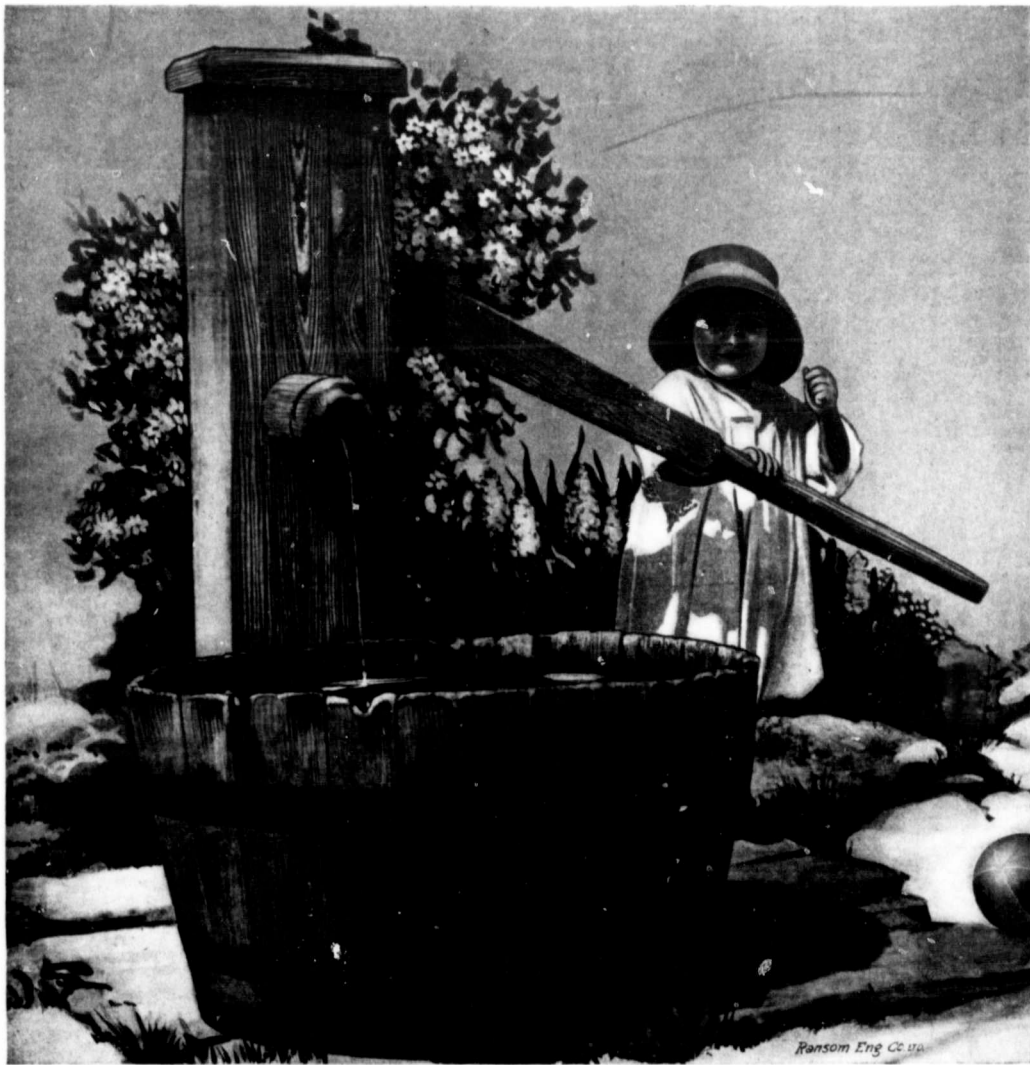


The CANADIAN THRESHERMAN AND FARMER

WINNIPEG CANADA

MAY
NINETEEN FOURTEEN

BETTER FARMING — BIGGER CROPS — BETTER PRICES



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

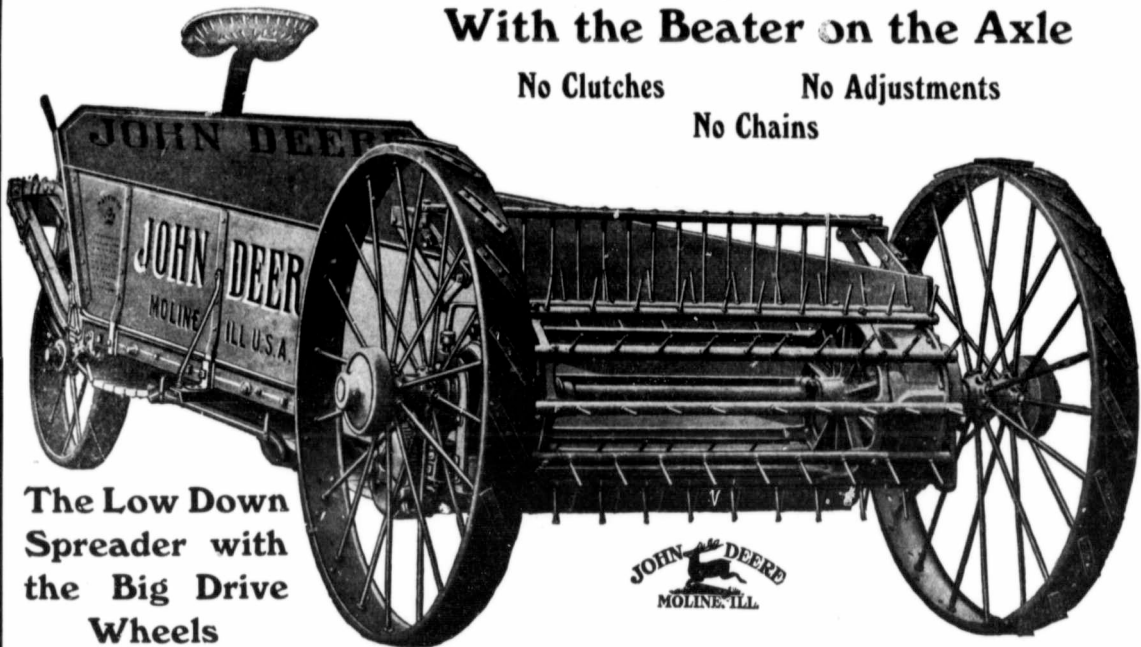
John Deere Spreader

With the Beater on the Axle

No Clutches

No Adjustments

No Chains



The Low Down Spreader with the Big Drive Wheels



Repeated trials extending over a number of years have demonstrated the fact that a Manure Spreader used on forty acres of land will more than pay the cost of the machine in one season by increasing the crop, to say nothing of the great saving in labor.

WHAT YOU WANT

Here's your chance to get exactly what you want in a manure spreader. One that is easy to load, light for your horses, free from constant repairing, and one that will last as long as you think it ought to.

WHAT YOU GET

With a John Deere Spreader you get a low-down spreader in which the advantage of big drive wheels is not sacrificed for the low-down feature.

You get a spreader that is easy for your horses because it has these big drive wheels, together with roller bearings, few parts, the center of the load comparatively near the horses and evenly distributed over all four wheels.

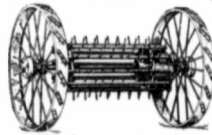
There are no clutches to get out of order, no chains to give trouble, no adjustments necessary.

Built with a steel frame, securely braced, like modern railway bridges—strong and durable.

WHY YOU GET THESE THINGS

Mounting the beater on the axle makes all these things possible in the John Deere Spreader.

It does away with some two hundred trouble-giving parts. It makes the spreader low-down. It belongs, not on the sides and frame of the spreader.



The Beater on the Axle.

It does a lot of other good things, too. They are fully illustrated and described in our new spreader book.

THIS VALUABLE BOOK FREE

Our new book, "Farm Manures and Fertilizers," was written to give our customers plain facts about how to raise more crops on the same land: what kind of fertilizer to use, when and how to apply it; and how to get the best results. With this book we will send you an illustrated folder telling all about the John Deere Spreader.

John Deere Plow Co., Ltd.

Winnipeg Regina Saskatoon Calgary
Lethbridge Edmonton

ROLLER BEARINGS, together with the simplicity of the machine itself, make the John Deere Spreader light draft. There are many more reasons that have helped to make the demand for John Deere Spreaders greater than all those interested in the spreader business thought possible. These features are fully discussed in our spreader book. You can get it free.

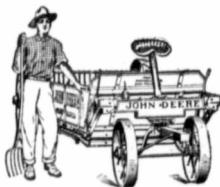
FEW PARTS. Clutches, chains and adjustments—in fact, some two hundred parts in all—are entirely done away with. To throw the machine into operation move the lever at the driver's right, back until the finger engages a large stop at the rear of the machine.

ONLY HIP-HIGH, easy to load. The top of the box is only as high as your hips. Each forkful of manure is placed just where it is needed. You can always see into the spreader.

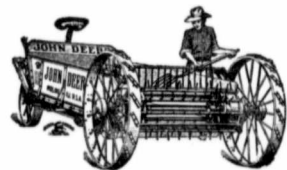
POSITIVE APRON DRIVE.

By the use of a very simple locking device on the inside of the ratchet feed, the apron is positively locked against racing when spreading up-hill or over exceedingly rough ground. The result is that when spreading with the John Deere Spreader, the manure is always spread evenly. A ratchet feed that is entirely new to manure spreaders is put on the John Deere. It is driven from one end of the beater by a large eccentric that gives the two ratchet arms forward and backward movement.

BEATER and all its driving parts are mounted on the rear axle. Power to drive it is taken from the rear axle through simple gears like those that have been used on horse-powers for many years. This construction is patented. You cannot get it on any other spreader.



Only as high as your hips.



Low down, easy to load.

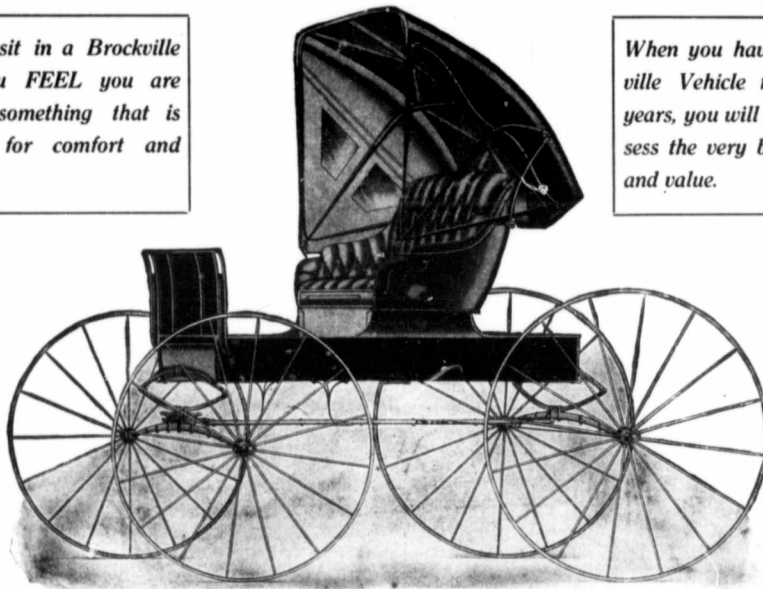
A BROCKVILLE CARRIAGE

is the Standard of

Class, Convenience and Quality

When you sit in a Brockville Vehicle you *FEEL* you are riding in something that is unequalled for comfort and elegance.

When you have used a Brockville Vehicle for a number of years, you will *KNOW* you possess the very best in durability and value.



No. 548 BROCKVILLE AUTO SEAT AND TOP

Greatest Variety

No Canadian House offers such an extensive selection of high class carriage specials as that covered by the BROCKVILLE LINE. It includes exclusive features in **Light Runabouts, Open Road Wagons, Top Buggies, Democrats, Surreys, Special Jobs, Delivery Wagons, School Vans, Pony Carts, etc.**

The BROCKVILLE Always LEADS— Others Follow

Every possible improvement that will add to the appearance or serviceableness of a buggy is first and instantly adopted on the "Brockville" Line. If you seek the very best possible—see a JOHN DEERE DEALER or write to

Finest Designs

For beauty and real novelty of design, there is nothing on the market so uniformly classy as the "Brockville Buggy". The "Brockville" was the first buggy to be equipped with "Inside Top Joints," whereby the top can be raised and lowered from the inside. One of the best improvements ever introduced on a top buggy.

John Deere Plow Company Limited

WINNIPEG
REGINA

CALGARY
SASKATOON

EDMONTON
LETHBRIDGE

Ask your nearest John Deere dealer to show you the Brockville Wrought Iron Line

MR FARMER WHERE DO YOU WANT YOUR GRAIN?
IN THE STACK OR IN THE SACK?
THE GEARLESS RUSSELL
 WITH THE SHARPE
 GRAIN SAVING FEATURE
PUTS IT IN THE SACK.



IF YOU THRESH FOR ME! YOUR SEPARATOR MUST HAVE THE GEARLESS RUSSELL WITH A SHARPE SAVING FEATURE! I'M TIRED OF LOSING MY GRAIN



WRITE THE RUSSELL WIND STACKER CO. INDIANAPOLIS, IND.

Use
 FLO
 5
 Mention this m.

Mack Thom Mack MacDo
 Barrist
 Regim
 Norm
 Hon.
 Dr.
 T. S.
 Hector
 Fra

General Solistic Thresher Manual
 General Solistic Collectors' Ann
 General Solistic and Implement Six Thresher an
 Saskatchewan.

Mention this mag


OGG ROU HOU FI




NEVE IN ITS EXC
 Makes a laq
 crisp crust, t
 fi

The OGILVIE
 Medicine Hat, Winnip

Mention this magaz



THE PREMIER COMPANY
THE PREMIER GOODS





Sawyer-Massey Gas Tractor, 25-45 H.P.

TRACTORS OF PROVEN WORTH

Plow and thresh this year with a SAWYER-MASSEY Tractor, the Premier of Canada.

The SAWYER-MASSEY 25-45 Gold Medal Gas Tractor is the machine for the Western farmer and thresherman, proven by repeated trial in actual field work and contest the best and most efficient Gas Tractor in Canada. It is made by a Canadian Company to meet the most trying conditions, and has repeatedly demonstrated its superiority over all competitors.

SAWYER-MASSEY Steam Tractors are the leaders in their class. Made in many sizes, there is a SAWYER-MASSEY Tractor for every farm. Investigate these machines carefully and talk with men who own one of them. What they have done for others they will do for you.

Our Illustrated Catalogue and a copy of the "Sawyer-Massey Chronicle," a magazine devoted to the interests of users of farm power machinery will be sent you on request.



SAWYER-MASSEY COMPANY, Limited

Builders of Steam and Gas Tractors, Grain Threshers and Road-making Machinery.

Head Office and Factory HAMILTON, CANADA

Branches and Warehouses: WINNIPEG, Manitoba; REGINA, Saskatchewan
CALGARY, Alberta; Agency, BUENOS AIRES, Argentina.

SAWYER-MASSEY

A
MACA
FU

Vol. XIX.

A
LMOS
can
pen
now
express
or another
of Canada
"voice" wort
has been lit
the voice of

Trees spee
comfort, cor
and what is
to many w
notes, they re
that few m
of fact sent
less farmers
ever contemp
if they know

Take the
value first-
farm that ha
little outlay
transformed
a state of
desolation in
paradise of be
and comfort.

the aesthetic
alone, we hav
cently read a
ber of letter:
Manitoba and
Satchewan f
ers who
eight or ten y
ago were ind
by the Fore
Department

plant inexp
and easily c
ated shade
around th
homes, and ir
pressing their
tonishment

the remark
growth which
taken place, t
that it near
\$500 to \$2500
of the place."

"Down Eas
the mere lumb
shade trees a
praised at \$3.
ment forest se
thousand tw
seventy-five d
despised cotto
years old! A
estimate of th
to crops and

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

A MAGAZINE FOR

The CANADIAN THRESHERMAN AND FARMER

THE FARM AND HOME

Vol. XIX.

WINNIPEG, CANADA, MAY, 1914.

No. 5.

ALMOST every voice that can articulate, and every pen that can write, has now expressed itself on one phase or another of agriculture in Western Canada, but there is one "voice" worth listening to that has been little heeded so far—the voice of the trees.

Trees speak of protection, of comfort, companionship, beauty, and what is still more acceptable to many who will read these notes, they represent a cash value that few matter-of-fact sentimentless farmers have ever contemplated if they know it.

Take the cash value first—of a farm that has at little outlay been transformed from a state of bleak desolation into a paradise of beauty and comfort. On the aesthetic side alone, we have recently read a number of letters for Manitoba and Saskatchewan farmers who some eight or ten years ago were induced by the Forestry Department to plant inexpensive and easily cultivated shade trees around their homes, and in expressing their astonishment at the remarkable growth which has taken place, they invariably add that it means anywhere from \$500 to \$2500 to the "appearance of the place."

"Down East" some time ago the mere lumber value of a row of shade trees a mile long was appraised at \$3,275 by the government forest service men. Three thousand two hundred and seventy-five dollars for a row of despised cottonwood trees forty years old! And a conservative estimate of the protection given to crops and buildings by this

WEALTH IN WIND-BREAKS

mile-long row of trees during the forty years is given as thirty-five thousand five hundred and eighty-five dollars!

its environment of soil and climate, no less valuable results can be secured in almost any neighborhood.

Mister Land-Miner, but sentiment has a cash value that you have not the means to understand until it comes to the very practical and serious question as to whether you with your "waste howling wilderness" or your neighbor who has saved his property from that indignity by planting a few trees and shrubs on it shall find a purchaser in the sentimental person who has come to inspect the two properties lying side by side.

But this is the remotest advantage to be gained from the trees around the home and stock barns. There is an immediate benefit of economic as well as aesthetic value to be found in the simple and inexpensive act of planting a few trees and shrubs around the bare walls of the homestead that will quickly lift it from a depressing atmosphere of solitude into a sanctuary of sociability, self contained and radiating good cheer to a whole countryside.

We have scores of impressive object lessons on this point ready to hand and they are now multiplying fast on every hand—thanks to

the energy and zeal of our Forestry Department and the intelligent results of private effort.

At the top of next page we illustrate the home and out-buildings of the Superintendent of the Indian Head Experimental farm photographed in 1904. This early effort at home-building on the "lonesome trail" needs no comment. It was never the intention to leave it like this, but to make it look like home and in time demonstrate that it is not



Elegance and comfort in a prairie home. Bungalow residence of J. D. McGregor, near Brandon.

This report was made after these same experts had examined a hundred and thirteen such plantings, and they add that had that row of cottonwood been of maple, American elm, ash or some other high grade shade tree its value would have been double this amount. These are no "random reckonings," but a careful estimate made by men of long experience in forestry work of actual benefits that were realized. By a commonsense adaptation of the right kind of tree to

This article has special reference to those who are farming somewhere on that wide expanse of prairie that reaches out to the sky line between which and the lonely homestead there is not even the ghost or promise of a tree or shrub. This is the "outlook" that more than anything else takes the heart out of the settler from the bosky British homeland, from the New England states or some garden spot in the blue grass country.

This is all "sentiment," you say,

only possible but perfectly easy to produce the same remarkable results as shown in the larger picture in center of the page.

deciduous trees leading up from the main road almost to the house door.

On the opposite page will be

of "foundation stock." There wasn't so much as a sage brush or thorn brush on it when its owner settled on the land; nothing but prairie sod but it covered a quality and depth of soil that would feed practically any form of plant life.

One feature of the protective influence of trees that is scarcely less valuable than the sheltering of stock and buildings is the fact that they have the effect of holding the moisture in the soil by breaking the force of the hot summer winds which play such havoc in rapid evaporation over the bare sun-scorched prairie. Further, the snow, held by them in winter as it melts in the spring, furnishes considerable moisture to the land in the tree zone which otherwise would have missed the extra snow blanket, and the normal covering would have been quickly swept into the atmosphere.

The foregoing indicates what

creation is the fact that we have given hostages to posterity.

This "posterity" plea was once advanced in the British legislature (so it is alleged) in behalf of a measure the immediate benefit of which was not apparent to at least one Irish member who desired to know "phwat these 'posterity' fellows had ever done for us that we should be spending so much money on them?" There are, of course, numbers of men who decline to move at all or to spend a dime that they cannot see on its way back in their own little life time; but with such a wretchedly poor appreciation of the case for the trees we feel sure we need not seek to argue with any subscriber to this magazine.

Had those who preceded us but a generation back, not to speak of the grandsires of an earlier day withheld their hands instead of spending the goodly portion of their time and energy they seem to have done in tree planting—what glorious exhibitions of forest wealth would have been lost to us today! What magnificent and alluring pictures of a natural grandeur and home life would now be nothing less than bleak, wind-swept moorlands, or it might be dumping grounds for the flotsam and jetsam of a citizenship that had no eye for beauty and comfort beyond the bricks and mortar of its inhospitable dwellings!

In Western Canada, on the most unkindly looking waste, the richness of the soil guarantees the full reward of a generous employment of time and money spent in this way even in

perfectly ment of which g rapidly.

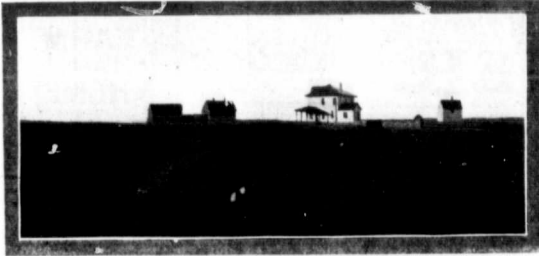
With a the higher ments of with each most temp dwellers who will grand ide with those beauty, th the cold b hot bre climatic wh prairie wh successfull date the p

Trees are terms to-d instruction them are so no excuse d or want o ledge can idea of a t arbor day—one day of but on a days as th can be sp this deligh profitable tion of ro ting the pra

There o little doubt one time a portion of f now an ur sea of gr grain crop a the eye can was here an heavily tin but has be nuded of tre haps many tes ago by ring prairie started no by the aborig the most co to this is to points and c that it does



Where trees are not is because the Few things are more eas



Not a shrub in sight! Residence of Superintendent of Experimental Farm and out-buildings at Indian Head. This picture was photographed in 1904 before planting the trees and shrubs which have made it one of the beauty spots of the West. Note the transformation after four short growing seasons in next picture—photographed in 1908.

taken off the same spot just six years later from the same point as the earlier photograph.

Speaking of Indian Head recalls a striking confirmation of the protective value of a shelter-belt as affirmed by the forestry

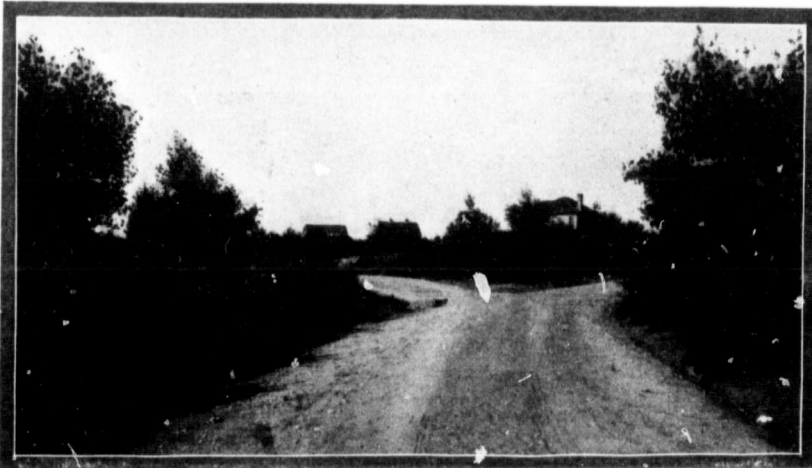
experts already referred to. Visiting Indian Head not long ago after a violent wind storm, the late Dr. Saunders was being conducted over the Experimental Farm by Mr. Mackay the Superintendent. He noticed several fields of grain alongside the young shelter belts (then about 15 feet high) which had suffered badly from the force of the wind. For about 750 feet out from the wind-break the grain crop was green and standing in good condition,

but beyond it began to get thinner and thinner and for a few feet it was entirely obliterated. There the whole crop was wiped out by the force of the wind blowing the plants out of the ground.

Dr. Saunders and Mr. Mackay measured the fields at several points and found that for each foot of tree growth there was about 50 feet of protection; that is to say that a shelter belt only 10 feet high protected a width of about 500 feet of the field.

So much for the saving of the crop, but of no less importance is the protective influence of the trees on the farm buildings and stock. One of the very best illustrations of this is to be seen in the case of Mr. J. J. Ring's farm two miles out from Crystal City. In our March issue we gave a reproduction of the home buildings showing a portion of the fine double avenue of evergreen and

found an extensive double shelter belt on the same farm and its effect on the worst efforts of a severe snowstorm to get into the barn yards. Within, all was comfortable—no drift snow whatever, and as the farm is exposed on all



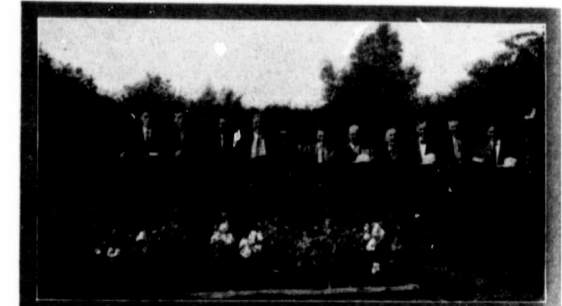
Photographed in 1908 from same point as picture at top of page. Does it call for any comment?

sides to the free course of every wind that blows, it can be readily imagined what the congestion might have been but for the trees.

Over 20 acres are enclosed in this way, made up of five small pasture fields and the large home garden. The kindly influence of the trees is an all the year round experience. Poultry, hogs, calves and foals find shelter from the hot sun and cold winds, while the horses and cattle are let out every day during the winter and are fed in those protected feed lots except on the very coldest days of an extreme winter.

The effect on the vegetables, small fruits and flowers is most noticeable and the very best results in exhibition specimens are an invariable experience on this farm. From the point of view of beautification only, the effect is marvellous when one realizes that it started from nothing in the way

benefits accrue to any intelligent movement in tree planting within a year or two from the time the young things take root and find



Some of the "Boys" of Indian Head who have turned the prairie wilderness into a Garden of Eden.

themselves at home in the soil. But in planting a tree, not the least good office we render to the world of mankind and the brute

the best years — the mellow autumn of a man's own life time. We have a wide range of beautiful trees to draw upon that are

perfectly adapted to the environment of soil and climate and which grow with marvellous rapidity.

With a prescience that deserves the highest credit, our Governments of all parties have vied with each other in offering the most tempting bounties to those dwellers on the treeless plains who will fall in line with the grand idea of populating them with those living monuments of beauty, those bulwarks against the cold blasts of winter and the hot breath of midsummer, climatic features of the open prairie which have been used so successfully in the past to intimidate the prospective settler.

Trees are to be obtained on such terms to-day and the necessary instructions as to the handling of them are so readily available that no excuse on the score of expense or want of horticultural knowledge can be urged against the idea of a universal arbor day—not on one day of the year but on as many days as the time can be spared to this delightful and profitable occupation of repopulating the prairie.

There can be little doubt that at one time a large portion of what is now an unbroken sea of grass or grain crop as far as the eye can reach was here and there heavily timbered, but has been denuded of trees perhaps many centuries ago by recurring prairie fires, started no doubt by the aboriginal Indians. Indeed the most conclusive evidence as to this is to be found at many points and certainly to the fact that it does not follow that if

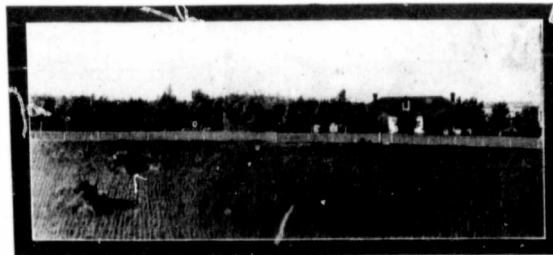
than the growing of certain hardy and extremely beautiful trees around a homestead, but like everything else there are certain conditions to complete success that must be complied with.

In some neighborhoods the rainfall is not abundant and so the old time method of dibbling a hole, sticking in the sapling and leaving it to take its chance will not do. Then it must be remembered that from the first the trees have to withstand a great deal of exposure to storms and extremes of temperature. Further, the soil of the prairie as we now find it after ages of exposure to the elements is so compact and hard that it needs to be specially prepared for the reception of young trees even of the most robust varieties.

There is a vast difference between the texture of the soil on the open prairie and that of the forest. In the first case there is a covering of tough compact sod

Following Nature's method, therefore, if we are to expect a uniform success in even the smallest experiments around the

the disc harrows. After the second plowing, the soil should receive frequent cultivation. Later in the fall a third plowing should



A source of pride to anyone. A transformation scene from the bare sod of a few years ago.

prairie home, we've got to "loosen up."

With regard to soil preparation for the reception of trees, Mr. Norman Ross (Chief of the Tree Planting Division) says in his exhaustive work on the subject: "In most cases trees will be found to do best on land that has been

be given, working up the ground eight or ten inches deep. On the following spring no further plowing will be necessary except when the trees are being planted, and then a plow should be used to open up a deep furrow in which the young trees are to be set."

Perhaps the very best preparation of the soil for trees is, in the season preceding planting to grow potatoes or some other hoed crop requiring deep and constant cultivation, and in the fall, after the crop is removed, again plow the land as deep as possible."

The variety of trees and the disposition of them is of course to a large extent a matter of taste in the hands of the farmer but he will first of all have to find out and make a list of those varieties which experience has found will succeed or are not likely to do well in the particular character of soil on his farm. Again we might quote from the authority already referred to, but as the matter covers so much ground and has been so thoroughly gone into by Mr. Ross, we strongly recommend those we can interest in this great forward movement to obtain a copy of this (Bulletin No. 1) from the Forestry Branch, Department of the Interior. It covers practically all conditions common to the three provinces of Manitoba, Saskatchewan and Alberta.

Let the open season of 1914 be a time of preparation at every suitable opportunity for planting as soon as the frost leaves the soil in 1915. Get your information down pat and see some reliable nurseryman's stock in course of the summer. Wayside seedlings are scarcely worth collecting and are not uniformly successful when transplanted.



A young shelter belt on farm of J. J. Ring, Crystal City. Not yet in its "teens" but doing duty worthy of a veteran forest.

while the soil beneath it is so hard as to be almost impenetrable for the roots of plants. In the forest, however, there will invariably be found several inches

under crop for at least a year previous to planting. But as many have no land under cultivation where they wish to plant, they can by a very thorough cultivation of the soil during one season in an ordinary year bring it into fit state for setting out the young trees. In a very dry year one season may not prove long enough to sufficiently rot the sod, and in such cases it will be more satisfactory to defer planting until the land is in a suitable condition, as upon this practically depends the future success of the plantation."

"To prepare sod land for planting" (still quoting from Mr. Ross's bulletin), it should be broken about two inches deep as soon as the frost leaves the ground in spring. When the sod is fairly well rotted, it should be backset about two or three inches deeper and thoroughly worked up with



Where all—man and beast alike—are welcome to the cool shade.

trees are not in sight anywhere it is because they cannot be grown.

Few things in home building are more easy and inexpensive

of loose, decaying vegetable matter and a subsoil comparatively open and porous owing to the action of the tree roots.

THE CANADIAN THRESHERMAN AND FARMER

CANADA'S LEADING AGRICULTURAL MAGAZINE

E. H. HEATH,
PRESIDENT

E. W. HAMILTON,
MANAGING DIRECTOR

F. C. BRAY, TREASURER

PUBLISHED MONTHLY BY



E. H. HEATH COMPANY, Limited,
WINNIPEG, CANADA



(MEMBERS WESTERN CANADA PRESS ASSOCIATION)

J. D. DUTHIE, EDITOR
C. B. FULLER,
FIELD REP.

U.S. Representatives—
JAS. A. BUCHANAN
CHAS. M. BEER
1313 MARQUETTE BLDG.
CHICAGO, ILL.

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

MAY

TEMPERATE FARMING

1914

OUR GUARANTEE

No advertisement is allowed in our columns until we are satisfied that the advertiser is absolutely reliable and that any subscriber can safely do business with him. If any subscriber is defrauded E. H. Heath Co., Ltd., will make good the loss resulting therefrom, if the event takes place within 30 days of date advertisement appeared, and complaint is 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 WEALTH OF THE FARM is the same as the first wealth of the nation, viz. its health". We quote from a very thoughtful letter sent us under the above caption, the substance of which we propose setting forth in this page. Referring to our day of "strenuous endeavor" and the fact that the exacting conditions of the West under the stress of its rapid development demands the best of manhood, this correspondent goes on to point out some of the many object lessons the country offers in the science of living and thriving. It is "essentially the trying out ground" of the manhood and womanhood which the nations are sending out to make a fresh start on the road to that objective which the humblest worker never has out of mind.

THE HARDIHOOD OF THE NORTHERN RACES stands out everywhere in bold relief when we look for examples of that virility that seems to dominate and conquer against all odds in an open field when it comes to a contest between "plain living and high thinking"

and the supineness of a more easy-going indulgence. The average farmer, says our correspondent, is supposed to be a very healthy individual owing to the fact that he breathes so much of the fresh air in his daily round. This, however, is only partly correct as the farmer in many cases has set up conditions which to a greater extent than he suspects counteracts the natural advantages of his outdoor life.

STUFFY FARM HOUSES, especially during the winter months, and the rapid consumption of meals every day of the year are to be regarded as among the chief set-backs to the otherwise salubrious environment of the farming life. Our friend points out also that the long hours spent at the threshing outfit involving just as long a fast followed by the "galloping consumption" of some unusual and often hastily-prepared food is bound to leave its impression for the worse sooner or later. He pays a tribute to the porridge-fed plowmen of Scotland—offering as they do a good example of the beauty and value of an easily digested diet of simple, wholesome, inexpensive food.

FRANKLIN'S STRICTURES ON OVER-EATING are more needful today than they were at the dawn of the American Republic. The old printer, philosopher and statesman laid down some stringent rules for the guidance of himself and others with regard to "feed", and made the observation which is as up-to-date in our day as it was in his that the destructiveness of over-eating is by far and away ahead of that of under-eating. Most people agree that "we all eat too much", but most people still continue to follow the custom of getting rid of just exactly what description and what quantity of food is

placed before them, and the drug business of this western country offers a sad comment on what its population finds it necessary to submit themselves to by way of "correcting" their habitual indulgence.

THE SPEED FEVER OF THE WESTERN FARM, however, is another point in our correspondent's onslaught upon this absurd idea of the art of living. Everything is being geared to a higher and still higher speed till the notion of a "sober thought and the enjoyment of life with its embellishment of art" is being completely swallowed up in the rushing tide of a life that cannot stay. The prospects of a "quiet eventide" are becoming sadly remote to many men on the farms to-day as well as to the no less insane "pacers" of the city's business life.

LIFE AT A WHITE HEAT all the time, whatever the reward in dollars' worth at the end of it is a fool's game. Our correspondent recalls the picture of restfulness at the end of the day, of the ideal of that life of work and worship that is alone worth living, described in Burn's "Cottar's Saturday Night". And he is positively right when he presents this as offering "an ideal ambition to become a millionaire of contentment with vigorous health and little worry, rather than to race through life chasing the will o' the wisp of money-bought pleasure". The highest wisdom is to be found in a rational adjustment of the periods of toil and recreation. Intemperance in either case is a blight and a curse.

THERE'S REAL ENJOYMENT even in hard work, but hard work cannot be carried on continuously at top speed without some rational interlude of rest or re-creating of exhausted nerves if a man is to "enjoy" his work. And recreation isn't worth the name unless it has been earned. Real hard work is the only royal currency for the purchase of any honey-pot of rest and recuperation that hasn't got a fly in it, but the everlasting grind that submits to any or every "mortification of the flesh" that will add one more dollar to the pile has not one recorded instance in history or biography to commend the practice to any seeker after true success

"**CONTENTED WI' LITTLE**, I aye found mair than I socht", was the life-long experience of a countryman of Robert Burns, who began life under conditions of poverty and hardship not unlike those of the poet himself. It was part of his creed that no man is permitted to accomplish more than the Almighty had instructed him through his own commonsense he was able to manage. This man rose early, fared plainly all his life; was known to his friends as "Genial Johnnie," and this sobriquet was engraved on his coffin plate by one whom he had helped again and again from his treasury of love and a purse that was never empty.

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.

Failing 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.

25 H.P. 4-Cylinder Vertical

EX

The

H Inve

TI



"The Great Minneapolis Line"



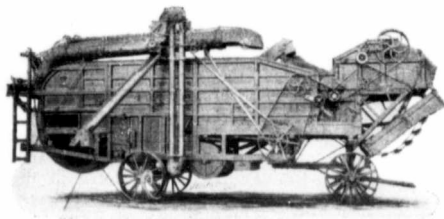
Quality

Always Satisfactory

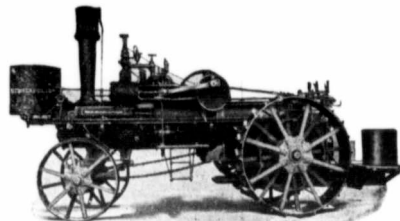
Service

You do yourself a great injustice if you purchase a threshing or plowing outfit without first investigating the many special and superior features of the **Minneapolis**.

Investigate **Carefully--Know Minneapolis Machinery** thoroughly and we feel sure you will favor us with your orders.



**An
Ideal
Threshing
Rig**



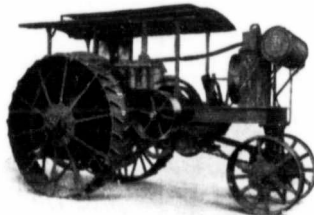
SIMPLE IN DESIGN.

**Very Durable
Always Reliable
Economical**

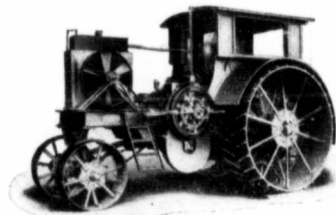
"IT SAVES THE GRAIN"

**Threshes Faster
Cleans Better
Lasts Longer**

25 H.P.
4-Cylinder
Vertical



**Tractors
that
Attract**



40 H.P.
4-Cylinder
Horizontal

Excellency of

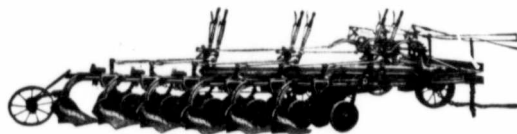
**Design
Material
Finish**

make Minneapolis Tractors

**Easy
Profitable
Safe**

to Operate

Stubble



Breaker

The Minneapolis Power Lift Plow will give you excellent service and satisfaction.

**How to
Investigate**

Send for our latest General Catalog and Testimonial Booklet.
Arrange to see sample machines if possible.
Let us send a representative to talk it over with you.
Ask any of our many customers.

Decide according to your own good judgment and order early from

The Minneapolis Threshing Machine Co.

Hopkins

(West Minneapolis)

Minnesota

REGINA

WINNIPEG

CALGARY

EDMONTON



MIXED FARMING

MANITOBA - SASKATCHEWAN - ALBERTA

BY W.C. McKILLICAN B.S.A.



The Effect of Mixed Farming on the Land

Last month I endeavored to show that mixed farming would give a larger immediate return for money and labor invested than is being obtained under present methods. In this article I propose to deal with the effect of mixed farming on the land and to show that by improving its yielding power, the land will be made a more profitable source of income from year to year.

Fertility

The virgin soil of Western Canada is stored with an enormous supply of the elements of plant food required for the production of crops. The constituents that are most essential and are drawn from the soil in largest quantities are potash, phosphoric acid and nitrogen. Fortunately these are largely in an unavailable form. I say this is fortunate, because, were all the plant food readily available, we would use it all up in a few good crops, and then our soil, like our minerals and timber, once used, would be gone for ever. But nature is more provident with the riches of the soil, she loosens her hold on a little of her wealth but always holds back a reserve. The available portion of the plant food is in solution in the soil moisture, and is taken up by the plants in that form. The unavailable portion is mixed with the other constituents of the earth in the form of the hard particles which we call the soil. The unavailable is made available by the cultivation of the land, by its exposure to sun, and air and moisture and the action of bacteria. These agents bring it into a soluble condition and then the roots of the plants are able to absorb and make use of it. When a crop of grain or any other crop is grown, a considerable portion of the available plant food is used up. If the grain is sold and the straw burned that plant food is gone and the soil is so much the poorer. The plant food used up by a few crops of grain is really not large compared to the total amount stored up in the soil. The difficulty is that the available, soluble portion is soon used up, if grain growing is continuously practised. Summer-fallowing is the cure that has been used under these circumstances,

and it has often been very successful. The effect of a fallow is to bring into soluble available form much of the plant food that was hitherto tightly locked up. The plowing and cultivation, the exposing the soil to the sun and air and the storing up of moisture all help to unlock Nature's storehouse of plant food. The summer-fallow is thus not a means of adding to the store of plant food (except water) but is simply a stimulant whereby what is al-

ready stored up is more rapidly prepared for use and used up. Some of our very rich soils can stand this depletion for many years and still be able to give good crops. But it all tends in the one direction, and some day, even in the best soils, exhaustion will begin to be felt and the summer-fallow will begin to lose its stimulating effect. That man is wisest who begins to put some-

thing back and to keep up the fertility of the land while it is still far from depletion. Mixed farming if properly carried on means the conservation of the fertility of the land. The keeping of live stock means the production of barnyard manure as a by-product. The use of barnyard manure on the land restores its fertility, it brings back to the soil part at least of the plant food which the crops had taken from it. Manure

Equally important with manure, as a means of increasing fertility, are the leguminous crops. Alfalfa, clover and peas are the most important of these. Nitrogen is the element of plant food that is most necessary and most likely to be exhausted. Yet four-fifths of the air is nitrogen. To most plants this nitrogen of the air is totally unavailable. Leguminous crops have the faculty of drawing upon the nitrogen that is in the air, using it for their own growth and leaving a surplus stored in the soil for the crops that follow. The growing of these crops, especially alfalfa, is a most important feature in mixed farming in Western Canada, and the possibility of growing such a crop, one of the strongest reasons for adopting mixed farming.

The amount of available plant food in the soil has an important bearing on the question of the conservation of moisture. The richer the moisture of the soil is with soluble nutrients the less the quantity of water required for a given amount of growth. It is like a man drinking soup; if it is a thick rich broth he may get a good deal of nutrition out of a plateful, but if it is very thin and watery, he may have to drink great quantities to get as much food. It is just the same with plants, if the moisture in the soil is well stored with the food they need, less moisture is required to feed them.

Physical Condition of the Soil

The physical condition of the soil has a very important influence on crop production. If a soil is too pure clay it is inclined to run together and form a gumbo, if it contains too much sand it is loose, and then the difficulty is soil blowing. Humus is the great moderating and improving influence in the soil. It is the decayed vegetable matter left there by the plants that have died and decayed in the past years. It makes a heavy clay soil more friable and easily worked. It binds together a sandy soil and helps it to stay in place. Western soils in their native condition are usually well supplied with humus. The black color that is a characteristic of our best soil is due to the presence of humus.

Continued on page 29

MR. MARTIN HARVEY AND

THE BREED OF THE "THRESHERMAN" MEET MANITOBA'S MINISTER OF AGRICULTURE.



This is not a political cartoon but it requires some little explanation. Mr. Martin Harvey is one of our leading British actors who recently toured Western Canada for the first time with his splendid company.

"The Breed of the Threshers" is a great historical play written around the Puritan and Cavalier struggle of 1645, etc., and is a masterpiece in the hands of Mr. Harvey, who has recently played to packed houses of Canadian admirers.

Mr. Harvey showed a keen interest in the agricultural West, and among other courtesies extended to him in Manitoba, he was invited to visit our New Agricultural College, but owing to pressure of other engagements he had to deny himself this pleasure. His intention to visit the college was known, however, and our artist, playing on the word which had very naturally confused the minds of others throughout the West, in so far as to read it from the bill-boards as "The Breed of the Thresherman," composed a little imaginary picture to commemorate the incident. The above is the result, and in getting at it some remarkable transformations have taken place in so far as to give the Honorable the Minister of Agriculture an outfit which he has probably never yet assumed, while the Editor of the Thresherman is rigged out as "Rereby the Rat"—Mr. Harvey's part in the production.

ready stored up is more rapidly prepared for use and used up. Some of our very rich soils can stand this depletion for many years and still be able to give good crops. But it all tends in the one direction, and some day, even in the best soils, exhaustion will begin to be felt and the summer-fallow will begin to lose its stimulating effect. That man is wisest who begins to put some-

occupies a very important place in agriculture in all countries where agriculture is on a permanent basis, where yields are not decreasing but rather increasing from year to year. Until manure is recognized and valued more highly, the yields of Western Canada and the Western States will continue to gradually decrease as they are doing at present.

and yo
work
beside
to lost
your c
is sat
saving

TI
Mar
Nov. 4, 1
with the v
has done
saving us 1
Miles
Jan. 23, 1
your load
a great sa
wages hie
saved us \$
for the e
36-inch ap
five teams
the machi
about four
field, and
operating a
Georg
Sask.—"I
you two s
satisfaction
grain as pl
lifts the s
carried up
up scattere
and cleans
consider it
horses. It
HENRY
Buffalo Ed
teams, as b
could do w
from it—s
clean field.
they want
Loader. I
am sure th
acquainted

T
passed
more th

Th

THRESHERMEN!

Here Is How It Figures Out:-

To Six Men, 40 Days, at \$15.00 per Day	-	\$600.00
To One Team, 40 Days, at \$2.50 per Day	-	\$100.00
Total	-	<u>\$700.00</u>

At the end of a 40-day run you will have to pay a labor bill that is considerably higher than the cost of the

Stewart Sheaf Loader

and you have only the work done to show for your money. By having a STEWART SHEAF LOADER, you not only have your work done at a considerable saving in cost, but YOU HAVE YOUR MACHINE LEFT, which is good for many years' more work; besides, it will continue to effect the above saving each year. It is a clear case of where you have everything to gain and nothing to lose. Furthermore, by making a STEWART SHEAF LOADER a part of your outfit, you have a distinct advantage over your competitor who doesn't own one. The farmers like it. It does its work in such a clean thorough manner that the farmer is satisfied with his threshing job right from the start. Read what a few of our hundreds of users say about this great labor-saving and money-making implement:-

TESTIMONIALS

Marcoux Bros., Viscount, Sask., Nov. 4, 1913.—"We are well pleased with the work the Loader has done: it has done all you claim for it and is saving us \$22.00 per day."
Miller Bros., Grantell, Sask., Jan. 22, 1914.—"We have used one of your Loaders for this season and find it a great saving as labor was scarce and wages high. We figure that it has saved us \$20 per day besides the board for the extra help. We operate a 36-inch separator and find that it keeps five teams with two spike pitching at the machine, going all the time. Saves about four teams and two men in the field, and we think that everyone operating a thresher should have one."
George Smith, Maple Bush, Sask.—"The Loader I purchased from you two years ago is giving perfect satisfaction. It does not shell as much grain as pitching by hand does, and it lifts the stooks up bodily and it is carried up nice and easy, also picks up scattered grain between the stooks and cleans up the stooks better. I consider it an easy draught on four horses. Saves me two teams and five men, which is a big item in wages and board bill."



Henry E. Wilson, Eyebrow, Sask.—"I run a 36-60 Garr-Scott Separator and 25-horse Buffalo Engine. I ran thirty days this fall and averaged 2,250 of wheat per day with four stook teams, as before I had your Loader I had ten teams and four pitchers in the field, and the best I could do was 1,800 and 2,000 of wheat per day. The Loader runs light and we have no trouble from it—it is ready all the time. It will pick up everything clean around the stook and leaves a nice clean field. We have threshed for two seasons for some of the best farmers in the vicinity, and they want every kernel, and they tell me that they would not have a rig on the farm without a Loader. They have learned that it saves the grain, also saves the feed for at least four teams. I am sure that the stook Loader is the farmers' and threshers' friend. All they have to do is to get acquainted."

Blasell Bros., Per G. F. Blasell, Radisson, Sask.—"I have used one of your Loaders all fall threshing. I find same has saved me at least four teams and five pitchers. I also find that I can thresh more grain in one day by having the Loader. It is also a grain saver."
John Frost, Box 273, Moose Jaw, Sask., Nov. 19th, 1913.—"I hereby testify to the working and saving powers of the Stewart Sheaf Loader as I worked same this season and found it the biggest money-saver of a threshing crew, both for thresher and farmer. It does the work of five men and two teams, which is a saving of \$20 per day, and will save more grain than you will with the pitchers in the field, and will keep a 36-60 separator full, in good grain, with four stook teams, threshing two thousand bushels per day."

David Low, Girvin, Sask., Nov. 19, 1913.—"Your Loader is a machine which no thresher should be without. It does away with the field pitchers and half the bundle teams."
Bernard Cumming, Argyll, Minn., Oct. 15, 1913.—"The Loader which I purchased from you this season has been used all through threshing in all kinds of grain and has always given entire satisfaction. It is a labor and money-saver which no thresher can afford to be without. I figure that it saves from two to two and one-half bushels of grain per acre. I found the machine especially valuable in loading about fifty acres of barley and seventy acres of flax from the windrow, saving the expense of shocking. Also find the machine well built in every way, and it hasn't cost a cent for repairs. It is simple to operate and the draft is no heavier than an 8-foot binder under ordinary conditions."
Vandergrift Bros., Vanguard, Sask., Nov. 20, 1913.—"The Loader certainly does a clean job and cuts down the expenses 20 per cent on any kind of a performer in loading flax."

TESTIMONIALS

THE STEWART SHEAF LOADER is just as essential to your outfit as a self-feeder or a wind-stacker. It has long ago passed the experimental stages, both as regards its construction and its ability to do the work for which it was intended. It will more than pay for itself in one season, therefore why should you hesitate about purchasing? Let us tell you all about it.

COMPLETE INFORMATION ON RECEIPT OF CARD TO

The Stewart Sheaf Loader Co., Ltd.

804 Trust and Loan Building, Winnipeg, Manitoba

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

A MAN'S TALK TO MEN

By

REV. DR. J. L. GORDON



Gossip

YOU WILL be a much happier man in life if you refuse to believe everything you hear about your neighbors. In every doubtful statement concerning your neighbor give him the benefit of the doubt. Of course we cannot absolutely ignore a man's weaknesses and shortcomings, but we should be slow to judge and never pronounce a verdict until all the evidence is in. Dr. Talmage once said: "Before I will accept a baleful story against a man's character, I will take off from it twenty-five per cent for the habit of exaggeration which belongs to the man who first told the story. Then I will take off twenty-five per cent for the additions which the spirit of gossip in every community has put upon the original story. Then I will take off twenty-five per cent for the fact that the man may have been put into circumstances of over-powering temptation. So I have taken off seventy-five per cent. But I have not heard his side of the story at all, and for that reason I will take off the remaining twenty-five per cent. Excuse me, sir, but I don't believe a word of it."

Bigotry

WHEN MEN hate each other in the name of God, beware. When men abuse each other for the love of the Saviour, look out. You never know how deeply a man feels until he feels deeply against you in the matter of religion, then he will plan your destruction until hell shivers and heaven shakes. As the old doctor in Harold Bell Wright's new novel, entitled "The Calling of Dan Matthews," says to the young minister: "There is no hatred, lad, so bitter as that hatred born of a religious love; no falsehood so vile as the lie spoken in defence of the truth; no wrong so harmful as the wrong committed in the name of righteousness; no injustice so terrible as the injustice of those who condemn in the name of the Saviour of the world."

This One Thing I Do

CONCENTRATION is the secret of success. One man, doing one thing, seldom ends in failure. It is like Napoleon converging all his strength on the weakest point of the enemy—something had to give way. Of all men in the world the preacher ought to concentrate. Let me quote from Austin Phelps a passage that I have frequently used in addresses and sermons: "Preach; let other men govern; preach; let other men organize; preach; let other men raise funds and look after denominational affairs; preach; let other men hunt up heresies and do the theological quibbling; preach; let other men ferret out scandal and try clerical delinquents; preach; let other men solve the problem of perpetual motion of which church history is full. Then make a straight path between your study and pulpit on which the grass shall never grow."

Dropping Out

MEN ARE "dropping out" continually. In ten years half the business signs on Portage Avenue will have disappeared and been replaced by new names. Death, disease, decrepitude, debauchery, drink, drunkenness—these are the Things which call for the social reconstruction of life. See to it, friend, that when you "drop out" you, spiritually, step up. I quote from a book of illustrations the following: "On the Lake of Geneva there stands a gloomy castle, where prisoners used to be confined, and in it there was a dark dungeon, with a dreadful staircase called the 'oubliettes.'

Sometimes the keeper went to a poor prisoner, and told him that now he was to obtain his life and liberty, and requested him to follow him. The prisoner went along thankful and glad, with visions of home and happiness. He reached the staircase, and was told to go down, step by step, in the darkness, that he might reach the castle gate, and so be free. Alas! it was a broken stair. A few steps down into the darkness, and the next step he took he found no footing, but fell down fifty or sixty feet, to be dashed to pieces amongst rocks, and then to have his mangled body buried in the lake."

Reverence

REVERENCE is a sign of a superior mind. I pity the man who is not aroused and strangely moved when he stands, for the first time, on some great battlefield, or in the presence of a masterpiece in the realm of art, or in some grand old cathedral, grey with age and ivy grown. I also pity the man whose emotions are not deep. Profound emotion, as a rule, reveals a reverence for ideals high and holy. Listen: "Robert Burns had other faults, but in this he was king. In obedience to some rustic custom, he stood on one side of the brook Ayr and Mary Campbell on the other. They bathed their hands in the sparkling water and then placed them on the boards of a Bible, so making their pledge of fidelity. On the cover of the Old Testament of that book to this day, in Robert Burns' handwriting, may be found these words: 'Ye shall not swear by my name falsely, I am the Lord.' And on the cover of the New Testament, 'Thou shalt not forswear thyself, but perform unto the Lord thine oaths.'"

Eloquent Deeds

THERE is nothing so eloquent as a cheque book well handled. The man who handed me ten new one hundred bills for my new church adopted a method which was exceedingly expressive. A ton of coal in the poor widow's cellar has more warmth in it than the finest sermon on charity. The man who sends a cured ham to dear old Mrs. DeLamand-out has struck poverty on the "hip and thigh." Seneca said, "The people learn more from the manners of Socrates than from his philosophy." When the statue of George Peabody was unveiled in London, the sculptor, Story, was invited to speak. Having no gift of eloquence, he pointed twice to the statue, saying, "That is my speech!"

Handling Men

SCORES of men fail because they do not know men. Not knowing men, they do not know how to handle men. Most men can be handled if they are approached in the right way. In order to "handle" a man you must know how to secure from him a favorable consideration of your side of the case. I knew a merchant in the city of Philadelphia angered

and indignant at John Wanamaker because he had offered a clerk of the merchant a higher salary and a superior position and thus secured his services. The indignant merchant said to a friend, "I will call on Wanamaker and give him a piece of my mind. I will let him know what I think of a business man who will entice away the clerk of a competitor, without saying a word—and in a busy season too!" and there was anger in his face, wrath in his gesture and indignation in his voice. The next morning he called on Mr. Wanamaker in his great departmental store, and finding the millionaire in his office began at once to ventilate his views. Mr. Wanamaker immediately arose and remarked, with a smile on his face, "Mr. Blank, have you ever been through this store of mine? No? Well, then, let me show you through," and he took his angry visitor by the arm and led him from floor to floor, from one department to another, introducing him to the heads of the various departments and explaining to him his various plans and business methods. After half an hour's pleasant conversation, Mr. Wanamaker bid his visitor "Good Day." During the entire time not an additional word was uttered concerning the question in dispute. The next day the man who had lost the services of a valuable clerk, remarked to a business neighbor: "That man Wanamaker is one of the finest citizens I ever met!"

Courage in Speech

COURAGE in speech is in daily demand. We very often hesitate to give people a straight answer when they ask a straight question. The man who asks the question: "Should I resign?" usually receives a negative answer, from the very people who privately and in the presence of others affirm that "there is nothing for that man to do but to resign." Such condition is neither fair, kind or manly. The author of "Getting One's Bearing," says: "One of the ablest men I have known, and one of the kindest, who could not bear to say a displeasing word, once made this confession: 'When I tell a man 'I will think of it,' I mean that I will not do it.' Is it not so with all of us at times, and is it well for us? Is it generous? That man with all his ability failed to reach eminence."

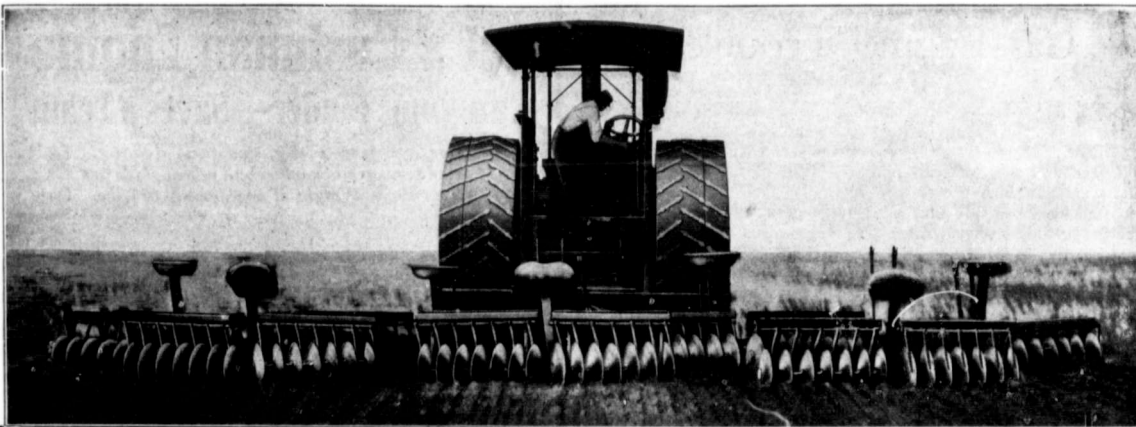
Cutting Remarks

THERE are unfortunate people who offend with the tongue. They have a genius for saying the wrong thing. They possess a phraseology which is rasping and a vocabulary which is cutting. They can sting, bite, stab and blister all in one sentence. When they are not asleep they are out on the hunt for victims. The happiest hour, in the neighborhood where they reside, is, when they suddenly meet somebody who is more than a match for them in the matter of vocal tools which have an edge. Better still is the man who can return good for evil and match a sneer with a smile.

The story is told of a young minister who was late in going home one evening from the church. He entered a crowded car, with his Bible under his arm, and at once there began some sneering remarks from some rough fellows. These remarks kept up, and when the young minister left the car, to the amusement of his companions, one youth said: "Say, mister, how far is it to Heaven?" Many a Christian under the circumstances would have kept quiet or have resented the insult; but the minister, with a quiet dignity and with all gentleness, replied: "It is only a step; will you take it now?"

you
the
with
Mr.off
lowe
wom
wide
AultI
tract
man
any
30-60
with
S

Th



Your Heavy Farm Work!

DO IT WITH AN

Aultman-Taylor 30-60 Gas Tractor

You will marvel at how easily and how thoroughly the Aultman-Taylor 30-60 Gas Tractor will do all of your hard, heavy farm work—the kind that you dislike—the slow, drudgery kind, such as breaking, plowing, harrowing, discing, harvesting, seeding, etc. This work, as well as the lighter work on the farm, cannot only be done easily and thoroughly, but it can be done quickly—just when conditions are right—and at an enormous saving—because with an Aultman-Taylor 30-60 Gas Tractor and one or two men, you can do the work of 10 men and 30 horses. Think this over! It means much to you, Mr. Farmer!

If you farm with horses and hired labor, you're not reaping the full benefits for your labor and your investment. You'll never regret it if you sell off the most of your horses, buy an Aultman-Taylor Gas Tractor and let it do this hard work. It's the tractor that reduces your production cost to the lowest, increases your crop returns and insures you bigger profits. You'll be astonished at how much easier, cheaper and better it does your work. You'll wonder why you did not buy one of these money-making, labor saving tractors years ago. Your experience will be similar to that of hundreds of other wide-awake farmers who have cast aside the old, costly and unreliable methods of farming with horses and are working their farms with one or more Aultman-Taylor Tractors and they're making more money every year than they ever did farming the old-fashioned "hit and miss" way.

Service is What You Want

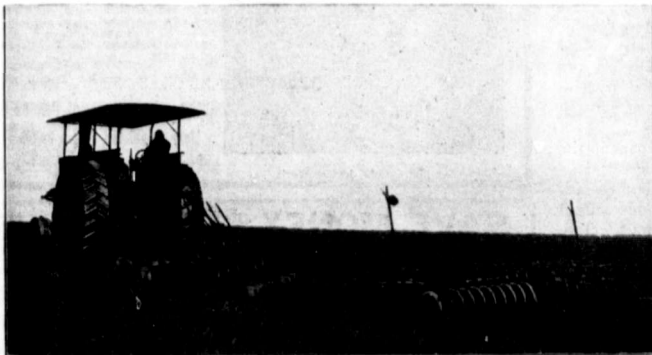
It's service that you demand first of all in a tractor. You get a heaping measure of service when you buy an Aultman-Taylor 30-60. You buy a tractor to turn off your work quickly and economically. Every time your tractor stands idle it is a losing proposition. It's equivalent to several teams and a number of men standing idle. The Aultman-Taylor 30-60 is absolutely reliable—is always on the jobs and costs less for maintenance than any other. The Aultman-Taylor 30-60 burns either Gasoline or Kerosene with remarkable efficiency. You want to know more about the Aultman-Taylor 30-60. Get our Catalog and learn in detail how this Tractor of Tractors is built. Learn why it does more and better work, at less fuel consumption and with less trouble and annoyance than any other.

Send us in your name to-day. A post card will bring you the desired information, or use the Coupon below. Don't fail to write us now.

The Aultman & Taylor Machinery Company

Lock Box No. 64, Mansfield, Ohio

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



COUPON

Please send me 1914 Catalog and other interesting literature about the Famous Aultman-Taylor 30-60 Gas Tractor.

Name.....

P.O.

Prov.....

Gas Engine Troubles

By A. E. CAMPBELL

WHEN a veterinarian is called upon to attend an animal which is sick, he first of all looks for symptoms of trouble. Having ascertained the symptoms, his knowledge of the diseases of animals enables him to determine the cause of the trouble. Having found the cause, it is comparatively easy to effect a cure if it is a curable disease.

When a gas engine expert is called upon to visit an engine which is not giving satisfaction, he follows out practically the same line of procedure as does the veterinarian. He looks for symptoms of trouble, then for the cause of the trouble.

To an expert, an engine is always considered to be in trouble if it is not developing its maximum power on the minimum consumption of fuel. The fact that an engine is running, and pulling a good load all day, does not necessarily mean that it is all right.

The engine owners are rapidly becoming alive to the above fact. A few years ago the purchaser of an engine was quite satisfied if the engine would run, and pull the number of plows which it was supposed to pull, or drive his separator, when it was being fed to capacity.

Now he demands more than this, the engine must develop a certain amount of horse power and it must do it on a certain amount of fuel. The engine owner has been enabled to gain a lot of knowledge in the past few years because of the efforts which have been made on all sides to educate him. The agricultural colleges, the various farm papers and the gas engine companies, besides several schools and private writers have all worked together to give the farmer a good knowledge of the possibilities of power farming, when the gas engine is used to furnish the power.

In discussing the various gas engine troubles met with by an expert in the field, it will be well for us to consider the very simple troubles as well as those which are more hidden, because these articles are intended for beginners, just as much as for experienced operators.

There are eight common symptoms of trouble, the first and most common of which is, difficult starting. Difficult starting is surely a symptom of trouble, there must be something wrong, somewhere if the engine won't start running after two or three trials at starting. If an engine which

is difficult to start, runs all right after it is started, that does not alter the fact that there existed some condition which was wrong, in other words, there was a cause.

The causes of difficult starting are many and some of them are also very simple.

Lack of fuel is a very simple and also a very common cause with beginners. We have known men who would crank an engine by the hour when the main valve in the supply pipe or the needle valve in the carburetor was closed. We have also known men who would try to start an engine which had perhaps stopped in the middle of the field, when they had no gasoline in the tank at all. Many an expert has travelled a long distance to visit an engine in "trouble" only to find that a little gasoline was all that was required to start the troublesome gas engine.

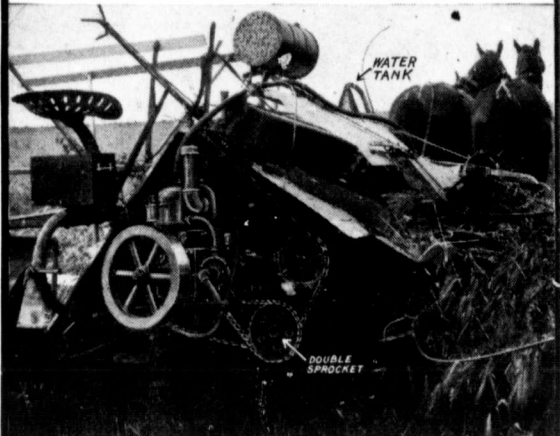
A trouble which is more hidden exists when the supply pipes or carburetor openings are clogged. There may be gasoline in the tank, but if the supply pipes are clogged or if the pump is out of order, the fuel does not reach the carburetor. Again there may be fuel in the carburetor, but if the openings in it are clogged the fuel does not reach the engine cylinder and as a result the engine will not start, simply because of lack of fuel. In the case of an engine which is equipped with a suction carburetor be sure that the suction pipe is not too long and also that it is perfectly air tight. In trying to start a new engine, if the gasoline pump will not suck fuel it will be well to examine the check valve in the suction pipe, it might be reversed or stuck.

The second cause of difficult starting which we will consider is "defective ignition." Without doubt, defective ignition, causes the average operator more trouble than any other one thing. Most experts admit that fully 75 per cent of the troubles met with in the field are found in the ignition systems of the engines.

If you do not get a spark in the engine cylinder you will never be able to start and sometimes failure to get a spark is simply caused by the operator failing to close the main switch. The main switch may be closed, but if the contact made is poor, it might just as well be left open. The timer, if there is one, must also make a good contact. Wires disconnected, loose at the binding posts or broken are all common causes of difficult starting. A

Let a Cushman Engine Run your Binder—Saves a Team

4 Gives you more power, smoother, steadier. **4**
Sickle never stops when bull wheel skids or
H. P. in turning. Weight of engine only 167 lbs. Cycle



Easily and quickly attached. Our universal adjustable brackets do the trick. Anyone can run this simple 4-H. P. engine on the binder. It runs the reel and sickle, elevates, binds and delivers the grain. Team simply draws the machine. Don't overstrain your horses. Sickle continues to run when the bull wheel skids. Cut your grain when ripe. Wet weather, muddy fields have no terror where the Farm Cushman engine is used.

Farm Cushman The Original Binder Engine

See Your Dealer Now—Write Us Today

This is a personal appeal to you. Insure your harvest. We cannot guarantee deliveries on orders in the rush season. Scores of farmers and dealers last year ordered too late to be delivered. Write now and make sure to get yours. See your dealer. If he does not handle the Farm Cushman, write us. Accept no substitute. Don't wait. Do it now.

Remember, the Farm Cushman is the all-purpose engine. Best for running the grindstone, pump, corn sheller, wood saw, feed grinder, washer, separator, etc. Runs at any speed, throttle governed. Change speed at any time without stopping. We also build 2-cylinder special heavy duty engines. 6 to 20 h. p., for use in the Corn Belt, for silo filling, operating large balers, grinding and sawing. Tell us your needs. Start the binder engine matter to-day. Catalog free.

The Self-Steering Device

The Cuddy Has earned and received more gratitude from plowmen and plowing experts than anything that has been invented for the dual purpose of saving time and labor and making absolutely perfect work.

Can be fitted to any Tractor now on the Market

It is the only patented steering device now in general use on tractors. Insures to all traction engine operators the most perfect self-steering arrangement, regardless of what make of tractor they are using. Extends only five feet in front of tractor axle to truck axle, and takes very little if any more headland. Unanimously endorsed by prominent engine experts who acknowledge it to be a direct and simple solution of all engine steering troubles. Used all over the world on all tractors. Four successful seasons in Canada. Any man can attach it to any engine. Price is reasonable, backed by a Positive Guarantee that it will fulfill its purpose.



Let the Cuddy do the Work

Write for Complete Details to
Cushman Motor Works of Canada Ltd.
Light Weight Gas Engine Builders
290 Princess Street, Winnipeg

SAVE MONEY BY BUYING OUR FITTED SHARES

Absolutely Guaranteed **\$2.99** FREIGHT PREPAID ON \$25 ORDERS

H. R. HAWKEY & CO. Write for CATALOG
Hardware Mail Order Specialists
WINNIPEG Reference: Bank of Hamilton MANITOBA

wire may insulation right on battery of starting, t frequently when use carded. course operator with the engine.

Trouble and break follows:

Electrod good conta corroded, t not make through th no spark points are points shot small file u flat contact surface of a complete c surface of points shot bright to emery paper purpose.

that the ele come in elc engine spar of adjustme

Carbon f metal of th and the met will cause a carbon is a

ty. Also a always follo assistance, the

the points a current whi cause a spa flow through metal of the

through the separating of arm on the will prevent

ring at all an break we spark. The

ticular attent break system the electrode

time of co the break wh 1-16 inch to the break an

at which the active coil n

ult starting. coil is short may flow fro

through the the core doe magnetised a perform its

fruit can be fact that th armed when t through the c han when no With an e spark ignition somewhat diff

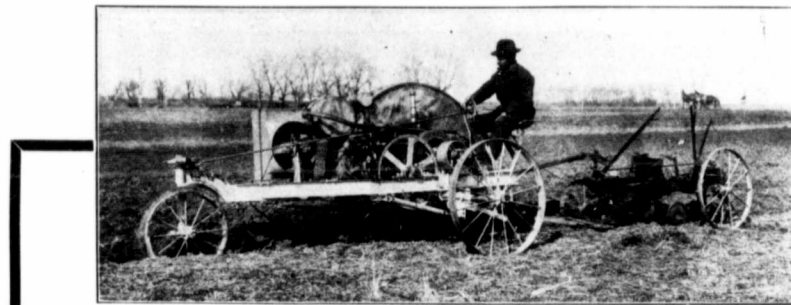
wire may be broken inside the insulation yet appear to be all right on the outside. When a battery of dry cells is used for starting, the cells should be tested frequently with an ammeter, and when used up should be discarded. The wiring must of course be correct and every operator should become familiar with the system used on his engine.

Troubles peculiar to a make and break ignition system are as follows:

Electrode points not making a good contact; if the points are corroded, the electric current cannot make a complete circuit through the coil and as a result no spark is formed when the points are broken apart. The points should be trimmed with a small file until they make a good flat contact, that is, the entire surface of one point should make complete contact with the entire surface of the other point. The points should be kept clean and bright to get the best results; emery paper can be used for this purpose. Sometimes we find that the electrode points do not come in contact at all because the engine sparking mechanism is out of adjustment.

Carbon forming between the metal of the insulated electrode and the metal of the ignitor body will cause a short circuit, since carbon is a conductor of electricity. Also an electric current will always follow the line of least resistance, the result is that when the points are broken apart, the current which would ordinarily cause a spark, finds it easier to flow through the carbon to the metal of the ignitor than to flow through the gap made by the separating of the points. A loose arm on the movable electrode will prevent a break from occurring at all and if we have too slow a break we do not get a good spark. The points to pay particular attention to in a make and break system are, the contact of the electrode points, the length of time of contact, the amount of the break which should be from 1/16 inch to 1-8 inch, the speed of the break and of course the time at which the break occurs. A defective coil may also cause difficult starting. In case the spark coil is short circuited the current may flow from one binding post to the other without flowing through the winding of the coil, the core does not then become magnetised and the coil fails to perform its function. A short circuit can be discovered by the fact that the spark which is formed when the current is passed through the coil is no stronger than when no coil is used.

With an engine using jump spark ignition the troubles are somewhat different. If the points



Every Farmer Ought to Know— We have revolutionized the Gas Tractor and put it on a bigger Profit Paying Basis

The Bull Tractor does the work of five horses, and its price is within the reach of every farmer. The construction is the simplest of any gas engine on the market to-day, no complicated machinery to get out of order or cause trouble in any way. The material and construction of the Bull Tractor is guaranteed to be the best that money can buy. When not being used for traction purposes it will do all kinds of

stationary work, such as grinding feed, sawing wood, pumping, and threshing, etc. Think what you will save by having this tractor on your farm, the price is only \$485, making horses a luxury at any price. The Bull Tractor must do what we claim for it, or you get your money back. Order now from your nearest agent, or write direct to

Canadian Bull Tractor Co. Limited

WINNIPEG, MAN.

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

Greatest Work for Least Fuel

It is not only original cost, but running expense that counts in the buying of an engine. Our claim for a strictly high-grade construction and modern design in

The Manitoba Engine

is backed up by such letters as this:—

"The Manitoba Engines Limited, Brandon, Man.
"Dear Sirs:—Enclosed please find Money Order for \$11.00 as per account rendered for changing my grinder and freight. I must say that the change is even more satisfactory than I expected. I put one gallon (by measurement) of gasoline in the tank and ground 20 bags full to the top of barley in 55 minutes; it made an excellent job, and though I could not see how much gasoline was left in the tank, the engine was running as strong as ever, when the 20 bags were done, as it was when we started."
(Sgd.) Geo. Blight."

Note that Mr. Blight actually measured one gallon of gasoline and ground 50 bushels. Suppose gasoline is 25c. per gallon, the cost of grinding with the Manitoba Engine is about 1/2 cent per bushel. The Manitoba is a profitable engine to buy and a profitable engine to run.

MANITOBA WINDMILLS

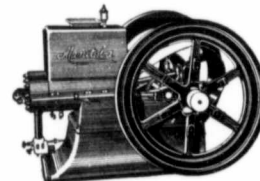
IN ALL SIZES, FOR POWER OR PUMPING

Made with all-steel Towers, and in sizes from 8 to 14 feet. MANITOBA WINDMILLS have demonstrated by their merit that they are, beyond all, the Windmills for the West. They embody many special features not found in any other mill.

OUR ILLUSTRATED CATALOGUES are free for the asking.

MANITOBA ENGINES, LIMITED

Calgary, Alta. BRANDON, Man. Saskatoon, Sask.



"Oakville, Man., Mar. 17th, 1914.

"Made in the West for Western Needs"

We Manufacture:

Gasoline Engines, 1 1/2 to 25 H.P.
Grain Grinders, 6 to 12 inch Pumping and Power Windmills, 8 to 14 feet
Wood and Iron Pumps
Wood Saws, all sizes

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

in the spark plug are not the correct distance apart there will either be no spark at all, or one which is not sufficiently large to ignite the charge in starting, although the engine might fire all right if it were once started. We have found in our experience that

1-32 inch is about the correct distance to allow between the points. The operator should be careful to keep the spark plugs clean, for if carbon is allowed to build up between the points a short circuit is formed and no spark will be obtained.

If the vibrator of the induction coil is out of adjustment, or if the points of the vibrator are not making a good contact, the soft iron core in the coil does not become magnetised or de-magnetised rapidly enough, and we do

Continued on page 29

TRACTION PLOWING

AS TOLD BY THE MEN WHO DO IT

Success Largely Depends on the Man Behind the Gun

Dear Sirs:

I began farming in spring of 1910. In spring of 1911 I bought a Rumely 30-60 Oil Pull and gang of 8 14-inch John Deere plows. I hired an experienced engineer to operate. Also one man for plows. We run 12 hours a day making 8 "mile rounds" and do just about 18 acres. I broke 1,400 acres first summer and disced it up for spring seeding. Our soil here is rather heavy clay loam, and slightly rolling. As engine had lots of power, we always pulled packer behind plows and seeded in 300 acres of flax by trailing seeder behind breakers.

This flax threshed from 10 to 14 bushels an acre. In breaking we used about 3 1/2 gallons kerosene, costs us 24c gallon here, and about same amount of water, the water going through carburetor and firing with oil; for cooling, we use zero black oil and as it does not evaporate it does not need replenishing. Engine also requires 3 1/2 gallons cylinder oil per 10 hour run. As near as I can figure, it cost about \$1.50 per acre, for depreciation, repairs, interest and all. In fall we bought a 36-60 Yellow Fellow separator and with it we threshed 18,000 bushels of our own grain and 10,000 for neighbors.

The separator gave perfect satisfaction and does a good job, when operated by competent man and will take most any amount of flax without slugging. Threshing is very easy on engine, but though engine requires only small amount of attention we have one man on each end of outfit as there are times when both need attention at once and saves much time starting and moving around.

Being well pleased with our experience with one engine we

traded off all our horses in spring of 1912, except one team, and bought a Big "4" 30. We decided to buy the Big "4" as it being a light weight two speed tractor, we figured it to be better adapted for the work of seeding, discing, cutting, etc. We hired an experienced man to operate who made a hitch for 3 seeders, 2 packers and harrows. Everything went well and we put in 75 acres a day using about 45 gallons of gasoline, 3 1/2 gallons cylinder oil, using water for cooling,

binders being new, run fine. We used two men on the four binders, using dump ropes on two. In cutting flax we covered lower curtain slats with extra canvas, cutting canvas same length as lower curtains and going entirely around. This prevented flax from catching in slats and sticking curtains. We cut 75 acres a day with very few stops, but after binders get old and worn it might be different, as if binders caused many stops it would not pay. In summer of 1913 we plowed

Almost Impossible Without a Tractor

Dear Sirs:

In answer to your letter I wish to say:

1. 45 h.p. I. H. C.
2. Running ten hours per day hauling 10 plows in stubble with discs, harrows or packer also attached, about 40 gallons per day.
4. About two barrels.
5. We follow the tractor with drill, four horses, and this outfit also hauls out the gasoline and water as they go to and from work.
6. For plowing stubble, discing at the same time and seeding with horses \$2.00 per acre.
7. We always haul 10 plows in stubble, with either harrow, discs or packer attached. Immediately behind we follow with the seed drill with the horses. We have found this most satisfactory, as the soil is then in excellent shape and the seed germinates much more quickly.
8. I certainly do not. In this country where it is essential to get the spring crop in early and quickly,

in order to escape the frosts in the early fall or late summer. It is almost impossible to farm to any extent without a tractor.

Yours truly,
Thomas Rogers,
Crossfield, Alta.

One Who Knows How and Does It

Dear Sir:
In regard to my experience on Gas Tractors I will say that I do not believe in co-operation in buying a tractor with your neighbor as you are not both of the same mind. I have had some experience on this matter and I lost heavy and so did my partner. We bought it for threshing in fall of 1912, and as he wanted me to run one end, I ran the separ-



A Sawyer-Massey 30 H.P. steam tractor pulling a 12-bottom, 14 inch John Deere Engine Gang in Manitoba gumbo.

it requiring only about 3 buckets a day, being enclosed type radiator with fan for enforced cooling.

However I will say here that in some districts, and some springs here, I do not believe an engine would be practical for seeding as the tractors will mire unless ground is dry on top. And I believe the extension wheels are a good improvement for any work on soft land. In summer we purchased set of 12 10-inch John Deere disc gangs, but could not use them as there was too much sod unrotted which it left lying every way on top. The breakers would turn this under. However next year (1913) these plows worked fine in any land which had had second plowing.

For cutting we used 4 binders and Hanson Binder Hitches, the

6,000 acres summerfallow with disc gang, and used the Big "4" for threshing and breaking. This work it did satisfactorily also, pulling 7 plows breaking.

As to whether a gas tractor pays as well as horses I believe depends entirely on man at the back of them. They have some advantages especially on large farms. One can do a great amount of work in right season such as summerfallowing and fall plowing, and if you also have a separator you are able to thresh first and get grain to market early usually obtaining top price for the winter. They are also great saving in help which is sometimes very scarce here. I do not believe the weight of tractors hurt the seed bed any.

H. King,
Feb. 17, 1914. Shaketon.

So an B It's It's

SINGLE
Design
General
Purposes.
The co
engine ha
the water
boiling po
The res
steel fra
water sp
shaft box
of direct
largely al
longer-liv
platform,
on this en

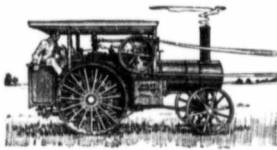
"LIGH
Avery Tr
built. Th
of any. T
pump, no
They are
order.
Avery Tr
bar effici
advan
Tractor, it
dead weigh
the heavy-
You can ge
or after a r
injure it o
Tractors do
Avery Tr
with speed
that they
mean lon
and light a
other feat
Tractors ha
wonderful
and others

Select your New Machine from the Most Complete and Up-to-Date Line of Traction Power Machinery Built--The Avery "Bull Dog" Line

It's the most Complete Line because

It's the most Up-to-Date Line because

Here are the Machines in the Bull Dog Line:

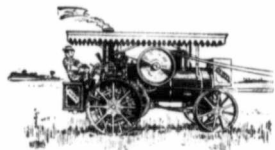


SINGLE CYLINDER STRAIGHT FLUE STEAM ENGINE

Designed especially for Threshing and other General Belt Work and Ordinary Traction Purposes.

The construction of the heater on this engine has been perfected to a point where the water enters the boiler at practically the boiling point, thus resulting in great economy.

The rear end of the boiler is carried by a steel framework with but few bolts in the water space. The axle brackets and counter-shafts are bolted to this steel frame instead of direct to the boiler. This construction largely eliminates boiler strains and makes a longer-lived engine. Cab, rockers, rates, steel platform, built-up steel wheels, are all regular on this engine.



SINGLE CYLINDER RETURN FLUE STEAM ENGINE

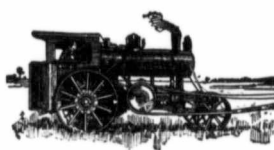
The man who wants a Steam Engine for belt work and ordinary traction purposes, will find that the Avery Single Cylinder Return Flue Engine will give him splendid results. They last a long time, are extremely economical in fuel and water consumption, and repair bills are very light.

The Avery Single Cylinder Return Flue Engine has a full water front boiler of our own special design. The water space extends completely around the front fire-box and in the front end of the boiler as well, thus no heat is wasted. Twenty-four owners of Avery Return Flue Engines report that the average amount of coal they use per day in threshing is only 1,137 pounds.

This is strong support of our claim that Avery Return Flue Engines are genuine fuel savers, and that they will do the same amount of work on less fuel and water than other makes.

It includes three styles of Steam Traction Engines in 9 different sizes. Threshers in all sizes from 22 x 36 to 42 x 70 inch. Five sizes of Gas and Oil Tractors. Six sizes of Engine Gang Plows. Four sizes of Motor Trucks. You can find in the Avery Bull Dog Line just the kind and size of machine to fit your needs, whether you want Threshing, Power Farming, Road Building or Hauling Machinery.

It includes a new Straight Flue Single Cylinder Steam Engine, the only Undermounted Steam Engine built, the Best Proven Grain Saving Separator, the Lightest Weight Gas and Oil Tractor considering its drawbar efficiency, the original Self-Lift Engine Gang and the Only Gasoline Farm Truck with Cast Steel Rim Wheels. The Avery Line offers you the most Original and Improved Design found in such classes of machinery—all proven out by actual field tests in the hands of users.



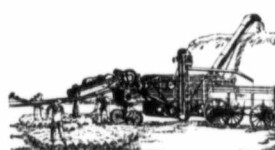
DOUBLE CYLINDER, UNDERMOUNTED STEAM ENGINES

The Greatest All-Around Steam Engine built. Designed for every kind of Heavy Traction and Belt Work.

Is More Durable because the cylinders, gearing, shafting and drive wheels are all mounted on an independent steel frame, which relieves the boiler of all pulling strains.

Is More Powerful because the pull of the cylinders through the gearing and back to the lead is in a straight line in place of down at an angle from the top of the boiler as in top-mounted engines.

Is Easier to Handle because all the working parts are low down and are within easy reach for oiling and adjusting while standing on the ground instead of having to climb around over a hot boiler, and also because of the fact that one man can put on the main drive belt while standing on the ground and do it alone.



"YELLOW-FELLOW" GRAIN SAVER SEPARATORS

Will thresh any kind of grain or seeds. Splendid clover huller.

To absolutely prove what the Avery "Yellow-Fellow" Separator would do we made twenty-seven field tests in different parts of the country. The average saving in the twenty-seven tests was 99.9-10 per cent—practically perfect. This is the best proven record of grain saving ever made by any make of Separator.

Avery Separators have more Original and Improved Features than any other make of Separator. They are equipped with the famous Avery Jumbo Tool-Steel Teeth, which are so good we guarantee them for life against breakage—the I. X. L. Separating Device, which is the best Grain Saving Device ever made—a Double Cone Pulley Belt Guide, which is so much better than others, that we sell hundreds of them every year for use on other makes of Separators—a Compressed Paper Centre Cylinder Drive Pulley which is a big improvement—Double Belling System, Steel Axles, Fluted Cylinder Boxes, Rubber Feeder Web, Diagonal Frame Cross Rods, and many other features much superior to those on other makes of machines.



"LIGHT-WEIGHT" GAS AND OIL TRACTORS

Avery Tractors are the Simplest Tractors built. They have the least gears and shafting of any. They have no cooling fan, no fuel pump, no outside lubricator, only one clutch. They are easy to operate and keep in running order.

Avery Tractors are also the Lightest Weight of any Tractors built, considering their drawbar efficiency. This is a wonderfully important advantage. When you get an Avery Tractor, it doesn't waste fuel moving useless dead weight. It will travel over ground where the heavy-weight Tractors mire down easily. You can get into the field early in the spring or after a rain. It won't pack your ground to injure it in any manner as the heavy-weight Tractors do.

Avery Tractors also combine strong power with speed. They are so perfectly balanced that they run with little vibration, which means longer life. The exhaust is steady and light and doesn't deafen you—these and other features are the reasons why Avery Tractors have made good in the field in such a wonderful way and why farmers, threshermen and others are buying them so fast.



"SELF-LIFT" ENGINE GANG PLOWS

The Avery "Self-Lift" Plow outclasses all other engine gang plows. It doesn't take a plowman to handle it. The plows are raised and lowered by power taken from the plow wheels. You can run the entire outfit alone. Or your boy can just as well. It's a One-Man or One-Boy Outfit. All you do is to handle the Tractor, and at the end of the furrows pull a cord to engage a clutch and the plows raise and lower automatically. Saves the wages and board of a plowman. Saves all the hard back-breaking work of lifting and lowering the plows by hand-levers at the end of each furrow. Saves time at the end. You don't have to stop or slack up as with a hand-lever plow. Just pull the cord and keep right on going.

And besides having this wonderful Automatic "Self-Lift," these Avery Plows are Light Draft. In the Winnipeg Plow Contest, they pulled the lightest draft of any plow in their class, and the lightest draft in the entire contest against the six most widely advertised makes of plows on the continent.



GASOLINE COUNTRY AND FARM MOTOR TRUCKS

It costs less for fuel to run an Avery truck than it does to feed enough horses to do the same amount of work. When the truck is idle, it costs nothing for fuel. One man can run the truck and do as much work as two or three men with teams. You can get over the ground much quicker, which is especially important in long hauls or when you have a perishable product. Avery Trucks are now being used for hauling grain, oil, flour, sand, gravel, crushed rock, tile, milk, cream, fruits and vegetables and other farm and manufactured products.

We have a number of letters from users which we have printed, and will send you upon request.

Country hauling with a Motor Truck is a comparatively new thing as yet, but there are men who have paid for their Avery Trucks in one season's hauling. INVESTIGATE THE WORK AN AVERY COUNTRY AND FARM TRUCK WILL DO FOR YOU.

Pick out the Machines You Want to Know More About Then write for Complete Catalogs and Get All the Facts

We publish four catalogues—Steam Engine, Separator, Tractor and Plow, and Truck. Ask for the Catalogues you want. Find out what Avery Machines will really do for you. Address:

AVERY COMPANY, 675 Iowa Street, Peoria, Illinois

Canadian Avery Company, Limited

WINNIPEG

REGINA

CALGARY

Western Canadian Distributors

ator and ran it good. Had no stops for it whatever, but, the crew did not give satisfaction and the first engineer called himself an I H C gas engineer. He lasted four days, then the next one called himself an expert, had put in all his life in the factory, working on gas tractors. He kept my partner so busy getting repairs that we had to hire one of the men occasionally to go after repairs at midnight, so we put in 30 days of time and the men had in 14 days work.

This looked quite discouraging for me, so I complained of the engine being no good. I saw I was into it and thought I would buy my partner's share, so I offered to take or give and he decided to sell, so I took it. Last spring I advertised for a gas engineering and got 200 answers all good, competent men, that is what they said. After a lot of correspondence I got a good man. We started plowing in spring last year and plowed all summer. Had only two dollars worth of repairs and he did not use as much gasoline plowing as we did threshing the fall before. It takes from 35 to 45 gallons of gasoline at 30c a gallon by the tank lot of 400 gallons.

This brings the fuel quite high, but I have found the best is the cheapest, so I did not try kerosene, but those who have tried it here say the best gas is the cheapest fuel. This 30c gas is too high and I want to know why in Minnesota gas is now 13c, and 500 miles from there 30c. It looks unreasonable.

The plowing would vary, as the land proved to be sandy loam, heavy gumbo, wet or dry and depth of plowing has to be reckoned. I average \$12 for gas, \$1 gas engine oil and \$4 for engineer and a month man, \$40 per month, or \$18.60 per day of 10 hours, doing 20 acres or 93c per acre. Some of our writers are stating that they run the engine themselves. I don't agree as to that being an economical way as two men may run a gas engine and do the water hauling on a small scale. I find I am as busy as can be and have a team at the outfit all the time. I have a water tank and use about two barrels of water a day, and when we move I have the tank always handy at every land, so I need not go a rod out of the way for either gas or water.

While the men get dinner I fill gas and water and oil. When they are through with dinner I am ready to start and at quitting time (my men only work 10 hours, understood). I have them get all ready while I have my supper, then I go to engine and as they leave I jump on and keep her going as long as I can see,

only I have to stop on the ends to put in and pull out the plows.

I can this way plow from 4 to 6 acres alone and the men have already applied to me for another job for this year. I think if more farmers would have a better system of giving their hired help regular hours, the West would be not so short of farm hands. Now comes threshing time again. I had the same engineer threshing and we put in 40 1/4 days without one cent of repairs and I paid the man \$6, which I consider was giving wages. I paid the same for separator man although I could have got cheaper men but this don't pay. My system was 12 hours work at the machine. The separator is a 36 x 56; engine 45 h.p. Titan I H C and I will now say on the strength of my outfit doing so good, two I H C outfits were sold in this neighborhood. I aimed to have the straw come out of the blower at 6 a.m. sharp, when you could see the smoke come, and at 7 p.m. sharp all work stopped to the minute. I made it a strict point to see that this was regularly observed, but the main thing bear in mind is that both ends of machine have a good man. I never did any talking to the men but treated them civilly as men and fed them good, and if any hand did not seem to work or act independently I would drive to town and get a man in his place. I would go 20 miles to do this; even if you have to go by rail to get your man do not stop, and keep one or more extra men on hand. In this way I got the credit of being the best thresher around here, although my separator is only a medium size one. I have made a good record of 2,800 bushels of wheat, and hear that I am above the rest of my neighboring brother engine men. Hoping this success will help some of our brother writers who are not successful.

Yours truly,
A. P. Brown,
Drinkwater, Sask.

✍

The Combination for Scrub Land

Dear Sir:

In regard to the traction outfit you make enquiries about. I have operated one since the fall of 1912. Did not do any plowing the first year and used it for threshing the summer of 1913. I bought a John Deere scrub breaker and broke 105 acres of scrub land. The land in this district is quite scrubby and I think the engine and scrub breaker are about the only combination to break this land and make a good job of it.

Our engine is a Fairbanks-Morse 15-30. We pulled a 24 in. breaker and packed the ground



You Need a New DE LAVAL SEPARATOR NOW

1st If you are still using some gravity or setting process of creaming—

Because Your Cows Have Likely freshened now and your supply of milk is greater.

Because Your Young Calves will thrive best with warm, sweet separator skim-milk.

Because Your Spring Work Re-quires every minute of your time and a good cream separator will be a great time and labor saver.

Because with Your Increased Milk flow your greater waste of cream, without a good cream separator, must run into more money than you can afford to lose.

2nd If you have a very old De Laval or an inferior separator whether new or old—

Because the Losses of the Poor separator from incomplete skimming, and the tainted product of the hard-to-clean and unsanitary separator mean most when your volume of milk is the greatest.

Because an Improved De Laval Cream Separator is so much simpler and more easily handled and cared for than any other, and you can't afford to waste time these busy days fussing with an inferior or half worn-out machine.

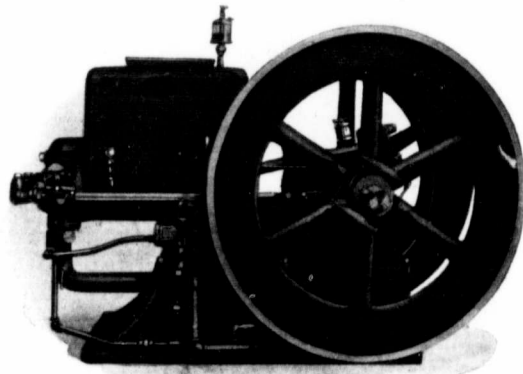
Because of the Ample and "More-than-advertised" capacity of the De Laval, you can separate more quickly and save time, when time means most to you.

Because the De Laval Separator of today is just as superior to other separators as other separators are to gravity setting.

These are all facts every De Laval local agent is glad of the opportunity to prove to any prospective buyer. If you don't know the nearest De Laval agency simply write the nearest main office, as below.

De LAVAL DAIRY SUPPLY CO., Limited
MONTREAL PETERBORO WINNIPEG VANCOUVER
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER.

The Dominion Engine



Manufactured in sizes from

1 1/2 H.P. to 26 H.P.

FOR

**Gas
Distillate
High Grade**

**Gasoline
Kerosene
High Power**

Write for our Catalogue and Price List

The North American Machinery Co.
Higgins Ave. Phone Main 5036 Winnipeg, Man.

with the
small di
gine, wh
three tim
the grou
almost li
We ha
with th
the scrub
two or
We us
kerosene
man for
the plow
acres of
acre. We
a few ye
gave the
could pul
with hor
how much
ing with
never don

Kerosene

Dear Sirs:

I have 1
Parr 45-6
breaking a
sons and t
trict which
ing in, it is
water is v
engine boil
In breaki
a five bott
and in plo
seven bott
another O.
The aver
about as fol
45 gallons k
3 gallons at 2
Oils and greas
Sharpening sh
Engineer wag
Plowman wag

The aver
breaking ve
acres or at
acre. In old
or at the rat
This does
tiation of t
slightly grea
but this sma
than made up
done more s
The engine
lons of wate
provided for
empty barr
bungs out of
a short woo
loaded these
filled them w
dumped one
each day's p
ing off a bar
side each ha
when we stop
the end we h
simply had to
gine, using a
1 1/2 inch with
to the bottom

with the engine wheels and had a small disk attached to the engine, which disked it over about three times after packing. It left the ground in very nice shape, almost like a summerfallow.

We have not done any work with the gangs yet. We have all the scrub breaking we can do for two or three years.

We used about 32 gallons of kerosene for 12 hours; takes one man for the engine and one for the plow. Can plow about three acres of that land and get \$10 an acre. We may use the gangs in a few years, but I think I would give the engine all the plows she could pull, and do the seeding with horses. I could not say how much per acre to do seeding with an engine as we have never done any.

George Birkenshaw,
Cocanville, Sask.



Kerosene Engine Ideal Power for the West

Dear Sirs:

I have been operating a Hart-Parr 45-60 for parts of three breaking and two threshing seasons and think that, for the district which we have been working in, it is the ideal power as the water is very hard on the steam engine boilers.

In breaking, have been pulling a five bottom Cockshutt breaker, and in plowing old land we use seven bottoms and could pull another O.K.

The average day's work stands about as follows per 10 hour day:

45 gallons kerosene at 18c.	8.10
2 gallons at 27c.81
Oils and grease	2.00
Sharpening shares	1.00
Engineer wages	4.00
Plowman wages	2.00

17.91

The average day's work in breaking very tough sod is 10 acres or at the rate of \$1.80 per acre. In old land about 20 acres or at the rate of 90c per acre.

This does not figure the depreciation of the outfit which is slightly greater than with horses, but this small difference is more than made up by having the work done more satisfactorily.

The engine uses about 40 gallons of water per day. This we provided for by securing five empty barrels, knocking the bungs out of them and putting in a short wood plug instead. We loaded these on the wagon and filled them with water and then dumped one off at the end of each day's plowing, also dumping off a barrel of kerosene beside each barrel of water. So when we stopped on the turn at the end we had both handy and simply had to pump it to the engine, using a semi-rotary pump—1 1/2 inch with four feet of piping to the bottom of it and five or six

feet of hose to the top with a strainer in the bottom joint of the pump. Found this great a saving of time and fuel over the pail system. A man and team one day in five keeps the engine supplied with fuel and water.

The engine is equipped with magneto and extension rims and I would recommend both for hard rough work where efficiency is the first consideration.

Have not done any discing or

seeding, but it should be a success on large farms. I find the engine O.K. for threshing, driving a 33-56 Garr-Scott separator very nicely and giving good steady power.

I think the kerosene engine is the ideal power for most parts of the West, though having run a steam threshing rig for four falls, I think that steam has a prominent place where water is plentiful and good, and where straw

may be used for fuel or coal is not too expensive.

To the prospective buyer of tractor, I would like to say; don't think that you can buy an engine, run it for ten hours a day, day in and day out and never take a look over it, for if you do you will surely get your share of trouble later on.

Two minutes on a loose stud or bolt may save a big repair bill,

Continued on page 24

Making Power-Farming Pay



Clean, uniform fuel and first quality lubricants are of first importance in power-farming. More than 300 Imperial Oil Company's tank stations in all parts of Western Canada put the best oils and fuels within reach of every farmer.

Silver Star

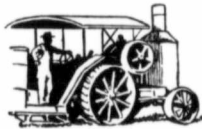
A Refined Oil for use on Traction Engines



are the tractor fuels specified at the Winnipeg Motor Contest. Uniform, powerful, fully refined products.



Keeps your motor running with least wear and friction. Polarine is the lubricant for cold weather—flows freely down to zero. Burns cleanly with minimum carbon deposit. It is equally good for gasoline or kerosene tractors.



THE IMPERIAL OIL COMPANY, Limited

Regina
Edmonton
Moose Jaw

Winnipeg
Vancouver

Saskatoon
Calgary
Lethbridge

Stock carried at 300 stations in Western Canada

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

STOP! LOOK! LISTEN!

WHAT WILL HAPPEN TO YOU
OR YOUR FAMILY IF YOU GET
HAILED OUT?

SEE OUR LOCAL AGENT, OR WRITE TO
BRITISH AMERICA ASSURANCE CO. WINNIPEG, MAN.
AGENTS WANTED IN UNREPRESENTED DISTRICTS

BRITISH AMERICA ASSURANCE CO.
INCORPORATED 1833 A.D.

Assets Over \$2,300,000.00
Losses Paid ... Over \$37,000,000.00
Directorate—All men of proved worth in Canadian affairs.
Policy of Company—Prompt Adjustments, Liberal Settlements.
Hail Insurance at Reasonable Rates.
Demand the Best.
A British American Hail Policy Will Be Your Choice.

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

SOME FUNDAMENTAL REASONS FOR THE ACKNOWLEDGED SUPERIORITY OF



CASE STEAM TRACTORS

For years Case Steam Engines have been known by the farm power users of the world as the very best Steam Traction Engines. Why? Because since our first engine was built we have always worked to make every improvement possible for the refinement and betterment of these, the best Steam Tractors.

As a result of this alert, ever watchful policy, Case Steam Tractors today continue to set the world's standard for this kind of power. Here is one reason for their pre-eminence—more will follow month after month—"Simplicity."

The Case Steam Tractor has but one cylinder with its attendant fewness of parts. In the Case Single Cylinder Steam Engine, the number of parts is therefore greatly reduced, when compared with the double cylinder type. This means closer approach to the ideal engine, as such simplicity as this is not only desirable, but necessary, for the most satisfactory operation under all conditions.

Further, only one set of gears is used to transmit the power from the crank-shaft to the counter-shaft, because here we have high speed and comparatively low pressure. A further simplification in design. But from the counter-shaft to the axle we use double gears, as here is found high pressure and low speed. The doing away with unnecessary gears between the crank-shaft and counter-shaft is a sample of Case simplicity. Why have any parts that are not needed? In Case Steam Tractors there are none. Compare these tractors with others. The more you honestly know about ALL tractors, the surer are you to be convinced of the fact that for all-around work, year in and year out, year after year, Case leads them all.

Watch for additional features next month, but in the meantime let us send you our catalog describing in detail this power, which means so much to you farm power users.



J.I. CASE THRESHING MACHINE CO.

741-791 STATE ST. INCORPORATED RACINE, WIS. U.S.A.
CANADIAN BRANCHES TORONTO · WINNIPEG · SASKATOON · REGINA · CALGARY

SOME OF THE SAME FOR THE UNIVERSAL LEADERSHIP OF CASE GAS TRACTORS

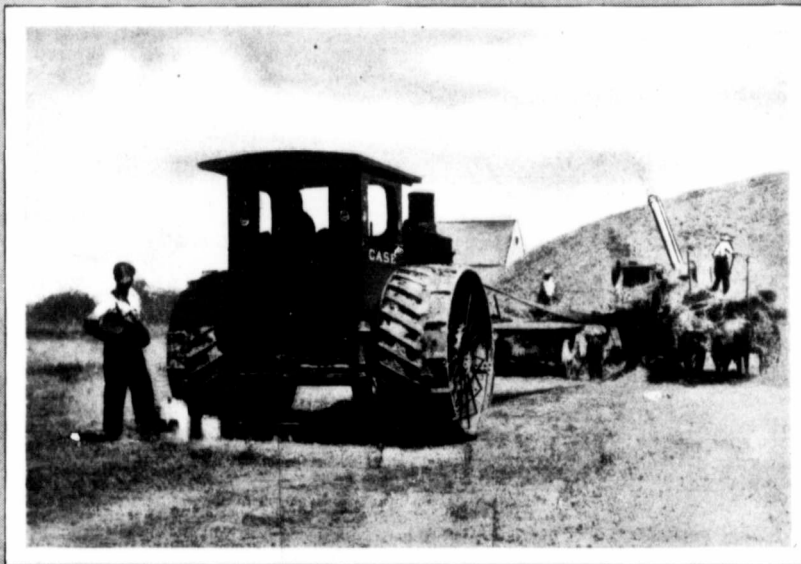


With the introduction of the gas and oil tractor as practical farm power, Case immediately took in this field the same place of leadership that we have occupied for years in the steam tractor world. Twenty odd years ago Case began work on a gas tractor, experimenting and improving at our own expense. As a result of this policy of "being sure," Case gas tractors today guarantee to users of this power results which make others envious. Here are a few reasons why Case gas and oil tractors are the joy of farmers and the envy of competitors. More will follow next month. Watch for them.

Scientific Simplicity

The Case Forty gas tractor has fewer parts than any other gas tractor on the market. Think what Case scientific simplicity means! It is not the leaving off of parts—the cheapening of the job. On the other hand, the fact that we use fewer parts means that we use BETTER parts. Only the very, very best materials that field test and mechanical practice have shown to be best suited for their respective tasks, are used. Such genuine construction you users of farm power must appreciate, if you want the greatest value and returns for your money. If you want a cheap machine, that is another thing, but if you want an economical machine, buy a simple one. Buy a Case, because it is the most simple of all makes. For this and other reasons (to come next and following months) you can do more work in less time, at less cost, with Case machinery than with any other.

Better send for our catalog on Farm Power. See next month's issue for other substantial, sound reasons for buying Case gas tractors. Better be safe than sorry.



J.I. CASE THRESHING MACHINE CO.

741-791 STATE ST.

INCORPORATED

RACINE, WIS. U.S.A.

CANADIAN
BRANCHES

TORONTO · WINNIPEG · SASKATOON · REGINA · CALGARY

and a good plan is to spend 15 or 20 minutes looking over the rig each day.

Hoping this will be useful to some of the many readers of your valuable paper. I greatly enjoy reading the Thresherman, and wish you many years of continued success.

S. E. Burch,
Wellwood, Man.



Very Profitable in More Ways Than One

Gentlemen:

I have owned and operated a Rumely 15-30 OilPull engine now going third season and have run it summer and winter and am running it to-day with thermometer hovering from fifteen to forty below zero; chopping for my neighbors.

My chopper is in a shed but my engine is outside with no protection whatever. I have not lost ten minutes in starting all winter. On an average I chop about two days per week. In chopping I burn ten gallons from eight a.m. to 6 p.m., running a nine and quarter Vissat chopper on kerosene at 17 1/2¢ per gallon.

In threshing and plowing I burn about thirty-five gallons per day and use between twenty and thirty gallons of water per day, (depending on weather conditions) and about 1/2 gallon of gasoline per day in starting.

In plowing I draw a six furrow Massey-Harris plow turning a swath of seven feet, plowing fifteen to twenty acres per day, depending largely on field conditions and unavoidable stops which should be few if tractor is kept in shape. I usually pay a man \$2.00 per day to tend plows, and lubricate engine thoroughly before starting in morning and noon hour. While I look over engine and keep things in proper working order and any other little necessity about the farm, as I always run tractor myself.

In threshing I have a complete outfit of my own, consisting of six stook teams and an oil wagon. I hire nine men—six teamsters, two field pitchers and separator man, and when I am ready to thresh, I am not depending on my neighbors for help or running around trying to hire men and teams.

If possible I try to get neighbors to draw grain to elevator, as I like to keep my own teams around the machine. They are used to it and in this way I avoid expensive runaways and loss of time getting strange horses up to separator.

The charges in this neighborhood are oats, 5¢; barley, 6¢; wheat, 8¢; which includes everything. Last fall in twenty days I threshed 45,000 bushels, including 25,000 wheat, 8,000 barley, balance oats. I would have

Threshermen MUST have a Grain Scale!

The "CROWN" Grain Steelyard

Will Do the Work and Costs Little

Government regulations will COMPEL every thresher who starts out this next season to include in his outfit a tested Grain Scale.

There is no getting away from this ruling, but, equally, there is no need to spend a large amount on something that may be bought at a price within the reach of all.

To comply with the Government requirements, yet work no great hardship on the thresherman, we have placed on the market this season

The Crown Grain Steelyard \$5.00

a Government-tested and approved Grain Scale, strong and neat, of sufficient capacity (100 lbs.), and with no complicated parts to get out of order, at the extremely reasonable price of

(Cash with order—F.O.B. Winnipeg, Saskatoon or Calgary)

Mail your order at once, to ensure delivery, as the demand for these Scales will be very great.

The Canadian Fairbanks-Morse Co. Limited

WINNIPEG REGINA SASKATOON CALGARY
MONTREAL ST. JOHN OTTAWA TORONTO VANCOUVER VICTORIA

See Page 40, this issue of "Canadian Thresherman" for full text of the new Dominion Act.

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

secured a better average only for so much very heavy, long, tangled straw. My wages ran about twenty-six dollars per day. In repairs, my 30-48 Rumely separator has cost me one dollar for the two seasons.

Repairs for my engine in 1912 were 1 pinion, \$7; 1 valve stem, \$5; two sets batteries, \$4 each. 1913, 1 pinion, \$7; 2 pinions and plate for pump, \$3, and 2 sets of batteries. I have practically done no seeding or discing with my engine as I have horse power enough to do this. In 1912 I plowed 300 acres for myself, and 80 acres at \$2.25 for my neighbor, clear expenses, for my spring's work in connection with my engine.

In 1913 I plowed 200 acres for myself and 40 acres for my neighbor, clear practically all expenses, with tractor that spring. For 1914 I only have about 100 acres to plow, as last fall I plowed with tractor and horses in wet weather when threshing was stopped.

In concluding I would say that I have found out for myself that my experience with power farming has been very profitable in more ways than one. In 1912 I received 5¢ per bushel for oats more by getting early market, and in 1913 I received 4¢ per bushel more by catching early market for 10,000 bushels of oats. This was impossible without a machine of my own waiting in the field, and by getting crop seeded in proper time in the spring.

The Rumely 15-30 is a very light tractor and I have extensions also. It practically does not pack the soil and will go over very soft places without going down. I might say I am well satisfied with the whole outfit.

Yours truly,
A. H. Walker,
Rokeby.

Calls for Grit-Proof Bearings

Dear Sir:

Pursuant to your request I will state my observations gained by three years experience at Zealandia, Sask., with traction farming. Although I have recently sold my outfit and rented out my land I will state my views briefly as possible. I first used a 20 h.p. gasoline engine and four-bottom P & O plow in breaking up my land in 1910. While the fuel consumption of this engine was light, averaging from 2 to 2 1/2 imperial gallons of gasoline per acre for plowing, yet owing to the light construction of engine I considered the operations rather unsatisfactory, especially if you consider that most tractors at that time were more or less in the experimental stage. This type of engine made splendid showing at the motor contests under favorable conditions and with expert handling when they were new, but under the steady grind and excessive wear it would not stand up under

the test. I did no threshing with this engine and no disking, but seeded 400 acres of flax, pulling only two drills and drag with very good satisfaction.

My next outfit was a Hart-Parr engine 40-60 h.p. and John Deere six-bottom breaking plow. I also rigged up a hitch for pulling six John Deere disks and drag, the disks being the tandem combinations. This outfit gave splendid results. We averaged over seventy acres per day double disking and floating in one operation. One man running the outfit most of the time. In plowing, the work was equally satisfactory, the Hart-Parr engine handling the six plows and heavily weighted drag with perfect ease and not appearing to be over two-thirds loaded.

By using a 450 gallon oil tank for kerosene and a steel tank with faucet for gasoline the work of catering to the needs of this outfit was reduced to a minimum. I used the engine for plowing, packing and disking only as I had plenty of horses for the other operations on seven quarter sections of improved land. I found the fuel oil consumption for plowing to average fully four gallons per acre. Though this might have been reduced if engine had been loaded to its capacity which would probably have been more economical. I do not consider the use of coal oil at 20 cents per gallon much more economical than gasoline at 30 cents.

ever n
has p
prover
built f
and al
materi

For
Wel
Dur
Eco
Easi

Seaso
popula

You t

TH

The First Quality Line Threshing Machinery

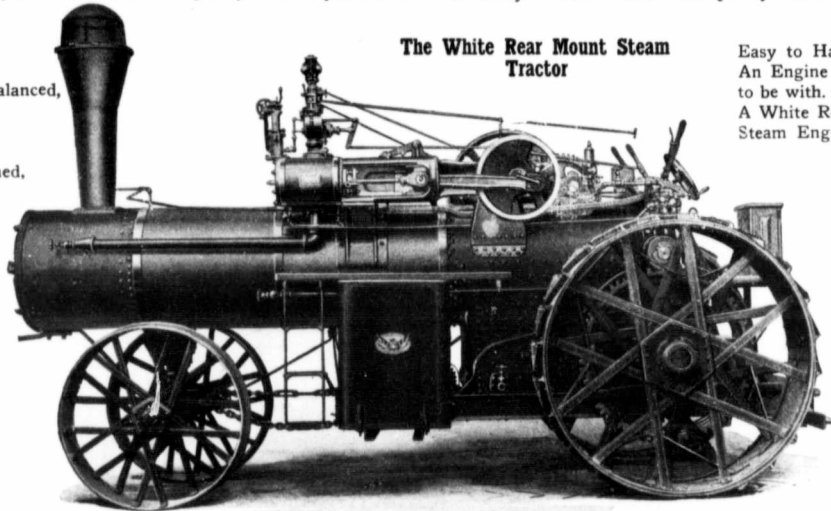
Fifty years' experience in Building Threshing Machinery is our Record

FIFTY YEARS' experience in building threshing machinery is an enviable record. To you, as a Thresherman, it however means far more than a mere record. It means that when you buy "The First Quality Line" you get a line of machinery that has passed through every stage of development in Canadian Threshing Machinery. It means that every part has been tried and proven in the field and that all of the experimenting has been done before you buy it. It means that, first of all, you get machinery built for service. Day in and day out it will go into the field and do the work that it was intended to do. It is also built to suit any and all conditions, no matter where they are nor how severe the work. "Quality" has been our motto for fifty years. Quality in material, quality in service rendered, quality in work performed. That is why we call it "The First Quality Line."

For a Well Balanced,
Well Made,
Durable,
Economical,
Easily Steamed.

The White Rear Mount Steam Tractor

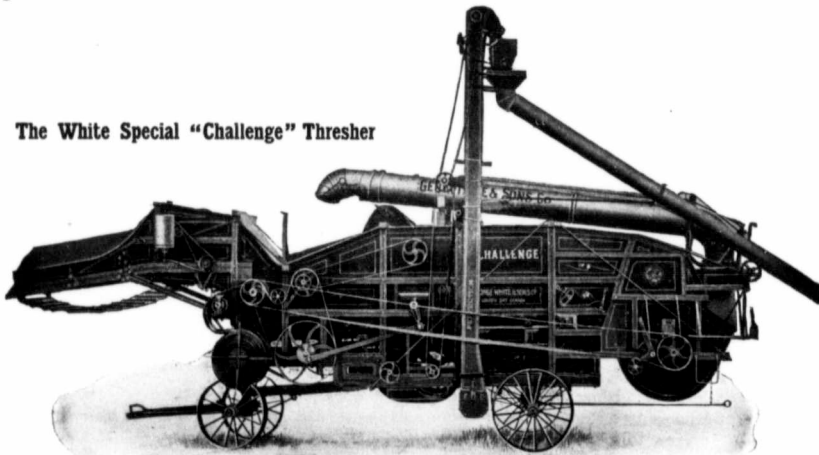
Easy to Handle.
An Engine it is a Pleasure
to be with. You need
A White Rear Mount
Steam Engine.



The necessity for the successful Thresherman to have a High Grade, First Quality Threshing Machine is greater than ever. Seasons are getting shorter each year. Farmers are more exacting.

The "Challenge" Machine from the increased sales up to date has not only kept up its reputation, but has increased its popularity among successful threshermen.

The White Special "Challenge" Thresher



You take no chance when you purchase the First Quality Line. Our years of experience has eliminated all chance. Our Goods are field tried and experience proven.

THE GEORGE WHITE & SONS COMPANY, LIMITED

LONDON, Ont.

BRANDON, Man.

MOOSE JAW, Sask.

Have You Tried Murray Carbon Remover Yet?

Did you ever have trouble with Carbon in your engine cylinders? Did you ever have dirty Spark Plugs? If you have ever run a gas engine of any style or description you know what trouble dirty carbonized cylinders and Spark Plugs have caused you. Just when you needed your engine most it began to lose power or stopped altogether. In some cases this carbon deposit meant a complete overhauling of the engine, requiring hours or even days. It will pay you to give this a trial and you can then verify our statements. It will positively remove carbon in five minutes. It will do it completely and effectually without ever stopping the engine. No tools necessary, non-explosive, contains no acids or any ingredients harmful to the engine. Your engine will develop more power every day you use Murray Carbon Remover. Endorsed and recommended by all leading Gas Engine and Automobile Agents.

Half Gallon Can, \$2.75.

One Gallon Can, \$5.00.

**For Sale by A. E. EMBY, Western Agent The People's Gas Supply Co. Limited
100 James St. E., Winnipeg. P.O. 1681**

A. E. EMBY, WINNIPEG.

Enclosed find \$..... for which please send me.....gallon can of Murray Carbon Remover.

Name

P. O.

Station C.T.F.

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

About 45 gallons of water per day was required with this engine. About one and a half gallons of cylinder oil and the same amount of block oil is required, or perhaps a little less of the block oil where gear grease is used on gears. While my repair expense for one season with this outfit for engine was practically nothing, yet you cannot get away from a big depreciation and wear and tear, and I always consider it the largest item of all in the long run. I must not neglect to state that my good luck was also due to having a careful and experienced engineer in caring for this engine most of the time.

My estimate that for fuel and labor this engine can plow for \$1.25 per acre but when depreciation and interest on equipment is brought into calculation as it should be, it is easily double the amount and then some. And if you will pardon me I wish to throw in this statement right here that, in my judgment the high tariff and excessive freight rates are contributing more towards grinding the heart of the Western Canadian farmer than any other one cause.

For disking and floating we used 70 to 80 gallons of oil per day, double disking and floating an average of 72 acres per day, and doing the finest work imaginable. About two gallons of gasoline are required per day excepting in real warm weather when less can be used.

As far as old land farming is concerned I believe that for best results an engine must be devised having gears enclosed and running in oil to reduce the tremendous wear owing to the flying dirt and grit in dry farming. I believe that through some system of warm gears this can be brought about as I can think of no other way where so much speed reduction is possible in so small compass.

I do not consider a tractor detrimental to the land only when used for seeding and working land after plowing, as the wheels pack land so much on the surface as to cause excessive evaporation unless the land is again loosened up on surface.

Yours very respectfully,
E. R. Fraser.

A Strong Believer

Dear Sirs:

I am in receipt of your letter of the 12th inst. asking my experience with the tractor on the farm. I regret to say in reply that I can only speak in general terms not having gone into details as to any of the points you raise. I can also only speak from a short trial of two years. In this short time I have become a strong believer in that method of farming and am convinced of great possibilities the farm tractor holds in putting the farming

4" "30" claim for this make of tractor is in my opinion true of any tractor adapted to the work on the farm. "It places farming on a scientific business basis." To do this of course the tractor must be used in a practical way. This cannot be done where the engine is operated by the farmer himself. It would be just as easy for a miller or the owner of a mill to operate his own engine instead of hiring an engineer. How many mill owners do this? No man living is capable of operating his own tractor on the farm

will make a good farm tractor but it must be built for the work it is intended to do. The inventor of the Big 4 was a farmer who knew the conditions to be met. This is also a 4 cylinder engine and I believe the first 4 cylinder farm tractor ever built.

I am sorry I cannot give figures along the lines you mention but instead have tried to give my opinion and a few facts gathered from a short experience of only two years.

I remain,
Yours truly,
W. N. Reid,
Brandon, Man.

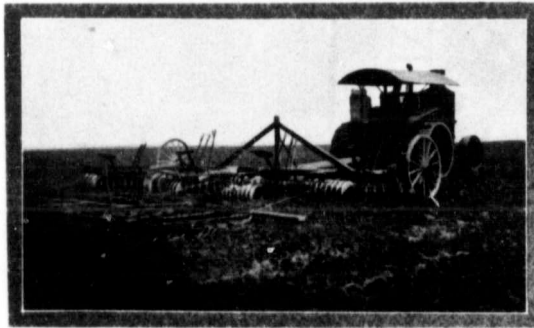


"I Like the Engine Fine"

Dear Sir:

In reply to yours asking for my experience with traction cultivation, I own and operate a Sawyer-Massey 22-45 horse power engine. I have not had the best of results from engine mainly through want of experience but have done quite a bit of work with it, plowing and discing, but have not attempted to do any seeding. I think that is a job for horses on account of not being able to turn the corners quick enough, especially if some of your land is fenced the same as mine is. And seeding is not the same as discing, for with discing in closing in a land, some of it is covered twice at the corners which does not hurt for discing, but would not do for sowing.

I purchased this engine the fall before last, did my threshing with it and some outside work. The separator is a 29 inch cylinder which is a little too small for engine. A 32 would have been better. It is a "Daisy" also Sawyer-Massey make. I have had more or less trouble with magneto on engine in draining the batteries. This engine has batteries for starting, and then you switch onto the magneto, but through some reason it has been draining the batteries when switched onto magneto, and up to the present we have not been able to locate the trouble. So the company ordered me to send magneto and batteries with all wiring to the shops and I am



A Great Assembly in Power Farming.

business on an equality with other businesses.

The tractor I use is the "Big 4" "30" gas tractor, made by the Gas Traction Co., of Minneapolis, now the Emerson-Brantingham Co. With this engine I have plowed, harrowed, disced, packed, harvested, threshed the grain and delivered it to market. In all these lines of work I am satisfied that the tractor excels the horse from the standpoint of economy and every other way.

About the only work I have not done with the engine on the farm is seeding. But where the land is free from ponds I see no reason why this work cannot be done with equal advantage with the others mentioned.

I anticipate in the very near future under draining with tile will make the tractor the ideal power on any farm in this country for all kinds of work. By draining the little sloughs and depressions earlier in the spring and by enabling the land to dry much sooner.

What the builders of the "Big

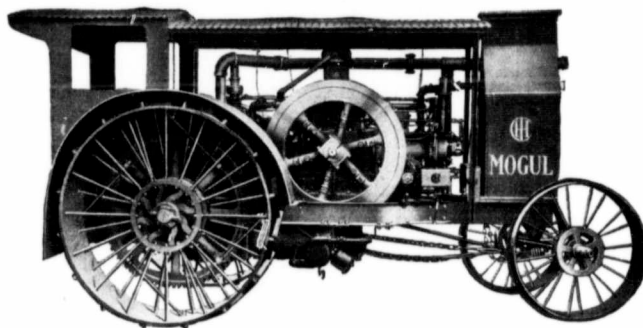
and make a success of farming. It pays to use a tractor on the farm only when a competent engineer is engaged, one who can produce results.

The traction engine on the farm has several advantages over the horse. Among them I will mention a few only. It only eats while working. This is a great advantage in winter. It eliminates the men required. It will not run away and break machinery, etc. It will work in all kinds of weather and all night as well as day if required. The flies or heat of summer do not bother it and sore shoulders are unknown.

There are a number of farm tractors and it has been my privilege to study a few of the leading ones. When I purchased an engine for my farm I did so with a great deal of thought and consideration in the matter and in selecting the "Big 4" "30" I did so believing it to be the best all round farm engine made and I can say that I have so far had no cause for regret.

I don't believe any make of en-

Leading A Double Life



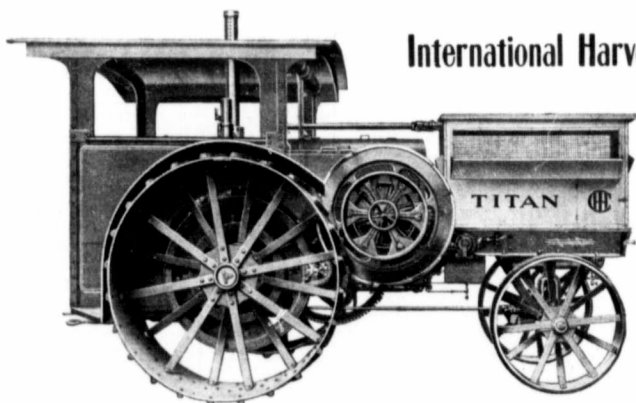
THE International Harvester oil tractor leads a double life. In its two distinct sides—drawbar and belt-power work—it is equally efficient. In drawbar work, you can see its great efficiency, for instance, at the plows. Where one day's plowing used to be two to three acres, the I H C tractor plows ten to thirty acres. It will pull three or more drills or binders, haul huge loads to town, and do your road work. It will pull plows, disks, and harrows, all at the same time, saving many hours of time when time is most valuable.

As a belt-power machine it can be kept busy in all seasons. Belted to the separator, it will thresh the grain. It will run any machine requiring steady power.

An IHC Oil Tractor—Mogul or Titan

is indispensable on the modern farm. Plowing and threshing take up but a small fraction of its time, if you use it wherever it can be used. Study the tried and tested I H C tractors, with their simple, powerful engines and transmissions; their ample, well-oiled bearings; their freedom from sparks, soot and smoke; their all-round usefulness and reliability.

I H C tractors are made in all approved styles, in 6-12 to 30-60 horse-power sizes. They operate on low and high grade fuel oils. I H C general purpose engines, for every power use, range in size from 1 to 50 horse-power. Write us for interesting catalogues and other information.



International Harvester Company of Canada, Ltd.

Western Branch Houses:

At

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

hopes that when it comes back that trouble will be remedied.

Last spring I did quite a lot of spring plowing, pulling eight plows which she handled without much trouble. I run about twelve hours a day doing about twenty acres. She uses about a barrel of gasoline for a day's run, 45 gals, three gallons of gas cylinder oil and about 1/2 gallon of gear oil besides a little hard oil, etc. The estimated cost per acre for spring plowing being about \$1.20.

For discing I used two ten-foot double disc harrows with the in and out throw and I also dragged behind that another small disc harrow to make a good job of cutting the center out between the two harrows which made a good job of it. I discd about 45 acres per day, the cost being about 50 cents per acre, and I could still reduce the cost per acre if I had another 10 ft. harrow as dragging the two was just play for engine.

This discing was done before plowing. I would not think of discing plowed land with an engine, as there would be too much dust flying around which would soon play havoc with your gears. For plowing deep for summer-fallow, I took one of the plows off and pulled three sections of harrows which worked it down pretty good for the time being, the cost per acre being about \$1.45 as for plowing. I had a man to handle the plows.

The water she uses is very little providing there is no leak. When full she holds about three parts of a barrel and she will run the whole day with just a few additional pails. I do not think that the engine is detrimental to the land as I could not see any difference in the crop where the wheels covered and where they did not.

I like the engine fine, and they are all right as long as the weather is not too cold, for in cold weather they are more or less trouble to start and have got to be heated before they will go. That is where the steam engine has the gasoline engine beat in the cold weather, and the days are too short to lose time trying to get the engine started.

Yours truly,
A. E. Turner,
Willow Grove Farm,
Abernethy, Sask.

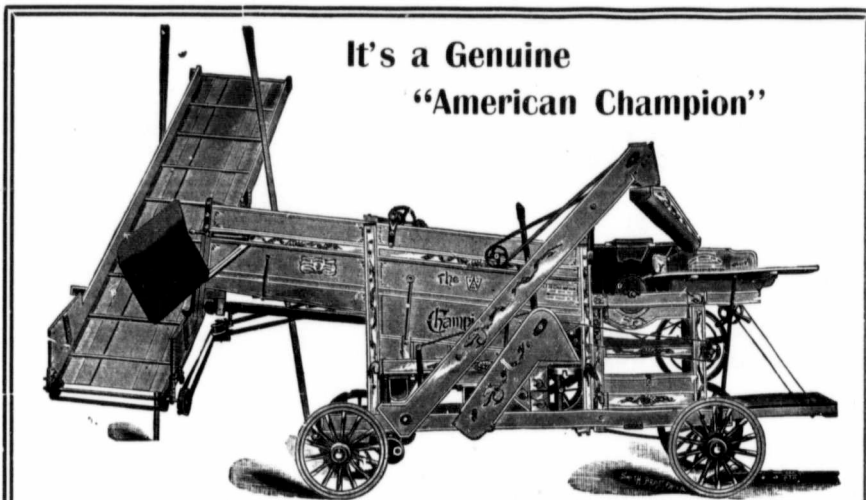


"Can you direct me to the best hotel in this town?" asked the stranger who, after sadly watching the train depart, had set his satchel upon the station platform.

"I can," replied the man who was waiting for a train going the other way, "but I hate to do it."

"Why?"

"Because you will think after you've seen it that I'm a liar."



It's a Genuine
"American Champion"

**BUY THE BEST THRESHING OUTFIT
BUY IT EARLY!**

It means much to you to have your threshing machine delivered in your place on time for the harvest.

You should write us at once for this threshing outfit, the best you can bring in your field for next season.

MOUNTED ON TRUCK, EASY TO MOVE, POWERFUL MACHINE with wagon bagger, tailings elevator, straw stacker. To run with gasoline or steam power.

Representatives Wanted

We would like to communicate at once and take agreement with experienced dealers or agents for the sales of our threshing machines in Manitoba, Alberta, Saskatchewan.

WRITE TO

P. T. LEGARÉ LTD.

Manufacturers

QUEBEC CANADA

Send the Coupon

It will bring you a beautiful catalogue and our prices on threshing machines. The most complete book of farming implements.

FULFILL AND SEND THIS COUPON TODAY

P. T. Legaré Ltd.
Quebec

Gents:—
Please send me your catalogue and full information on your threshing machines.

NAME

ADDRESS

C.T.F. PROVINCE

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

Water Scarcity Booms Business for Well Drillers

Enormous increase in immigration, scarcity of pure water and alarming spread of TYPHOID FEVER are booming the well-drilling business. Entire populations demand pure well water.

Well drillers are making from \$25.00 to \$50.00 a day clear profit the year around. Magnificent money-making possibilities for live men everywhere who want to work—men who have a reasonable amount of money to invest in machinery—men who can grasp the exceptional opportunity for engaging in this business NOW—a business VITAL to the country's prosperity and growth.

Immigration Compels Immediate Action!

Hundreds of thousands of families are settling throughout Canada, and every homestead requires a pure supply of fresh water. Creeks, lakes, ponds and shallow wells, now contaminated in every locality, are being condemned by health authorities. And the drilled well is the people's only alternative. Today, there is ten times more drilling to be done than men to do it. Enter this profitable field, simplify the work with

Armstrong Well-Drilling Machinery

Build for Service Since 1867—Cuts the Cost—Trebles the Profits

Armstrong Well-Drilling Machinery affords you the quickest and easiest way to turn the Canadian water scarcity into profits. It does more work at less expense than any other drilling machinery in existence.

By actual test Armstrong machines average 92 feet per day in solid rock, using 5 1/2 gallons of fuel on work where other machines average only 61 feet on 12 gallons. Armstrong averages 46 per cent more efficiency at 25 per cent less fuel.



For nearly half a century Armstrong Machinery has been noted for its unequalled durability; also for its simplicity of construction and operation. Our patented Internal Compensating Band Wheel Clutch—which does away with lost motion—is one of the greatest improvements ever made in well-drilling designs. This clutch and our improved friction hoists do away with all attachments, balance wheels, cast brakes, cans, bumpers, treadle levers and ratchets. Produces ideal elliptic drilling motion with absolute minimum friction. Eliminates expensive repairs and delays. Only one gear and pinion. We make gasoline and steam outfits—traction and non-traction, walking beam, spindling rig, rotary and combination outfits—a machine for any depth, every formation. Outfits furnished with power or without. We furnish famous Armstrong Special Gasoline and Steam Drilling Engines with patented speed-controlling lever of drilling end of machine. Changes instantly and absolutely controls speed of engine. Non-slipive steam power. Our engine removes last objection to gasoline power for drilling. Broad guarantee protects you fully. A branch now in Saskatoon to take care of our Dominion trade. Confer with us on any technical question. **WRITE FOR BIG 184-PAGE ILLUSTRATED CATALOG**—The book fully explains well drilling and shows how Armstrong Machinery simplifies it. Tells how new men have jumped in and made big incomes with little experience. If you are interested in well drilling write for this book. Sent free on receipt of 10c to cover postage. **ARMSTRONG MFG. CO., 354 Drilling Block, Saskatoon Sask. Home Office and Factory Waterloo Iowa**

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



"I clear \$50 a day above expenses, right along."
THOS. KELLEY.

Why Well Drilling Beats Threshing

An Armstrong Well-Drilling Outfit costs from one-half to one-third that of a threshing outfit, can be operated every day in the year, and pays from two to three times the profit. Proving wonderfully attractive to threshermen, farmers, railroad men—all seeking steady work and a profitable business of their own. Complete outfit furnished with or without power.

M a
Mixer
When
up ther
blowing
and pa
that a
have a
the soil
as the
vated, a
root fib
humus
blows r
more fr
tivated
disinteg
summer
destruct
of culti
continu
the ph
land, m
growing
gether
and mo
hard br
a condit
The e
to keep
The gro
the soil
that w
prairie
fills the
of rootle
and prev
of grain
and do
pose. M
to the h
The e
conserva
importan
country.
is held
stick to
articles
moisture
the partic
is called
will run
holds mo
cause th
smaller
are more
the water
particles
solid and
the surfa
Humus, t
table mat
on the c
soaks it
within th
large am
Western
sible for
long perio
soaks up
it until th
keeping
humus in
a very im
dry-farmin
mixed far
mendable
light.
The
The lan

Mixed Farming in Western Canada

Continued from page 12

When the prairie is first broken up there is no difficulty with soil blowing. The humus in the land and particularly the root fibres that are not completely decayed have a binding effect and keep the soil in its place. Year by year as the land is plowed and cultivated, and crops are grown, these root fibres are ground up and the humus is used up so that the soil blows much more readily. The more frequently the land is cultivated the more rapidly this disintegration takes place, and summer-fallowing is especially destructive because of the amount of cultivation it entails. Thus continuous grain growing spoils the physical condition of the land, makes it more subject to growing, more likely to run together and be sticky when wet, and more likely either to form hard bricks or be in too powdery a condition when dry.

The effect of mixed farming is to keep up the supply of humus. The growing of grasses restores the soil to a similar condition to that which existed when the prairie was first broken up. It fills the soil with a fine network of rootlets which bind it together and prevent blowing. The roots of grain crops are few and coarse and do not accomplish this purpose. Manure also adds greatly to the humus in the soil.

The effect of humus on the conservation of moisture is an important consideration in a dry country. The moisture in the soil is held in layers of water that stick to the outside of the particles of soil. When there is more moisture than what will stick to the particles of soil, we have what is called free water, or water that will run off in drainage. Clay holds more water than sand because the particles are much smaller and consequently there are more little surfaces to which the water can stick. But the particles of both clay and sand are solid and can only hold water on the surface, just as a pebble can. Humus, being composed of vegetable matter, not only holds water on the outer surface, but also soaks it up, and thus holds it within the particles. It is the large amount of humus in our Western soils that makes it possible for crops to live through long periods of drouth. The soil soaks up the moisture and holds it until the plants require it. The keeping up of the supply of humus in the soil is consequently a very important consideration in dry-farming and one that makes mixed farming especially commendable when the rainfall is light.

The Spread of Weeds
The land of Western Canada

is yearly becoming more and more polluted with weeds. So long as crops of one type only are grown, the control of weeds is very difficult. Even though summer-fallowing is done frequently and thoroughly wild oats and other weeds get worse. Mixed farming makes it much easier to keep the land clean. Different weeds thrive best with different crops and when a change in the kind of crop is made it gives the weeds a setback. For instance, seeding down to grass and growing hay for a few years is the easiest and most effective way of killing wild oats. The change in crop brings about a condition that is quite unsuited to that type of weed.

Gas Engine Troubles

Continued from page 17

not get any induced current in the secondary winding of the coil, or at least it is not of a sufficiently high voltage to jump the gap in the plug. In the case of a non-vibrating coil, the points in the breaker box must make a good contact and should be kept clean. Sometimes the condenser in the coil becomes short circuited and therefore fails to perform its function and provides a continuous circuit through the primary winding. Where a magneto is used it must of course be timed with the engine or else it will not deliver current at the correct point in the cycle.

When an engine is very cold it is often very difficult to start, especially so if a low grade of gasoline is being used. This is simply due to poor carburetion. Liquid gasoline will not burn, we must have a small amount of vapor before ignition can take place. No carburetor can vaporize fuel unless heat is present, although it must be admitted that only a small amount of heat is required to vaporize a good grade of gasoline. Under ordinary weather conditions the heat of compression is generally sufficient to vaporize enough fuel to permit ignition to take place, but with a cold engine in cold weather this is not so. With a small engine we can turn it over with sufficient speed to tear the fuel up into a spray and then by continued cranking get some vapor to form, but with a big heavy engine we cannot do this. We must therefore warm up the engine with a torch, being particular to warm the intake manifold and the carburetor. It is quite safe to warm the gasoline if you are careful to keep all flame away from the top of the vessel in which the gasoline is contained. The spark plugs should be warmed and cleaned in frosty weather, and dry cells should be kept in a place where the temperature is never below freezing.

OIL

Mr. Traction Owner!

Did you receive a copy of our new booklet entitled

"Traction Engine Troubles Eliminated"?

If not, write and get a copy

Sent FREE

It tells all about

**White Rose Motor Gasoline
Rex Motor Spirit
Lily White Engine Kerosene
National Gas Engine Oil, etc.**

Address:

Canadian Oil Companies Limited

REGINA WINNIPEG CALGARY

Cut out Coupon, fill in and mail to office nearest you.

CANADIAN OIL COMPANIES, LIMITED.

Winnipeg Regina Calgary

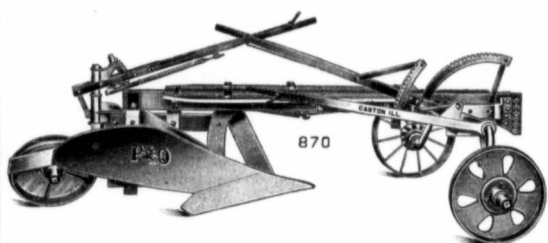
Gentlemen: Kindly mail, without charge, copy of your booklet entitled "Traction Engine Troubles Eliminated."

Name

P.O. Address

State type of Tractor owned, etc.

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



POWER GRUB BREAKER

For Use with Traction Engines Exclusively

The heaviest, strongest, and most powerful single bottom plow made; weighs nearly a ton and is nearly all steel except the platform. Convenient to operate, as the three levers are worked from the center of the platform.

Can be operated at any depth from six to twelve inches, and cuts a 24-inch furrow. Mold made in two sections, and when necessary, the rear half can be removed and rods attached in place.

It is a massive, heavy plow, and it is built to stand the tremendous strain of the deepest work in the worst kind of ground. The bottom, from tip to tip, is over six feet long. This gives some idea of its size.

Write for descriptive circular, prices and terms.

International Harvester Company

OF CANADA, LIMITED

Sales Agents for Canada.

Winnipeg
Brandon
Saskatoon

Regina
Yorkton
North Battleford
Estevan

Lethbridge
Calgary
Edmonton

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

Don't Have Carbon in Your Gas Engine Cylinders

As a matter of fact it isn't necessary. Someone will immediately say, "but it will get there if you run your engine despite anything to the contrary." Let us explain. It is true that a carbon deposit is almost sure to take place on any gas engine cylinder when used for any length of time and even when used only a short while if poor fuel be used.

Recently we witnessed a demonstration of Murray Carbon Remover, a preparation designed for the purpose of removing carbon deposit from gas engine cylinders. The object of the demonstration was a four cylinder automobile, the cylinders of which were very badly carbonized. The car, so we were informed, had not been cleaned for about eighteen months and if dirty cylinders are any indication of long usage, we have no reason to doubt the statement. The valves and cylinder heads were all heavily coated with a deposit so hard that it required a hacksaw to make an impression on it.

The car was run into one of the city garages and was not prepared in any way for the demonstration. A long nozzle funnell was secured and with the car running the operator proceeded to pour about 2-3 of a quart of the carbon remover into the cylinder through the air intake of the carburetor. This took about five minutes. The car was then stopped and upon removing the cylinder caps it was found that while all of the carbon had not been removed most of it had been and what remained was so broken up that another five minute run would have made the cylinders as clean and bright as a new silver dollar.

From the demonstration we would say that Murray Carbon Remover does all that is claimed for it which should recommend it strongly to any gas engine user, especially those who own and operate internal combustion tractors. It will undoubtedly save much time, power and machinery. As such it is the busy power Farmer's Friend.

Farm Boys' Club for Winnipeg Exhibition

Another Hundred Manitoba Youths Invited to the West's Big Show.

The Farm Boys' Club originated by the Canadian Industrial Exhibition Association last year aroused widespread interest. It was of course intended to appeal primarily to the youth of the province devoted to the pursuit of Manitoba's banner industry, agriculture, but the broader, general interest which the an-

nouncement of the plan excited was a surprise, even to the Association.

Scores of boys in all parts of the province, ambitious to be included in the club of one hundred invited to spend the week at the exhibition as its guests, with railway fares and all other expenses paid, entered the essay-writing competition, the subject of which was "The Prairie Farm." On their return home the successful boys were required to write a second essay under the head of "What I Saw and Learned at the Exhibition." Substantial cash prizes were awarded for the best five essays, and a number of these were published in one or other of the farm journals. The prize winners of 1913 were:

Robert Coulter, Swan River; Orville J. W. McMahon, Roland; J. Harold Best, Benito; G. H. Hambly, Swan Lake; A. Sinclair, Swan River

So successful did the Farm Boys' Club feature of the 1913 exhibition prove that the directors have decided to repeat it and are now distributing a folder inviting the farm boys of the province to enter the competition for places in the club of 1914, by writing an essay of 400 or 500 words on the following subject: "How Waste on a Manitoba Farm May be Reduced."

The selection of the boys will be made by a committee composed of the Deputy Minister of Education, President Black and Prof. E. Ward-Jones, of Manitoba Agricultural College, and a member of the Exhibition Board. The contest is open to boys residing on farms, or those intending to make farming their life work, and who were not members of last year's Farm Boys' Club. Each applicant must be of good moral character and between the ages of fifteen and nineteen years. No student of any agricultural college is eligible to enter.

Each applicant must notify the school inspector of his district through his teacher, or communicate direct with the Exhibition Association and write the essay as above indicated. The essays must be in the exhibition office not later than May 15, 1914. The Exhibition dates this year are July 10 to 18.

A copy of the folder giving full particulars may be obtained by addressing the Secretary of The Canadian Industrial Exhibition Association, Chambers of Commerce, Winnipeg.



Road Hog (after mishap in which a puppy has been run over) —"Madam, I will replace the animal."

Indignant Owner—"Sir, you flatter yourself."

No Punctures, No Skidding On This Year's Program



You can enjoy the benefits of pneumatics with none of their drawbacks. You can drive anywhere without fear of skidding, punctures, stone cuts, bruises or oil rot. You can come home at night or hurry for an engagement, or set out for a tour, without fear of your pleasure or business being spoiled by tire troubles.

Best of all, you can spend LESS money instead of more.

WOODWORTH TREADS are an always-ready non-skid and puncture preventer. They are ALWAYS ready for greasy roads, and an ever-present surety against tire damage.

Their patented coil tension springs absolutely prevent them from stretching loose and chafing the tires. They are soft and glove-like, yet very durable. Their life is equal to that of bare tires in equal service; but new tires covered by WOODWORTH TREADS last about three times as long as when run bare. Thus the Treads earn more than their whole cost in the tires they save.

WOODWORTH TREADS for 1914 sell at the same prices in Canada as in the United States.

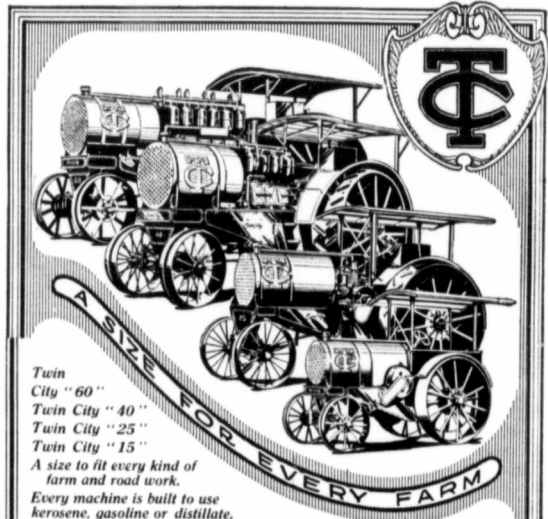
1914 PRICES

Size	Price	Size	Price
30 x 3	\$ 9.00	34 x 4	\$16.50
30 x 3 1/2	10.75	35 x 4	17.25
32 x 3 1/2	11.50	36 x 4	17.75
33 x 4	16.00	36 x 4 1/2	22.00

Other Sizes in Proportion

WOODWORTH TREADS are sold by JOHN MILLEN & SON, LTD. and THE CANADA CYCLE & MOTOR CO., at all their branches and by first-class dealers everywhere. Send for our new booklet, "Tire Users New Freedom."

**Leather Tire Goods Company
Niagara Falls, Ontario**



- Twin City "60"
- Twin City "40"
- Twin City "25"
- Twin City "15"

A size to fit every kind of farm and road work.
Every machine is built to use kerosene, gasoline or distillate.

SUMMER BREAKING

will soon be the order of the day. There is nothing that tries the power and durability of a tractor as does this class of work. Note the following features of TWIN CITY Tractors and then compare them with other makes:

1. Heavy steel plate frame, built like a bridge.
2. Heavy duty four cylinder motor.
3. Force feed oiling system and compact enclosed cooling system.
4. Automobile type of axle that makes steering easy.
5. All gears enclosed and running in oil.
6. Durability—economy—adaptability—surplus power.

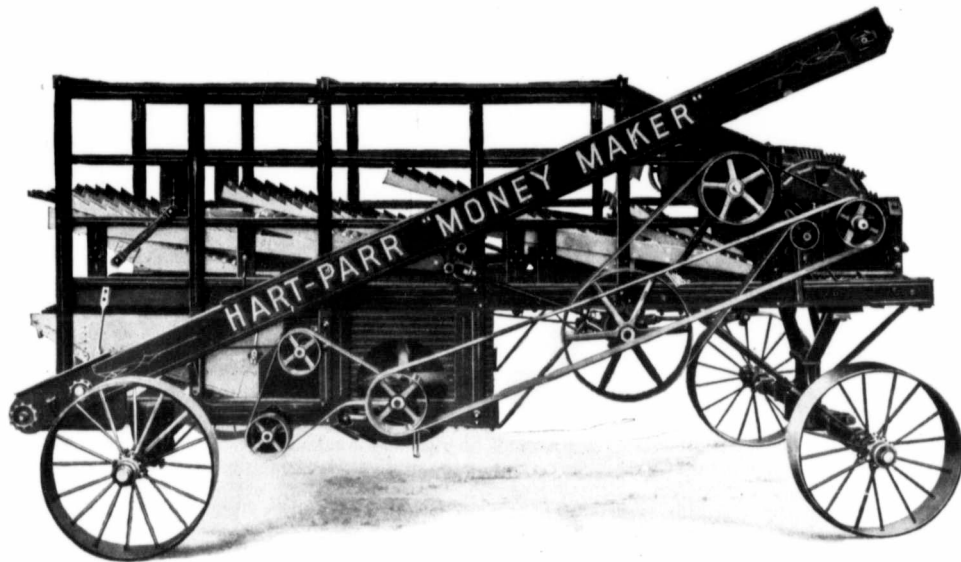
Then go a step further and examine our Direct from Factory to Farm sales plan and we are positive you will consider nothing but a TWIN CITY. Write for more information about it. Remember—a postal will do it—NOW.

When you buy a Tractor this Spring, be sure that you get a Tractor built in 1914 and not a machine that has been carried over from some previous year. All TWIN CITY Tractors for our 1914 trade are built in 1914 to meet 1914 requirements.

Minneapolis Steel & Machinery Co. of Canada Ltd.

L. L. Brockett, Mgr. WINNIPEG, MAN. 167 Princess St.
BRANCHES:
REGINA—JOHN GIBNEY, Rep. CALGARY—C. F. LEIF, Rep.
SASKATOON—R. E. SMILLIE, Rep.
Address all Inquiries to the General Office at Winnipeg.

What You Need Is A "MONEY MAKER" OUTFIT



View of skeleton without attachments

You have probably schooled yourself, by observation and actual experience, to know just what to look for in a grain thresher.

Now, just recall all the thresher features that appeal to you, and then examine a Hart-Parr "Money Maker." Look it over carefully from cylinder to shoe—from truck to deck. You will find all the desirable features embodied in most grain separators plus some features that few other machines contain. The

HART-PARR "MONEY MAKER"

is double belted; double eccentric driven in racks and pans and shoe. The end shake shoe has an independent double eccentric drive; the sieves and chaffer are adjustable. The racks are strong, stiff and counter-balanced. It has double grain pans, big cylinder, "Mastodon" teeth, heavy concaves, steel slat grates, big, undershot fan and a balanced motion throughout. It has a "down to the minute" feeder, with Pickering governor control for both speed and feed, and wabble knife spreader. The stacker is a "no choke," gearless wind stacker, with ratchet drive. Note the absence of annoying crank and "stub" shafts. All parts accessible for oiling from outside. An exclusive

feature is the spring mounting on the rear axle. This eliminates all jars and jolts from the windstacker. All main separator belts are provided with convenient belt tighteners. No delays cutting and lacing belts.

Shrewd farmers in Indiana, Illinois, Ohio, the great Dakotas and elsewhere, know that a grain separator bearing the familiar "Money Maker" trade mark, is a quality separator—every inch of it—and a big grain saver as well. Get the straight of this: A "Money Maker," driven by an "Old Reliable" Hart-Parr Oil Tractor, is an ideal threshing outfit that puts money into your pockets instead of into the straw stack.

*Learn all about the great Hart-Parr line of power farming machinery
Write to-day for interesting catalog and special bulletins*

HART-PARR CO.

30 Main St., Portage la Prairie, Man.

The Chapin Co., 325 8th Ave. West, Calgary, Alta.

1616 8th Ave., Regina, Sask.

PRACTICAL TALKS TO THRESHERMEN

Talk No. LXXIX.

Conducted By PROFESSOR P. S. ROSE

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

A TRACTION engine, whether it be steam or gas driven, is a clumsy awkward machine at best. It is heavy, the gears are large, the wheels bite into the ground, they turn slowly and the entire machine is more or less unwieldy, one of the large ones developing 60-brake horse power or 30-horse power at the draw bar. The system of gearing is simple and of the spur gear type throughout. The system of levers which will presently be described is shown in figures 183

and 184, to be patterned after those used on a number of automobiles though differing from automobile construction in some particulars to make it apply to tractor conditions. The gears in figure 183 are shown in neutral position. By moving the sliding position, 10 into mesh with pinion 11, low speed forward is obtained and

which is loose on the turned portion of the shaft.

By means of the links and cranks as shown in figure 183, gear 10 and jaw clutch 14 are moved as desired. Hand lever 2 is for operating the friction clutch (not shown) and lever

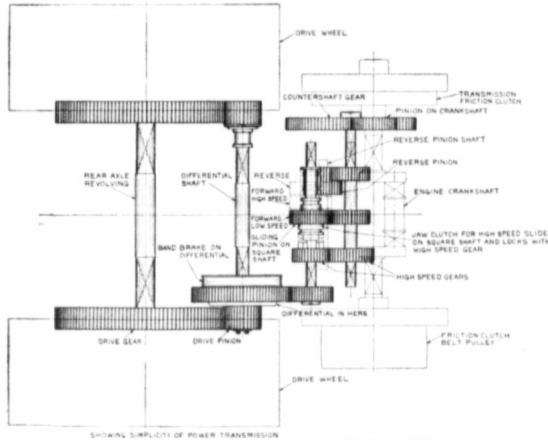


Fig. 182. Plan of Gearing from Engine to Drive.

and the larger it is the more unwieldy it generally is. Its broad wheels and great weight make it much less flexible on the road than an automobile. Automobile designers, however, are very careful in designing their machines to make them as easily handled as possible. They spare no trouble to place all the control levers in a position easily reached by the operator and see to it that there is no possibility that antagonistic acting mechanism can possibly be engaged at the same time. All of this adds to the safety of operation of the car, and gives the driver instant and complete control.

In the days of the old steam tractor with its single speed and simple train of gears apparently little thought was given to the arrangement of the various levers if we may judge by some of the awkward arrangements on the market, but with the advent of the gas tractor and with automobile design to set the pace, every effort has been made by gas tractor manufacturers to place all control levers as conveniently as possible. We have already shown the method by which power is transmitted to the drive wheels on several different styles of tractors, but in this lesson we will consider the means by which the different speeds may be obtained; that is, the system of levers by which control is effected. The machine in question is

and 184, to be patterned after those used on a number of automobiles though differing from automobile construction in some particulars to make it apply to tractor conditions.

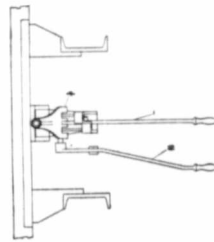


Fig. 184.

The principal features in this design are to provide safety interlocking devices to be used in connection with the hand levers that shift the gears and apply the friction clutch for a sliding transmission. With the arrangement shown in drawing, figure 183, the following results are obtained: (1) Two speeds and reverse with one gear shifting hand lever. (2) Means for guarding the operator against throwing the load on the gears unless they are properly located, which will make sure that full width of the teeth is being utilized. This will overcome the danger of stripping the covers off the teeth. (3) A positive lock to hold the gears in their proper places while the clutch is in. (4) An arrange-

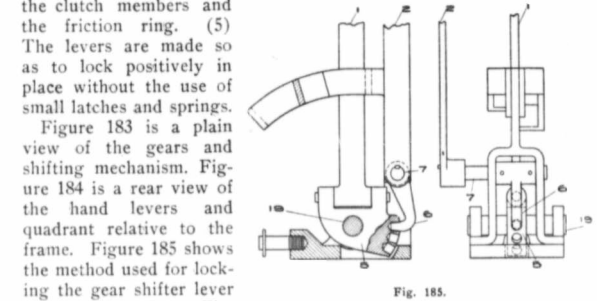


Fig. 183.

ment for disconnecting the engine from the drive wheels, other than by friction clutch. This is to avoid accidents which sometimes happen when the clutch sleeve gets dry and seizes the crank shaft or a piece of waste or similar matter gets between the clutch members and the friction ring. (5) The levers are made so as to lock positively in place without the use of small latches and springs.

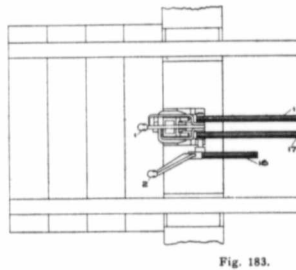


Fig. 185.

Fig. 186 is a rear view of the gears and shifting mechanism. Figure 187 is a rear view of the hand levers and quadrant relative to the frame. Figure 188 shows the method used for locking the gear shifter lever with the clutch lever.

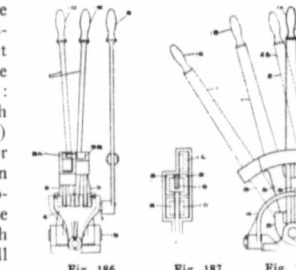


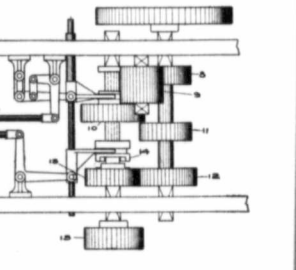
Fig. 186.

Fig. 187.

Fig. 188.

disengaged as it is shown and locking the jaw clutch 14, which is mounted on the square shaft with pinion 10 into pinion 13

1 is for shifting gear 10 and clutch 14. The different positions of the hand levers are shown in figure 188, 2A, with friction clutch in 2B with friction clutch out; 1A, figure 188, and 1E, figure 186, with jaw clutch engaged with pinion 13 for high gear forward; 1A, figure 188 and 1D, figure 186, for low gear forward; 1B, figure 188 neutral and 1C, figure 188, is for reverse.

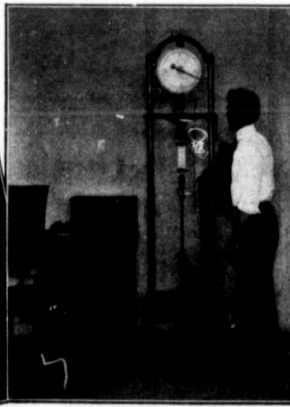


Rods 17 and 18 are connected to levers 3, figures 186 and 188, which are movable on shaft 19 which also supports block 5. Hand lever 1 is moveable in block 5 and can be engaged with either lever 3 whereby they may be placed in any one of the three positions. Hand lever 1 cannot be disengaged from either lever 3 without its first being brought back to neutral, and when shifting it from 1D to 1E or 1E to 1D it carries lock 4 which is slotted so as to allow lever 1 to travel parallel with the slots in the quadrant figure 187. It is also slotted

(Continued on Page 40.)



Chemical Test of Paint.



Testing Strength of Fabrics.



Test for Semi-Steel.

HOW WE TEST OUR MATERIALS

GOOD materials are important factors in the building of good machines. Skilled workmen, modern factories and the determination to build each machine just as good as it can be built, are other factors that contribute to the merits of the Rumely Lines and make them the safest to buy.

If you visit our testing laboratories, talk to those in charge and watch them at work, you will more readily understand why Rumely machines last so long and give such good service. Our physical laboratories are equipped with the best machines that money can buy. Our chemical laboratories are complete in every detail. The man in charge of this work has spent more than forty years in studying and classifying materials. His work is known everywhere. The careful inspection by him and his assistants assures the high quality of the materials we use.



Dr. W. G. Scott, C. E., who is shown above, has spent more than forty years on the study of materials entering into the manufacture of farm machinery. He is a recognized authority.

In the physical test above, a bar of semi-steel one inch square is placed on supports 12 inches apart, and mechanical pressure is applied to its center. The bar must show a transverse strength of 37,000 pounds, about 13,000 pounds greater than ordinary gray iron, or it is rejected. The same bar must have a tensile strength of 34,000 pounds, 12,000 pounds more than cast-iron. If it does not, it is not good enough. Semi-steel is the metal in the gears, cylinders and piston rings used on Rumely tractors and engines.

All the metal used in Rumely machines must pass similar tests. In addition, all metals are put through rigid chemical tests, to see that they are of just the right composition for the purposes they are to serve. Not only the metals, but the wood, the belting, all materials used in building Rumely machines—even the paint—must undergo the same careful tests. We have set our standards high. Only good materials can pass.

Rumely Lines

Kerosene tractors, gasoline tractors, steam tractors, kerosene engines, gasoline engines, steam engines, grain separators, balers, engine gang plows, traction disc plows, feed mills, road machines, grain graders, saw mills, saw rigs, power pumps, power hoists, grain elevators, fuel tanks.

Catalogs on Request

Rumely Products Company

(Incorporated)

Power-Farming Machinery

Chicago

Illinois

CANADIAN BRANCHES:

CALGARY, Alta.; ESTEVAN, Sask.; REGINA, Sask.;
WINNIPEG, Man.; TORONTO, Ont.; SASKATOON, Sask.

Ad. 959.

The Thresherman's Question Drawer

ANSWERS TO CORRESPONDENTS

Q. G.R.F. 1. Will you please tell me whether a 40-horse power automobile engine has as much or more power than a 7-horse power steam engine? I have a traction ditcher operated by a 7-horse power steam engine and would like to change it for a gasoline motor.

A. 1. Automobile engines are rated at a piston speed of one thousand feet per minute which in the case of an engine with four and one-half inch stroke would represent a rotational speed of more than 2,000 r.p.m. If the engine runs at half this speed, it will have a little less than one-half as much power. If at a quarter, the power will be less than a quarter of the maximum. There is a good deal of misapprehension in regard to horse power. Many people seem to think there is a difference between steam horse power and gas horse power, but there is not. A horse power is a perfectly definite mathematical unit just as definite as a bushel of grain or a pound of meat. It doesn't matter how the power is generated, a horse power represents the same quantity of work in either case. If you have a steam engine that is generating 7-horse power, neither more nor less, and a gas engine that is generating 40-horse power, it is very easy to see which engine is the more powerful. The reason for the general misapprehension lies principally in the fact that the power of a steam engine can be varied greatly by varying the steam pressure or varying the speed or varying both steam pressure and speed. The variations possible with a gasoline engine are confined to speed only. Many builders of steam engines rate them at low steam pressure and low speed while as a matter of fact they may be operated at a much higher speed and at double the steam pressure. Nearly every steam tractor can be made to generate three times as much power as that at which it is rated. Some of the gasoline tractors will generate fully twice as much power as their rating, while others have an overload capacity of only about ten per cent. These are the reasons for the general lack of understanding in regard to power.

Q. E.L.H. 1. Can you describe a method of timing the valves on a four cylinder gasoline

engine and a method for finding the best position of the spark relative to the position of the cranks? My engine runs very well, but has no power. I have put in new piston rings and new valves but obtained no relief. Can you tell me what to do?

A. 1. You do not state what make of engine you are using, how fast it runs or anything about it which would give us a clue as to how it is constructed except that it has four cylinders. Our answer to your question, therefore, must necessarily be somewhat general. If there are four cylinders the valves should be timed so that the cylinders will fire in the following order, counting from the head end, namely, 1-3-4-2. The valves should, therefore, be timed so that when cylinder one is taking in a charge the gases in cylinder two will be compressed, three will be exhausted and four will be making its power stroke. This will give you the proper order of firing. The inlet valve in any cylinder should open just as the cylinder piston starts forward on its suction stroke and should close when the suction stroke is completed or, if the engine is a high speed engine, when the crank has passed about five degrees past centre on the next stroke. The exhaust valve should open when the crank is about thirty degrees from the centre line and near the end of the power stroke and close when the crank is about five degrees past centre on the next forward stroke. That is, the exhaust valve should remain open during the entire exhaust stroke and for a brief instant after the next suction stroke commences. You can time the ignition by having it occur on the compression stroke when the piston lacks from one-quarter to five-sixteenths of an inch of completing the stroke.

The reason for lack of power may be faulty timing of the valves or, what is more likely, wrong timing of the ignition. Nearly all high speed four cylinder engines, and we are assuming that is the kind of engine you have, are equipped with a timing lever to advance or retard the spark. If the spark advancing or retarding mechanism has a sufficient range of motion, the spark can be advanced so that at high speed it occurs when the crank is

When you think Belt Guide think



"Saska"

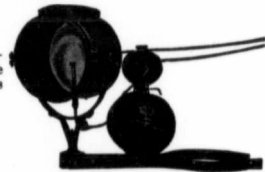
and ask any Implement Dealer in Western Canada, or write us for Special Delivered Price

"SASKA" MANUFACTURING CO. LIMITED
SASKATOON SASKATCHEWAN

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

SPARK ARRESTER

One that gets all the sparks without clogging or interfering with the draft. Fits any engine. Screens adapted to any fuel.



ACETYLENE GAS HEADLIGHT

Turns night into day. Bracket to fit any make of engine. Throws light 400 feet. Operating expense about 1c. per hour.

FLUE CUTTER

You need this tool to get ready for your Spring Plowing. Is adjustable in length and size. Cuts the flue without burring the end. Try it.

Estate of E. M. POPE, Watertown, S. Dakota, U. S. A.
Send for Catalogue and Price List to

THE MATTAG COMPANY, LIMITED, Winnipeg, Man

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



THE BEST Anti-Friction BABBITT
On the Market is

The Frost King

The "Frost King" is the product of our long years of experience, and is without doubt the most reliable Anti-Friction Babbitt made to-day. It is specially designed for Threshing Engines, Separators and Machinery of all kinds. If your dealer does not stock it—write for sample 30-pound box.

Hoyt Metal Co. Eastern Ave. and Lewis St. TORONTO

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

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

about twenty-five degrees below centre on the compression stroke and in starting it can be retarded until it fires on dead centre or just a trifle after. With some timing systems, the lever is set so that when the engine is fully retarded it fires when the pistons are on dead centre at the end of the compression stroke.



Q. H.K. 1. Is babbitt a suitable compound for filling a safety plug? Is castor oil good for loosening scale in a boiler? What should I do with the safety valve if it starts blowing off about fifteen pounds below where it is set for and keeps blowing a little for a long time? Does the steam govern the governor or does the governor govern the steam? Please tell me in a short way, either yes or no. I saw an explanation of this question in your papers a few months ago but it was so long I couldn't find out much about it. Is a double cylinder engine stronger than a single cylinder? Some tell me a single cylinder engine is stronger in a dead pull.

A. 1. As a general thing we do not recommend babbitt in a safety plug. Babbitt is an uncertain compound which may melt at anywhere from six hundred to a thousand degrees. Pure tin, which melts at four hundred and forty degrees, is the metal to use.

We have never used castor oil for loosening scale and can't tell you whether it is of value or not. We have never seen it recommended, however, in any engineering books or publications. If the safety valve starts blowing off before it should and blows for quite a long time, it is evident that the regulator should be adjusted. We suggest you write the manufacturer for his book of directions on how to regulate the safety valve. Every poppet valve has a system of regulation and since no two valves are made exactly alike we can't tell you just how to proceed, so the best thing to do is to get the manufacturer's catalogue.

Your question about steam governing the governor or the governor governing the steam cannot be answered by yes or no. The governor holds the speed within certain limits. If the speed gets to the upper limits, the governor partly shuts off steam; if it gets to the lower limit it opens up the steam valve. The steam, of course, runs the engine and the engine runs the governor.

A double cylinder engine may be stronger or weaker than a single cylinder engine just as one horse may be able to pull more than two, depending upon the size of the horses. The fact that the engine has two cylinders has nothing to do with its pulling

Has it Ever Happened

that you were short of help at threshing time, or that your expenses were too heavy? You can guard against this.

The Answer is—

Hart-Brown Wing Carriers

ATTACHES
TO ANY
SEPARATOR
WITH ANY
FEEDER,
OLD OR NEW



Mr. Hart B. Carrier will prove the best hired man you ever had. The carrier attaches to the main sills and main frame of separator, putting no weight on feeder. It delivers the bundles to the hand knives straighter, more evenly and uniform than is done by hand. It facilitates rapid and steady threshing. The troughs swing about as is most convenient, and the carriers will save the services of from two to four pitchers, and if used with the Hart Universal Thresher Racks will

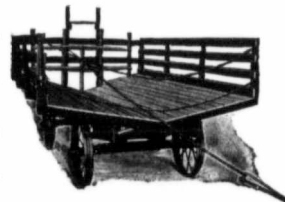
SAVE EIGHT TO TEN MEN AND TEAMS

The Hart Universal Thresher Rack fits on any wagon or truck gear, has no derricks or other complicated parts for unloading—only a simple pull-off gate that holds the load while the rack is withdrawn from beneath it.

No waits at the machine for an opportunity to unload. No time wasted in pitching off.

One rack and driver will do as much work as two ordinary racks, two drivers and one field pitcher.

Racks may be purchased complete, or you can **Build Racks Yourself**. We will furnish plans, specifications and license.



Sold by

Canadian Avery Company

WINNIPEG, Man. - and - REGINA, Sask

Manufactured by

HART GRAIN WEIGHER CO., PEORIA, ILL.

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

power. The thing that does count is the power generated in the cylinder or cylinders. There is no advantage in traction by having two cylinders over one, but there may be some gain in convenience. A double cylinder engine is quite likely to use a little more water than a single cylinder engine which generates the same amount of power.



When Bobbie brought home his monthly school report, it made a very poor showing.

"This is very unsatisfactory," said his father, looking over the report. "I am not at all pleased with it."

"I knew you wouldn't be," answered Bobbie. "I told the teacher so, but she said she couldn't change it."

There is no other reason why or after death except because we should live either tomorrow love and are beloved.

"STUDEBAKER"

Electric
Started



Electric
Lighted

Four Cylinder.....\$1,375.00
Six Cylinder.....\$1,975.00

Complete Stock of Spare Parts Carried for all Models from 1911 to date. Trade discount to legitimate dealers.

Breen Motor Co. Ltd., Factory Distributors
704 Broadway, WINNIPEG

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

An Act Respecting Weighers as Used Upon Threshing Machines

All of our readers may not be aware that a change has been made in the thresher weigher proposition in Canada. As a violation of the Act subjects the user to a penalty we give herewith a circular as provided by the Department of Inland Revenue.

Under Section 33 of the W. & M. Act Chap. 52 R. S. 1906, provision is made for the toleration of machines attached to threshing machines, which will record, automatically or otherwise, the number of discharges made. The Department is aware that large numbers of automatic registers or tallies of various makes are in use in Canada, particularly in the Western Provinces, for determining threshing charges, and that these machines are sold as weighers. The machines are specially constructed to meet the severe conditions under which they are used, but the Department is unable to admit them to

(A high grade of steelyard with sliding poise will satisfy.)

(3) The absence of such verified scale or measures will be regarded as evidence that the automatic tally is being sold or distributed as a weighing machine within the meaning of Section 65 of the Act, and will subject the manufacturer, dealer or distributor to the penalties of Section 70 of the Act; whilst the use of such automatic tallies so un-equipped will be regarded as evidence that they are being used as weighing machines within the meaning of Section 65 of the Act and will subject the thresherman or operator to the penalties of said Section 65.

(4) The obligation of equipping threshing outfits, already in use, with the verified scale or measures, shall rest upon the owner.



The above is a sample of the steel yard required by the new act. Supplied through the courtesy of Canadian Fairbanks-Morse Co.

Government Inspection and stamping under the W. & M. Regulations. Nevertheless, their use is legitimate under Section 33 of the W. & M. Act, above referred to, when sold and used as "automatic registers or tallies" and when the discharges are check-weighed over a properly verified scale such number of times per day as is agreed upon between the operator of the threshing machine and the owner of the grain threshed."

W. & M. Inspectors, manufacturers, importers and users of these machines, are therefore advised that,

(1) These threshing machine registers or tallies are not in future to be imported, sold or used, as weighing machines, under the provisions and penalties of Section 30 (last clause) and 65 of the W. & M. Act, but may be imported, sold, and used, under Section 33 of the Act as automatic grain registers or tallies, provided:

(2) Each such automatic register or tally shall be equipped with an independent, duly verified scale, of not less than 100 lbs. Capacity, or else with one duly verified measures of capacity of one-half bushel.

The Inspector of each Division will supply each house in his district handling threshing machines with a copy of this Circular, whilst officers in the field will take every opportunity to see that the same is complied with.

Practical Talks to Threshermen

Continued from page 36

for levers 3 to work in the same manner. On the outside, slot notches are provided for locking levers 3 in neutral while free from hand lever 1. As shown in figure 186, hand lever 1 has been passed from 1D to 1E carrying lock 4 with it and positively locking 3A in neutral position. The opposite movement is performed in like manner. This is to prevent getting two gear combinations in at the same time.

Figure 185 shows the connection between the friction clutch hand lever and the gear shifting hand lever. Hand lever 2 is connected to the clutch by means of rod 16 and is keyed solid to shaft 7. Mounted rigidly on shaft 7 is a finger 6 which, when friction clutch is applied slips into one of the holes in block 5 which will positively lock hand lever 1 and either 3A or 3B, the

6000 Always in Stock

Every thresherman knows that when he needs a thresher belt he needs it quick. He appreciates the service of the belting company that fills and ships his order the day it is received.

To enable us to do this we carry over 6,000 thresher belts always in stock, in over 100 different lengths and widths. Every thresher belt order is filled WITH A SEASONED BELT the same day it is received.

20,000 SATISFIED USERS ENDORSE

Gandy Thresher Belts

AS THE STANDARD



Its reputation has been established by the long and excellent service it has given threshermen everywhere for over thirty years. Water, heat, oil, dirt or temperature changes have no effect on the Gandy Endless Thresher Belt.

If you're not already a Gandy user, write to-day for booklets, sample of belt and full information.

The Gandy Belting Co.
BALTIMORE, MD.
New York Office - 85-90 Reade St.

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

Steam or Gas Tractors

Equipped with



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.

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



To keep your traces in best condition, use

Eureka Harness Oil

It sinks into the leather and keeps it soft and strong. Free from acid.

In convenient sizes. Dealers everywhere.

THE IMPERIAL OIL CO., Limited

Winnipeg
Vancouver

Toronto
Montreal

St. John
Halifax

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

Ma
T
No
St
tur
Se
You can
any po
G
remaining
4, figure 1
Thus w
is applied,
the trans
ally and
their prop
By movi
trally bet
let back in
figure 187,
will act o
3B in neut
engaged th
avoid trou
caused by
anyway.
In case
been move
leaving the
holes in blo
with the fin
applying th
*The mechu
used on Pa
large tractors
Saskatch
Fal
Govan
Southey
Herbert
Mortlach
Weyburn
Milestone
Moose Jaw
Imperial
Lanigan

The Test of a Belt is Time and Tear

Nothing that men make is so dependent for its life on **QUALITY** as the **Thresher Belt**. If it is not manufactured by **EXPERIENCE** from the **Strongest and Most Enduring Material** that can be employed in belt structure—then it is worthless for all practical purposes. Don't get anything in **Belt Service** but the **Best** that money can purchase; therefore get the



Lion Brand

Rubber Belt

OR THE

Maple Leaf

Endless Thresher Belt



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

Gutta Percha and Rubber Limited, WINNIPEG CALGARY

NOT IN ANY TRUST OR COMBINE

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

remaining one, is held by block 4, figure 186.

Thus when the friction clutch is applied, all movable parts in the transmission are automatically and positively locked in their proper places.

By moving hand lever 1 centrally between 1E and 1D and let back into notch as shown in figure 187, lock 4, figures 186, will act on both levers 3A and 3B in neutral position which disengaged the gears. This is to avoid trouble which may be caused by the clutch setting in anyway.

In case hand lever 1 has not been moved to its proper place leaving the gears out of line, the holes in block 5 will not be in line with the finger which will prevent applying the friction clutch.

*The mechanism above described is used on Fairbanks-Morse Company's large tractors.

Saskatchewan Summer and Fall Fairs, 1914

Govan	July 23-24
Southey	July 28
Herbert	July 30
Mortlach	July 31
Weyburn	Aug. 4-5
Milestone	Aug. 6-7
Moose Jaw	Aug. 11-14
Imperial	July 28
Lanigan	July 29

Elstow	July 30	Arcoia	Aug. 4
Kennedy	Aug. 4	Francis	Aug. 5
Mooseomin	Aug. 5	Redvers	Aug. 6
Windhorst	Aug. 6	Creslman	Aug. 7
Wapella	Aug. 6	Stoughton	Aug. 11
Fairmede	Aug. 12	Craik	Aug. 12
Broadview	Aug. 13	Davidson	Aug. 13
Whitewood	Aug. 14	Alsask	July 21
Churchbridge	July 22	Kindersley	July 22
Salteoats	July 23	Broek	July 23
Foam Lake	July 24	Zealandia	July 24
Yorkton	July 28-29	Colgate	July 28
Elfron	July 30	Midale	July 29
Wynyard	July 31	Oxbow	July 31
Lampman	Aug. 4	Gainsboro	Aug. 3
Carlyle	Aug. 5	Carnduff	Aug. 4
Fort Qu'Appelle	Aug. 7	Alameda	Aug. 5
Lipton	Aug. 8	Estevan	6-7
Stockholm	July 29	Hawarden	July 23
Dubuc	July 30	Brownlee	July 24
Abernethy	July 31	Bounty	July 28
Gravelburg	Aug. 4	Plenty	July 29
Nokomis	Aug. 5	Kerrobert	July 30
Punnichy	Aug. 6	Punlook	July 31
Kelliber	Aug. 7	South Qu'Appelle	Aug. 4-5
Tantallon	Aug. 11	Grenfell	Aug. 6
Melville	Aug. 12	Sintaluta	Aug. 7-8
Watrous	Aug. 13	Wolsley	Aug. 11-12
Vonda	July 28	Lumsden	Aug. 13
Togo	July 30	Paymont	Sept. 15
Canora	July 31-Aug. 1	Maymont	Sept. 16
Invermay	Aug. 4	Duck Lake	Sept. 18
Shellbrook	Aug. 6	Tisdale	Sept. 22
Marcelin	Aug. 7	Melfort	Sept. 23
Rosthern	Aug. 11-12	Kinistino	Sept. 24
Humboldt	Aug. 13-14	Wadena	Sept. 29
Lloydminster	Aug. 18	Quill Lake	Sept. 30
North Battleford	Aug. 19-20	Watson	Oct. 1
Lashburn	Aug. 21		
Radisson	Aug. 25		
Prince Albert	Aug. 26-28		
Swift Current	July 6-8		
Regina	July 27-Aug. 1		
Saskatoon	Aug. 4-7		
Langham	July 24		
Cut Knife	July 28		
Wilkie	July 29-30		
Perdue	July 31		
Asquith	Aug. 4		
Unity	Aug. 5		
Luseland	Aug. 6		
Hanley	July 30		
Bladworth	July 30-Aug. 1		

You Have Tried The Rest, Now Try The Best

It makes no difference whether you have a single, double or compound engine, or what size it may be,

The Practical Force-Feed Oil Pump

is guaranteed to furnish plenty of oil for and properly lubricate it.



Pumping Frozen Cylinder Oil

is just one way of demonstrating the superiority of "The Great Cold Weather Lubricator." It pumps the dope cold as well as hot, thick as well as thin, and has no ratchet wheel with its troublesome pawls to get stuck, slip and do those little stunts which most threshermen are familiar with.

Write for catalogue, prices and full information.

McCallough Manufacturing Co., Minneapolis, Minn., U.S.A.

CRANE & ORDWAY CO.

WINNIPEG, MAN.

Distributing Agents for Western Canada

Insurance Doctor (filling in application)—Ahem! Have you ever had any fevers? Ever had scarlet fever, hectic, rheumatic, gastric, typhoid, typhus, or yellow fever?

Mr. O'Hara—Eh? Phwat do you think Oi am? Wan of thim patint-medicine advertisements?

See It Beat It Out

In the one thresher which uses the only correct method of separation.

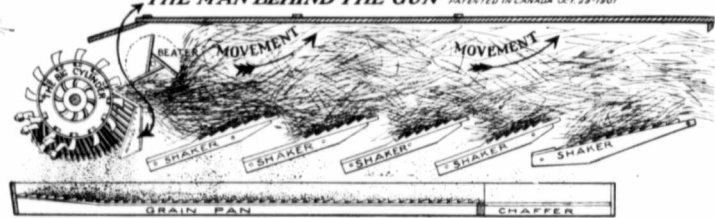
NOTE CAREFULLY THE FOLLOWING ILLUSTRATIONS:

THE MAN BEHIND THE GUN

PATENTED IN U.S. FEB 12 - 1901
PATENTED IN CANADA OCT 23 - 1901



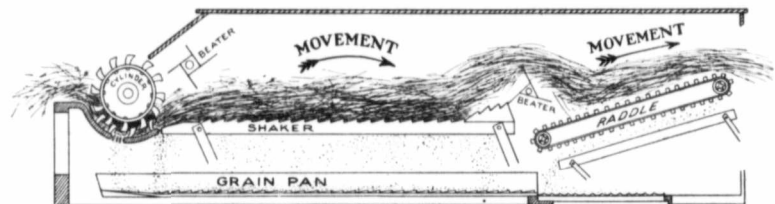
This is the way to Separate by hand with a pitchfork



This is the way the RED RIVER SPECIAL Separates
IT BEATS IT OUT - like you do with a pitchfork



This is the way the Lazy Man tries to Separate with a pitchfork



This is the way OTHER KINDS try to separate
THEY DON'T BEAT OUT THE GRAIN

If you have all the grain you must take it out of the straw by force. Some machines depend upon the grain dropping out while the straw is hurried through the machine. All of it will not drop out. It should be forced out to prevent waste. The Red River Special is the only thresher which properly separates by force. That is why it wastes less. That is why it SAVES THE FARMER'S THRESH BILL. IT BEATS THE GRAIN OUT OF THE STRAW. The Big Cylinder, the "Man Behind the Gun," and the Beating Shakers take the grain out of the straw by force. They do not hurry the straw through the machine, carrying grain along with it.

The straw is thrown violently against the "Man Behind the Gun." The grain goes through and the straw goes over upon the shakers. THE BEATING SHAKERS TOSS THE STRAW UP AND BEAT IT UNTIL THE GRAIN IS BEATEN OUT. Note the comparison between the Red River Special and the other kind in the cuts on this page. Note how the straw is BEATEN and the grain BEATEN out in the Red River Special. Note the "Man Behind the Gun" and the Beating Shakers. THESE FEATURES ARE FOUND ONLY IN THE RED RIVER SPECIAL. THEY ARE PROTECTED BY PATENTS IN BOTH THE UNITED STATES AND CANADA.

We have thousands of testimonials like the following:

We, the undersigned farmers, had our threshing done this year by Colvet and Ingvaldson, with their Red River Special outfit, and we want to tell you that when you built the Red River Special you certainly did a great thing for us farmers.

We can now get our threshing done and know that we are getting all we raised in the wagon box instead of having our profits blown into the straw pile.

Colvet and Ingvaldson say it is the way the shakers in your separator beat the straw that makes it save enough more grain that other machines would waste to pay our thresh bills.

There must be lots of farmers that don't know what your Red River Special will do, and there should be some way of letting every farmer know. Why don't you advertise direct to the farmer? They are the men who have the grain to thresh.

- | | |
|---|--------------------|
| ERIK LARSON, Spring Brook, N. Dakota. | S. L. ELLINGSON, |
| MARTIN VALDEN, Spring Brook, N. Dakota. | MIKE SUNDE, |
| H. A. SCHROEDER, | M. J. VANDERBERG, |
| M. M. MAY, | CHRISTIAN WANG, |
| OTTO HAUG, | A. BJELLA, |
| JOHN JOHNSRUD, | Epping, N. Dakota. |
| HENRY HAUGIN, | |

Epping, North Dakota, October 20, 1913.

We, the undersigned farmers of Iowa Country, State of Iowa, bought of you a Red River Special Separator, size 32 x 52 with Gearless Wind Stacker and Universal Self Feeder, which was delivered to us early in June, 1913. This machine threshed all our grain the past season, and we feel that you should know of the splendid results, and success we have had.

We were told that the separator was better belted, and would run all day long without bother; and that it would do more and better work than any other machine of the same size. Also that the Universal Feeder would feed the machine without slugging, that the teeth were too steel, and would not break.

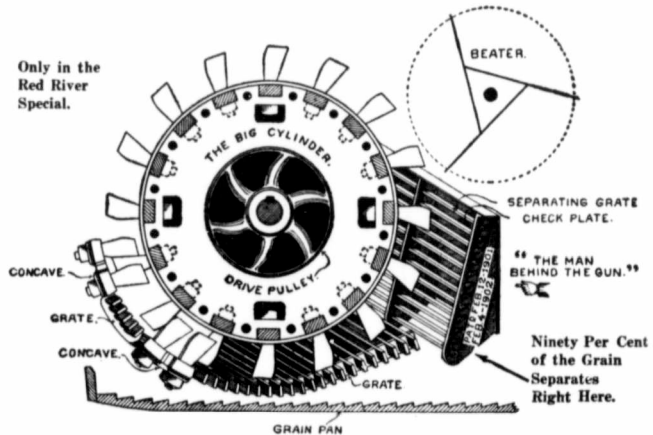
The use of this machine has confirmed these statements, and we heartily recommend to our farmer friends of Iowa that they arrange to have their grain threshed and saved in the future by a Red River Special Separator. It will do all that is claimed for it.

- | | |
|--------------------------------|-------------------|
| A. W. BROWN, | G. C. BIGREE |
| J. A. PELZER, | C. E. BROWN |
| D. H. GREEN, | H. F. WILLENBROCK |
| Marengo, Iowa, March 21, 1914. | J. F. M. GREEN |

WHEN YOU ARE READY TO BUY LOOK WELL INTO THE MERITS OF THE RED RIVER SPECIAL.

"The Man Behind the Gun"

Only in the Red River Special.



Patented in the United States and Canada.

Send for Catalog

NICHOLS & SHEPARD COMPANY, Battle Creek, Michigan

In continuous business since 1848

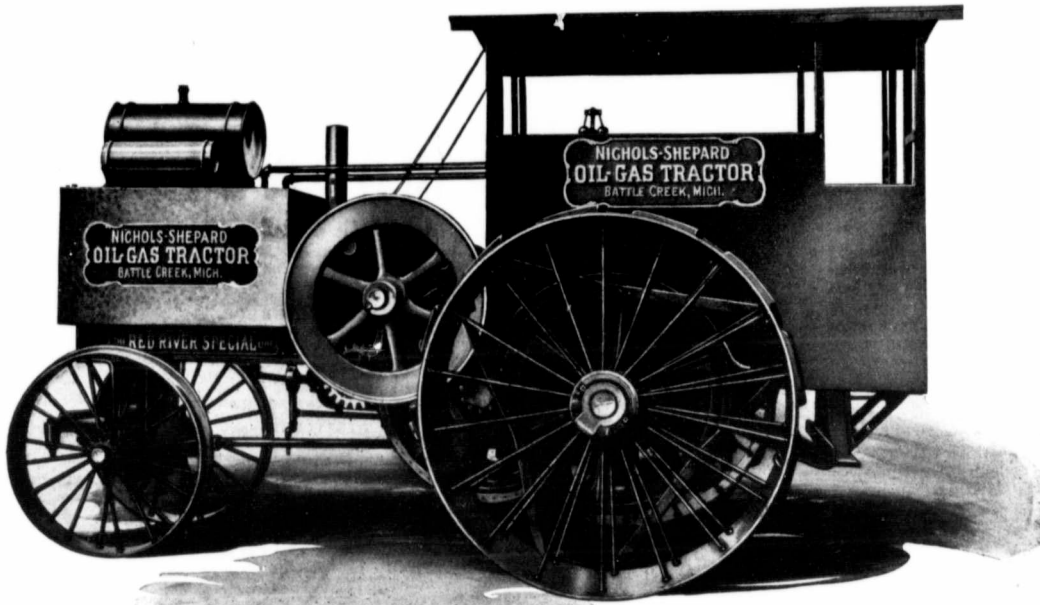
Builders of the Red River Special Threshers, Traction Steam Engines, Oil-Gas Tractors, Stackers, Feeders, etc. Branch Houses with Repairs and Stocks of Machinery at WINNIPEG, MAN., and REGINA, SASK.

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

Extra plo
Two- Starts
Good A goo
JOS say the farmer's my own burn. I It is at country that wo
GEC run my never as proves t for wear consider and awa
FRA summer 300 acre and I ha powerful steam en and I ha
HAR Power O I have ju all kinds kerosene
Our Sp
NIC

Oil-Gas Tractor

Burns Kerosene, Gasoline and Motor Spirit at all loads. Not in the class with so called light-weight tractors. Made heavy and substantial so that it will furnish ample power on the belt or draw-bar.



NICHOLS-SHEPARD OIL-GAS TRACTOR.

Extra wide Drive Wheels to take care of weight when used for plowing.
 Two-cylinder motor for purpose of simplicity and effectiveness.
 Starts easily in cold weather.
 Good steady power.
 A good Threshing Engine and a good Plowing Engine.

The only Oil-Gas Tractor that is suitable and popular for both threshing and plowing.
 Moderate crank-shaft speed, insuring dependable and reliable power.
 No parts moving when not in use.
 Simple system of gearing. No bevel gears in the driving gearing. Shaiting and Gearing heavy and strong.

We have hundreds of letters like the following:

JOSEPH DUFAULT, FORGET, SASKATCHEWAN, says: "I can truthfully say that your firm has, in your 22 Horse Oil-Gas Tractor, come closer to the farmer's ideal of a Gas Tractor than any competitive engine on the market. I ran my own engine all fall without any delay or trouble whatsoever. I have power to burn. It handles your 30 x 46 separator at full capacity with the greatest of ease. It is strong and will endure the hardship that it has to contend with in this country and stand up. It is positively the only engine in Forget district this year that would start in the morning after the weather got cold."

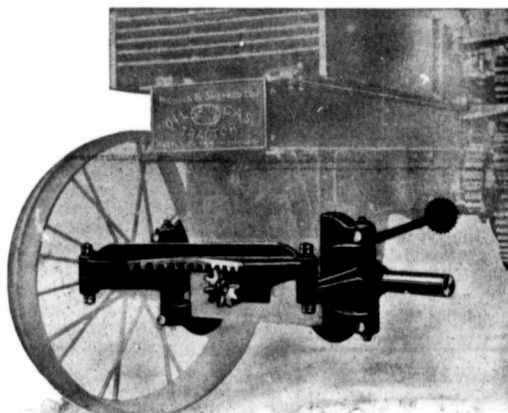
GEORGE W. CLARK, REDWOOD FALLS, MINNESOTA, says: "I have run my 35 H.P. Oil-Gas Tractor and 44 x 64 Red River Special 46 days this fall. I never as much as started a gas engine in my life before. I booked \$4,140, which proves that I was threshing most of the time. My Tractor is not any the worse for wear; my gears and bearings do not show the least wear. I would never consider steam again for threshing. All you have to do is to insert the starting bar and away she hums."

FRANK W. POTTER, VALLEY CITY, NORTH DAKOTA, says: "Last summer I bought a 25 horse Nichols & Shepard Oil-Gas Tractor. I have plowed 300 acres and threshed for 35 days, pulling a 40 x 60 Red River Special Separator, and I have never lost a minute's time on account of lack of power. This engine is powerful and runs smooth and gives just as steady motion for threshing as any steam engine. It furnishes just as good power using kerosene as when using gasoline, and I have not been laid up on account of breakages whatever."

HARRY W. SLAKER, NORTH AURORA, ILLINOIS, says: "The 22 Horse Power Oil-Gas Tractor which I purchased has given me the very best of satisfaction. I have just finished threshing and it handled the 32 x 52 Red River Special easily in all kinds and conditions of grain. I have burned nothing but the cheapest grade of kerosene costing 7½ cents, delivered, and have not had a minute's trouble."

Our Special Steering Device that makes the Tractor easily handled on rough ground.

Send for Special Oil-Gas Tractor Catalog.



FRONT AXLE AND STEERING DEVICE, NICHOLS-SHEPARD OIL-GAS TRACTOR.

NICHOLS & SHEPARD COMPANY, Battle Creek, Michigan

In continuous business since 1848
 Builders of the Red River Special Threshers, Traction Steam Engines, Oil-Gas Tractors, Stackers, Feeders, etc.
 Branch Houses with Repairs and Stocks of Machinery at WINNIPEG, MAN., and REGINA, SASK.



Fundamentals of Good Farming

By Dr. J. H. Worst, President North Dakota Agricultural College

WITHOUT question, considerable progress is being made by farmers in the agricultural states. The fundamentals of agriculture, however, are not being sufficiently emphasized, perhaps owing to their simplicity. I consider the seed-bed and the selection of the very best seed absolutely fundamental in the profitable production of crops. Rotation of crops, thorough drainage, fertilization of the soil and elimination of weeds are very important factors and are being given considerable attention by progressive farmers. Conservation of moisture is also given larger consideration than heretofore, even in regions of fairly abundant rainfall. There must be a constant movement of moisture during the entire growing season. When the clouds fail to give down moisture, the subsoil must give it up or the crop will suffer. To insure abundance of moisture at all times, therefore, is as necessary as to plant the seed.

I am of the opinion that, until these basic requirements are honestly and intelligently complied with, the element of chance will continue to enter too largely into the farmer's calculations. Deep plowing, a firm, compact seed-bed with granulated surface, plenty of barnyard manure, strong, perfect, viable seed, and a system of rotation that will both eliminate weeds and discourage the multiplication of injurious fungi in the soil, will unquestionably enable the average farmer to succeed in his business. The principles here enumerated, though thoroughly scientific, are not difficult to understand. They represent the foundation of successful agriculture, and, until thoroughly understood and intelligently complied with, our agri-

cultural structure will remain in a more or less shaky condition.

The rearing of live stock in general and dairying in particular should become important factors on every farm. Without live stock, the country goes backward every year, and more rapidly in proportion to the abundance of the harvest. Live stock is the salvation of the country, while the immediate bank account, resulting from continuous cropping to small grain, is more often its ultimate destroyer.

A better system of farm credits also is an immediate necessity. Farmers should be able to borrow money on as favorable terms, as to rate of interest and time, as the big corporations. There should be no obstacle to farmers securing the necessary capital to improve their holdings to the utmost—to make their farms more profitable.

Sugar Beet Raising a Profitable Industry

By Max McD.

Under normal conditions sugar beet raising is very profitable. In Southern Alberta the industry has been carried on successfully under very exacting circumstances. When the industry was in its experimental stage a certain amount of land whereon beets should be cultivated was chosen at Magrath and Stirling in Southern Alberta and treated in the same manner as best land in the best states in United States. Before the seed was put into the ground, sugar beet experts came over especially to select the localities and inspect the soil. This was in 1901. When the first two years had been passed and the industry had been proven that it could be carried on with success in Southern Alberta, in 1903, a 30 acre patch of land was taken which grew 330 tons of beets. Figuring the different expenses as follows: seed, \$1.50; hoeing, \$3.50; thinning, \$4.50; cultivation, \$1.50; lifting, \$1.50; topping, \$6.00; hauling, 50c; making a total of \$19.00, there would be an approximate profit clear of \$20.00 an acre, allowing six per cent for rough cutting, waste and wagon tare. The company pays a straight price of \$5.00 per ton for beets. During the first two

**DR. WARNOCK'S
ULCERKURE**

The wound healing wonder. Heals without leaving a scar or the usual aftergrowth of white hairs. Ulcerkure is the surest and safest of all antiseptics.

Sold in bottles, 50 cents and \$1.00
Western Veterinary Co.
Sole Proprietors

P.O. Box 2132. Winnipeg, Canada

Mention this magazine when writing advertisers



**A COMBINE
WITH A
CHARACTER**

The idea is so much of a novelty it is worth looking into, as the popular belief is that all "combines" are organized hold-ups and are characterless.

We have found a combine that does have a character, and its reputation is all the other way. It is always giving and giving in abundance. It is the **Combine of the Cow and the Cream Separator.** A well-bred, well-fed milker and a

**"MAGNET"
Cream Separator**

is the biggest money-making co-operative scheme ever introduced into Western farming.

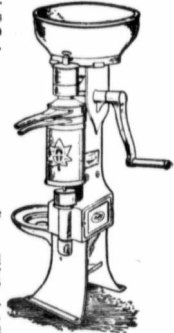
"The Magnet" is different and distinct from all other separators. It has **NONE** of the defects of any other separator and has got them all "skimmed" for accurate work, for unflinching service and simplicity. **ITS SQUARE GEAR AND ROCK-RIGID STEADINESS ON ITS FEET ARE ALONE** worth the small difference in cost between the Magnet and the cheapest separator made.

Our Slogan is **"TO SATISFY"**—and we will do it at all costs. We will prove every point we claim for the superiority of the "Magnet" on your farm—at our expense.

Our 1914 Calendar is now ready for distribution.

The Petrie Mfg. Co. Ltd.

Head Office and Factory: HAMILTON, ONT.
Winnipeg, Calgary, Regina, Vancouver, Montreal, St. John, N.B.,
Edmonton, Alta.



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

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

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

Two or Three Battery Breakdowns Will Pay for a Wizard
Hasn't this happened to you?
At threshing time, engine goes dead from exhausted batteries. Two hours lost getting new ones from town. Sixteen men idle.
Two or three such breakdowns will pay for a Wizard Magnetos that will give uninterrupted service throughout your engine's life. Its hot, sharp spark will get all the power out of the fuel. Its simple, rigid, waterproof construction insures against ignition trouble.
Insist on a Wizard when you buy an engine. Get one for the engine you own. There's one for every make and size of engine and every one's guaranteed. Ask your dealer to write us for details.
Send for Free Book "The Sluggo Engine Owner," which explains fully about ignition and shows also how to remedy or prevent most engine troubles. Ask any Route Dealer.
THE HERCULES ELECTRIC CO.
2156 N. Western Ave., Indianapolis, Ind.

50,000 Wizard Magnetos are used on such engines as:
Alamo
Challenger
Dempsy
Fairbanks Morse
Field Brandage
International
Harvester
New Way
Rock & Van
Dervoort
Stover
Waterloo Boy
Witte

WIZARD MAGNETOS

THE HAPPY ENGINE OWNER

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

years
bonus
a cen
next t
cent a
went
the be
manuf
The
been p
22 ton
at this
good
acre w
imater
reckon
years t
sugar i
16 per
In 19
was rea
figure;
went d
rose ag
crop, h
under t
cumstan
frozen t
and fre
ing caus
is a ver
than car
Contine
British
ably wi
raised in
Knight
held to
zeben, t
imported
Having
condition
have bee
the resul
eminently
affords a
are plant
dustrial
anticipate
on a very
returns o
and an av
of sugar.
In addi
there will
in the bee
the field,
be seen i
for cattle.
in the sli
is used as
pulp out o
ders and s
tured.
A comm
beet culti
can promp
cash by ta
and can
more exact
uncertainty
which over
rule, from
8
"He neve
thing his w
"No; he n
"I wonder
"I suspect
not."

years the Alberta Government bonused to the amount of a half a cent a pound and during the next three years a quarter of a cent a pound. Half of this bonus went to the farmers who grew the beets and the other half to the manufacturers.

The highest yield which has been produced would be about 22 tons to the acre, and figuring at this rate under exceptionally good conditions the profit per acre would amount to approximately \$80.00. It has been reckoned that for the past four years the average percentage of sugar in the beets has been about 16 per cent.

In 1909 the highest percentage was reached when 17.44 was the figure; in 1910 the percentage went down to 15.67 and in 1911 rose again to 15.70. The 1911 crop, however, was harvested under the most harrassing circumstances, early frost having frozen the beets in the ground, and frequent thawing and freezing causing them to decay. This is a very much higher percentage than can be got from beets in Continental Europe or in the British Isles and compares favorably with the quality of beet raised in the United States. The Knight Sugar Company have held to the original Klein Wanzleben, the seed for which they imported direct from Germany.

Having regard for the unusual conditions under which crops have been grown in recent years, the result may be considered as eminently satisfactory; and it affords ample proof that if beets are planted and grown on an industrial scale, there might be anticipated in a normal season, on a very conservative estimate, returns of fifteen tons per acre, and an average of fifteen per cent of sugar.

In addition to the beet itself, there will be considerable profit in the beet tops which are left on the field, the value of which may be seen in their advantage as feed for cattle. There is also a value in the slime or lime cake, which is used as a fertilizer, and in the pulp out of which condition powders and stock food is manufactured.

A commanding advantage of beet cultivation is that a farmer can promptly turn his crop into cash by taking it to the factory and can estimate his revenue more exactly, and thus escape the uncertainty and disappointment which overhangs agriculture as a rule, from one season to another.



"He never seems to question a thing his wife says."
 "No; he never argues with her."
 "I wonder why?"
 "I suspect that she has told him not to."

The Horse

Methods to Control Blind Staggers, Which is Causing the Death of Thousands of Horses

Investigators have practically established that this horse disease can be controlled effectively only by a total change of feed and forage. It is quite obvious that there is a direct connection between the green forage, exposed pasturage, and newly-cut hay or fodder which the horses eat and this cerebro spinal meningitis, as the disease is known to scientists. In fact, eating of such forage when contaminated is undoubtedly the most important cause. Over 95 per cent of cases of this disease in Kansas and Nebraska during the outbreak of 1912 were maintained under such conditions.

Great care must be taken that horses do not obtain the dangerous forage unknown to their owners. The owner of one farm informed the department's investigator that his dead horses had eaten nothing but old hay and grain.

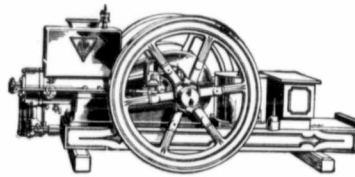
"But what about the closely-cropped grass in this pasture?" remarked the investigator, noticing the adjacent field.

"Oh," answered the farmer innocently, "I always turn the work horses into pasture overnight."

Many horses have died from blind staggers caused by eating moldy baled hay. As soon as the hay was eliminated the disease ceased. Other horses in the vicinity, not fed upon this hay, failed to contract this disease. Later some of the moldy bales were opened and exposed to the sun for three or four weeks. After this the hay was fed to horses without producing any ill effect. Forage poisoning, therefore, seems not to be an infection, but rather what is called "auto-intoxication"—that is, it is due to certain chemical poisons or toxins formed by the activity of internal organisms. These poisons may be present when the forage is taken into the body or may be formed in the stomach. The nature of this poison is still unknown.

Characteristic Symptoms of this Disease

When the horse is taken with the blind staggers it usually exhibits a disturbance of the appetite, depression, and weakness, while there is trouble in swallowing, drooping of the head, and sleepiness, which may give way to excitement and attacks of dizziness. The vision is impaired, which results in the staggering gait that gives the disease its



The Alpha Gas Engine

Doesn't need a skilled mechanic. So well built that it plugs right along like a steady well-broken horse. No worry, no bother, no tinkering.

THE ALPHA IS A GOOD ENGINE for any purpose, but because there is no mystery in either its construction or operation, it is an ideal engine for farm use.

IT ISN'T BUILT OF ROUGH castings and bolted together. It is made from the best of material, and the workmanship and design are high grade in every particular.

IT STARTS AND RUNS ON a slow speed magneto. That alone is a big item because it means you have no batteries to fuss with or get run down or out of order when you need to use your engine the most.

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

Every farmer needs an "Alpha." Send for new catalogue.

DE LAVAL DAIRY SUPPLY CO., Ltd.
 LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
 MONTREAL PETERBORO WINNIPEG VANCOUVER

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

SHIP TO US
 If you are producing good cream and feel you are not receiving best returns for it, write to us to-day.

We Pay Highest Prices for CREAM

We supply cans without charge for trial shipments, remit promptly, and give you a fair deal all the time. Tags furnished free. Cans promptly returned.

We have been 17 years in business, and our shippers know they can rely upon us. Brandon is a handy shipping centre, with splendid railway facilities.

Drop us a post-card to-day.

"The Old Reliable Creamery."
 The Brandon Creamery & Supply Co. Limited.
 Brandon - 15 - Manitoba

Brandon Creamery & Supply Company
 BRANDON, MAN.

Tie This Tag to Your Cans

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

Family Group Photos a Specialty

AT
 STEELE & CO., LTD.
 MAIN ST. AND BANNATYNE AVE. WINNIPEG

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

popular name. Certain muscles of the neck and flanks are cramped and there is a grinding of the teeth. Sometimes the animal has pains as though it were afflicted with colic. The animal will walk strangely if in an open space and will try to push through any obstacle it encounters. In the stable he will press his head against the stall or rest it on the manger. Sometimes he will crowd into a corner. The temperature at the beginning of the disease ranges from 103 degrees to 107 degrees F., but within 24 hours the temperature falls and eventually becomes subnormal. The animal is often down on the second or third day and may or may not get up when urged. Death usually occurs in from 4 to 8 days, although death may follow within 10 hours of the first symptoms, while chronic cases have been known to last for 3 weeks. About 90 per cent of the affected animals die.

Medical Treatment Generally Unsatisfactory

While medical treatment in the vast majority of cases has not brought results, nevertheless if it is used at all it must be prompt and before the disease has had time to run. The digestive tract should be cleaned out thoroughly at once. Active and concentrated remedies should be given. Afflicted animals, however, have great difficulty in swallowing immediately after being taken, so that these remedies must generally be given by injection. Arcocolin in one-half grain doses, subcutaneously, has given good results as a purgative. Early in the disease urotropin in doses of 25 grains dissolved in water and given by the mouth every two hours, appears to have been responsible for the recovery of some cases of the malady.

After the animal has been purged, the treatment varies according to the symptoms. The following measures have been recommended:

The first and most important: Feed only clean, well-cured forage and grain, and pure water.

Calomel, salol, and salicylic acid, to disinfect intestines.

Copious cold-water injections, if the temperature is high, give better results than antipyretics.

An ice pack applied to the head is beneficial in the case of marked nervous disorder.

One-ounce doses of chloral hydrate per rectum should be given if the patient is violent or muscular spasms are severe.

If the temperature becomes subnormal, the animal should be warmly blanketed.

If much weakness is shown this should be combated with stimulants, such as strychnine, camphor, alcohol, atropin, or aromatic spirits of ammonia.



Starting a Flock of Ducks

Ducks are easily raised, and can be kept with profit on a farm. It is the general opinion that ducks cannot be raised unless they have access to a pond or river. A body of water is not essential, though it furnishes excellent feeding-grounds and consequently lowers the cost of keeping the ducks. Ducks are hardy and stand most any climate. Some varieties are good winter layers, and their eggs always command a few more cents per dozen than hens' eggs. The large share of ducks are raised for market, and prices obtained for them are consistently good.

Ducks' eggs may be hatched under hens or in incubators. Four weeks are required. The young ducks should be fed about five times a day for the first few weeks on a mash food. The mash I feed consists of wheat-bran and hominy, with beef-scrap and fine grit or sand, all mixed together with water or skim-milk. Later cracked corn, wheat or any reliable chick-feed is added to their diet. If they do not have free range, they should be given plenty of green food of some sort.

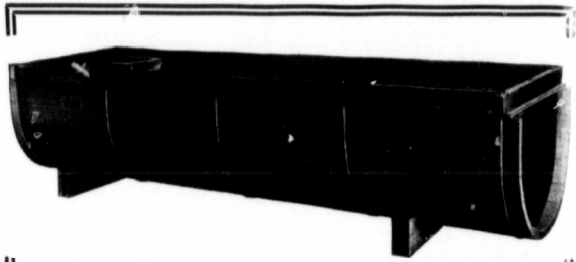
Feeding for Market

When the ducks are weaned, it is best to transfer to colony houses large enough to accommodate flocks of not more than twenty. The houses should be open in front and covered with half-inch wire netting to keep out all night intruders. The houses should be near, or bordering, a brook or pond, if there is such upon the farm. Otherwise have the houses scattered over free range far enough apart so the flocks will not mingle. They should be fed practically the same as when younger, and the houses should be kept clean.

The ducks and drakes intended for market should be confined for a week in dark pens and fed all the corn-meal mash or wet cracked corn they will eat. Give them very little water. If the ducks are dressed before sending to the market, remember to save the feathers, for they are valuable.

A house ten by ten feet on the ground, seven feet front by three feet in the rear, wind and storm proof on all sides but one which faces to the south will accommodate about twenty ducks and three drakes and serve for winter quarters.

A litter of straw or meadow-hay should be supplied for bedding. A few dry-goods boxes placed against the wall on the in-



When you think Thresher Tank, think

"Saska"

and ask any Implement Dealer in Western Canada, or write us for Special Delivered Price.

"SASKA" MANUFACTURING CO. LIMITED
SASKATOON SASKATCHEWAN

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

Will run all day without attention, furnish exactly the power you need, maintain a uniform speed and save you money every hour it works.

Use either Kerosene or Gasoline for fuel. Best economist of time and money you can place on the farm.

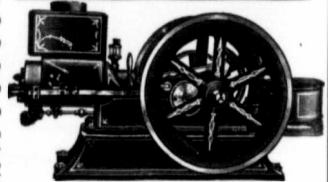
PRICES FOR CASH WITH ORDER

- 1 1/2 H.P. Air Cooled Engine \$ 38.40
- 1 1/2 H.P. Hopper Cooled Engine 39.20
- 2 1/2 H.P. Hopper Cooled Engine 56.80
- 4 H.P. Hopper Cooled Engine 104.00
- 6 H.P. Hopper Cooled Engine 148.00
- 8 H.P. Hopper Cooled Engine 209.60
- 12 H.P. Hopper Cooled Engine 314.40

Prices quoted are for skid mounted. These engines will all develop from a half to a horse power more than they are rated above.

THE WATERLOO BOY GASOLINE ENGINE

LOWEST IN PRICE BECAUSE MADE IN LARGE QUANTITIES AT LOW MANUFACTURING COST



GUARANTEED FIVE YEARS

THE DEXTER ELECTRIC WASHER



Its absolute safety, ease of operation and substantial construction make a strong appeal to every prospective purchaser.

Admiration is expressed by everyone at the neatness, safety and convenience of this machine. When in operation, one becomes enthusiastic at its marvelously smooth and perfect work, making wash-day delightful. Put in the "dope" switch on the electricity and it is practically all over but looking at it. Absolutely safe, as all moving parts are entirely covered by smooth, metal cases. No danger of injury to the fingers—no chance of tearing or soiling the clothes as the Dexter cleans by agitation rather than by friction.

Prices for cash with order: Hand Machine (with free pulley), \$12.40.—No Wringer. Power Machine, complete, \$22.40. Electric Machine, complete, \$55.00 (can only be used where electric power is available). For interested write for Catalogue.

Address all inquiries to Winnipeg.

Canadian Agents All prices quoted are f.o.b. at Winnipeg

Burridge Cooper Ltd. Winnipeg and Regina

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

side of t
sawed in
for the du
straw put
appreciate
them prefer
to dropping
ding.

Laying
three times
ter. Bran
shorts, mix
make a go
them. W
which have
water mak
At night th
as in the
the mash
corn. A s
occasionally
them good.
oyster-shell
fore them a
plenty of fr

To A
When fee
little coarse
main appet
must also be
of some kind
to lay well in
During the
they have f
pick up enou
for their me
substitutes m
scraps, bone-

Even if Your Crops Escape the Hail

the feeling of security and freedom from worry which a Canada Hail insurance Policy will give you all summer, is well worth the small premium. If you are "hailed out"

The Canada Hail Insurance Co.

HEAD OFFICE, WINNIPEG, MAN.

Guaranteed by the London Mutual Fire Insurance Co. of Canada

will pay your loss promptly and in full. Our fair adjustments and quick settlements are known and appreciated throughout the country.

Equally sure and satisfactory is the protection against fire which has been afforded for over half a century by

The London Mutual Fire Insurance Co. of Canada

London Mutual Farm Policies cover all the contents of house or barn under one item, specific insurance being required on live stock only.

London Mutual Automobile Policies give very broad protection against fire, explosion and self-ignition, to body, machinery and equipment, while in use or in the garage. Investigate.

For rates on Hail or Fire Insurance consult any of the local agents of these companies, or apply to the General Agents:

Applications for
Local Agencies
Invited.

Matthews, Wrightson & Co. (Canada) Limited 720 Union Bk. Bldg
Winnipeg, Manitoba

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

side of the coop, with spaces sawed in each box large enough for the ducks to go through, and straw put in for a nest are much appreciated by them, as most of them prefer laying in such a nest to dropping their eggs in the bedding.

Laying ducks should be fed three times a day during the winter. Bran, cracked corn and shorts, mixed to a crumbly mass, make a good morning feed for them. Whole oats and wheat which have been soaked in warm water make a good noon meal. At night the same should be fed as in the morning, except that the mash should contain more corn. A supper of whole corn occasionally is a change that does them good. The ducks must have oyster-shell grit and charcoal before them all the time, including plenty of fresh drinking-water.

To Avoid Egg Loss

When feeding a mash, mix in a little coarse sand, as grit is their main appetizer. Laying ducks must also be provided with meat of some kind if they are expected to lay well in winter and summer. During the summer months, if they have free range, they will pick up enough bugs and worms for their meat diet, but in winter substitutes must be given. Beef-scraps, bone-meal and green cut

bone are among the best meat foods for them. These should all be mixed in the mash.

During the laying season, if the expected number of eggs is not found early in the morning, the ducks should be kept in their houses until about nine o'clock, after which time there will not be many left to lose. There are several varieties of very good laying ducks, and every farmer should give the profit-payers a trial.

A. E. Vandervort.

Dairy Value

In the commercial world it is reasonable to assume that what you pay and what you get determine value; a low price, in itself, does not spell value; price and quality, together, determine value.

As applied to the dairy herd, how does this work out? A farmer does not necessarily buy a cow because the price is low, he wants quality; in this case quality may be interpreted to mean dairy capacity, or ability to produce plenty of good milk. If he does not purchase, possibly the heifer coming into milk has been raised at rather too high a cost so that her dairy quality is

impaired. She may not be of the right stock, that is, from a dam of deep milking qualities and a sire of known ability, and all may have suffered from lack of the right feed.

The other part of the value side of every dairy cow, that is, what you get from her, is right in the dairyman's own hands. He can easily determine each cow's value, or dairy quality, by keeping individual records of production. Then if he wishes to part with a good cow, her selling price is enhanced by reason of that certificate of value, her record, which helps to fix the price. Right buying is true economy; the factory patron with the highest conception of value will buy, or raise, right, and will know, by his own simple records that each cow in the herd separately, not averaged in a lump, fits his ideal of value. Fix a good standard, make each cow pay.

Dominion Department of
Agriculture
Dairy Division

Why Not Keep the Better Kind?

Just as long as a dairyman knows only the production of all his cows, just so long will he be

without the necessary incentive to take steps for herd improvement. But when he knows his cows individually as to production and cost of feed, then he can retain the abundant and economical producers.

The general result as applied to a district are full of suggestion. In one lot of 422 cows belonging to 42 men the average yield last year was found to be 4,494 pounds of milk, the cost of feed \$32.90; thus, simply taking the cost of feed into consideration, leaving a net profit of \$14.28. But a slight investigation showed that the 100 best cows produced milk to the value of \$7,137, the 100 poorest cows produced only \$3,200, or much less than half as much.

The best cows were fed at an average cost of \$38.42, leaving a clear profit of \$32.96 each; the poorest cows cost \$30.26 to feed, returning a clear profit above the cost of feed of only \$1.74 each.

It thus is evident that each one of the 100 best cows made as much clear profit on the milk produced as that given by eighteen of the poorest.

Why not keep the better kind? It pays to find out which kind are in your herd. Milk and feed records may be obtained free on application to the Dairy Commissioner, Ottawa.

Life Insurance for Farmers

By GEO. M. REID

"Life Insurance is a great social plan, replacing the weakness of man standing alone, by the immeasurable strength of men standing together."

To anyone unfamiliar with the developments of modern Life Insurance it may come as a surprise to learn that at the end of 1913, the total of insurance carried on the lives of policyholders of the Canadian companies alone was in excess of \$1,200,000,000, applying to one and a half million lives, and safeguarding the future well-being of probably more than four million persons.

The Story of Life Insurance—its inception, early history and expansion—is a romantic story indeed; the romance of a great human need met by the evolution of a great co-operative plan; of small and faltering beginnings merging into vast undertakings; of painstaking research by the ablest mathematicians in the world; of long experiments patiently conducted; of brilliant plans carried to conclusions far more momentous than the originators ever dreamed.

It would be interesting, if space permitted, to trace the early beginnings of Life Insurance, from those early days in 1698 when a Lancashire clergyman induced a number of his parishioners to band together, and by paying a certain sum yearly, ensure to the families of those who died whatever sums were available from the funds of their Association, the first life insurance company. Thus in a crude and experimental fashion, those early pioneers practised the great principle of co-operation, which lies at the root of the vast enterprise of life assurance. For life insurance is applied co-operation. It is the "alliance of prudent men against disaster." It spreads the loss occasioned by the death of one amongst the many. It gives the strength of unity. For the average man life assurance is the only way of making absolutely secure financial provision for

those dependent upon him, whatever may befall. The man adequately insured may undertake hazardous business ventures with an easy mind, knowing that his death need not mean disaster. His careful plans need not go awry though he himself be removed. Life insurance means ease of mind. It places upon an impregnable basis the safety of the home. It means an end to poverty.

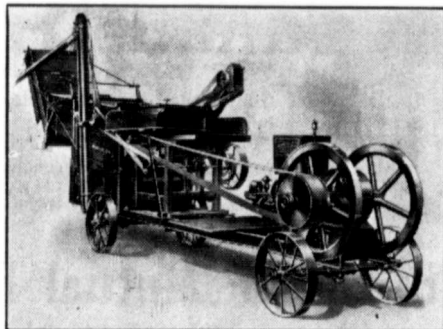
To no member of the community should this sound principle of helpful co-operation appeal more than to the farmer. Already he carries the principle into almost every detail of his daily life. Innumerable associations have been founded in all parts of the country for the more profitable marketing of farm commodities; farmers have their grain growers' and stock breeding associations; their great agricultural journals in which they co-operate in the interchange of knowledge and ideas. They have their fairs and exhibitions, their local clubs and societies; even in the remotest districts and in the humble operations of the daily round, farmers, even more than other men, co-operate in mutually helpful acts—in their building bees, their plowing contests and the hundred and one events in which one helps the other.

Thus, to the farmer of all men, the sound principle of life insurance, the greatest plan of practical co-operation ever devised, should appeal in the strongest degree. While every class may benefit by life insurance, the poor and the rich, young and old, men and women, there are features that should have the special consideration of every man engaged in the most essential of all the productive callings, the great business of agriculture, rightly described as "the backbone of a nation's wealth." Let us briefly outline some of the peculiar advantages the farmer may derive from life insurance.

In the first place, it should not be forgotten that the farmer's personal industry and skill constitute the most valuable asset he possesses. These qualities form the foundation of his prosperity. Everyone knows that one farmer will make a thriving living from land on which another man would starve. The farmer practising up-to-date and scientific methods will gain success where the slovenly and idle will make nothing but a hopeless failure. So the farmer's personality may well be de-

The Up-to-date Threshing Outfit

"DOMINION"



The long felt want of Western Farmers.

Wheat has been threshed and cleaned ready for market with the above at a cost of three cents per bushel, or a saving of seven cents on large outfit.

Write to-day for Catalog giving full description and price and ensure having same on hand when needed.

Address:

O. Chalifoux & Fils, Ltee., St. Hyacinthe, P.Q.



TRACTOR IGNITION

Demands Strong, Reliable, Damage-Proof Batteries.

Columbia Multiple Batteries are all this and more. They are the most economical source of current

on the market. Get one from your dealer. If he does not handle them, write us and we will tell you where to get them.

We will send you a 32-page book on Ignition, free. It gives you valuable points about finding and remedying trouble in gasoline engines and shows you how to keep your motor running properly. Address mail to

Tractor Department

Canadian National Carbon Co., Ltd.

99 PATON ROAD, TORONTO, ONT.

THE INTER-PROVINCIAL FAIR

Brandon, Man.

July 20th to 24th (inc.), 1914

\$50,000.00 in premiums and purses \$50,000.00

Manufacturers are invited to make exhibits. No charge for outside space. Machinery display space is high and dry—no trouble with wet grounds. Every manufacturer should be represented at the, greatest farmers' fair in Canada. It's where you meet the buyer.

Write for prize list

Single Fair and Excursion Rates on all Railroads

J. S. Gibson
President

Wm. Nichol
Vice President

W. I. Smale
Sec. & Mgr.

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



YOU CAN LEARN TO BE A TRAVELING SALESMAN by mail in eight weeks and our Free Employment Bureau will assist you to secure a position where you will have an opportunity to earn big pay while you are learning. No former experience required. Salesmen earn \$1000 to \$5000 a year and expenses. Write today for large list of good openings and testimonials from hundreds of our students who are now earning \$100 to \$200 a month. Address nearest office. Dept. 179 NATIONAL SALESMEN'S TRAINING ASSOCIATION Chicago New York Kansas City San Francisco

Mention this magazine when writing advertisers

scribed
tast p
proper
protect
that in
nifies
skill at
The fa
sure th
machin
ability-
class a
who, fe
dollars
sure hi
destruc
be so f
Then
farmer
and equ
fixed m
and ma
values
financia
matter
most va
vantage
all may
independ
fortable
if he dic
the care
Four alt
To carry
they can
be it
supervis
to sell t
rienced
of the r
perience
often gri
he overlo
ing capa
desirable
none nee
lessons c
how diffi
to sell a
figure.
problem
viding a
money to
over their
til a fair
may be o
paid imm
coin of t
life insur
ver lining
Here is
one farm
property
many year
farming s
and farmi
ed by one
ance comp
he was he
much of i
was avers
that he t
better in
But the
as life
the farme
purchase
for \$50,000
premium
\$1,000. T
paid. Bef
even delive

scribed as by far the most important piece of machinery on the property. Life insurance affords protection against the loss of that invaluable asset, and indemnifies the household should that skill and industry be removed. The farmer who neglects to insure the most valuable piece of machinery on the farm—his own ability—is in precisely the same class as the thriftless individual who, for the sake of saving a few dollars annually, neglects to insure his barns against the risk of destruction by fire. Who would be so penny-wise?

Then, again, the property a farmer acquires in land, building and equipment, is not as a rule of fixed money value. Buildings and machinery depreciate, land values fluctuate, and in times of financial depression it is no easy matter to dispose of even the most valuable farm to good advantage. While the owner lives all may be well; no man is so independent or so sure of a comfortable livelihood. But what if he dies and the farm passes to the care of those less competent? Four alternatives confront them. To carry on the farm as best they can; to engage capable and, be it remembered, expensive supervision; to rent to others, or to sell the property. No experienced farmer need be reminded of the mishap that fall to inexperienced — occasionally amusing often grimly tragic. Neither can he overlook the difficulty of finding capable supervisors or really desirable permanent tenants. And none need be reminded after the lessons of the last few months how difficult it is in many cases to sell a farm at a remunerative figure. The solution of the problem is life insurance, providing a substantial sum of money to enable the family tide over their difficulties, or wait until a fair price for the property may be obtained. The money is paid immediately, and is paid in coin of the realm. No wonder life insurance has proved the silver lining of many a dark cloud.

Here is a brief story of how one farmer saved a great property by life insurance. Not many years ago a Westerner, farming several hundred acres, and farming well, was approached by one of the great life insurance companies. Busy man that he was he had not thought very much of insurance, and at first was averse to spending money that he thought might be used to better immediate advantage. But the life agent persisted, as life agents do. At last the farmer was induced to purchase a considerable policy for \$50,000, and paid the first premium of something over \$1,000. That was all he ever paid. Before the policy was even delivered, while it was in

the mails, that strong man, in the prime of life and full activity, over-exerted himself in the fields one day, caught a severe cold, developed pneumonia, and died of that treacherous disease, often more fatal to the strong than to the weak. The \$50,000 was immediately paid in full to the widow. She was able to pay off pressing obligations to the banks, and with capable assistance could carry to a successful conclusion the ambitious schemes that, but for the life insurance, would have ended there and then.

The incident emphasizes an important feature of farming some are inclined to overlook. Few farmers can operate without occasional advances from their banker. Bankers lend money far more readily to the man who carries life insurance than to the man who does not. Many of them insist upon adequate protection—all strongly urge its value.

Finally it should not be forgotten that for the farmer whose property is mortgaged life insurance is an acquisition of the utmost value. To many a struggling widow the mortgaged farm has proved nothing but a perpetual burden. Life insurance will lift the mortgage and remove the burden. Count if you will, the life insurance premium as a trifling increase to the interest on the loan, and it is one of the shrewdest investments the farmer could ever make.


There is the very essence of life insurance. It is always an investment — never, if wisely chosen, a sheer expense. Sooner or later, all the money paid will come back again, to the insured himself if he lives, to his heirs if he dies. There is no possibility of loss to the man who completes his share of the bargain. The company always completes his share. There has never been a failure of a well-conducted old-line Canadian life insurance company. The companies operate under strict government supervision, and their millions of assets are protected by the most rigid safeguards.

Commonsense, then, not less an attitude of wise precaution, urges every farmer to carry life insurance. But there is a curious element in the human make-up that causes men who could not sleep o' nights if the fire insurance on their barns ran out, to put off life insurance. Some men must be almost bounded to take a policy. Yet how dangerous their supine mood! It is a mighty disturbing thing to remember that of every hundred men who apply for life insurance, eight are rejected on account of ill-health or other considerations. Yet the great majority

CASH FOR YOUR CREAM

EVERY SHIPMENT

Free Cans For A Months Trial Shipments If Required



Write for Free Illustrated Booklet—
"DAIRYING FOR DOLLARS"

CRESCENT CREAMERY CO.
LIMITED
WINNIPEG AND BRANDON
LARGEST BUYERS OF CREAM IN CANADA
PAID UP CAPITAL, \$268,725.00

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

SMOKE

FOREST & STREAM

TOBACCO

It is exceptionally mild

10c Per Tin 10c

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

We pay highest Prices For

RAW FURS

And Remit Promptly

FREE

HALLAM'S TRAPPERS GUIDE
French or English
A book of 96 pages, fully illustrated. Game Laws revised to date—tells you how, when and where to trap, bait and traps to use, and many other valuable facts concerning the Raw Fur Industry, also our "15-in-the-minute" fur quotations, sent ABSOLUTELY FREE for the asking.

Sixty Thousand trappers send us their Raw Furs. Why not you? We pay highest prices and express charges, charge no commission and send money same day goods are received. Millions of dollars are paid trappers each year. Deal with a reliable house. We are the largest in our line in Canada. Write to-day

Address **JOHN HALLAM, LIMITED** Mail Dept. 468 111 Front St. East, **TORONTO**

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

were at one time perfectly insurable. The trouble was—they "put it off" too long. Recognizing this too-frequent attitude, the editor of "The Canadian Thresherman and Farmer" arranged this special series on life insurance, and decided to give his many readers information that would lead them to abandon the hazy conception some of them, it may be, hold as to the urgency of protection, and by simple explanations, show them how logical and sound is the whole life insurance idea—how immensely important this great principle of applied co-operation.

In succeeding papers these principles will be explained in as interesting a manner as possible, that those who read may see that life insurance is not an expense, but the wisest of investments, that its benefits are sure and easy to attain, and that farmers, of all men, will do well to secure for themselves and their families the broadest measure of advantage from carefully-chosen life insurance.

Correspondence

A Reply to Mr. Hamilton's Article "The Weak Link in a Strong Chain"

Editor, "Canadian Thresherman and Farmer."

Dear Sir:—Although I am not a subscriber I am a reader of "The Canadian Thresherman and Farmer" I take considerable interest in the work you are doing for the agricultural interests. Although I don't agree with all the views expressed in the magazine, I consider it—as a whole—a great journal.

One of the topics on which I would like to express a different view bears the headlines of "The Weak Link in a Strong Chain"—by Mr. Hamilton—in the March number.

The page on which the article ends is a proverb that, I think, describes the condition. "Dodging hard facts never brought success to the dodger."

There is a ray of truth in the article, but, on the whole, it is false.

Mr. Hamilton criticizes farmers for letting implements stand out. That weather has a bad effect on machinery is a fact. But that that is the weakest link seems to me rather doubtful. To my mind the "purchase price" is the weakest link.

The Employees Position

He says, in substance, that the implement factories employ a large force of skilled and highly paid men. What he considers a large force or high wages he does not say. At any rate, I

think he will find a larger force of poorly paid men. That they give the best that is in them is a fact if the following has any weight: "In those industries where inventions are most frequent and most profitable employees are now required to sign contracts providing that all inventions made by them shall become the property of their employers."—A. M. Simons, in "Wasting Human Life."

"The eighteenth annual report of the United States Commissioner of Labor estimated that the average cost of maintaining a family at a standard of as good working efficiency as animals is \$768. The investigators of the Russell Sage foundation, after a study of a large number of families raised this estimate to between \$950 and \$1,000. The average yearly wage of the 6,615,056 employees in the manufacturing establishment of the U.S. in 1910 was \$518."—"Wasting Human Life."

The Farmer's Position

We are informed that "the Canadian farmer produces about six times as much grain as the European farmer." There is no reason why that statement shouldn't make the most of the Canadian farmers think. He goes on to say "this is because Canadian farmers use modern machinery, while the European farmer doesn't. This is one of his many statements that are pure assertion. There is a large amount of Canadian and American-made farm machinery sold in Great Britain, and at a far lower price than it is sold for at home, in spite of the fact that it costs considerable for exportation.

In view of the fact that the actual cost of production is only about one-fourth of the purchase price of a binder, will the people agree with Mr. Hamilton "that the high cost of implements is due to the lack of a shed to shelter them."

To my mind it is the reverse. The lack of a shed is due to the high cost of implements. The weakest link in the chain of agriculture is the excessive cost of implements. This problem will be solved not by the manufacturers, but by their employees and the farmers. It has been said that "the farmer and the mechanic should be brothers." Those who can read the signs of the times can hear the rumbling of a change in our social system.

When the farmers and the wage earners join hands in the common cause they will solve the problem of the exploitation of both classes. No others will. We think that will be house cleaning day at Ottawa.

H. H. Mann,
Anerley, Sask.,
24th March, 1914.

Acetylene Headlights for Traction Engines



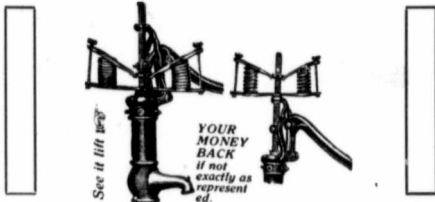
Complete in one apparatus. The best on the market. Indispensable for plowing at night or moving over rough fields, and bad roads. Attachments for all makes of engines. Projects a light 400 feet. Will not jar out. Runs ten hours with one charge. Write for catalog. Agents wanted.

AMERICAN ACETYLENE STOVE CO.
512 Masonic Temple, Minneapolis, Minn.

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

THE "HERCULES" PUMP GOVERNOR

is the new name for **THE ADVANCE PUMP GOVERNOR**
WHICH WE NOW CONTROL IN WESTERN CANADA



See it lift hay

YOUR MONEY BACK if not exactly as represented.

Can. Pat. 144464. Dec. 3rd, 1913

Write for our Pump Governor Pamphlet which gives all information, and also a plan to **MAKE A LITTLE MONEY** without soliciting, collecting or obligation on your part.

The Western Steel and Iron Co. Ltd., Winnipeg, Canada

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



Build Concrete Crib Floors and Supports

THEY keep the rats, squirrels and other rodents from carrying away your profits. Millions of dollars are lost to farmers each year through the ravages of rodents in cribs and granaries. Part of this loss is paid by every farmer whose crib floor isn't built of concrete.

Concrete crib floors and supports stop the waste because

They Protect Your Grain

Concrete is strong, durable and clean. It never wears out and needs practically no repairs. It is the cheapest of all materials for cribs and granaries. Write for this free book "What the Farmer can do with Concrete." It tells all about the uses of concrete and will help every farmer to have better buildings and save money.

Farmer's Information Bureau
Canada Cement Company Limited
780 Herald Building, Montreal




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

Ma
F
7
EC
W
UNT
YOU
COU
TE
RES
WE
CON
FACI
TRAI
WI
AND
ENG
BORI
We
of
Cru
P
at
Fire
Roa
tc
Stes
produc
Ma
Tele
Stu
A Graphic
efficiency, resu
and experience
It is a w
ertain amo
when a trac
Assuming
ditions of so
tractor, the
page does no
we add plo
critical num
the percenta
much more
blows stall th
drivers turn
forward mov
in other wor
ts drivers w
the efficiency
ent.
This decre
ency is graph
curve. The
page is shown
number of p
lippage at
efficiency of t
the right. By
percentage of
the drivers w
g used to m
ard. The c
y percentag
0 per cent, 1
to slippage

FARMERS! DO YOU WANT GOOD MACHINERY?

If you do, this is what you are looking for—a Tractor that is Guaranteed to stand up to its work and give good service. Built by "MARSHALL'S"—a firm of world-wide repute. Every part Fitted, not assembled. Only best materials used and all carefully tested out before selection. The horse power is not over-rated, and we guarantee they will do all that is claimed for them. They are well named:

The Dreadnoughts of the Prairies

BUILT LIKE A BATTLESHIP—RUNS LIKE A WATCH

**ECONOMICAL,
DURABLE,
RELIABLE**

WE ARE NOT OFFERING YOU AN UNTRIED ARTICLE AND CAN REFER YOU TO A NUMBER OF USERS IN THIS COUNTRY.

THE MOTOR IS BUILT UNDER THE BEST ENGINEERING PRACTICE AND WE INVITE YOU TO COMPARE OUR CONSTRUCTION AND BEARING SURFACES AS AGAINST ANY OTHER TRACTOR SOLD IN THIS COUNTRY.

WE ARE HERE TO LOOK AFTER YOU AND HAVE SKILLED MECHANICAL ENGINEERS FROM WORKS AT GAINSBORO.

We Guarantee Prompt Despatch of all Repair Parts. Crude Oil Engines, Stationary and Portable. Simplest and most economical Engine made. Fixed Steam Engines 2 to 2000 H.P. Road Rollers, Steam Hauling Tractors, etc. Steam Boilers, all kinds.



Two Sizes in Stock: 16 Draw-Bar H.P., 30-35 Brake H.P.;
32 Draw-Bar H.P., 60-70 Brake H.P.

EVERY ENGINE IS THOROUGHLY TESTED BEFORE LEAVING THE WORKS AND WE GUARANTEE ITS EFFICIENCY.

WE HAVE THEM RIGHT HERE WAITING FOR YOU. COME AND CHOOSE YOUR SIZE.

"MARSHALL'S" NAME STANDS FOR QUALITY ALL OVER THE WORLD.

WE HAVE A FULL STOCK OF SPARES ON HAND AND THERE WILL BE NO DELAY IN CASE OF ACCIDENT.

Not in any Combine

Send for Illustrated Catalogue with Full Description

The "Marshall" Works at Gainsboro, Eng., were established in 1848, and now employ over 5,000 men. Works cover 40 acres and they have produced about 155,000 Engines, Boilers, Threshing Machines, etc. Call and see our New Factory at Saskatoon, site 500 x 130 ft.

Marshall, Sons & Co. (Canada) Ltd., Engineers, Saskatoon, Sask.

Telephone No. 3393

FACTORY: ELEVENTH STREET WEST

P.O. Box 1564

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

Study the Curve

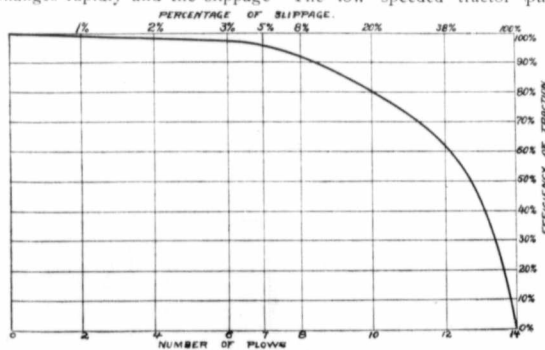
A Graphic representation of traction efficiency, resulting from practical tests and experience.

It is a well known fact that a certain amount of slippage occurs when a tractor is pulling a load. Assuming fair, average conditions of soil and a 20,000 pound tractor, the percentage of slippage does not increase rapidly as we add plows, until we reach a critical number of plows. Then the percentage increases in a much more rapid ratio, until 14 plows stall the tractor, so that the drivers turn around without any forward movement of the plows. In other words, the tractor slips its drivers without moving, and the efficiency of traction is 0 per cent.

This decrease in tractor efficiency is graphically shown by the curve. The percentage of slippage is shown at the top, and the number of plows causing such slippage at the bottom. The efficiency of traction is shown at the right. By this we mean the percentage of power delivered to the drivers which is actually being used to move the plows forward. The difference between the percentage of efficiency and 100 per cent, represents the loss due to slippage.

With two plows, the slippage is 1 per cent. Then the efficiency of traction is 99 per cent. The wheels lose but one turn in 100. With 8 plows, we have a slippage of 8 per cent. The drivers move forward 92 revolutions and slip 8 out of each 100. The ratio then changes rapidly and the slippage

Note two tractors which have approximately the same weight and draw-bar horse power. But one has a speed above 2 and the other a speed below 2 miles per hour. The slippage in either case will be approximately the same, for a certain number of plows. The low speeded tractor pulls

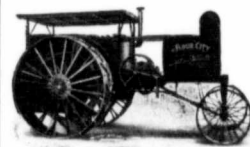


ASSUMING A 20000LB TRACTOR WITH STANDARD CLEATS IN AN AVERAGE FIELD, THE ABOVE CURVE REPRESENTS THE PERCENTAGE OF FIGURED OR THEORETICAL SPEED WHICH WILL BE MADE IN PRACTICE WITH DIFFERENT NUMBERS OF PLOWS.

with 10 plows becomes 20 per cent, and one out of five turns of the drivers is wasted in tearing the soil beneath the drivers. Only 80 per cent of the power is used to pull the plows forward. When 14 plows are hitched on, the tractor spins the drivers, and buries itself, anchored by the plows.

more plows, though it does not necessarily cover more acres per day than the higher speeded one with less plows. Since the slippage of the low speeded tractor is greater, the number of acres covered per day is further reduced. The higher speeded tractor having the same draw-bar horse power, pulls a less number

SPECIAL SALE



Flour City Gasoline Tractors

We have two 30 H.P. and one 40 H.P. TRACTORS which have been rebuilt and are in good running order.

Write for special offer.

Big Inducements to cash purchasers.

Ontario Wind Engine & Pump Co. Ltd.

Winnipeg and Calgary

of plows. But at night, it has covered more ground and a superior piece of work has been done. It may often happen that the same tractor will cover more acres per day, if the load is decreased by a plow or two, so that the slippage is also decreased.

The study of this question is one of immense and vital importance to every man the least interested in power farming.

\$1,000 for the Boys!

The Canadian Bankers' Association gives \$1,000.00 in prizes to the Manitoba Winter Fair for Beef Animals Fitted and Exhibited by boys under Seventeen Years.

During the recent Winter Fair, Mr. J. D. McGregor, President of the Manitoba Winter Fair, made the announcement that in order to encourage the boys on the farm and to stimulate the breeding and fitting of beef animals for the market, \$1,000.00 would be offered in prizes at the 1915 exhibition for beef animals fitted and exhibited by boys under seventeen years of age. This announcement, needless to say, created great enthusiasm among young and old. Recently, President McGregor and Secretary Smale went to Winnipeg, at the invitation of the Canadian Bankers' Association, when that body unanimously made the very generous offer to contribute the sum of \$1,000.00 for the boys' competition for grade steers or heifers calved in 1914 and exhibited at the Manitoba Winter Fair, March, 1915. The munificent grant will be an annual affair and is contributed for the sole purpose of encouraging the farm boys of Canada and above all to stimulate a greater and more intelligent interest in live stock breeding and fitting for the market. The competition is open to the Dominion and it is expected that not less than one hundred boys will compete. The one thousand dollars is divided into twenty prizes, the first prize being \$100.00 and gradually dropping to four prizes of \$25.00 each. In addition, the winner of the first prize will receive a gold medal.

This competition means much to the West and every Board of Trade, Agricultural Society and Boys' Club should get busy at once and see that its district has one or more entries in the competition. The Bankers' Association has shown that it is deeply interested in solving the high cost of living and is assisting in a substantial and practical manner by interesting the young boys in the great basis industry that Canada depends on and which must be encouraged and developed if we are to succeed. This is an advance step in agricultural education — it is an effort to accomplish something practical. The Bankers' Association is to be congratulated. The generous action in providing such a large fund for this laudable purpose will meet with the hearty endorsement of the commercial and agricultural interests of this

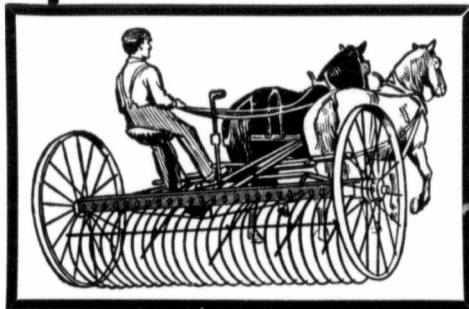
Your Farm Equipment Should Include a

FROST & WOOD
Internal-Gear MOWER and All-Steel RAKE

To farm without the aid of these two valuable Haymakers is to work under a heavy handicap. Their use, for a single season, will prove this to your complete satisfaction.

A Light-Draft Mower

The cutter-bar of the FROST & WOOD MOWER is driven by internal gears. "Lost motion" is completely done away with—teeth-wear and friction reduced to the lowest point. Roller-Bearings at every vital point make this MOWER unquestionably the easiest running machine of its kind on the market.



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

A Durable Rake

The FROST & WOOD Rake is built to last a life-time—even with the most strenuous usage. Angle-steel frame—steel, staggered-spoke wheels—staunch steel axles—spring-steel teeth—that's the way we build the FROST & WOOD for SERVICE. All parts are riveted; they won't fall apart like bolted parts.

SEE THEM

A call on our Agent will convince you that these two implements will make money for you. See them, today if possible—or write for illustrated descriptive booklet "Haymakers." It's Free

Cockshutt Plow Co.
Winnipeg, Regina, Calgary, Saskatoon

country. The Manitoba Winter Fair, now the most important in Canada, will continue to expand until it will rank among the best on this continent.

The rules governing this competition are as follows:

Boys' Competition

\$1,000.00 in cash prizes donated by the Canadian Bankers' Association for grade steers or heifers calved in 1914 cared for and fitted by boys under seventeen years of age.

Competition open to boys under seventeen years of age. Competitors must have fed, cared for and fitted the animals exhibited for at least six months previous to the date of the exhibi-

BABBITTS

Buy direct from the manufacturers and save money



Owl Babbitt Metal

For Threshing Machines, Small Gas and Steam Engines
Cash with order price 30c per lb.

Owl Traction Metal

For Gas and Steam Tractors will stand heaviest work

Worth \$1.00 Cash with order price 65c per lb.

Scientifically alloyed Babbitt metal made in Winnipeg by

The Owl Metal Co., Ltd.
Metallurgical Experts

151 Notre Dame Ave. WINNIPEG

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

bition and must themselves exhibit the animals in the showing for judging purposes. Parents, guardians or employer must furnish a certificate that the boy has cared for and fitted the animal for at least six months and also certify as to the boy's age, giving name, date of birth and address and also certify as to the age of the animal. No entry will be accepted unless this is done.

Competition and Prizes

Open to grade steers or heifers calved in 1914, fitted by boys under seventeen: 1st, \$100; 2nd, \$90; 3rd, \$80; 4th, \$75; 5th, \$70; 6th, \$65; 7th, \$60; 8th, \$55; 9th, \$50; 10th, \$45; 11th, \$40; 12th, \$40; 13th, \$35; 14th, \$35; 15th, \$30; 16th, \$30; 17th, \$25; 18th, \$25; 19th, \$25; 20th, \$25.

In addition the Manitoba Winter Fair donates a gold medal to the winner of the first prize and a silver medal to the winner of second.

These prizes are worth an effort on the part of the farm boys of Western Canada. Now is the time to prepare. The Bankers' Association is entitled to the thanks of the farmers of Canada, and the management of the Manitoba Winter Fair is to be congratulated on securing this magnificent donation, the object of which is to encourage and educate the boys of the farm. The carrying out of the competition is in capable hands. The men in charge of Manitoba's great Winter Fair can be depended upon to bring this great event to a successful issue.

The Scotch Collie

This dog is the typical sheep dog of the world and is seen in most every country. It is a most friendly dog and soon becomes attached to its master. It has been known to follow its master for miles and if it loses track of him it will howl most piteously. The standard breed of Scotch Collies stands about 22 to 24 inches high at the shoulders, and has a skull quite flat with a fine tapering muzzle and brains that often act with better judgment than those of his human master on matters within the dog's range. This dog will tend his flock as well, often better than men. The sheep soon become perfectly acquainted with their dog and evidently regard it as a friend. The dog knows the sheep of the flock which it is required to attend and even in a crowded market adroitly separates them from others. When a dog has been kept on a place for a little while it always remembers it and often while hungry will return to a house at which it has once been fed.

The standard qualities called

Frost Fence
Covers
Canada.

A Purely Canadian
Product

We Make Our Own
Wire

Sold Through Dealers Only

The Farmer has had so much occasion to complain about cheap fence made from cheap wire, that nearly all see the importance of buying goods with a reputation for service, and turned out by a known and reliable firm.

Cheapness in the Cheap Fence is being Worked Harder than Ever this Year and the farmer is asked to "Save Money" by a "direct-from-factory-to-user" policy, and cut out the agent's profit. But, is he told about the possibility of his getting scant and cheaply-made goods? Or is he told that these identical goods are offered to dealers at a still lower price, although he is encouraged to believe that he is supporting a policy which gives him the preference?

Farmers Have No Positive Means of Knowing What Sort of Material They are Getting, Unless It is the Branded Make of a Responsible House Whose Goods Have a Reputation for Service Do you know of any fence whose individuality is so pronounced as the "FROST"?

That tight-lock binding is our trade-mark. When this is offered to the farmer, he can be absolutely sure that he is getting "FROST" Fence, which means full weight and a great big measure of extra service and perfect satisfaction.

We Make:

Gates—All Galvanized. Fancy and Plain, all sizes.
Coiled Wire—Each bundle tagged with a guarantee of quality.
Stays and Locks—For Field-Built Fences.
Tube Posts and Rails—For Lawn Fences.
Iron Fences—Many handsome designs. Send for special catalogue.

Wire—All sizes from 6 to 16 gauge, any degree of pliancy from hard steel to dead soft, including Soft Galvanized Wire, Barbed Wire, Telephone Wire, Hay Wire and Ties, Oiled and Annealed Wire, Staples, Fence Hooks.

Send for our Catalogue—it goes to the heart of the Fence question. If we are not already represented in your locality, write us for agency.

The Manitoba Frost Wire Fence Co., Limited
Winnipeg, Man. - - - Hamilton, Ont.

Cut below shows one of the many styles of FROST Fence. All FROST Wire, which is drawn true to gauge, carefully tempered to the proper hardness and thoroughly galvanized in our own mills by expert workmen who have had years of experience in wire-making. Note our neat and doubly secure lock. It is the finishing touch to our perfect fence. "FROST Fence sells best where best known."



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

for are a heavy coat except on the head and legs, the outer coat very rough, while the undercoat is very soft and furry and so close that it is difficult on parting to see the skin. The mane and frill around the neck should be very abundant, with the forelegs slightly feathered and the hind legs below the hocks very

smooth. The tail should be very bushy and also busy on the hips. The color of this breed ranges from black and brown or tan, to tan and white or the most beautiful of all pure white, which color is very rare. The dog's weight varies greatly, about 45 to 70 pounds and the female from 35 to 45 pounds. The

ears are covered with an abundance of hair and are very small; in repose they are folded but when alert are thrown up and drawn together on the top of the skull, giving the dog a very friendly appearance. The cause for the obliqueness of the eyes in this breed is because of the absence of the brows.

NO. 1 HARD

Winnipeg, May 2, 1914.

April is usually a month of careful inspection and estimation of the winter wheat crop. Markets hinged largely upon the condition of that crop, showing a fair advance about the middle of the month when fears were entertained as to the drought in Western Kansas, Texas and Nebraska. In the last few days copious rains have relieved that anxiety, and now the winter wheat prospect is the finest in years, and the acreage the largest. Yet be it remembered that even this May Day winter wheat crop report, though ever so rosy, is valuable only as allowing for a safe margin of pre-harvest shrinkage.

Spring wheat sowing in the three big States has proceeded rather slowly, being about two-thirds done, with a considerable percentage yet to be sown in North Dakota, thus making a late seeding time. The ground was in good condition, though the recent delay has been occasioned by too much moisture.

Cold unseasonable weather until the last two days, has greatly retarded sowing in Western Canada, and unless we have extra fine growing weather, some wheat will not reach proper maturity. Owing to the increase in mixed farming, the acreage sown to wheat in Manitoba and Saskatchewan will likely not be much increased. Yet coarse grains have not in most cases paid so well as wheat the last year, so that a big attempt will be made even for another week to sow as much to wheat as possible.

Foreign crop advices are much mixed. Great Britain finds spring planting delayed from too much moisture, and home stocks of wheat are being rapidly consumed. France has had too much rain and winter wheat promises considerably below average. Germany wants warmer, drier weather, while Russia reports fair seeding conditions, but offerings of wheat at lower ports fairly scarce. Continued storms in the Argentine has hindered crop marketing and kept the corn still in the fields.

Winnipeg inspections to May 2nd are large.

	Bus. 1913.	Bus. 1912.
Wheat	136,123,200	118,611,000
Oats	69,123,100	35,935,410
Barley	14,315,400	12,714,000
Flax	11,863,500	15,312,150

In view of the quantity of wheat now in country elevators, about 13,325,000 bushels, the quantity in the farmers' hands at this date must be small.

The stocks at terminals on the opening of navigation, April 25th, were large, particularly in No. 1 about 8,000,000 of that grade alone. The export demand for several months previously had been so fitful, that opening charters of space were comparatively small, but in the last week large quantities have been worked for export, hence those terminal stocks should move quite readily now. Russian, Danubian and Argentine shipments are all lessening. With European "Visible" stocks about 24,000,000 bushels less than a year ago, Europe is bound to be a good buyer of our wheat for the next four months. Yet American millers complain of poor demand for flour the last few weeks, with just an indication of better enquiry once stocks have been reduced.

To sum up, apparently Europe has in the last week purchased more Canadian cash wheat for immediate loading and American winter wheat for July-August shipment than she bought all-told from America in three months just preceding. Perhaps the Ulster situation made this buying more feverish. Canadian seeding is late, and old stocks are not burdensome. These are two strong bullish factors. The strong bear factor is the excellent American winter wheat crop prospect, but that is only a prospect and likely has already been fully discounted by the recent declines in Chicago, July and September wheat. Conditions point to a gradual advance unless unusually fine weather prevails over both Wheat Belts, and peace is declared between Uncle Sam and Mexico.

Oats

Early pasture and big stocks of corn and oats combined to weaken corn in the U.S.A., and our oats followed. But in the last days of April a short interest in the May option was disclosed, and our May oats rallied sharply on the

There's a "Come-back" to the LEADER Fence that Counts

Jars, rough usage, or strains of any kind cannot damage the Leader Fence. The posts may break, but that is all. The elasticity of the high-grade coiled spring wire used in its construction, together with the perfect construction of the Leader Lock, makes the Leader the most efficient fence on the market.

You Get Your Money's Worth in the LEADER FENCE



The Leader Fence has long since passed the experimental stage and is recognized as the real leader among wire fences.

Real value is judged by length of service, and the Leader has proven its claim to be, "dollar for dollar," the best fence value obtainable.

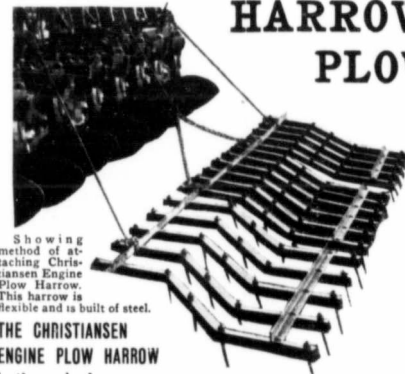
Leader Fence is made of the highest-grade galvanized coiled spring wire absolutely rust-proof and full gauge.

Write for catalogue showing the different weights of Leader fence, gates, etc.

The Manitoba Anchor Fence Co. Ltd.

Cor. Henry and Beacon Sts., Winnipeg. P.O. Box 1382

HARROW WHILE YOU PLOW



Showing method of attaching Christiansen Engine Plow Harrow. This harrow is flexible and is built of steel.

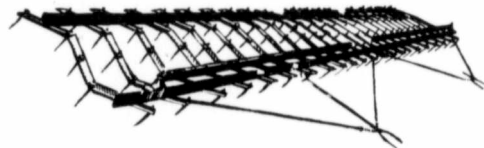
THE CHRISTIANSEN ENGINE PLOW HARROW

is the only harrow on the market today that can be used successfully after an engine gang. It can be adjusted to any angle, and does not interfere in the least with turning at the ends. Adjustable to same angle for all sizes of plows.

Don't go over your land twice when once will do. The ground is always easiest to level when it is just plowed.

The CHRISTIANSEN LINE OF PLOW ATTACHMENTS

is the most complete to be found anywhere. Made to fit any style or make of plow, moldboard or disc.



Can be changed to a horse-harrow in a few minutes

NO DRAW BAR REQUIRED

Don't begin your Spring work until you have investigated our line of harrow attachments. They have no equal. More of them in use than all other makes combined.

PRICES FOR ENGINE PLOW HARROWS	
6-bottom, 2 sections	\$18.00
8-bottom, 3 sections	24.00
10-bottom, 4 sections	30.00
Gang Plow, 36-in.	10.00
Triple Plow, 48-in.	11.00

If your dealer cannot supply you remit us direct. Money refunded if not satisfactory after a fair trial. Dealers wanted in Manitoba, Saskatchewan and Alberta.

The Christiansen Harrow Co. 331 Austin Street, WINNIPEG, Man.



Saves \$2 per day for every plow and man.

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

WE KNOW and SO WILL YOU

WHEN YOU GET A GARDEN CITY FEEDER FOR YOUR SEPARATOR

THAT NO TEETH OR CONCAVES WILL BE BROKEN.

THAT THERE WILL BE NO WINDING IN WET FLAX.

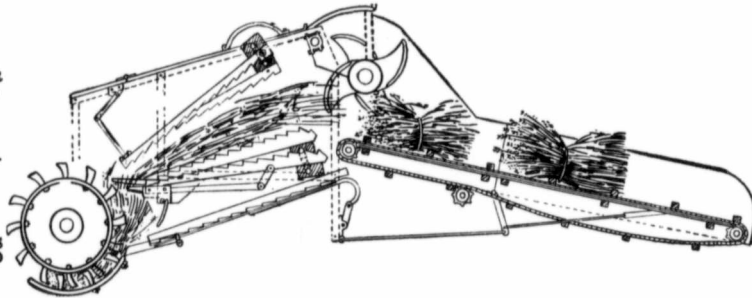
THAT THE SIEVES WILL NOT CARRY OVER ANY GRAIN.

THAT THE BLOWER WILL NEVER CLOG.

THAT THERE WILL BE NO LITTER UNDER THE FEEDER.

THAT SLUGGING CANNOT HAPPEN.

THAT ALL BUNDLES ARE DELIVERED TO THE CYLINDER END FIRST.



THAT THE FEEDER BELT WILL NOT BE BURNED OR FLY OFF.

THAT THE FITTERS CANNOT PLUG THE CYLINDER.

THAT NO COSTLY REPAIRS WILL BE NEEDED.

THAT YOUR THRESHING TROUBLES ARE PAST.

THAT YOU CAN MAKE SOME MONEY FOR YOURSELF.

DON'T TAKE OUR WORD FOR IT — MAKE US PROVE IT

WE ALSO SELL THE FAMOUS CASEWELL BELT GUIDE

SEND FOR CATALOGUE TO ANY OF THE FOLLOWING PLACES:

THE GARDEN CITY FEEDER CO., Ltd. - Regina, Sask.
THE GARDEN CITY FEEDER CO., Ltd. - Hamilton, Ont.

H. P. NORTON COMPANY - - - Calgary, Alberta
MART McMAHON - - - - - Lethbridge, Alberta

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

rumor that Armour of Chicago was planning to take delivery and ship a large quantity of Canadian oats South. It is believed that Armour received nearly all the May 1st tender of 2,750,000 bushels. Just note the tremendous inspections to date given above. Stocks at terminals are not burdensome, and the cash demand is decidedly better, and should improve.

Barley

The slight advance always due about the opening came as expected, and will likely be maintained with fair demand. Stocks everywhere seem ample, but not oppressive.

Flax

This grain had a bad decline, due to lack of demand in oil. Producers claim the consumption is 50 per cent less than a year ago owing to business stagnation. Yet stocks are small everywhere. There is said to be only 850,000 bushels in country elevators, and receipts are slight on both sides of the Line. On any good bulges such as we have had to-day, flax might well be sold. The acreage sown to this grain will likely be increased.



The weak man holds his grudges. The strong man, while he may not forget, masters them.

A Credit to His Community

EVERY now and again we come across an individual or rather we stumble upon one who is worthy of note. His sense of modesty, combined with a constant desire to do things that are worth while.



Harry D. Mewhirter, Springfield.

does not invite a halo of publicity with the result that it takes some public action on his part to bring him before the people.

Such an individual is Mr. Harry D. Mewhirter, the present Conservative candidate for member of the local Manitoba House from the constituency of Springfield. Mr. Mewhirter is that rare combination of business man and farmer that we so seldom meet, but in his case he is first of all a farmer. Born in 1874 he lived on a farm with his parents until he was 21 years of age. Circumstances led him at that time towards the commercial field but the call of the farm became so irresistible that in 1909 he purchased a track of land near Beausejour, Manitoba, and began raising and breeding pure-bred Clydesdale horses, Holstein cattle and Berkshire hogs. His natural love for this class of work brought him no small measure of success, and to-day the pure-blood that was started on his Beausejour farm is to be found scattered all over Western Canada.

About a year ago Mr. Mewhirter moved to another farm near Dugald, Manitoba. At that time he discontinued the breeding of horses, having decided to devote all of his time in a live



Mr. Farmer:

If you buy a dollar's worth, you expect at least one dollar's value.

If you invest your money in our "Great West" Wire Fencing

the reward will be at least two dollars value for every dollar invested.

It is the "Standard Fence" of our "Great West." Nothing can beat it.

The Great West Wire Fence Co. Ltd.

Distributing Offices:

Care of Messrs. Reynolds & Jackson, Calgary, Alta. Care of Messrs. Kace, Hunt & Giddy, Edmonton, Alta.

Mention this magazine when writing advertisers

stock way to the raising of Holstein cattle and Berkshire hogs. His farm is a model of neatness and care. The house and out-buildings while not elaborate show the earmarks of utility and convenience. They are such as the average farmer can afford to

erect, use and make money out of.

Mr. Mewhirter has also devoted considerable time and attention to the cultivation of alfalfa, and to the tame grasses such as are suitable to a Manitoba

As a member in the local Manitoba House Mr. Mewhirter would undoubtedly exercise the same keen judgment and ability that has characterized his work both in business and in his farming operations.



A model Manitoba farm home. H. D. Mewhirter's residence at Dugald, Man.

climate, and in this connection has set a very valuable example for his neighbors. In 1913 one of the government alfalfa experimental plots was located on his farm. He is in every respect a practical farmer, and has at all times taken an active interest in the welfare of his community. He is a strong advocate of "mixed farming," and is an indefatigable worker in the cause of good roads.

Mr. Mewhirter is also manager of the Gutta Percha and Rubber Limited at Winnipeg. This concern is one of the largest of its kind in Canada. He secured his present position through promotion from sales manager of the same concern, showing that he is as thorough a business man as he is a farmer.

Mr. Mewhirter's farm is about 14 miles from his business office, and it is a significant fact that he drives to and from his work every day. He has a Case 40 automobile, and at no time during the past winter did storm or weather keep him away from his office



Stock barn of the Mewhirter farm at Dugald, Man.

work. With the thermometer standing around 35 below, and with the snowdrifts deep and solid, it was sometimes necessary to buck the snow, but without a single exception the Case was always equal to the task.

Maytag Company to Handle Well Known Line of Gasoline Engines

Arrangements have been completed whereby the Maytag Co. of Winnipeg will handle the well known Stickney line of gasoline engines.

The line itself is too well known to need any comment. As a matter of fact the Stickney Gasoline engine was one of the first to be sold in Western Canada, and throughout a period of several years it has held an enviable reputation wholly and solely upon its merits.

The Maytag Co. are to be congratulated upon securing this line, and with their facilities for distributing and handling this class of machinery we bespeak for them an enviable trade.

They will carry in stock a full and complete line of repairs, so that any farmer needing repair parts should take the matter up with the above concern.

Unfortunate Combination

Customer: "Are you sure you'll have my taxi at the house on time?"

Garage - Owner: "Certainly. Don't you know there's nothing surer than death and taxis?"

A Forecast of 1920 Models—

Take the 1914 Model Fisher and it is safe to predict that the leading cars of 1920 will be the same in all essentials. Of course there will be minor improvements—just as the Fisher "4-36" to-day at \$1500 is equipped with Gray and Davis Electric Cranking Device and Lighting. But fundamentally, the Fisher Car to-day is perfect as it stands, the embodiment of faithful service, stamina, speed and comfort.

Fisher Car

The Fisher owner has the certain knowledge that his car will respond to his control under all conditions. That is the main essential. Good looks? — Yes! Speed — comfort — economy of operation? — the Fisher has them all; but above even these it offers endurance, long, honest service—it is a car that is built "for keeps"—designed for

the man who demands satisfaction not only at the time of purchase but when the car has run thousands of miles.

The Fisher will change but little from year to year. It has gone through the refining process and every car turned out to-day embodies all the improvements that eight years in the automobile industry have proven desirable.

TWO TOURING CARS

\$1,500 for the 4-36
\$2,500 for the 6-48
f. o. b. Factory

SEND AT ONCE FOR CATALOGUE

The FISHER is fundamentally perfect!

The Fisher is the best equipped car on the market to-day at its price. You will agree that its specifications, as given in the catalogue, coincide with your idea of what a car should be. The rest is proved in actual service.

Dealers write for our Special Agency proposition.

Davidson Garage and Motor Co. Ltd.

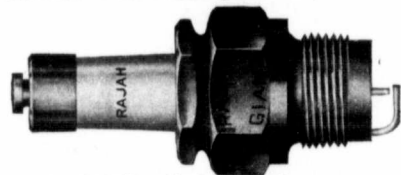
53-55-57-59 HARRIET STREET

WINNIPEG

CANADA

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

The SPARK PLUG is the Connecting Link between Fuel and Power



This is why "RAJAH" spark plugs have given such universal satisfaction. They are simple—embody no freak ideas or experiments. Parts are interchangeable, thus doing away with the necessity of always buying new plugs when only a small part is worn out or broken. They work equally well with either battery or magneto.

TO GAS TRACTOR OWNERS

We specially recommend our GIANT RAJAH plug as it is made much heavier in the porcelain and metal parts.—Every gas tractor or stationary gas engine should have an extra plug or two in its tool box. An hour's delay will buy a dozen. Get a set of RAJAH plugs from your dealer or order from us direct. Made in 1/2 and 3/4 in. only

\$1.50

JOHN MILLEN & SON Limited, Winnipeg, Canada

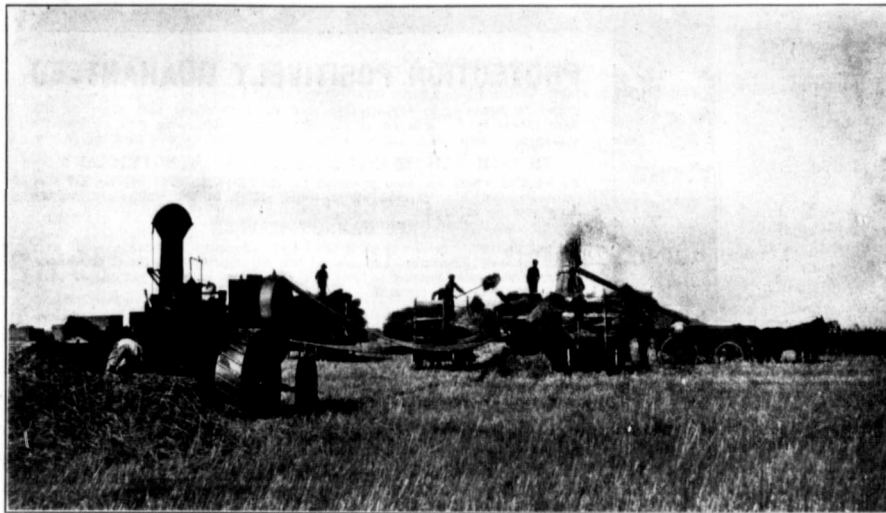
You saw this advertisement in this magazine. Don't forget to say so when writing.

Get Your Neighbours Interested in

The Canadian Thresherman and Farmer

It will educate them and we will PAY YOU

Too Early For Threshing



But not too early to buy a **"Star"** or a **"Lumber King" Belt**
Canadian Consolidated Rubber Company, Ltd., Montreal, P.Q.
 Winnipeg Regina Saskatoon Calgary Edmonton
 Write for a Quotation

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

Canadian Industrial's Great Preparations for 1914 Show

Big Additions to Live Stock Premium List.

Beachey, World's Most Famous Airman, to Fly.

The Canadian Industrial Exhibition has rightly earned the distinction of being classed among the greatest live stock shows of the Dominion. In fact it was generally admitted that last year's exhibit at Winnipeg in this department was one of the best ever assembled in Canada. It is becoming each year more widely recognized that live stock production is to be the backbone of agriculture and prosperity in the immediate future of the West, and for that reason the horse, cattle, sheep and swine sections are being annually more extensively featured in the various fairs and exhibitions throughout the country. The directors of the Canadian Industrial Exhibition, in line with the development taking place in the live stock industry throughout the prairie provinces, have this year added

some \$3,500 to the live stock end of the 1914 prize list, and it is confidently expected that the showing in 1914 will excel in every way last year's record mark.

The Pony Show

A feature of this year's exhibition will be the big pony show, which will comprise a splendid collection of Shetland, Welsh and Hackney ponies from all parts of the country, shown in harness and under the saddle. This feature has been arranged with the special view of providing something that shall be essentially and particularly the youngsters' show, although grown-ups will not be prohibited from seeing it also.

"The Siege of Delhi."

In "The Siege of Delhi" the exhibition has secured a realistic reproduction of one of the most tragic incidents of British army annals of the last century, connected with the historic uprising of the native Indian regiments and the slaughter of their white officers and their families. "The Siege of Delhi" is a great military

SEVENTH ANNUAL
Engineering Short Courses
 IN STEAM AND GAS ENGINEERING AT
Manitoba Agricultural College
 Will begin Tuesday, June 2nd and end Saturday, June 20th

The courses given will consist of the care and operation of steam and gas engines. Attention will be given to valve setting, belt lacing, habbiting, care and operation of the separator, etc., etc. All work will be made as practical as possible.

For further information write
Pres. W. J. BLACK
 Manitoba Agricultural College
 June 2nd. to June 20th.

spectacle, filled with dramatic scenes and movement, cannonading and fire. It is followed in the evening by a brilliant display of fireworks, in which the commemoration of the centenary of peace between Great Britain and the United States is the outstanding feature.

Gas Engine Demonstration.
 The demonstration of agricultural portable and stationary gas engines has been designed especially for the benefit of the farmer. Diplomas will be awarded to machines reaching a certain standard of efficiency, and hereafter the farmer when buying an engine will have a better idea what

WINNIPEG - CANADA
 719 MOUNTAIN BLOCK
JOHN A. HERRON
 fully all that I submit. Address: made is that you shall read care- money. The only stipulation able venture, then I want none of sound conservative and highly profit- do not satisfy you that it is safe, is a hearing. If the facts I present the proper thing to do. All I ask intelligent judgment tells you it is expect to see all stock, but I will not use to which you can put your money. Primarily, of course, my or not. I don't care whether you buy stock all about it, whether you know obligation to me—I want you to know formation. You will be under no deal of very useful and beneficial in- you will at least have gained a great use to which you can put your money. Telegraphic stock than by any other investing a few dollars in Wireless that you can make more money by you, by a preponderance of evidence and if I do not succeed in convincing

WRITE TO ME

Mention this magazine when writing advertisers

The World's Most Daring Aviator.

Perhaps the feature of this year's exhibition that will prove to have the greatest drawing power, as it certainly will be the most novel and sensational, is the engagement, after prolonged negotiations, of Lincoln Beachey, the world-famous birdman. Mr. Beachey has been engaged by the exhibition board to fly in Western Canada this year exclusively at the Canadian Industrial Exhibition in July. Mr. Beachey's marvellous performances are described as producing upon the vast crowds that witness them an uninterrupted succession of thrills and gasps. He flies upside down, loops the loop, flies straight up or straight down and does other seemingly impossible and nerve-stirring feats. Mr. Beachey will fly on five days of the exhibition two flights a day, rain or shine, wind or calm, and as this will probably be the only opportunity—owing to the great expense involved—that Westerners will have for a long time of witnessing the feats of an aviator of Beachey's eminence, it is certain that a very large number will be attracted to the Canadian Industrial Exhibition this year to see Beachey alone.

THE STORY OF TWO FARMS AND ONE FLASH

PROTECTION POSITIVELY GUARANTEED

caused by lightning to any structure and its contents if said structure has been rodded by our ninety-nine p.c. pure copper cable. We give an absolute guarantee to this effect, and we know we are taking no risk in doing so.

IN OUR TEN YEARS' BUSINESS AS ELECTRICIANS

No building which has been protected by the "TOWNSLEY" system has ever been damaged by lightning storm, while others in the immediate vicinity have gone up in smoke.

IT CANNOT HAPPEN

and our protecting cover (which is the least expensive insurance you ever paid) not only guarantees you against loss of property, but the inconvenience arising from such destruction, and the double loss in being put out of business till it has been replaced.

Write us at once for full particulars. Agents wanted in Western Canada

335 9th Street

Brandon
O. W. TOWNSLEY, Manager

99 CANADIAN LIGHTNING ARRESTER 99
AND ELECTRICAL CO. LTD. BRANDON

RUINED BY SIMPLE NEGLIGENCE OF THE ROLLY-BEING UNPROTECTED

SAVED BY TOWNSLEY'S TAKING NO CHANCES

PURE COPPER

Altogether the Exhibition of 1914 promises to be a notable one viewed from any angle. Certainly the directors and the manager are sparing no effort or expense to make it so.

How Good Farmers Make Money

By J. B. BARTHOLOMEW, President, Avery Company, Peoria, Ill.

This article was written with special reference to the United States but applies with equal force to Canada (Ed.). THE greatest of all resources of the United States has long since been conceded to be the soil, the annual output from which over-shadows everything else, not only in value but as to importance, first because it constitutes the food supply for the nation, and second because the surplus brings money from other nations.

Good farming means, first, Diversified Farming.

Diversified farming not only means the growing of the several kinds of crops best suited to the locality where it is being carried on, but includes the raising of different kinds of stock (horses, cattle hogs, sheep and fowl, also dairying operations) and it is up to the farmer to select the different kinds of crops and live stock he is to produce and decide the proportion of each that is best fitted to the size and character of the farm he is operating and its location geographically.

The time of exclusive cattle raising in the Southwest, and exclusive wheat raising in the

Northwest is fast passing. These sections are becoming more thickly populated, the land is being taken up and sub-divided into smaller tracts, the demand is for better fed cattle than usually come from the range; continued wheat growing on the same land will gradually deplete its fertility, and the advantage of putting these vast prairies on a more businesslike basis, better adapted to the requirements of these sections as they are gradually being covered by settlers, suggests diversity in crops and stock raising upon a properly proportioned basis that will afford a steady and profitable output from these lands.

Diversified farming also means that the farmer should own the automobile and should use it to take something to market every time he goes to town.

Good farming means, second, Extensive Farming.

(Not bonanza farming). According to the University of Minnesota, the greatest efficiency is reached on farms of 280 acres in size, the difficulty with very small farms being to keep the men and work teams busy; the

THE Litchfield Down-Low Manure Spreader

The Spreader with the High Under Clearance



Thirteen to eighteen inches of general clearance under the machine and same clearance under front axle as found in the high machines. Compare this with the 8 to 10 inches clearance found under other low-down spreaders.

Don't buy a Sled when you are paying for a Manure Spreader. Any machine soon becomes a sled in muddy and rough ground if it hasn't sufficient under clearance. Most manure spreaders are made too close to the ground and are soon put out of business.

Get full details of the special features of this spreader. Its NO-CHOKE BOX, its BULL-DOG CYLINDER. With these our low-down spreader has plenty of traction without making any change in size of wheels and tires.

A. Spreader, medium height, 70 bushels capacity, \$152.00. B. Spreader, medium height, 100 bushels capacity, \$160.00. S. Spreader, down-low, 80 bushels capacity, \$152.00. Y. Spreader, down-low, 60 bushels capacity, \$140.00.

The Litchfield Steel Farm Wagon

THIS IS THE VERY latest thing in Farm Wagon construction. It embodies an I-beam steel axle with semi-steel skains connected to the ends by a patented fusing process.

THIS PRINCIPLE eliminates all holes, using neither bolts nor rivets through the axles anywhere, thus retaining the greatest possible strength and stability.

WE USE large skains with the very latest thing in pressed steel wheels, which are far better than wood wheels. Bear in mind these are not the old-fashioned style of cheap steel wheels. The wheels are oiled with solid grease cups, thus obviating the need for removing the wheel for oiling purposes.

THESE GEARS are built in two sizes. The Jumbo Wagon, full front and rear hounds working capacity 5,000 lbs., built either with 30-24 in., or 34-40 in. wheels, using 5 in. tire and 3 1/2 x 10 in. skain. The Little Giant Truck with rear hounds and with the front construction arranged for T tongue, working capacity 3,500 lbs., using either 30-24 in. or 34-40 in. wheels with 5 in. tire and 3 x 9 in. skain.

This is the desirable rig, indestructible, everlasting, all steel except the tongue, bolsters and reach—and remember at a price that is way below the same quality in the wood construction.

Steel Truck, 5,000 lbs. gear, \$48.00; \$3,500 lbs. gear, \$38.00.

The Litchfield Laundry—Most Complete and Easy Laundry Outfit for the Farm Home.

With this ideal and inexpensive power combination, the clothes can be wrung from the rinsing tub to the bluing tub while the Washing Machine is handling another batch of clothes. All done by power at the same moment. It means immense labor saved. Time saved and a great saving of wear and tear on the fabrics being cleaned.

No back-breaking work for the woman. THE ENGINE DOES THE WORK OF TEN TOILING WOMEN.

Send at once for Complete Illustrated literature of this the greatest event in Home Economics since Washing Machinery was first heard of.

Burridge Cooper, Ltd. Sole Canadian Agents Winnipeg

All prices quoted are for cash with order. Address all inquiries to Winnipeg.

difficulty with bonanza farms being personal and proper supervision. However, it must be admitted that the most economical size of farm for profitable operation is an area equal to the "Bigness" of the farmer operating it. According to the Government Reports, farmers must have at least two horses. On the 40 acre farm one horse works less than

ten cro... 120 to... is 21.5... 28 ac... farms... undout... ency... pond... farm... farm, v... efficien... farm m... (or co... portion... increas... ment I... farms... machin... is \$5.00... acres, 4... on fru... is reduc... not fig... mobile... The... matter... be is... On the... portion... the hou... lot, gar... fore m... capital... in prop... To illu... Reports... average... acres, o... the av... 143.4 ac... the larg... in crops... Exten... use of t... animal p... Plowin... quiring... farmer's... plow aft... the next... fails... where h... carried... of feed... the long... sections... be carri... limited... a soluti... power p... connectio... used to... crop ac... horse... Adopti... the selec... mensurat... the farm... and will... vestment... though h... where h... carried... because... does not... them to... ing rais... automobi... takes five... and, acco... Agricultu... quires ne...

ten crop acres per annum; on the 120 to 200 acre farm the average is 21.5 acres, which increases to 28 acres per horse per annum on farms of about 600 acres. It is undoubtedly true that the efficiency of manual labor is correspondingly greater on the 280 acre farm than it is on the 40 acre farm, while the greatest value of efficiency from investment in farm machinery per acre increases (or costs less per acre) in proportion as the size of the farm increases, as shown by Government Reports. For example, on farms of 40 acres the value of machinery required per crop acre is \$3.00; on farms of 160 to 200 acres, \$2.88 per crop acre, while on from 400 to 500 acre farms it is reduced to \$1.87 per crop acre, not figuring on tractor or automobile equipment.

The efficiency of the land, no matter what size the farm may be is worthy of consideration. On the small farm a greater proportion of the land is required for the house and yard, barn, feeding lot, garden, orchard, etc., therefore making the overhead and capital investment much larger in proportion to the crop acreage. To illustrate, from Government Reports, on 40 acre farms the average cultivated crop is 26.4 acres, on 160 to 200 acre farms the average cultivated crop is 143.4 acres, the larger the farm the larger the proportionate acre in crops.

Extensive farming means the use of tractor power to augment animal power.

Plowing is the big power requiring farm operation. The farmer must plow for the crop, plow after the crop, and plow for the next crop, even if the crop fails. Therefore, in sections where horse raising cannot be carried on profitably on account of feed, care and shelter through the long winter period, and in sections where horse raising can be carried on profitably in a limited way, the tractor affords a solution of this great farm power problem, and which, in connection with the horse, can be used to more than double the crop acreage possible with the horse.

Adopting the tractor means the selection of one that is commensurate in size to the size of the farm it is to be operated on, and will be a very profitable investment to the farmer even though he is located in the district where horse raising for profit is carried on to the fullest extent, because horse raising now-a-days does not contemplate working them to death while they are being raised. Ford can make an automobile in 29 seconds, but it takes five years to mature a horse, and, according to the Government Agricultural Department, requires nearly 25 per cent of the

The Massey-Harris Separator

Closest Skimmer Made

— Because —

The Discs have more skimming surface than any other Separator claiming the same capacity.

The Discs are closer together, thus cutting the milk into very thin layers.

The Improved Split Wing delivers the milk uniformly to the Skimming Discs.





Self-Balancing Bowl

Spins like a top on a Ball-Bearing at upper end of Spindle and at the centre of gravity of the Bowl—

It balances itself and runs without vibration.

Smooth-Running Gears

All Gears are machine-cut and absolutely correct as to pitch and mesh.

The Diagonal Teeth run much more smoothly than Straight Teeth.

The Worm Gear runs in Oil—giving an Efficient Splash System of Oiling.



Gladstone, Man., March 25, 1914.

MASSEY-HARRIS CO., Limited.
Toronto, Ont.

This is to certify that the Cream Separator I purchased through your Local Agent at this point has excelled any other make I have used in the past 25 years, by producing 5% more cream. It is a light-running perfect machine in every way.

(signed) **JOS. T. MAYOR,**
Highland Dairy Farm.

Beautifully Illustrated Catalogue containing Valuable Hints on Dairying, free for the asking.

Massey-Harris Co., Limited.
Winnipeg, Regina, Saskatoon, Swift Current, Yorkton,
Calgary, Edmonton.
— Agencies Everywhere —

crop that can be raised by the horse to feed it annually, and the cost of keeping the horse annually has increased from \$80.00 in 1907 to \$112 at the present time, and out of the five years in which the horse is being developed his services are available not to exceed one season for farm work, and then only in a limited way during the time he is being broke and trained and his muscles hardened for service, after which period he is ready for the market at the longest price, and from that time on will depreciate in value each year, and even with the coming of the automobile at the rate of more than 300,000 annually, it is impossible to produce horses fast enough to meet the demand, and therefore the price has great advanced. Therefore, the farmer's greatest advantage in making profits lies in the use of machinery—the tractor, the automobile,

UNIVERSITY OF SASKATCHEWAN, Saskatoon, Sask.

Domestic Science School, June 1 to 20. (Class limited to 48).
Agricultural Engineering School, June 9 to 26. (Class limited to 40).
Teachers' Course in School Gardening, July 6 to 17.

For fuller information regarding the above write to

S. E. GREENWAY,
Director of Agricultural Extension,
University of Saskatchewan, Saskatoon, Sask.

N. B.—Homemakers' Club Convention, May 26 to 29. (100 clubs participating).

etc., saving the horse for the world's vast amount of work for which he is best adapted.

It will therefore be seen that next in importance to the resources from the land is the modern farm machinery of all kinds, produced in the U. S. which is absolutely required for tilling the soil and carrying on the numerous farm operations that make the land resourceful in

an economic and profitable, up-to-date, American manner. In fact the Government Reports show that the farmer's profits increase in proportion to his investment in modern farm machinery.

The Gas or Oil Tractor has come to stay. It has come to meet the long felt want, and to make farming more profitable. You might as well try to stop the Twentieth Century Limited.



OUR TENTH ANNUAL CATALOG

is a Dandy. In addition to explaining fully the mechanics construction of the Gould Balance Valve and the splendid results to be obtained by its use, it also contains other information of value to engine operators.

HOW TO SET A SLIDE VALVE

is explained fully and is easy to understand. Write for Catalog No. 10 and a copy of the "Evidence." Both books sent postpaid. Address:

Gould Balance Valve Company, Manufacturers of Gould Balance Valves, "Tows" Ensilage Cutters and Gardner Grain Conveyors, **Kellogg, Iowa**

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

The New Russell Wind Stacker with Sharpe Grain Saving Device

ON another page in this issue interesting particulars of the will be found some inter-Gearless Russell Wind Stacker with the Sharpe Grain Saving appliance. The slogan of the manufacturers of this wonderful combination is: "Mr. Farmer! Where do you want your grain—in the sack or in the stack?"

It is superfluous in these days to refer to the usefulness of the pneumatic straw stacker as an attachment to grain threshing machinery for carrying the straw away from the threshing machine. It is enough to say that 90 per cent of the threshing machinery built and sold in the U.S. and Western Canada is equipped with the wind stacker.

The Russell Wind Stacker Co. began manufacturing wind stackers for every make and size of separator in 1895, by combining the good points of several styles of straw stackers, already then produced. They introduced the geared stacker, which proved so successful that they built and sold hundreds of them and attached and sold them in all parts of the country.

They have spent thousands of dollars in getting measurements and data of all the different machines, and trying to give to the threshing machine world the best windstacker that it was possible to make.

In 1903, the Russell Wind Stacker Co. brought out the gearless stacker, which revolutionized the pneumatic straw stacker business, and because of its superiority over other stackers, this style was at once adopted by the thresher manufacturers and is in general use to-day.

The Russell Wind Stacker name is known to every threshing machine owner in the U.S. and Canada, and many foreign countries. Their energy, zeal, and pride in the upbuilding of the wind stacker, has caused them to be on the alert for anything that would promote the interests of the wind stacker, whether the idea came direct from them, or from any other source.

This wonderful Sharpe Grain Saving Feature came to their ob-

servation in the early spring of 1913, and after giving it a thorough investigation and trial in the field, they were at once convinced that this Grain Saving

with the Sharpe Grain Saving Feature embodied.

It not only saves the grain, but it makes it possible to have as steep a hopper as is necessary on

drum also has a 4 inch offset at the point of air compression which compresses the air. This compressed air is piped through a 3 inch pipe around under the hopper of the stacker and is provided with an air distributing nozzle which enters the hopper at a point where the hopper is provided with grates or traps. This air plows constantly over these grates or guides and blows the light material such as chaff and straw into the eye of the fan in a positive manner. These grates or guides are located at a point in the hopper of the stacker where the material enters the fan housing. The grain being heavier than the chaff and straw, is trapped and drops into the auger which is provided underneath the hopper. This auger conveys the grain back to the tailings auger of the separator and is consequently saved.

There are no clumsy contrivances on this stacker, and the Grain Saving Feature is driven from the fan shaft of the stacker and there is absolutely nothing to get out of order.

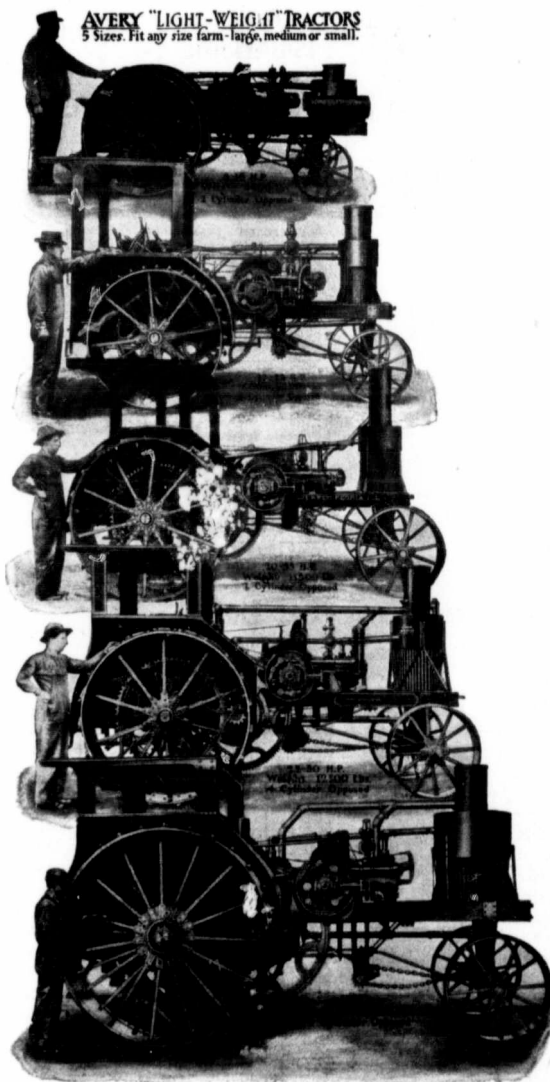
There are many conditions that a separator is subjected to, such as bad condition of grain, careless separator men and the slugging of the cylinder. These conditions are the cause of the grain going over into the stacker.

The Russell Wind Stacker Co. is in position to furnish this new stacker to fit any make or size of separator, new or old, wood or steel, and they feel that history is only repeating itself and that the wind stacker business will be once more revolutionized by this wonderful invention.

Short Course in Steam and Gas Engineering

Will our readers take note of the announcement made on another page by the President of Manitoba Agricultural College respecting short course in engineering which will begin at the college on 2nd June and continue until 20th.

The college is provided with a splendid equipment and staff of expert engineers, and the opportunity is one that should be eagerly embraced by every aspirant who can find it possible to leave the farm for the few days to take in the course. See page 61.



That the manufacturer is keeping abreast of the times and is meeting the farmer's tractor needs in all its phases is clearly evidenced by the above line up. Can you beat it?

Feature was one more step forward. They at once set about to exploit this stacker. The result of their investigations is told in the fact that their entire 1914 output will be the Gearless Russell

the widest machine. The drum of this stacker is also constructed so as to eliminate the back lash in the stacker, which has always been so objectionable heretofore in the gearless stacker. This



MAYTAG



COMPANY LIMITED

WINNIPEG, MANITOBA

The Ruth Feeder

is Still at the Head of the Procession

If you are buying a new Separator order it with a Ruth on. If the old Feeder is worn out or not giving satisfaction write us. A Ruth will satisfy.

It is

The Best Feeder in the World

Does better work, costs less for repairs, and has a stronger Warranty than any other. Write for our new catalogue. Do not wait until threshing time. Do it to-day—NOW.

ANNOUNCEMENT

To all Dealers and Owners of

STICKNEY GASOLINE ENGINES

In Manitoba, Saskatchewan and Alberta

We wish to announce that we have a contract with the manufacturers of the **Stickney Engines** for the exclusive sale of same in the above Provinces. Any of these engines that you may be able to secure from any other source are simply the tail ends of old stock on hand.

We will carry in stock, and be prepared to make prompt shipment of all sizes, from 1½ H.P. to 20 H.P. We have in stock a complete line of repairs and extras. In the future all orders should be sent direct to us. We would suggest that you save this advertisement for future reference.

Threshers' Supplies

When in need of any of the following write us for Catalogues and Prices:

- Ruth Self Feeders.
- Sawyer Drive Belts.
- Lace Leather.
- Leather and Rubber Belting.
- Wire Cables.
- Suction Hose.
- Discharge Hose.
- Injector Hose.
- Tank Pumps.
- Oil Pumps.
- Gas Headlights.
- Inside Flue Cutters.
- Success Belt Guide.
- Oils, All Kinds.
- Hard Oil.
- Axle Grease.
- Belt Dressing.
- Lifting Jacks.

**And
Anything
Else
That
You
May
Need**

The Maytag Power Washer (WITH SWINGING WRINGER)

In our opinion is the best Power Washing Machine in the world to-day, regardless of price or anything else. This may sound like a strong statement, but we mean it. If you own a small gasoline engine, this is the machine to buy. The smallest gas engine made will furnish enough power. It is the only Power Washer in the world with a "SWINGING WRINGER." The wringer is also run by power and works perfectly whether on the tub or swung in the two other positions. We also furnish with every machine a hand power attachment so if anything should go wrong with your gas engine before the washing is done the washing can be finished without any loss of time. The machine is full to the brim with quality. We prefer to sell through your local dealer. Ask him to order one for you. If you are not perfectly satisfied with it at the end of a month take it back and get your money. If your dealer does not attend to the matter promptly, write to us. Address, The Maytag Co., Ltd., Winnipeg, Man.

THE MAYTAG COMPANY LIMITED, WINNIPEG, MANITOBA

OUR YOUNG CONDUCTED BY Cousin Doris. FOLK

Girls' Cozy Corner

Vespers.

(By Ethel Hallett Porter.)

The little birds all face the sun, And sing to him from leafy limbs, Deep sheltered, when the day is done— Their twittering, trusting creature-hymns,

Oh, little tender, feathered things! But for your music, spring were bleak, And summer would go droopingly With tears upon her cheek.

Strange that grim tragedy should stalk About these lives—that grief and care, Anxiety, and toil and woe, Should fert the kingdom of the air! What humor, pathos, pain and care In Birdland! Yet, when day is done And vesper impulse thrills their hearts, The little birds all face the sun.

Girls' Prize Letter

Ramsay, Alberta, Can., March 27, 1914.

Dear Cousin Doris—This is my first letter to your charming club. My father takes "The Canadian Thresherman and Farmer," and I have been a reader of the Girls' Cozy Corner Club for some years.

I am 17 years old, and I have two sisters and one brother. My brother is 16 years old, and my oldest sister is 12 years old, and my little sister is 3 1/2 years old.

We came to Canada 5 years ago next fall. My father is very poor, and needs help if anybody does. All of us children are trying to help him all we can.

I will tell you what I am doing to help him. The second summer that we were in Canada my mother was in the hospital all summer. My sister and I kept house. We did all of the washing, scrubbing, bread baking, and everything.

We have kept house every summer since. I like housekeeping very much. How many girls like cooking? I do for one. I can cook almost anything that my sister asks me to. I am learning my sister to cook too.

My mother died on the 7th of February, 1914. We have all been very sad ever since. My two sisters had pneumonia, and my mother had it too, all at the same time this winter. Pneumonia was what killed my mother.

My father is talking of getting someone to keep house, so that my sister and I can go to school. I should like to go to school very much, but I think that it would be better for me to stay at home and take care of things, as my father is too poor to pay hired help. I hope that he does not get anybody, for I should not like to have to quit my work. I should like very much to correspond with anyone who would write to me. I will answer all letters. I will close, hoping that this letter will not see the W. P. B., and that I may be a member of your club. Georgia Orton.

White Bear, Sask., Feb. 16th, 1914.

Dear Cousin Doris—I have been one of those silent readers of your interesting page for more than two years, but as yet I have never taken the courage to write.

I am at present staying with my sister-in-law while her husband and my younger brother are away to the traction school of engineering at Regina.

My father and my three brothers own a 30-60 Rumely Oil Pull.

Our school has been out since the 1st of December. If the weather is nice it will begin the 1st of March. My studies were arithmetic, history, geography, composition, grammar, reading, literature, spelling, writing and drawing. My favorite studies are composition, history, grammar and writing. I am in the fifth grade. I will be 13 years of age the 6th of March.

There has not been any snow here up to about four weeks ago, and now it is so cold you are liable to get your nose bit if you stick it out of doors.

I am anxious to go home and see my pets, which consist of three kittens and a dog. The names of the kittens are Topsy, Muggins and Jane Ann. My dog's name is Ned.

I am enclosing a receipt for cream candy—Take three cups of granulated sugar and cover with warm water. Set this on the stove, and let it boil till you can blow three bubbles from a hairpin that has been straightened out and bent into a circle at the end. Then pour out on buttered plates, and let cool for about three minutes. Beat it until it is white, then work with the hands until it is soft. Make it into small balls. You may beat in cocoa, coconut, nuts or flavoring. Coloring is sometimes used. This must not be cooked after three bubbles are formed.

Hoping this will miss the W. P. B. I remain, Maid of the Golden West.

Huxley, Alta., March 25, 1914.

Dear Cousin Doris—This is my first letter to your club. I like to read the letters in "The Canadian Thresherman and Farmer," that I thought I would join it too. My sister and brother are going to put their letters in with mine. It has been quite cold here for the last week. I go to school now. I am in the third reader. We have a good teacher, her name is Miss Bruce. I am ten years old. My birthday is in February. I will close for this time. From your loving cousin, Florence Ferschweiler.

Hoping to see my letter in print.

Hutton, Alta. Can., Mar. 27, 1914.

Dear Cousin Doris—I would like to join your Cozy Corner, as my father has been taking "The Canadian Thresherman and Farmer" for over a year. I read the letters every month, and like them fine, so thought I would write. I am 11 years old, will be 12 on May 31. School started here on the 3rd of March. I am in the fourth grade, and third reader at school. We are going to have an examination in April. I have one brother, he is 13. He goes to school also. He is in the sixth grade. Our teacher's name is Mr. McCoy. We live one and one-half miles south of the school. The teacher lives one-half of a mile south of us. I have for pets one cow named Bessie, one calf about a year and a half old, his name is Casey, another one named Buddy, and a white-faced one named Lady Viola, one pony named Buck, one dog named Netty, one cat named Kitty Gray. I have six pigs, they have not got any names. Wishing the club success. Hoping my letter jumps the W.P.B. I remain, your cousin, Violet May Fisher.

Neepawa, Manitoba, March 24, 1914.

Dear Cousin Doris—I have been reading the letters in the "Girls' Cozy Cor-

ner," and thought I would write a letter for this month.

Neepawa is a town between two or three thousand, and we have good times here.

I have one brother and four sisters. My father is the manager of the "Neepawa Planing Mill."

I have no pets, though we used to have a canary bird, but something went wrong with it's leg, and it had to be given chloroform.

I am twelve years old, and am in grade sixth at school.

I guess I had better close for this time, hoping to see my letter in print. I remain, Alexandra Fusee.

St. Louis, Sask., Mar. 27, 1914.

Dear Cousin Doris—I received the book, and thank you very much for it. I read it already, and think it is a nice story. We have had nice weather here, but these last two weeks it is snowing and windy; it wasn't so bad to-day.

I think we will have spring soon. I hope so, anyway, as I want to make a big garden again this year.

I've had a nice time this winter, and went to some dances. How many of the members like dancing? I do for one. I don't think there is any harm in dancing, do you?

I guess this will be all about dancing. I will tell you what I did this winter in spare time to make money.

I made some cushion tops of the pieces of silk and velvet I had, and got some sateen to frill around them and for one side.

I sold them, and got \$3.00 for the three. If members would do that with the pieces they can't use for anything else they will make money.

And I made some fancy work, too. I am very fond of it, and I am fond of housework, cooking and doing all kinds of work.

Our school closed last fall, but it will open on the 15th of April. We get a new teacher every year. I love going to school. How many of the members do?

I sew all my dresses and sewing we have to do with the machine.

How many members like sewing? I think it a nice job.

I think this is all for this time, as it is getting late.

I hope to see my letter in print, and wish you and members every success. I remain, as ever, Agnes McDougall.

Baldur, Man., March 23, 1914.

Dear Camper—This is my first letter to your camp, and I think it is very comfortable for boys to be in the camp on a cold winter's day. We must hurry so

the girls won't be ahead next time. I am going to school. I am in Grade V., and am 12 years old. I got a little dog. His name is Buckle. I call him that because he had a white buckle around his neck. I wish somebody would correspond with me. Wishing you all good success. This is all for this time. Yours truly, Signis Gudason.

Cereal, Alta., Feb. 11, 1914.

Dear Cousin Doris—I saw my last letter in print. It is very cold out here now. The snow is about eight or nine inches deep. It has been 49 below. We raised oats, barley and flax. Our oats made 60 bushels to the acre; barley, 49 bushels; and flax about 7 bushels. My brother takes The Canadian Thresherman and Farmer. I like to read the Girls' Cozy Corner. I am 12 years old and in Grade IV. I will close with a story:

The Wheat

One day in the summer, when I was a little boy, I sat down by the granary. It was very hot. I fell asleep and dreamed that a little wheat seed was talking. And this is what it said: "At first I was put in the drill and was sowed. Before I could speak I found myself in the dark ground. I did not like to be under the dark ground. It was very hot and dry for me in a day or so. I found the light. Then I grew and grew, until at last the farmer came into the field and said that it was time for us to be cut. The very next day they came with the binder and cut us down. Then we were stooked. Then they put us into a big engine and threshed us. Then I was put into this old granary. I guess that is all of my life."

Good-bye.

Ethel Bennett.

Assiniboia, Sask., Feb. 9, 1914.

Dear Cousin Doris — We have taken your interesting paper for a long time, but never could get around to write a letter; at least, I don't remember if I wrote to you before or to another club. Well, anyhow, I have read every letter in your little corner. I saw in your paper that we were to send in a story with our letters. I cannot send a very good one, but will try my luck.

One day, about three years ago, it was very hot. In the afternoon a dry wind arose. Papa had an engine, and was going to plow up our garden. This engine can pull nine or ten plows, so it had quite a big platform. I sat on the platform, which had a big hole in it. I was sitting near it and my dress was hanging down through it. The fireman took out the ashes, and they started for



FREE BOYS—Don't pay \$5.00 for a baseball outfit. Here is your chance to get a Big League outfit absolutely free. It consists of a dandy solid leather catcher's outfit, complete with thumb, and raised heel, rider's glove, new 1914 steel catcher's mask, full sized base ball, fine slugging bat and there's a dandy pair of baseball shoes for every boy who earns an outfit. Address—REGAL MANUFACTURING COMPANY, DEPT. 58 108 TORONTO, ONT. Write at once.

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

to the grass, but was not noticed. My dress just touched the ground. So when it swept over the burning grass it caught fire. I did not notice it till I could feel the heat up my neck, but did not think anything of it, because I thought it was the sun. Anyhow, I turned around and saw a great, big flame behind me. I screamed and jumped off. When I had run about ten feet papa saw me. He shut down the engine and ran after me. He could not catch me as he is a good-sized man; but the fireman caught me and held me. Papa took out his jack knife and cut up my belt and clothes. I ran to the house. When mama looked at me my whole back was burnt, and some places it was just black. Let me tell you it hurt some. It hurt me terrible, but finally I got over it. Sometimes I feel it yet.

Well, I will tell you what we have on our farm if it does not take up too much room. We have three-quarters, which are our own. It is nearly all plowed up, except the pasture. We have 8 head of horses, 15 head of cattle, 96 pigs, 249 chickens, 30 ducks and 21 turkeys. For pets, we have one dog and five cats. I guess I will close, so good-bye.

Esther Burgeson (age 12.)

Penhill, Sask., Feb. 5, 1914.

Dear Cousin Doris—This is my second letter to the Girls' Cozy Corner. I am eight years old, and my birthday is on the twelfth of November. We have three pigs. I bought one of them for myself; the other two belong to my two brothers. My little sister can walk now. We just think she is the dearest little sister. We have so much fun with her. She plays at tea parties with me. She has a little doll to play with, but she likes mine better because they are larger. We have three cats, two cows, one calf. We raised eighty chickens last summer. I set most of them. One of them died the other night. I started to do some embroidery. I worked a pillow top for my doll. It has been pretty cold for the last three weeks. I did not get out to slide so we play in the house. I do some sewing, and study my lessons. I will close now. Wishing the girls every success. I would like to have some of the girls write to me. I will answer them. Yours truly,

Marie J. Brust.

Canadian Boys' Camp

NORTHWARD HO!

Bird-Migration

By S. J. Douglass

Rich-freighted argosies o'erhead,
Beating toward distant Arctic skies—
Proud galleons — full-fledged pinions
spread!

At every stroke broad landscape flies:
And on and on winged-journey lies.

Warm Ocean's breath invites to flight:
Sweet South-wind whispers, "Follow
me!"

Trim fleets, on lake or sheltered bight,
Come sailing in on strong wing free,
And gaily deck the surf-white sea.

How flash old Ocean's briny shores!
How bright the river's emerald bed!
And long-drawn ridges guide to shores
Where countless wanderers have fed,—
Long to far homes these paths have
led!

Aloft, see harrow-pictured sky;
The whirring ducks' long, purpling
lines;

Hear stilled crane's far, creaking cry!
How snowy swan's white mantle shines,
Bound for cool lake by dark-robed
pinions!

What splendid vista—"bird's-eye view"—
Conned from the heights of upper air!
Soaring aloft, where prospects new
Glide swiftly past, like pictures rare,—
Lake, silvery brook; hills, meadows
fair!

Perchance, ice-bound the long-sought
streams:
Mayhap, snow-crisped nest-sheltering
tree:
Afar, stream, tree have filled bird-
dreams.
But soon warm winds song-brooks shall
free,
And bud and leaf deck dell and lea.

Homes—homes to-be, at end of flight!
Press on stout hearts and hardy wing!
Next, armies vast, of lesser might,
Flit joyous on, and trill and sing
The songs of ever-circling Spring.

One Mind directs that wondrous flight:
One Heart is pained at sparrow's fall
What darkness, deep as shades of night,
Must heart, or mind, or soul enthral
That gloats o'er pain to great or small!

Boys' Prize Letter

Penkili, Sask., Feb. 5, 1914.

Dear Campers—This is my second letter to the Canadian Boys' Camp. I will tell you one of my most interesting days in my life. That was at Saskatoon fair last year. I had a ride on the merry-go-round, and I saw a pony circus, a whole lot of animals in a cage, and a girl was in it making them do tricks. I saw some horse races, a lot of machinery, and all kinds of engines. One was a Pioneer, of which I took particular notice, as we have one of our own. I also saw a lot of horses, cows, sheep, pigs, chickens, ducks, turkeys and some pretty little rabbits. I saw some pretty little Shetland ponies, and a man go up in an aeroplane. I saw something that probably some of my brother Campers never saw, and that was two white horses walking up a scaffold about thirty feet high, then jump into a pool of water. On one of them a lady would sit on its back and ride down with it. I also saw a man go up on a scaffold twenty-five feet high. Then he would jump into a net. I saw a girl dance on a wire. I saw a pony in a fence. The manager hung a lot of flags that represented different countries on the fence. Then the pony was told to get a certain one, and he did it very well. Another thing that I thought was going to be very nice, but it wasn't. Papa bought some ice cream, which was so cold I couldn't eat it. I will tell you of one exciting day for me. That was the day before we went to the fair. We were nearly done breaking, and papa was in a hurry to finish it, so he told the man we had thought he wanted to get through that day early as he wanted to take the governor to the fair. I was steering the engine and found out that when we got through that I was the governor he took to the fair. Before that I did not know I was going. Well, Brother Campers, I don't hardly expect to get the prize, but I had a good time at the fair just the same. Yours truly,
George William Brust.

Canuek, P.O., Sask., Feb. 6th, 1914.

Dear Boys of the Camp—This is my first letter to you. My father is taking The Canadian Thresherman and Farmer and I thought I would like to join your camp. I was 12 years old the 13th of June. We are living on the bank of a lake, one mile long, and one-half mile wide. We are 35 miles from a railroad. We started out here on the 2nd of May, 1911. We were 8 days on the road. We travelled 120 miles with 6 teams. There were 2 teams of oxen, and 4 of horses. I walked most all the way, driving 9 head of stock. We had a saddle horse but he was very lame, and I could not ride him. We had good weather. There were 18 people all together. We had to stop in tents all the time. We rested the teams over Sunday then came on, and not here the 9th day of May. We only had one room, 12 feet wide and 16 feet long. We had nothing to burn but cow chips, if you know what that is. A year ago this country was cleared from grass by a very large fire. It was in the evening, and mother and my sister and brother were alone. Father was to town, but the lake kept the fire away from our buildings. My father has 4 working horses, 1 saddle horse,

EFFICIENT--Semi-Steel firepot has straight sides--ashes can't cling. You get with

McClary's
Sunshine
Furnace a clear fire and more heat from same coal.
See the McClary dealer or write for booklet.



KING CORN



EARLY NORTHWESTERN DENT—This famous variety was first introduced to the West by Steele, Briggs. Our stock is true to the original strain. Also Longfellow, North Dakota, Minnesota 13, and others.

ALFALFA

THE QUEEN OF FORAGE CROPS

Our stocks are the most northerly-grown seed known and the hardest. This genuine class of Alfalfa cannot be sold lower than our prices.

GENUINE NORTHERN VARIEGATED ALFALFA

GENUINE GRIMM'S ALFALFA

GENUINE IMPORTED TURKESTAN ALFALFA

Our Booklet on "Alfalfa Culture" should be in the hands of every Western grower. Price 10c but FREE to OUR CUSTOMERS.

MENSURY SIX-ROWED BARLEY
SILVER KING SIX-ROWED BARLEY
REGISTERED BANNER OATS
REGISTERED ABUNDANCE OATS
NEW FRENCH LIZO OATS

ORLOFF OATS—The Earliest Variety Known and Big Cropper; equal to barley as a cleaning crop and as a nurse crop.

OATS—VICTORY ("SEGER" in Swedish), the true stock, bred by Professor Nilsson, Svalof, Sweden, and first introduced to the West by Steele, Briggs, direct from the original source.

ESSEX RAPE

The great pasture annual for cattle, sheep and swine. Our booklet—"Rape, It's Uses and How to Grow It," free to our customers.

BROME — WESTERN RYE — TIMOTHY — SWEET CLOVER

All fully described in our beautiful 136-Page Catalogue—Write to-day for a copy (free to all).

AGENTS FOR PLANET JR.'S IMPLEMENTS

AGENTS FOR BLATCHFORD'S CALF MEAL

Steele, Briggs Seed Co.

WINNIPEG

Limited

"CANADA'S GREATEST SEED HOUSE"

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

and 5 colts. He has 2 cows, and 2 calves, and 3 2-year-olds. I hope to see my letter in print. Yours truly,
George W. McMartin.

Earl Grey, Sask., Mar. 24, 1914.

Dear Campers—I have never written to you before, so I will write now. In the Boy's Camp a month ago I saw that the Editor wanted every boy to write about the happiest day he ever had or about some incident that has happened; but I should have been a month earlier to write about one of those subjects. I don't think it is too late so it is no use of not trying.

I will write about the happiest day of my life. It was when we were fishing. Four years ago we went out to one of our friends in Govan. After we

had stayed by them two days we went to Longlake to fish. When we arrived we took a row boat and went north for about a mile to a family living just a little way from the shore and had our dinner. After we had finished dinner we rowed off to an island where we caught many fishes. My brother felt a fish nibbling at his hook, he pulled in and he had a great big pike, but it got loose from him and swam off. I did not get any but my mother and brothers got quite a few.

Then we landed on the island and cooked some fish and ate; after we had finished we rowed back and went to our friend where we stayed over night and the next day we went home.

I guess I'll have to close now as my letter is getting long. Wishing the club good success. Your friend,

Alfred Forsman (14).

OUR WOMEN FOLK

CONDUCTED BY
PEARL RICHMOND HAMILTON

SOMETHING WORTH WHILE

Something worth while in life to do,
Makes a great citizen out of you,
Useful and happy and on the go,
With never a moment to brood and grow
On mean and contemptible things and low,

Or waste in bickering—on the fly
Bidding ill-feeling and hatred good-bye.

Something worth while amid the strife,
Helps the upbuilding of better life,
Takes the bad taste of the petty and vile

Out of the spirit and keeps it rife
With beauty and duty and song and smile
And a higher faith and a central theme
Of hope and ambition and deed and dream.

Something worth while to do makes men
Over and over and over again;
Lifting them up from the dust and scum
Unto the summits of wider ken,
Out of whose vision the great tasks
Come,
The great age grows and the masters
rise
And doubt departs and the narrowness
dies.

God's price for beauty is very low,
Just to be happy wherever we go
With a seeing eye and a feeling heart,
Down in the country, the lane or mart;
And maybe the best that we get from
all

Exacto no cost but the sudden thrill
Of grateful feeling and thankful trust
In these divinities of the dust.

Dear Readers—The letters of appreciation that come to my desk every month are most gratefully received. They bring me nearer you than anything else. I often feel the sad heart throb as I learn of heavy hearts here and there—women crushed under the burden of trouble, sickness and death. My dear friends, the way cannot always be bright with the sunshine of love and happiness

Ladies' Hair Combing

Made up in any style

Elite Hairdressing Parlors

207 New Enderton
Building
Portage Avenue
Winnipeg

Specialists in Wigs
Toupees, Transformations
Etc.

Correspondence invited on matters relating to hair. Advice free. A full line of the best toilet articles and hair dyes carried

Our Motto:
"Best Service Every Time"

Dr. J. KLEIN, Proprietor

Mention this magazine when writing advertisers.

and wealth; some rain must fall into every life or else the life will be a barren one indeed. The April showers may come from time to time, but the sun is behind the cloud, and flowers will spring up in the quickened soil of the heart, while a rainbow shall curve over the sky of your life, the reflection of which is the more beautiful because of your courageous conquering of life's battles. Our sufferings are proportionate to our powers of resistance, and genius nearly always has its source in charity. The real life is not outside ourselves, but within. The real possessions are not what the hands may grasp, but what the heart may hold.

"We know not what lies in us till we seek;
Men dive for pearls—they are not found on shore;
The hillsides most unpromising and bleak
Do sometimes hide the ore.
Go, dive in the vast ocean of the mind,
Oh, woman! far down below the noisy waves,
Down in the depths and silences thou mayst find
Rare pearls and coral caves;
Sink thou a shaft into the mine of thought.

Be patient, like the seekers after gold:
Under the rocks and rubbish lieth what may bring thee wealth untold,
Reflected from the vastly Infinite.
However dulled by earth, each human mind
Holds somewhere gems of beauty and of light
Which, seeking, thou shalt find."

The woman who wrote the above lines was once a poor girl on a rocky, unproductive farm. Her environment was most discouraging; her parents were poor in purse, and had to work very hard. There was little in the home in the way of comfort. To-day her name is known in nearly every home on this continent and abroad. She suffered and feels the throb of the heart of humanity because of her trials. There is a poem that runs something like this:

"The day is dark and cold and dreary;
It rains, and the wind is never weary."
The second verse begins like this:
"My life is cold and dark and dreary."
But the third verse says cheerfully:
"Be still, sad heart, and cease repining,
Behind the clouds is the sun still shining;
Thy fate is the common fate of all;
Into each life some rain must fall.
Some days must be dark and dreary."
Another poem runs like this:
"After a day of cloud, and wind, and rain,
Sometimes the setting sun breaks forth again,
And, filling all the darksome woods with light,
Smiles on the fields until they laugh and sing."

The bravest woman in Canada is the mother who is bringing up a family of little ones in an isolated place—the woman who pioneers. It is she who is doing most for our country. Her name may not be in print, but her influence will touch many lives. Sometimes she is discouraged and thinks her place in life is narrow, but she is most blessed. There are women on this continent in prominent positions who realize incomes of from ten to forty thousand dollars a year. Let me quote what one of the most successful of these women has said: "A woman came to me the other day," said one of the biggest of them, "after making such persistent effort to reach me, and stated her desire to enter one of the great new professions that are just

now opening to women. She had talent. I was quickly convinced of that. But she had some other things. She had a husband and two lovely children. When I had wrung that fact out of her I spent the greater part of one very valuable day in convincing her that her workshop was in her nursery. 'Children! I wish I had a thousand of them,' I told her, and I meant every syllable of that."

It is the realization of the importance of family life that is inspiring our public-spirited women to work for the vote. We want our boys and girls to be in a clean environment, free from intoxicating drink and its attendant influence. Last month a girl staggered into the kitchen of my neighbor. The man with her rudely pushed her in. A few hours before he had called for her to go with him to a place of amusement. This was the result. The next day she lost her position. Friends, there are many cases like this. Our girls are in danger as well as our boys from this drink evil. The best argument for woman's suffrage is the fact that the liquor interests are against it. This month more than one thousand saloons in the State of Illinois were closed as a result of women's vote. Until recently only religious and temperance publications printed material on temperance. To-day the leading magazines all over this continent are offering thousands of dollars in prizes for the best stories showing the evils of intemperance. Truth will prevail in the end every time, and God hasten the day when our boys and girls shall be safe from the monster demon "Intemperance" and our women shall be free from his evil blows.

P.R.H.

Mothers' Corner

MOTHERS' DAY—MAY 10

By Adela Stevens Cody

The Knights of Canadian Manhood

Have donned their insignia to-day
And the gleam of the white carnation
Shines fair through the blooms of May

The orchid and rose are discarded—
Ay, and even the sweet violet!
For to-day sees the white carnation
In the crown of motherhood set.

Ah, blest is the land whose mothers
Have borne sons who such homage pay,
That her badge as an honor
To her virtue on Mothers' Day!

Who wear her flower—and better,
Live true to the dreams she had
Of the future which held as hero
Her own little clear-eyed lad.

And even if time smote roughly
Thy so dreams, so enchantingly bright,
Who find scattered still 'mong their ruins
Some jewels of heavenly light.

Some wealth which they owe to "Mother,"
That the world has never guessed,
Whose sign is the white carnation
That lies on each loyal breast.

The booklet entitled "Helps for expectant Mothers" will be sent free to any wife who writes to 983 Grosvenor Avenue, Winnipeg—Pearl Richmond Hamilton.

ON MOTHER'S DAY

By Owen O'Neill

You who need dedicate this day to mother
Should blush for shame to own your self remiss
When everyday remembrance is a brother,
The conscience cannot make amends like this.

I care not what your birth, or birth-right, even,
Or what your advent to this vale of strife,
A mother held you dearer than High Heaven,
A living jewel in her crown of life.

The tears of all the mothers of the ages,
Four forth Life's River from His throne above,
And all the wisdom of the saints and sages,
Relate no deathless love, save mother-love.

By night your lips should feel those mother-kisses,
Her smiles, Madonna-sweet, your dreams should share.
Count each day lost, my friend, when your life misses
The holy impulse of your mother's prayer.

A DINNER MENU

Mrs. N. B. H.: As baby is in the second half of the second year a suitable dinner would consist of a meal selected from the following list:

A cup of chicken broth, a couple of ounces of beef juice, and a delicately cooked egg; or a tablespoonful of rare scraped beef or shredded lamb chop, a little macaroni, stewed celery, nicely-cooked spinach, rice jelly, prime jelly, baked apple, apple sauce, junket, custard, and once in a while a little vanilla ice cream. A piece of stale bread may be given and the child should have water to drink at this meal.

A CASE OF INDIGESTION

Mrs. J. C. S. D.: The food which you describe ordinarily would be very strong for a baby one month old. When the food does not agree a child will not thrive. An oatmeal gruel formula should help his constipation. As he is now four months old the following might agree with him:

Stir sixteen ounces of top milk gently and take ten; dissolve two level tablespoonfuls of milk sugar, a pinch of soda, and a pinch of salt in twenty ounces of warm oatmeal gruel. Combine with the ten ounces of milk. Give from three and one-half to four and one-half ounces at a meal. Procure a graduate with the ounces marked on it so as to be exact.

After he grows accustomed to this it can be strengthened gradually by using a little less gruel and a little more milk.

Ringworm is contagious and so care should be taken that other children do not get the infection. Soften the scales by washing in a warm sud made with carbolic soap. Paint the spot with equal parts olive oil and iodine applied with a camel's hair brush. Do this night and morning. Paint a little ring outside of the irritated spot.

A First among other sterilized widths of (erably ster remove split safety pins widths of tourniquet length of at each e to stop bl peroxide of carbolated Soap (an cleaning dir ammonia (Carron Oil, linseed oil case of cin net for the bottle of of shock tives, essen of ginger f liniment, e

C. D. T. Roche's em

NELLIE FOR M

The foll of Nellie I political co time in th were aske ing.

The app length whe known au convention she felt momentou of it. Ou hearts the had given hoped that their resp

Fifty y distancing what woul to women would rea they shoul present ag say that woman. T old days kind woul (laughter) that wom in the bot in Mrs. M in Englan afterward overboard who was that she w went out arrested. sion that matters o in matter

The spe when she political p convict ar women w was wor case of th idiot, the they wer it was u an electio in the fra before th him.

On beh wives, M to the n fair deal desirous others. looked up were deso women w sold. It Western of coloni audience women p failed to she appe

A First Aid Cabinet should contain, among other things, a package of sterilized absorbent cotton, several widths of bandages neatly rolled, preferably sterilized, a pair of tweezers (to remove splinters, etc.) different sizes of safety pins, a pair of scissors, several widths of surgeons' adhesive plaster, a tourniquet (a wooden handle with a length of stout wide bandage fastened at each end, to be twisted about a limb to stop bleeding), a bottle of reliable peroxide of hydrogen, a jar or tube of carbolated vaseline, a bottle of Synoi Soap (an antiseptic liquid soap for cleaning dirty wounds), a bottle of liquid ammonia (for insect stings), a bottle of (Carron Oil, equal parts limewater and linseed oil (for burns), an eye stone, in case of cinders in the eye, a small magnet for the removal of metal specks, a bottle of aromatic ammonia, in event of shock or collapse, suitable laxatives, essence of peppermint or extract of ginger for stomach ache, a bottle of liniment, etc.

C. D.: There is nothing better than Roche's embrocation for whooping cough.

NELLIE L. McLUNG WORKS HARD FOR MOTHERS OF THE WEST

The following clipping is an account of Nellie L. McClung's address before a political convention, where, for the first time in the history of Canada, women were asked to address a political meeting.

The applause was continued at some length when Mrs. Nellie McClung, a well-known authoress, rose to address the convention. She stated, in opening, that she felt the occasion to be a very momentous one; she felt the solemnity of it. Out of the generosity of their hearts the delegates to the convention had given them an opportunity, and she hoped that they might measure up to their responsibility.

Fifty years ago, she said, lurid and distressing pictures had been drawn of what would happen if the vote was given to women. It was thought that they would read yellow-backed novels when they should be peeling potatoes. In the present age there were none who would say that illiteracy was any help to a woman. The expression was used in the old days that a progressive act of this kind would "rub the bloom of the peach" (laughter), that chivalry would die and that women would take no more interest in the home.

Mrs. McClung said that in 1832 women in England had the vote, but the bill was afterward repealed and the women cast overboard. In 1837 there was one woman who was still possessed of the thought that she was a person. (Laughter.) She went out and voted, but was at once arrested. The court ruled on that occasion that a woman was a person in matters of pains and penalties, but not in matters of privilege.

Some Political Peers

The speaker caused great amusement when she stated that women had as political peers the idiot, the lunatic, the convict and the Indian. The condition of women with regard to enfranchisement was worse than any of these. In the case of the convict, the lunatic and the idiot, their franchise was returned when they were brought back to society, and it was usual to let them out just before an election. (Great laughter.) An idiot in the first place must be very, very bad before the vote was taken away from him.

On behalf of the mothers, sisters and wives, Mrs. McClung said she appealed to the men of the West who loved a fair deal for themselves and who were desirous of getting a fair deal from others. Sometimes a suffragette was looked upon as the new woman, but they were descendants of the Teutonic race of women who were never bought and never sold. It was the noble women of Western Canada who had paid the price of colonization. The older men in the audience can bear witness that the women pioneers of the West have never failed to do their share. In their name she appealed to the convention to recognize women as citizens. Surely women were equally intelligent and had an equal right to vote with the lad of twenty-one coming fresh to the shores of Canada. Mrs. McClung said she did not believe their appeal would be in vain.

Your Reward For using PURITY FLOUR

will be found in light, flaky pie-crusts, delicious delicate cakes, sweet snow-white, wholesome bread, and cookies beyond compare.

The quality and strength of PURITY FLOUR permit you to add more water than other flours can stand, meaning that you get more loaves from PURITY FLOUR than from an equal amount of any other flour milled.

Dealers pay more for PURITY FLOUR than for other kinds. The fact that the better class dealers are willing to sacrifice a part of their profits in order to sell you PURITY FLOUR, is strong evidence of their belief in its being the best flour on the market. Get a 7 lb. sack and try it yourself.

PURITY FLOUR

More Bread and Better Bread

WESTERN CANADA FLOUR MILLS CO. LTD. MANITOBA WHEAT

PURITY FLOUR

157

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

Applause Drowns Sentence

There were many reasons advanced by people holding opposite views why women should not have the vote. One of these reasons was that it would make trouble in the home, that political rows would occur in the homes at election time. "Well," said Mrs. McClung, "if they agreed right along all the time, I think a little dispute once every four years—" The attempt of Mrs. McClung to finish her sentence was drowned in a storm of applause and laughter.

There were those who said there was no use giving the vote to women for they were sure to vote with their husbands, that it would mean a double married man's vote, and who, she asked amid cheers and much clapping of hands had a better right to two votes than the married man. The married man was the most intelligent voter extant.

Some said the women should not have the vote because they could not fight. "I mean go to war," explained Mrs. McClung, bringing renewed laughter. The time for brute force, she said, had gone by. It was no longer necessary in war to spread your enemy's features all over a vacant lot. (Much laughter and cheering.) If there was disfranchisement in

the war game then every man over 45 would be debarred and so would all the smaller men. She asked the delegates, amid great laughter, how they would like that. If physical force, she said, were the only requisite they would have to give Jack Johnson seven or eight votes. It was further said that there were some women who would never vote. It is also said that when wild animals were placed in a cage and thoroughly tamed they would have no inclination to seek their freedom when the door of the cage is thrown open. Voting was not compulsory and the shrinking violets would not be dragged from their homes if they did not want to go.

Confident Franchise is Coming

Mrs. McClung said, in conclusion, that she was sure the delegates endorsed them heartily and she was confident that votes for women were coming in Manitoba. This was the next step. In the dark ages it was debated whether women had souls. Then they were given a place at table and finally allowed to receive an education. Now they were going to get the vote. Mrs. McClung said that the suffragettes did not like the term "women's rights." The struggle was between men and women ruled by sense and reason against those ruled by prejudice, and prejudice was harder to root out than ignorance. Women did not want the vote in order to secure the offices that belong to men, because they love their homes and their children. It was a mere man

that would deny a woman a weapon with which she could defend the children she had brought into the world. Some might say, what about the father of the children? In answer to this she would say that two parents were not too much for any children. She said she was speaking to the convention on behalf of the motherhood of Manitoba and she hoped that they would put into the hands of these women this weapon of votes for women with which to defend their children.

Correspondence Column

This column is open to "Our Women Folk" for discussion on any subject that interests them.

Dear Mrs. Hamilton—I understand that certain statements are being circulated among the H.E.S. to the effect that during my visit to the societies last winter I gave the impression that I was sent out by the Agricultural College. This is entirely unfounded. I went out in my capacity as Provincial President and at the request of the Advisory Board of H.E.S., and my expenses have since been paid by the Hon. Minister of Agriculture.

Rebecca Dayton.

Dear Mrs. Hamilton — I enclose a stamped envelope and would be very glad if you will send me "Hints for Ex-

peasant Mothers." We of the "way out" places cannot have too much of such sensible advice. Your section in the March issue is most interesting. I usually find it so. Thank you for having Nellie L. McClung's address published. It was fine. I would like to be able to attend one of those big conventions. I hope to some day. I think it is about time women woke up and attended to their own interests, even in such small things as eggs and butter. Women do all the work and are cheated every time they take the produce to the store. We are forty miles from town. I never sold butter before. I had more than we needed this spring, so took it to our little country store. I thought it was a low March price when they paid me 25 cents a pound but last week (the first in April) they were giving 18 cents a pound, in trade at that. At the same time they were giving 15 cents a dozen for eggs. The worst of it is they sell them at such a different price to the town's people. It does not affect me, but it makes me feel so indignant when I see so many poor women working so hard, often to feed and clothe the whole family, and they get such poor returns for their eggs and butter. Way out here they have no choice but to trade at the small store. I know you are interested in our women's problems. With best wishes for your work, yours truly,
An Interested Woman.

I wish every woman who has a problem would write to us. We like to receive letters like the above. By the way, I want to warn Our Women Folk against a fraud company in Winnipeg that is gathering in many dollars from women and girls in the country. They advertise great profits for making cushion tops and charge a fee of four dollars to begin with.

P.R.H.

Home Economics

We publish every report we receive. Kindly address all reports and letters to my private address—983 Grosvenor Avenue, Winnipeg—P. R. H.

EMERSON

The Emerson H.E.S. have been holding regular meetings with good interest. Several new members have joined. At a recent meeting we had an interesting address by the Rev. Mr. Pritchard. During March, April and May we have planned for papers on gardening. The March meeting is past, and we had a good paper by Mrs. Bell touching both vegetables and flowers. Mrs. Ballantyne then read a magazine article on "How to Make a Hot Bed." We also had a few remarks from Mrs. Shorty (who came recently from the East). She told something of the work of Women's Institutes in Ontario. We are discussing the prospects of opening a rest room in the near future.

P.R.H.

MINNEDOSA.

The March meeting of the H. E. S. although small (just thirteen members) was nevertheless interesting. After the usual business was transacted, an answer to the petition sent in by the presidents at the conference was read from Mr. Bedford. This was followed by one from Mrs. Speechly, asking the opinion of the members on asking to have the act amended. Nearly everyone are voting for it. Mrs. Gugin then gave a very instructive paper on starting seeds inside, explaining fully from the selecting of boxes and earth until the plants were ready to put outside. To one box of good light earth one peck of sand and two of lead mould should be added. After the seeds are planted the boxes should be put in a tub, one-third of the box under water until the moisture comes to the top. They should not re-

quire any more water until they are through the earth. Mrs. Boyd's paper on starting house plants was much appreciated. Care should be taken in the selection of the soil for the more delicate plants. Begonias and fushias require leaf mould. Ferns and foliage clay; also plenty of water and a good plant food.

Mrs. (Dr.) Andrews' paper on the "Maid Problem" should simplify the getting as well as keeping. Of the help for the coming summer's work, Mrs. Andrew suggested studying a girl's nature and his capabilities. Teaching easier way for work she finds burdensome, letting her have some time for recreation in the sunshine, not always at night.

From Mrs. Hands' paper on "Spring Sowing," many economical ideas could be gathered, making small stockings out of worn large ones; boys nickers from partly worn men's trousers, etc.

All children's frocks will be found more easily made, washed and ironed if made from a simple pattern.

A short time was given to the study of the food course, after which the meeting adjourned.

Anna J. Lamont, Sec.

NEEPAWA

Neepawa, March, 1914.

Dear Mrs. Hamilton—It is some time since you have heard from our society, and I will tell you why. At our annual meeting in December only fourteen members were present. So many seemed to be losing interest in the meetings, the feeling then seemed to be that it was almost useless to continue. However it was announced at that meeting that the agricultural college had prepared, and was sending out a short course of lessons on home nursing.

The very fact that it was the agricultural college who were doing this seemed to give weight and awaken interest. So that at the very first lesson (when we had one of our doctors and a nurse from our hospital give a talk and demonstration on "Bandaging and Dressing"). The room that had formerly been more than large enough was now found to be far too small, a number not being able to get in at all. So the advisability of securing another room was discussed. Thirty-six new members joined that day. We have now made arrangements for the Methodist Church Schoolroom, with the use of piano and dishes, we had thought that it would be necessary to have a 10 cent tea to pay for the same, but now begin to think we may even do without that, as fourteen more joined at our last meeting.

Our membership is now seventy (70). So you see that without any effort on our part, but just advertising that the college had prepared this course of lessons, has now made ours a large society, and every one take such an interest in the lessons. I would like you to know how much we appreciate what has been done. I am, yours truly,
Annie Simpson, Sec. Treas. Neepawa H.E. Society.

SWAN LAKE.

MARCH H. E. S. MEETING.

The March meeting of the Swan Lake Home Economics which was held on the 28th inst. was a great success. It was the first meeting held since the visit of Mrs. Dayton, Provincial President, and in spite of somewhat uncertain weather was well attended specially by the country members.

The first part of the afternoon was spent in outlining a programme for the current year, and, by a show of hands, it was decided to keep to the open programme which will again be printed, each month being in charge of four ladies as entertainment, four as lunch committees who will be responsible, but who will, of course, be at liberty to find a substitute if they cannot conveniently act then. The Cor. Sec. read various communications, amongst them one from the Librarian of the Agricultural College with a list of the books available for the use of the members of the H. E. Societies, and she was directed to write and ask for the three books on Gardening, so that the programme committee for April could use them if they wished

to do so. The question of taking up the Sewing Course sent out by the agricultural college was discussed, but the members decided that although they would appreciate the pamphlets as valuable references, they did not care to form a class on the subject.

The programme was then opened by Mrs. Hartwell, who read "As the Twig is Bent," an amusing skit on the present day fashions and postures, and this was followed by the admirable paper written by on "Public Health National Wealth," and read by Miss Beech who substituted for Mrs. Penniston; this was so a propos that the President suggested the continuing of the subject at some future meeting.

The President, Mrs. Gordon, gave a clear, unbiased account of the conference held at the agricultural college last February, and explained quite impartially the various matters which had been under discussion lately and the issues to which they lead. The meeting closed by the unanimous signing of a resolution supporting the president.

Programme and Lunch Committees.

January.—Programme—Mrs. Dayton, Pres. Lunch—Mesdames Hartwell, Dodd, G. Crawford, W. J. Scott.

February.—Omitted.

March.—Programme—Mesdames Gordon, Gardner, Hartwell, Penniston, Lunch—Mesdames Gordon, Robb, J. Couch, Clark.

April.—Programme—Mesdames Hodgson, Blair, De Roo, Langridge. Lunch—Mesdames McDole, Harman, Misses Bowes, E. Shirley.

May.—Programme—Mesdames Flack, Clark, Misses Beech, V. Gordon, Lunch—Mesdames Moore, Hodgson, Penniston, Anderson.

June.—Programme—Mesdames Downey, Moore, Pepper, Miss Connelly, Lunch—Mesdames Gardner, Blair, Herbert, Moffatt.

July.—Programme—Mesdames Anderson, Irwin, Miss E. Docking, Mr. Holland. Lunch—Mesdames McPherson, Angell, Shirley, Pepper.

Aug.—Programme—Mesdames Dodd, McPherson, Dunfield, Miss Gamble, Lunch—Mesdames Hedley, Skinner, De Roo, Miss E. Docking.

September.—Programme—Mesdames Herbert, J. Couch, Shirley, Robb, Lunch—Mesdames Dunfield, G. O. Couch, Misses Beech, V. Gordon.

October.—Programme—Mesdames Moffatt, Skinner, Misses Docking, E. Shirley. Lunch—Mesdames Downey, Cook, W. H. Couch, Miss Connelly.

November.—Christmas Suggestions—Programme—Mesdames McDole, W. H. Couch, Cook, Miss Bowes and other members. Lunch—Mesdames Gordon, Irwin, Scott, Miss Docking.

December.—Programme—Annual meeting. Lunch—Mesdames Hartwell, Dodd, J. Couch, Clark.

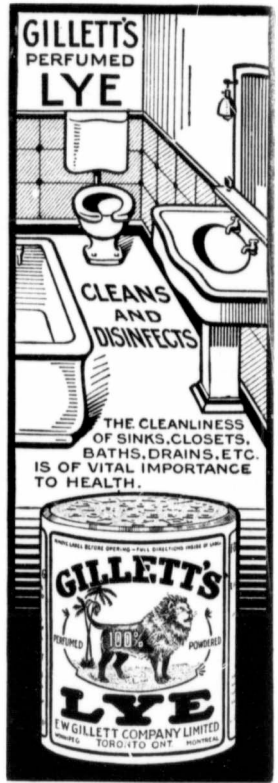
VRIDEN.

Dear Mrs. Hamilton—I am sorry you have not been having our reports regularly, but we are doing beautifully.

In January instead of our regular meeting we had a musical afternoon, interspersed with selections from Barrie's "Little Minister" and Drummond's "Habitant," and as we have good local talent we had a very pleasant afternoon.

In February we exchanged programmes with the Oak Lake Society. They brought in the whole programme which was one of the most interesting we have ever had. 125 members and friends turned out to welcome our visitors, and after the meeting about thirty sat down to supper in the Rest Room.

Our train service admits of this exchange easily, and I can heartily commend it to other societies not too far apart. It promotes good will and co-operation. Our March meeting was chiefly given over to "The Child's Welfare." One of the best addresses we have had was given by Miss Gilroy, of our collegiate, on "The Relation of the Home to the School." Mrs. Scorth, who was formerly a trained nurse, gave a most practical and sympathetic address on "The Care of the Child from Birth." Some of our very youngest musicians provided the music. The Court Room where we hold our meetings was so filled that some were unable to get seats, notwithstanding the fact that many extra ones had been brought in.



Mention this magazine when writing advertisers.

We have had many new members lately, and our women feel they cannot afford to miss the meetings. At this meeting a resolution was brought in favoring a woman on the School Board, and our women were asked to qualify by having their names put on the voters' list in order that they may be ready for the next election. Our annual fee is only 25 cents, but we always take up a quarterly collection. We have bought a new piano, each member giving \$1.00 towards paying for it. We make music one of the features of our meeting, and always serve a cup of tea, as it seems to help make strangers more quickly acquainted. A resolution supporting the amendment to the H. E. S. Act, asked for by the presidents, was unanimously passed.

OAK LAKE.

The H. E. Society held their annual meeting in the Rest Room on Saturday, March 21st.

The president opened the meeting with prayer, after which the secretary-treasurer, Mrs. Cameron, gave a splendid report and financial statement for the year, showing a cash balance of \$81.50. Mrs. Gordon gave an interesting account of the demonstrations on "The Cooking of Meats and Vegetables," given by Mrs. Gray, of Chicago, at the Brandon Winter Fair.

Mrs. Boyd gave an excellent paper on the "Choosing of Books" which we read. She impressed upon us the fact that the Bible, the great Book of books, should receive closer attention, and that the study of nature be encouraged more, as it alone in so many instances reveals sermons. Miss Boyd's paper was particularly appropriate, as the society is on the point of opening a circulating library. The books contained in the library have been chiefly donated by members.

The membership fee for the year will be 25 cents for members of the society, and 50 cents for non-members. Before the close of the meeting the election of officers for the year took place, with Mrs. Andrew in the chair.

sulting as Burns; first Lang; second Cabbins; first name; correct. Let's.

HOMEM.

Eden C. The meeting held at Mrs. noon. After minutes of George gave the doings of the convention at the form in connection was considered makers as of more H. answered T would mean stand of two Mr. Albe George for after a dis of the Grad God Save pleasant at

CANDIA

Record of Meeting McClellan. ing of "The last meeting A number the family president who been grateful We had a Value." Mrs. Pret "Kitty Ma Chinaman g We receive Next meet of Mrs. For Meeting King." Mrs. J.

WASHING

(This paper is the great ply would be In the e and harder clude the w work, even in a famil springing u the entire prices at so cities where stationary y tric washer their own v West can c many of us no more s grandmother a farmer th father did? be made lig method, as ery and equ ever the e enough pro co-operative in the ches way. Suc out in c onfermeries, blessing to enough wo them bad) will relieve of household waiting for condition th on, and son woman sho machinery t as much as should have the latter shaner, by each time, deal of we

sulting as follows:—President, Mrs. Burns; first vice-president, Mrs. J. B. Lang; second vice-president, Mrs. McCubbin; secretary-treasurer, Mrs. Cochran; corresponding secretary, Mrs. McLeish.

HOMEMAKERS' CLUBS OF SASKATCHEWAN.

Eden Grove Homemakers' Club.

The monthly meeting of the club was held at Mrs. Macready's on Friday afternoon. After the secretary had read the minutes of the last meeting Mr. Percy George gave an interesting account of the doings of the Grain Growers Convention at Moose Jaw held in February. The forming of a Woman's Auxiliary in connection with the Grain Growers was considered by many of the Homemakers as unnecessary. The organizing of more Homemakers' Clubs would have answered the purpose just as well, and would mean one large association instead of two smaller ones.

Mr. Albert Macready thanked Mr. George for his interesting address, and after a discussion of the various items of the Grain Growers program, tea and God Save the King brought a very pleasant afternoon to a close.

CANDIAC HOMEMAKERS' CLUB.

Record of Meeting Held March 12, 1914.

Meeting held at house of Mrs. J. J. McClellan. Opened, as usual, by singing of "The Maple Leaf." Minutes of last meeting read and approved.

A number of parcels had been sent to the family in need of clothing, and the president was able to report they had been gratefully received.

We had a very good paper on "Food Value."

Mrs. Pretty, suitably costumed, recited "Kitty Malony's Experiences with a Chinaman as a Fellow-servant."

We received six new members.

Next meeting to be held at the home of Mrs. Ford. Subject: "Gardening." Meeting closed with "God Save the King."

Mrs. J. J. McClellan, secy. pro tem.

WASHING AND CLEANING CLOTHES.

(This paper was read before the Hanley Club.)

If asked what part of the housework is the greatest drudgery I'm sure the reply would be the laundry work.

In the cities it is becoming harder and harder to find a maid willing to include the washing in the general housework, even if there be but two or three in a family. Family laundries are springing up everywhere prepared to do the entire wash and manage the flat prices at so much per lb. So if in the cities where laundries are fitted up with stationary tubs, hot and cold water, electric washers, etc., and they cannot do their own washing, why we women out West can certainly call it a drudgery, as many of us women in the country have no more saving appliances than our grandmothers had. But where is there a farmer that tries to farm as his grandfather did? A woman's work needs to be made lighter by the latest improved method, as well as man's work. Machinery and equipment cost money. Whenever the community is made up of enough progressive individual families. A co-operative laundry solves the problem in the cheapest and most satisfactory way. Such co-operative laundries are now in connection with co-operative creameries, and have proven to be a blessing to the community. As soon as enough women want them, and want them badly, co-operative laundries will relieve them of this heavy item of household labor. But while we are waiting for that much to be desired condition the washing process must go on, and some one must do them. Every woman should see that she has some machinery to help her, she needs these, as much as she needs a cook-stove. One should have a good washer and wringer, the latter helps to wash the clothes cleaner, by removing the dirty water, each time, but also saves them a great deal of wear and tear. A wash-board

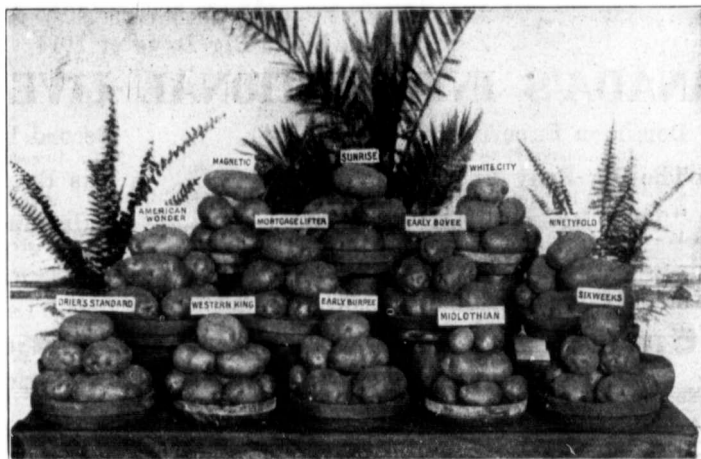
HARDY NORTHERN GROWN TREES—SHRUBS—FRUIT

Our Nursery was established in 1883. It is the oldest and largest in the West. That is what makes us reliable. We offer for Spring Planting:

100,000 Russian Golden Willows, 2-4 ft. high, per 100	\$ 5.00	500,000 Maples, 2-4 ft., per 100	\$ 5.00
3000 Russian Golden Willows, 6-8 ft., good trees, per 100	20.00	Gooseberry and Currant Bushes, hardy varieties, two years old; Raspberry Plants, hardy varieties; Rhubarb Roots, Horseradish, English Mint, Lilacs and all Hardy Shrubbery and Ornamental Trees and Plants.	
30,000 Laurel Willows, 2-3 ft., per 100	5.00		
500,000 Maple Seedlings, per 100	1.00		

Patmore's Reliable Seed Potatoes

We ARE and have been for 31 years the biggest GROWERS OF SEED POTATOES IN WESTERN CANADA



SEED POTATOES are unusually scarce this year. We offer:

Early Six Weeks	Honeyeye	Manitoba Wonder	Drier's Standard
Ashleaf Kidney	Early Bovee	Elephant	General Gordon
Sunrise	Northern Rose	Mortgage Lifter	Wee McGregor
Magnetic	American Wonder		

Patmore's PURE CLEAN RELIABLE Seeds

Brome Grass, per 100 lbs.	\$14.00	Timothy, per 100 lbs.	\$ 9.00
Western Rye, per 100 lbs.	12.00	Alfalfa, per 100 lbs.	20.00

Grown, Selected and Tested by Seedsmen with long practical experience in the Field—not in Offices

Patmore Nursery Company Limited

Brandon, Man. Saskatoon, Sask.

"Everything in Horticulture"

ESTABLISHED 1883

THE PATMORE NURSERY CO.
BRANDON, MANITOBA

Please send me your 1914 Catalogue on Garden and Field Seeds, Nursery Stock, Grasses, etc.

Name

Address N.W.F. 5-5-14

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

is sometimes necessary for very soiled garments, which cannot be soaked before putting them in the machine. For the best results, one should be very particular about keeping tubs and boiler clean, and to use clean soft water. Another good plan is to soak clothes, that is white clothes overnight, if possible, as it loosens the dirt, and they are easier made white. Ammonia, borax, sal-soda, coal oil and turpentine are some of the different things that can be added to the water in which clothes are boiled. I've found bluing very good to whiten clothes when added to the water in which clothes are boiled. I've also learned that when preparing the bluing water for white clothes, if one would add a half-cup of skimmed sweet milk to the bluing, and then add ingredients all to the water, that the clothes would not be streaked, and treated this way, you could let the clothes stand over

night in this bluing water, and they would not be streaked nor too blue. Gasoline is used for stains and cleaning gloves, silks, etc. To clean dainty laces, chiffon, etc., put gasoline and flour in sealer and put in laces, etc., and shake well, and they will not be injured in this way. Grain alcohol removes grass stains and medical stains. Colorless vinegar, common salt and sugar of lead are used to set colors. Muriac acid and Oxalic acid are used to remove rust and other stains. Javelle water is used to bleach and remove stains and is made as follows:—Dissolve 1 lb. of sal-soda in two quarts of water, when cold add quarter-pound of chloride of lime, mix thoroughly and let stand several hours. Pour off the liquid and bottle for use, and keep in a cool dark place. Javelle water bleaches very quickly, and very effective, so care must be taken or the fabric will be injured. Stretch

the cloth and moisten the stain, when the stain has disappeared rinse quickly in water into which ammonia has been added. Sulphur is used as a bleacher. It is burned, and the fumes are brought in contact with a moist stain. Powdered chalk is used to absorb stains. The sun is a very good bleacher, especially when the cloth is wet, and is aided by the green in grass or foliage. Ammonia and peroxide of hydrogen are good for taking stains out of woollen goods. Use equal parts of ammonia and peroxide of hydrogen, and moisten stain until it disappears. Blood stains can be removed by soaking in cold water, and then rub out. When stain is nearly gone use soap and water. If dry and cannot be got out in this way, use Javelle water or peroxide of hydrogen. Fruit stains can be removed by warming alcohol over hot water and apply to stain. Then use boiling water. There are so many com-



**WINNIPEG CITY
MAGNET**

CANADIAN INDUSTRIAL EXHIBITION



**THE GREAT
FAIR
OF
THE GREAT
WEST**

WINNIPEG, JULY 10th to 18th

The Eight Big Days of 1914

CANADA'S INTERNATIONAL LIVE STOCK SHOW

Dominion Experimental Farms

An Exhibition in itself

The Big Pony Show

A 1914 Feature; will delight the youngsters

"The Siege of Delhi"

A thrilling Historic Spectacle

Second Farm Boys' Club

Original with the C.I.E.

Gas Engine Demonstration

Arranged specially in the Farmer's interest

Fairland in Fireworks

Gorgeous set-pieces commemorating 100 years' peace

ANNOUNCEMENT EXTRAORDINARY! Beachey, the world's most daring aviator will Loop the Loop and Fly Upside Down at this year's Exhibition. You can't afford to miss seeing Beachey

\$75,000 in Premiums, Purses, Attractions

ENTRIES CLOSE JUNE 22nd

FRED. J. C. COX, President.

W. J. BOYD, Vice-President.

A. W. BELL, Manager and Secretary

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

positions of ink that it is difficult to say what method is best without knowing the composition of the ink. If the stain is removed before the ink had a chance to dry it can be done by soaking in sweet milk. Lemon juice and salt applied and spread on the grass in the bright sunshine is good. As a last resort try the Javelle water.

Mildew stains are sometimes removed by rising strong soap suds. Lemon juice and salt are also good. Butter-milk is also good for mildew if soaked in it, and left on the grass in the sun. Tea, coffee and cocoa stains may be removed by using boiling water. Alcohol is good for grass stains, especially on goods that can not be washed. It dissolves all the green coloring matter. For grease and oil stains rub with lard and let stand to soften, then wash out. Materials that cannot be washed in water, clean with gasoline, have several folds of soft towelling or other absorbent under the spot. Moisten the outside first, and rub toward the center to avoid leaving a ring on the cloth, when the stain has been removed. Ether and chloroform are sometimes considered better than gasoline.

For paint and tar stains use threpen-tine. For iodine stains use chloroform. For perspiration stains use strong soap suds, and let garment lie in the sunshine. Muratic acid is also used with good results. To discuss laundry work profitably it is necessary to know something of the nature of materials to be handled, and of means employed to bring about the desired results. With a satisfactory knowledge of these things intelligent results are sure to follow.

Mrs. M. Grimes.

WASHING.

(Read before Hanley Club.)

I am expected to make a few remarks to-day to you ladies regarding a subject that is, I am sure, well known to all present, namely, washing.

Now I do not think for a moment that I will be able to give you ladies

any new ideas, as I am sure there may be many modern methods that I am ignorant of, as I have simply been doing the washing in very much the old-fashioned way with the help of a washing machine and wringer, so that all I can say to you is to give you a few very simple plans which I consider helpful in the work of washing clothes.

In the first place, I consider a washing machine very essential, also a wringer. Then the water question is a very necessary requirement. Of course where soft water can be procured easily this part of the affair is soon settled, but where hard water only can be got there I find it a good plan to fill a barrel a few days previous to washing day, and soften it by putting two or three table-spoons full of Gillett's lye into it.

And, again, I have found it very helpful to have everything arranged the evening before, so as to cause as little delay in the morning as possible. Where the washings are large it saves some time to have a covered basket large enough to hold a week's washing, and to put into this basket according as they are discarded the clothes to be washed; it prevents any article from being overlooked.

Home-made hard soap is very satisfactory for the heavy and coarser clothes, but for the finer and lighter garments the napha or sunlight is best. In washing prints to prevent fading, soap in luke warm water, to which has been added salt, then rinse and dry quickly as possible.

In washing an article where soap may change the color instead of using soap take water that pared potatoes have been boiled in, and this method will also prevent colors from running in washing print.

Flannels should be washed and rinsed in water of the same temperature, and strong suds used in the washing. In cold weather they should be dried inside, as the frosty air causes shrinkage. To remove grease spots a tablespoonful of ammonia and soap used in cold water and will not affect colors in the article.

Mrs. Ed. Moore.

HOMEMAKERS' CLUB CONTINUES TO GROW.

Sessions Become Interesting—Visitors are Delighted with Progress.

March 12th

The regular monthly meeting of the Hanley Homemakers held at the home of Mrs. T. O. Hamre last Thursday afternoon, was a great success. Some fifty ladies were present, all of whom showed a marked interest in the afternoon's proceedings. After the business session was concluded, Mrs. Grimes and Mrs. Moore each gave a paper on the

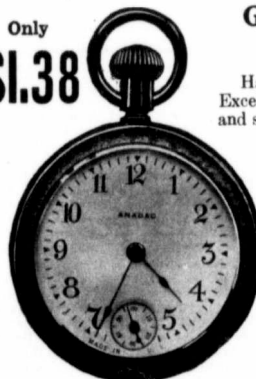
topic of the day, viz: "Washing and cleaning all kinds of goods," which were full of practicable advice, clearly showing they were experts in that line of work.

Mrs. McGregor gave a reading entitled "The minutes of a ladies' aid meeting" (by Mrs. McClung), which, judging by the applause, was highly enjoyed. Little Mildred Whittle gave a splendid recitation, while Ray and Mary McKenzie kindly rendered two musical selections on the piano.

The club was honored by having as guests, Mrs. McNaughton, of Piche, and

Don't Be Without a Watch

Only
\$1.38



EXACT SIZE

Greatest Value Ever Offered

Handsome made and finished. Excellent timekeeper. Stem winder and stem setter. Gold finish.

If not satisfied when you receive the watch return it at once. Money will be refunded to you. Can any offer be more fair?

Lawrence Glasco Co. 501 Keweyden Bldg. Winnipeg. Please send me one of your gold finished watches at the advertised price. The watch which I enclose \$1.38. Name P. O.

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

Miss Stocking, of Delisle, who are respectively president and secretary of the Woman Grain Growers' Auxiliary. Mrs. McNaughton gave a very interesting outline of the proposed work of the new organization she represented, and the benefits that would eventually accrue as a result of being affiliated with the main body of Grain Growers. Miss Stocking confined her remarks solely to an expression of delight in being a guest at such a large organization of ladies. The meeting closed with the singing of the National Anthem.

CUT KNIFE.

"THE PRACTICAL VALUE OF MUSIC."

(A paper read by Mrs. Ague.)
"Does it pay?"

In spite of scoffers a perfectly sane question. Does it pay a father of a family of boys and girls to spend his money for their musical education, or the city to spend its dollars for instruction in singing in our public schools? Does it pay a government to provide regimental bands for its armies? Or the nations of the world to encourage in every possible way the promotion of this art?

If the answer to each question cannot be given, and with good proof in the affirmative, then it is time we ceased to give talent, time and money to the support of the musical education of our children, and of men and women of our country. We have profited by the experiments of other lands in manners and methods of creating among the people a desire for the highest and best expressions of the human mind and heart, and have endeavored to solve difficulties peculiar to our own needs.

Does music in the home pay? If music were understood better; if parents and teachers would guide children to help them to interpret music, and would devote less time to technicalities, music would come to have a happier, deeper meaning to the child; his delight in good music would be akin to his pleasure in a good story. Parents owe it to their children to help them to understand and to enjoy what is good and beautiful in art, whether it be poetry, painting or music. Each makes man happier, ennobles him, helps him to realize a higher, intellectual, moral and spiritual standard. It cannot have a market value, it is beyond quotation, it is that which helps to make life worth while.

To realize the worth of a thing it is well to try to imagine what the world would be without it.

There is scarcely a public or private institution where the services of one or of many musicians are not required. It has its commercial value. It is not a mere plaything for entertaining the populace. The field for the musician is a large one, and it behoves us as a country to give every opportunity for musical education to our people as have other countries. We need thousands of musicians, and will need more as all people are made to realize the power for good music can be.

If we consider the child as the hope of our nation then the home is the first medium through which we can work. The family is the smallest unit, and upon its rests the success of all our larger institutions and its influence for good or bad is greater than we can measure. It is then in the home that the seed of culture should be sown, and it is so easy to inculcate a love for music in the family circle. Shall the son or daughter be made to practice for many hours, and money expended upon their lessons and upon an instrument, is a question for parents to consider well. When talent is lacking surely the child might better give his time to good healthy play, and spare his family and neighbors the necessity of listening for hours of each day to five-finger exercises and later to waltzes and marches drummed out to his one, two, three and one, two, three, four.

It is not absolutely necessary to become even an amateur performer in order to appreciate good music. We do learn, it is true, by doing, and we do not wish to deprecate musical instruction in the home. Let it, however, be of a sane, rational nature.

There are few people who have not at least voice enough to sing reasonably well in a glee or some form of chorus, and the time or money spent in learning to do so correctly is not great, while that of learning to play an instrument involves months of wearisome scale playing.

Protect Baby from the Summer Heat

Every mother knows the agony of seeing her child in the throes of pain and discomfort caused by the heat of summer, but every mother is not aware of how a great deal of this awful trouble may be avoided by a simple and perfectly natural system of dieting, discovered and perfected through long experience in children's dietetics.

Now is the time to get at this knowledge and to put it in practice. Don't wait until the season has advanced and the digestive organs of the little one have been seized and held by the merciless heat and quickly alternating changes of atmosphere which really do more than the actual "heat."

We again counsel our mothers everywhere to try the special baby-food prepared by Porter of Winnipeg, particulars of which will be found in another column and were referred to in our last issue. We would not wish to be thought mere "advertisers" of this inexpensive but most effective child's food, but really the testimony of the many medical men who are recommending it and the large number of appreciative mothers, who have expressed their thanks after repeated trials, compel us (especially at this opportune season) to put in a strong word in its behalf. The editor of this department has the fullest confidence in recommending any mother who has a little one to send for a sample of Porter's Food.

The Fairest Flower in the Garden

By PEARL RICHMOND HAMILTON

The Queen of Hush-a-bye Land sat on her magnificent throne making tiny white dresses. Her throne was at the top of a pyramid of Easter lilies and steps of yellow roses fashioned a stairway down to paths bordered by pansies and violets—these were the paths of Hush-a-bye garden, the most wonderful place in the whole world.

In each white lily about the throne a dear little cupid with a tiny violin daintily tuned his instrument. Suddenly the little cupid orchestra began a most exquisite serenade, and as they played, fairies moving in rhythmic harmony carried tiny babies to a bed of deep blue violets. Each baby kissed a violet and immediately the eyes became blue. Just as they were leaving a breath from the violets whispered: "Be modest little ones."

The babies then touched some roses and the pink and white of these beautiful flowers quickly tinted the skin of the little ones and they were carried away in their pink and white beauty.

This was the training class in Hush-a-bye Land for these babies were nearly ready to go into homes of the Earth-Land where kind men and good women had waited so long for baby sweethearts.

Now among these babies a dear little darling with very blue eyes and sweetly modest peeked through the curtain of Hush-a-bye Land and looked down into a home where there was not a single child. The big man sat near a table reading a paper and the lonely woman sewed on a piece of fancy work near a window. There was not a toy around, nor a tiny rattle nor a little boot nor a wee dress—it was just a bare empty house because there was no baby in it. Now the wee tot back of the curtain liked the kind smile on the big man's face. He looked just as if he would be the best daddy in the whole world if there were only a baby there to love him, and the woman seemed so sweet

THE Pleasant Choice of Wedding or Anniversary Gifts

which you wish to give can easily be made in the quiet and comfort of your own home.

Our Mail Order Book, with its 124 pages of clear-cut, accurate illustrations, is as helpful and interesting a companion as you could wish in making such a selection, and will give you the best ideas possible in what is best in appearance, quality and price in Jewellery, Silver, Silver Plate, Cut Glass and Brass Ware.

If you have not a copy of this Catalogue of ours write us, sending your name and address, and we will see that a copy is mailed you at once.

D. R. Dingwall
Limited
Jewellers
Winnipeg



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



Mason & Risch Pianos

"FROM FACTORY TO HOME"

17 WESTERN BRANCH STORES

"Mason & Risch"—this name is synonymous with all that is BEST in piano construction.

A reputation of this nature can be maintained year after year only through using GREATEST care in the selection of materials and STRICTEST attention to all manufacturing details.

Get the whole interesting story of HOW it's made in greater detail by writing for our latest booklet "Inside Information." It will remodel your ideas of Piano perfection.

Write for it TO-DAY! It's free.

MASON & RISCH LIMITED
WINNIPEG, MAN.

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

Double The Yield of The Garden

We Want You to Try Rennie's Tested Seeds This Spring
OUR CATALOGUE

Is larger and better than ever, and includes several splendid new varieties. For 45 years the leading authority on Vegetable, Flower and Farm seeds, Plants and Bulbs. You need it before you decide what kinds to plant. Send for your copy to-day.

WM. RENNIE CO. Limited
Also at Toronto, Montreal and Vancouver
394 Perigo Avenue, WINNIPEG

With Rennie's Seeds

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

and motherly just like the kind that would love a baby all the time if she had one in her arms, so the little one made up her baby mind then and there to go into that very home.

But the fairy reminded her of some lessons yet to be learned in Hush-a-bye Land and the wee one obeyed. She kissed a red pony and got her ruby lips. At the end of the garden was a bed of roses where babies learn to smile. The wee girlie lingered there and came away with a rose-bud mouth.



The Little Lady with the Beautiful Smile

"Dark or golden hair—which shall it be?" asked the good fairy.
 Baby looked very wise.
 "Brown or golden?" again repeated the fairy.
 But baby could not decide until the good fairy carried her over towards the dandelions. All golden haired babies get the color from the dandelions. Then she learned to smell from a bed of carnations.

By this time the flower garden swarmed with fairies and babies moving about among the roses, peonies, dandelions and carnations while the dear little

cupid in the lilies played most divinely. They learned from the mignonette—meekness; from the butter-cups—cheerfulness; from the daisy—daintiness; from the heliotrope—helpfulness; from the tulip—truthfulness; from the clover—cleanliness; and from that human-like flower that ever looks up to heaven—the pansy, they learned to love God.

Finally after the birds had taught them a lesson in singing they all gathered about the throne of Hush-a-bye Land.

Such a wonderful garden of flowers, music, sunlight, and love.
 Is it any wonder that babies are perfectly sinless?

Did I not say that the throne was made of pure white lilies?
 There sat the queen with her arms and lap full of beautiful lilies, and a crown of lilies on her golden hair.

Do you know the lesson she taught them—their final lesson? When this was learned they were ready for Earth Land. It was the lesson of the lilies—purity.

Then the queen blessed them, and each little cupid came down from his seat in the lily flowers and kissed the babies on the cheeks, chins, and elbows, and that is how they got their dimples—they are love kisses.

Each little fairy angel took her baby now and hastened to Slumber Land—which is in the paradise of stars, where hundreds and hundred of hammocks were swinging. Each hammock was fastened to two twinkling stars. In these hammocks the babies were lulled to sleep and the fairy angels filled the air with harmony as they sang:
 "Hush-a-bye baby among the bright
 stars,
 Sleep, sweetly sleep, 'neath the blue,
 blue sky,
 Soon you will pass through the flowery
 bars,
 Down to the earth from Hush-a-bye."
 They were near—yes, very near to the Heavenly Land of the Christ Child.

The next morning someone whispered at the door of the home of Mr. and Mrs. Irons—"What is it a boy or girl?" For the wee tot from Hush-a-bye Land who had seen the home without a child had come to stay and the daddy and mother were very very happy and they named her Helen.

Helen loved her daddy and mother and the days passed so quickly that wee Helen was two years before they realized it.

All through her babyhood she had been sweetly beautiful for she had never forgotten her lessons learned from the flowers in Hush-a-bye Land, and for this reason every one thought she was just like a beautiful flower.

Now when Helen was two years old her daddy and mother took her to her grandfather's farm—a place just full of wonderful sights for a little girl from the city.

She called her grandfather "Gugga" and her grandmother, "Gugga-mamma." When her grandfather was in the fields where Helen could see she would stand in the door-way and call to him. Sometimes he would wave his hand.

When the horses were brought to the pump for a drink wee Helen would be at the pump and make believe that she was pumping for the, but of course the pump was far too heavy for her.

There was a wee colt named "Fanny" that Helen liked very much but she was afraid of it when it would gallop up for a piece of sugar. Her favorite on the farm was "Sporty" the dog. "Sporty" would run around Helen and when he came near her she would say "Watch 'ossif 'Portey, no get 'eited." She liked to get her daddy to put her on the wheel barrow and give her rides around the yard, and she liked to pick the big red strawberries that looked so tempting.

Helen was very happy on the farm and when the time came for her to go home, she left two broken hearts behind her—for "Gugga" and "Gugga-mamma" missed their little sweetheart very much.

But Teddy Bear at home wanted Helen and her dollies were lonely and her dishes were neglected so wee Helen really had to go home to attend to the needy, and the story now is brought to the present. Teddy is her best friend. She takes him out for walks. At dinner time she always puts a bib on him and

The Secret

of correct dressing is snug-fitting underwear. Besides improving the look of one's outer garments it assures the utmost in comfort while giving one the satisfaction of being well-dressed from the skin out.

Penmans Underwear is actually knit to form—knit with mechanical precision to fit the varying types of men, women and children—knit to retain its shapeliness—knit from the best selected wools.

When you buy Penmans underwear you can be sure of its lasting, smooth-fitting qualities. No. 95 natural wool garment is a great favorite—ask to see it. Look for the trademark

Penmans Limited
 Paris, Canada

Underwear 90
 Hosiery
 Sweaters

Penmans Underwear



gets her mama to put a piece of potato on her little plate for him. She has a little table and chairs of her own and puts Teddy on a chair by the table so he can eat his dinner.

Nothing pleases her more than to have her mamma let her dry some spoons for her and if her mother is not very busy Helen asks to have her own granite dishes washed so that she can dry them.

Helen's mind is bright with memory rhymes and she repeats "Old King Cole," "Jack Sprat," "Ding-Dong Bell" and many other jingles. When bed time comes she never forgets to ask mamma to listen while she says:

"Now I lay me down to sleep,
 I pray the Lord my soul to keep.
 If I should die before I wake,
 I pray the Lord my soul to take."

Helen is a happy little girl, she is a real princess of childhood for a real princess always has a smile. Her picture is on the cover of the magazine—the little girl at the pump on her grandfather's farm, and the picture in this department is also Helen's. Her daddy likes to catch these smiles before they get away—but Helen is going to keep them until she is a big lady so people will say, "Here is Helen Irons—the lady with the beautiful smile."

PORTER'S FOOD
Saved this Baby's Life!
 Mrs. Elliott, 410 Lipton St., Winnipeg, as a last resort, on the advice of her Doctor, gave her baby Porter's Food; after three days on this food the baby showed great improvement, and is now happy and well.

Porter's Food is made entirely from Canadian Wheat-flour and Oatmeal. The process by which it is manufactured makes it perfectly digestible by the youngest and most delicate babies. It is to be used with cow's milk and water, and is proved to be the best means of diluting cow's milk, making it the best possible substitute for Mother's Milk.

Porter's Food is an excellent digestive food for invalids and the aged. Nursing Mothers derive great benefit from using it.

If your druggist does not stock Porter's Food write direct to me—on receipt of \$1.00 I will send a large tin to any address in Canada post free—or send 5c in stamps to cover postage of free 1/4-lb. sample tin.

Ask your druggist or write direct to

George Porter, 309 VICTOR STREET, WINNIPEG

Mention this magazine when writing advertisers

LC
 S
 AU

Co
 A sudd
 into the
 "Be sensi
 claimed.
 with a pi
 "My w
 If you ha
 will do.
 I was me
 of my Ha
 His sho
 slacked
 warped in
 digger, he
 again. T
 around
 buried t
 burying-g
 loose-ha
 which we
 able proc
 ing its ov
 "Good
 muttered.
 The mu
 "In plain
 two spad
 Speech
 into the c
 with the
 out and d
 "Get in
 "If we
 said Sedg
 seat, "wh
 before?"

The otl
 "You're
 usual," he
 be done l
 "Well,
 cried th
 excitement
 the car, I
 Kent's
 deliberate
 said he;
 "this—nov
 to withdr
 "That's
 artist. "
 that to m
 The c
 your par
 "We're b
 tonight.
 understand
 mind?"

"Just t
 ground is
 said as m
 ber? He
 next door
 sleepless

A NOVELTY IN MYSTERY STORIES
THE SECRET OF LONESOME COVE
 By
SAMUEL HOPKINS ADAMS
 AUTHOR OF AVERAGE JONES ETC
Copyright, 1913, The Bobbs-Merrill Company.

Continued from page 81 April.

A sudden thought struck cold into the heart of Sedgwick. "Be sensible, can't you?" he exclaimed. "What do you want with a pickax and spade!" "My wants are few and small. If you haven't a pick, two spades will do. In fact, they'll be better. I was merely sticking to the text of my Hamlet."

His shoulders slumped, his jaw slackened, and, as his figure warped into the pose of the grave-digger, he wheezed out the couplet again. The cold thought froze around Sedgwick's heart. He visioned the wet soil of Annalaka burying-ground, heaped above a loose-hinged pine box, within which went forward the unthinkable processes of earth reclaiming its own.

"Good God! Is it that?" he muttered.

The mummer straightened up. "In plain prose, do you possess two spades?" he inquired.

Speechless, Sedgwick went out into the dark, presently returning with the tools. Kent took them out and disposed them in the car. "Get in," he directed.

"If we had to do this, Kent," said Sedgwick, shuddering in his seat, "why haven't you done it before?"

"The other turned on the power. You're on the wrong track as usual," he remarked. "It couldn't be done before."

"Well, it can't be done now," cried the artist in sudden sharp excitement. "It won't do. Stop the car, Kent!"

Kent's voice took an ominously deliberate measure. "Listen," said he; "I am going through with this—now—tonight. If you wish to withdraw—"

"That's enough," growled the artist. "No man alive can say that to me."

The car slowed up. "I beg your pardon, Frank," said Kent. "We're both of us a little on edge tonight. This is no time for misunderstandings. What is on your mind?"

"Just this, Annalaka burying-ground is watched. Lawyer Bain said as much. Don't you remember? He told us that the house next door is occupied by an old sleepless asthmatic who spends

half her nights in her window overlooking the graves."

The car shot forward again. "Is that all?" asked Kent.

"Isn't it enough?" "Hardly. We're not going within miles of Annalaka."

"Then our night's work is not—" Kent could feel his companion's revolt at the unuttered word, and supplied it for him.

"Grave robbery? It is."

"Where?" "In the private burying-ground on the Blairs' estate."

"Wilfred Blairs' grave? When was the funeral?"

"This morning. I was among those present, though I don't think my name will be mentioned in the papers."

"Why should you have been there?"

"Oh, set it down to vulgar curiosity," said Kent.

"Probably you'd say the same if I asked you the motive for this present expedition. I suppose fully appreciate the chance you are taking?"

"Didn't I tell you that it was rather more than a life-and-death risk?"

Something cold touched Sedgwick's hand in the darkness. His fingers closed around a flask. "No, no Dutch courage for me. Where is this place?"

"On Sundayman's Creek, some fourteen miles from the Nook as the motor-car flies."

"Fourteen miles," repeated Sedgwick musingly, following a train of thought that suddenly glowed, a beacon-light of hope.

"And these Blairs have some connection with the dead woman of the cove, the woman who wore her jewels." His fingers gripped and sank into Kent's hard-fibered arm. "Chet, for the love of heaven, tell me! Is she one of these Blairs?"

"No nonsense, Sedgwick," returned the other sternly. "You're to act,—yes, and think—under orders till this night's job is done."

There was silence for nearly half an hour, while the car slipped, ghostlike, along the wet roadway. Presently it turned aside and stopped.

"Foot work now," said Kent. "Take the spades and follow."

He himself, leading the way,

RENNIE'S SEEDS



Our new Seed Catalogue is larger and better than ever before. Contains everything in seeds, bulbs, small fruits and plants worth growing. 420 illustrations; 120 pages. Any gardener sending his name on a postal card can have it for the asking.

SEND FOR IT TO-DAY.

Send 15 cents (stamps) and we will enclose in the catalogue a packet of our GIANT PANSY.

No. 1357. Rennie's Royal Exhibition Pansy. Per pkt. 25c.

WM. RENNIE CO. Limited

Also at Toronto, Montreal and Vancouver

394 Portage Avenue, WINNIPEG



Women Wanted
 —who want charming homes

A charming home is the outward expression of a woman's sense of beauty—It is not the result of lavish spending. You can have a beautiful home—every room glowing with warmth and cheerfulness and decorated to harmonize with a general color scheme—if you use

Alabastine

"Alabastine" is the twentieth century finish—something vastly better than paper or kalsomine, because—

Wall paper is placed on a layer of paste—

This is nothing more or less than a nursery for germs and insects—

Besides most wall paper is saturated with arsenic in sufficient quantities to impair health.

Then ordinary kalsomine is bound to chip, blister, crack, peel or rub off—

It's base is only whitening and animal glue—a combination with no solidifying or sanitary qualities.

"Alabastine" has antiseptic properties—

Germs cannot live on or in it. Once the walls of a room are coated with "Alabastine" there is no necessity for re-decoration after sickness.

"Alabastine" has stood the test of time and is to-day more popular than ever—

It is more economical than either wall paper or kalsomine and far more sanitary.

Anybody can apply "Alabastine"—

Just mix with cold water and use a flat bristle brush.

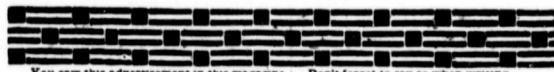
With our numerous tints and white any color scheme can be easily and artistically carried out.

Free Stencils

Our staff of trained decorators will perfect any color scheme for you absolutely free of charge. Also supply free stencils exactly suited for your purpose. Your Hardware or Paint Dealer will supply you with "Alabastine." But write for full particulars, and free booklet.

THE ALABASTINE CO., LTD.,

79 Willow St. - Paris, Canada.



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

Buy Your Seeds From a House of PRESTIGE

There's a big difference between seeds bought from established, reliable seedmen and those bought from a house of no particular prestige. Sow to grow! Use our tested seeds. Write for handsome illustrated Catalogue. A post card brings it by return mail.

Valuable Premium Free
With your first order we send you, absolutely free, an attractive premium. See page one of our catalogue.

Darch & Hunter Seed Co.
Box 1273 Ltd.
London, Ont. Canada

\$35

DOMINION BICYCLES

FOR

\$25



These famous Bicycles now sold at little more than the cost of manufacture. The Dominion retails at \$35 in Winnipeg, but you can buy it by mail for \$25. Equipped with mud guards, wood or steel Dunlop rims, roller chain, New Departure Coaster, rubber pedals, pump and tools.

Sundries and Tires at wholesale prices to everyone. Send for our illustrated free catalog.

Dominion Cycle Company
224-6 LOGAN AVE.
Winnipeg, Man.

Don't Burn Out the Temper of Your Tools

Here's a grinder that puts a sharp cutting edge on farm tools without injuring them. Never wears humpy. Anyone can use a

CLEVELAND Grindstone

made from the only Berea stone, famous for its even grit, just right for farm use. The standard by which all grindstones are judged. 8 out of every 10 makers of farm implements use CLEVELAND GRINDSTONES in their own shops. They know what grinds best. We guarantee every stone to do good work. If it doesn't, we refund your money.

Farmer's Special
Here's the identical stone you need. Specially selected by our experts. Genuine Berea stone. Hard-wood frame. Ball bearings. Hand or engine power. Write for booklet "The Grit that Grinds", and name of dealer who will supply you.

THE CLEVELAND STONE CO., INC.
1125 LEADER NEWS BLDG., CLEVELAND, OHIO



MEN WANTED AT ONCE TO ATTEND the Chicago School of Gasoline Engineering in Winnipeg; to learn to operate and repair gas tractors, automobiles, auto trucks, also stationary, marine and tractor gasoline engines; only a few weeks required to learn. We have our own free employment agencies in most every large city in Canada and the U.S.A. Our school is steam heated, equipped with every modern machine used in connection with automobiles and gas engines; our head instructor is employed by the city of Winnipeg to lecture evenings on "Gasoline Engineering" at the city public technical school. Call or write for free illustrated literature.

Main Street (opposite City Hall), Winnipeg (Upstairs)

carried a coil of rope on his shoulders. For what Sedgwick reckoned to be half a mile they wallowed across soaked meadows, until the whisper of rain upon water came to his ears.

"Keep close," directed his guide, and proceeded down a steep bank.

The stream was soon forded. Emerging on the farther side they scrambled up the other bank into a thicker darkness, where Sedgwick, colliding with a gnarled tree trunk, stood lost and waiting. A tiny bar of light appeared. It swept across huddled and half-obiterated mounds, marked only by the carpet of myrtle—that faithful plant whose mission it is to garland the graves of the forsaken and the forgotten—shone whitely back from the headstone of the old slave-trader, came to a rest upon a fresh garish ridge of earth, all pasty and yellow in the rain, and abruptly died.

"Too dangerous to use the lantern," murmured Kent. "Take the near end and dig."

Delving, even in the most favorable circumstances, is a fairly stern test of wind and muscle. In the pitch blackness, under such nerve-thrilling conditions, it was an ordeal. Both men, fortunately, were in hard training. The heavy soil flew steadily and fast. Soon they were waist deep. Kent, in a low voice, bade his fellow toiler stop.

"Mustn't wear ourselves out at the start," he said. "Take five minutes' rest."

At the end of three minutes, Sedgwick was groping for his spade. "I've got to go on, Chet," he gasped. "The silence and idleness are too much for me."

"It's just as well," assented his commander. "The clouds are breaking, worse luck. And some one might possibly be up and about, in the house. Go to it!"

This time there was no respite until, with a thud which ran up his arm to his heart, Kent's iron struck upon wood. Both men stood, frozen into attitudes of attention. No sound came from the house.

"Easy now," warned Kent, after he judged it safe to continue. "I thought that Jim dug deeper than that. Spade it out gently. And feel for the handles."

"I've got one," whispered Sedgwick.

"Climb out, then, and pass me down the rope."

As Sedgwick gained the earth's level, the moon, sailing from behind a cloud, poured a flood of radiance between the tree trunks. Kent's face, as he raised it from the grave, stretching out his hand for the cord, was ghastly, but his lips smiled encouragement.

"All right! One minute, now, and we're safe."

Saves one ton in seven

Figure up your annual coal bill, divide it by seven, and you have the amount the Hecla Furnace will save you every year. The steel-ribbed fire-pot does it. Adding steel ribs to the fire-pot increases its radiating surface three times more than is possible by any other method. The steel-ribbed fire-pot heats the air quicker. It sends the heat through the registers instead of up the chimney. Examine the Hecla. Compare it with other Furnaces. You will find every feature that makes for convenience and ease of operation. But the Hecla is the only one that has the Steel-ribbed Fire-pot—the fire-pot which saves thousands of users one ton of coal in seven.

HECLA FURNACE
No Gas or Dust

Section of fire-pot showing ribs of steel plate which save 1 ton in 7.

Burns wood as well as coal.

And this furnace cannot possibly leak gas or dust. The joints, usually bolted or cemented, are fused in the Hecla in a perfectly tight joint. Time and service cannot loosen the Fused Joint. The fusing welds the Hecla Radiator into one piece.

Our Booklet "Comfort & Health" should be in the hands of everyone who has a heating problem to solve. It will be sent free of charge.

CLARE & BROCKEST LIMITED,
Winnipeg, Man.



THE CAR FOR THE FARMER'S FAMILY

BECAUSE the cost of operating it is practically out of sight. It is all in the first cost—the initial price of the car. The market is flooded with machines that cost a few dollars less at the start than the HUPMOBILE, but the second cost in operating expenses becomes a ruinous affair to the owner.

Write for New Catalogue and Full Specifications

JOSEPH MAW & CO., Limited
112 KING ST., WINNIPEG, MAN.



Don't Fail to Renew Your Subscription Before it is Too Late.

Write Harness, illustrate of West owners' THE B Co

Mention this

THE ARLE OF SAN DE FRAN TOR

All "ARL" but our CH Mention this

P LLOYD Hope Bld Write Mention this

E. V. CH CHAP A 545 Some WINNI

Mention this

Arm 1 1/2 to Eng

If you exact econo running- and stea forget he

Build

Arm complete i all over the men need to operate.

these men power to d for over 45: the Arm

N

We don g ear drive gives ove advantages quality ad Armstrong that it is tive tests they have in a clas

Let us Arm going with of unequall utaracter.

If you ne

11-2 to B Horsepowe

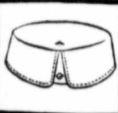
Armstr 354 Drin Home Office an

HARNESS

Write for our catalogue of Quality Harness. Over 60 sets described and illustrated, together with complete line of Western saddles and all horse owners' requirements.

THE BIRT SADDLERY COMPANY
Cor. Main and Market Sts.
Winnipeg, Manitoba

Mention this magazine when writing advertisers.



CHALLENGE COLLARS

Acknowledged to be the most effective of Waterproof Collars ever made. Ask to see, and buy no other. All stores or direct for 25c.

THE ARLINGTON CO.
of Canada, Ltd.
88 PRINCE AVENUE
TORONTO

All "ARLINGTON COLLARS" are good, but our CHALLENGE BRAND is the best. Mention this magazine when writing advertisers.

PATENTS

LLOYD BLACKMORE & CO. LTD.

Hope Bldg., 63 Sparks St., Ottawa, Ont.

Write for Free Book of Information.

Mention this magazine when writing advertisers.

E. V. Chaplin J. R. Young, C.A.
T. Anderson, C.A.

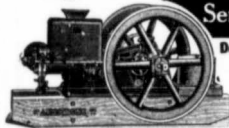
CHAPLIN, YOUNG & ANDERSON
Accountants and Auditors

545 Somerset Building Phone
WINNIPEG, Man. MAIN 2153

Mention this magazine when writing advertisers.

Armstrong
1 1/2 to 20 H.P.
Engines

An Engine Built for Hard Service



Delivers 100 Cents in SERVICE For Every Dollar Invested

If you want an engine that is built for exacting, dependable service—that is economical in first cost and cost of running—one that runs so true and smooth and steady and QUIET that you can just forget her—HERE'S YOUR ENGINE.

Built For Old Customers First

Armstrong Gas Engines right up from the raw material are built complete in our own factory. They are shipped all over the world to our regular customers—to men needing a dependable trouble-proof engine to operate *Armstrong* Well-Drills & Machinery. Naturally these men get absolutely the best that lies in our power to devise. And we've been in the business for over 45 years. Today men say no engines excel the *Armstrong* in durability and simplicity of construction.

Magneto Free

We don't tell you ours is the only good gas engine. But with its wonderful built-in gear driven magneto—furnished with all engines over 1 1/2 H.P.—with other striking advantages—with the same standards of quality adhered to that have put the name Armstrong to the very front—we do claim that it is close to perfection. After comparative tests side by side with other engines, they have seemed to put the Armstrong Engine in a class by itself.

Let Us Send You Full Facts—Owners of *Armstrong* Engines get real protection. The written guarantee going with each engine is the strongest indication of unequalled quality ever submitted by a manufacturer.

If you need an engine, you should at once write us. Just say "Send Armstrong facts." Do it today.

Armstrong Manufacturing Co.
354 Drinkle Block, Saskatoon, Sask.
Home Office and Factory, Waterloo, Iowa. Estab. 1867

"Safe!" repeated the other. "With that opened grave! I shall never feel safe again."

From between the earthen walls Kent's voice came, muffled. "Safe as a church," he averred, "from the minute that we have the coffin. Take this end of the rope. Got it? Now this one. It's fast, fore and aft. Here I come."

With a leap he clambered out of the excavation. He took one end of the rope from Sedgwick's hand. "All ready to haul?" he inquired in matter-of-fact tones.

"Wait. What are we going to do with this—this thing?" demanded his co-laborer. "We can never get it to the car."

A low chuckle sounded from the shrubby back of them. The resurrectionists stood, stricken.

"An owl," whispered Sedgwick at length.

"No," replied Kent in the same tone. Then, in full voice, and with vivid urgency, "Haul!"

Up came the heavy casket, bumping and grating. Even through the rope Sedgwick felt, with horror, the tumbling of the helpless sodden body within. With a powerful effort Kent swung his end up on the mound. The lantern flashed. By its gleam Sedgwick saw Kent striving to force his spade-edge under the coffin lid, to try to pry it loose. The chuckle sounded again.

"That's enough," said a heavy voice, with a suggestion of mirthful appreciation.

Sheriff Len Schlager stepped from behind a tree. He had a revolver on Kent. Sedgwick made a swift motion and the muzzle swung accurately on him.

"Steady, Frank," warned Kent anxiously.

"I'm steady enough," returned the other. "What a fool I was not to bring a gun."

"Oh, no," contradicted the scientist. "Of what use is my gun? We're in the light, and he is in the shadow."

"So you've got a gun on you, eh?" remarked the sheriff, his chuckle deepening.

"I didn't say so."
"No; but you gave yourself away. Hands up, please. Both of you."

Four hands went up in the air. Kent's face in the light was very downcast, but from the far corner of his mouth came the faintest ghost of a whistled melody—all in a minor key. It died away on the night air and the musician spoke in rapid French.

"Attention! La ruse gagne. Quand lui donnerai le coup de pied, battez-le à terre."

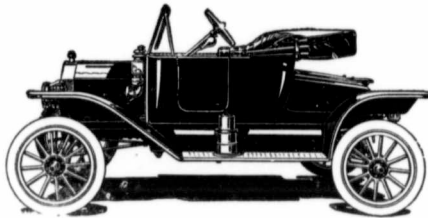
"What's that gibberish?" demanded Schlager.

"Very well," said Sedgwick quickly, in the tone of one who accepts instructions. "I'll be still



The Ford—the Lightest, Surest, Most Economical—the very essence of automobiling—and all Canadian

Model T \$ 600
Runabout
I. O. B. Ford,
Ontario



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



STANDARD Gas Engine Oil

Recommended by leading builders for all types of internal combustion engines, both tractor and stationary—gasoline and kerosene. Keeps its body at high temperature, leaves practically no carbon deposit. Equally good for external bearings.



PRAIRIE Harvester Oil



The most durable oil for farm machinery. Stays on the bearings; will not gum or corrode; not affected by weather.

Eldorado Castor Oil
Thresher Hard Oil **Arctic Cup Grease**

Imperial Oil Co. service puts these products within the reach of anyone in the Dominion.

Write any agency.

THE IMPERIAL OIL COMPANY, Limited

Toronto	Montreal	Winnipeg	Vancouver
Ottawa	Quebec	Calgary	Edmonton
Halifax	St. John	Regina	Saskatoon

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



SYNOPSIS OF CANADIAN NORTH-WEST LAND REGULATIONS

THE sole head of a family, or any male over 18 years old, may homestead a quarter-section of available Dominion land in Manitoba, Saskatchewan or Alberta. The applicant must appear in person at the Dominion Lands Agency or Sub-Agency for the District. Entry by proxy may be made at the office of any Local Agent of Dominion Lands (not sub-agent), on certain conditions. Duties—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres, on certain conditions. A habitable house is required in every case, except when residence is performed in the vicinity.

In certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$3 per acre. Duties—Six months' residence in each of six years from date of homestead entry (including the time required to earn homestead patent) and 50 acres extra cultivation. The area of cultivation is subject to reduction in case of rough, scrubby or stony land after report by Homestead Inspector on application for patent.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption may take a purchased homestead in certain districts. Price, \$3 per acre. Duties—Must reside six months' in each of three years, cultivate 50 acres and erect a house worth \$300.

W. W. CORY,

Deputy of the Minister of the Interior. N.B.—Unauthorized publication of this advertisement will not be paid for.—37085. Mention this magazine when writing advertisers

1877-1913

Thirty-six years' experience in brewing

Drewry's Redwood Lager

tells the story of its popularity

TRY IT

Mention this magazine when writing advertisers

CHEW MAPLE SUGAR TOBACCO

MILD, SWEET, MELLOW AND JUICY
Manufactured by
ROCK CITY TOBACCO CO.
Quebec Winnipeg

Mention this magazine when writing advertisers

enough. Go ahead and do the talking."

"Better both keep still," advised the deceived sheriff. "Anything you say can be used against you at the trial. And the penalty for body-snatching is twenty years in this state."

"Yes; but what constitutes body-snatching?" murmured Kent.

"You do, I guess," retorted the humorous sheriff. "Steady with those hands. Which pocket, please, Professor?"

"Right-hand coat, if you want my money," answered the scientist sullenly.

"Nothing like that," laughed the officer. "Your gun will do, at present."

"I haven't got any gun."

"I hear you say it! Remember, mine is pointed at your stomach."

"Correct place," approved Kent, quietly shifting his weight to his left foot. "It's the seat of human courage. Well!" as Schlager tapped pocket after pocket, without result, "you can't say I didn't warn you. Now, Frank."

With the word there was a sharp spat as the heel of Kent's heavy boot, flying up in the coup de pied of his own devising, caught the sheriff full on the wrist breaking the bones, and sending the revolver a-spin into the darkness. As instantly Sedgwick struck, swinging full-armed, and Schlager went down, half-stunned.

"Pin him, Frank," ordered Kent.

But Sedgwick needed no directions, now that resolute action was the order of the moment. His elbow was already pressed into the sheriff's bull neck. Schlager lay still, moaning a little.

"Good work, my boy," approved Kent, who had retrieved the revolver.

"Who clubbed me?" groaned the fallen man. "I didn't see no third feller. And what good is it going to do yoo, anyway? There you are, and there's the robbed grave. Exaggerated by assault on an officer of the law," he added technically.

"That is right, too, Kent," added Sedgwick with shaking voice. "Whatever we do, I don't see but what we are disgraced and ruined."

"Unless," suggested Kent with mild-toned malice, "we rid ourselves of the only witness to the affair."

A little gasp issued from the thick lips of Len Schlager. But he spoke with courage, and not without a certain dignity. "You got me," he admitted quietly. "If it's killin'—why, I guess it's as good a way to go as any. An officer in the discharge of his duty."

"Not so sure about the duty,

19

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

Just Tell Us Where You Live and We'll Send You OUR NEW BIG FREE CATALOG

It is crammed full of money-saving bargains at prices that guarantee a saving of 25 to 50 per cent. You will find a complete line of FURNITURE, STOVES, VEHICLES, GROCERIES, HARDWARE and numerous other articles for the Home and Farm. Every article listed is GUARANTEED to give entire satisfaction, or your money will be refunded immediately, together with all freight charges. We will send you this BIG CATALOG FREE on receipt of your name and address. It will be the means of saving you considerable on your purchases, besides giving you merchandise of QUALITY that is only obtainable at our store.

NEW COMFORT KITCHEN CABINET

Never before have you seen such a beautiful Kitchen Cabinet. Made of high grade maple, every piece of wood used in the construction is thoroughly kiln dried and the best workmanship possible is put into its construction. Compare it with what you have seen offered elsewhere at \$25 to \$30. Contracting for these cabinets in 1,000 lots enables us to obtain a price fully 25 per cent lower than any other dealer.

No. C46 Kitchen Cabinet. Price **\$21.75**

THE BASE is 48 in. wide, by 28 in. deep, contains two pastry boards, long linen drawers, three smaller drawers, large tilting flour bin, large cupboard, with rack and heavy corner posts. TOP has two large china cupboards, below which are two tilting sugar bins in centre, a large cupboard, with bevel plate mirror 10 x 14, drawer and large shelf. Finished in natural or cherry. No. C46 Kitchen Cabinet. Price **\$21.75**

THE FARMERS' SUPPLY CO. LIMITED
Dept. C.T., 173-177 BANNATYNE AVE. EAST, WINNIPEG, CAN.

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

The World's Best Eveners Help to Stop Your Farm Leaks

Heider 2, 3, 4, 5 and 6-horse eveners on the market 12 years. Often imitated but not equalled. The Heider 4-horse plow evener works 4 horses abreast on gang, sulky or disc plow, one horse in furrow, three on unplowed ground. Heider 3-horse wagon evener for wagon, manure spreader, grain drill or other implements with pole.

HEIDER EVENERS are the means of many short-cuts in farming. They save time, labor and horses, consequently make you money. The Heider line is complete and manufactured in the largest evener factory in the world and is no experiment. They are made right by expert workmen, of best material and fully guaranteed. Why take chances with the ordinary kind when you can get the best? ASK YOUR DEALER for Heider Eveners. If he has none in stock, write us for free circular showing entire line and we will tell you where to get them. Address: **Heider Mfg. Co., 725 Main St., Carroll, Iowa**

Write for Free Circular Showing Full Line

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

Fistula and Poll Evil

Any growth, however insignificant, can readily cure either disease with Fleming's

Fleming's Fistula and Poll Evil Cure—even bad old cases which doctors have abandoned. Easy and simple to use. Just a little attention every day—and your money refunded if it fails. Cures most cases within thirty days, leaving the horse sound and smooth. Particulars given in Fleming's Vest-Pocket Veterinary Adviser. Write us for a free copy. Sixty-six pages, covering more than a hundred veterinary subjects. Durable bound, illustrated and illustrated.

FLEMING BROS., Chemists, Church Street, Toronto, Ont.

Well Drilling Machines

Over 70 sizes and styles, for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on gins or horse sills. With engines, strong, simple, durable. Any mechanic can operate them. Send for catalog.

WILLIAMS BROS., ITHACA, N. Y.

Imperial Bank OF CANADA

Established 1875

Capital Authorized \$10,000,000
 Capital Paid Up 6,925,000
 Reserve and Undivided Profits 8,100,000
 Total Assets 22,000,000

BRANCHES IN WESTERN CANADA

Province of Manitoba
 Brandon Portage la Prairie Winnipeg

Province of Saskatchewan
 Balgonie Broadview North Battleford
 Southern Fort Qu'Appelle Prince Albert
 Saskatoon Moose Jaw Regina
 Wynnie Hague Wynyard

Province of Alberta
 Athabasca Landing Edmonton Strathcona
 Banff Lethbridge Wetaskiwin
 Calgary Red Deer Rediff
 Rocky Mountain Hqs. Medicine Hat Millet

SAVINGS DEPARTMENTS AT ALL BRANCHES

Interest allowed at Current Rates
 Drafts and Letters of Credit issued available in all parts of the world.

Winnipeg Branch
R. G. LESLIE, Manager.

SPRAY PUMPS

Double-spring Lift Tank and Spray

MYERS

Stayson Flexible Door Hangers

with steel roller bearings, easy to push and pull, opens in Showers if the track—hence its name—Stayson. Write for descriptive literature and prices. Exclusive Agency given to right party who writes to us.

W. F. WILSON & CO., Agents.

Boring Machine

THE ORIGINAL PECH

THE OLD RELIABLE

Improved Up-to-date Drilling Machines

Highest to operate Bore Faster Most Durable

DESCRIPTIVE CATALOGUE FREE

Cherokee Mfg. Co., Dept. A, Cherokee, Iowa.

Mention this magazine when writing advertisers.

Schlager," said Kent with a change of tone. "But your life is safe enough, in any event. Pity you're such a grafter, for you've got your decent points. Let him up, Sedgwick."

Relieved of his assailant's weight, Schlager undertook to rise, set his hand on the ground, and collapsed with a groan.

"Too bad about that wrist," said Kent. "I'll take you back in my car to have it looked after as soon as we've finished here."

"I s'pose you know I'll have to arrest you, just the same."

"Don't bluff," retorted the other carelessly. "It wastes time. Steady! Here comes the rest of the party."

Across the moonlit lawn moved briskly the spare alert figure of the owner of Hedgerow House. His hand grasped a long-barrelled pistol. He made straight for the grove of graves. Within five yards of the willows he stopped, because a voice from behind one of them had suggested to him that he do so.

"I also am armed," the voice added.

Hesitancy flickered in Mr. Blair's face for a brief moment. Then, with set jaw, he came on.

"Two men of courage to deal with in a single night. That's all out of proportion," commented the voice with a slight laugh. "Mr. Blair; I really should dislike shooting you."

"Who are you?" demanded Mr. Blair.

"Chester Kent."

"What are you doing on my property at this hour?"

"Digging."

"Ah!" it was hardly an exclamation; rather it was a contained commentary. Mr. Blair had noted the exhumed casket. "You might better have taken my offer," he continued after a pause of some seconds. "I think, sir, you have dug the grave of your own career."

"That remains to be seen." "Schlager! Are you there?"

"Yes, Mr. Blair. They've broken my wrist and got my gun."

Mr. Blair took that under consideration. "It doesn't strike me that you are much of a man-hunter," he observed judicially. "Who are they?"

"Francis Sedgwick is the other, at your service," answered the owner of that name.

An extraordinary convulsion of rage distorted the set features of the elderly man.

"You!" he cried. "Haven't you done enough—without this! I would come on now if hell yawned for me."

Stricken with amazement at the hatred in the tone, Sedgwick stood staring. But Kent stepped before the advancing man. "This

Big Ben



They Say He's Worth 8 Million Dollars

Yes Sir! American farmers and business men, and their wives and children have said, "He's worth eight million dollars," for they've paid that much to 20,000 jewelers to get him to come to work in more than three and a quarter million homes (3,250,000).

Big Ben is only four years old, but he's made a bigger success for himself than any other clock alive.

You'll find him on all the big farms—helping to get the farm hands out on time—helping to get the bigger, better yields. You'll see him 'round the house telling the women-folks the time all day so they can have the meals on time.

You'll see him in the parlor on the mantelpiece—7 inches tall, sturdy, handsome, triple nickel-plated, ticking quietly and tending to his knitting.

In the bed rooms in the morning you'll hear him calling different people different ways—in "that" room, with one straight "hurry-up" five minute ring, and in "that other room," with ten short "reminder" calls lasting ten minutes. Tell him how you like your call—he'll accommodate you.

Call on Big Ben at your dealer's. His price is \$3.00. Let him show you what he does. If your dealer hasn't Big Ben, a money order for \$3.00 addressed to his makers—Westclox, La Salle, Illinois—will bring him to you anywhere in Canada duty charges prepaid.

Big Ben Alarm Clocks

ARE ILLUSTRATED IN THE CATALOGUE OF

D. R. DINGWALL, Limited

JEWELLERS, WINNIPEG

WRITE FOR A COPY OF THIS BOOK

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

\$100,000,000 OF INSURANCE NOW IN FORCE

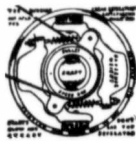
- In April, The Great-West Life attained to One Hundred Millions of Business in Force—protecting over forty-seven thousand lives.
- Founded in 1892, the Company has reached this great Business in less than two-and-twenty years—a record of speedy growth.
- Behind this Progress—and accounting for it all—lies a remarkable record

OF RESULTS TO POLICYHOLDERS.

The Great-West Life Assurance Company

Head Office - Winnipeg, Man.

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



Dealers Increase Your Sales!

Take a Look at the Strite Governor Pulley. It's the original and the only thing for driving cream separators with gasoline engines.

STRIE GOVERNOR PULLEY CO., 310 S. 3RD ST., MINNEAPOLIS

Making High-Price Pork while Grinding their own Feed.



AGENTS WANTED in Every Town and District

Shipments made from Galt, Ont. and Winnipeg, Man.

Address to Head Office

Canadian Hog Motor Co. Ltd. 372 Portage Ave. Winnipeg, Man.



THE Double Track Route

Detroit, London, Hamilton, Toronto, Montreal and New York via Niagara Falls

Smooth road-bed, polite employees, unexcelled dining-car service, and latest standard equipment

AGENTS, COOK'S TOURS AND ALL STEAMSHIP LINES

Rates, reservations and all particulars at Ticket Office

Phone Main 7008 260 Portage WWINNIPEG

Mention this magazine when writing advertisers

IF YOU NEED ANYTHING FROM a tin whistle to a high-grade piano or organ let us know; we are out of the high rent district, consequently can save you money; we carry immense stock of sheet music and instruction books for all instruments; satisfaction guaranteed. Royal Music Company, 460 Spadina Avenue, Toronto.

Mention this magazine when writing advertisers

BIBLE HELPS

Honest Bible Students may harmonize the Scriptures by reading our Booklet "About Hell." Based on the latest authorities. The best word on this important subject, with other valuable information. Price ten cents. (To the poor free).

INTERNATIONAL BIBLE STUDENTS ASSOCIATION 96 Alloway Avenue, Winnipeg

Mention this magazine when writing advertisers

Capital and Reserve \$3,000,000

Money to Loan

We have money to loan on improved Farm and City Property. Our financial strength and expert staff enable us to capably manage estates. We are a permanent institution and will survive the longest trusts.

National Trust

COMPANY LIMITED D. H. Cooper, Manager. C. Y. Stanier Secretary. 323 Main Street WWINNIPEG.

Mention this magazine when writing advertisers

won't do," he said firmly. "We can't any of us afford killing."

"I can," contradicted Mr. Blair. "You would gain nothing by it. If one of us is killed the other will finish the task. You know what I am here for, Mr. Blair. I purpose to open that coffin and then go."

"No," said the master of Hedgerow House; and it was twenty years since his "no" had been overborne.

"Yes," returned Chester Kent quietly.

Mr. Blair's arm rose, steady and slow, with the inevitable motion of machinery.

"If you shoot," pointed out Kent, "you will rouse the house. Is there no one there from whom you wish to conceal that coffin?"

The arm rose higher until the muzzle of the pistol glared, like a baleful lusterless eye, into Kent's face. Instead of making any counter-motion with the sheriff's revolver, the scientist turned on his heel, walked to Sedgwick, and handed him the weapon. "I'm going to open the coffin, Frank," he announced. "That pistol of Mr. Blair's is a target arm. It has only one shot."

"True," put in its owner, "but I can score one hundred and twenty with it at a hundred yards' range."

"If he should fire, Frank, wing him. And then, whatever happens, get that casket open. That is the one thing you must do—for me and yourself."

"But he may kill you," cried Sedgwick in an agony of apprehension.

"He may; but I think he won't."

"Won't he!" muttered the older man on an indrawn breath. "I'd rather it was the other scoundrel. But either—or both."

Sedgwick stepped to within two paces of him. "Blair," he said with a snarl, "you so much as think with that trigger finger, and you're dead!"

"No, no killing, Frank," countermanded Kent. "In his place, you'd perhaps do as he is doing."

"Don't take any chances, Mr. Blair," besought the sheriff. "They're desperate characters. Look what they done to me!"

"There's a testimonial," murmured Kent, as he picked up his spade, "for one who has always worked on the side of law and order."

He worked the blade craftily under the lid and began to pry. The cover gave slightly. Mr. Blair's pistol sank to his side. "I should have shot before warning you," he said bitterly. "Violating graves is, I suppose, your idea of a lawful and orderly proceeding."

The rending cackle of the hard heavy wood was his answer. Kent stooped, and struggled up

UNION BANK OF CANADA

Established 1865

Head Office Winnipeg

Paid-up Capital \$5,000,000 Reserve Fund 5,000,000 Total Assets, over 80,000,000

HON. PRESIDENT - WM. PRICE PRESIDENT - JOHN GALT VICE-PRESIDENTS

R. T. RILEY G. H. THOMSON DIRECTORS

W. R. ALLAN E. L. DREWRY Hon. S. BARKER, P.C. E. A. DI'VEY M. BULL S. HAYS M. JOHN W. CARSON F. W. HEUBACH B. B. CROFTY W. M. SHAW G. H. BALFOUR, General Manager. H. B. SHAW, Assistant General Manager. F. W. S. CRISPO, Superintendent of Branches



Head Office, Winnipeg. Two Central Offices in Winnipeg—Main St. & William Ave., D. M. Neve, Manager. Portage Ave., Cor. Garry St. (adjoining Post Office), F. J. Boulton, Manager

Other Branches in Winnipeg as follows: Corydon Ave., Logan Ave., North End, Sargent Ave., Portage Ave. and Arlington St., Sargent Ave. and Arlington St., 480 Portage Ave.

Branches and Agencies West of the Great Lakes.

Montreal—Baldur, Birnie, Boisvert, Brandon Cattery, Carman, Carroll, Clearwater, Crystal City, Cypress River, Dauphin, Deloraine, Glenboro, Hamiota, Hartney, Holland, Killarney, Manitou, McCreary, Melita, Minnedosa, Minto, Morden, Neepawa, Newdale, Niles, Rapid City, Roblin, Roland, Russell, Shoal Lake, Somerset, Souris, Strathclair, The Pas, Virden, Waskada, Wawanesa, Wellwood, Winnipeg. Saskatchewan—Abbey, Adana, Alasek, Arooa, Asquith, Assiniboia, Bounty, Buchanan, Cady, Canora, Carlyle, Craik, Cupar, Cut Knife, Dinsmore, Dummer, Eastend, Esterhazy, Estevan, Eyebrow, Filmore, Gravelbourg, Guernsey, Gull Lake, Herbert, Houghton, Humboldt, Indian Head, Jansen, Kalifed, Kalvinhurst, Kerrobert, Kenderley, Landis, Lang, Lanigan, Lemberg, Loversa, Lumsden, Lussell, Macleod, Maple Creek, Mayfield, Macrorie, Melior, Milestone, Moose Jaw, Moose Mountain, Mores, Neche, Neudorf, Oasma, Outlook, Oxbow, Pense, Perdue, Piquette, Prince Albert, Qu'Appelle, Regina, Rosamville, Rosemont, Saskatchewan, Scott, Soper, Shaunavon, Simpson, Sinitault, Southey, Stranburg, Swift Current, Tassier, Theodore, Togo, Tompkins, Vancouver, Verdon, Veevey, Wapella, Wawota, Watrous, Webb, Weyburn, Wilkie, Windthorst, Winkler, Yorkton, Zenasland. Alberta—Airdrie, Ait, Barons, Bashaw, Bussan, Bellevue, Blackie, Blairmore, Bowden, Bow Island, Brooks, Calgary, Carbon, Cardston, Carleton Place, Central, Chinook, Clearholm, Cochrane, Consort, Cowley, Didsbury, Edmonton, Empress, Fort Saskatchewan, Grande Prairie, Grande Lake, Hanna, High River, Hillcrest, Innisfail, Irvine, Laocomb, Langdon, Lethbridge, Madoc, Medicine Hat, Okotoks, Parkburg, Picher Creek, Seven Persons, Standard, Strathmore, Swallow, Three Hills, Wainwright, Wainfall. British Columbia—Enderby, Glacier, Hazelton, L'Anse-au-Loup, Nanaimo, New Hazelton, Newport, New Westminster, Prince Rupert, Smithers, Tsalika, Vancouver, Vernon, Victoria.

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



NEPONSET Paroid Roofing

GET Neponset Roofings—the "slowly made" kind. Then you are sure to get roofings that are slow to wear out. Then you'll never get a poor roofing when you need a good one.

Neponset Roofings are long on the roof—because long "in the making." This means that you think. It means that: Maximum protection to your home—your stock—and your pocket-book. Protection against leaks—repairs—and that greatest danger of all—fire. Remarkable year-in-and-year-out protection—in cold or hot climates—at a minimum cost—this is the "blanket protection" slowly made Neponset Roofings invariably give.

There's a slowly made Neponset Roofing for every purpose. Neponset Paroid is the great roofing for fine farm buildings.

Other Neponset Roofings are—Neponset Shingles for residences; Neponset Prostate, the colored roofing.

Sold by dealers everywhere. Write for name of nearest dealer.

Surely Send for Roof Book—FREE

BIRD & SON (Est. 1795), 867 Heintzman Bldg., Hamilton, Ont. Montreal St. John, N. B. Winnipeg Vancouver

Also makers of Neponset Wall Board, used in place of laths and plaster, and Neponset Waterproof Building Paper

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

Renew Your Subscription Now

Advertisement for Warps and Gau... with various product details and prices.

Advertisement for PAT... Write for b... FETD, B F... 36-37 Cana

Advertisement for MACHINES... \$1500... have been m... ing Machines...

Advertisement for NEPONSET Roofing... The AMERIC... WELL W... General Office and Works: AURORA, Ill., U.S.A. Chicago Office: First Nat. Bk. B'g.

Advertisement for ERZIN... Leads them... JOHN... Phone #...

Warranted to Give Satisfaction.
Gombault's
Caustic Balsam



Has Imitators But No Competitors.
 A Safe, Speedy and Positive Cure for
 Curb, Splint, Sweny, Capoea Hook,
 Strained Tendons, Founder, Wind
 Puffs, and all lamenesses from Spavin,
 Ringbones and other bony tumors.
 Cures all skin diseases or Parasites,
 Thrush, Diphtheria. Removes all
 Bunches from Horses or Cattle.
 As a Human Remedy for Rheumatism,
 Neuralgia, Sore Throat, etc., it is Invaluable.
 Every bottle of Caustic Balsam sold is
 warranted to give satisfaction. Price \$1.50
 per bottle. Sold by druggists, or sent by
 express, charges paid, with full directions for
 its use. If found for descriptive circulars,
 testimonials, etc. Address
The Lawrence-Williams Co., Toronto, Ont.

Mention this magazine when writing advertisers

PATENTS TRADE MARKS AND DESIGNS
 Write for booklet, circulars, terms, etc.
FETHERSTONHAUGH & CO.
 FRED. B. FETHERSTONHAUGH, E. C. M. E.
 GERALD S. ROXBURGH, E. A. Sc.
 36-37 Canada Life Bldg. WINNIPEG

Mention this magazine when writing advertisers



\$1500 to \$5000 Per Year
 have been made by hundreds of people
 operating the "American" Drill-
 ing Machines. 40 years' experience,
 89 regular styles and sizes and the
 output of the world's largest manu-
 facturers of this kind of machinery
 make "AMERICAN"
MACHINES STANDARD
 Made in types for every kind
 of earth and rock drilling or
 mineral prospecting, equip-
 ped with any power, or oper-
 ated with your traction en-
 gine. Our new 196
 page Catalog Free.
**THE AMERICAN
 WELL WORKS**
 General
 Office
 and
 Works:
AURORA
 ILL.,
 U.S.A.
 Chicago
 Office:
 First
 Nat.
 Bk. Bldg.

Mention this magazine when writing advertisers

**ERZINGER'S No. 2
 CUT PLUG**
 Leads them all. It's the Best Dollar
 Tobacco sold anywhere.
JOHN ERZINGER
 McIntyre Bldg. - 293 Portage Ave.
 Phone 69 Phone 2677

Mention this magazine when writing advertisers

bearing a shapeless heavy object in his arms. The object seemed to be swathed in sacking. Kent let it fall to the ground, where it lopped and lay. "All right," said he, with a strong exhalation of relief. "I knew it must be. And yet—well, one never is absolute in certainty. And if I'd been wrong, I think, Frank, we could profitably have used that gun on ourselves. You can drop it, now. Come over here."

Courageous though Sedgwick was, his nerves were of a highly sensitive order. He shuddered back. "I don't believe I can do it, Chet."

"You must. As a witness. Come! Brace up!"

Setting the bull's-eye lantern down, Kent produced a pocket-knife. Sedgwick drew a long breath, and walking over, crouched, steeling his nerves against the revelation that should come when the cords should be cut and the swathings reveal their contents. "If I keel over, don't let me tumble into the grave," he said simply, and choked the last word off from becoming a cry of horror as he beheld his friend drive the knife-blade to the hilt in the body, and then whip it across and downward with a long ripping draw under which the harsh cloth sang hideously! "Open your eyes! Look! Look!" cried Kent heartily.

A strong trickle of sand flowed out of the rent in the sack and spread upon the ground.

Relief clamored within Sedgwick for expression. He began to laugh in short choking spasms.

"Quiet!" warned Mr. Blair, in a broken tone of appeal. "You've found out the secret. God knows what you'll do with it. But there are innocent people in the house. I see a light stirring there now. We—I must do what I may to shelter them."

A glimmer shone from the ground floor of one of the wings. Thither Mr. Blair ran, calling out as he went. When he returned, his face was like a mask.

"Now," said he, "what is this matter? Blackmail?"

Kent's face withdrew, as it were, behind his inscrutable half smile. "Peace, if you will," said he. "A truce, at least."

"I should like to know just how much you know."

"An offer. I will tell you whenever you are ready to tell me all that you know. I think we are mutually in need of each other."

"I wish you were at the bottom of that pit," retorted the other grimly. "You and your scoundrel of a friend with you."

"Thank you for myself," said Sedgwick. "If you were twenty years younger I would break every bone in your body for that."

(To be continued.)

The Occidental Fire Insurance Co.
 Head Office: WAWANESA, MAN.
 A. NAISMITH, President R. M. MATHESON, Vice-President
 A. F. KEMPTON, Sec. and Mgr. C. D. KERR, Treasurer
 Subscribed Capital \$500,000.00
 Security to Policy-holders 640,817.29
Full Deposit with Dominion Government
Agents wanted in unrepresented districts

Alex. Naismith, Pres. S.H. Henderson, Vice-Pres. C. D. Kerr, Treasurer
The WAWANESA MUTUAL INSURANCE COMPANY
 HEAD OFFICE: WAWANESA, MAN.
 A. F. KEMPTON, Secretary-Manager
 Amount of Insurance in force Dec. 31st, 1912 \$54,606,666.00
 Assets over Liabilities \$587,537.07
 THE NUMBER OF FARMERS INSURED, 31st. Dec. 1912, 23,261
 The Largest Farmers Mutual Fire Insurance Company in Canada. Agents wanted in unrepresented districts

REGISTERED TRADE MARK

JOSEPH RODGERS & SONS, Limited
 SHEFFIELD, ENG.
 Avoid imitations of our CUTLERY by Seeing that
 This EXACT MARK is on Each Blade.
 SOLE AGENTS FOR CANADA
JAMES HUTTON & CO., MONTREAL.

CAEW
"BAT"

PLUG TOBACCO
 THE ROCK CITY TOBACCO CO. LTD. QUEBEC-WINNIPEG
 You saw this advertisement in this magazine. Don't forget to say so when writing.

**There Is No String
 To This Pipe**



It is absolutely FREE to subscribers who take advantage of this offer
The Weekly Free Press and Prairie Farmer,
 Winnipeg
The Canadian Thresherman and Farmer
 Both including Pipe for \$1.25
 the nominal sum of
 The lowest price at which these two papers will be offered this year is \$1.25. It makes no difference whether you take the pipe or not, the price is the same. While the supply of these pipes lasts they will be given away free to all who subscribe. Better get your order in early and be sure of a good smoke.
 Weekly Free Press and Prairie Farmer. 1914
 Winnipeg, Man.
 Find enclosed \$1.25, for which send the "Weekly Free Press and Prairie Farmer" one year, and the "Canadian Thresherman and Farmer," one year, together with pipe to the following address:
 Name
 Town
 Province P.O. Box

W



Conducted for the benefit of Dealers, Threshermen and Farmers who have anything to sell or exchange. Five cents a word for each insertion.

WANTED—To hear from owner who has good farm for sale. Send description and price. Northwestern Business Agency, Minneapolis, Minn.

WANTED to hear from owner of good threshing machine for sale. Send description and price. Northwestern Business Agencies, Minneapolis, Minn.

FREE FOR SIX MONTHS—My special offer to introduce my magazine "Investing For Profit." It is worth \$10 a copy to anyone who has been getting poorer while the rich, richer. It demonstrates the real earning power of money and shows how anyone no matter how poor can acquire riches. "Investing for Profit" is the only progressive financial journal published. 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 Blvd., Chicago.

FARMS WANTED. We have direct buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property free. American Investment Association, 15 Palace Bldg., Minneapolis, Minn.

OXY-ACETYLENE WELDING—Save your cracked or broken castings from the scrap heap. We send crickets, oxy-acetylene, gears, levers, etc., retain original form and strength at a small cost. Metals added to worn-out parts. All metals welded. Expert repair work. Welding & Manufacturing Co., 624 Princess Street, Winnipeg.

FOR SALE

We have on hand at present a very full line of rebuilt and second-hand Engines and Separators, which we are offering at attractive prices. Write us fully what you are thinking of buying, when we shall be pleased to tell you what we have and quote prices. All our rebuilt goods are sold under same guarantee as new ones and of course are carefully repainted and look exactly like new. If you write us at once we are sure to have the size you almost want.

SAWYER-MASSEY COMPANY, LIMITED, Winnipeg, Man.

BARGAINS.

- 1-32 H.P. Port Huron engine, rebuilt and in first class shape.
1-American-Abell 20 H.P. engine, rebuilt.
1-Minneapolis Separator 4472, rebuilt. With all connections.
1-3244 Avery Separator complete, just rebuilt.
1-3240 Avery Separator to be rebuilt complete.
2-Avery 36 H.P. double undermounted engines.
1-30 H.P. Northwest engine, not rebuilt, cheap.
1-J. I. Case steel, 42x60 separator complete with all attachments.
1-4270 Avery separator, will be rebuilt in time for next fall's work.
If you are interested in second hand goods, please write and let us know what you want as we are making deals almost every day, and feel sure that we can fit you out with almost anything you want, either in new or second hand goods.

HAUG BROS. & NELLEMOE CO., Ltd. WINNIPEG.

BUYERS, ATTENTION!

THE GEORGE WHITE & SONS COMPANY LIMITED, BRANDON, MAN.

ENGINES

- 3-25 H.P. White tractors thoroughly rebuilt and in good shape. Each... \$ 160.00
Second Hand
1-16 H.P. American Advance tractor... \$ 700.00
1-18 H.P. Minneapolis tractor... \$ 600.00
1-20 H.P. Bradon Cornell, Portable... \$4000.00
1-20 H.P. White tractor... \$1200.00
SEPARATORS—Second Hand
1-Aultman & Taylor, 28x50, all attachments... \$ 400.00
1-40x62 Waterloo separator, all attachments... \$ 400.00
1-36x60 Goddison separator, all attachments... \$ 300.00
1-36x60 American Abell, all attachments... \$ 325.00
1-36x60 Pease separator, all attachments... \$ 300.00
2-32x60 Great West separator, all attachments... \$ 200.00
1-White Challenge separator, thoroughly rebuilt, all attachments. Each... \$ 300.00
Write us re new goods—we have the best.

FOR SALE—Complete power farming outfit consisting of 16 H.P. Eagle gas tractor which has only plowed about 600 acres. 10-bottom Avery self-lift engine gang, drills, packer, harrows, binders, J. I. Case 16-inch separator complete. Also wagons, blacksmith tools, in fact, practically everything necessary to handle a section or more of land. Will sell at a bargain to close out, as I have disposed of my farm. Address, Julius Wirkow, Minto, North Dakota. Machinery on farm at Maldstone, Sask.

WANTED—Improved farms and wild lands. Best system for quick results. Full particulars and magazine free. Don't pay big commissions. Western Sales Agency, Minneapolis, Minn.

FOR SALE.

- 15 Horse Case Simple Portable Engine...20540
15 Horse Case Simple Portable Engine...15833
15 Horse Compound Portable Engine...13426
18 Horse Simple Traction Waterloo...323
18 Horse Portable Sawyer-Massey...8290
20 Horse Portable Sawyer-Massey...1419
20 Horse Simple Traction Sawyer-Massey...1418
20 Horse Compound Traction Engine, Case 7926
20 Horse Simple Traction Engine, Case...17721
20 Horse Simple Traction Engine, Case...16912
32 Horse Simple Traction Engine, Case 19019
J. I. CASE, THRESHING MACHINE COMPANY, Winnipeg, Canada.

FOR SALE—1 110 H.P. simple traction J. I. Case engine, 1 80 H.P. simple traction J. I. Case engine, 1 75 H.P. simple traction J. I. Case engine, 2 25 H.P. simple traction J. I. Case engines, 1 60 H.P. simple traction J. I. Case engine, 1 45 H.P. simple traction J. I. Case engine, 1 43 H.P. simple portable J. I. Case engine, 1 30-60 oil tractor J. I. Case engine, 2 40-62 separators, J. I. Case; 2 36-58 separators, J. I. Case; 1 32-54 separator, J. I. Case; 1 25-20 separator, J. I. Case; 1 24-42 separator, J. I. Case. The above separators are all equipped with feeders, windstackers, and automatic grain handlers. The 110, 80 and 75 H.P. engines are equipped with contractor's fuel bunkers. We also have for sale two second-hand J. I. Case 30 H.P. automobiles, which will be sold at reasonable prices. J. I. Case Threshing Machine Co., Regina, Sask.

PEDIGREE SEED WHEAT, OATS AND BARLEY—Big strong seed with breeding, money back guarantee. Surprisingly low prices. Get samples and catalog showing how these seeds are bred by both the Garton and Swedish systems. Harris McFayden, Farm Seed Expert, successor to Garton Pedigree Seed Company, Winnipeg. We ship same day your order reaches us, and carry complete assortment of all farm seeds.

MR. FARMER—Do you want to dispose of some of your land? If you have any clear title land (either wild or improved) that you have not been able to sell in the regular way, send us a complete description of it, giving location, etc.; and we will promptly send you full particulars of good exchanges that we can make for you, in the way of revenue-producing property in Winnipeg. We specialize on exchanging properties, and are in touch with nearly all the desirable exchanges in the city. You pay us nothing till we complete a deal that is satisfactory to you. N. M. Waldo & Company, Realty Exchange Specialists, 318-320 Sterling Bank Building, Winnipeg, Manitoba.

BRITISH COLUMBIA FRUIT LANDS—In blocks of ten to one thousand acres, sale or exchange. B.C. Land Co., 409 Somerset Bldg., Winnipeg. Phone Main 2472.

FOR SALE—Shop-worn National Cream Separators, guaranteed new. \$25.00 each. Raymond Mfg. Co. Ltd., Winnipeg, Man.

312 ACRES—Improved, five miles from Moose Jaw, 320 acres near Munster; 1,280 acres near Gainsborough; 160 acres improved, near Carievale; 640 acres, 3 1/2 miles from Laignon; 320 acres near Wroxton; 1,280 acres near Borden. Write for full particulars regarding any parcel in which you may be interested. Canada Lands, Limited, 400 North Crown Bank Bldg., Winnipeg, Canada.

Save \$50 to \$300 on Engines... Save \$35 to \$50 on Spreaders... Save \$35 to \$50 on Separators... The new Galloway Separator is the most modern, most sanitary and closest skimming cream separator on the market. Gear runs in a constant bath-oil. Easy to run, easy to clean. A genuine Mechanical Marvel. The equal of any machine selling at twice our low prices. We guarantee it. Send for one. Give it a good 90 Day Working Test at our risk. Write for catalog.

Buy Direct from the Actual Manufacturer... And save all middleman's profits. Galloway machines are made right in our own factory and sold direct to you at wholesale prices. They are high quality, proven machines. Stop paying tribute to "Trusts" and "Combinations." Buy direct from the actual manufacturer. Write for one of our money saving plans.

WRITE ME TODAY FOR FREE CATALOG AND OFFER... It only costs you a one-cent postal to get my list of catalog. No postage to pay. No obligation to buy. Yes! If you send me your name for my catalog, I am going to make you the most liberal, co-operative profit sharing offer you ever heard of in your life. Write me today. Wm. Galloway Co. of Canada Ltd. Dept. C7 Winnipeg, Man.

30 Days Free Trial—5 Year Guarantee

FOR SALE OR EXCHANGE—For land, horses or cattle, one 35 horse power steam engine and separator. One improved 10-bottom Oliver steam plow, all in good running order. Write Box 1, Gadsby, Alta., Canada.

LAND—30 miles from Winnipeg. All mixed farming lands. Good transportation, from mile to 3 miles from railway. Water at 15 feet. Garden City Land Company, 318 McIntyre Block, Winnipeg. Phone M 4799.

REBUILT ENGINES and separators bought and sold. Do you want a good rebuilt automobile? Experts sent out to all parts of Sask. Agents for Geo. White engines and separators. Rumely, Gaar Scott, and Advance lines. The G. M. Graves Machine and Motor Co., Sutherland, Sask.

WANTED to hear of good farm or improved land for sale. Send description and price. Northwestern Business Agency, Minneapolis, Minn.

ENGINEER—Wishes position on farm. Steady job. Experience with steam and gasoline and farm machinery. H. O. Loveday, Koch's Siding, Nelson, B.C.

STEWART SHEAF LOADER—Good as new. Will be sold cheap. Apply R. A. Brodie, Pierson, Man.

FOR SALE—4 H.P. Waterloo Boy Gasoline Engine, practically new. Has been used for demonstrating purposes only. In first class shape. Price \$125, a real snap. Maytag Co., Limited, Winnipeg, Canada.

WANTED—Position as engineer on steam plowing outfit, 1914. Good man, strictly temperate. Holder of certificate for Saskatchewan. Andrew L. Johnston, Killarney, Man.

CANADIAN GOVERNMENT EXAMINATIONS—Farms railway mail clerks everywhere soon. Citizens over 15 eligible. Big pay. Life job. Yearly vacation with full pay. Common education sufficient. Write immediately for free sample questions and list of examination places. Franklin Institute, Dept. F 181, Rochester, N.Y.

"HEAVEN AND HELL" and the world of spirits. Swedenborg's great work on the life after death. 400 pages. Only 25c. post paid. W. H. Law, 486-G, Euclid Ave., Toronto, Ont.

POSITION WANTED—As Engineer on gasoline plowing and threshing outfit, experienced. Can send references. Rumely gas plow, or Minneapolis farm motor preferred. Start early spring—stay till freeze up. A hustler. Apply, stating wages, to J. Crossdale, 113 Inkster Ave., Winnipeg, Man.

HALL'S RED RIVER EMPLOYMENT OFFICE, 188 Logan Ave., East. Successors to old established Red River Employment Office. Farms, railways, engineers, steam and gasoline plowmen and all other farm help. Phone Main 7298.

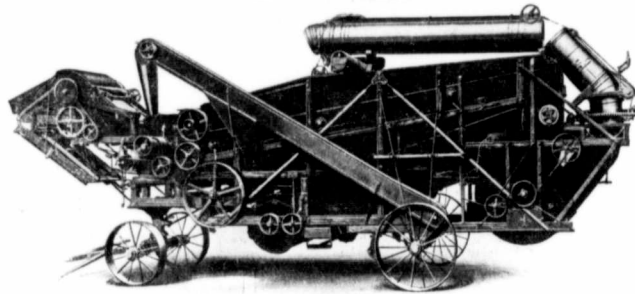
Mention this magazine when writing advertisers.

Lower Prices on GENUINE GOODRICH TIRES Direct from Headquarters. This wonderful drop in prices on a number of the popular sizes of the accepted standard automobile tires means a great saving in running expenses. Prices quoted are f.o.b. your nearest station. Table with columns for Size, Smooth Safety, and Prices.

Sporting Goods THAT ARE Fit for Sport. EVERYTHING FOR THE SPORTSMAN AND ATHLETE. BASEBALL UNIFORMS OUR BIG SPECIALTY. Get our prices before placing your order, as we certainly have the finest in Western Canada. Also Baseball Supplies of all descriptions, Football Goods, Lally's Lacrosse Sticks, Tennis Goods, High Grade Cricket Bats, Kams Golf Clubs, Sweaters, Pennants, Shirts, Cycle Tires, Baseball Shoes, Waterman Cane Engines. GET THEM AT THE Sportsmen's Headquarters P. J. Cantwell Co. Limited 346 Portage Avenue, Winnipeg, Man. Dept. C.T.

NOTICE The William Galloway Co. Ltd. of Canada. Now carry the Famous Galloway Line of gasoline engines, cream separators, manure spreaders and other farm machinery and merchandise in stock at Winnipeg to take care of their large Canadian business. Remember, all Galloway Made Machines are sold direct to the consumer at factory wholesale prices. You are consulting your own best interests when you investigate our machines and direct from factory, one-profit plan of selling before you buy any other style or make. We have thousands of satisfied customers in Canada. Galloway machines are always sold at the lowest prices backed by the strongest guarantee and on the most liberal terms. You take no risk whatever when you buy on our liberal plan. Our machines must please or we will refund your money with freight paid both ways. Write us, get familiar with our money saving plan. Read this advertisement. Then send for our catalog showing our entire line of merchandise for Canada's best farmers. Buy Direct from the Actual Manufacturer. And save all middleman's profits. Galloway machines are made right in our own factory and sold direct to you at wholesale prices. They are high quality, proven machines. Stop paying tribute to "Trusts" and "Combinations." Buy direct from the actual manufacturer. Write for one of our money saving plans. WRITE ME TODAY FOR FREE CATALOG AND OFFER. It only costs you a one-cent postal to get my list of catalog. No postage to pay. No obligation to buy. Yes! If you send me your name for my catalog, I am going to make you the most liberal, co-operative profit sharing offer you ever heard of in your life. Write me today. Wm. Galloway Co. of Canada Ltd. Dept. C7 Winnipeg, Man. 30 Days Free Trial—5 Year Guarantee

HUBER



THE HUBER THRESHER

Noted for its Good Cleaning and for Saving the Grain

The Huber machine has a cylinder of large diameter and heavy construction. Cylinder and concave spikes are so placed as to give the least clearance necessary and allow grain to pass between. This prevents heads going through with the grain in them. The shaft is supported in self-adjusting boxes. Even if the level of machine is disturbed, the cylinder is bound to run true and even.

Cylinder shaft bearings are lubricated automatically. A tank for oil is placed on top of machine at front. Two small pipes lead from this tank to oil cup over shaft bearing at each end. Feed is by gravity. If the oil in tank is replenished at beginning of each day, cylinder shaft bearings need no further attention.

The great success of the Huber in handling various kinds of grain is made possible by a combination of several excellent features of construction. The two beaters, immediately back of cylinder and both revolving toward it, pound the straw from opposite sides, loosening up the mass, and beating the threshed grain down through the grates to grain bottom.

Back of beaters, the deflector catches fly-

ing grain from the cylinder, and deflects it downward out of the straw.

The vibrating racks are so built that as the straw travels back from the beaters, it is elevated and violently shaken by the end thrust. Any loose grain remaining in the straw is separated here, and falls through the racks. When the straw passes on to the stacker, the grain has been left behind. The arrangement of riddles, fan and shoe, finishes the thorough cleaning of the grain before it leaves the spout.

All belts on the Huber machine are kept at proper tension by automatic tighteners. This insures every part running with right, steady motion. The thresher will give longer service, and belts will not wear out so quickly, because this automatic adjustment prevents slipping.

Every attachment designed to save labor and increase the capacity of the thresher is provided for the Huber machine.

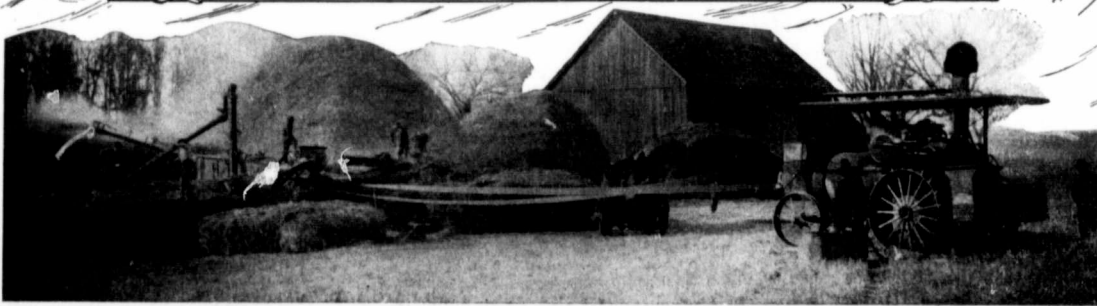
For power to operate it, you have your choice of the Gas Tractor in three sizes, or the Steam Tractor in five sizes.

Machinery and parts in stock at Winnipeg.

THE HUBER MANUFACTURING CO.,

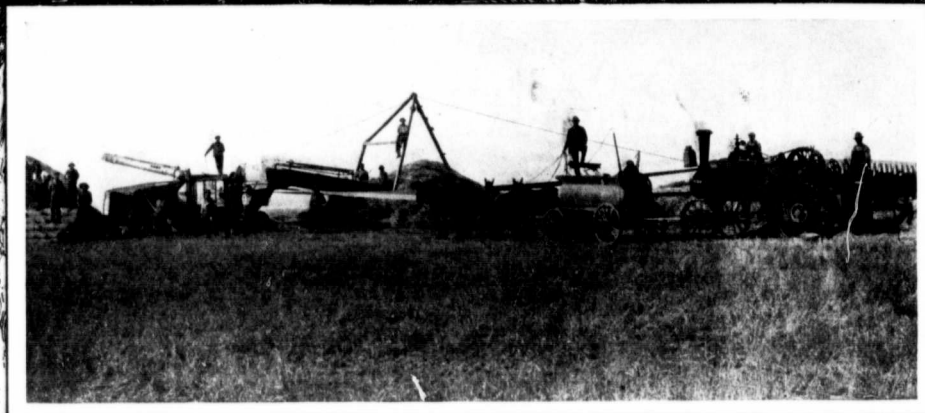
Cor. Logan and Arlington, WINNIPEG, MAN.

Home Office and Factory, - - - - - Marion, Ohio, U.S.A.



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

SAFETY FIRST



CASE

STEEL THRESHING MACHINES

Proof Against

FIRE-WIND-WATER

Case Steel Threshing Machines can go through raging fires, as often happens between stacks, can be overturned in a hurricane or cyclone, can stand for years exposed to the rain and snow, without serious damage. Your insurance against loss is in a Case Steel Threshing Machine. Stop and consider what such common things as these, to which all threshing machines are exposed, would do to wooden machines. What would you have left? But they cannot touch the Case Indestructible Steel Machine.

This absolute security against physical loss, taken in connection with their ability to thresh any grain or seed in a most rapid, clean and economical way, is the combination that explains why three Case steel machines are sold to one of other makes. Better pay a little more for a machine like this one, that will last a "lifetime," always doing good work, than to save a few dollars and be liable to total loss at any time. It is never sound business policy to gamble. Case machines are sure things for the threshermen. May we send you our catalog and Facts From the Field, giving evidence from your vicinity of the substantiation of our claims? A post card will bring it.



J.I. CASE THRESHING MACHINE CO.

741-791 STATE ST.

INCORPORATED

RACINE, WIS. U.S.A.

CANADIAN
BRANCHES

TORONTO · WINNIPEG · SASKATOON · REGINA · CALGARY