Department, being of a purely administrative character, consisting respectively of the oversight and enforcement of the laws of the province and the charge and distribution of public moneys in accordance with the decisions of the Legislative Assembly, is not detailed here, as it is presumed that information will be desired rather regarding the work of the principal spending departments of the Government.

Department of Public Works

\$9,000,000 Spent on Roads, Bridges and Ferries

The Department of Public Works is one of the big spending departments of the Government. It has spent nearly eight millions on roads, bridges and ferries. The Department has built hundreds of bridges, many of them fine steel structures, costing thousands of dollars. These bridges are built for the settlers in a remarkably short time without direct taxation, and are standing evidence of the policy of the Government in making capital expenditure with a view to giving the settlers needed facilities, without the long weary waiting experienced in other countries. Road building in this province, where in wide areas there is no little gravel or other binding material is a difficult task, as the first cost is the minor consideration, the expense of maintenance being a very heavy charge annually. The Government, however, has before it an ideal, and towards that ideal progress is steadily being made. This ideal is to have a main trunk system, with feeders running in all directions, with the ultimate object of making it as easy as humanly possible for the farmer to haul his produce to market. Rapid progress is being made, but it is a Herculean task which cannot be accomplished in a year or two.

Work Not Yet Completed

The work is not completed, nor will it be for years, as every new settler means a new demand, and so far as the Department is concerned the policy is to keep the settler in the province if public conveniences will contribute to that end. Some idea of the cost of the work is conveyed in the expenditures of money on roads, bridges and ferries since the province was formed in 1905. The Government, since 1912, has made large capital expenditures in addition to money spent from revenues, and as a result the settlers have been provided with conveniences much sooner than would have been otherwise possible, and certainly without the heavy direct taxation which could have been imposed. From 1905 to December 31, 1915, there has been \$3,852,855 spent from revenues and \$3,704,746 from capital account, or a total of over seven and a half millions. With the 1916 expenditure this would considerably pass the eight million mark. The capital expenditure has largely gone into trunk roads and permanent bridges, and every dollar has been spent as carefully as possible. In the past few years a system of maintenance has been introduced which will result in a large decrease in the cost of upkeep and will tend to make the roads more permanent in character. Had we an abundance of gravel in all parts of the province, the maintenance problem would be more easily solved, but under present conditions the Department is entitled to the greatest credit for the work accomplished.

Department of Agriculture

Widely Extended Services in Developing Most Important Industry

Alberta's Department of Agriculture may have an equal in Canada, but there is no hesitancy in claiming that it has no superior. From the point of view of all parts of Canada eulogize the work accomplished. Having for its motto, "Mixed Farming Alberta's Ideal," there has been steady progress along all educational lines, and the results achieved are a source of pride to patriotic Albertans. The Department has several branches all steady "on the job" of helping to build up Alberta, and each branch is headed by an expert. Several of the leading experts in Canada are to be found among the officials, selections being made on the grounds of fitness rather than personal or party considerations. It is difficult to differentiate or to make comparisons, each branch doing its own work well. Credit must be given, however, to the institution of a system of Agricultural Education, which is attracting attention in all parts of Canada and indeed all over the American Continent.

Schools of Agriculture

The Schools of Agriculture in connection with the Demonstration Farms at Olds, Claresholm and Vermilion, have already far exceeded expectations, and have firmly established the principle upon which they were founded, to educate the farm boys and girls, so that farming would become to them a scientific and attractive calling. This ideal is approached by systematized and specialized instruction in practical agriculture and the real science of farming, as a means of promoting the general welfare of the rural environment, and, as the schools are co-educational, there is every opportunity for cultural and social experience.

Demonstration Farms

The Demonstration Farms supply the schools with the opportunity of practical farm tests and are proving of immense worth. It is not the intention that these farms should become money makers, but rather that they should supply the means of practical agricultural experiments.

The Department maintains a Provincial Veterinarian who, besides lecturing at the Schools of Agriculture, visits all parts of the province and lends a vigilant eye for diseases and for the presence of weeds causing sickness and death. In the remote parts where regular practitioners are scarce his services are given to the farmers. He also lectures at Short Course Schools and in connection with the Demonstration Farms. The work of Alberta's capable Livestock Commissioner is well known. He has general supervision of the livestock industry and has contributed materially to the proud position it occupies to-day. The Commissioner also supervises the administration of the Estray Animals Act. The Brand Readers' Ordinance, and investigates all facilities for handling and shipping of stock.

Dairying Industry

The Dairy Commissioner's Department has through its grading of the dairy products kept in close touch with the markets and given the farmers very valuable assistance. This Branch also did yeoman service for the farmers in the marketing and grading of eggs. The industry is also showing great development, with bright prospects for greatly increasing the revenue of Alberta farms. The total of creamery butter produced in 1915 was 7,776,871 pounds, an increase of 35 per cent. One very gratifying feature of the trade was that 95 per cent of the butter was made from cream brought direct from the farmers and paid for on a grand scale. The figures reveal the pleasing fact that there are 14,000 dairy farmers in Alberta. Cheese production in 1915 was 372,693 pounds, as against 70,581 pounds in 1914—a pleasing increase and significant to the farmers.

Fairs and Institutes

A Branch of the Department with a constantly growing influence for good is that of Fairs and Institutes. Well on to one hundred fairs are held in Alberta. At all these fairs the live stock was judged by experts provided by the Government, and every fair was granted substantial financial assistance pro rata to the amount paid on prizes. This Branch also carried on valuable educational work. Short Course Schools of six days each were held at various points throughout the province, at which experts lectured on a variety of subjects pertaining to the farms. A feature growing in popularity is the Mixed Farming Special Train, composed of twelve cars, and which is now a familiar sight throughout the province. The train goes over all lines of railway and in time will have visited every point in Alberta.

Women's Institutes

Too much could not be said in favor of the Women's Institute Branch, which is doing excellent service in assisting the farm women in solving their problems. At the beginning of 1916 there were 107 branches in the province, with 3,000 members. The Institutes contributed over \$7,000 to the Red Cross and other patriotic work in 1915.

Seed and Weeds

The Seed and Weeds Branch is taking no second place in importance, and besides the number of seed fairs held and the general supervision given seed grain, the Branch has tackled the weed problem with vigor and with marked results. While a Government can do much in the way of education and supervision, the extermination of weeds in the final analysis rests with the individual farmers. That the farmers are responding to the educational work is one of the gratifying signs of the times.

Poultry Branch

The Poultry Branch is doing a big share in the development of this important industry, and each year sees a gradual increase in the quality of the stock and a better appreciation of the value of good stock, balanced rations and other methods of inducing egg production.

Under the direction of the Minister of Agriculture are: The Brand Branch, the Game and Fire Guardian, Crop Statistician, Provincial Sanitary Engineer, Provincial Laboratory, Provincial Health Offices and Registrar-General, and the Publicity Commissioner's Branch.

Department of Municipal Affairs

A Work Which Comes Close to the People

When the Government of Alberta led the way in Canada in establishing a Department of Municipal Affairs, great benefit was expected to accrue. The record to date reveals a decidedly interesting fact that realization has been greatly in excess of expectation. Not only has the Department justified its existence in so far as administrative efficiency is concerned, but it has developed into a helpful leadership in all matters municipal. Besides departmental routine its officials, all carefully selected with a view to special qualification, have been at the disposal of municipalities everywhere, and by way of expert advice and willing assistance have helped greatly in riding over the many difficulties which have arisen as a result of the readjustment period following upon the collapse of the real estate boom.

Leadership in Civic Affairs

In many ways Municipal Government is the most important of all, as it most closely touches the home, and the individual ratepayer exercises a larger measure of influence than he does in the wider field of political activity. For this reason great care is needed in protecting the municipality against over-zealous expenditure and too sanguine a vision as to immediate prospects along the line of development. The too hopeful vision which guided the majority of urban councils prior to 1914 led to the creating of very large debenture debts, and in the reaction which followed, considerable distress was experienced in meeting obligations. It is during this period, therefore, that the Department of Municipal Affairs is showing strength in leadership, and there is no disputing the statement that civic affairs throughout Alberta are in a better position to-day as a result of the formation of such a department. The Department of Municipal Affairs has general supervision of the practical working out of the various urban and rural municipal acts, and by close association with the people has contributed very materially to the splendid conditions prevailing to-day, despite the wide readjustment of the past two years.

Encourage Self-Government

It has been the specific object of the Department to urge that people living in rural localities take on a greater measure of self-government, and with that object every encouragement has been given the establishment of rural municipal organization. The one great objection met with is that the opinion prevails that self-government means increased taxation, but this is strongly disproved by the experience of the rate of taxation in a rural municipality, where the people create their own liabilities and fix their own tax rates, has been lower than in the Local Improvement Districts established under the old system. However, satisfactory progress has been made, and the hope is expressed that in a few years rural municipal organization will become general. There are in Alberta 6 cities, 48 towns, 192 villages and 87 rural municipalities. It is hardly likely that there will be an addition to the number of cities or towns for a few years, as the disposition now is to await the filling in of the farm lands rather than looking for the development of congested or industrial centres.

Assists School Districts

The Department, besides its general supervision of municipal work which includes an expert audit of all secretary-treasurer books, has charge of the collection of the Wild Land Taxes, the Timber Area Tax, Educational Taxes, and each year assists in the collection of Rural School Taxes. In 1915, for example, the Department assisted the rural school districts in collecting \$79,000, as compared with \$48,150 in the year previous. This is a constantly growing service which the Department is rendering rural school districts without charge. That it is appreciated is amply evidenced in the growing demand upon the Department for help. The administration of the Wild Lands Tax Act involves the assessment of the lands, and this entails an enormous amount of work. There have been two assessments made, and the greatest care is exercised to see to it that no man who is doing his bit in the way of adding to the wealth of the province comes under the Act. The Wild Lands Tax is designed to promote production and is expected to work great good to the province. The total amount of money collected through the Department in 1915 for local improvement districts, school districts and through the special acts was \$695,104.55.

Provincial Secretary's Department

Enlightened Policy in Treatment of Prisoners

The Provincial Secretary's Department, besides having charge of the incorporation of companies and the collection of certain license fees, the regulation of theatres and moving picture censorship, etc., undertakes the management of such public institutions as the Asylum for the Insane at Ponoka and the Provincial Jails at Lethbridge and Fort Saskatchewan. In the administration of the Provincial Jails has been the policy of the Department to utilize prison labor for the purpose of making the prisons partially self-sustaining and also to give the prisoners the opportunity of retaining their manhood and dignity. Nowhere on the American Continent have humanitarian principles in prison administration been more widely applied or been more uniformly successful. Instead of being compelled to wear distinctive garb and be subjected to humiliating treatment, prisoners are received as men who have made a mis-step, would probably be released in a few days, and are given sufficient encouragement. Consequently the prisoner is garbed in the ordinary "Blue Jeans" of the workman, and if his conduct shows him to be "trusty" he is given the opportunity of working on the public roads, for which he is credited with fifty cents a day, and, if it is not sent to his family, it is kept as a "nest egg" to give him a start when he leaves the jail. So well do the men respect the privileges given them, there is very seldom an attempt at escape. At Ponoka, in connection with the Asylum for the Insane, the same enlightened policy is followed, and the patients are given the best known modern treatment, the result showing a large percentage of complete cures. At each institution a farm has been established to supply food and healthful employment for the inmates.

Department of Railways and Telephones

Railway Development Under Guarantee Policy

Some idea of the railway development of the province in the past seven years is gleaned from the fact that 3,015 miles of railway have been built, an average of 430 miles a year and more than a mile a day. Seven years ago there was practically a monopoly, to-day four companies are in active competition and operate 4,528 miles as against 1,404 miles at the beginning of 1910. Of the bumper crop enjoyed in 1915 approximately 30,000,000 bushels were taken to market by the guaranteed railroads. Without these railways there would not have been such a crop nor such prosperity.

The Government in deciding upon the guarantee policy under which 56 per cent of the mileage built in the last seven years has been constructed, did so with a deep and abiding confidence in the future of the province, and nothing has developed to shake that faith in the slightest degree. Alberta's future is as assured as that season follows season, and for that reason it was felt that the province could well afford to give the railway companies the benefit of a guarantee which would facilitate the raising of the money necessary to build the roads. That the policy has been justified is strongly evidenced in the fact that up to the outbreak of the tremendous struggle now in progress in Europe, capital was more than willing to assist in developing railways in this province, and there is not the slightest doubt that on the resumption of peace, money will be available for railway and industrial development, and that the ideal will be fully attained, namely, that there should be a railway sufficiently near every farmer to permit of a trip to market and home again in the one day.

Alberta's Publicly-Owned Telephone System

No greater example of the success and advantages of Government ownership of a Public Service Utility, over private ownership, could be cited than the Alberta Government Telephone System which has been extended more rapidly and over a much larger but more sparsely settled area than any other system in the North American Continent. The first duty of a public utility, such as the telephone, is to serve communities and then the individual. For this reason and also because the very nature of the business makes it imperative, essential, the long distance and toll lines connecting the various cities, towns and villages are constructed first, then follow the accommodation toll and rural lines radiating from these established exchanges of centres of trade, to serve the districts and individuals tributary thereto.

Rapid Development

A telephone service with 16,780 wire miles and 4,931 pole miles of long distance and toll lines; 32,322 wire miles and 5,933 pole miles of rural lines extending in all directions over an area of approximately 80,000 square miles, serving over 500 cities, towns, villages and communities, giving a universal interchange service to more than 31,000 subscribers' stations in Alberta and over 100 cities and towns in Saskatchewan and British Columbia, is an achievement that has never been equalled or approached by any other system in such a short time.

Almost every well settled community within reach of the system, with a few exceptions, mostly in the more recently settled portions of the province, is enjoying to a greater or lesser degree the benefits of this rapidly and widely extended service. While there are still many without this convenience in their homes, they are, in the great majority of districts, within a reasonable distance of a means of communication in cases of sickness or other emergencies.

Distribution of Lines

While the amount of construction work that it is physically possible to complete in any season is limited, it is essential that the distribution of lines be made in proportion to the length and breadth of the province as equitably as possible, consistent with demands made upon the Department and the amount of work possible to undertake and complete. Owing to manufacturers of telephone wire and supplies devoting their best efforts and working their factories to their utmost capacity in turning out war materials, the Department found it absolutely impossible to secure deliveries of sufficient material to enable them to undertake the extension of any new lines anywhere in the province this year, and while the Department has a few poles on hand (barely sufficient for one year's average year's program), nothing could be done without the other necessary material, but this cessation of work is only temporary.

Future Activity

As soon as conditions again become normal it is the intention to continue the former aggressive policy by extending the system as rapidly as warranted by requirements and conditions.

A system, economically constructed, covering such a large and sparsely settled area, regulations governing the service more generous, rural lines built at a greater distance, at the initial rental rate; subscribers' service rentals and long distance rates lower than any other system; a night rate of one half the day rate (given by no other system in Western Canada) and the whole operated at a lower cost than any other system; this, with a sinking fund and reserve, sufficient for all needs of the immediate future, are features of this publicly owned utility in which every Alberta citizen may feel a justifiable pride.

Department of Education

An Efficient and Progressive Educational System

The Department of Education for Alberta has attained the proud distinction of establishing a system of education equal to the best in Canada, and far in advance of that of experienced educators look for in a young province. It has established schools in all the settled portions of the province and has formulated plans for reaching children of isolated settlers living beyond the boundaries of a school district, adopting for its motto, "An Education for Every Child in the Province." In regard to agricultural instruction, the Department has established a thorough system of instruction in agriculture in the public schools, also a Summer School for Teachers to thoroughly qualify them in this course, and by special annual grants has encouraged school boards to supply the facilities and teachers to do this work efficiently. The Department has also prepared an excellent text-book on agriculture for use in the public schools, and furnishes the same free of cost to the pupils.

Improved Rural Schools

The Department has improved the efficiency of the Rural School by establishing a Teachers' Bureau to keep schools supplied with teachers, by encouraging school boards to operate their schools for the whole school year, by establishing and putting into effect an organization for ensuring enrollment and regularity of attendance of all pupils, by careful inspection and supervision, by a competent staff of Inspectors, and by establishing consolidated schools where practicable and desired by the ratepayers. A Library Branch has been organized which supplies the best in books free to school districts. Each rural school house can by this means become a community centre and have within reach a public library suitable to old and young.

Special Services

Model plans and specifications for one and two-roomed rural school buildings, which save districts using them many hundreds of dollars and gives them up-to-the-minute buildings suitable to the needs of rural education, are supplied free.

The Debenture Branch sells the bonds of school districts direct to the investor at a mere fraction of the charges made by brokers, and by grouping several offerings place them on the market in sufficient amounts to command the highest price. This branch has saved school districts much expense, has secured them a higher price for their bonds than would have otherwise been possible, and is rapidly becoming very popular throughout the province, the town and city school boards having availed themselves of its services as well as the rural and village districts.

The Department has fostered patriotism in schools, by supplying an abundance of good literature on the war and its causes, by providing for instruction on the principles and operation of the British Constitution, by requiring the hoisting of the Union Jack over every school house, and by buying up by every possible means an intelligent and popular. Excellent Normal Schools for the training of teachers have been established at central points in the province.

Technical Education

The Department has given every possible impetus to technical education by encouraging all school boards, special governments, and grants to furnish equipment for giving instruction in Manual Training and Domestic Arts, by furnishing courses for teachers at the Summer School to qualify them to give this instruction, by supervising and encouraging the work through the Technical Education, by organizing, supervising and financially assisting night schools for miners in the coal mining centres of the province, by the establishment of an Institute of Technology at Calgary, which gives advanced scientific and technical instruction to mechanics, miners and tradesmen, and by co-operation with the Dominion Hospitals Commission gives special vocational instruction in certain trades to returned, partially disabled soldiers, thus fitting them for useful occupations.

A Provincial University entirely independent in its operation has been established, so that citizens of Alberta are afforded the privileges of a higher education with the maximum of efficiency at a minimum of expense.

EFFICIENCY is the watchword of the Department. In making appointments qualification and merit have been the only consideration.

Position of Women in Alberta

In her "Legal Status of Women in Alberta," Mrs. Henrietta Muir Edwards, of Macleod, the author, in the preface states:—

"The women of Alberta, except in dower rights, are more favored in regard to legal status than are those of any other province in Canada. The Government's appreciation of the work of the women in standing shoulder to shoulder with their men folk in the development of their country has been shown by giving to them this premier place in the Dominion."

The objection raised by the author was removed at the last session of the Legislature. Under the Dower Act the wife, or widow, is maintained in possession of the homestead for life. This homestead in the country is defined as one quarter section of land upon which the residence is situated, and in the case of cities, towns or villages, not more than four lots upon which the residence is situated. No matter what the terms of the husband's will may be, the wife's rights cannot be interfered with. The husband cannot mortgage, sell or otherwise dispose of the house without the written consent of the wife.

With the conferring of the franchise the Alberta Government went much further than the Province of Ontario. In that province the right to vote was conferred, but the demand for the right to a seat in the legislature was refused. Alberta women not only have the right to vote, but every other political privilege enjoyed by man, so that a woman is equally eligible for every office conferred by vote of the electors or by appointment of the government.

The interests of women have also been carefully safeguarded in the Marriage Laws and the laws relating to inheritance, guardianship of children, benefits under life insurance policies, and in the Factory Act.

In one sentence it may be said that the privileges enjoyed by man politically are equally bestowed on women; and what man can do in business, such as the right to enjoy, hold and administer property, a woman can also do.

The Government and The Farmer

Much of the recent legislation enacted in the province in recent years has been directed to the benefitting of the agricultural population, and as a consequence the Government has been charged with legislating too much in the interests of the farmers. While the farmers of Alberta have been more than ordinarily successful in their requests for legislation, the Government has been solicitous for the interests of all classes, realizing that in an agricultural country the prosperity of all depends upon the success of the farming community. Two of the most vigorously contested acts passed in the interests of the farmers have been the Alberta Elevator Act and the Farm Machinery Act, passed in 1913, both of which have proved of great value in assisting the farmers of the province. A number of important Acts for the benefit of agriculture were passed at the recent session of the Legislature, including the following:—

- The Alberta Farm Loan Act.
- The Alberta Co-operative Credit Act.
- The Livestock Encouragement Act.
- The Reclamation Act.
- The Seed Grain Act.
- An Act to Amend an Act Respecting Seed Grain, Fodder and Other Relief.
- The Stallion Enrolment Act.
- An Act to Amend the Agricultural Societies' Ordinance.
- An Act to Amend the Wolf Bounty Act.
- An Act to Amend the Game Act.
- An Act to Amend an Act to Incorporate the Alberta Farmers' Co-operative Elevator Company.
- An Act to Provide for the Guarantee of Certain Borrowings of the Hail Insurance Board of Alberta.
- An Act to Amend the Private Ditches Act.
- An Act to Amend the Drainage Act.
- An Act to Amend the Municipal Co-operative Hail Insurance Act.
- An Act to Amend the Rural Municipality Act.
- An Act to Amend the Local Improvement Act.
- The Municipal Hospitals Act.
- An Act to Amend the School Ordinance and the School Assessment Ordinance.

Every Alberta farmer should be familiar with the provisions of the above legislation which are outlined in a "Synopsis of Important Acts," giving a comprehensive review of the legislation passed at the last session of the Legislature of the province, which has been prepared for free distribution.

Progressive Legislation

A review of the legislation of the past three or four years shows that not only has the Government of Alberta been responsive to public opinion, but in the enactment of progressive legislation has not been surpassed by any other Government under the British flag. Here are a few of the progressive measures given the people of Alberta:—

- Direct Legislation.
- Womankind's Act.
- Patriotic Contribution Act.
- Schools of Agriculture.
- Wild Lands Taxation Act.
- Farm Machinery Act.
- Co-operative Elevators.
- Acts for the Protection of Workmen's Wages.
- Married Woman's Relief Act.
- Acts to provide for Relief and Rescue Work in Coal Mines.
- Act to Establish Co-operation Associations.
- Woodmen's Lien Act.
- Corporations' Taxation Act.
- Juvenile Courts' Act.
- Rural Municipalities' Act.
- Extra Judicial Act for Protection During the War.
- Drainage Act to Permit the Reclamation of Large Areas of Waste Lands.
- Acts for the Relief of Volunteers and Reservists.
- Act Regulating the Sale of Bonds and Shares to Protect Investors.
- The Fire Prevention Act.
- The Women's Institutes Act.
- Municipal Co-operative Hail Insurance Act.
- Public Utilities Act.
- Forfeiture Pay for Miners.
- Building Trades Protection Act.
- Acts for the Protection of Women, regarding Insurance, Property Rights, Slander, etc.
- School Acts Building up a system second to none.
- Municipal Acts giving the people the largest possible measure of home rule.
- Telephone System owned and operated by the people.
- Railway Policy which has added a mile a day to the railways of the province.

The Art of Blacksmithing

As Applied to the Trade

Continued from page 23 May issue

Length of Stock for a Ring

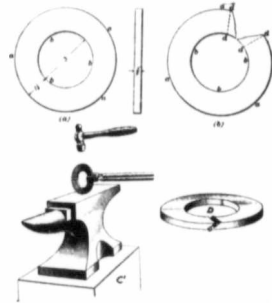
The following rule will be found convenient for determining the amount of stock required for either band or round rings.

Rule

Add together the inside diameter of the ring and the thickness of the stock and multiply the sum by 3 1-7.

Making a Ring Hook

A ring hook of the form shown in Cut (A) may be scarf-welded. It also shows, in its construction a method of splitting stock for



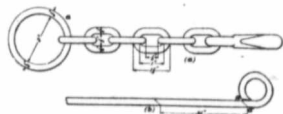
no scarf or weld marks, and agree with the dimensions of the drawing.

Making a Flat Ring

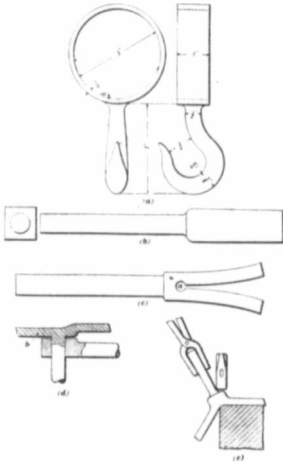
In making a flat ring, as shown in Cut (A), a piece of 3/8x1 1/4 in. flat iron 14 inches long, is cut off and heated, and the end farthest from the tongs is bent edgewise over the horn of the anvil. As the circumference of the outside circle (a. a. a.) of the ring is considerably greater than the circumference of the inner circle (b. b. b.), the iron will be upset along the inner edge and stretched along the outer edge by the bending. This will make the iron thicker than 3/8 inch at the inner edge and thinner along the outer; the iron will also buckle and twist when being bent. By hammering it flat on the anvil, using the flatter if desired, the iron can be brought back to an even thickness; however, it should not be allowed to get far out of size, and its width and thickness should be frequently tried with the calipers. When bent, the iron will have the form shown in Cut (B), the corners are then cut off as shown by the dotted lines (dd), the ends scarf-ed and the iron bent on the anvil as shown in Cut (C) until the scarfs overlap, their inner surfaces remaining about 1/4 inch apart, as shown in Cut (D). The heat is then raised, the weld made and the ring finished with the hammer.

Making a Small Chain

In making a chain like the one shown in Cut (A), six distances of 3 1/2 inches each are marked off on a bar of 1/4 inch round iron, 29 inches long. These marks may



be put on with a soapstone pencil or, the rod may be nicked on the hardie. One end of the rod link is then heated, fluxed and to the shape shown in Cut (B); it is then cut off obliquely at the first mark, as shown by the line (a a), this makes only a single scarf necessary on each weld. This link is then heated, fluxed and



branch pieces that is valuable in smithing operations. On a piece of iron of good quality, such as Norway iron, 7/8 inch square and 5 inches long, mark off with a center punch 2 inches from one end and draw this piece out to 5 inches, leaving the stock of the form shown in Cut (B). Next, the hole shown at (a) in Cut (C) is made with a punch, the stock split out to the end, and the branches bent apart as shown. The shank is then placed in a heading tool and the branches bent out as shown in Cut (D). During this part of the work, great care must be taken to prevent cracks from starting in the corners as shown at (b) in Cut (D). When the iron has closed around cracks started in this way, they are known as cold sheets, and the piece is liable to be dangerously weak where they occur. They may be avoided by removing the piece from the heading tool when branches have been partially bent out, placing it over the round corner of the anvil, and using a large fuller or a set-hammer in the manner indicated in Cut (E). The branches are drawn out to the proper dimensions, scarf-ed, bent to the ring form, and welded as in the case of the band ring. The piece is held in the tongs by the ring while the hook is being shaped. The finished piece should be sound, show



THE TWENTY-TWENTY COAT

OLIVE KHAKI

"BUILT FOR WAR"

Under date of December 3rd, 1916, an Infantry Officer in France writes to a friend: "We find we cannot get Slickers here and have to write back to Canada for them, and if anyone needed a Slicker, believe me, we do over here. I want a "TOWER" make if I can get one, as they are by far the best."

BEFORE THE WAR

This was a Farm Coat, its special features, so necessary in farm work; the full skirt making easy walking; the overlapping front—thorough protection when driving. Its exceptional waterproof qualities which are guaranteed.

SOLD BY DEALERS EVERYWHERE

Manufactured by

TOWER CANADIAN LIMITED
TORONTO

SELLING AGENTS

Alberta
Great West Saddlery Company
Calgary and Edmonton

Manitoba and Saskatchewan
Gutta Percha and Rubber Limited
Winnipeg

It will pay you to investigate and see The New Favorite

(Formerly Manufactured by "Fisbie") Before Buying That Separator



Equipped with Garden City Feeder, Perfection Weigher, Side-Fan Blower.

The New Favorite

The Favorite appeals to you on its merits:—
It is a real grain saver
It is very easy running
It is very simple to operate
It has a long and faithful life

SIZES:	
26 x 55	28 x 45
28 x 50	30 x 45
24 x 38	

Owners are satisfied that the Favorite is the cleanest, fastest and most efficient thresher in existence. If there is not a Favorite in your district we will give a special proposition to the Thresher purchasing the first. We know that this machine in your district will be the best salesman we can have.

We can save you hundreds of dollars and furnish a better machine. WRITE FOR REASONS. Be sure and see our Exhibit during the Brandon Fair.

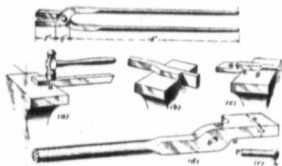
The Favorite Thresher & Supply Co. Ltd.
WINNIPEG

welded, and bent into the proper shape. By the time the first link is finished, the next section of the rod is hot enough to scarf and bend into shape. The rod being cut off at an angle makes it easy to scarf, but the hammer must be drawn, in order to crowd up the iron at the large end of the scarf. When the second link is ready to weld, it is fluxed and the heat raised. When at a welding heat, the link is brought to the anvil, the first link caught up in it, and the weld made, or the previous link may be caught up in it; after fluxing and before putting it into the fire for the final heat. In this way, five links can be made, the heat for scarfing and bending a link being raised while the previous link is being welded. The sixth link joins the other five links to the chain hook. After the sixth link is approximately bent into shape, the fifth link of the chain and the hook are caught up by it; its ends are then brought into proper position and are heated and welded. It is often of advantage to both the maker and user to have the hook link made slightly longer than the others.

When the six links of the chain have been made, the ring shown at (a) Cut (A), can be made of the remaining 7 or 8 inches of the rod. The iron is scarfed at one end and bent into shape, after which the first link is picked up in the ring, which is then heated and welded. The chain can be finished by brushing it with a stiff brush and some sand and water, after which it is heated to a dull red and dipped into linseed oil or rubbed with a piece of oily waste, guarding carefully against fire in case the oil ignites.

Making a Pair of Tongs

To make a pair of blacksmiths' tongs for holding flat iron, such as is shown in Cut, a bar of 3/4-inch square iron, not more than 2



feet long, is marked at 2 inches from the end and heated. When hot, the marked end is flattened to a thickness of 7/16 inch, leaving the shoulder, as shown at (a) in Cut (A) on one side. This may be done by holding the iron so that the marked edge is on the edge of the anvil and by flattening the end with the hammer as shown. The piece is again heated and placed on the anvil as shown in Cut (B), and flattened for about 3 inches in length. It is then cut from the bar and the other end (cg) of the piece is offset as shown at (c) in Cut (C), and flattened for about 3 inches in length. The end (gd) is then drawn down to 1/2 inch round, as is shown in Cut (C). The end (D) may be left a little larger than 2 inches, and then scarfed for welding. Another piece is

then made like this, and a 1/2-inch round rod 12 inches long is welded to each to form the handles. A 3/8-inch hole is then punched through one of the pieces, as shown at (b) in Cut (D). The two parts of the tongs are now held together and the hole marked in the second piece by punching it through the hole already made. The first piece is then laid aside and the hole punched through the other one.

The pin or rivet, shown in Cut (E), that is to hold the two parts together is made by upsetting a 3/8-inch rod at one end and forming it into a head. It is then cut from the bar, making it the proper length, and tried in the tongs to make sure that it fits. The pin is then put into the fire and heated on the end (p). When hot, the finished head (h) is cooled by being dipped into the water, but the end (p) is left hot. The pin is then put back into the fire and heated on the end. When hot, it is put through the two holes and the tongs finished by riveting the end of the pin. It frequently happens that the rivet bends in the holes, this makes the tongs tight, but the jaws will not stay parallel. In such a case the rivet is driven out while it is still hot and another one made.

The fuller may be used to good advantage in making the tongs. The bar having been cut down part way with the hot cutter, the material may be worked out to approximately the correct form with the fuller. Sometimes it is well to take a heat over the work; this consists of going over the piece, when it is at a white heat, with a light hand hammer. In this way, the fibers that have become separated are re-welded and the forging improved.

In making tongs, it is well to inspect the parts very closely before putting them together. A good way to detect flaws and defects is to heat the suspected part to a dull red; this will show all defects such as cracks, seams, poor welds, etc. The welds, angles, offsets in the jaws, and the metal near the punched holes are very liable to show defects. If the defects cannot be remedied, a new part must be made.

To be continued next issue



The Chauffeur: Never mind that, Jimmy, there ain't any cops in sight.



THE MOTOR OIL FOR NATIONAL USE

We Get Thousands of Just as Enthusiastic Voluntary Letters as This, Which We Will Gladly Show You—Write!

"I have been buying oils for a number of years. My repair bills for burning out carbon were \$3 about every three months. My attention was directed to National Carbonless Motor Oil through the word 'Carbonless', and although skeptical, I placed an order for a barrel. Although this is more than a year ago, my car has not been in the garage for carbon or lubrication troubles since, and it runs smoother than ever."
(Name on request.)

"Quality First" is the foundation of National Petroleum Products Success, and Universal Satisfaction is proven by their broad National Use and Prestige.

J. W. Littlefield
Secretary and General Manager

Guarantee Longest Life to Any Car or Tractor Made

The cost of operating any car or tractor is too great—much more than it should be—unless National Carbonless Motor Oil and White Rose Gasoline are used.

When you use these National First-Quality Products we guarantee: 1. More horsepower developed. 2. Minimum costs for repairs, caused by friction. 3. More miles per gallon. 4. Lowest operating cost per mile. 5. Longest life. 6. Highest value when the car or tractor is to be traded or sold.

All NATIONAL Petroleum Products are always made on the "Quality First" principle, regardless of cost of raw materials, labor, time, scientific laboratory investigation and rigid tests both in the processes of making and in practical tryouts and use on every make of car and tractor.



Always the Sign of Absolutely Unqualified Satisfaction

Other NATIONAL Products

White Rose Motor Gasoline. Always uniform. Every drop is continuous power. Pure, dry, carbon-free.

En-ar-co Tractor Oil. Especially made for modern tractors. Proper body to lubricate most efficiently—saves cash in machinery depreciation.

National Light Oil. Bright, clear light for lamps. No smoke, odor, charred wick or chimney. Uniform heat for incubators and brooders. Best for oil heaters and all purposes for which the best burning oil is required.

Black Beauty Axle Grease. Insures a smooth, friction-free, wear-resisting axle. No compounds to clog and gum. Goes farther than ordinary grease. Buy it by the pail.

Order Today—Decide Now to Buy National Products. We will see that you are supplied, no matter where you live.

Canadian Oil Companies Limited

Dept. T
2-12 Strachan Ave., Toronto, Ont.

Sent FREE To AUTO and TRACTOR Owners

Canadian Oil Companies, Limited
Dept. T, 2-12 Strachan Ave., Toronto, Ont.

I own..... automobile or..... tractor (Give name above)
and make use 2-cent station. Send me Handy Long-Stroke Oil Can FREE. Please give nearest shipping point and quote prices on items I have marked. I will be in the market about.....

I use.....gals. gasoline per year. I use.....auto grease per year.
I use.....gals. motor oil per year. I use.....gals. kerosene per year.
I use.....the axle grease per year. I use.....gals. tractor oil per year. (For Wagons)

My Name is.....
Address.....
Postoffice.....

MAIL THIS COUPON TODAY

NOTE—This can will be sent to owners of Tractors or Automobiles only and when you fill out coupon complete. Not for boys or girls.



WE'LL BUY YOUR TIME this summer. We want about 300 men, who, for first-class remuneration are willing to represent us in their own neighbourhood. For full particulars, write to the circulation manager.

E. H. HEATH CO. LTD., WINNIPEG.

THESE ARE A FEW OF THE BARGAINS SHOWN



Renowned Domestic Jewel Blue Steel Range
Burns wood or coal. Full asbestos lined. Fully guaranteed.
18in. Oven, six 9in. Lids. Complete with High Closet and Reservoir.

PRICE 31.50

Extra large oven bakes to perfection. Body is made of Wellsville polished steel and the nicked parts are high silver nickel. Has four or six lids, high closet, long front damper pouch feed and is full asbestos lined. A range to last a lifetime.

With 16 in Oven 4 9 in Lids **Price 30.00**

IN OUR BIG FREE CATALOG

is Bigger and Better than ever. You should have a copy of this wonderful book. It's yours Free for the asking. Everything in Furniture, Stoves, Wire, Vehicles, Harness, Washers, Hardware, and practically everything for the home. Get your copy to-day, a postcard will bring it.

Here's the very best in an Auto Seat Buggy. We have put every improvement possible into this Buggy, making it equal to any \$100.00 vehicle offered elsewhere. The wheels are screwed and bolted between each spoke; the gear is our time-tried double reach full ironed; the piano body is large and roomy, securely braced and has patent leather dash. The seat is upholstered with genuine leather, extra large and roomy, full spring and has high automobile back. Throughout we have given every detail the minutest attention. Painting is the same of perfection. Don't hesitate to order this buggy on approval. Money returned and all charges if not satisfactory. Price at Winnipeg **77.00**

Get Your New Buggy Early

EVERY BUGGY WE SELL IS GUARANTEED FOR TWO YEARS



\$77 Complete with Shafts at Winnipeg

Binder Twine

WE HAVE A LIMITED QUANTITY OF 550 FEET MONARCH MANILLA. OUR STOCK IS RAPIDLY DIMINISHING. SEND FOR PRICES AT ONCE. THERE ARE PROSPECTS OF A DECIDED SHORTAGE OF TWINE THIS YEAR. ORDER EARLY. PRICES ON REQUEST.



100 ft. 7 in. 4-Ply **\$28.50**

150 in. 6 in. 5-Ply **\$62.00**

Endless Canvas Belts

SPECIAL REDUCED PRICES FOR IMMEDIATE SALE. MADE OF EXTRA STRONG SPECIAL WEAVE DUCK.

On account of the peculiar construction of this belting it is unaffected by atmospheric changes, unimpaired by water or steam and may be subjected to a degree of heat unknown to other belting. It is therefore the best belting for outdoor use and for wet, damp or hot places.

100 ft., 7 in. x 4 ply.....	\$28.50	120 ft., 8 in. x 4 ply.....	\$41.00
100 ft., 7 in. x 5 ply.....	\$35.00	120 ft., 8 in. x 5 ply.....	\$47.50
100 ft., 8 in. x 4 ply.....	\$34.50	150 ft., 8 in. x 5 ply.....	\$62.00
100 ft., 8 in. x 5 ply.....	\$40.00	120 ft., 7 in. x 5 ply.....	\$42.50
120 ft., 7 in. x 5 ply.....	\$42.50	150 ft., 8 in. x 6 ply.....	\$74.50

THE FARMERS' SUPPLY COMPANY LIMITED, 179 Bannatyne Ave., East (Dept. C.T.F.), WINNIPEG

Biggest Tractor Event of the Year in Western Canada

The Provincial Exhibition at Brandon will again stage a light tractor plowing demonstration, this demonstration to be held on the 16th, 17th and 18th of July at the time of their midsummer fair.

The Brandon Fair Board in general, and secretary Smale in particular, has always been keenly alive to the needs of the farmers of Western Canada. Mr. Smale is a student of conditions, and through his careful study and observation, he is able to anticipate the future.

There is not the slightest question of a doubt but what the light tractor in some form or other will eventually become as common upon the farms of the Canadian West as a wagon or a plow. It has taken a long time for the public to realize this, partly because of the fact that the tractor has had a more or less experimental career.

Being a field implement it was of necessity developed in the field and the farmer has been obliged to share in its experimental development as well as the manufacturer. Happily, however, we have now reached the stage where we can pretty safely say that the tractor is a sure thing, and any farmer who expects to get the most out of his land must

of necessity investigate what the tractor will do for him.

With this fact in mind, no farmer can afford to miss the big plowing demonstration that will be held at Brandon. A large list of entries is assured. The demonstration is carefully staged. The farmer who goes to Brandon and follows this demonstration carefully will see practically every type of tractor that is on the market to-day, the demonstration having been prepared so as to take away from it all of the things that go to make up a contest, allowing each tractor to perform in its own way in the way it was designed to work upon the farmer's fields, and the farmer who goes with his eyes and ears open can spend the two hours each day for three days very profitably to himself.

Her Answer

The Suffragette, in the course of an argument, was told that woman should not vote because she could not bear arms or fight.

"Not fight?" she retorted: "I think she can, when it comes to the scratch."

"Why is it that they always say a man 'pines' for a woman?"

"I suppose it's because pine is about the softest wood there is."

"Power-Economy-Saving"



"I would not take five times its original cost if I could not get another one."

A gentleman made this statement about the

Gould Balance Valve

to a group of threshermen at one of the conventions last winter. He was sincere—absolutely honest in his opinion. He had proved its value to himself. Yet, last year he was doubtful. He knew, however, that it would not cost him a cent to try one if it did not prove our claims. The result was that this man soon realized the enormous waste, wear and tear on the engine—the useless expense year after year that could all have been saved.

This leak is now stopped and he has an investment that will

RETURN BIG DIVIDENDS each season.

For information regarding our prices and selling plan, give size and make of engine, and address the

Gould Balance Valve Company

Kellogg, Iowa

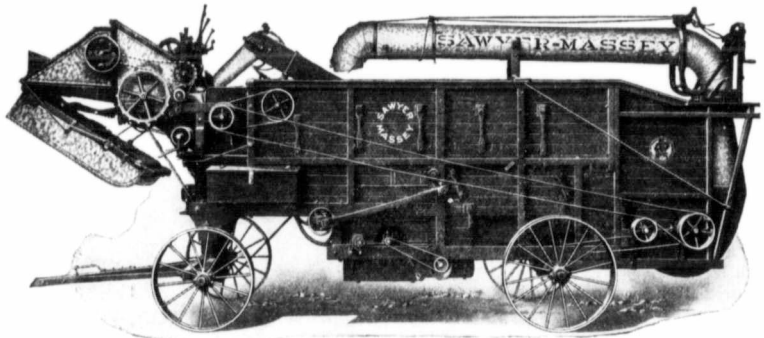


"We Guarantee Value Received"

Twelve Months of this Magazine for \$1.00

Thresh Your Own Crop

COUPLE this big capacity, light running **SAWYER-MASSEY SEPARATOR** with your 20 Horse-power Gas Engine. This Canadian Manufactured Separator, built in two sizes, 20x36 and 28x44 respectively, is designed for a farmer's own threshing and that of a few of his neighbors.



No. 1 Thresher

Read this letter from E. V. Todd, Strathmore, Alta., dated January 30th, 1917:—"Mr. McEwen and myself had approximately six hundred acres in crop. We can heartily recommend the No. 1 Thresher to one or two farmers having about the same acreage to be about the best and most economical way to get it done. By using four stook teams we could run 800 bushels of wheat or 1900 bushels of oats a day. The machine cleaned the grain in good shape and saved practically all of it. A few of our neighbors still have grain standing in the shock, but thanks to the little No. 1, ours was in Fort William long before the embargo was put on."

W. H. Ellis, of Wolsley, Sask., wrote us December 2nd, 1916:—"This fall I purchased one of your new style Separators. I am pleased to state my complete satisfaction with same. I have seen some different makes of Separators in operation and consider yours is the best of them all. It threshes fast considering its size, threshes clean as evidenced by the fact that I have just received the returns of a car of wheat which graded One Northern and no dockage, and I had plenty of power to drive it with a 20 horse-power gasoline engine. The almost complete absence of vibration is a very noticeable feature, making it a long-lived machine. The simplicity of operation for the different kinds of grain makes it a suitable Separator for the individual farmer. The large shaftings and bearings and the general substantial build is a very important feature also. I am certainly pleased with my purchase and recommend your Separator to all farmers who consider it advisable to own a threshing machine of their own."

We manufacture Steam Tractors, Gas-Oil Tractors, complete line of Road Machinery and complete range of Separators from the No. 1 Thresher (illustrated herein) to the large 40x64 custom machines. Talk with our local agent in your town, or write for free catalogue and detailed information, telling us the size machinery you would particularly like special information on.

Sawyer-Massey Company, Limited, Branch Offices and Warehouses: Winnipeg, Regina, Saskatoon, Calgary

HEAD OFFICE AND FACTORY: HAMILTON, ONTARIO

How Farmers View the Use of Gasoline Engines

ONE of the best articles published upon the subject of farm engines and their uses was recently published by the Journal of Agriculture, and it is reprinted herewith.

Our first experience in using a gasoline engine on our farm was about six years ago when we purchased a 2½ h.p. engine. It proved to be such a labor saver, doing its work at such low expense and causing no trouble at all, that we were not long in buying a larger one, this latter being a six h.p. These engines have saved us a great many dollars and while they have done a great amount of work we cannot tell but that they are in as good condition as when we bought them.

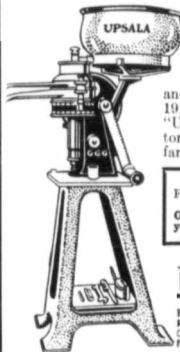
We have had to buy some repairs, but the parts needed have been so few and the cost so small that we hardly consider them. There is no machinery used on the farm that has no parts which will not eventually break or wear out, but our engines have caused us less trouble and expense in this respect than any other machinery used on our place during the past six years. When we

purchased these engines we studied them thoroughly until we fully understood their operations. There is not a person on the place who cannot run them. Even the women folks operate the small engine when using the washing machine, cream separator and barrel churn.

A good gasoline engine will perform any work to which it is adapted a great deal cheaper than it can be accomplished by hand or horse power. There is a place for such power on practically every efficiently conducted farm, and where proper forethought is used in the selection of this power equipment it will be a source of satisfaction and profit to the owner.

In purchasing a gasoline engine it is wise to secure catalogs and descriptions of the various types and kinds now upon the market, and make a selection with a view to the adaptability of the engine to the work which is to be done. Where there is a great variety of work an engine should be selected which will be fairly efficient in each class of work. Where an engine is desired for a single kind of work it

Built to Give Years of Service

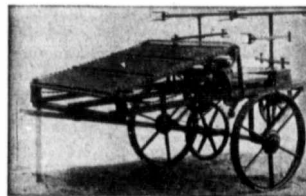


WE guarantee this Cream Separator to be as good as the best on the market. Dirt collector in bowl prevents all dirt from passing into cream. Gearing and oil reservoir completely enclosed. An easy-running, close skimming, sanitary and dependable machine. See pages 82 and 83 of our 1917 catalog for full descriptions and prices on the "Upsala," as well as the "Favorit" and "Tor" Separators. Prices range from \$14.50 to \$74.25 for standard farm sizes.

Let a G.G.G. Sewing Machine do your summer Sewing. Full descriptions with prices in catalog, pages 83 and 86. Get away from the hot stove on ironing day. Our guaranteed Gasoline Iron costs only \$4.00. Write us about anything you may need in Implements or supplies.

The Grain Growers' Grain Co. Ltd
 Branches at: REGINA, SASK., CALGARY, ALTA., FORT WILLIAM, ONT.
 Agency at: NEW WESTMINSTER, British Columbia
 Winnipeg-Manitoba

Advance Straw Spreader



Patented in Canada

DON'T BURN STRAW

The Western Steel & Iron Co., Ltd.
 Situated in Winnipeg, Manitoba
 See how we will show you how to burn straw
 Let us show you how to burn straw
 Name _____
 Address _____

should be selected with a view to its adaptability for that particular work. Where the same engine is to be used for a variety of tasks in different locations its portability as well as its efficiency in operation is a point well worth considering. In any event an engine made by a reliable manufacturer who will back up the advertised claims of efficiency made for his product should be selected, and every manufacturer who has faith enough in the engines which he is building to seek the farmers' patronage can safely be counted in that class.

Economy in a purchase of this kind is not necessarily based upon low cost for a good gasoline engine properly cared for will last many years, even though used constantly. This kind of efficiency will be secured, however, only where good materials and good workmanship are used in the construction of an engine of correct design and these factors are cheaply purchased at even a considerable increase in first cost.

Some who contemplate buying a gasoline engine may think it is a curious, stubborn thing that will go when it feels like it and don't go when it doesn't feel like it, and that the operator is helpless until the engine gets ready to start. This is all wrong. When the engine runs there is a reason why it runs and when it stops, there is a reason why it stops. If the owner will learn the reason that makes the engine run he can find out readily why it stops. Now all gasoline engines are dependent absolutely on three great factors or principles which must be present to obtain their proper working. The absence of either is a dead failure of the engine to move.

First, we must have a good electric spark. It is folly to try to start or run the engine unless we have this and the wires must be in proper shape (tight and trim) and the connections all good to carry this spark to the igniter which is in the cylinder.

I have seen an expert come to a dead engine that could not be started and with his fingers trace the trouble to a broken insulated wire. The insulating casing on the wire prevented the break from being seen and it was found by tracing all along the wires by pressure with the fingers. After trying the usual methods to start the engine without success the expert traced the wires and in five minutes from the time he arrived the engine was at work. A ten-mile trip had been taken to do a very simple thing.

Second, the engine must supply to the cylinder a proper amount of a mixture of gasoline and air. Too little gasoline will not do and too much will flood the cylinder and extinguish the spark. Just the right amount comes to the operator by experience. A knowledge of the proper color of the exhaust and the sound and time of the explosion will soon be acquired. The instructions which accompany the engine are generally very clear on these points. Every purchaser of a gasoline engine should carefully study its principles and the instructions which come with it.

Third, the engine must have good compression. That is, the piston or plunger must fit the bore in the cylinder snug and close so there is no leak at the time of the explosion of the charge, that the full force of the explosion may be exerted on the head of the piston and drive it back with all the power of the explosion.

If these three essentials are present the engine will run. Now the facilities for connecting these three factors in their proper relation and timing the explosion to strike the piston head just when the power is needed to drive it out and maintain a suitable speed for the work to be done are the parts that make up the advantages of the different styles of engines that are competing for purchasers.

Simplicity is a cardinal point in every class of machinery used on the farm. If we combine simplicity with good service it will always be welcome. Complicated parts that are not readily seen and difficult to get at make lots of trouble. The engine that will start up under its load and do the work required of it, and at the same time has fewest complicated parts to worry and annoy the owner out in the country away from expert service, is the engine that will prove most satisfactory.

The Fish

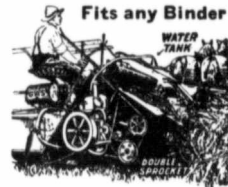
She—"They say there are germs in kisses. What do you suppose a girl could catch that way?"

He—"A husband."



THE THEATRE OF WAR

Cushman Light Weight Engine Saves a Team on the Binder



Cushman 4 H.P. Engine on a Binder. Fits any Binder. Same Engine does all other work.

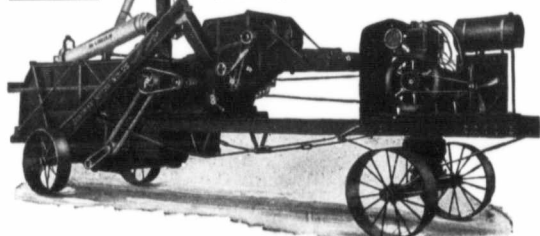
The Original and Only Successful Engine for Binder Work

Attachments for any binder. With a Cushman you can cut from 8 to 10 acres more and with less horses. If the sickle chokes, in heavy or tangled grain, simply stop or slow down the horses and engine clears the sickle. Binder runs the same, whether horses go fast or slow, and will last several years longer. In a wet harvest, Cushman saves the crop, as slipping of the bull wheel does not stop sickle. Engine on rear of binder is balanced by water tank on front. Direct driven water circulating pump keeps engine cool on all-day run. Cushman Engines are so light and so reliable that they do so many jobs other engines cannot do. 4 H.P. weighs only 190 lbs.; 8 H.P., only 320 lbs.; 15 H.P., only 780 lbs.; 20 H.P., only 1200 lbs. Throttle governed and equipped with Schebler Carburetor and Friction Clutch Pulley.

Talk with your Dealer about the Cushman Line or write for Free Catalog.

Cushman Combination Thresher

8 H.P. with Straw Carrier and Hand Feed; 20 H.P. with Wind Stacker and Self Feed; 15 H.P. with Wind Stacker and Hand Feed. Equipped with the famous Cushman 3-Cylinder Engines.



CUSHMAN MOTOR WORKS, OF CANADA, LTD.

Dept. A, Whyte Avenue and Vine Street, WINNIPEG
 Builders of Light Weight Engines for Farm and Binder use. Distributors of Reliable Power Driven Machines, such as Fanning Mills, Grinders, Saws, Power Washing Machines, etc. Also Barn Door Hangers and Mountaineer Neck Yoke Centres.



The Townsley System

Will Guarantee Protection From Electric Storms

You will also save the cost of thorough protection by reduction on Insurance Rates, if your buildings are rodded by the TOWNSLEY SYSTEM of Lightning Protection.

NOW is the time to make inquiry as to how, at an infinitely small cost, you can safeguard the lives of your family, your live stock and your property. Write us for full particulars—refer to "The Canadian Thresherman and Farmer."

See page 50 of this Issue of this Magazine for some Startling Particulars

Canadian Lightning Arrester and Electric Co., Ltd.
 BRANDON, MAN.

To "Hard Tacks" with the Gas Tractor

Some more sheaves from the Field of Experience

Defines the Ideal Engine Capacity

East Selkirk, Man.,
January 3rd, 1917

Gentlemen—Our tractor experience has been with a Hart-Parr "Little Devil" oil tractor. It is rated at 22 H.P. on the belt and 15 at the draw-bar, a two-cycle engine of the three-wheel type. It has two speeds—low speed at 2 miles per hour and high at 3 1/4 miles.

We operated it during the fall of 1915 in plowing, and during the 1916 season in plowing, discing and harrowing. In plowing through the 1915 fall, we used the ordinary 14-inch, John Deere riding gang, which however we found too light for the engine; so in the spring of 1916 we got a 3-bottom 14-in. John Deere "Poney" engine gang which is quite a bit heavier than the ordinary riding gang. It also has a good clearance for trash and is very strongly made. On the whole it has given us good satisfaction, but if I might suggest an additional advantage it would be that it had levers to lift it as the only way it can now be lifted is with the engine.

After rains and when the footing is poor, we pull two bottoms on high gear. When the ground is dry and the footing good, we pull 3 bottoms on low gear. We prefer to use the low gear as one makes a better job plowing. But we find we can go on high gear after a rain storm a day and a half quicker, or nearly as fast as with horses which is a great saving of time.

Our land is a heavy clay loam. It takes five good horses of about 1500 lbs. weight to handle a 14 in. gang, plowing 5 inches deep. Our average day's plowing with the tractor is 5 acres—some days more, some days less, in a 10 hour day. We have plowed as high as 8 acres in 10 hours.

On an average we will use 25 gals. kerosene, 1 gal. lubricating oil, 1/4 lb. grease in 10 hours — plowing 5 inches deep. The cost laid down at our station is 16 1/2c per gal. for kerosene and 43c for cylinder oil. Grease costs us 12c a pound.

We only require one man to operate the outfit as the plow is a self-lift. We have all the necessary power to plow 5 inches deep, but not enough to go deeper. We have used our tractor a lot in discing, pulling 2 discs, a 14 foot and an 8 ft. John Deere disc, weighted with stone. When the footing is ideal, we pull two sec-

Massey-Harris Service

Talk No. 3.—*Extra Parts for Repairs.*

MASSEY-HARRIS Implements are built to last, and many have been known to give splendid satisfaction for twenty or twenty-five years. It is only natural, however, that some parts will wear and others be accidentally broken, and the matter of securing extra parts promptly is an exceedingly important one.

We have always prided ourselves on being able to promptly supply duplicate parts for any Massey-Harris machine no matter how long in use. All Massey-Harris parts are interchangeable, that is when any part is worn out by long continued use or broken by accident, it can be promptly replaced by one exactly like it. This is true whether the part desired be made of Wood, Steel, Cast or Malleable Iron, or Canvas. Parts that go into the machines and parts for Repairs are made from the same patterns, are identical in every respect and will give satisfaction in every case.

By our complete organization for the handling of Extra Parts, we are in a position to give prompt service to our many thousands of customers.

Parts in common use are kept on hand at thousands of Local Agencies throughout Canada, while large stocks are maintained at our factories, branch houses and other convenient points from which other parts can be had promptly.

Some idea of the expense of maintaining this efficient Repair Service may be gained from the fact that the number of different parts listed in our Extras Lists is approximately fifty thousand, some of which are kept on hand by the hundreds or even thousands, representing a value in Parts and necessary Warehouse accommodation for same running into millions of dollars, with many thousands of dollars paid annually to maintain competent and experienced staffs at various points to handle same.

The importance of this service will be best realized during Seeding or Harvesting when every hour counts, and great loss may be sustained if parts cannot be secured promptly.

MASSEY-HARRIS CO., LIMITED

Head Offices—Toronto.

Factories at Toronto, Brantford and Woodstock.

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

AGENCIES EVERYWHERE

WE'LL BUY YOUR TIME

this summer. The plans for our summer subscription campaign call for 300 more men. The opportunity is particularly big in view of our continuing to sell The Canadian Thresherman and Farmer at present subscription price.

Several Canadian farm publications have been obliged to increase their prices on account of the increased cost of paper. Considering this fact The Canadian Thresherman and Farmer should be the greatest and easiest sold magazine for the farmers to-day. We particularly desire farmers who are well known in their localities. These men can conduct a vigorous campaign with our help to their decided profit.

Applications should be sent immediately to the Circulation Manager.

E. H. HEATH CO., LIMITED, WINNIPEG, MANITOBA

tions of a lever drag harrow extra and run on high gear.

On an average we use 20 gallons kerosene, 1 gal. lubricating oil, ¼ pound grease, discing about 40 acres in 10 hours. In discing the tractor has given us extra good satisfaction, getting over a lot of ground and doing a really good job. We also have pulled one of the ordinary road graders making ditches through the fields and here also the tractor does excellent work.

We also use our engine in winter for crushing also for sawing wood. We have a 12 in. three-roller crusher which the engine handles on one cylinder, using 12 gals. kerosene, 1 gal. lubricating oil and ½ pound grease. We have never used the outfit with the threshing machinery, but one of the same make, on a farm close by handles a 24-inch separator with all attachments. In the rush seasons we usually operate our tractor from 14 to 16 hours which enables us to get a lot of work done in a short period.

While the foregoing figures may seem excessive, my advice is—don't figure it that way! Getting your plowing and discing done in good time certainly means a big lump of discount from the apparently high cost; and when your tractor is not in use, you have no labor or expense running in feed, etc.

Our conclusion is that our tractor is rather too small and too light to operate to the best advantage while the engine is of too high speed. Our ideal would be a tractor with 4 wheels, of 35 belt horse-power, or one that would pull 4 plows—a four cycle, slow speed; heavy duty engine to weigh not less than 350 lbs. per belt horse-power. We do not think a tractor of that weight will injuriously pack the soil.

We feel satisfied that a tractor of this size can be used to advantage on a farm of 240 acres or more. While we use our little engine to advantage and have no fault to pick with it, if it was a little larger it would be all the better for the work we have to overtake.

Yours Truly,
Russell Burnett.

Heavier, Better and Cheaper Work Than With Horses

Iroquois, S. D.

4th January, 1917.

Dear Sir—I answer to your list of questions, I am using a 15-30 "Bates Steel Mule Tractor," with which I have done considerable plowing, discing, drilling, grinding and threshing. (My threshing outfit is a 24x42 separator).

In plowing I used a 3-14 in. bottom "Grande-tour" stubble plow, making about 8 acres per

day. On an average it took 2½ gallons of gasoline per acre, going 5 inches deep; one gallon of lubricating and one quart of machine oil per day and about half-a-dollar's worth of transmission grease per week. My outfit is strictly a "one man show" and I myself ride the implement I use.

In discing the engine pulled a 2-8 ft. disc on low or plowing speed; one twelve foot drill on high speed. In plowing with the 3-14 in. plows I had a harrow hitched behind. I haven't used my tractor for anything but farm work of the kind I have stated although I could have done so on many occasions.

I have used this tractor 2 years and all round have had very good luck with it and naturally am well pleased with my investment. I certainly find I can do heavier, better and cheaper work with it than I can do with horses.

Yours Truly,
E. H. Allen.

Would not Go Back to Steam

Waskada, Man.,

January 10th, 1917.

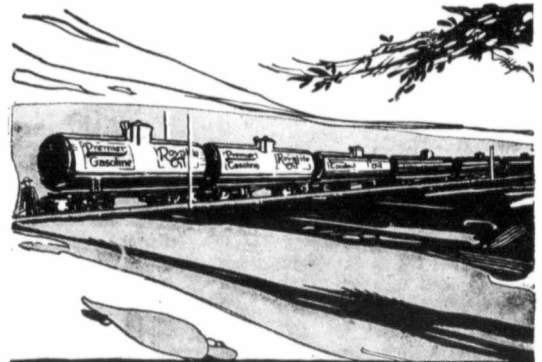
Dear Sirs—I have a Sawyer-Massey 25-45 H.P. gas tractor which I have run for the last four years, at plowing, threshing and chopping grain, and I have found it a fairly good investment. I had never seen one working before I bought this and I swallowed the old yarn that anyone could run a gas engine.

I found this to be true in the sense, that anyone could run one to pieces, or run themselves into debt. I found it takes knowledge, gumption and experience to make a success of it, but the company stood by me nobly, by sending first class experts to show me how to handle it, and to keep the engine in good shape.

This practical help, along with taking a correspondence course put up by Hart Parr Co., and my own experience since, enables me to get along fairly well now. In plowing we use a 14-inch 8 bottom Verity Plow, with which we can plow on an average about 2 acres an hour at 5 to 6 in. deep on about two gals. of gasoline per acre and about 1¾ acre per hour at 6 to 8 inches deep, on 2¾ gals. per acre.

We use about three gals. of best engine oil and about four to five pounds of axle grease per day and about two gals. of water in same time in radiator. We apply the axle grease on gearing four or five times a day. It takes two of us to run the outfit. I would prefer an engine lift-plow with the extra man; stils, to help grease, clean plows, etc.

I have never tried seeding, harrowing, discing or cutting, and think that except in the hands of an expert, they would give more



TRAINS of tank cars bring crude petroleum to our refineries—deliver the refined product to the country town or the tank station nearest you. Every one of our 1200 tank cars is a link in the distributing chain which brings the right lubricant for your machine from the oil well to your farm.

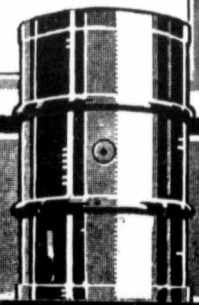
All of our oils are supplied in steel barrels and steel half-barrels—convenient, economical. No waste. You use every drop you pay for.

AN OIL FOR EVERY FARM MACHINE

	For Gasoline Engines, Tractor, Auto or Stationary POLARINE OIL STANDARD GAS ENGINE OIL
	For Kerosene Engines, Tractor or Stationary POLARINE OIL HEAVY IMPERIAL KEROSENE TRACTOR OIL <small>(Recommended by International Harvester Co.)</small>
	For Open Bearings of Farm Machinery PRAIRIE HARVESTER OIL —very heavy body, resists cold, won't thin out with moisture ELDORADO CASTOR OIL —a thick oil for worn and loose bearings
	For Steam Cylinder Lubrication, whether Tractor or Stationary Type CAPITOL CYLINDER OIL —the standard product for steam cylinder lubrication.
	For Grease Cup Lubrication of Bearings THRESHER HARD OIL —a clean, solidified oil high melting point

The Imperial
Oil Company
Limited

BRANCHES THROUGHOUT CANADA



The Twine Binder Situation

McCormick Recommended

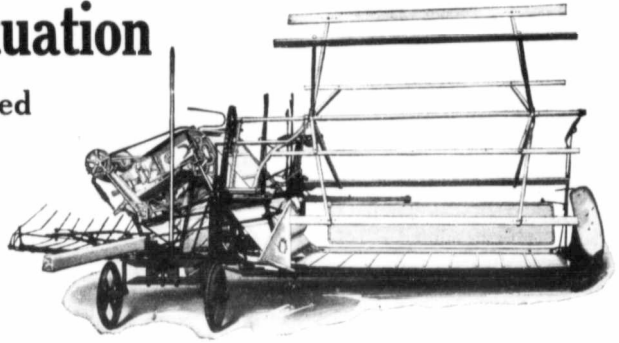
THERE is every reason to believe that this will be a good year for the farmer who has grain to sell. The world's stock is low. The crops so far reported are not large enough to make up the shortage and furnish a year's supply besides. No matter how large a crop North America may raise the indications all favor good prices.

Therefore, it is important to be ready for the harvest with binders and twine that will save the whole crop, no matter what the harvest conditions may be. Good, reliable **McCormick** machines and twine are the kind to buy this year.

Buy early. This applies to repairs as well as to binders and twine. You can get all three now. It may be difficult to get them later. On repairs and twine,

especially, our advice to every farmer is to buy at once all he is going to need, and not alone to buy but to go to the dealer, get the full amount of twine and all the repairs necessary, and take them home.

The local dealer has done all he can to insure the harvesting of your grain. He will appreciate having your order as early as possible, so that he can give service to your neighbors who delay. Help him out.



International Harvester Company of Canada, Limited

BRANCH HOUSES:

West—Brandon, Man.; Calgary, Alta.; Edmonton, Alta.; Estevan, Sask.; Lethbridge, Alta.; North Battleford, Sask.; Regina, Sask.; Saskatoon, Sask.; Winnipeg, Man.; Yorkton, Sask.

East—Hamilton, Ont.; London, Ont.; Montreal, Que.; Ottawa, Ont.; Quebec, Que.; St. John, N.B.

satisfaction as Photos than in any results of economical value.

Ever in plowing on disked stubble, the sand is very hard on gearing and bearings. The gas tractor is not flexible enough to entirely take the place of horses, and as we have to have the horses anyway, I think it is more satisfactory to have them do the seeding and etc.

I have quit plowing with tractor in spring as with gasoline at present price, it does not pay to look for trouble with a big tractor in soft wet land, or to run the chance of getting it stuck in pot hole. But they are fine for summer-fallowing and fall-plowing. Where you have long rounds, they can rip the land up deep, while the horses, especially mares with foals, are getting a needed rest at this time.

For threshing the gas tractor is just the thing. We have a 32-56 Sawyer-Massey, Great West Machine, and keep 8 stook teams, doing all they can do. It takes about three and half gals. of gasoline per hour, and we never use more than two gals. of water in radiator per day, which is a big saving in a dry district. We have little or no danger of fire, and no trouble with scattering weed seed in fields and on roads while moving, as with straw with steam machines.

Eight teams with two extra

men by using portable graneries are all the help required to do big threshing, so that two or three farmers can get their threshing done quickly with little more than their ordinary help. I have had many years experience with running steam threshers, and have been successful, too; but even with gasoline higher than now I would not go back to steam again if I could get as good a gas tractor, as I have now.

I do not owe the Sawyer-Massey Co. anything, so am not seeking favors. I have learned a few things about gas outfits. Do not expect a gas tractor to take the place of horses entirely on the farm. They will not, but they will help horses out. I would not buy one without I could pay cash for it, or be very sure of a way to meet payments, outside of its own work, for payments and interest both come due. I would not get one the size we have on less than a section of land. I would not buy one unless self, or boys, could run it, for if you have to hire an engineer you will find what exorbitant wages mean, and chance getting a botch at that.

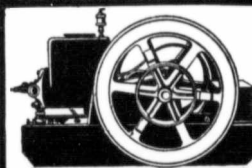
Go to an engine school a while. Do not expect too much from it for it is only a machine, and you will have to furnish the brains and hands, too. But if you are a good thinker, and have lots of

Do Not Buy New Parts For Your Machinery

Have your broken or worn out ones made as good as new by our process. Your blacksmith or repair expert can do this work for you. See him about your broken castings. If he does not own an Oxy-Acetylene Welding Plant write us, giving his name. We are the pioneers of this process, and we will show him how we can save him both time and money.

L'Air Liquide Society 1207 PINE STREET, WINNIPEG, MAN.
Largest Manufacturers of Oxygen and Welding Plants.

DREADNAUGHT



ENGINES

TO
The Western Steel & Iron Co., Ltd.
Winnipeg, Canada

Sirs—

Send me your catalogue of Dreadnaught Engines and your Best-in-the-West Engine Proposition.

Name

Address

DON'T SCRAP YOUR BREAKAGES

Send us all your broken or cracked Cylinders, Crank Cases, Gear Wheels, Gear Housings or Machine Parts. We will deliver perfect results and save you money.

HUB WELDING COMPANY

253 SHERBROOKE STREET, WINNIPEG

Lowest Price consistent with Best Workmanship.

patience and gumption, you will have a good chance of success with a gas tractor. Do not expect great things of it in very cold weather with ordinary gasoline.

It pays to take good care of the outfit. Keep under cover when not in use, keep clean as possible, and remember it costs you about \$5,000—rather expensive to neglect. Use the best gas engine oil and fuel oil. Keep everything tight and in good shape, and it will be a pleasure to run it.

Yours truly,
John Spence.

Beats the Horses in a Rush

Druid, Sask.,
4th January, 1917.

Dear Sirs—The engine I have is a "Waterloo Boy" 12-24. I have been using a John Deere Pony engine gang with 2-14 inch bottoms. It handles this quite easily in breaking to a depth of 4½ inches. With this plow it is easily handled by one man, as all levers can be reached from the platform. It has a self-lifting attachment making it unnecessary to stop on the ends.

I only plowed about one hundred acres with it, 60 acres breaking and the rest summer-fallow. In breaking I used from 2½ to 3 gallons of coal oil per acre. I used about the same on the summer-fallow but I was plowing 6 and 7 inches deep. As for lubricating oil, I used about ½ pint per acre and the grease is a small item.

I averaged about five acres per ten hour day breaking, but this is very heavy land. We use the rod mould boards as any other kind won't clean.

This engine is guaranteed to pull 3-14 inch furrows in stubble, but if the stubble is very grassy it plows nearly as hard as breaking. If I have any surplus power, I put a disc or packer behind rather than load the engine too heavy. I have no separator yet but intend getting one this fall.

My engine is guaranteed to run a 24 inch with all equipment. I did some discing and scrubbing with it. I used a 4 horse disc and heavy scrubber well loaded down with stones, making a good ten horse load, but this was hardly load enough so I have purchased a 10 ft. double engine disc. I haven't tried it yet but I think this will be a nice load for it on stubble. I haven't done any belt work but I used it to haul my granaries around. The ground was wet and sticky but it handled them all right. I find the engine beats the horses when you want to rush your work. I could average about 7 acres per day in long days but a man has to like engines to make a success of them.

I am, yours truly,
Albert E. Bevan.

Pays Well for the Cost and Trouble

Hilda, Alt.,
January 2, 1917.

I own a 25-45 Sawyer-Massey Gasoline Tractor. Bought it in 1915 with a 32-56 Great West separator. I ran the outfit during the fall of 1915 until the 7th day of January, 1916, when I had threshed 102,000 bushels with no trouble worth mentioning.

I found my engine having plenty of power for ordinary work, but at tough hours the separator could not be crowded. I have also run the outfit during the fall of 1916 when I threshed 58,000 bushels, being a shorter season. I have not cleaned any of the valves and cannot complain as to lack of power for ordinary work. I needed 42 gallon of gasoline for a 13 hour day in ordinary dry weather.

I have not used my tractor as yet for plowing, however made a 45 mile move, pulling separator and two wagons with 12 barrels of gasoline, and had no trouble in climbing steep hills. The fly wheel is run on a bevel gear which of course could be improved, however it makes a steady pulling on the belt, no shaking nor jerking to it however.

The tractor has four cylinders, standing. I used 2 gallon of oil per 13 hour day. In hot weather it took a little more. Cooling system is simple. Uses up about two gallon of water a day. The oiling system is poor, very much care must be exercised in cold weather; otherwise the tractor is easy to run.

In brief I believe that this tractor pays well for its cost and trouble and better than a big percentage of other tractors. I expect to use it in the field this coming spring.

Yours truly,
E. A. Mantz.

Proud to Own His Outfit

Antler, Sask.,
January 11th, 1917.

Dear Sirs—In reply to yours of 27th ult. in which I may say my engine and outfit is a J. I. Case, and proud I am to own it. My engine is a 10x20 gas engine tractor, and as I never worked with an engine before in my life I had everything to learn. I threshed about 1450 acres of grain this last fall. The wheat crop was very poor, so of course I did not make big bushels in a day but on oats I threshed 1130 bushels in nine hours with two men, two boys and myself with this outfit: 18 inch cylinder, 36 in rear, and it would take all one man could pitch into her, and I had power in plenty, and 21 gallons of gas would run her 11 hours in threshing with the above separator.

Now I had so many horses on the farm, I did not do any tilling with her as yet. I have run a 12-inch plate crusher and have lots of power with that; I have put 70 bushels of oats through in one hour with 1 gallon and 3 quarts of

Famine Feared

Governments frantically appealing to the people to save resources. The life of nations depends upon raising more grain, and **SAVING** it all. The world is in immediate need of every kernel of grain that can be saved. Every precaution must be taken to **REDUCE WASTE**. **SAVING** grain is as important as raising grain.

SAVE THE GRAIN! SAVE THE GRAIN!

Every threshing machine wastes grain. This **WASTE CAN BE STOPPED** by using a

Grain Saving Wind Stacker

For patriotic reasons alone every thresherman must strive for the highest standard of efficiency, and must make an intelligent, energetic and careful effort to **SAVE ALL THE GRAIN** by employing the most improved machinery. Never before was agricultural preparedness and elimination of waste on the farm so imperative. Help your nation, help your customer, help yourself by attaching to your threshing machine the scientific **AUTOMATIC DOUBLE-ACTING**

GRAIN SAVING WIND STACKER

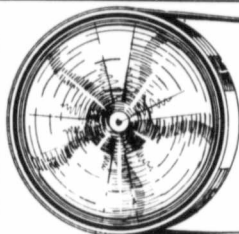
It **SAVES** the **GRAIN** the threshing machine wastes, **STACKS** the straw, eliminates **back-lash**. **RUNS** with **LESS POWER** and saves fuel, and is **Superior** to all straw stackers. Put the grain in the **SACK**, do not waste it in the stack. **SAVE THE GRAIN! SAVE FUEL! SAVE THE NATION!** Threshing Machine Manufacturers are progressive, patriotic and prepared to supply efficient machinery, and will furnish the **GRAIN SAVING WIND STACKER** upon demand.

Obtain Catalog from Threshing Machine Manufacturers, illustrating and explaining how **THE GRAIN IS PUT IN THE SACK** and not in the Stack with the

GRAIN SAVING WIND STACKER

The Indiana Manufacturing Company

INDIANAPOLIS, INDIANA, U.S.A.



BETWEEN FLY WHEEL *And* CYLINDER PULLEY



there is more money won and lost than in any other risk of the threshing field. The "risk" is neither in the fly-wheel or pulley but in the **character** of the belting that connects them. **We take this risk** if you take in preference to all others the



LION BRAND Rubber Belt

OR THE

YELLOW FELLOW

ENDLESS THRESHER BELT



Sold by all thresher companies doing business in Canada. They may cost a trifle more than some fabrics that are always a big risk but that is forgotten in the added years of service, and we guarantee our goods against all disappointment from slippage or breaking. It is not possible to make better belting by any scientific method known at this day.

Gutta Percha and Rubber Limited,

Not in any trust or Combine

WINNIPEG FORT WILLIAM REGINA SASKATOON CALGARY LETHBRIDGE EDMONTON

gas, and put 60 bushels of barley through in the same time with but 2 gallons gas.

Now regarding lubricating, my engine would run all day on 1/2 gallon with the exception of the gears, and five gallons did me all fall. Grease, 1/4 lb. a day was plenty. I made about 26 days in all running.

There is one thing about my engine, when I draw back into the belt to tighten up, my front wheel will skid in the plowed land if it should be a little loose soil, which I think when plowing she might keep breaking in the furrow and causing uneven plowing, that is in loose stubble land, so I would think two front wheels are far better than one for plowing in loose soil. I think I have told you all I know at present, but if I should do any tilling on the farm this summer, I will let you know more about my tractor; but in the meantime I would certainly like your book, "How to Handle an Engine," if you have them, as I would like to learn all I can about them.

Believe me yours,
John Barnett.

After Operating for Ten Years
Minto, Dec. 30, 1916.

In answer to yours of the 27th I must say that my experience with tractors has been confined to threshing last fall, only.

I have for the past ten years operated a small portable outfit; hand feeding from one side and using three stook teams, and this outfit gave me such good satisfaction that I determined to get another one about the same size; only this time I decided on a tractor engine, my idea being to use the engine in the field and do my work with one man and one outfit of horses less. I am working one section of land.

My engine is a 20-horse Case, running an 18-36 Case separator, all complete, and I find I have plenty of power, using from 22 to 23 gallons of gasoline per 10 1/2 hour day, and threshing from six to eight hundred bushels of wheat a day with 5 men and 4 teams, when putting my grain in the grainer. One man looking after the outfit. As to pulling power, the most I have ever given my engine to pull was the threshing machine and three empty wagons, going from one field to another over stubble land with ease.

Owing to the high price of gasoline this fall I decided to do my fall work with the horses.

Yours respectfully,
W. J. Douglas.

Twelve Months of this Magazine for \$1.00

Steam or Gas Tractors

Equipped with



"THE GOVERNOR WITHOUT JOINTS" PICKERING

give greatest efficiency

FITTED TO EVERY BUILD OF ENGINE

Patent Ball Ranger Speed Changer Supplied on all Genuine Pickering Governors.

Will increase speed 50% or more.

THE PICKERING GOVERNOR CO.

PORTLAND

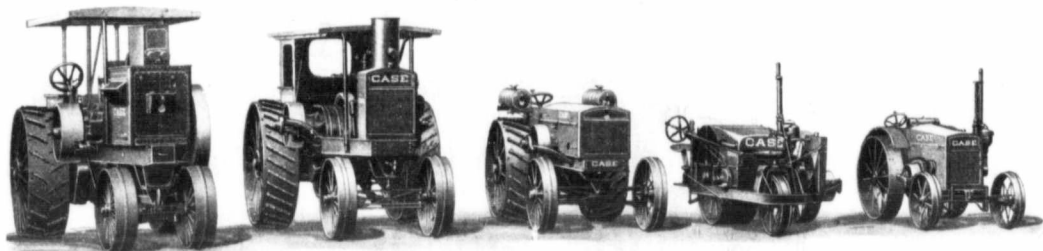
CONN, U.S.A.



Dr. Thomas' Eclectric Oil

Relieves all Pain in Man or Beast

25 Cent Bottles at all Dealers



Steam, Gas or Kerosene - Case Builds Them All

Every farmer who starts power farming should choose the right tractor. If you want steam, gas or kerosene insist first of all on quality. Choose a tractor with plenty of power, one that burns fuel economically, one that is simple and accessible. And above all, choose the machine that is adapted to all kinds of field and belt work.

A tractor isn't an every day investment. The profit and satisfaction it will give you depends on the make you choose. If you want something cheap you will get what you pay for - troublesome delays, breakdowns and expensive repair costs.

Case steam, gas and kerosene tractors are not built to sell on price. We build honestly and conscientiously to give the farmer full value. Our price is determined on this basis. The Canadian government after careful investigation has just purchased nine Case tractors which are giving excellent satisfaction. Hundreds of Canadian farmers would have no other.

When you choose a Case tractor you are getting a tractor backed by experience, reputation and an industrial organization known and respected the world over.

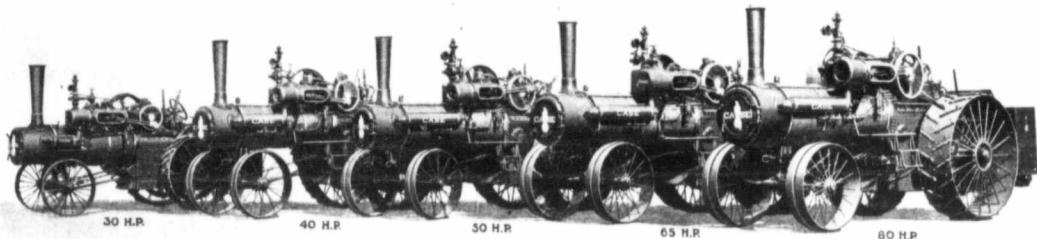
Case gas and kerosene tractors are built in five sizes; 9-18, 10-20, 12-25, 20-40 and 30-60. Case steam tractors are built in eight sizes; 30 - 40 - 50 - 60 - 65 - 75 - 80 and 110 H. P.

J. I. CASE T. M. CO. Inc. 855 LIBERTY ST. RACINE, WIS.

CASE

ESTABLISHED 1842

Canadian Branches: Winnipeg, Calgary,
Regina, Saskatoon.



Now is the Time to Start Tractor Farming

The whole world is looking to the United States and Canada for its food supply. The millions of men fighting in Europe have been non-producers and a shortage of food stuffs is the result. Every farmer must utilize all of his land, extra pains must be taken in the preparation of the seed bed. "One of the great problems of the war is labor", says the Breeder's Gazette. Then it goes on to say, "It may come to a mobilization of labor or conscription of farm hands. Every useful implement of a labor saving nature should be bought and put to work." Think of the obligations the farmers on this continent are under to supply the nations now at war. The soldier of the furrow is doing his most patriotic duty to his country by staying at his post. The farmer will be the important factor in winning the war.

HOW ARE WE GOING TO SOLVE THE PROBLEM

Mechanical power must replace the old way of doing things if we are to cope with demand for food. We must supply the nations at war. Farmers must save time, save labor, for labor will also be at a premium. A reliable tractor is the answer to the problem. With a CASE TRACTOR either steam or kerosene you can do your work better and cheaper than with horses. A CASE TRACTOR will work for you day and night, if necessary. It will always be ready to answer your call for service. It will save labor as well. That is another important feature. The power farmer is the farmer that will be equipped to do the maximum amount of work. And if you are not a power farmer, it is time to begin NOW. You must make your farm produce more.

In the tractor field, Case experience is your safeguard. We build only carefully and honestly to uphold a reputation that has been known for three-quarters of a century. Our users in the United States and Canada number into the thousands. Quality is the foundation of the Case institution. If you are interested in steam tractors, Case builds eight sizes, 30-40-50-60-65-75-80 and 110 H. P. Case kerosene tractors are built in five sizes, 9-18; 10-20; 12-25; 20-40 and 30-60. A request will bring you information on all sizes. Write today. Fall in line with the army of power users.

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

RACINE, WISCONSIN

CASE

ESTABLISHED 1842

Canadian Branches: Winnipeg, Calgary,
Regina and Saskatoon.



Steer Feeding Experiments

The Manitoba Agricultural College has just completed feeding operations with 18 steers. Having a quantity of rusted oat sheaf for feeding, and knowing numbers of feeding cattle were going to the States, the Animal Husbandry Department entered the market last fall, and bought thirty-four feeding steers. Eighteen of these were put into a feeding trial, and the balance fed for use in the college dining room. With the eighteen under test the object was to try out feeding the more expensive high priced feeding cattle that usually go to American feed lots, to use rusted oat sheaf for roughage, and to get some data on the use of ensilage in steer feeding. The cattle were bought early in October before the low point of the market was reached, but at the time of the greatest demand from American cattle feeders. The cattle bought were heavier and better quality than most Canadian stockmen take out, and the loss of this type of cattle to our trade is constantly lamented. Manitoba farmers usually avoid this kind because of its high price with the prospect of a narrower spread between fall and spring prices with such cattle as compared with the thinner kind.

The eighteen steers were divided into three lots at the time of the purchase. Six were of Aberdeen Angus breeding and were designated Lot No. 1. Lot No. 2 consisted of six of Short-horn breeding, and Lot No. 3 were of Hereford breeding. Lots No. 1 and 3 cost seven cents per cwt., and Lot No. 2 \$6.75 per cwt. The cattle ran on the field until November 14, when they were weighed up for feeding and the feeding continued for 125 days.

The cattle were put into large box stalls which had very poor ventilation and which could not be remedied on account of the construction work being under investigation. In the cold weather which prevailed, most of the time the walls and ceilings were very wet and the cattle no doubt made less response to feed than if they had been in an open shed or properly ventilated boxes.

When feeding operations began corn was worth \$39 per ton, or nearly 2 cents per lb., oats 1 1/4

cents per lb., barley 2 cents and bran 1 1/4 cents. At these prices it was decided to feed half corn and half bran which made a mixture worth slightly over 1 1/2 cents per lb. Sheaves were valued at \$9.00 per ton or three cents each, and ensilage at \$5.00 per ton. A charge of 5 cents per head per day for labor was made.

Lots No. 1 and 2 were fed sheaf and the grain mixture, and Lot No. 3 was given sheaf ensilage and the same quantity of grain. At the start all took three sheaves each per day, and in addition Lot No. 3 ate 30 lbs. of ensilage a day. Throughout the whole test each lot ate the same quantities of sheaf and grain and Lot No. 3 in addition ate the 30 lbs. of ensilage per head daily.

The grain allowance at the start was 2 lbs. per head per day which in a month was worked up to 6 lbs. a day. Increases were then made more gradually, until by the 9th of March they were feeding 10 lbs. of grain per day and from January 12th to the end of the period they took four sheaves a day.

The gains made indicate that ensilage was not profitable in feeding these steers, but there are a few circumstances that have to be considered: 1st, that the ensilage was made from very immature corn due to a late spring and early fall frosts; and 2nd, the white-faced steers were older than the others and in higher flesh when they went on feed.

The following is a statement of the feeding operations:—

	Lot 1	Lot 2	Lot 3
Weights Nov. 14th	6330	6230	6365
Cost on market	\$135.96	\$94.33	\$417.76
Keeping cost	190.97	191.87	246.78
Selling charges	11.82	11.82	11.82
Total cost	\$638.75	\$598.02	\$676.36
Selling weights	7470	7295	7260
Total gain	1140	1065	850
Gain per head per day	1.6	1.4	1.1
Cost per lb. of grain	17c.	18c.	27 1/2c.
Profit	\$127.90	\$149.72	\$67.69
Profit per steer	21.31	24.92	10.76
Spread in price between fall and spring	3.25	3.50	3.25
Average profit per steer	\$19.18.		

The operation shows that the ensilage in this case increased the cost of making gains, that the average daily gain in this type of short-keep steers was 1.3 lbs. per day, and that rusted oat sheaf proved a satisfactory roughage for fattening cattle as there was not a case of a steer going off feed.



WAR OR NO WAR

our business is to do our bit in feeding the world. All our men who can fight or who ought to fight went into the trenches at the first stage of the game and no Canadian outfit is better represented in the firing line to-day. Holding THE BEST for many years, we older units are spending every thought and sinew at home in making still better the

"MAGNET" Cream Separator

Seventeen years' constant use on Canadian farms have established beyond the shadow of a doubt that the "MAGNET" with its square gear drive and ball-bearing adjustments has shown no wear and proven that it will surely last a lifetime.

DAIRY WOMEN know that the "MAGNET" bowl and one-piece-skimmer is easily washed sweet and clean in less than five minutes—a saving of from 10 to 15 days' labor each year over the time required to properly wash the disc kind. The

MAGNET ALWAYS SKIMS CLEAN

because its bowl is supported at both ends, cannot wobble and therefore will do perfect skimming for a life-time. Dairy men and women can avoid all "misery" by buying the up-to-date "Magnet" Cream Separator.

"Facts are chieft that winna ding, and canna be disputed."

The Petrie Mfg. Co. Ltd.

Head Office and Factory: Hamilton, Ont.

WINNIPEG, CALGARY, REGINA, VANCOUVER, MONTREAL, ST. JOHN, EDMONTON, LETHBRIDGE



For rough work wear
**OVERALLS
SHIRTS
AND
JUMPERS**
made of

**STIFEL'S
INDIGO CLOTH**
Standard for over 75 years.

Better than you expect—a cloth that's built to stand wear and tear and weather. Three generations of wearers have found it the most-for-the money cloth.

Be sure your overalls, shirts and jumpers are made of Stifel's—it hasn't an equal anywhere for all-round satisfaction. Look for the label on the back of the cloth inside the garments when you buy. Insist upon STIFEL'S and you'll never be disappointed in service. Remember, it's the CLOTH in your overalls that gives the wear!

Cloth Manufactured by

J. L. STIFEL & SONS

WHEELING, W. VA.

Indigo Dyers and Printers

New York 260-262 Church St.
Philadelphia 324 Market St.
Boston 31 Bedford St.
Chicago 223 W. Jackson Blvd.
San Francisco Postal Tel. Bldg.
St. Joseph Mo. Saxton Bank Bldg.

Baltimore Coca-Cola Bldg.
St. Louis 928 Victoria Bldg.
St. Paul 228 Endicott Bldg.
Toronto 14 Manchester Bldg.
Winnipeg 460 Hammond Bldg.
Montreal ... Room 500, 489 St. Paul St.

Hunting Trouble

ORDINARILY the fellow who starts to hunt trouble finds it quicker than he expected, but not so with the automobilist; when he starts to hunt trouble—in the car—it seems to be a very demon for eluding the searcher. Trouble will hide in a tiny piece of carbon lodged under a valve, or between spark plug points, in a wire that has jarred loose, in an interrupted point, a piston ring, a gas pipe—oh, in the most secret and insignificant place—in size—and just defy one to ferret it out. One learns that the insignificant things are really the most important at times.

Yet most of the troubles incident to the operation of a motor car may be located very quickly if one will go after them in a systematic way, and not wander aimlessly about the engine and other parts. The hardest thing a driver has to do when the engine stops or acts up is to divest himself of the idea that he knows just what the trouble is. He is sure he can fix it in a minute and he putters around a long time before he makes up his mind that it is something else, and it takes a lot of time to prove that to some persons.

"The best way to go about it," said H. C. Brokaw, principal of the Automobile School of West Side Y.M.C.A., 318 West 57th street, New York City, "is to start without preconceived ideas as to what the trouble may be, and follow a system, which is really a process of elimination. To start a gasoline engine three things are necessary—gasoline, compression and a spark at the right time. To keep it running it is necessary to have also water for cooling (unless an air-cooled engine) and oil for lubrication.

"If the engine stops on the road and pressing the starter pedal fails to start it, the first

thing to do is to get the crank out of the tool kit and crank over the engine. If, with the gears in neutral, the engine cranks over hard, it indicates a lack of lubricating oil, or a lack of water, which has allowed the engine to reach a temperature where the lubricant fails to perform its work. If the engine turns over fairly easy it is not necessary to look for oil or water trouble.

"The next test is for compression. If the driver is not experienced and is unable to tell simply by the resistance to the starting crank if each cylinder has compression, he should open all petcocks except on one cylinder and turn the crank two revolutions, noting if there is a resistance for one-quarter of a revolution in the two revolutions. Compression occurs only on one stroke of the piston in the four-stroke cycle. Each cylinder should be tested in a similar manner, opening all petcocks except on the cylinder being tested; see if the compression is practically equal in all cylinders.

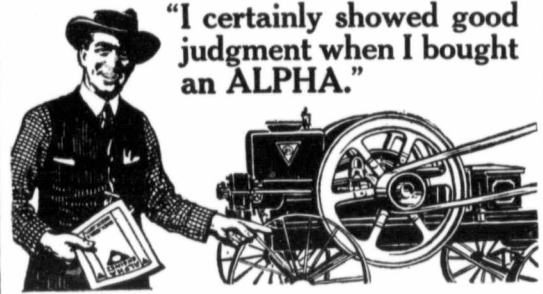
If one cylinder has very weak or no compression, the trouble will be found usually in the exhaust valve. First examine the push rod to see if there is clearance between it and the valve when the valve is supposed to be closed; if there is, the valve must be lifted out and the valve and seat inspected for carbon. Sometimes a piece of carbon will lodge on the valve seat and, due to the hammering of the valve, will become fastened to valve or seat. For temporary repair generally it can be scraped off with a knife and the valve be ground in upon reaching the garage.

"If the trouble is not in the exhaust valve it might be in the inlet valve. In some types of engines the valve head may break off and get into the cylinder and



INSULT TO INJURY.

Mother's Own Boy—"Peep ho! I see 'oo!" (profane silence from Jones, who has come to grief in trying to avoid the sweet child.)



"I certainly showed good judgment when I bought an ALPHA."

"Before I bought a gas engine there were two or three that looked pretty good to me, and there was one, especially, offered at a considerably lower price than the ALPHA, that I came near buying.

"When I got thinking the proposition over, though, I figured that the ALPHA must be worth all its makers were asking or else it wouldn't be outselling the cheaper engine. So I finally picked the ALPHA, and I know now that I didn't make any mistake. One of my neighbors saved a few dollars (as he thought) by buying the other engine and he wishes now that he had followed my example and bought an ALPHA."

The first cost of an engine is the last thing to consider. What you are buying is not so many wheels, washers and pistons, but so much service. If you can't depend on an engine to do the work you buy it to do, it is dear at any price.

Thousands of Canadian engine-owners swear by the ALPHA because they have found that it is reliable at all times and under all conditions. It is sturdy built. It is simple in construction. It is powerful. It runs on either gasoline or kerosene and develops its full published horse power on a minimum amount of either. If you want an engine that you will be thoroughly satisfied with, put your money into an ALPHA.

Ask for catalogue, prices and complete information. Made in eleven sizes, 2 to 25 H. P. Each furnished in stationary, semi-portable or portable style, and with hopper or tank and cylinder.

THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns and Buttermakers. Catalogues of any of our lines mailed upon request.

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



BEST
ANTI-FRICTION
BABBITS
ON THE MARKET

With forty years' experience in manufacturing alloys for all classes of machinery, the HOYT METAL CO. has evolved two alloys which are unsurpassed by anything of the kind now in use.

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

HOYT'S FROST KING Babbitt is especially designed for threshers, separators and stationary engines of all classes.

If your dealer does not carry these metals in stock, send your order direct to us. In order to insure prompt delivery, send postal money order.

Nickel Genuine	Frost King
Less than 28 lbs. 85c per lb.	Less than 30 lbs. 40c per lb.
28 lb. box 80c per lb.	30 lb. box 37c per lb.
56 lb. box 78c per lb.	60 lb. box 35c per lb.

Delivered to your nearest express or post office station.
Hoyt Metal Co. Eastern Ave. and Lewis St.
TORONTO

FACTORIES—London, Eng.; Toronto, New York and St. Louis.

PROVINCE OF MANITOBA ENROLMENT OF STALLIONS

The attention of the Public of Manitoba is directed to the following sections of the "Horse Breeders' Act" of Manitoba:—

3. It shall be the duty of the owner of every stallion, standing or travelling for public service in Manitoba for remuneration, before commencing such business, to apply annually to this Department (Manitoba Department of Agriculture) and to obtain a certificate of enrolment as hereinafter provided.

(a) Every importer or breeder, before offering a stallion for sale, must have such stallion enrolled with the Department.

14. The owner of any stallion standing or travelling for public service in Manitoba, shall post and keep posted, during the entire breeding season, copies of the certificate of enrolment of such stallion, issued under the provision of this Act, in a conspicuous place on the inside or outside of the main door leading into every stable or building where the said stallion stands for public service. Such copies shall be printed in bold conspicuous type, not smaller than pica; and nothing on such bill, poster or advertisement shall be of an untruthful or misleading character.

15. The owner of an unenrolled stallion shall not have route bills or breeding cards printed or posted, nor shall he charge or receive any service fees.

Under this Act four classes of certificate are issued—A, B, C and D. These certificates differ materially in statement, and each mare owner should read the individual certificate of the stallion he intends to patronize.

A copy of the "Horse Breeders' Act" may be had free on application. Lists of all stations enrolled with the Department are prepared and revised weekly, and one of these lists will be sent free on application.
V. WINKLER, Minister of Agriculture and Immigration.

when the piston comes up punch a hole in the piston head. A petcock may be loose so that it will jar open sufficiently to affect the compression and cause the cylinder to miss fire. These troubles usually are confined to one cylinder and not to the whole engine.

"The gasoline is the next to be inspected. Is there gasoline in the bowl of the carbureter? This may be determined by inspection, opening drain cock, or tickling"—flooding. If not, examine gasoline tank and see if there is a supply; then see if the shutoff valve in the line leading to the carbureter is open; if so, drain the bowl of the carbureter to get rid of possible water and dirt. To check the possible clogging of gasoline pipe or carbureter screen, notice if the bowl fills up again in a reasonable time.

"Do not adjust the carbureter. If the engine has been running it is practically certain that the carbureter has not become out of adjustment. Inspect the intake pipe, or manifold, to see if it has been loosened by vibration. If the engine still refuses to run, put about a tablespoonful of gasoline in each cylinder and crank over the engine. If this runs the engine for a few revolutions it indicates that the trouble is in the gasoline system and leaves but the spray nozzle, which may have dirt lodged in it, or the auxiliary air valve, which may be stuck, as remaining causes.

"Next inspect the ignition system. The first thing to do is to loosen one of the wires from a spark plug and lay or hold it so the bare end will be $\frac{1}{8}$ in. from the base of the plug and have some one crank the engine by hand or with the starter. If a spark does not occur, go first to the interrupter points and short-circuit the fixed point with a screw driver or other metal tool and see if there is a spark. Examine the points for dirt and see if they come together and open properly. Then examine the condition of the battery, testing it. Examine the connectors on the battery, which sometimes jar loose; examine the wires leading to the interrupter and switch; see if they are loose, or broken, or short-circuited. This need not be done if the spark shows at the interrupter.

"Examine the distributor for moisture or dirt and see if the wires have become loose. If a magneto only is used, it is a simple matter to see if the interrupter points are making and breaking properly and if the distributor is clean and dry. If these appear to be all right the trouble is doubtless in the armature winding or the condenser and cannot be repaired upon the road.

"The wires to the plugs may be burned or short-circuited. If with an apparently good spark, we have compression and there is a mixture passing into the cylinders, the trouble may be in the spark plug. To test a spark plug it is necessary to remove it. Widen the gap to $\frac{1}{8}$ in. and lay the plug with wire attached upon the cylinder; crank the engine and see if a spark jumps the gap. Widening the gap is necessary, because the spark will not jump so far under pressure as in the open air. If it does not jump the plug may have a broken insulator, or need cleaning. An extra set of plugs should be carried to replace those which become dirty; cleaning should be done in the garage. If uncertain about condition of plug, exchange it with one in another cylinder that is working properly.

"This covers most of the usual troubles experienced on the road. There are, of course, a great many possibilities, but if these tests, carefully made, do not disclose the cause of the trouble, the novice would better send for a garage man. If one or two cylinders miss fire, the trouble is most likely to be caused through lack of compression or short-circuited spark plug. If the engine refuses to run the trouble is most likely to be due to lack of gasoline, or failure of battery or magneto.

"The general rule given here-with should be cut out and pasted under the hood, or carried in an envelope in the tool box for ready reference. It may save much time and trouble when far from a garage. Carefully followed it should locate almost any trouble likely to be experienced and it is the locating, not the fixing, which takes time."

General Trouble Rule

Above all remove nothing from the engine, except as directed in test rules.

Needed to make an engine run:

1. Gasoline. Is tank full? Are pipes clean? Is carbureter clean? If carbureter needs adjusting, do it, otherwise leave it alone. Does manifold leak?

2. Compression. To test: Open all petcocks except the one on cylinder to be tested; crank engine, noticing how strong the compression is in each cylinder.

3. Ignition at the right time.

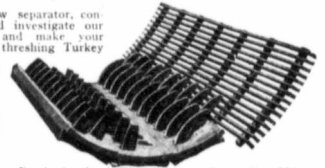
a. Test for a spark by taking the wire off any plug; hold wire about $\frac{1}{8}$ in. from plug; crank engine with switch on. Spark should jump to plug.

b. Are the batteries run down? Does the vibrator (if any) buzz? Is timer clean? Do timer points make good contact?

c. Are any wires loose, burnt, wet, broken or short-circuited?

UP-2-DATE CONCAVES, MR. THRESHERMEN!

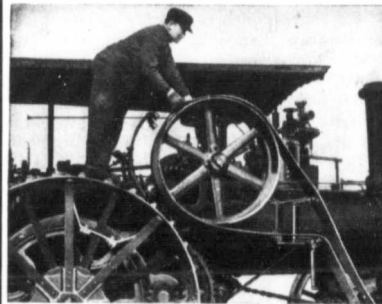
Are you intending to buy a new separator, concaves or teeth? Then you should investigate our Up-2-Date concaves and teeth, and make your separator an Up-2-Date one. For threshing Turkey Red, Marquis or Blue stem wheat, Bearded barley, Honduras or Blue Rose rice, nothing can equal them in getting the grain out of the toughest heads without cracking the grain. No winding or back lashing in long, damp straw. We guarantee them. Write for concave catalogue.



Frank D. Morrill, Secy. Minnesota Brotherhood of Threshermen, Janesville, Minn., writes Jan. 4, 1916. "The Up-2-Date concaves that I bought last fall for my 40-hp separator will do more than you claim for them, in fact they did so well, that when I bought another 40-hp machine three weeks later, I set the concaves aside and put in another set of your Up-2-Date concaves. It is the first time in my 20 years' experience as a thresherman that I have threshed a season through without teeth trouble, and as not a single tooth broke or got loose in either set, I had no trouble with my cylinder teeth. I would not take \$100.00 for a set and have to go back to the old style. They are the only concaves to get Turkey Red and Marquis wheat out of the head."

AN UP-2-DATE BELT HOLDER AND GUIDE

For Steam or Gas Tractors



Threshing With a Chaffin Belt Guide on a Windy Day.

An Up-2-Date "Flue Scale Remover" removes all scales on the outside of flues. You probably wonder how it is done. Our catalog explains. E. H. Egerton, Wallingford, Iowa, writes: The Hanson patent tool for removing scales from boiler tubes is a great success. I took out one bushel of scales from our 20 H.P. boiler at one cleaning. This tool with your flue cleaner makes flues steam like new ones.

WM. PENN JONES IMPLEMENT WORKS, 134 Washington Ave. So. Minneapolis, Minn.

HOUSE PAINT

Add Lasting Beauty to Your House



DO the OUTSIDE painting thoroughly this season.

Use the best paint you can get and put it on right. But be careful of your choice. Not all house paints will withstand the rigorous Western climate. It's a terrific test for any paint not manufactured especially for it. There is a weather antidote mixed into every can of

Stephens' HOUSE PAINT

Users of it have proved that outside painting—done in the *Stephens* way—often requires no attention for many years. Ask your hardware dealer for information and Color Cards.

G. F. Stephens & Co. Limited
PAINT AND PAINTER MATERIALS
Winnipeg, Canada

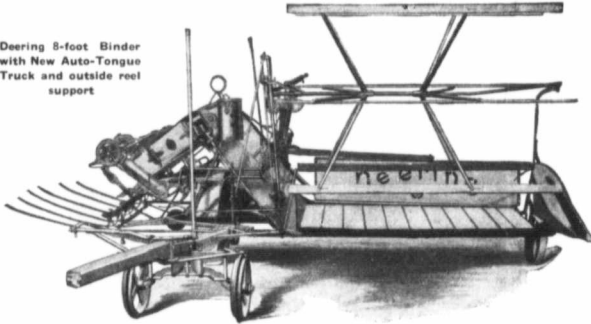
TWELVE MONTHS OF THE BEST FARM PAPER PUBLISHED FOR ONE DOLLAR

Buy Early This Year

THIS year, Canadian farmers have need of first-class equipment in harvesting machines, twine, and binder repairs. Buy none but well-known, long-tried machines and buy early.

Buy good twine, and buy it now. This is no time to be thinking about saving a cent or two on twine, but to

Deering 8-foot Binder with New Auto-Tongue Truck and outside reel support



think of the dollars that good twine will save in the field. Our advice to every farmer is to buy at once the full amount he is going to need, and not alone to buy it, but to go to the dealer, get it, and take it home.

Deering binders now cost less in the amount of farm produce required to buy them than ever before. But prices of all manufactured goods are likely to go higher without much warning, while there is no chance at all for them to go lower this season. The safe thing to do, therefore, is to buy now, at present prices, for immediate delivery.

Your local dealer has done his share to insure the harvesting of your grain. See him as soon as you can and arrange for the repairs, twine, or new machines you are going to need this year.

International Harvester Company of Canada, Limited

BRANCH HOUSES:

West—Brandon, Man. ; Calgary, Alta. ; Edmonton, Alta. ; Estevan, Sask. ; Lethbridge, Alta. ; North Battleford, Sask. ; Regina, Sask. ; Saskatoon, Sask. ; Winnipeg, Man. ; Yorkton, Sask.

East—Hamilton, Ont. ; London, Ont. ; Montreal, Que. ; Ottawa, Ont. ; Quebec, Que. ; St. John, N.B.

Are spark plugs clean and are points 1-50 in. apart?

d. Does magneto armature revolve? Is safety spark gap clean? Are interrupter points clean and adjusted right? Do all brushes make good contact? Is distributor clean? Is distributor rotor loose, broken, or making poor contact?

e. Check magneto wires as per c.

Note—Loose wires and terminals and neglected batteries, also dirty gasoline, cause much trouble. To keep a gas engine running cooling and lubrication are needed.

Carbureter Conundrums

To some car owners the carbureter is somewhat of a conundrum, as they fail to realize that the carbureter is essentially a nozzle for spraying gasoline in a current of air, so that the gasoline evaporates quickly and becomes a gas. As the air openings are comparatively large, they are seldom the cause of trouble, but the clogging of the small gasoline nozzle is of more frequent occurrence.

Supplying the carbureter with clean gasoline is the first and most essential requirement of

good carbureter operation. If there is a strainer in the gasoline line, or attached to the carbureter, it should be cleaned at fairly frequent intervals, or the strainer will be of little value. Most carbureters are fitted with a drain plug, or pet cock, at the bottom of the float chamber and, if this pet cock is opened each day, before starting the motor, the water and dirt that have settled during the night will be drained out and trouble will be avoided. Water is heavier than gasoline and will settle to the bottom, except when the car is in motion, then it is apt to be drawn into the gasoline nozzle. The globule of water will act as an effective plug and shut off the supply of gasoline.

Before blaming the carbureter for all the ills the motor is heir to, says "Automobile Dealer and Repairer," it is well to make certain that the valves are not leaking, and that the motor is not full of carbon. Good carbureter adjustment cannot be secured until the motor is in good mechanical running order.

Small particles of dirt in the gasoline sometimes become lodged between the gasoline inlet needle and its seat, thus keeping the needle valve from closing properly and causing the carbure-

Safe, Clean Cooking

SAFE, because the oil tank is away from the heat, and because the height of flame cannot vary. Clean, because there are no wicks to smoke or need trimming.

Burners can be regulated to give degree of heat desired, and when not in operation are left completely up out of oil contact. The asbestos lining and dead air space, and glass door of "Success" oven ensure heat retention and visible baking.

An economical cooker and baker, beautiful in appearance.



McClary's FLORENCE

OIL COOK STOVES Wickless, Valveless, Blue Flame, Automatic

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B., HAMILTON, CALGARY, SASKATOON, EDMONTON

retter to flood. If gasoline drips from the carbureter for only a short time after the motor has stopped, this may be due to unvaporized gasoline, which has collected on the walls of the intake pipe. This gasoline runs back into the carbureter, after the suction from the motor has ceased, but the trouble can be eliminated by providing heat in the form of hot air, or a water jacket, to vaporize the gasoline more thoroughly.

No attempt should be made to adjust the carbureter until the motor has been running for a few minutes and attained its normal working temperature. A carbureter that is adjusted to suit a cold motor will not give good results when the motor has become warmer.

If the carbureter is provided with an auxiliary air adjustment, this air valve should be closed, and the gasoline adjusted to run the motor smoothly and evenly at low speeds, with the throttle almost closed. Then, by opening the throttle, with the spark still retarded, the pick-up of the motor can be used to determine if the correct setting for high motor speeds has been attained.

Too much air is indicated if the motor chokes and picks up speed but slowly and jerkily. Backfiring through the carbureter often occurs when the mixture is very weak.

Too much gasoline will cause the motor to pick up speed fairly fast, but not as fast as will the correct mixture. Also, the motor will not seem lively. Black smoke and a somewhat muffled sound from the exhaust are indications that the mixture is over-rich in gasoline.

If the driver will use the same hill as a test hill, and try the car after making each adjustment, the best results will be secured.

Motors for Farm Work

Agriculturists in all parts of the world are now face to face with a greater shortage of manual and horse help than ever before, and that too at a time when the demand for their products is constantly increasing. This demand can only be met by the greater use of machinery, and especially of the oil and gasoline motor. This will, it is generally believed, solve the problem; although the horse in temperate climates will not disappear from the farm, for there is much work which can still be done more cheaply by the horse than by mechanical means.

At present the motor, though far from perfect, is valuable for many kinds of work. Perhaps

even the best type of engine has not yet been evolved, but serviceable designs exist.

As regards the motor tractor for use in the near future, experience shows that it requires large wheels of ample width, extra strong gears, ease in turning, steering and reversing, and engines with a reserve power to take attachments for a variety of work with special means of fixing these. Then these implements cannot always be of the same pattern as those drawn by animals and guided direct by hand.

The implement maker and designer of the tractor must work together. It is even proposed that a small motor should be designed to dig with a spade or fork and to imitate the movements of the hand and arm. To facilitate harvesting work, we may in due time witness combined reapers and threshers. It has been suggested that if this can be done by one combined machine, then the harvester must be of the stripper type, designed also to cut and tie the straw, while the threshing is done by a separate machine. Hay making is becoming more and more mechanical, and for large fields a new sweep has been designed to collect and elevate the hay. A small motor to drive a field loader may be better than horses pulling a heavy loaded wagon to do this extra work.

With the present high prices of cereals, motors should be employed at home and abroad to break up new land, for the prospects of profitable times for grain producers are most favorable; and when prices fall it will be found that tillage can be done more cheaply by motor than by manual labor, the cost of which is likely to decline. More crops are required of potatoes, which will in all probability be used in the near future for the production of alcohol motor fuel.

With gasoline at its present price, the fuel question becomes an urgent one, and it must be asked whether the cane sugar grower is yet giving sufficient attention to the distillation of alcohol for industrial purposes?

Motor Cultivation

In the agricultural section of the British Association meeting, C. B. Fisher read a paper on "Motor Cultivation," in the course of which he claimed for the motor tractor that it had great powers for good. It might be of enormous assistance in solving the question of reconverting the strong wheat land to its proper purpose, and thereby increasing the opportunities of employment. It could, and undoubtedly would, raise the standard of

Saves Money, Time, Labor

Electricity on the farm gives you the great advantage of clear, clean, brilliant, convenient light. But over and above all that, it saves money, time and labor. Delco-Light will shortly pay for itself in money and time saved.

With Delco-Light you save the time of cleaning lamps and lanterns. Housework and chores are done more quickly because of better light. In addition, Delco-Light power will do the milking, separating, churning, washing, water-pumping, feed-cutting. Allowing only 10c an hour for labor on your farm, Delco-Light will save you at least \$127.40 a year.

Compact, Sturdy Motor

This is the Delco-Light Powerstand—a portable, efficient little electric motor that will run from any light socket. Runs all your light machinery and can be carried anywhere. Economical of current.



DELCO-LIGHT

ELECTRICITY FOR EVERY FARM

Easy to Operate Economical, Safe

Simplicity is the key-note of the Delco-Light plant. It is easy to understand, easy to operate. A child can attend it. It consists of gasoline engine, generator, switchboard and batteries. Self-Starting, it stops automatically when its work is done. Gasoline consumption is small—and it is absolutely safe.

Write Today

Get the complete Delco-Light story. We have published books covering every point. Send your name and address on a postcard.

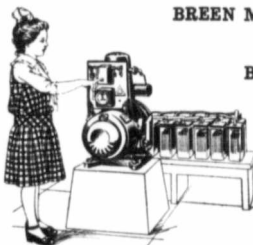
BREEN MOTOR CO.

Distributors
WINNIPEG

B. L. ROBINSON

Distributor
CALGARY

Domestic Engineering Co.
DAYTON Ohio



WHEAT AND OATS

ALFALFA, FLAX and other crops yield more if the Western is used in preparing seed bed. It has no equal for this work. Pulverizes, packs and mulches at one operation, without extra horsepower. Saves time preparing seed bed—saves seed. Especially adapted for milling small grain when two or three weeks old—makes a perfect mulch to hold moisture without hurting the grain.

Western Pulverizer, Packer and Mulcher Three Machines in 1

Made in 2, 3 and 4 sections. Best every farmer to have our free catalog before buying a roller or harrow. It will prove we can save you money and have far the best machine. Contains full description and price direct to you, letters from many farmers proving its advantage over other makes, and much other valuable information. Send for it today.

The Western Steel & Iron Co., Ltd., Implement Manufacturers
Winnipeg, Man.



wages by turning the agricultural laborer into a skilled mechanic. If the nation had decided that one of the chief lessons of the war was the necessity for the future security of the country, of a greater production of food at home, the makers of motor tractors had an enormous power and future before them. But to justify the increased expenditure of capital by farmers one thing was absolutely essential, and that was a guarantee of some stability for the price of wheat.

R. N. Wilson held that the motor plow would materially improve the condition of clay land, as had been demonstrated in Essex. Another great advantage was that one could launch the equivalent of 20 horses on the land at the proper moment and make better use of artificial manures by perfect tillage.—British Board of Trade Journal.

Our Western Fairs of 1917

Elsewhere in our columns will be found the announcement of the Western Canada Fairs Association for this summer's exhibitions. Two new associations were admitted this year—Weyburn and Yorkton. In keeping with the increased interest being displayed in live stock and agricultural matters generally, the different exhibition associations have uniformly increased their prize lists, and over \$200,000 will be offered in the various departments of the exhibitions composing this circuit.

The demand for pure-bred live stock was never keener than it is to-day, and the farmers have the money to buy what they want. This circuit offers opportunities to the breeders of live stock and manufacturers generally and of farm equipment especially, unsurpassed on this continent.

In promoting agricultural interests, the Western Canada Fairs Association realizes that increased production is one of the highest forms of patriotism.



Kind-hearted clergyman (to little maid who has fallen in the mud: "Dear! dear! Now what will mother say when she sees that awful mess!")

The Victim: "She'll say it's 'nough to make a parson swear."

To Save the Flag Prepare More Land and Prepare it Better

1918





"The Plow is our hope!"
Lloyd George.

The food shortage is world wide, and more acute than the present generation has ever seen. Everything points to still greater scarcity in 1918.

You cannot meet the Empire's call for more food next year, unless you prepare more land for crop NOW—and prepare it better. Every possible acre of new land should be broken between seeding and harvest. Every summer-fallow should be kept clean and well tilled, to conserve the moisture necessary for a big 1918 crop.

In the fertile prairies of Western Canada rest the hopes of the Empire. Yours is a great opportunity—and a great responsibility.

Invest Your Profits in War Savings Certificates

"It is the bounden obligation of every man, of every woman in Canada, to work harder and produce more, to cut down luxurious, unnecessary expenditure, to save money for the purpose of the war."

Sir Thomas White, Minister of Finance.

Canadian Government War Savings Certificates are issued in denominations of \$25, \$50 and \$100, repayable in three years. At the purchase prices of \$21.50, \$43 and \$86 respectively, they yield over 5% interest. Buy them at any Bank or Money Order Post Office.

The National Service Board of Canada.

R. B. BENNETT,
Chairman.

C. W. PETERSON,
Secretary.



ARE YOU LOOKING FOR A NEW FARMING LOCATION?

Let me tell you about the Stonewall-Balmoral-Teulon District. Unexcelled for Mixed Farming.

R. W. RUTHERFORD
309 Merchants Bank
Winnipeg Manitoba

Have You a Willard Battery?

When it needs attention send it to either our EDMONTON or CALGARY Service Station if you are located in Saskatchewan or Alberta. We are the official WILLARD SERVICE STATION and we can give you **Prompt and Efficient Service.** In addition to this we stock a full and complete line of AUTOMOBILE SUPPLIES, Tires, etc. **QUICK DELIVERY.**

The Motor Car Supply Co. Limited

Drawer 2195 Dept. A CALGARY, Alta.

Oxy-Acetylene Welding Hints

COMPETITION is more keen every day and it behooves the smith to get lined up on every line that will boost his business, providing the outlay is not more than he is able to stand. The cost of the welding machine is, at the present time, within easy reach of any smith who would care to have one in the shop. Many concerns are selling on the instalment plan and this eliminates the putting up all cash, which many, of course, appreciate, especially if capital is limited.

Just what machine to buy depends on the choice of the smith, for there are many machines on the market and most of them good, for no manufacturer can put out a poor machine and expect to stay in the business any length of time. It seems that the most used machine is the machine having the storage tanks filled at a service station, that is, getting the drums of oxygen and acetylene gas filled at the filling station and returning them when empty, thus simply exchanging the empty drums for the full ones and paying for the gas that is in them. All outfits on the market to-day are fitted with gauges and connections for using these tanks and for the small shop this outfit will be the better. The larger outfits generating the gases as used are found principally in the larger shops.

The cost of the outfits as described range from \$35 to \$75, depending somewhat on the size, etc. There is considerable in the gauge equipment and these things should be taken into consideration in making the purchase. For instance, an outfit may be put out with nothing but reducing gauges, that is, they reduce the tank pressure to say, 20 or 30 pounds, as desired. Then there is the combination gauge outfit which not only reduces the pressure to the desired pressure, but another gauge gives the reading of the tank at all times. This one feature is not absolutely necessary, but it is very convenient because of the fact that the amount of gas remaining in the storage tank is known at all times. Then the torch equipment has much to do with the price, for there is a great deal of difference in torches, as one will learn as he begins to use them. In the first place there are torches of the same capacity, one using considerable more gas than the other on the same job, and this should also be taken into consideration.

Some of the outfits are equipped with a cutting torch which, of course, will advance the price from \$15 to \$40, depending somewhat on the size and construction. A cutting torch is a very useful tool and no welding outfit is complete without it, as it can be used to great advantage in cutting large shafts or plates. Then again it is handy for cutting beams, or wrecking steel structures of any kind. It is very useful in wrecking automobile frames when junking cars, as rivets can be sheared quite fast, without, however, damaging the channel iron of which the frame is made. The ordinary torch can be used for cutting small plates and shafts, etc., but it is very unsatisfactory because of the fact that the edges are rough, to say nothing of the waste of gas in the operation.

If the machine is to be portable, the first thing to do after receiving it is to make a suitable truck to move it about. A very handy one can be made which resembles very much a small truck used in a stock or storage room. The two tanks can be placed on it and the balance of the supplies can have a corner where they can be close at hand. The cost of this truck will be very small, for it can be made and welded up after the machine has been set upon the floor. It is a very good idea to make the entire truck of angle iron or some other iron, for in case it is made of wood there is a possibility of it being burned.

Then next in order will be a table on which to do the welding. The top should be a planed surface, for it will save a great deal of time in lining up work that must be kept straight. Something of this sort can be found around most every shop, and in case it cannot, it can be ordered from any of the heavy hardware houses from which the smith buys his goods. This can be mounted on trucks, or legs as desired, but the truck is best as it allows of moving about to meet the condition.

The welding of the steel will probably bother the beginner more than all other metals with which he will have to deal, because of the fact that to get a good weld the steel must be heated to just the proper temperature, and have the gases regulated correctly. The first thing to do is to be able to tell whether or not the steel is in a molten condition or burning. In case the flow of acetylene gas is excessive, the steel as well as the

Provincial Exhibition

BRANDON, Man. July 16, 17, 18, 19, 20, 1917

A Provincial Exhibition that has made good every year. An improvement over the previous year. It's a bigger and better Exhibition for 1917. **LET'S GO!**

LIGHT TRACTOR PLOWING DEMONSTRATION

The unqualified success of last year's demonstration (the first held in Canada) justifies our repeating it this year. Rules and entry forms are ready. Entries positively close July 1st.

INDUSTRIAL EXHIBITS

The buildings and outside space for Manufacturers' Exhibits make this the best place in the West for the display of all kinds of **Farm Machinery, Farm Implements, Automobiles and Mercantile Exhibits.** It's where the Manufacturer meets the Farmer. It's where sales aggregating hundreds of thousands of dollars are made. **It's where you meet the MAN WITH THE CASH.**

EXHIBITS SOLICITED. Application for space should be made early to insure a location. **WRITE FOR PRIZE LIST**

SINGLE FARE RATES ON ALL RAILROADS

P. PAYNE, President

W. I. SMALE, Secretary

CARRY ON!

Your plowing and threshing will move along briskly if you use a high grade lubricant which can be depended upon at critical times. We have an oil to lubricate correctly every type of tractor. Tell our agent about your machine. He will lubricate it properly.

For Steam Tractors—

CAPITOL STEAM CYLINDER OIL

For Gasoline Tractors—

**POLARINE OIL
STANDARD GAS ENGINE OIL**

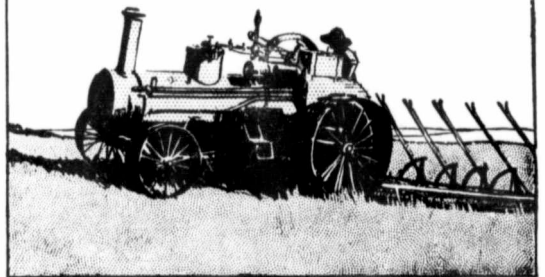
For Kerosene Tractors—

**POLARINE OIL HEAVY
IMPERIAL KEROSENE TRACTOR OIL**

All of our tractor oils are sold in steel barrels and steel half-barrels direct from our 500 prairie tank stations. There is one near you.

THE IMPERIAL OIL COMPANY
Limited

BRANCH STATIONS THROUGHOUT CANADA



rod will carbonize and have practically no strength at all. On the other hand, in case the flow of oxygen to the tip is too strong it will have an effect on the steel which is known as oxidizing it. This as well renders the steel useless. This fact will be found in welding all metals, but quite a little more noticeable on steel than any of the others. The flame may be adjusted to show absolutely neutral to the eye, but it can yet be either too rich with either of the gases, so the proper and sure way is to be able to judge the flame from the manner in which the metal performs under the heat of the torch.

Now if the operator will melt a piece of steel with the flame containing a noticeable excess of acetylene, he will observe the way it boils, with large white bubbles on the surface. Next try using the torch with the excess of gases reversed. Now there seems to be a white froth, so to speak, which resembles the froth from an animal's mouth, or much like soap suds with a slight tinge of dirt in it. Either of the welds made with either gas in excess will leave a joint without strength and be absolutely useless so far as strength is concerned. After a little experience one will be able to tell from the manner in which the steel flows whether or not it is flowing as it should.—J. N. Bagley, in American Blacksmith.

Arithmetic

The Correct Answer—Teacher: "If a bricklayer gets \$4 for working 8 hours a day, what would he get if he worked 10 hours a day?" Bright Pupil—"He'd get a call-down from the union."—Hershey's Weekly.

"By Jove! I came away from home this morning without a cent in my pocket."

"What made you do a thing like that?"

"I don't know. But I guess my wife had a hand in it."



The Worst of It

Cheery Mate at the top: "What's your trouble, Bill?"
Bill: "I can't reach my bünkin' pipe."

Certainty in Thresher Belts

Both Dunlop "Prairie" and Dunlop "Reliance" are made of a special high-grade duck. A superior rubber friction welds the plies firmly together, and a very tough, wear-resisting rubber face ensures a ready pulley grip. Because of this latter feature, the tendency to slip when wet, or to burn or run off when tangled sheaves are drawn swiftly into the cylinders, is minimized.

Dunlop Thresher Belts
"Prairie" and "Reliance"

To lend double security these brands are stitched very closely with vulcanized thread by an improved method which sinks the stitches to avoid a lumpy surface. This is the reason they are noted for such smooth, evenly-balanced faces. Practically all stretch is removed during the manufacturing process, so that the constant adjustment of the engine to ensure the proper tension is not necessary as in the case of leather or canvas belts.

Both of the above brands of Belts are regularly supplied endless and stitched unless otherwise ordered.

Dunlop Canvas Thresher Belts and Dunlop Agricultural Hose are thoroughly upholding the reputation of the "Two Hands" Line of Rubber-made Goods.

Dunlop Tire & Rubber Goods Co., Limited
Head Office and Factories: Toronto
BRANCHES:—Victoria, Vancouver, Edmonton, Calgary, Saskatoon, Regina, Winnipeg, London, Hamilton, Toronto, Ottawa, Montreal, St. John, N.B., Halifax.

THE MARTIN
DITCHER AND GRADER
DIGS YOUR DITCHES
GRADES YOUR ROADS

EASILY QUICKLY CHEAPLY

REVERSIBLE ADJUSTABLE

PAYS ITSELF IN ONE DAY

DOES THE WORK OF 50 MEN
SEND FOR FREE BOOKLET

THE PRESTON CAR & COACH CO LIMITED
74 DOVER ST. PRESTON CANADA

OXY-ACETYLENE **WELDING** APPARATUS and SUPPLIES

* We can supply a thoroughly practical outfit from \$100.00 up. There should be at least one plant in every district to repair breakages quickly and SAVE TIME and MONEY. Up-to-date farmers with Traction Engines are putting in welding outfits and doing their own and their neighbours repairs. We give free instructions to purchasers. **SEND YOUR BROKEN CASTINGS** Scored Cylinders or any kind of Repairs. We Re-bore Cylinders, True Up Crank Shafts, Re-tip Boiler Flues and are in a position to handle any repair job promptly.

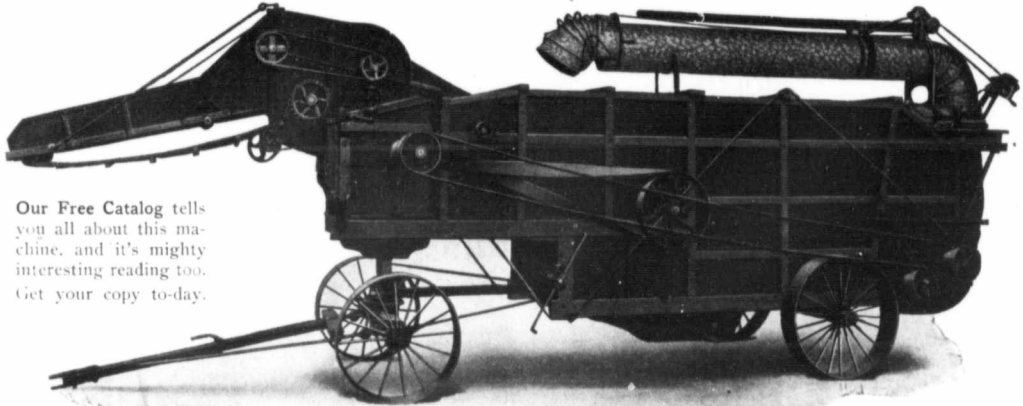
Nothing too large or too Small

GIEGER WELDING WORKS, SASKATOON

BELT YOUR LIGHT TRACTOR

to the Sturdy Fairbanks-Morse Separator

Light running, substantial, simple, it saves all the grain and has remarkable capacity for fast clean work. There's a size just right for *your* tractor.



Our Free Catalog tells you all about this machine, and it's mighty interesting reading too. Get your copy to-day.

THE CANADIAN FAIRBANKS-MORSE CO., Limited

SASKATOON

WINNIPEG

CALGARY

Kill Winter Annuals Now

In connection with the work of seeding, it is very important that thorough means be adopted to destroy all winter annuals. Of these the worst that grows in Manitoba is the stink-weed (or French weed). Stink-weed is both a spring and a fall germinating annual, but by all means the most harm is done by those plants that sprout in the fall, live under the snow all winter, and go right on to develop and ripen their seeds in the month of June. These plants are known as winter annuals.

Last year the Manitoba Weeds Commission found thousands of acres, especially summer-fallow, upon which, during the beginning of June, the growth of stink-weed was away above the crop, and very rapidly developing. These plants could all have been killed by the use of the duck-foot cultivator before sowing the grain.

While the stink-weed is more thickly seeded in the eastern than in the western part of the province, the western parts are more subject to pepper grass, another winter annual. One of the best farmers of the Brandon district

states that in one field last year he lost ten bushels of crop per acre on land from which he did not kill the pepper grass at the commencement of the season.

Among the other winter annuals the most conspicuous are: Shepherd's Purse, and Blue Bur, the latter especially being objectionable where sheep are kept, the burs getting into the wool.

The plants of all these winter annuals are very small at the present time, but they have established a vigorous root system, and, unless killed by early spring cultivation, grow very rapidly.

A War Measure

Poultry keeping at all times is a pleasant and profitable industry. Just now it might be looked upon as something more—a patriotic duty—a war measure. More eggs are required by the Motherland. While she is compelled to exclude some imports for a time, she welcomes eggs. Poultry pays. In spite of high prices, eggs are a necessity. Larger flocks and increased production could be brought about without undue expense. Poultry keeping is an industry that can be carried on with the lighter kind of labor. It can be made a success when only the older people or the younger members of the family are available for the work. Poultry thrives in every climate under almost any

Calgary Industrial Exhibition

JUNE 28th to JULY 5th, 1917

Generous Prizes. Grand Display of Live Stock and Industrial Exhibits
Attendance last year, 103,725, and \$18,045 paid out for Prizes



These Clever Animals will Entertain You.

Don't miss seeing Miss Katharine Stinson, the World's Greatest Girl Aviator.
GRAND PROGRAMME OF ATTRACTIONS. MUSIC AND RACES.
Reduced Passenger Rates. Single Fare good, going June 27 to July 8; returning, to July 7. 50 per cent of Freight refunded on Alberta Livestock Exhibits.

President: E. J. DEWEY

Prize List and all information from E. L. RICHARDSON, Manager, Calgary, Alberta.

HIGH GRADE SHEET MUSIC—The entire stock of a wholesaler, all attractive selections, biggest values; five assorted copies 25c., 14 for 30c. Order quick. They went last long. Home and Office Supply Co., Music Dept., Montreal.

SEPARATOR—36 x 56 Geiser, good as new, all rebuilt, with self-feeder and blower; a snap at \$850.00. Apply P.O. Box 178, Winnipeg.

STEAM TRACTORS—One 25 h.p. double cylinder Geiser (rebuilt), just like new, runs like a watch, \$2,000.00 cash; one 25 h.p. North West, single cylinder, rebuilt, \$1,000.00 cash; one 20 h.p. Nichols & Shepherd, good order, \$800.00 cash. Apply P.O. Box 178, Winnipeg.

WANTED—Management of farm or season's work with steam outfit, by man and wife, one child 15 months; thoroughly reliable and competent; locomotive engineer. State wages offered, etc., in first letter. Box 164, Winnipeg.

OHIO GAS ENGINES—15 h.p. standard, \$325.00; 12 h.p. standard, \$300.00. Apply P.O. Box 178, Winnipeg.

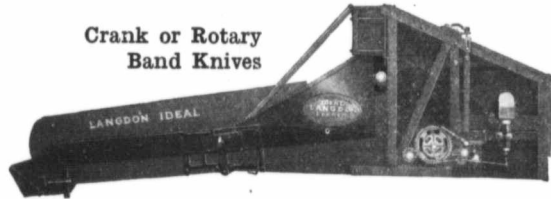
BARGAIN—8 h.p. Ohio gas engine, hopper cooled, rebuilt, good order, \$150.00. Apply P.O. Box 178, Winnipeg.

PORTABLE ENGINES—On very strong and substantial trucks, both new and second-hand; 20 h.p. and 22 h.p. at prices from \$500 to \$600 cash. Apply P.O. Box 178, Winnipeg.

The Better Feeder

LANGDON IDEAL FEEDER

Crank or Rotary
Band Knives



A New Principle in Self Feeding

WITH THE ADVENT of the LANGDON IDEAL SELF FEEDER a new principle for automatic band cutting and self feeding was brought into effect although the basic principle is as old as modern machine threshing. In reality it is the principle of better hand feeding. In other words, the drier the grain the faster it feeds—the tougher the grain the slower it feeds. All feeder manufacturers claim this happy result but we are able to prove to threshermen that any feeder not equipped with the LANGDON governing device, which is controlled exclusively by this Company, cannot feed as well as the LANGDON. The LANGDON governing retarder, acting in perfect unison with the threshing cylinder, estimates, as it were, in advance the exact quantity of any certain kind of grain the cylinder can handle to advantage and allows that much, and no more, to pass to the cylinder in a smooth, even flow. No other feeder can govern the LANGDON way. No other feeder can feed so well, so rapidly, or so cleanly.

In the selection of material and in mechanical design LANGDON construction is like LANGDON feeding, far ahead of all others.

There is a "Better Feeder" for every separator, large or small, old or new. Send us your name and address and we will mail you our free catalog.

Cushman Motor Works of Canada, Limited, DISTRIBUTORS FOR CANADA, Winnipeg

HART GRAIN WEIGHER CO.-PEORIA, ILL.

"Makers of Better Feeders"

conditions; little expense is required to start; returns come quickly and every month should see some cash receipts.

In all probability there are not as many breeding hens in Canada this spring as there were a year ago. Because of the high price of feed, too many layers and breeders were sold last fall. For the same reason, many hens are not in prime laying condition this spring. To meet the situation as many eggs as possible should be hatched. Every breeder who has good, fertile eggs for sale should make an effort to place them in

the hands of those who will have them hatched rather than send them to market.

The Present Need of Wool

Just at the present time the securing of a good wool clip is of unusual importance because of the heavy demand for woolen goods for soldiers' wear. In order that the rapidly increasing amount of wool now produced in Manitoba may be marketed in the best possible condition during 1917, the Dominion Live Stock Branch and the Manitoba Department of

Agriculture are putting forth a concerted effort that is bound to have decided results. The Manitoba Department of Agriculture will again, in 1917, sell on the co-operative basis all wool consigned to it. Also, it is sending Circular 33 to all known sheep men. Even those sheep owners, if any, who may not be intending to sell their wool on the co-operative plan should secure one of these circulars because it contains the best advice that the Dominion and Provincial authorities have to present.

Mr. Charles N. Stetson, a sheep

and wool specialist is now touring Manitoba, personally visiting sheep owners and promoting co-operative wool marketing and better care of the fleeces. When he has completed his work, Mr. Stetson will have practically a complete census of the sheep of Manitoba.

Any questions regarding sheep keeping or wool handling addressed to the Manitoba Department of Agriculture will be answered either by Mr. Stetson or one of the Provincial or Agricultural College authorities in touch with this matter.

Care and Operation of the Separator in the Field

By J. H. M.

WE see a great deal of advice printed as to the running of the various makes of gas and kerosene engines and how to adjust and keep them in repair, but the running of the separator very seldom seems to be mentioned; although it has been the experience of the writer, that this end of a threshing outfit gives the most bother; for no matter how careful we are as to the sowing and harvesting of our crops, carelessness during threshing will neutralize to a great extent a whole season's care. A few remarks therefore as to the care and adjustment of the separator in the field, may be helpful to some person who is trying to get the best out of his machine.

In setting the separator to thresh, be sure that it is level sideways; it does not matter so much whether it is level endways, although it should not be too low in front, but be sure that it is level sideways at the rear end. Some makers attach so much importance to this point, that they put a spirit level on the machine in order that the operator can tell when it is level. The reason for this is, that the chaff will have a tendency to bunch on the low side, so that the wind blast cannot move it, consequently the grain will go over with the chaff and the other side will be comparatively bare, allowing the grain to be blown over. After the machine is set level to start with, watch it, as one wheel may sink lower than the other in a stubble field, allowing it to get out of level.

Coming to the feeder—one of the most abused parts of the machine—be sure that the knives are sharp, and do not allow bands to go to the cylinder uncut. This also is a very important point in the running of a machine, for it is expensive work cutting twines with the cylinder and concaves, especially when using a gas engine. The knives should be sharpened before the start of the season, and at least once in the middle of the season, it being a good practice to carry a spare set of knives with you, so that they can be put on in a short time, while the other set is sent away to be sharpened. The governors of the feeder should be set to feed as regularly as possible, and the pitchers cautioned to pitch properly, for irregular feeding is one of the greatest drawbacks to good threshing, and it is impossible for any machine no matter how well designed or built, to do good work, if it is fed in this fashion—a big wad and then stop and run empty, and then another great wad, and so on over and over again, with the machine alternately under and over speeded.

The cylinder is the heart of the machine, and must be properly cared for. It must, in the first place, be kept properly balanced. If it is out of balance it will be impossible to keep it from getting endplay. To test for balance, make a chalk mark on cylinder and a mark on concaves, and rotate rapidly. If it stops at the same place often, it is out of balance. When putting in new teeth, be sure and put them in evenly all around the cylinder, for if too many are put in in one place they will help to throw it out of balance. After it is balanced test for endplay, allowing about 1/8 inch. Take this up by adjusting boxings, care being taken to see that teeth center, as teeth not centering will cause one side of cylinder teeth to run too close to concave teeth, cracking grain; while the other side will run too far apart, letting unthreshed heads through.

In the adjustment of the concaves, it is found to be good practice, to use fewer teeth and keep concaves tight up, thus allowing cylinder teeth to keep concaves clean and act, as they were intended to act, as grates, also to prevent unthreshed heads getting through. It is also good policy to spread the rows of concave teeth in concaves, for if the rows of teeth are bunched the cylinder has a tendency to grab grain through too quickly. The idea to work on, is to keep the grain going through in a thin, even stream, and this system will use less power than if the grain is going through in wads.

The causes of cracking grain at the cylinder, a common occurrence when the wheat is large and the straw very dry, are: (1) Overspeeding. (2) Endplay. (3) Returning too much grain through the tailings. (4) Running empty by irregular feeding.

Be sure to keep cylinder running at the speed the maker has stenciled on the machine, although in tough grain a little faster does no harm and in very dry grain the machine can be run a little slower. The cylinder should be tested for endplay every day. Do not allow clicking teeth. The tailings should be examined periodically, and should consist of 90 per cent chaff and unthreshed heads. If too much grain is coming through, open the adjustable sieve a little. Do not allow grain to go through cylinder any more times than is necessary, as it is not safe until it is in the wagon box. Irregular feeding has been touched on previously, and should not be allowed; when cleaning up, slow machinery down.

The grates behind the cylinder should be raised up, when grain is tough, in order to allow beater to throw the straw back in a thin,

COMPLETE ITINERARY Annual Mixed Farming Special Train

Conducted by ALBERTA DEPARTMENT OF AGRICULTURE, assisted by DOMINION DEPARTMENT OF AGRICULTURE, THE CANADIAN PACIFIC RAILWAY COMPANY, AND THE EDMONTON, DUNVEGAN & BRITISH COLUMBIA RAILWAY COMPANY.

SPECIAL LECTURES AND DEMONSTRATIONS ON ALL PHASES OF FARM WORK SUBJECTS—Live Stock, Field Husbandry, Poultry, Dairying, Game Protection, Special Exhibits from Demonstration Farms and Schools of Agriculture, Household Science and Home Nursing. The train will stop for half a day at each of the following places:

EMPRESS BRANCH, C.P.R.		
Empress	Wednesday, June 27th	9:00 to 12:00 A.M.
Paterson	Wednesday, June 27th	2:00 to 5:00 P.M.
Jeffer	Thursday, June 28th	9:00 to 12:00 A.M.
Bassano	Thursday, June 28th	3:30 to 6:30 P.M.
Gleichen	Friday, June 29th	9:00 to 12:00 A.M.
Langdon	Friday, June 29th	2:00 to 5:00 P.M.
Shepard	Saturday, June 30th	9:00 to 12:00 A.M.
Calgary	Saturday, June 30th	2:00 to 6:00 P.M.
(Exhibition Grounds)	Also Monday, July 2nd, all day.	
LACOMBE BRANCH, C.P.R.		
Clive	Thursday, July 3rd	9:00 to 12:00 A.M.
Alex	Thursday, July 3rd	2:00 to 5:00 P.M.
Erskine	Wednesday, July 4th	9:00 to 12:00 A.M.
Stettler	Wednesday, July 4th	2:00 to 5:00 P.M.
Botha	Thursday, July 5th	9:00 to 12:00 A.M.
Gadsby	Thursday, July 5th	2:00 to 5:00 P.M.
Radnor	Friday, July 6th	9:00 to 12:00 A.M.
Castor	Friday, July 6th	2:00 to 5:00 P.M.
Fleet	Saturday, July 7th	9:00 to 12:00 A.M.
Coronation	Saturday, July 7th	2:00 to 5:00 P.M.
Veteran	Monday, July 9th	9:00 to 12:00 A.M.
Loyalist	Monday, July 9th	2:00 to 5:00 P.M.
Thompson	Tuesday, July 10th	9:00 to 12:00 A.M.
Monitor	Tuesday, July 10th	2:00 to 5:00 P.M.
Kirriemuir	Wednesday, July 11th	9:00 to 12:00 A.M.
Compeer	Wednesday, July 11th	2:00 to 5:00 P.M.
WETASKIWIN BRANCH, C.P.R.		
Provost	Thursday, July 12th	9:00 to 12:00 A.M.
Cadogan	Thursday, July 12th	2:00 to 5:00 P.M.
Metekow	Friday, July 13th	9:00 to 12:00 A.M.
Czar	Friday, July 13th	2:00 to 5:00 P.M.
Hughenden	Saturday, July 14th	9:00 to 12:00 A.M.
Amek	Saturday, July 14th	2:00 to 5:00 P.M.
Hardisty	Monday, July 16th	9:00 to 12:00 A.M.
Loughheed	Monday, July 16th	2:00 to 5:00 P.M.
Sedgewick	Tuesday, July 17th	9:00 to 12:00 A.M.
Kilham	Tuesday, July 17th	2:00 to 5:00 P.M.
Strome	Wednesday, July 18th	9:00 to 12:00 A.M.
Dayland	Wednesday, July 18th	2:00 to 5:00 P.M.
Rawl	Thursday, July 19th	9:00 to 12:00 A.M.
Canmore	Thursday, July 19th	2:00 to 5:00 P.M.
Arrive EDMONTON 9 o'Clock P.M., July 19th.		
DUNVEGAN LINE		
High Prairie	Saturday, July 21st	2:00 to 5:00 P.M.
Peace River	Monday, July 23rd	2:00 to 5:00 P.M.
Falher	Tuesday, July 24th	2:00 to 5:00 P.M.
Spirit River	Wednesday, July 25th	2:00 to 5:00 P.M.
Grande Prairie	Thursday, July 26th	2:00 to 5:00 P.M.

This SPECIAL TRAIN will consist of fifteen cars, including three cars of horses, cattle, sheep and hogs, to be used for demonstration purposes; other cars will contain exhibits upon which demonstrations and lectures will be given on different phases of Agricultural Work, Live Stock and Domestic Science. EVERYBODY WELCOME Ladies Specially Invited.
Hon. Duncan Marshall, Minister of Agriculture. James Dougall, General Agricultural Agent, Canadian Pacific Railway.
Alex. Galbraith, Supt. Fairs and Institutes. Alex. Campbell, Traffic Manager, Edmonton, Dunvegan and B.C. Railway.

"Ideal Champion" COMBINATION THRESHERS

STAND EVERY TEST OF SERVICE

An Outfit Superior to All Others Made in the following Sizes only:
24 x 36 "Champion" Separator, Hand-Feed, 18 ft. Straw Carriers, 14 ft. Wagon Loader, and 12 h.p. "Ideal" Oil Engine.
24 x 36 "Champion" Separator, Self-Feeder, Wind Stacker, 14 ft. Wagon Loader, and 22 h.p. "Ideal" Oil Engine.
28 x 42 "Champion" Separator, Hand-Feed, Wind Stacker, 14 ft. Wagon Loader, and 22 h.p. "Ideal" Oil Engine.

An outfit with a Famous Reputation behind it. Brantford "Ideal" Engines and "Waterloo Champion" Separators are leaders and always reliable.



Think What You Save in Threshing Expenses!
The in-built quality in our outfits appeals to every farmer. Rigid Construction Mounted on an 8-in. channel steel frame that eliminates vibration. Fully warranted not to sag in centre. No lifting jack required. Easily moved. "Ideal" engines have friction clutch belt pulley and high tension magnets; 12 h.p. horizontal type or 22 h.p. opposed cylinder are used. Waterloo-Champion Separators deliver the grain ready to market in the sack—not the stack! Handle any kind of grain perfectly under the most adverse conditions. We guarantee every part—Separator, Stacker, Feeder, Register and Engine to give you entire satisfaction.

GET ALL THE FACTS ASK US FOR FULL PARTICULARS—NOW!
Be sure and see our Exhibit at the Brandon Fair; also our 15 x 30 Engine at the Flowing Demonstration.

The Waterloo Manufacturing Co., Ltd.
PORTAGE LA PRAIRIE, MAN.
Goold, Shapley & Muir Co., Ltd.
WINNIPEG REGINA CALGARY

"Waterloo Champion" Separators, Steam Traction Engines and "Heider" Light Weight Farm Tractors

NINE YEARS of actual field work has proven the superiority of the "HEIDER" ONE-MAN ALL-PURPOSE TRACTOR.

SPECIFICATIONS MODEL "C"

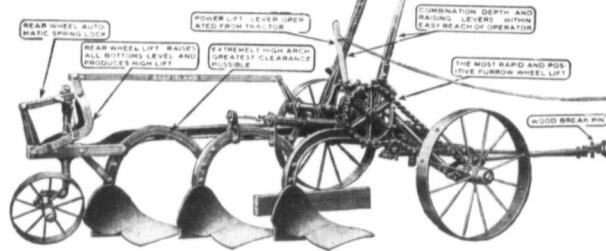
HORSE POWER - 12.20.
DRAW BAR - 12 H.P.
BELT POWER - 20 H.P.
FUEL - Gasoline or kerosene.
FUEL CAPACITY - 21 gallons.
WATER CAPACITY - 7 gallons.
WEIGHT - 6000 pounds.
IGNITION - Dixie magneto, with starter coupling.
TRACTOR SPEED - 1 to 4 miles per hour.
BELT SPEED - 100 to 500 revolutions per minute.
CARBURATOR - Kings ton improved type.

MOTOR - 4 cylinder, 4-cylinder, 4 1/2 in. bore; 6 1/2 in. stroke. Enclosed valves. Special heavy duty Waukesha tractor motor.
LUBRICATION - Splash system.
FRAME - Steel.
HEIGHT - 8 ft., including top.
WIDTH - 6 ft. 2 in.
LENGTH - 12 ft.
WHEEL BASE - 96 in.
REAR WHEELS - Diameter, 37 in.; width, 10 in.
FRONT WHEELS - Diameter, 30 in.; width, 5 in.

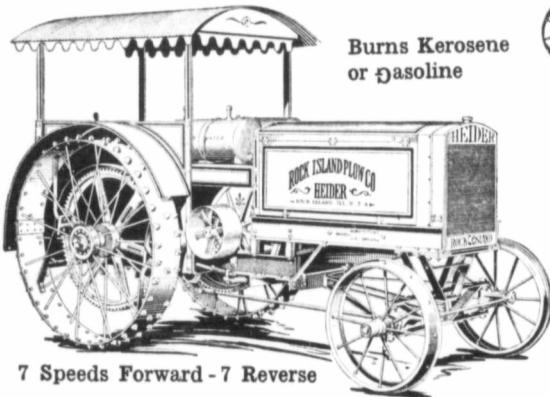
EVERY PIECE OF OUR MACHINERY BEARS THE "WATERLOO" BRAND OF EXCELLENCE

FOREMOST IN CANADA FOR OVER SIXTY YEARS

2, 3 or 4 Bottoms



Burns Kerosene or Gasoline



7 Speeds Forward - 7 Reverse

Rock Island Plows. Work Behind Any Tractor

Separator Sizes: 24-36, 28-42, 33-52, 36-56 and 40-62

See the "HEIDER" TRACTOR demonstrating its superiority as a real ALL-PURPOSE FARM TRACTOR at the BRANDON FAIR, July 16th to 20th. Our full line will be on exhibit. Make Our Tent Your Headquarters.

ASK FOR FREE CATALOGUE

The Waterloo Manufacturing Co. Ltd.

WESTERN HEAD OFFICE: PORTAGE LA PRAIRIE, Man. BRANCH OFFICE: REGINA, Sask.

Chaffless Coffee is Not Injurious But it IS Delicious

"Smooth as Velvet."

Sold Standard

even stream. The beater is there to prevent backlash and winding of the cylinder and to keep the straw spread out in a thin, even stream. The heavy adjustable check apron just back of the beater should be kept down in windy weather, to check draft through machine. Most separators have another canvas curtain farther back and these curtains should be replaced if they come out as they prevent beater throwing grain and straw too far back to the rear. The chaffer and adjustable sieves should be kept as wide open as it is possible, to do good work, according to the different kinds of grain being threshed. A good rule to set the adjustable sieve is to open it so that a small quantity of chaff comes in the wheat in the wagon box and then close slightly. The wind-blast should be regulated by the fans, always remembering that the blast on the shoe is regulated by the opposite fan shutters.

The blower fans should be kept balanced, the same as the cylinder, and the shaft should be adjusted as the boxings wear, by the brace rods provided for that purpose. The blower pipe should be extended out so that it has the least bend.

The use of belt dressing is permissible only at times and should never be allowed to take the place of lacing, for in order to make every part do the work for which it is intended the belts must be

kept snugly laced and not allowed to slip.

In conclusion I would say that the most important points to keep in mind are: Leveling machine sideways, regular feeding, sharp knives, proper speed, balanced and centered cylinder, proper adjustment of the concaves, properly adjusted chaffer, shoe and blast with a machine that keeps going, these few things properly attended to, will go a long way towards earning one the reputation of a good and successful threshing.

IMPORTANT NOTICE TO OUR SUBSCRIBERS

OWING to the unusual increase in the cost of newspaper production, we find it necessary to place our subscription list upon a strictly cash, paid in advance, basis. We are pleased to state that only a very small percentage of our subscribers are in arrears. We want to retain all of our old subscribers, and for this reason we are making an exceptional offer to those whom our subscription books show as owing us money for their subscription.

For a limited time we are making a price of three years for two dollars. This does not apply to new subscribers, nor does it apply to old subscribers who are not in arrears.

Our subscription auditors, the American Adjusting Association of San Francisco, California, are at present going over our books, and you will receive from them a statement of your account, which we trust you will see fit to take care of when the same is presented.

Payments can either be made to the E. H. Heath Company direct, or to our Auditors at the above address.

We feel that this offer is one that you will want to take advantage of. It gives you a subscription to the Canadian Thresherman and Farmer at an exceptionally low rate.

THE E. H. HEATH CO. LIMITED

TRADE **SAWYER** MARK Registered

Stitched Canvas Belting "The Quality Belt"

Enjoys an enviable reputation for strenuous pulling, and will wear like iron. Only the best materials go into the making of Sawyer Belts.



THIS TRADE **SAWYER** MARK Registered IS YOUR GUARANTEE

PLEWES, Limited

DISTRIBUTORS 199 Princess St. WINNIPEG

Life Insurance--The Widow's Godsend

By MARK LANE

OUR western farmers have not heretofore availed themselves of the benefits of life insurance protection to the same extent as their city brethren and the intention of this article is, not to urge the claims of any particular company but to emphasize the vital importance of the matter for those readers upon whose efforts others are dependent. Let it be stated at the outset that the writer is not an insurance agent, nor has he an interest in any insurance company, apart from being a policy holder in several.

Life insurance in its early stages encountered some "conscientious objectors" who opposed it because, to their minds, it was of the nature of a gamble and in any event in the dispensation of Providence the widow and the fatherless would not be left destitute. These objections were gradually superseded by the conviction that it is an act of true brotherhood to band together for the care and protection of the unfortunate and the heresy of the second objection became apparent with the knowledge that in divine economy if a man shirks a plain duty the consequences are by no means nullified.

Hence it is a privilege of membership which the insurance company offers to the prospective insurer and, to the family man, the duty of securing adequate protection is one he dare not shirk if he would be true to his vows and obligations. The young man, ambitious and foreseeing, will reckon a life policy one of the first steps to a career of stability and success; the happy-go-lucky individual is induced to save by the regular payment of premiums and the business man secures his associates against the loss which his death would inflict on the concern—Furthermore, the well insured man knows that in time of need he can borrow upon his policies and if unable to pay the premiums his policies will remain in full force until the maturing premiums have exhausted the surrender value.

Ignorance of the value, cost and conditions of life insurance may be due to the fact that the average individual objects to being badgered by our aggressive insurance agents and to the unwillingness of certain companies to supply inquirers with tables of rates and other particulars except verbally through the agents. The more widespread the intimate knowledge of the matter becomes the more will its advantages be appreciated.

There are now many "frills" to life insurance by way of old age pensions, investment and income policies but the straight life policy or, in other words, the largest insurance cover for the least outlay, still holds the field. An agent may emphasize the advantages of a more expensive policy because, being more profitable for his company, he will receive a larger commission, but this significant fact should rather divert attention to the lower premium policies where the company's margin is smaller but under which the insured gets more actual insurance for his money. The premiums mentioned hereafter are supplied by a Canadian Company and are per \$1000 insurance on male lives:

Ordinary Life without Profits—The premium is payable throughout life, and the sum assured (without bonus) is payable at death. Premiums, age 30, \$18.10; age 35, \$21.30.

Ordinary Life with profits—The premium here is also payable throughout life, but is higher because at intervals the profits on the company's whole business are ascertained by actuarial investigation and allocated between shareholders and policy-holders—in mutual companies all profits belong to the policy holders—such policy holders' profits are either (1) added to the sum assured or (2) applied in reduction of premiums or (3) paid out in cash. As even the without profit rates are loaded to cover more than the actual insurance cost to the company it follows that in a successful company the premium hereunder should in time by the application of bonuses upon it fall below the without profit rates in the preceding paragraph. Premiums for ordinary life with profits, age 30, \$24.05; age 35, \$27.80.

Limited Payment Life with or without Profits—Here the premium is payable for a stated number of years only, but the sum assured is not payable until death. It is a "halfway house" to the endowment plan and appeals to the man who wishes to be relieved of paying premiums in his later years—Premiums for a 20-year payment without profits policy, age 30, \$25.50; age 35, \$28.75; with profits policy, age 30, \$32.95; age 35, \$36.60.

Endowment Insurance—This is really a combination of life insurance and investment but in these days of high yielding war bonds the prospective insurer may well leave the investment feature for separate treatment. The premium is high because the policy is



Cover your crop with a BRITISH AMERICA ASSURANCE CO. HAIL POLICY

Get Full Payment Promptly in Case of Loss

Beware of the man who offers cheap insurance. Choose a company who have a reputation for fair dealing—fair adjustments and prompt payments.

The reputation built up by us during the past 80 years for fair dealing has won for us the confidence of farmers everywhere—let us serve you.

Ask for particulars of our policy

Write us to-day or see our Local Agent

British America Assurance AD-1855 Company

HAIL DEPT., WINNIPEG

The Test of Value is Demand

On this test the value of the Great-West Life Policies is strikingly obvious.

For ten successive years popular opinion has given first place to the Great-West policies. For ten successive years The Great-West has written the largest Canadian Business of all Canadian Companies.

During twenty-four successful years there has been a steadily increasing appreciation of the low premium rates, the high profit returns and the liberal conditions that characterize the Policies of

The Great-West Life Assurance Company

Dept. "U"
HEAD OFFICE - WINNIPEG

Ask for personal rates—stating age.

PACE HARRISON Ltd.
WINNIPEG. General Agents
Yorkshire Fire Insurance Co. of England
LIVE STOCK DEPARTMENT
SPECIAL FARMERS' ACCIDENT POLICY
FIRE INSURANCE
AGENTS WANTED

Money to Loan

on improved farm property

Lowest Current Rates

Apply through our representative in your district or direct to our nearest office.

National Trust Company Limited.

323 Main Street WINNIPEG

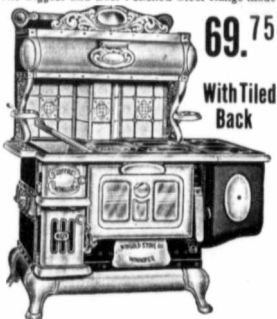
TORONTO MONTREAL
EDMONTON REGINA
SASKATOON

BEFORE YOU BUY
Write for this new Stove
THE **WINGOLD BLUE BOOK**

It shows the newest designs, special sanitary features. White Enamelled Splasher Backs and Oven Door Panels. Scores of other conveniences. Highest quality—Lowest Wholesale to Consumer Prices.

JOFFRE WINGOLD

The Biggest and Best Polished Steel Range made



69.75

With Tiled Back

Send your name and address for your free copy of the Blue Book

SEE OUR EXHIBIT—BRANDON FAIR
The WINGOLD STOVE CO. Ltd.
181-6 Market St. WINNIPEG

payable at the end of the stated period if the assured survives or of course on previous death. The premium quoted for a 20 year endowment policy without profits for age 30 is \$41.60; for age 35 is \$42.55; with profits for age 30, \$49.05; for age 35, \$50.20. It will thus be seen that if a man decides he can pay an endowment premium but instead of taking that plan he selects a whole life policy he will secure immediate cover for about double the amount obtainable at the cost under the endowment plan. In effect the man taking endowment insurance backs himself to survive the currency of his policy, and then get the use of the proceeds in his lifetime otherwise, for the sake of his beneficiaries he would without hesitation take the larger amount of whole of life insurance at the same outlay.

Friendly Society Insurance

The low rates offered by fraternal orders frequently compete with the life companies' tariffs, but it is of vital importance to note that the life insurance company's business is operated upon an actuarial basis established upon a century's experience of mortality, and the company's whole operations are under direct government supervision, while most friendly societies are without these fundamental safeguards. Furthermore, the writer knows from experience that in our friendly orders, sickness, funeral aid, widows' pensions and such like funds are in many cases being administered by men of no financial experience, far less of actuarial training. A striking instance of this weakness in friendly society life insurance occurred recently, when a prominent order was compelled, in order to attain solvency, to raise its rates to such a degree that a large number of the older members took the surrender value of their policies rather than submit to the new conditions.

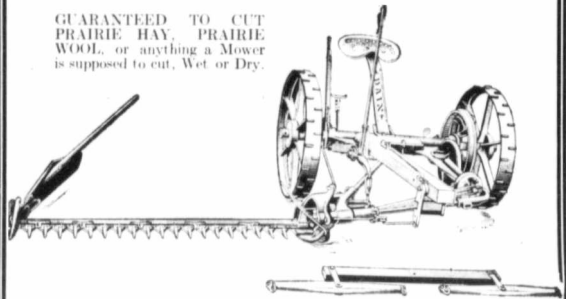
A life policy which has not bedrock security behind it is a delusion and a snare and in the selection of a company the prospective insurer should insure with one of undoubted strength, managed by specially qualified men, rather than with a young, untried company which is probably offering exceptional inducements to secure business.

The man who carries insufficient insurance or none at all should realise that the only time for securing protection is NOW—next month sickness or disease may impair the constitution and render him uninsurable, while the risk of premature death is common to us all.

When Cupid shoots an arrow his victim feels the quiver.—Ex.

The John Deere Mower

GUARANTEED TO CUT PRAIRIE HAY, PRAIRIE WOOL, or anything a Mower is supposed to cut, Wet or Dry.



We carry a Full Line of Agricultural Implements

LOOK OVER THIS LIST OF HAY-MAKING MACHINERY:

- | | |
|------------------------------|-----------------------------|
| Deere Self-Dump Horse Rakes. | Dain Automatic Stackers |
| Dain Power Lift Sweep Rakes. | Dain Jr. Mounted Stackers. |
| Dain Truss Frame Rakes. | Dain New Idea Stackers. |
| Dain New Idea Sweep Rakes. | Dain Hay Loaders. |
| Dain Side Delivery Rakes. | Dain Pull Power Hay Presses |

WRITE FOR FREE CATALOG AND MENTION THIS PAPER

John Deere Plow Co. Limited

WINNIPEG REGINA CALGARY SASKATOON

UNION BANK OF CANADA



Head Office: Winnipeg
Total Assets over \$109,000,000
Deposits over \$58,000,000

LOANS for LIVESTOCK

THE UNION BANK OF CANADA is prepared to make loans to good farmers on reasonable terms, to purchase cattle for feeding or breeding purposes. It is in the best interests of farmers to increase their herds. Consult the Local Manager for particulars.

Paid Up Capital - - \$ 5,000,000.00
Total Assets Exceed - \$109,000,000.00

The Pioneer Bank of Western Canada

FARMS FOR SALE

Belonging to Estates which must be closed out. Send for Particulars.

UNION TRUST COMPANY LIMITED

REGINA, SASK. WINNIPEG, MAN.

235

FOR SALE—Threshing outfit, 10 h.p. Manitoba engine (portable) and Sawyer-Massey Eclipse separator, straw carriers. This outfit is in excellent condition and may be seen any time. Reason for selling is I have got a bigger outfit. Price \$650.00 cash. H. Stanforth, Aldersyde, Alta.

FOR SALE CHEAP—One 25 h.p. Reeves steam engine, Canadian special boiler; one 30 h.p. Avery steam engine; one 40 by 60 Sawyer-Massey separator; two 36 x 56 Nichols & Shepard separators; one 40 x 62 Minneapolis separator. For further particulars, write S. Swanson, Semans, Sask.

Better Farm Homes

By Professor L. J. SMITH, Dept. of Agricultural Engineering,
Manitoba Agricultural College

LATE last summer the Manitoba Agricultural College, in co-operation with the Manitoba Department of Agriculture, inaugurated a Better Farm Homes Competition, open to the farm women of the province. It was hoped by this method to learn what type of home the housewife

plans are being prepared by a capable draftsman under the direction of the Department of Agricultural Engineering, which department is also getting out a complete bill of material for each plan.

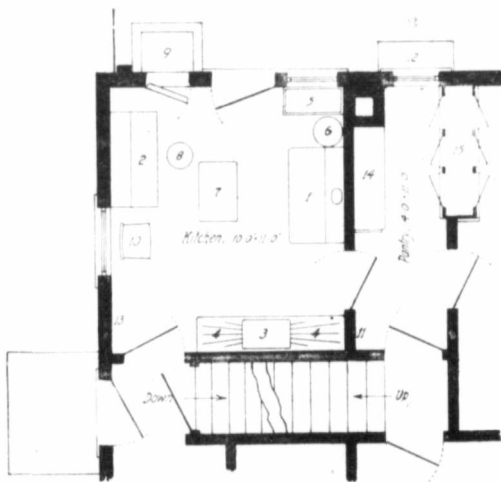
The Manitoba Agricultural College House Plan "A" is the



on the farm actually needed for our western conditions; for who can tell what is necessary in the farm home better than the women whose life work is in these houses?

Though it was during the busy season, over one hundred and thirty women applied for cross-sectional drawing paper and directions for entering the compe-

first of the prize plans. It was submitted by Mrs. R. Robbins, of Glenella, Manitoba, and is the smallest of the houses, being only 26 x 28 feet, yet the house contains four rooms on the first floor and four bedrooms and a bathroom on the second floor. It was necessary to make a few minor changes from the original to allow for stair-space, etc.



PLAN SHOWING LAYOUT OF KITCHEN

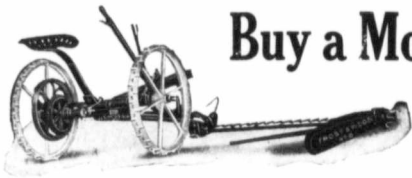
Copyrighted, May, 1917.

- 1 Range
- 2 Cabinet
- 3 Sink
- 4 Drain boards
- 5 Fuel
- 6 Hot water tank
- 7 Movable small table
- 8 Dishwashable stool
- 9 Refrigerator
- 10 Chair
- 11 Collapsible dinner wagon
- 12 Dog shelf
- 13 Brooms
- 14 Shelves
- 15 Cupboard

tion. Sixty-three plans were submitted and, of these, six were selected by the judges as being the best; six equal prizes of \$25 each in cutlery or silverware being given.

Complete working drawings and specifications of these prize

Figure 1 shows the exterior. It has a neat, compact appearance and represents a simple and pleasing type of construction, free from the ornamentation common to transient styles of architecture. Being nearly square it has a hip roof. The front hall,



Buy a Mower

that will cut

any crop that grows. You get best results when using a

Frost & Wood Mower and Rake

For the last 20 years Frost & Wood Mowers have made a success of cutting the toughest kinds of "wire grass," "prairie wool" and "old bottom" found in this country. Get one this season and you are assured of harvesting your crop without delays and with least possible labor.

The Frost & Wood Mower

Simple and easily operated, yet sufficiently strong for the toughest propositions you can put it up against. Light in draft because of high grade roller bearings in all working parts. One of its best features is the quick-acting, substantial **Internal Gear** arrangement of the driving mechanism. No "flying start" required. The machine begins cutting at the first forward motion of the horses.

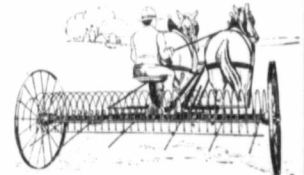
The Frost & Wood Rake

Built on a strong, heavy, angle-steel frame. Parts are rivetted, not bolted, so they cannot shake off. Teeth are special high grade spring steel, every one carefully tempered and tested. The hardest work and roughest usage won't pull the Frost & Wood Rake out of shape. Fitted with automatic dumping device.

Write to-day for folder on Frost & Wood Mower and Rake, Side Delivery Rakes, Hay Loaders, etc. You'll get some profitable pointers on Haymaking.

Cockshutt Plow Co., Limited

Winnipeg
Regina
Saskatoon
Calgary



E-B (GEISER) THRESHER

Here is a small thresher with big capacity. Small enough for your own use and large enough for profits in custom work. Equipped with Wind Stacker and Feeder, can be operated by light tractor. We manufacture all sizes and styles of threshers. Write for catalog. Look for the E-B trade mark. It's your guide to better, more profitable farming. Ask for E-B literature.



- Emerson-Brantingham Implement Co. (Inc.), Regina, Sask., Canada
Please send me free literature on articles checked:
- | | | | | | | | |
|-----------|---------------------|-----------------------|-------------------------|-----------------------|------------------|-----------------|-----------------|
| Plows | Harrows | Collectors | Mowers | Spreaders | Drills | Planters | Hay Tools |
| Tractors | Gas Engines | Wagons | Rugges | Auto Tractors | Potato Machinery | Saw Mills | Rolling Presses |
| 1 Listers | 1 E-B 12-20 Tractor | 1 Emerson Model 12-20 | 1 Big Four "20" Tractor | 1 Reeves "40" Tractor | 1 Engine Pumps | 1 Steam Engines | 1 Threshers |
| | | | | | | | 1 Case Shakers |

Name _____
Address _____

CLASSIFIED

BROME AND WESTERN RYE GRASS SEED—Mixed about half and half, best quality procurable, well cleaned and sacked in 50 lb. and 100 lb. bags. This seed has been grown, threshed and cleaned by grass seed specialists; it is plump and well matured, without damage by frost and cleaned with the most up-to-date machinery. Warehouse located on track; shipments made same day as orders received. Price, 12 cents lb. The best time for seeding is right at hand. Write for pamphlet giving full information regarding tame hay or pasture, methods of seeding, etc. The Hallman Grass Seed Growers, Benton, Alta. \$27

WANTED—A position as Sales or Collection Manager by young man with fifteen years' experience in Eastern and Western Canada, as office Clerk, Collector, Salesman, Collection Manager and Sales Manager in farm, threshing and road making machinery, also automobiles. Will consider offers as District Representative for reliable Automobile or Loan Company. Address Box 3164 Canadian Thresherman and Farmer.

FREE FOR SIX MONTHS—My special offer to introduce my magazine, "Investing for Profit." It is worth \$10 a copy to anyone who has not acquired sufficient money to provide necessities and comforts for self and loved ones. It shows how to become richer quickly and honestly. Investing for Profit is the only progressive financial journal and has the largest circulation in America. It shows how \$100 grows to \$2,200; write now and I'll send it six months free. H. L. Barber, 496-20 W. Jackson Boulevard, Chicago.

so common to the city house, is missing. The stairs rise from the centre of the first floor (Fig. 2) being equally convenient to the kitchen, dining-room and living-room. One can go upstairs from the kitchen without passing through the dining-room or the living-room. The cellar stair is underneath that leading to the second floor, which is the most economical arrangement as regards the saving of space. By means of the side entrance, one can take ashes up from the cellar without tracking dirt through any part of the house or causing cold draughts by opening doors in winter, an important item in northern latitudes. The side door also makes possible another very desirable feature, namely, a man's bedroom entirely separate from the rest of the house. The little entry between the side door and the man's bedroom allows for a wash bowl and pegs for hanging working clothes. Where a man and his wife are employed on the farm, the arrangement here shown is very good. It is also of decided advantage when hired men are employed (as is so commonly the case in the Northwest where labor is scarce).

By the arrangement shown here the second floor of the house is as private as in any city home. The long back porch is screened in and is large enough to be used as a dining-room in the summer. Why not eat outdoors where it is cool, on the farm as well as at a summer cottage at some watering place?

There is no waste hall space on the second floor. The feature on this floor is that separate sleeping porches are provided for two bedrooms. The sleeping porch is one of the latest but one of the most important of the modern improvements of the home, and one whose value will be appreciated only with the coming years.

The detailed kitchen lay-out shown in Fig. 3 will be of interest to the housewife. The built-in ice box saves kitchen space, and, being on the porch, is filled outside, thus avoiding the extra dirt and confusion in the kitchen, as well as doing away with the ice in cold weather. The sink is convenient to the pantry. By means of the drop shelf (12) food and dishes in the pantry can be conveniently passed out of the window for use on the porch table in the summer.

The back porch would be better eight feet wide; in fact, the house would possibly be better a little longer, but the evident aim of Mrs. Robbins' plan was to get as much as possible in as little space as possible, and, since the demand in the majority of cases from farmers is for a small house,

Guaranteed Roofing

THICK HEAVY DURABLE

3 Ply 108 Square Ft. Will Cover 100 Sq. Ft. NOW 60 POUNDS. 32 Inches Wide.
 No. 9B23 \$2.50 Per Roll
EXTRA HEAVY GRADE.
 Guaranteed to Wear 12 Years.

2 Ply 108 Square Ft. Will Cover 100 Sq. Ft. Weight, 50 Pounds. 32 Inches Wide.
 No. 9B22 \$2.10 Per Roll
HEAVY GRADE.
 Guaranteed to Wear 10 Years.

1 Ply 108 Square Ft. Will Cover 100 Sq. Ft. Weight, 40 Pounds. 32 Inches Wide.
 No. 9B21 \$1.65 Per Roll
MEDIUM GRADE.
 Will Wear 7 Years.

Let us Save You Money on Our Matchless Guaranteed Ready Roofing. The Best Roofing Money and Experts have ever been Able to Produce.

The cost of Steel Roofing is so high that it is almost prohibitive. We are offering "Matchless" Guaranteed Roofing at the old price for a limited time only. Do not delay.

SEND YOUR ORDER AT ONCE

GUARANTEED 7 to 12 YEARS

There is no better Roofing Made than Matchless. Thousands of people will tell you that it has never failed to satisfy. We are the only Mail Order House in Canada that can sell you a roofing made of Trinidad Lake Asphalt. Contractors always specify Trinidad Lake Asphalt roofings; they know it is the best; yet we sell you the high grade quality roofing at prices below the price of ordinary short wool felt roofings. Whether it be for house or barn you will buy Matchless Roofing if you are looking for a smooth finished roofing. Suitable for any roof with a pitch of 1 1/2 inches or more per running foot.

Matchless Roofing will outwear wood shingles, tin, tar or steel roofing, as it has stood the test in all climates from Alaska to the Gulf of Mexico. A weatherproof and fire resisting roofing that looks like rubber, feels like rubber and wears like iron. It is free from odor, and will not discolor rain water; it can be used on either steep or nearly flat roofs. Any one can lay it, the only tools required being a knife and a hammer.

Every ingredient that enters into the manufacture of Matchless Roofing is the best we can procure. Strong, tough roofing felt and tested grade of asphalt only are used. Then, not being satisfied with using the most dependable grades of materials, we analyze every ingredient thoroughly before we use it, so that we feel satisfied that everything going into the make-up of this roofing is positively weather resisting and durable. These precautions, together with the use of only the latest improved machinery, skilled workmen, and every roll being made under our own most careful inspection, result in Matchless Roofing being a most reliable and durable smooth surfaced roofing.

Each roll is packed complete with large head galvanized roofing nails, and the necessary liquid cement for cementing the laps, and full directions how to apply. Roll contains 108 square feet. Width of roofing, 36 inches. Made in three different weights, all the same high quality exactly, the difference being only in the thickness and weight.

Catalog No.	Thickness	Weight Pounds	Guaranteed to Wear	Price per roll
9B21	1 Ply	40	7 Years	\$1.65
9B22	2 Ply	50	10 Years	2.10
9B23	3 Ply	60	12 Years	2.50

EVERY ROLL GUARANTEED

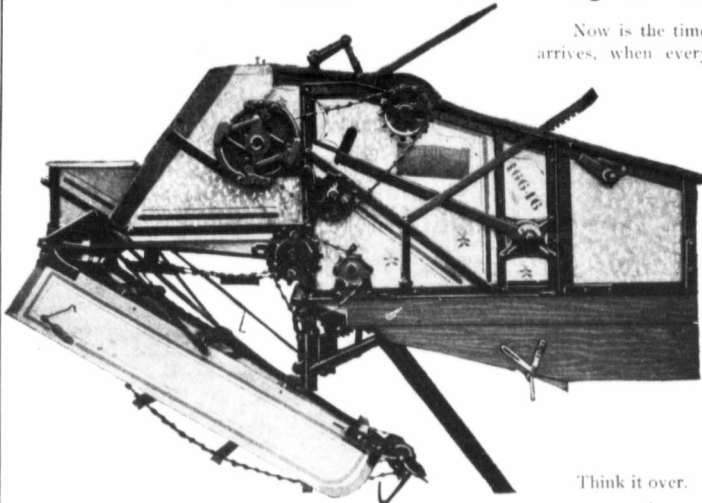
SEND YOUR ORDER DIRECT TO

C. S. JUDSON CO. LIMITED WINNIPEG



The Famous Garden City Feeder

The Only Band-Cutting and Feeding Device ever placed upon the Market that actually Feeds a Threshing Machine as it should be done.



Now is the time to prepare for threshing; don't wait until harvest arrives, when everybody is overworked. You need a Garden City Feeder attached to your machine because it will make money for you, by feeding your separator so evenly that nine-tenths of the usual stops, breakdowns and delays will not occur. It will prevent the troubles caused by careless, ignorant or mean pitchers. They may pile the grain in as fast as they please, and in any manner, the Garden City Feeder will deliver it to the separator in a constant and even flow; never too much; never too little, and every sheaf end first; thus securing the best possible work without any delays. Think what it would mean to you. No slugging; no overloaded straw racks or sieves; no clogged blower or broken belts; no cylinder to dig out; no stops; no delays; just a steady run from morning till night, day after day, while the weather remains good; your threshing done and your grain sold before winter.

Think it over. Satisfaction guaranteed or your money back.

The Garden City Feeder Co. Ltd. Regina, Sask.

BRUCE DAVISON CO., Brandon, Man.

MART McMAHON, Lethbridge, Alta.

H. P. NORTON, CO. Calgary, Alta.

it was not thought wise to make this plan larger.

The basement allows for coal, wood, fruit and vegetable storage, and for a dairy and laundry. There is also space for lines for drying clothes in winter. The cistern is placed below the basement floor away from the frost. By doing away with the large galvanized iron basement tank, so commonly used in the Northwest for rain water storage, more basement space is provided. A detailed plan of the basement is shown in the working drawings.

Anyone who attempts to plan an ideal house will soon come to this conclusion—that it is impossible to get all the desirable features in a limited amount of space. One thing crowds out another. This is especially true of the small home. The smaller it is, the harder it is to plan so as to get what is wanted. So with this House Plan "A." It is not perfect; but the writer has seen few plans adapted to farm conditions that have made such good use of the limited space and incorporated as many good ideas as are to be found in this house.

Working drawings, showing front and two side elevations, sectional elevation, basement plan, exterior and interior details (6 sheets 14 x 24), together with specifications and a bill of material can be had by writing the Department of Agricultural En-

gineering, Manitoba Agricultural College, Winnipeg. This material is sold at a nominal price with no intention of securing a profit, but to cover the cost of the reproduction of individual copies. The cost to applicants residing in Manitoba is \$3.00 and for those residing elsewhere \$5.00. Applicants, when sending for this material, should allow plenty of time for the getting out of copies of the specifications and bills of material.

Producing Is a Privilege

It is an inherited privilege accorded to each and every individual to produce something, but it is a crime for any individual to waste that which has already been produced. It is only a catastrophe like the present war that makes us realize the absolute importance and necessity of adhering strictly to a programme of conservation.

For centuries the civilized world has devoted a great deal of its time and attention towards producing an era of peace, and a great many of us deluded ourselves into the feeling that such an era had been reached. Overnight as it were, however, Germany and her allies destroyed practically everything that had been done up to that time for the cause of peace on earth and good will towards men.

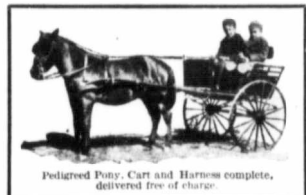
PURE BRED SHETLAND

PONY GIVEN AWAY

To BOYS and GIRLS

Together with Pony Cart and Harness

YOU'LL certainly be proud of this top-notch outfit, which you now have a splendid opportunity of owning. It doesn't need to cost you a cent of your money either. All we want is a little of your spare time. Just write your name and address on the coupon and send it to us—we'll tell you all about the Pedigreed Pony Outfit right away.



Pedigreed Pony, Cart and Harness complete, delivered free of charge.

There are other beautiful gifts, too, for Boys and Girls, and lots of real cash money as well. Remember, there is nothing to buy—no charges of any kind. Make note of this also—no big folks are allowed; this is for boys and girls only, and every one of them can be a prize-winner.

Send Your Name For This Free Book



BOYS and GIRLS—Don't put off this chance. Don't stop with just thinking you would like it. Get a pencil now and write your name and address in the corner below, cut it off and send it to us. We will send you the Free Pony Book, and you will have an equal opportunity to win the real live Shetland Pony with all his trappings. Do it now.

Boys and Girls' FREE PONY BOOK

PONY COUPON
 The Pony Distributor
 Dept. C, Winnipeg, Man.
 Please send me the Free Pony Gift Book, and enter my name in your Pony Club, so I will have an opportunity to win the Shetland Pony outfit you are giving away.
 My Name is.....
 Post Office.....
 Province.....

PARENTS—Please show this offer to your children, and send in the coupon. You will be interested in our free Pony Book, and your children will enjoy it immensely. Besides, your children can win the Shetland Pony we are actually giving away this season. They will have just the same opportunity as any others, no matter where you live. Address your letter to
THE PONY DISTRIBUTOR
 Dept. C - - Winnipeg, Man.

The present war has made unusual demands from the farmer. In some respects he is in the happy position of being able to produce that for which all nations are clamoring, namely food products, but at the same time a responsibility has been thrust upon him that he cannot, and must not shirk. It is up to every farmer to produce every bushel of grain that it is possible for him to raise, firstly because his country needs it, and secondly because it is profitable to him to do so.

No farmer ever expected to see \$3.00 wheat, and while \$3.00 or even \$2.50 a bushel is not a peacetime price, as determined by law of supply and demand, it is fair to assume that it will be a long while before wheat again goes below \$1.00 per bushel, and other grain crops in proportion.

In the old days, the saving of grain was a laborious task. The farmer's little board was gathered together kernel by kernel, and the chief implement that was used, if such it might be called, was the human hand. To-day, however, we farm by machinery, the tractor plow, the drill, the harrow, the self binder, the sheaf loader, the modern grain thresher, and last, but by no means least there comes to us a grain saving device that puts a finishing touch upon the final task of handling the farmer's grain crop.

The farmer has been all too prone to save at the bung and to waste at the spigot as it were. He gathered his grain carefully, carried it to the threshing machine, threshed it and then burned the straw pile without ever stopping to realize how much grain there was in that straw that should have been in the bin.

The Modern Grain Saving Windstacker was designed to overcome this difficulty, and it is doing it. When the Kansas State Board of Agriculture, the Agricultural College at Purdue, Ind., the Agricultural College of Minnesota and other institutions will take hold of and endorse an implement you can rest assured there is something doing.

When wheat is selling at one dollar per bushel there is perhaps not so much of an object in saving every kernel, but when wheat is selling well over \$2.00 per bushel, there is every reason why every kernel that is grown should be threshed. It is quite reasonable to assume that if grain saving windstackers were placed upon every threshing outfit in Western Canada that at least 3,000,000 bushels of wheat could be saved, which at \$2.00 per bushel is \$6,000,000. Supposing the farmers of Western Canada were to save this grain and donate it to our returned soldiers, wouldn't it be a glorious contribution?

Prizes Doubled! Ford Car Added!!

Help to Solve Percy's Perplexing Problem



MARY'S letter is surely a puzzler. She has so mixed up the letters in the names of things she would like Percy to give her for her birthday gift that they spell something different entirely. Sometimes she has even made two or three words out of one name, as in number nine, which undoubtedly is "Diamond Ring."

Each of the names in Mary's letter represents a present that any girl would like to receive for her birthday. You know one of them; now try to solve the remaining names, and when you do, re-write Mary's letter, substituting what you consider the correct names and send your solution to us. In this interesting contest we offer

A 1917 Ford Touring Car (value \$495.00) as Added Grand Prize and \$510.00 in Cash Prizes

1st Cash Prize.....	\$150.00	14th Cash Prize.....	\$5.00
2nd Cash Prize.....	75.00	15th Cash Prize.....	5.00
3rd Cash Prize.....	50.00	16th Cash Prize.....	5.00
4th Cash Prize.....	35.00	17th Cash Prize.....	3.00
5th Cash Prize.....	25.00	18th Cash Prize.....	3.00
6th Cash Prize.....	20.00	19th Cash Prize.....	3.00
7th Cash Prize.....	15.00	20th Cash Prize.....	3.00
8th Cash Prize.....	10.00	21st Cash Prize.....	2.00
9th Cash Prize.....	10.00	22nd Cash Prize.....	2.00
10th Cash Prize.....	10.00	23rd Cash Prize.....	2.00
11th Cash Prize.....	5.00	24th Cash Prize.....	2.00
12th Cash Prize.....	5.00	25th Cash Prize.....	2.00
13th Cash Prize.....	5.00	26th Cash Prize.....	2.00

and Fifty Cash Prizes of \$1.00 each

Each cash prize carries a doubling bonus by which the winner may receive twice the amount given above, making

\$1020.00

the Total in Cash Prizes

PERCY'S PLAN WILL HELP YOU

THE first thing Percy did was to walk through the stores and make a list of all the things that would make nice presents for a girl, so that he could compare his lists with Mary's and see how many names would fit the puzzling words. He was surprised to find the number of nice things one could get for a girl, for very soon his list contained the following: Sewing set, umbrella, wrist watch, silk waist, manicure set, jewel case, kid gloves, lace handkerchiefs, mapkin ring, earrings, silver thimble, diamond ring, candy, photo frame, necklace, books, perfume, flowers, set of furs, lace collar, etc. These suggested presents may help you. Get a pencil and paper and try!

How to Send Your Answers

USE one side of the paper only in writing out Mary's letter and keep it the same in form as given above, merely substituting your solution of the proper names in place of the jumbled ones. In the lower left hand corner instead of the postscript put your full name (not Mr., Mrs. or Miss) and your full address. Anything else must be written on a separate sheet of paper. Do not send fancy, drawn or typewritten answers. A contestant may send as many as three sets of answers to the puzzle but only one set may win a prize, and not more than one prize will be awarded in any family. Entry to the contest is barred to all employees of this Company and their relatives.

No Expense is Attached to this Great Contest—Any One Can Win a Fine Prize



1917 Five Passenger Ford Touring Car, Value \$495.00

The Contest Editor, EVERYWOMAN'S WORLD, CONTINENTAL PUBLISHING CO., LTD., 226 Continental Bldg., Toronto, Ont.

\$6,000,000 would go a long way towards placing these men in comfortable positions where they would cease to be a burden to themselves and a charge upon the community. Wouldn't it be a good thing, a glorious thing, not to say a patriotic thing if every farmer who owned a threshing outfit were to equip it with a grain saving windstacker, and donate this extra amount saved to the above cause. He could

then turn what would otherwise be wasted into a benefit fund of great value.

Think it over and investigate.

The "New Favorite" Thresher

On another page will be found particulars of still another development in the Thresher world. This is a new grain separator which was formerly manufactured by the "Filshie" Company and

beautiful illustrations and departments of interest to every one in the family. More than 180,000 Canadian homes gladly take EVERYWOMAN'S WORLD and welcome it every month. It is supplying American magazines in the favor of Canadians everywhere, and you will like it and agree that it is the most interesting magazine being produced in Canada.

EVERYWOMAN'S WORLD and introduce it to friends and readers in all parts of Canada so read carefully the copy of EVERYWOMAN'S WORLD which we send you, show it to the members of your family and discuss it with your friends. To qualify your entry to stand for the judging and awarding of these big cash prizes we will ask you to help us further advertise and introduce it by showing your sample copy to just three or four of your friends and neighbors who will appreciate this worth while Canadian magazine and want it to come to them every month. You can easily render this simple favor and through it an additional Cash Reward is guaranteed and will be paid to you at once.

How the Prizes Will be Awarded

AS soon as your answers are received, we will write and tell you the number of names solved correctly, send you your free copy of the magazine and the big list of cash prizes and rewards that you can win, as well as names and addresses of hundreds of winners of big prizes from EVERYWOMAN'S WORLD.

THE judging of the entries will be in the hands of three independent judges, having no connection with this firm, whose names we will tell you in due course, and contestants must agree to abide by their decisions. The awards will be given to the senders of the best sets of answers qualified according to the rules and conditions of the contest. In judging the entries to the puzzle, points of merit will be laid sets having most correct answers; (b) general neatness and appearance of the entry (handwriting, spelling, punctuation and style all being considered). All answers must follow the form of Mary's letter, but containing the sender's solutions for the proper names as called for above. Answers in any other form will not be considered. The contest will close promptly at 5 P. M., August 25th, promptly, after which judging will be commenced and the prizes awarded. Should Mary's letter be the correct solution now. Entirely in addition to the competitive prizes, an extra cash reward is guaranteed and may be secured at once by every contestant complying with the conditions of the contest. Send your answer to:

MAGNIFIED COPY OF MARY'S LETTER

Dear Percy, Since you have so kindly asked me to suggest a birthday present that I would like I am sending you a little list to think over. If you can puzzle this out in time for my birthday I would just love to receive any of the following:-

- 1 BALL RUME
- 2 OH C ROB
- 3 DEVILS KOG
- 4 SORE STUFF
- 5 BELT CARE.
- 6 SCARE CAD
- 7 GRANSIRE.
- 8 C CAN LEEK.
- 9 DO MI DARNING.
- 10 TRAIINE MUSEC.

P.S. I have printed the words so that you can read them easily!

Sincerely yours
Mary

Our Women Folk

CONDUCTED BY
PEARL RICHMOND HAMILTON

Sunbeams

Keep A-smiling

It's best to keep a-smilin',
For a smile's a kind of net
That catches by beguiling
Just the things it wants to get.
So keep your smile a-spreadin',
Crack a jolly joke or two,
And you'll find that things come headin'
Straight for smilin' folks like you.

Children require a lot of patience to enable them to get along with their parents.

The Reason

Miss Ann Thrope—Women's ideas are much purer than men's.
Mr. B. A. Kidder—That's because they sensitize their ideas so freely.

Every time father takes mother to a musical comedy mother can't enjoy anything for fear one of the fifty-nine varieties of tight's will rip and give father more than the press agent advertised.

The rainbow is only the sunlight

Caught in a drop of rain,
To tell us the storm is over
And life will smile again.

And God who sends earth's brightness
When the grim-hued storm wrack clears
Will give each heart it's rainbow,
After the mist of tears.

But for the breath of suspicion gossip would die a natural death.

Flashy garments frequently betoken an under-tone intellect.

I may be old-fashioned, but I maintain than ten cents worth of sassafras tea will give a girl a better complexion than ten dollars worth of paint.

Home Economics

Gilbert Plains

Gilbert Plains H. E. Society held its regular monthly meeting March 3rd. In the absence of the president, Mrs. Geo. Findlater, the vice-president occupied the chair.

Correspondence was read from the College, offering a week's Short Course in Dressmaking, to begin April 16th, and the members agreed to accept it.

The delegates to the H. E. convention in Winnipeg reported enthusiastically on the addresses, papers, etc., which they had the privilege of hearing, while the members showed great interest in hearing of the resolutions brought up and passed by the convention.

The members of the Programme Committee served lunch at the close of the meeting. This branch was organized three years ago, and had a membership of 70 in 1916.

May Meeting

We had a large attendance at our May meeting, and committees were appointed to arrange for a picnic some time in July. Mrs. Best gave some excellent recipes for summer beverages and drinks.

The President read a letter from Mr. Newton, re the Summer Convention, to be held at Dauphin, and a discussion took place on the best plans to be drawn out for the convention.

Mrs. J. B. Parker, Secy.

Home Maker's Clubs

Prairie Rose Homemakers

The Prairie Rose Home-makers' Club met at the home of Mrs. W. C. Ridalls on Thursday, April 26th, and spent a very profitable and enjoyable afternoon. Seventeen ladies were present among them being several visitors. The question of obtaining a district nurse was discussed and many arguments, pro and con, were put before the meeting. A committee was finally appointed to explain the proposition to the commission and have them talk it over at the June council meeting. It being a matter concerning the whole municipality.

Material to be made up for the Red Cross hospital was distributed and some of the completed garments will be entered at the Regina exhibition next July, where prizes are to be awarded for best workmanship on Red Cross articles.

We decided to hold a bazaar at our summer fair at Vanguard, to raise more funds with which to buy material to be used in the same way.

Some of our members contributed sums of money which they had raised in various ways during the month, for Belgian relief, a total of eleven dollars and fifty cents being realised in this way.

A very dainty lunch was served by the hostess, and all departed for home, having thoroughly enjoyed the meeting.

M. Elso, Club Reporter.

White Heather Homemakers' Club, Govan

A very interesting meeting of the White Heather Homemakers took place on Wednesday, April 4th, at Pioneer Farm, the home of Mrs. Martin Anderson, at which quite a number of ladies were present.

The subject was "Laws pertaining to Women and Children in Saskatchewan," by Mrs. C. B. Latta. Roll call. What women should ask of the Government.

Mrs. Latta's plan first of all was to outline the laws when the province was organized 12 years ago, for which we owe our thanks to the leading women of different organizations for the right to vote.

Secondly. In order to vote intelligently in Provincial and Municipal elections it requires study.



THE TRANSFORMATION OF A HAYSEED

Yes'm, since these women workers come on the land there's somethin' wrong w' my husband. 'E wouldn't think o' goin' plowin' now unless 'is boots were polished and 'is finger-nails cut, and a clean collar an' tie; an' now 'es started pastin' 'is 'air back.

Third. The Acts in regard to Labour in Factories, Orphans, Criminal Children and Defectives.

Homestead Act. Allowing widows to homestead.

Hospital Act. To give municipalities power to unite in constructing the same.

Election Act. Which gave women the right to vote in Provincial Elections.

This paper was followed by a Roll Call in the form of a discussion for improved Legislation. Some of the things asked for by the women were:—

Domestic Prohibition.

Homestead Rights for Spinsters.

Medical Inspection in the Schools.

Miss Gladys Anderson then read a very interesting paper on Current Events. After which Mrs. A. J. Currie and Miss Evelyn Osborne played a duet.

The hostess then served a delightful lunch.

The next meeting was arranged to take place on Wednesday, May 2nd, at the home of Mrs. O. Landstrom.

May Meeting

Our club met on Wednesday, May 2nd, at the beautiful new home of Mrs. O. Landstrom. The subject of "House Plants and Their Care," being assigned to Mrs. C. H. Cross, was delivered in a splendid manner.

In which she explained the care and culture of house plants, giving details on different varieties which proved to be quite interesting. The Roll Call then ensued to which the members gave quite a variety of their "Favorite Flowers and their Origin," which was very good.

Miss Evelyn Osborne then read a good paper on Current Events, touching on different topics of the day. The meeting adjourned by singing "God Save The King." After which Mrs. Landstrom served refreshments. The next meeting will be held on Wednesday, June 6th, at the home of Mrs. W. A. Paul. The paper will be given by Mrs. C. A. Puffer on "Loyalty to the Club and one Another." Roll Call. Quotations on Loyalty and Kindness.

Mrs. Wm. Greentree, Club Reporter.

The following is the programme for the latter part of the year.

June: Loyalty to the Club and one another. Mrs. C. A. Puffer. Roll Call. Quotations on Loyalty and Kindness.

July: Report from Convention.

August: Canning and Pickling. Mrs. J. G. Carr. Roll Call. Favourite Desserts.

September: Best periodicals for the

Home. Mrs. W. A. Paul. Roll Call. Current Events.

October: Economy in the Home. Mrs. C. Laknas. Roll Call. Recipes for Left Overs.

November: Demonstration on Candy Making. Mrs. Archibald.

December: Annual Meeting. Roll Call. Suggestions for Christmas Gifts.

Hyde Park

Sandwich P.O., Sask., May 14, 1917.

The Hyde Park Homemakers met at the home of Mrs. Parkhouse on Thursday, May 10th. There were ten members and four visitors present. The meeting opened in the usual way by singing the "Maple Leaf." The minutes of the last meeting were read and adopted and business arising from same was transacted. It was decided to undertake the catering for the exhibition to be held in September, the funds to be donated to the Red Cross. A committee of three was appointed to make all necessary arrangements. Mrs. Shepherd, Mrs. A. M. Dodd and Mrs. A. C. W. Dodd were the three members forming this committee. A collection of fancy work is to be sent to the Provincial Exhibition to be held at Regina in July, from the club. Miss Moore was appointed to collect the work and mail it. The Red Cross secretary has more Red Cross garments to be made up. It was decided not to hold a sewing tea this month, but to distribute the garments among the members, as owing to seedling very few members could have horses to attend the meeting. Mrs. E. Parkhouse was appointed our official delegate to the convention to be held at Saskatoon in June, Miss Baxter and Mrs. A. C. W. Dodd then gave some music and the meeting was closed by singing the "National Anthem." All members enjoyed a dainty tea provided by their hostess. The next meeting will be held at the home of Mrs. Baxter on Thursday, June 14th.

GOOD BREAD FROM ANY FLOUR

Success or Failure Depends Largely Upon the Methods of Handling

(By J. L. Ashlock)

Getting at his subject from an analytical point of view and determining the exact why and wherefore of each result obtained, Mr. George A. Olson, chemist of the Washington Experiment Station, after several years of experimentation and observation has arrived at the conclusion that good bread can be made from virtually any kind of flour. He says that success or failure in bread-making depends almost wholly upon the methods practised by the individual. In the course of his study Mr. Olson made an extensive observation of the experiences of persons who made bread. With no exception he found that those who succeeded in making good bread all the time did not depend upon fixed recipes.

"The first requisite for successful bread-making," he says, "is good, active yeast, and it makes little difference whether the source is compressed or dried yeast cake, or a 'starter.' The main thing is that it should be active and not soured by chills or draughts. By using good, active yeast and proper methods, good bread can be made from any flour. The best temperature for the development of yeast is from about eight-two to ninety degrees Fahrenheit."

The method given by Mr. Olson for the preparation of yeast is as follows: Grate a fourth of a pound of potato; add a quart of boiling water and stir thoroughly. Next, add three ounces of sugar, an ounce of salt, and when the temperature has

fallen to blood heat, add one cake of crumbled dry yeast cake and stir. Cover snugly, set aside in a warm place away from air currents, and leave it there to ferment. The following morning this mixture should contain much yeast foam on the surface. Strain and add enough water to meet the required absorption of the flour.

If a "starter" is used, instead of the above proportions use four ounces of sugar and one and a fourth ounces of salt, and follow the above directions. The next morning save out half a pint and place it in a fruit jar, which may be set away in a cool place ready to use as the starter. The remaining pint and a half of yeast preparation is strained and diluted with the required amount of water.

The Danger of Rough Handling

"The use of too little water is the most prevalent cause for failure to make good bread," adds Mr. Olson. The dough should be almost slack enough to cling to the hand. A stiff dough is slow to rise, and in case fermentation is prolonged it will sour and never spring in the oven. Dough of proper consistency will rise rapidly and develop into "well-piled" loaves of good texture when baked. It is better to use too much water than too little, for in the former case the time of fermentation can be shortened and baking prolonged to dry off the excess water. Upon mixing, if the dough is too stiff it is possible to overcome this by adding more water and working it gently and thoroughly.

Giving directions for the handling of dough, Mr. Olson says: "Mix one pound of flour with all of the yeast and water, either with a spoon or a bread-mixer. Let it stand for a few minutes, and then gradually work in the remaining two and three-quarter pounds of flour. Never force the flour to take up the water. If the hands are used the dough should be partly lifted and half turned toward or away from you. The mixing operation should be continued until all the ingredients have been thoroughly mixed. The same precaution should be exercised in kneading the rising dough. Knead gently and thoroughly until all the large gas pockets have been worked out. A thorough mixing followed by two gentle kneadings is best with some flours, whereas with others the mere handling in the last kneading to shape into loaves gives the best results. If the mixing, kneading and other operations are done with force there is danger of lessening the activity of the yeast, in which cases the dough fails to rise. On the other hand, over-fermented doughs, when placed in the oven to bake, will fall. In such cases it is advisable to knead and let the dough rise again, although the quality of such bread will be more or less impaired."

Since a measure full of one flour will weigh more than a measure full of another, it should be weighed, not measured. Also, it is more satisfactory to weigh the water. The proper amount of water must be determined for each lot of flour, and it is therefore preferable to purchase flour, not a sack at a time but in barrel lots. Mr. Olson adds that flour generally improves with age. Inasmuch as scientific methods to determine the amount of water a flour requires are impracticable for household purposes, he suggests the following simpler plan:

Using a fairly accurate scale and a small apothecary's graduate, weigh out three or four lots of flour of four ounces each. In one lot add two ounces of prepared yeast preparation; in another, two and four-tenths ounces; and in a third, two and eight-tenths. If the one with two and eight-tenths ounces is too soft, while the one with two and four-tenths ounces is a little too stiff, mix the fourth lot with two and five-tenths ounces of the yeast preparation. Mix, set aside in a warm place and let rise until light; then bake and observe which combination gives the best results. The one which, according to your judgment, gives the best result indicates also the required amount of yeast solution to use. The quantity of yeast preparation used for four ounces of flour multiplied by fifteen will give the quantity required for five one-pound loaves of bread; or, multiplied by three, will give the quantity required for each three-fourths of a pound of flour to make a one-pound loaf of bread.

The Quality of Flour

In addition to the character of the wheat employed, the method of manufac-

ture is also a most important factor in determining the value of a flour for bread-making. Good workmanship in milling flour is necessary to secure quality, and the good workmanship must be combined with the best of appliances for manufacture. Each flour possesses an individuality that is determined by the character of the wheat and the method of manufacture.

Then, too, good yeast is as necessary to good bread as is good flour. If the yeast is too old or does not contain a sufficient number of active yeast cells, fermentation will be slow and there will be a tendency to prolong the process to such an extent as to soften or injure the physical qualities of the gluten. When this occurs, the gas that is formed is lost from the weakened dough and the loaf is small and of poor texture. A prolonged fermentation period cannot make good the lack of freshness and quality in the yeast. Too little yeast will, of course, yield a badly raised loaf, but too much yeast is just as objectionable, as the bubbles formed in the gluten of the flour, unable to resist the pressure of the excessive amount of gas, break open, the gas escapes the dough becomes heavy and soggy.

Too much yeast also gives an unpleasant "yeasty" taste to the bread, due partly to the presence of superfluous yeast cells. Even when used in small quantities yeast has a decided influence on the flavor of the bread. The amount of yeast which should be used depends on the strength of the flour. A flour in which gluten is abundant and tenacious can resist a much stronger pressure of gas than one with scant or weak gluten.

Occasionally an insufficient amount of water is used in making the dough. If there is not enough water the gluten fails to develop physically. With strong flours 65 per cent of water or other liquid is necessary to make a good dough. With weak flours 10 per cent or so less water is required. Good yeast and a proper adjustment of the amount of water to the flour used are essentials that are too frequently overlooked in bread-making. A strong flour will stand more mixing, kneading and manipulation than a weak flour. A flour of poor quality and small amount of gluten is easily injured. Another essential is the regulation of the temperature during fermentation. From 75 to 80 degrees Fahrenheit is the best.

If the temperature is either too high or too low good bread is not secured. In bread-making the measuring cup and the thermometer should be the guides; the finger is a poor thermometer. Sometimes the yeast is dissolved in water that is taken from the teakettle and warmer than it appears. If it is above 125 degrees the vitality of the yeast is greatly impaired.

It is false economy to use poor flour because it is cheap. The cost of the raw materials for six loaves of bread made from good flour is usually about a cent more than when poor, low-gluten flour is used. When you consider the difference in quality and in food value, however, the strong flour is much the cheaper. Moreover, if the bread is good more is eaten and a saving of more expensive foods is effected. If the flour is strong in gluten it is not necessary to use such large amounts of meat to balance the ration, because the bread is already balanced as to protein content for tissue-repairing and vital purposes. When you consider that a pound of flour yields over 1600 calories and a pound of meat only 1200; that the strong, glutinous flours





contain approximately as much protein as meats, including refuse and inedible parts; and that there is no refuse at all to flour with its large difference in cost, it is readily understood why bread is so justly called the "staff of life."

MODERN ESTHERS
A Sermon to Women Preached at Hamiota by Rev. Fred C. Middleton

The following is a report of a sermon delivered at Hamiota, on Sunday, April 22nd, the members of the Home Economics Society being present by invitation.

Many charming stories are told in the Bible, and among the most charming is that of Esther, the beautiful Jewess who, with her uncle Mordecai, was instrumental in securing the emancipation of the Jews during the reign of Ahasuerus (Xerxes), the Persian monarch. There is a fine analogy between the story of this woman patriot and the history of the women's movement in recent years. The analogy is clearly seen if we consider what Esther risked, what she achieved, and the follow up work she undertook after her main request was granted.

(1)—What Esther Risked

She risked her social standing. In asking her to "go unto the king and make supplication for her people" Mordecai was asking her to break an age-long custom. It was infra dig for her to appear before the monarch without being called. Pioneer women patriots of our day had to do the same thing—risk their social standing, do the unconventional thing, for to "go unto the king" was a bold move in our day as it was in Esther's time.

Esther risked, further, the displeasure of the king, and how often this has been the case with the modern women's movement. "Those women! Let them stay at home! They cannot fight, why should they vote?" Thus has many a displeased ruler of to-day met the women's demand for a hearing.

A third thing risked by Queen Esther was life itself; the punishment for appearing before the king unbidden was death. Women of to-day do not endanger their lives in the sense that Esther did, yet the women's movement has not been without its physical dangers. While we may disapprove the actions of some of the militant suffragettes, yet such scenes as were enacted during the "hunger strike" in England show that women have been ready to die, if need be, for their ideal.

(2)—What Esther Achieved

She achieved, first of all, the privilege of being heard. So to-day; the time has gone by when any responsible statesman will refuse to listen, however little he may heed. Even ex-Premier Asquith had been converted, and perhaps the "detestable campaign" of a few years ago had as much to do with it as the heroic work of women since the war. Yes, indeed, women have earned the right to be heard, and unwise the statesman who refuses to listen.

Our Jewish heroine also secured the cancellation of an unjust decree. The crafty Haman had planned the destruction of the Jew. Esther's plea revoked the edict. Already old laws are being altered and new ones are being introduced in response to the plea of women.



Old Lady: What is your son doing now?
Auntie Washington: Him? Oh, jest talkin' about what he's gwine ter do.
Old Lady: But your husband—what is he doing?
Auntie Washington: Him? Oh, he's jest talkin' about what he's done."



Government Issues Warning Against Fly Poisons

Following is an extract from "The Transmission of Disease by Flies," Supplement No. 29 to U. S. Public Health Reports, April, 1916:

"Of other fly poisons mentioned, mention should be made, merely for a purpose of condemnation, of those composed of arsenic. Fatal cases of poisoning of children through the use of such compounds are far too frequent, and owing to the resemblance of arsenical poisoning to summer diarrhea and cholera infantum, it is believed that the cases reported do not, by any means, comprise the total. Arsenical fly-destroying devices must be rated as extremely dangerous, and should never be used, even if other measures are not at hand."

106 fly poisoning cases have been reported by the press within the last three years. As stated above this number is but a fraction of the real number. Protect your children by using the safe, efficient, non-poisonous fly catcher



Made in Canada by
The O. & W. Thum Company
Walkerville, Ont.
American Address: Grand Rapids, Mich.

THE HECLA WARM AIR FURNACE

gives you the maximum heat from every ounce of coal consumed and uses as little fuel as possible. This furnace has passed through years of tests and improvement, and to-day it is bought because of its proven economical service.

YOUR HOME CAN BE SO COSY

It isn't a question of coal that keeps some houses cold. It may be the furnace. You cannot get more heat out of a furnace than it was designed to give. The logical thing is to buy the furnace built to give you the most heat from the least fuel possible. A "Hecla" puts an end to all heating doubts. Consider these:

THE STEEL RIBBED FIRE POTS give three times the heat radiating surface of other makes. It actually saves you one ton of coal in seven.

THE PATENT FUSED JOINTS—No bolts or cement here. The "Hecla" joint makes gas or dust through the registers impossible.

THE CIRCULAR WALTER PAN goes all around the "Hecla," ensuring even moisture to every room.

These are but three points of the finest detail. You get more than a furnace when you install a "Hecla." Better let us plan it fully.

Send for your copy of "Comfort and Health"—free

Clare Bros. Western Limited
Dept. CT WINNIPEG

The same care has been carried down to install a "Hecla." Better let us plan it fully.

Send for your copy of "Comfort and Health"—free

Clare Bros. Western Limited, Dept. CT Winnipeg, Man
Please send me copy of "Comfort and Health."

COUPON

Name _____ Address _____

103 GEMS
OF OUR
HEROIC VERSE

A FINELY printed collection containing **One hundred and three poems, songs, requiems and dirges**—the most heart-stirring of all patriotic appeals in the Anglo-Saxon language, will be presented **FREE** with every new subscription or renewal for one year of **The Canadian Thresherman and Farmer**.

Including most of the great historic ballads, this attractive volume contains the very choicest of the more recent products of the great war; regimental ditties, heroic poems that send a thrill through every heart and some that will never grow stale while the English tongue is heard in the counsels of men.

This fine book of gems has been delicately to the Canadian Expeditionary Forces. To any one with the remotest interest in the classics of his race, this opportunity is worth far more than

THE DOLLAR

that pays for twelve months of this magazine, and at same time secures a free copy of this unrivalled collection of lyrics and epic poems.

If you are not delighted we will return your dollar immediately. Address "Circulation Department"

E. H. HEATH CO., Ltd.
Box 3164 WINNIPEG

The Mother's Pension Act of Manitoba, the Dover Act of Alberta, the right to accept office on municipal councils in town or city, a place on school boards—these are some of the things that women have achieved already.

But, perhaps, the best thing that women of to-day have secured, is the franchise, the weapon with which to defend themselves. The state of Wyoming was the world pioneer, granting woman's franchise 48 years ago. The Isle of Man came next, 12 years after Wyoming; then followed Australia and New Zealand, and to-day the record reads: Five Canadian provinces, 13 American states, all Australia, Finland, Norway, Denmark and Iceland. Russia and England will soon come into line and in a few years there will be world-wide suffrage for women.

(3)—The Follow-up Work

After securing a favorable answer to her main request, Esther did two other things. She kept continually in touch with the king, personally and through Mordecai; and she carried out reform work among the Jews until the author of the book could say that there was "light and gladness, joy and honor" among the people of the Jews all over the kingdom of the Persian monarch.

Women of to-day must do follow-up work. They must demand further changes in the laws of our land. Just here, let me congratulate the H.E.S. for the splendid manner in which they handled the petition re alterations to the criminal code. Some 250 signatures of men and women have been secured in this town and district, praying the Dominion government to raise the "age of consent" and the "age of seduction," and to make adultery a crime. I trust petitions will pour in from all over Canada and that the requests will be granted.

The Manitoba government did nothing this session with your requests re amendments to the "Wills and Intestacy Act," the "Infant Act," and the "Home-stead Act"—but keep at it; you'll get them yet.

And go after the abolition of the "double standard" in morals. See to it that men found in immoral houses are not only fined but their names published.

In January of this year a beast of a man indecently assaulted a little eight-year-old girl in a Kildonan street car Winnipeg. He was fined a paltry \$50 and his name kept secret, because he was "an aged man of respectable family!"

And how long are women going to stand for the absurd penalties attached to such offences? This man, for indecent assault, was merely fined; the maximum penalty is only two years. Yet, if he stole a letter from the post office the minimum sentence would be three years and the maximum, life imprisonment! Letters are evidently of greater value than little girls.

Again, if a man steals your daughter under 16 years of age and lives in immoral relations with her, he is liable to a maximum penalty of five years; if he steals your cow he can be imprisoned for 14 years. Again, our cows are worth more than our girls.

In addition to alterations to the criminal code, it is the privilege of women to raise the ideals of our political life. Surely in women we shall have able advocates for the abolition of patronage, the rule by caucus and similar reforms.

Women can also do a great deal among the women and children of the European immigrant. We may not be able to greatly influence the adult males, but Canadian women have a great opportunity among the mothers and children of the foreigners.

And when peace comes and the future is to be safeguarded; in the reconstruction period after the war, women must have a voice. As Asquith says, she has earned the right—yes indeed, earned it by sacrifice, suffering and service.

Just a last word. Woman must prove to-day that she is no less a woman because she has become a citizen. Ladies, you will touch, as you ought to touch, the political, social, economic and industrial life of this province; and you will touch it for good. You will do this the more effectively because you have been granted the right of citizenship. You have received a new name, the name of citizen.

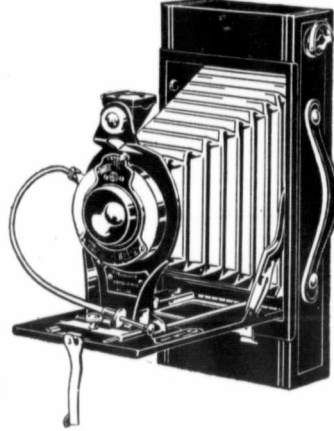
But will you let me suggest to you that you forget not your old names—

M A D E I N C A N A D A

It makes good because it makes good pictures

2C Folding Autographic Brownie

Price, \$9.00



A camera built in the Kodak factories by Kodak workmen; made to conform to the requirements of results.

A camera in which is incorporated the autographic feature making it possible to date and title each negative at the instant it is made.

A camera of a size and shape to fit the pocket, easily, making pictures 2 7/8 by 4 7/8 inches, a size and shape to fit the view.

A camera neat in appearance, simple in operation that will make good pictures for anyone.

DETAILS

Capacity, 10 exposures without reloading. Size of camera, 1 3/4 by 3 3/4 by 8 1/2 inches. Weight, 25 ounces. Lens, meniscus achromatic, 4 1/2-inch focus. Shutter, Kodak Ball Bearing, equipped with Kodak Autotime Scale. Reversible finder, two tripod sockets, automatic focusing lock, black leather bellows.



CANADIAN KODAK CO., LIMITED TORONTO, CAN.

97 Piece Dinner Set and lovely Silverware Given To You



YOU can secure without a penny of cost this magnificent complete 97-piece English Dinner Service and a lovely set of half-dozen Wm. A. Rogers teaspoons.

Each dinner service is guaranteed full size for family use, its 97 pieces comprising 12 cups and 12 saucers, 12 tea plates, 12 dinner plates, 12 bread and butter plates, 12 soup plates, 12 sauce dishes, 2 platters, 2 oval covered vegetable dishes, a cream jug, covered sugar bowl, a gravy boat, pickle dish, and a salad bowl. It is handsomely decorated in rich floral design and will surely delight the most fastidious hostess.

The beautiful set of Teaspoons are in the famous Wm. A. Rogers French Carnation design with French grey handles and brightly polished bowls.

Read our Wonderful Offer



We pay all delivery charges on these Grand Premiums

Carnation French Canadian Teaspoons

Genuine Wm. A. Rogers make—the most beautiful pattern ever seen. These magnificent spoons will delight any housekeeper and they are guaranteed to give every satisfaction in wear.

Will you sell just 12 boxes among your friends at only 25c. per box?

You can easily do this because every one you know will be glad to learn of this grand remedy. It is one of the world's best known prescriptions, a tried and proven remedy for weak and impure blood, nervousness, indigestion, constipation and anaemia. In all run down conditions of the system it will be found a grand blood builder and revitalizer, and as a general tonic for blood and nerves it has no equal.

Send No Money—Just send your name and address to-day and we will send the 12 boxes postage paid. You will be able to sell them quickly and easily because every purchaser of a box can obtain a beautiful gift of fine silverware from us free. Then return our money, only \$1.00, and we will promptly send you all delivery charges paid, the beautiful set of spoons, and the handsome dinner set you can also receive without selling any more goods by simply showing your fine reward among your friends and getting only six of them to sell our goods and earn our fine premiums as you did. We pay all delivery charges right to your door.

REMEMBER YOU TAKE NO RISK. You do not spend a cent of your own money. We trust you with our goods until sold and if for any reason you cannot sell them we will take them back and give you beautiful premiums or pay you a big cash commission on the quantity you do sell. Write to-day if you wish to take advantage of this liberal offer. It gives you the opportunity of a life time. Address 526

The International Mfg. Co., Dept. D 101 Toronto, Ont.

Twelve Months of this Magazine for \$1.00

names which, after all, are bigger names—names fraught with more meaning for yourself and of more importance to society. I refer to the names "wife" and "mother." Let not your work as citizens overshadow your greater work as wives and mothers. There need be no antagonism between the two—see to it there is not.

And for a motto, let me give you these words:—

I live for those who love me,
For those who know me true;
For the heaven that shines above me
And assents my coming too.
For the cause that needs assistance,
For the wrongs that need resistance,
For the future in the distance,
And the good that I can do.

A Woman's Talk to Women

By LILLIAN BEYNON THOMAS

Jeannette Rankin

Miss Jeannette Rankin, the first Congresswoman in the United States, has had the eyes of the men and women of the world upon her during the past month. The first woman to hold such a position, in her first session, had to face the greatest national crisis that can be faced by either a man or woman. To go into war or not to go into war, was the question before the nation. On that question she had to vote. She voted "No!"

In her own country and in other countries many and varied are the opinions on her position. There are those who claim that she has done the cause of women more harm than can be rectified in a hundred years, while others claim with equal vehemence that she has stood for what women the world over must stand for, now and always, if the world is ever going to emerge from the savagery of war, the brutality of slaughter, the pagan worship of force.

There are those who see in her action the promise of a better world when women take their rightful place in the government of the nations of the world. There are those who claim that the present tragedy of war would have been impossible had women done their part in the past in cementing the bond of motherhood, that should bind all the mothers of the earth in a union to refuse to raise food for cannon.

But of one thing the women have reason to be proud. That is, that in the United States, where the suffragists in their largest organizations have promised full support in the war, the women have united in declaring that Miss Rankin was brave to do the unpopular thing, when she thought it was right, and that no harm can come to a nation or a cause from an action that is impelled by conscience.

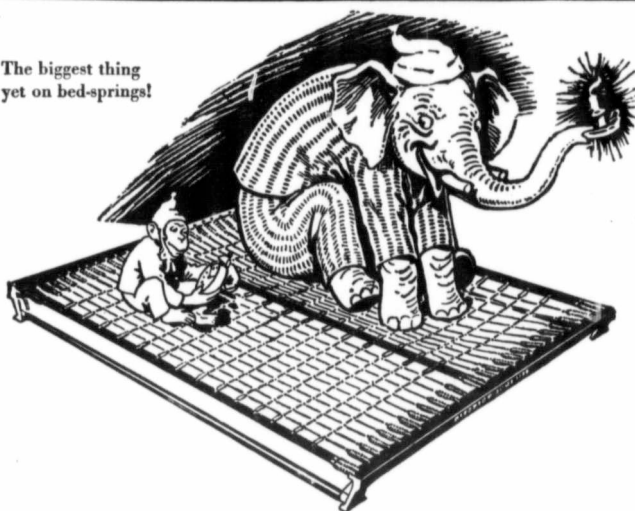
Mrs. Carrie Chapman Catt, chairman of the National Woman Suffrage Party, excused Miss Rankin for voting against the war resolution. She took the stand that Miss Rankin had the right to vote as her conscience dictated. She said that now that the country was at war, Miss Rankin, she expected, would take part in no movement to hamper the government of the United States in prosecuting it.

"I predicted two weeks ago," said Mrs. Catt, "that no matter which way Miss Rankin voted she would be criticised. If she voted for war she would offend the pacifists; if she voted against it, she would offend the militarists."

"Do you not think that Miss Rankin neglected an opportunity to make a million or more votes for suffrage by voting as she did?" she was asked.

"I do not believe Miss Rankin was guided by any such consideration," she replied. "You must remember that Miss Rankin was not voting for the suffragists of the nation; she represents Montana. But I do not think any higher tribute could be paid to a person in public office that to say that he voted as he thought he should vote. Miss Rankin has done nothing to be ashamed of, far from it, and she can be counted upon to do nothing that she need be ashamed of. She did her duty as her duty appeared to her. It was not for anyone else to make her decision for her."

The biggest thing yet on bed-springs!



THE BED-SPRING with THE BACKBONE

A revelation in sleeping comfort! A level, buoyant mattress support, on which two occupants of a bed cannot roll together. That's

The "DUPLEX" 20 Years of Sleep Comfort Guaranteed

It makes an ordinary double bed into two single beds—because the steel backbone entirely prevents rolling to the centre. It's the ideal bed for any two persons—and the only bed for two persons of unequal weights. Read that statement again!

No other bed made in Canada has the patented features of the "Duplex." Order it by name or ask for the "Spring with the Backbone." Your dealer sells it or will get it on request.

THE ALASKA BEDDING CO., LIMITED

Makers of Bedsteads and Bedding

Calgary

WINNIPEG

Regina

"Alaska on an article means High Grade Every Particle."

128W

CLASSIFIED



PURE BRED BARRED PLYMOUTH ROCKS—Eggs (guaranteed) for sale at \$2.00 per sitting. My pens have been carefully built up from unrivalled breeding stock. Mrs. Dumbrell, Charleswood, Man.

FOR SALE—Or would exchange for a good portable of 20 or 25 h.p., a Rumely oil pull tractor, 23-45 h.p., complete with extension rims and self steerer. Been run two seasons. Good reason for selling. W. Garnet Leflar, Ironmore, Man.

WANTED—Gear mounted steam engine, with or without plows; must be cheap and in first class shape. State lowest cash price and particulars in first letter. Apply Box 20, Burnie, Man.

WILL EXCHANGE quarter-section of good land, two miles from station in Manitoba, for new small threshing outfit with blower and hand feed. Apply Box 3164, Canadian Thresherman, Winnipeg.

FOR SALE AT BARGAIN—One 45 h.p. 4-cylinder gas tractor, rebuilt, excellent condition, \$1,200 cash. Also one of same second-hand at \$1,000 cash. Apply P.O. Box 175, Winnipeg.

Peerless Poultry Fencing

A real fence, not netting. Strongly made and closely spaced, a complete barrier against animals of any kind. Keeps the small chicks confined. They can't get through. Does all and more than is required of a poultry fence.

The heavy, hard steel top and bottom wires with intermediate laterals will hold a carelessly bucked wagon or unruly animal and immediately spring back into shape.

The wires are held together at each intersection by the Peerless Lock.

Send for Catalogue and address of nearest agent. We make a complete line of farm and ornamental fencing. We now have agents nearly everywhere, but will appoint others in all unassigned territory. Write for catalogue today.

THE BANWELL-HOXIE WIRE FENCE CO., LTD.
WINNIPEG, MAN.
HAMILTON, ONT.

Have You thought of STUCCO

as a finish for your new house—as a renovator for your old one—as a substantial, permanent, yet moderate priced material for the walls of barn, garage or granary? It looks fine—costs nothing for paint or upkeep—and when applied on a foundation of

BISHOPRIC STUCCO BOARD

it never cracks or comes off.

THE DOVETAILED LATH



BISHOPRIC STUCCO BOARD

is made of tough, heavy sheets of Asphalt Mastic, surfaced on one side with sulphite fibre board and reinforced on the other with No. 1 kiln-dried, beveled lath. It is nailed direct, lath side out, to the studding or on the siding of an old building. The stucco is clinched in the dovetailed spaces between the lath, and is there to stay!

Bishopric Stucco Board thus takes the place—does the work—and saves the cost—of lath, furring strips, building paper and sheathing lumber, at but little over half the total cost.

Write for sample and descriptive booklet, showing houses built the economical Bishopric way.

Bishopric Wall Board Co. Limited
529D, Bank Street, Ottawa, Ontario

There's a Reason

We would be glad to send you our booklets, prices and particulars of any of the undermentioned goods, if you will kindly place an X against any you are interested in. We know we can sell you these Articles at a less price and give you better quality, and at the same time give you more money for your HIDES and FURS than any house in Canada.

- Harness, Halters and Leather
- Ladies' Hudson Seal and Muskrat Coats
- Tanning Hides and Furs for Robes, Coats, Bags, or Lace Leather
- Mounting all kinds of Game Heads and Birds
- Prices of Hides and Raw Furs

Wheat City Tannery
Tanners and Manufacturers
BRANDON, MAN.

PATENTS TRADE MARKS AND DESIGNS

Write for booklet, circulars, terms, etc.
FETHERSTONHAUGH & CO.
FRED. A. FETHERSTONHAUGH, F. C. M. E.
GERALD S. ROBERTS, R. A. S.
36-37 Canada Life Bldg. WINNIPEG

It has been reported far and wide that Miss Rankin wept when the vote was taken, and fainted and had to be carried from the house. Mrs. Laidlaw, a personal friend who was in the House at the time and who wished her to vote for war, says, "I leaned over the gallery rail and watched her. She was undergoing the most terrible strain. She was still struggling with her emotions when her name was first called, and she could not vote. When she finally cast her vote, we were disappointed, but we knew she had done what she thought was right."

"It is not true that Miss Rankin wept, fainted, or had to be carried from her seat. She was perfectly composed. She had been asked by so many of her friends to vote for the resolution; at the same time she was gripped by a desire to express a woman's horror of war and her principles against it. When she finally voted, she voted with intense sincerity, knowing that she was not doing the popular thing, but refusing to allow herself to be governed by motives of expediency. She just couldn't vote for war."

BUTTER SUBSTITUTES

Last week the grocer told me he had some very good dairy butter just in. On his assurance that it was good I bought some. I was pleased with the appearance of it, but when I went to use it I was astonished at the texture. I had never seen butter like it. It crumbled under the knife. It cut like dripping and it did not taste like anything I had ever tasted before.

Oleomargarine is not supposed to be sold in Canada, and as I have never seen any so-called or tasted it, I do not know whether the supposed dairy butter I purchased is oleomargarine or not; but of one thing I have no doubt, it is not butter. There must be butter substitutes on the market at the present time and this compound that I purchased was sold at thirty-five cents a pound, which is a tremendous price for dripping, or whatever it is.

A friend told me not long ago that she found something, not butter, in her supplies, when she ordered butter. Now the problem before the women of the country is this. At the present time the laws forbid the sale of oleomargarine in Canada. Some agitation is on foot to have this product allowed on the market. In the meantime something is on the market that is not butter and is being sold at the price of butter.

Would it not be much better to allow this product on the market, labelled and unashamed, with a proper price attached, and not the butter price, that people may know what they are buying? Or, if we do not wish any butter substitutes, then we should have pure food laws that will compel dealers to state exactly what they are selling, that the public may not



Tommy (back from Blighty): "Yus, I grant yer a bit o' leave's alright. But it's awful depressin' too, at home—nothin' but war—war. It gives yer the fair 'ump."



Economical Tubes That Cost More

The economy of a tube is not to be measured by its price. Nor can it be judged alone by the length of time the tube serves you. A tube's sole purpose is to hold air, and to hold it continuously. But upon its efficiency in performing this duty depends not so much the life of the tube, but the life of the casing.

For the commonest enemy of tires is under-inflation.

And slow leaks are the deadly cause of under-inflation.

Deadly because inconspicuous and insidious.

For this reason a good tube is as important as a good casing. Without good tubes, good casings are of little avail.

A Goodyear Tube is as important as a Goodyear Tire.

They are Laminated Tubes. They are built up thick, layer on layer, of pure, tissue-thin rubber. It is this thinness that enables us to make the rubber clean and flawless.

So they hold air better, give longer service, save tires.

It is just as easy to say "Goodyears" when you buy tubes. It is much more economical.

The Goodyear Tire & Rubber Co.
of Canada, Limited



ONE DOLLAR SPENT ON A YEAR'S ISSUE

Of the CANADIAN THRESHERMAN AND FARMER is equal to One Thousand Dollars' worth of Hard Experience.

Goodyear Tubes, along with Goodyear Tires and Tire-Saver Accessories are easy to get from Goodyear Service Station Dealers everywhere.

pay for one thing and get another. This matter of pure foods is one that the women will have to face sooner or later.

GROWING THINGS

The price of living is going up steadily and by leaps and bounds. It is getting up by every possible method. It is bound to continue to go, so long as the war lasts, and for this year at least and until a year from the present harvest. What can we do to make conditions better?

So far as the human intelligence can probe into the future, there is one thing everyone should do, and that is grow as many things as possible. The little garden patch will be an important part of the living for someone and everyone who has a patch should use it to the very best advantage. Not many in this country have any idea of how much can be grown on a small plot of ground.

One spring I was in British Columbia and I was astonished to see in many garden patches two or three kinds of vegetables apparently occupying the same space. The idea was that radishes, for instance, are over before many other vegetables are very large, and if, say beets, are planted between the rows of radishes, they will get along alright for the radishes will be out of the way before the beets spread out enough to require all the space. In this way one patch of ground bore two or three, or even four crops of vegetables in one year. It can be done in this country, if necessary, and a very small plot of ground can be made produce a large part of the living for a family and perhaps contribute a bit for a neighboring family.

This year everyone should grow something. Grain is not enough. Everything is bound to be dear. We have the land and the sunshine and the rain; if we but provide the seed and care the returns are sure to be more or less abundant.

VOTES FOR RUSSIAN WOMEN

Conditions in Russia are naturally very unsettled. The future is sure to be full of strife and trouble, but out of it will eventually come a new era in which the people will develop, in an atmosphere of freedom. The women of that great country are taking no small part in the struggle and they will take no small part in the day that is just dawning.

Already the women's organizations are very strong in the large cities, and it is reported that the City Council of Petrograd has unanimously agreed to appoint a certain proportion of women to a number of committees. Another despatch says that women are to be allowed to vote for members of the Constitutional Assembly.

The attitude toward the women is shown in two declarations of the revolutionists. One is—To proceed forthwith to the preparation and convocation of a Constitutional Assembly, based on universal suffrage, which will establish a governmental regime.

The other is—Communal elections to be based on universal suffrage.

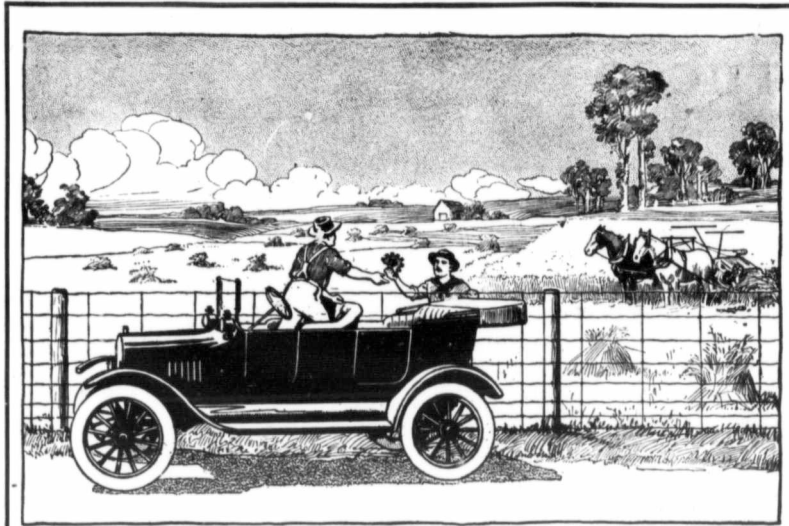
As late as 1904 women's suffrage organizations in Russia were forbidden by law, but they still held together as part of the international suffrage organization and always paid their dues to the international organization.

In the neighboring countries the suffrage was granted to the women of Finland in 1906, the women of Norway in 1907, the women of Iceland in 1913, and those of Denmark in 1915, while the women of Sweden have had municipal suffrage since 1862.

Upon receipt of the news of the revolution in Russian and its possible effect upon the status of the women, Mrs. Catt, representing the United States suffragists, cabled both to Russia and to Finland, but has received no reply.

THE COST OF LIVING

Yes, we all agree on that. The cost of living is high, very high, very, very high, and as many more verys as you care to write or say. No one ever disputes that statement these days. It is the one thing on which everyone agrees. The question some ask is why? There are many answers to that. The following is not an answer, but an explanation that comes from Port Hope, Ontario:



Real Daylight Saving

In the harvest time every hour between daylight and dark is worth money to the busy farmer.

You get an early start in the morning intending to do a big day's work, but the

binder, mower or other implement breaks down and you must go to town for the repairs. If you have a Ford you are soon away and its speed clips two hours off the former three-hour journey there and back.

Count up the extra half days that a Ford will save you

during the rush of seeding, haying and harvest. You will find that the Ford will save you a week or more of valuable time on your necessary trips alone.

Many times you will want to take some produce along with you. Then your staunch

Ford is ready to carry a load of 1000 pounds. How handy this would be?

Once you own a Ford and find out the many ways you can use it for business and pleasure you will wonder how you managed without it.

The Ford is an economical investment, and a necessity on every farm.



Touring - - \$495

Runabout - \$475

F. O. B. FORD, ONT.

Ford Motor Company of Canada, Limited

FORD - - - ONTARIO.

42

Myers Cog Gear Pumps

**OPERATE EASIER
LAST LONGER**

Pumping is made easy by using Myers Cog Gear Pumps for they save one-third of the operating power. The line includes hundreds of styles and sizes of hand, windmill and power pumps, well, cistern and tank pumps, spray pumps, etc. Other Myers features are the long set length, adjustable base, reversible spout and handle, non-corroding glass valve seat, anti-freezing construction etc. Illustrative catalog sent upon request.

F. E. MYERS & BRO.
ASHLAND, OHIO
Ashland Pump and
Hay Tool Works



Well Drills

**For Drilling
WELLS or BLAST-HOLES**

Built to stand up under heavy work. Most economical and rapid drills made. Styles and sizes for all purposes, with or without power.

Write for Circular
WILLIAMS BROS.
426 West State Street, Ithaca, N.Y.

We'll Buy Your Time

this summer. We want about 300 men, who, for first-class remuneration are willing to represent us in their own neighbourhood. For full particulars, write to the circulation manager.

H. E. Heath Co. Ltd., Winnipeg



Synopsis of Canadian Northwest Land Regulations.

THE sole head of a family, or any male over 18 years old, who was at the commencement of the present war, and has since continued to be, a British subject or a subject of an allied or neutral country, may homestead a quarter-section of available Dominion Land in Manitoba, Saskatchewan or Alberta. Applicant must appear in person at Dominion Lands Agency or Sub-Agency for District Entry by proxy may be made on certain conditions. Duties—Six months residence upon and cultivation of land in each of three years.

In certain districts a homesteader may secure an adjoining quarter-section as pre-emption. Price \$2.00 per acre. Duties—Reside six months in each of three years after earning homestead patent and cultivate 30 acres extra. May obtain pre-emption patent as soon as homestead patent on certain conditions.

A settler after obtaining homestead patent, if he cannot secure a pre-emption, may take a purchased homestead in certain districts. Price \$3.00 per acre. Must reside six months in each of three years, cultivate 50 acres and erect a house worth \$300.00.

Holders of valid contracts of employment as farm laborers in Canada during 1917, as residence duties under certain conditions.

When Dominion Lands are advertised or posted for entry, returned soldiers who have served overseas and have been honorably discharged, receive one day's priority in applying for entry at local Agent's Office (but not Sub-Agency). Discharge papers must be presented to Agent.

W. W. CORY,

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

THE C. P. R. GIVES YOU TWENTY YEARS TO PAY

An immense area of the most fertile land in Western Canada for sale at low prices and easy terms ranging from \$11 to \$30 for farm lands with ample rainfall—irrigated lands up to \$50. One-tenth down, balance if you wish within twenty years. In certain areas, land for sale without settlement conditions. In irrigation districts, loan for farm buildings, etc. up to \$2000, also repayable in twenty years—interest only 6 per cent. Here is your opportunity to increase your farm holdings by getting adjoining land, or to secure your friends as neighbors. For literature and particulars apply to Allan Cameron, General Superintendent of Lands, Department of Natural Resources, 918 First Street East, Calgary, Alta.

CHALLENGE COLLARS
WATERPROOF ECONOMICAL ALWAYS DRESSY
NO EXPENSE FOR LAUNDRY BILLS
DULL FINISH, JUST LIKE BEST LINEN
AT YOUR DEALER'S, OR DIRECT, \$25c
THE ARLINGTON CO. OF CANADA LIMITED
34 56 BROADWAY, TORONTO

STEAM PLOWERS-ATTENTION!
CANMORE COAL
HIGHEST GRADE STEAM COAL PRODUCED IN CANADA
Canadian Coal for Canadian Farmers
Equal to the best American Steam Coal. Semi-Anthracite. Smokeless, Sparkless, Low Ash, 14491 B.T.U.'s. Ask your dealer or write us for descriptive circular.
Birnie Lumber & Coal Co., Ltd.
General Sales Agents
CALGARY CANADA

It appears that a farmer entered the place of business of a carriage dealer and announced that he wished to purchase a buggy, when told the price was \$90, he said: "My father bought a buggy exactly like that for \$60, 20 years ago." The dealer remembered the sale also, and said, "Your father turned in 300 bushels of corn to pay for it. I will do better for you than I did for your father. You bring in your 300 bushels of corn and I will let you have in return one \$90 buggy, one \$75 wagon, one \$20 suit of clothes, one \$20 dress, one \$5 baby dress, one crib, one \$3 box of cigars, \$10 worth of sugar, \$10 worth of coffee, \$10 worth of tea, \$100 worth of gasoline, \$17 worth of lubricating oil." The total figured up \$365 as the present value of 300 bushels of corn. It is stated the farmer climbed back into his motor car, with the words, "I guess I haven't any kick coming on the high cost of living. Send out the \$90 buggy."

The Imperial Royal Navy and the Canadian Naval Volunteer

By Edmund Bruce Mallett, Lamont, Alta.

That fine force of men, known as the Royal Naval Canadian Volunteer Reserve, and designated the R.N.C.V.R., was the first unit in Canada to be called out on active service. These naval volunteers have not been much in the public eye, outside of their own immediate sphere of action, for secrecy, of a necessity, surrounds the Imperial Royal Navy, and all the naval forces connected therewith; consequently, little is known by the public at large of the Royal Naval Canadian Volunteer Reserve.

But now this force is urgently in need of recruits for service in the Imperial Royal Navy. Thus young Canadians have here a fine opportunity to render very valuable service to the Empire, for, in order to join this force, it is not requisite that they have previous sea experience and those who join will immediately be sent across to one of the great naval training depots in England, and here they will be especially trained and before long be full-fledged sailors, serving aboard British men-o'-war.

These men are needed to man the new ships. All the available men in England have been conscripted for the army, and rather than withdraw these for the senior service, the navy looks to young Canadians to volunteer for this purpose, thus extending to them the glorious opportunity of serving in the Imperial Royal Navy in time of war.

The R.N.C.V.R. has paved the way. These men are well paid and are well used. Young Canadian, join the Royal Naval Canadian Volunteer Reserve. A free kit is furnished, and right here I have a few words to say regarding the natty, baggy, picturesque blue uniform of a British Jack Tar.

Plenty of cloth is used in the making. The collar with the three white stripes thereon is traditional and was worn in days of yore by the gallant sea warriors of Devon. The three white stripes on the collar are also significant and mean three battles—Nile, Copenhagen and Trafalgar.

Young Canadian, join the R.N.C.V.R. Don this uniform and serve your king. A warm welcome will await you at the Naval Barracks. The British tar will be glad to see you and every assistance will be given in your training until you are shortly ready for your ship.

The navy needs you. You cannot do better than visit the nearest naval recruiting station, and there enter your name. You will never regret having done so and in these times such should be a source of untold satisfaction.

Think of the men of Devon who fought and won England's battles on the high seas. Think of Froisher, Raleigh, Hawke, and Drake. Think of Nelson, and Trafalgar, and do not hesitate.

"This day England expects every man will do his duty," so ran Nelson's famous signal at Trafalgar, and how applicable are those words to the Empire at large to-day.

Enlist in the R.N.C.V.R. The navy needs you and you cannot in any manner render greater service to your king and country, than by joining the Royal Naval Canadian Volunteer Reserve.

Amusements, as well as duty, are carried on in the navy.

GILLETT'S LYE
HAS NO EQUAL
It not only softens the water but doubles the cleansing power of soap, and makes everything sanitary and wholesome.
REFUSE SUBSTITUTES.

Baked Rice and Cheese

1 cup rice, 4 cups boiling water, 1 1/2 teaspoons salt, 5 tablespoons butter, 3 tablespoons flour, few grains cayenne, 1/4 teaspoon mustard, 2 cups hot milk, 1 cup cheese, 1/2 cup cracker crumbs. Wash rice, drain, and add to boiling water with one teaspoon salt. Boil five minutes and cook over hot water forty-five minutes or until soft. Melt three tablespoons butter, and add flour, one-

half teaspoon salt, cayenne and mustard; then add slowly, while stirring constantly, the hot milk, and stir until boiling point is reached. Add cheese cut in small pieces, and when cheese is melted, mix lightly with the cooked rice and pour into a buttered baking dish. Mix cracker crumbs with two tablespoons melted butter, sprinkle over the rice, and bake in a hot oven until delicately browned.

Western Canada Fairs Association

W. I. SMALE, Brandon, Man., President. J. O. HETTLE, Saskatoon, Vice-President. W. J. STARK, Edmonton, Alta., Sec.

\$200,000.00 Offered in Premiums for 1917

City	Circuit Dates for 1917	Manager
Calgary	July 28 to July 5	E. L. Richardson
Red Deer	July 5 to 7	G. H. Lindsay
Edmonton	July 9 to 14	W. J. Stark
Brandon	July 16 to 20	W. I. Smale
Regina	July 23 to 27	D. T. Elderkin
Saskatoon	July 30 to August 30	C. D. Fisher
North Battleford	August 6 to 8	F. Wright
Yorkton	August 6 to 7	J. A. Duncan
Prince Albert	August 9 to 11	W. O. McDougall
Weyburn	August 8 to 11	Frank Heard

WRITE THE INDIVIDUAL MANAGERS FOR PRIZE LISTS

Western Canada Fairs Association

Chimney Flue Lining



ALL CHIMNEYS should be lined on the inside with hard burned flue lining. Not only does the lining of a flue add to the safety of a flue from the standpoint of the danger of the flue cracking, but also from the possibility of soot fires. The inside of the flue being smooth it leaves no place for the soot to gather, and for this reason it is almost impossible to have a chimney fire.

FARM DRAIN TILE

Some of the most fertile land is kept out of cultivation because it is under water at planting time.

It is worth while to convert a worthless marsh into a fertile field and to do it right.

Our facilities for turning out this material are so unusually good that we feel safe in the assurance that not only will our farm drain tile be found the highest in quality but the lowest in price.

WRITE US FOR INFORMATION AND PRICES

Thos. Jackson & Sons

BUILDERS' SUPPLIES OF ALL KINDS

370 COLONY STREET

WINNIPEG

COMBINGS!

LADIES—We make your combings into switches, any quantity for **\$3.00**
Satisfaction Guaranteed.

New Hair added to Combings if desired from \$1.00 worth up.

We carry a full line of **TOILET GOODS**
10c. postage for mailing

Elite Hairdressing Parlors
207 Erderton Building
WINNIPEG

The Baby
A Guide for Mothers

Savory & Moore Ltd.
1601, Montreal

SAVORY & MOORE'S BOOK

Messrs. Savory & Moore, Chemists to The King, and makers of the well-known Infants' Food, issue a little Book entitled "The Baby," which gives a great deal of useful information on the Care and Management of Infants.

A USEFUL GUIDE

The book contains hints on Feeding, Teething, Development, Infant Ailments, and such matters as Sleep, Exercise and Fresh Air, which are so important for baby's well-being. It also contains a chart for recording baby's weight, a dietary for older children, and recipes for simple nourishing dishes. It forms, in fact, a useful mother's guide, which should find a place in every home. It is not intended to take the place of medical advice, when such is needed, but it will often serve to allay needless anxiety, and indicate the right course to be pursued.

FREE TO MOTHERS

Those who are genuinely interested in the subject may obtain a Free copy of the Book by sending name and address on a postcard to Savory & Moore, P.O. Box 1601, Montreal.

EAGLE MOTOR STYLE

Write to-day for our big **FREE CATALOGUE** showing our full line of Bicycles for Men and Women, Boys and Girls—Tires, Coaster Brakes, Wheels, Inner Tubes, Lamps, Bells, Cyclometers, Saddles, Equipment and Parts for Bicycles. You can buy your supplies from us at wholesale prices.

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

"Jolly Jack Tars" are no misnomers. They are the merriest and most jovial of men.

Canadians will serve in a separate division and wear a distinguishing badge—Young Canadian, join the R.N.C.V.R. and carry the Maple Leaf into the Imperial Royal Navy.

KITCHENER'S ONLY LOVE

The true story of the oft-told conversation between Lord Kitchener and her late Majesty, Queen Victoria, is at last out. So declares a London magazine. After being granted a peccage, it was Lord Kitchener's duty, of course, to visit the Queen, who at the time was in residence at Balmoral Castle, Scotland. On being ushered into the royal presence, Kitchener rather surprised Her Majesty by his courtly, soldierly, and yet cheerful manner. She could not at all reconcile it with what she had been led to expect—stiff, austere six feet two inches!

The introduction over, and the story told from his own lips of the fall of the Mahdi, the Queen, with that insinuating gentleness of which she was a master, asked Kitchener if she might address one or two personal questions to him.

"There is nothing personal that I cannot tell your Majesty," replied the soldier.

"It is of common report, your lordship, that you have a strong repugnance to women. Has report lied again?"

"I have often been amused, Your Majesty," said Kitchener smiling, "on hearing the report. I am not guilty of the charge."

"Perhaps it has arisen from the fact that you have not yet thought it advantageous to call a partner to your side?"

"I am still a soldier, Your Majesty," replied the soldier again good humoredly.

"And so you have never loved any woman?"

"Oh yes, I have and do still love."

"May I be privileged to have the name of the good lady?" asked the Queen.

"The only woman whom I love is Your Majesty."

It is said that, after the interview, the Queen confided her impressions to a member of her family, remarking, "Such a man ought to have the best."

The Rule for Fondant.

Ingredients—2 cupfuls granulated sugar 1 pound, 2-3 cupful water, 1/4 saltspoonful cream of tartar, scant.

Put ingredients into a small saucepan, heat slowly, stirring with a wooden spoon until the sugar is dissolved—no longer. Boil carefully—wiping away all crystals that form on the sides of the pan—until 238 degrees F., or the "soft ball" stage, is reached. If a thermometer is not used, begin testing as soon as large bubbles appear. Dip a wooden skewer into a cupful of ice water, then into the syrup, and again into water. If the syrup which clings can be rolled into a soft ball, the fondant is ready. Pour it carefully onto a lightly oiled platter or marble slab; do not scrape out that which remains in the pan. Let stand a few minutes until it will hold an impression of the finger. Now work, using a wooden paddle, until creamy; knead until smooth. Place in a bowl, cover with oiled paper; let stand twenty-four hours.

Great Britain
Great Britain

SCOTLAND FOR EVER

TALKS ON TRACTOR FUELS

By The Imperial Oil Company, Limited

AT the Eastern Canadian Tractor Demonstration November 1916 more than half the engines ran on kerosene. You can probably use kerosene in your tractor, and if so, you will save 33 1/3% to 50% in fuel cost; and 500 prairie tank stations (there is one near you) can supply you with whatever fuel you require. Be sure to get **SILVER STARKEROSENE, ROYALITE GOAL OIL** or **PREMIER GASOLINE.**

Cast Iron Breakages Welded
By the Oxy-Acetylene Process

WE ARE THE PIONEERS OF THIS PROCESS IN THE WEST

Our repairs are permanent and our welds absolutely guaranteed. Prices reasonable. All machinery parts welded. We operate a machine shop in connection with the welding department. Worn or scored engine cylinders rebored and fitted with oversize pistons and rings.

INQUIRIES CHEERFULLY ANSWERED

Manitoba Welding and Mfg. Co.
(Established in 1911)

58 PRINCESS STREET WINNIPEG

MAKE YOUR BIKE A MOTORCYCLE

At a small cost by using our Attach also outfit. FITS ANY BICYCLE. See it attached. No special tools required. Write today for data. **FREE BOOK** describing the G.L.V. Bicycle Motor Attachment, Motorcycles, all makes, new and second-hand, etc and etc.

SHAW MANUFACTURING CO.
Dept 199 GALESBURG, KANS., U.S.A.

BOOK ON DOG DISEASES
And How to Feed

Mailed free to any address by the Author

H. CLAY GLOVER CO., Inc.
118 West 31st Street, New York

America's Pioneer Dog Remedies

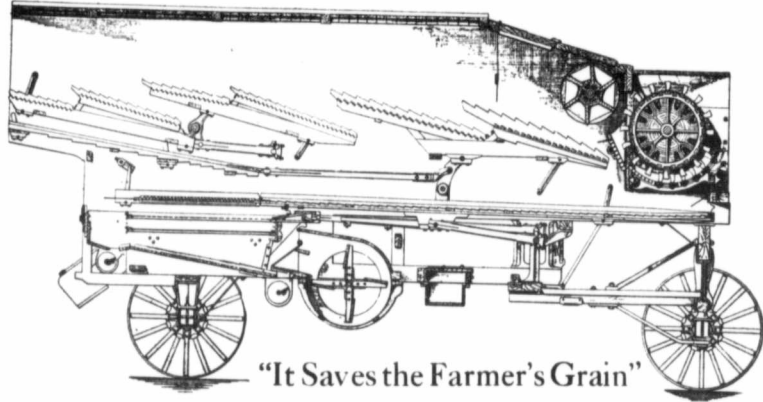
"The Great Minneapolis Line"

This year the farmers are going to insist on having their grain saved, even though they pay a little more for the service. The wise thresherman will prepare now to meet this demand. Any old machine will not do.

If your power has not been satisfactory and you contemplate making a change before the coming threshing season, by all means make your selection now and get your engine home.

Buy
a
Minneapolis

We
must
not
waste



Why
take
a
chance

Prepare
Yourself
NOW

"It Saves the Farmer's Grain"

If your machine is a late improved Minneapolis you are sure to have a long and profitable run because the Minneapolis separator has long since won fame and renown and established an enviable reputation for saving the grain. It is the thresherman's favorite and the farmer's first choice. The cost of upkeep is comparatively small. Investigate thoroughly.

In selecting bear in mind that Minneapolis steam engines and gas tractors have given universal satisfaction, that the demand for them has grown from year to year, and despite numerous large additions to our factory it is taxed to the utmost to supply those who prefer Minneapolis to those of other makes. There are many reasons for this increasing demand. Compare carefully.

"OUR CUSTOMERS ARE OUR REFERENCES"

H
A
R
V
E
S
T
I
N



SEPARATORS	FARM MOTORS	STEAM ENGINES
24x36 Jr.		
28x46 Std.	15 H.P. 4 Cyl.	16 H.P.
32x52 ..	20 H.P. 4 Cyl.	20 H.P.
32x56 ..	40 H.P. 4 Cyl.	24 H.P.
36x56 ..		28 H.P.
36x62 ..		
40x62 ..	Plows in sizes to suit.	Single Cylinders
40x72 ..		

GRAIN ECONOMICALLY \$\$\$\$\$\$\$\$\$\$ CLEAN, PERFECT

Our Catalog describes the entire Minneapolis Line, and it will be a pleasure to send one to you free upon request.

Large Colored Poster or a Thresher's Account Book is yours for the asking.



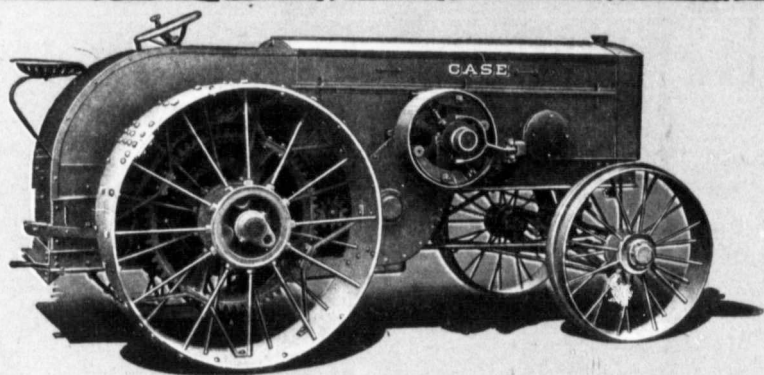
H
R
E
S
H
I
N
G
!!!

THE MINNEAPOLIS THRESHING MACHINE CO.

HOPKINS (WEST MINNEAPOLIS), MINNESOTA

WINNIPEG, MANITOBA

REGINA, SASKATCHEWAN



THE CASE 12-25 KEROSENE TRACTOR

When you buy, choose the tractor that that will give you faithful service day after day and year after year. One that is adapted to both field and belt work. One that is simple and accessible. One that will burn *kerosene* or *gasoline* economically.

The Case 12-25 is just that type of tractor. It's for the farmer who wants something good, NOT something cheap. It is designed by skilled engineers, constructed honestly for power farmers. It drives a Case 26x46 Thresher with all attachments and handles a four bottom plow

You are urged to know all about the Case 12-25. You are entitled to full value. That's what you get in a Case 12-25. Let us furnish you with complete details. Sent gladly on request.

J. I. CASE T. M. COMPANY, Inc.
844 LIBERTY ST. RACINE, WISCONSIN

Canadian Branches: Winnipeg, Calgary, Regina and Saskatoon

CASE