

# The **CANADIAN** THRESHERMAN AND **FARMER**

WINNIPEG CANADA

FEBRUARY  
NINETEEN FOURTEEN

*BETTER FARMING — BIGGER CROPS — BETTER PRICES*



*Ransom Egg Co. Ill. Was.*

Published Monthly by E. H. Heath Co. Limited—Our Twelfth Year



Single or  
Double Beam



# Take Your Choice

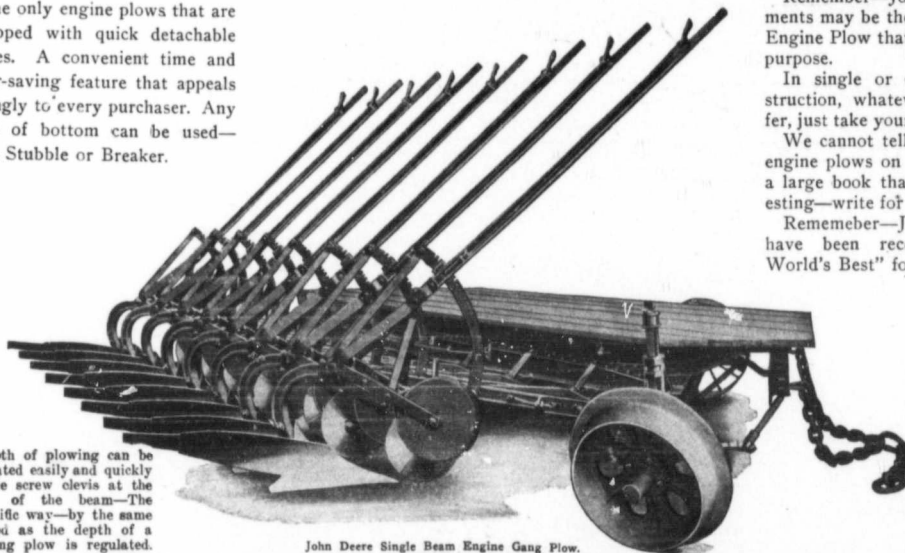
The only engine plows that are equipped with quick detachable shares. A convenient time and labor-saving feature that appeals strongly to every purchaser. Any style of bottom can be used—Rod, Stubble or Breaker.

Remember—John Deere Plows may be there is a John Deere Engine Plow that will just suit your purpose.

In single or double beam construction, whatever style you prefer, just take your choice.

We cannot tell you all about our engine plows on one page, we have a large book that does—it is interesting—write for it.

Remember—John Deere Plows have been recognized as "The World's Best" for nearly a century.



John Deere Single Beam Engine Gang Plow.

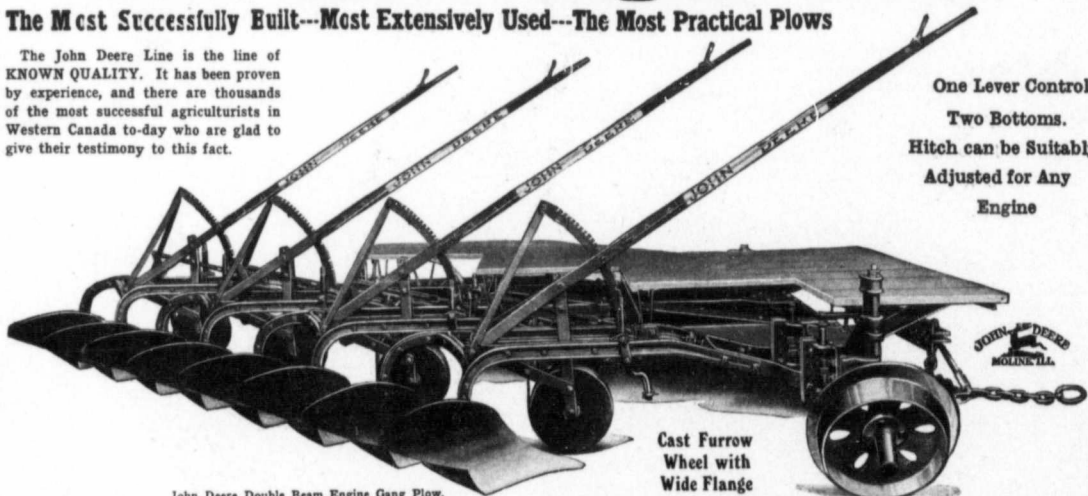
Depth of plowing can be regulated easily and quickly by the screw clevis at the point of the beam—the scientific way—by the same method as the depth of a walking plow is regulated.

Sizes from  
4 to 12  
Bottoms  
in Single Beam  
Construction

## John Deere Engine Plows

The Most Successfully Built—Most Extensively Used—The Most Practical Plows

The John Deere Line is the line of KNOWN QUALITY. It has been proven by experience, and there are thousands of the most successful agriculturists in Western Canada to-day who are glad to give their testimony to this fact.



John Deere Double Beam Engine Gang Plow.

One Lever Controls  
Two Bottoms.  
Hitch can be Suitably  
Adjusted for Any  
Engine

Cast Furrow  
Wheel with  
Wide Flange

A plow must do good work otherwise it does not pay to own it. John Deere Plows have the most successful field record behind them. Since John Deere invented the first steel plow they have been in the lead. They do better work. This is more than a statement, it is a fact. A careful examination shows that in construction they are simple and strong yet perfect in adjustment.

Our New "BETTER FARMING" Catalogue is ready, the most complete ever published. Mailed Free.

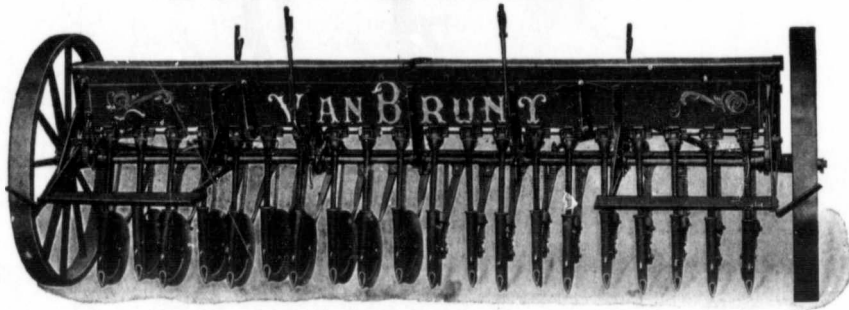


**John Deere Plow Co., Limited**  
Winnipeg Regina Saskatoon Calgary Lethbridge Edmonton





# VAN BRUNT



## All Soils are alike to the Van Brunt Drill

The highest grade farm tools are the most profitable to buy.

The purchaser of any farm tool wants satisfactory service above everything else. Only the highest grade implements give that service.

The **Van Brunt** line of grain drills is part of the John Deere line; the name "**Van Brunt**" stands for highest quality in the grain drill world, just as the name "**John Deere**" stands for highest quality in plows.

The farmer who buys a **Van Brunt** grain drill has the assurance that he is getting the latest and highest class of drill, which will give a long and satisfactory service.

**Van Brunt** drills are the result of years of experience in manufacture and field work. They are built from the best material, strong, light draft and do the highest grade of work.

Call at the store of your nearest John Deere dealer. Look the **Van Brunt** drill over. Its many points of superiority will quickly appeal to you.

Made in 12, 14, 16, 18, 20, 22 and 24 sizes. Single, Double Discs or Shoes interchangeable.

### Lighter Yet Stronger

The strong, light weight, light draft drill. Two to four hundred pounds lighter than any other type of drill. Why have your team haul around all day three or four hundred pounds unnecessary dead weight? It costs money to do this. Improved construction has done away with all unnecessary weight. Axles are strong and run from one wheel to the other—no sagging in the centre—Wheels stand up straight and do not lap over.

#### FORWARD DELIVERY

Seed is delivered near the centre of the disc where the furrow is wide open. Closed disc boots convey the seed down into the furrow without being deflected by coming in contact with the upward turn of the discs.

#### Van Brunt Drills

Will do first class work in soil that can be seeded, and will not clog or choke in mud, gumbo, sticky or trashy ground.  
All Disc Bearings that wear out will be replaced free.

### Adjustable Force Feed

The feeds are uniform. Each one deposits the same quantity at all times.

There is no leaking. The seed case is cast in one solid piece. All other parts are fitted into place accurately at the factory and made seed tight.

Feed can be regulated without changing the gears.

#### OTHER SUPERIOR FEATURES

Tilting levers provide for adjustment to suit different size of horses.

Double feed device. Each feed drives half the machine.

Gear drive—no chains to work loose or wear out.

Write for our Drill Catalogue.

Get Quality and Service.

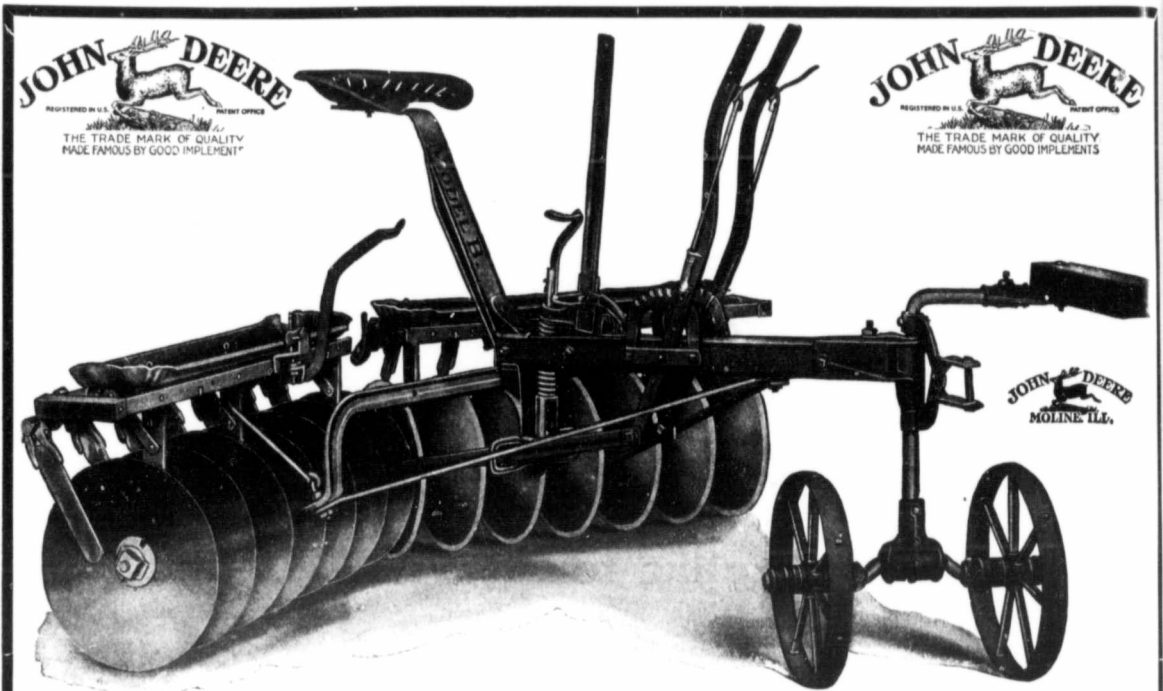
John Deere Dealers Give Both.



## John Deere Plow Co. Ltd.

Winnipeg Regina Calgary Edmonton  
Saskatoon Lethbridge





## A Good Seed Bed Means Dollars at Harvest Time

Many practical experiments and a good deal of scientific study just recently has proven the advisability and, in fact, the absolute necessity from an economic standpoint of properly preparing the soil before plowing.

Nature stores moisture in the subsoil, which is brought up to feed the plants by capillary attraction. It is only perfect when the soil is well pulverized and compact, that is, the land must be free from lumps and pulverized so that there will be no large air spaces to retard the process of bringing the moisture from the subsoil to the seed bed proper. The success or failure of the crop may depend on the storing and saving of all the water in the soil.

Stubble, heavy layers of manure, corn stalks or rubbish is a hindrance, and the capillary water stops at the break made by the bottom of the furrow, consequently, the plants suffer because they must depend entirely on the water in the seed bed proper. They cannot get the moisture from the lower subsoil.

This condition is obviated by discing before plowing. The disc not only pulverizes the ground, thereby making a perfect contact between the furrow slice and the bottom of the furrow, but all vegetation, manure and trash that was on the surface is cut up and thoroughly worked into the seed-bed.

Discing cuts and mixes the stubble with the ground so that when plowed under, decay is rapid and the soil layer settles down on the subsoil compactly.

Discing puts the ground in condition for rapid absorption when rain falls or snow melts, thereby preventing washing of the soil.

An intelligent and systematic use of the disc harrow year after year will greatly increase crop yields. This has been verified time after time by the most careful experiments. Of first importance is a good seed-bed, which can be prepared most successfully by using the disc harrow.

## Deere Model BA Disc Harrow

The Only Flexible Disc Harrow

The third lever with its powerful spring gives the pressure that is needed to cut out dead furrows or cultivate over ridges without burying centre of machine. Each gang is independent of the other. Only that part passing over an obstruction is raised out of the ground. With a rigid harrow the entire machine is lifted out, leaving considerable uncultivated ground.

### A Durable Harrow

On the Model BA is the high arched steel frame, which is high carbon steel through out. Disc blades are made of the very best material and highly polished. Gang bolts are of heavy steel with forged heads. The entire machine stands easily any strain that it may be subjected to.

**The Harrow of Quality made by a John Deere Factory, a Guarantee of Quality**

**It has all the qualities that are required in any such implement, but no unnecessary parts.**

### Easy To Handle

Both for drivers and horses. Levers are conveniently located. It has easy running discs with hard maple soaked bearings. Oil cups at top of frame easy to reach and out of the way of dust and dirt. Tongue Truck with pivoted wheels permits either wheel to pass over an obstruction with out any strain on the horses' necks. Oscillating scrapers keep the discs absolutely clean at all times. They can be set at centre or edge, or, if not needed, can be locked off entirely, reducing draft.

There are many other special features that belong entirely to the Deere Model B. It ranks first among disc harrows. With it every farmer can raise bigger crops with no greater expenditure of time and effort.

Write for our Book "Bigger Crop From Better Seed Beds." It contains a lot of helpful information.

Our New Farmers Catalogue is ready, the most complete ever published. Mailed Free.



**John Deere Plow Co., Limited**

Winnipeg Regina Saskatoon Calgary Lethbridge Edmonton



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

**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.

**How 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

**Fertilizers with high Percentage of Potash Increase Yields and Promote Maturity**

This is a very important fact for the Western farmer to note, since it often means the difference between Success and Failure to have his crops ripen one or two weeks earlier than they otherwise would, besides obtaining larger yields of superior quality.

Another important point to note is that Fertilizers are effective for several seasons after their application, a feature which should never be lost sight of.

Properly balanced fertilizers, containing adequate supplies of Nitrogen, Phosphoric Acid and Potash, in the proper proportion demanded by the various crops, should be used in order to obtain the best results.

When one considers that in Great Britain and Germany where fertilizers are most largely used, the average yield of wheat is more than 30 bushels per acre, even allowing for differences in climatic conditions, there seems every reason to believe that the yields of the wheat lands of the Dominion could be enormously increased by the judicious use of fertilizers.

In order to meet the increasing demand for information on this subject a number of treatises on the fertilization of the various crops have been prepared by agricultural experts; amongst them are:

- "Artificial Fertilizers; Their Nature and Use."
- "Potash in the Prairie Provinces."
- "Fertilizing Grain and Grasses."
- "The Potato Crop in Canada."
- "Farmer's Companion," etc.

FREE copies of these publications as well as expert advice on soil and fertilizer problems may be obtained from

**GERMAN POTASH SYNDICATE**  
1203 Temple Building,  
— TORONTO, Ont. —

**FARM AND SHOP BLACKSMITHS' FORGE 6.85**

Form and Shop Blacksmiths' Forge is a well built and practical one which can be used in a variety of ways. The size is 4 inches and produces a strong fire. It weighs 11 lbs. It is made of heavy iron and is very durable. One remarkable feature is that it is portable and can be used in any place.

Write for our complete catalogue of blacksmithing goods for farm and shop use free.

**The HALLIDAY COMPANY,**  
HAMILTON, CANADA  
Sole Importers for the Dominion  
**STANLEY MILLS & COMPANY**

**ABOUT OURSELVES**

**N**OT to get "behind the man who goes in front of us," we invite every reader of this magazine to join our great co-operative organization. "Co-operation" seems to be in everybody's mouth (figuratively speaking), and in keeping with the spirit of the age we are seeking to conduct our own little compact in what may be called "potted experience."

There must at least be two parties to every confederacy, and forgetting all others now, we specially address ourselves to YOU—the one man or woman, or promise of a man or woman who will read this page the moment you clap your eyes on it. The deal is entirely between you and ourselves, whether you are a subscriber or merely one who may have accidentally stumbled on a copy of the present issue.

Knowledge of the greatest value to the world of men is hidden away in all sorts of odd corners—"wasting its sweetness on the desert air" or hermetically sealed in the dark holes of the earth, useless for every practical purpose as the coal seam that has never been shattered by the pick-axe of the miner.

Wrapped up in YOUR personality there cannot fail to be certain experiences that all the world would be glad to know about. They may not individually be worth much more than the 'hill of beans,' but who shall say what they might not lead to in unsuspected wealth if communicated to some one else who may hold the complement that in a perfectly natural way would complete and stamp them with a value that cannot be computed?

We are writing personally to many thousands of up-to-date farming friends to ask them to give us for publication their most recent experience in handling one feature or another of their farming equipment. If by chance you may not have heard from us, we beg of you to accept this very personal invitation to give us any story of success or failure that is on your mind.

If you should have received this request by mail, may we ask you not to set it aside but to take the opportunity to pen a few lines while the subject is hot in your good intentions. You will confer a favor upon us and you will have done a duty you owe to your neighbors in this great hustling West where we hang by each other like a bee-swarm.

Napoleon said that the most successful men were always the fellows with the best information. No one in Western Canada can live the life of a hermit crab except to his own destruction. The greatest luxury we know of is the privilege of imparting and with every confidence and an enthusiasm that can be felt but cannot be described, we invite you to share in this fine idea.

**E. H. HEATH COMPANY LIMITED**

**The Stronghold of Cleanliness**

**Old Dutch Cleanser**  
Chases Dirt  
MAKES EVERYTHING SHINE AND SHAW

Write to the **CUDAHY PACKING CO.** Toronto, Canada, for our booklet "HINTS TO HOUSEWIVES"



A  
MAGAZINE  
FOR

The  
**CANADIAN**  
THRESHMANN AND  
**FARMER**



THE  
FARM  
AND  
HOME

Vol. XIX.

WINNIPEG, CANADA, FEBRUARY, 1914.

No. 2.

○ One of the mightiest forces in the world of men and animals is habit. Habit has killed more than any poison known to savage or scientific and it has also unconsensually cured more in flesh and blood than all the restorative prescriptions the medicine men hold in their catalogue of "remedies."

Habit of thought is far stronger than ten preaching archangels to change the current of a man's life if it is set in a given course. "As a man thinketh in his heart, so is he," and when the thought habit has become a time-incrusted conviction it takes far more than the clamor-call of an impending judgment to convince and convert.

The thought habit and the inherited conservative streak in human nature is accountable for the slow progress that has been made in applying much of the ascertained facts that scientific research has dug up and presented without fee or patent restriction to the service of men.

In the world of agriculture we see this cautious conservatism holding its own more conspicuously, perhaps, than in any other department of our social economy. Even in highly civilized countries, we find to-day rules in operation and methods employed in crop cultivation that have not changed in the slightest detail for centuries. They are clung to with almost insane tenacity because the habit of thought that was born with them has given these methods the prescription of a natural law that cannot be varied or tampered with except at a risk which no man dares to contemplate!

Some of these—in India, Egypt and even in the highlands of Scotland were described and illustrated in these pages quite recently. We smiled at them because that was all we could do. Here, however, we are set down in the very centre of the biggest and most enterprising phase of agricultural activity that the eyes of the modern world have yet looked upon and looked towards for that "testimony in the life" that, all who seek to inculcate

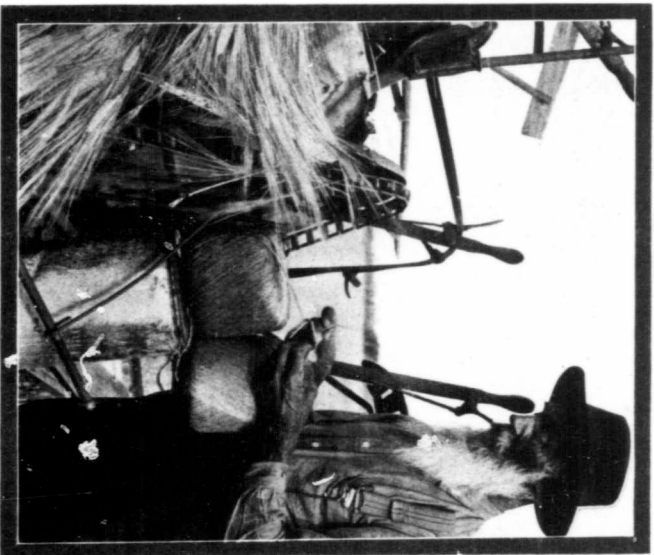
## THE BRAWN IN THE BARLEY

new doctrines must render if their school has a right to live and to look for converts who can no longer hold out against the living testimony.

To be specific, the subject of barley may seem to be a very

had but surry treatment. No

doubt, as suggested by Dean Henry of Wisconsin University, the brewers are responsible for the widespread prejudice with which it is regarded in this connection, some of them even going



"Making ends meet"—with his barley crop.

insignificant one to associate with any strenuous "thought habit." Yet at no time nor anywhere has it taken the place which scientific research and conclusive experiments have earned for it. While (as "pearl" barley and in other forms) it is used extensively and with extraordinary results as a human food, in certain parts of Europe, in North America it is barely recognized.

Even for stock feeding, it has

so far as to allege that it is poisonous to farm stock!

The probabilities are that the brewers, wishing to control the entire use of this crop, have furthered the prejudice and kept alive the belief that there is only one real market for this much maligned cereal—that which will conduct it straight to the distillery and the beer vat.

Not to speak of the absurdity of the "poison" myth, no intelli-

gent farmer to-day will belittle the feeding qualities of barley, but for several reasons he has not yet risen to a full conception of just how great these are and of the point to which the value of this cereal may be carried in Western Canada where it can be so easily grown.

Did some of our Western stock men realize just what this means, it would be a source of comfort to them, when they find much of their barley crop discolored by exposure to rainfall, etc., before they were in a position to thresh it. Such grain has lost little or none of its nutrients, though for the brewer its value may have been greatly diminished. The wise stockman will use such barley for feed rather than force it on the market at the low price to which its "color" condemns it.

Now, this article is not intended to take the form of a discursive treatise on the nature and cultivation of the barley plant. All that is needful in that respect is about the commonest of our common knowledge. Few things in agriculture are better understood or more easily accomplished than the raising of a good barley crop in Western Canada, but not many realize the possibilities it offers as a flesh forming food.

Were barley recognized as it deserves to be as a stock food, it would not figure as it so often does as a kind of after-thought in the mixed-farming or purely grain growing business, a sort of "handy-man" to clean up the weeds, a kind of "tag" or vial to wait on the aristocratic wheat crop, or that might come to something in any old place that looked a risky spot for any other crop.

The habit of thought has been that the great stock feeder is corn, corn and again corn. Corn is king in the cattle states of America, and in looking up a long file of ration papers published as the last word in stock-feeding by one of the most popular of the American farm journals, there is not a single reference made to barley except in one melancholy instance where it is quoted as a

desirable tit-bit for hogs if presented in the form of brewers' swill!

It is astonishing how indispensable to success are so many things that you haven't got! Again and again it has been said when the stock-raising industry in Western Canada has been under tribute that to get these fine show beasts and the ideal beef cattle that adorn the pages of the "Stock Breeders' Gazette": "You cannot get results like that unless you give them corn, and then you see we are not yet able to reckon on corn as one of our safe crops in Manitoba."

Long live the corn belt, and may the borders of that indefinable country extend until they compass the remotest point where the genius of men can make it grow; but if we cannot as yet reduce our corn crop to the obedience of barley and "No. 1 Hard Red Fyfe," we can, as it has recently been demonstrated in the most conclusive manner harness our barley crop to the performance of wonders in feeding that have not been surpassed by the best corn diet ever fed to a steer.

It will, of course, take some time until the average man really gets into the habit of thinking that as great things can be done with the crop that grows easily around his own door as he can with the much coveted but unattainable corn. But it is really worth taking some pains to look into, and this is an invitation to take the subject seriously to heart in the light of recent events both in Eastern and Western Canada.

Barley seems to kick against no climate where it has been invited to stay. It is one of those friends we delight to welcome who "take things as they find them" and adapt themselves so readily to circumstances. Barley grows without protest as far north as 70 degrees latitude in Lapland near the North Cape, while we find it in Arizona or flourishing side by side with the lemon and orange groves of California. It is one of the most hoary of our ancient food plants.

veloped some wonderful things, and among them was the fact that feeding methods are changing rapidly, the evidence of the value of cheaper rations being one of the predominant features seen on every hand. The story of McGregor's Aberdeen-Angus has gone all round the world, and does far more than serve to "point a moral and adorn a tale."

We have already referred to this historic event at some length but it is not the purpose of the education department in Cana-

the barley and oats."

That is a simple statement, but there's a wealth of thought in it and brain food that every sane man will masticate and ruminate upon for many years to come. At the risk of appearing to undue prominence to this episode we will quote again what the owner of this world's champion said recently, when speaking of corn and barley:

While not depreciating the value of corn as a food, he made a strong bid for the more general use of barley in this connection and for its better cultivation in Western Canada. In comparison between the two was significant. The average crop of corn grown on ideal land was something like 35 bushels to the acre. In Western Canada the average yield of barley is about 35 bushels, but barley is commonly regarded

a "scratch" crop that may be sown in "any old place". But if grown on the best land, the average need not be short of 50 bushels or more, and weight for weight, barley is very little at all behind corn in feed value.

"The books" have much to say about barley and its place as a stock food. But here is a boy who has beaten them all with his intuition. Are there not other "stock-fitters" in Western Canada who have very definite experiences worth relating of what they have done by "chumming it" with their beasts? Who in some way get to know infallibly how to cater to the appetite of the animals? Let us hear from them.



An impressive sight of "brawn in the toiling beasts."

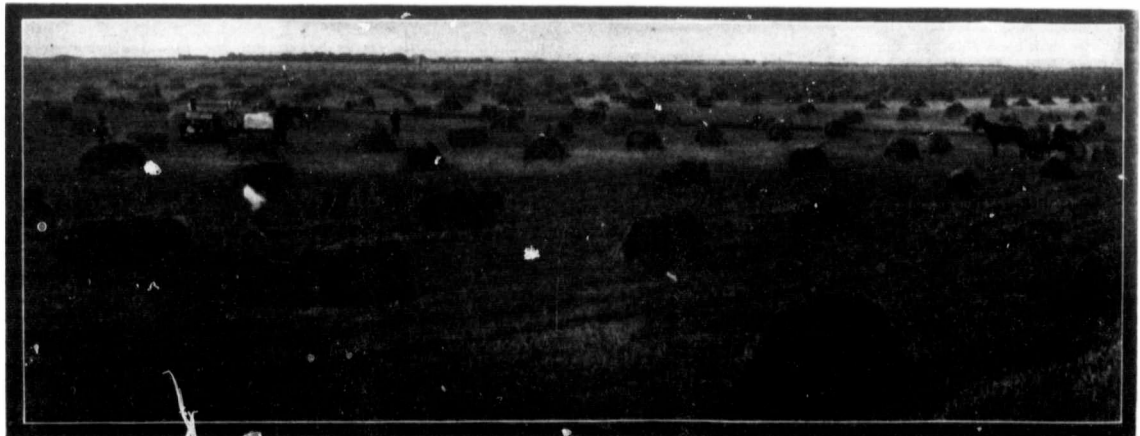
(You could tell that by its beard.) It was probably for a long time the chief bread plant of the ancients, and just why it seems to have become practically obsolete as an article of human diet in the "upper circles" is not to be accounted for by reason of any limitations or disqualifying points in its composition as a flesh-forming heat-giving food.

The tide of fashion set in against it and so it has drifted in the esteem of men until this date. But some of our most successful stock men have been experimenting with it and the eyes of a big audience of interested people have been opened wide with astonishment at the results.

The 1913 International de-

dian Agriculture to let it rust or become a forgotten incident while the West remains in business. The boy who nursed the winner from infancy was asked by a spectator what were his rules for feeding. "I have no rules," said the lad. "I just fed him what I thought he needed. I could tell what he liked and what was doing him good. A few times he got off feed, but not very often. He got mostly barley and oats and a few turnips. During the summer I fed him green barley sheaves. He had a few bundles of corn fodder that we hauled over from another farm. You know corn doesn't mature up here, so we didn't have any of the grain. Sometimes we boiled

them.



This scene never comes on the stage "by accident."

N  
than  
popu  
farm  
or ha  
tem  
here  
rare  
the  
boun  
then  
tativ  
vatio  
destr  
cient  
bred  
farm  
ing t  
the s  
In  
three  
being  
tal in  
of pri  
ing  
posse  
natur  
soil.  
with  
cipita  
d ro t  
tion  
deepe  
farme  
than  
single  
agenc  
manu  
for m  
moist  
holdin  
fertile  
cent o  
with  
than s  
poveri  
manag  
not ad  
and th  
of ma  
produc  
every  
increa  
vious  
becom  
manag  
poveris  
will be  
grain  
in a  
power



No political issue, immediate or prospective, more vitally affects the West than that of increasing its rural population. With an up-to-date farmer on every quarter-section or half-section of land and a system of crop rotation rigidly adhered to, crop failure would be of rare occurrence and the wealth of the West increased by leaps and bounds. The smaller farms could then be given the intensive cultivation necessary for the conservation of moisture and for the destruction of weeds, and sufficient live stock bred on every farm for maintaining the fertility of the soil.

I mention these three things as being fundamental in the business of profitable farming in localities possessed of a naturally fertile soil, but supplied with limited precipitation. For drought unquestionably cuts deeper into the farmers' profits than any other single adverse agency. Barnyard manure is not a direct substitute for moisture, yet its liber application to the soil not only retains moisture on account of its water-holding capacity, but a highly fertile soil containing a large per cent of humus will produce a crop with considerably less moisture than soil that is run down and impoverished. Any system of farm management, therefore, that does not admit of thorough cultivation and the production of abundance of manure necessarily lowers the productivity of the land with every crop that is produced with increasing uncertainty. For obvious reasons, the older any state becomes under a system of farm management that constantly impoverishes the soil, the smaller will become the average yield of grain and other crops. Farming in a large way—farming with power machinery on a big scale—

unless amply compensated for with live stock, spells exploitation by the present land owner, and results in ultimate impoverishment of the soil which future generations must occupy.

## The Waste of Soil Fertility

By DR. J. H. WORST  
President North Dakota Agricultural College.



The best means of replenishing a depleted soil

### Towns Must Build the Country

The cities and towns are also interested in soil conservation. Their prosperity depends upon increasing yields of grain and animal products, as well as the farming communities. Commercial bodies, therefore, should pay more attention to increasing the population of the country districts and less to bringing increased numbers to the towns. The towns will take care of themselves. Double the population of the country and improve the efficiency of farming methods and the increased wealth produced, in consequence, will prove a sufficient stimulus for urban population. Moreover, it will prove a healthy, permanent growth for both town and country.

With the present limited rural population and correspondingly

in an extensive way, which always invites disaster during seasons when the weather conditions are not reasonably satisfactory or when farm laborers are not immediately available to care for the crop. The past season fully demonstrated the handicap farmers suffer from on account of their dependence upon inefficient, unreliable, transient labor.

"More farmers and fewer farm hands," obviously, is the best and perhaps the only permanent solution of the farm labor problem.

### Good Farming is Insurance

Moreover, good farming is the best insurance against crop failure. The causes that produce crop failures are not difficult to observe by expert farmers, but precautions necessary to modify or destroy their influence cannot be taken with any degree of cer-

tainty where a man aims entirely at large acreage and trusts in providence for timely rains and other things on which profitable crops depend—and upon transient farm hands to care for the crop during the harvesting and threshing season.

Farming is a business. It requires a better business head—a man of broader vision—to farm scientifically than to practise in any of the popular professions. The farmer, therefore must acquire business habits. He should rank as a business man.

The shrewd business men of this generation are ever on the alert to increase their profits. Otherwise they would not be classed as business men.

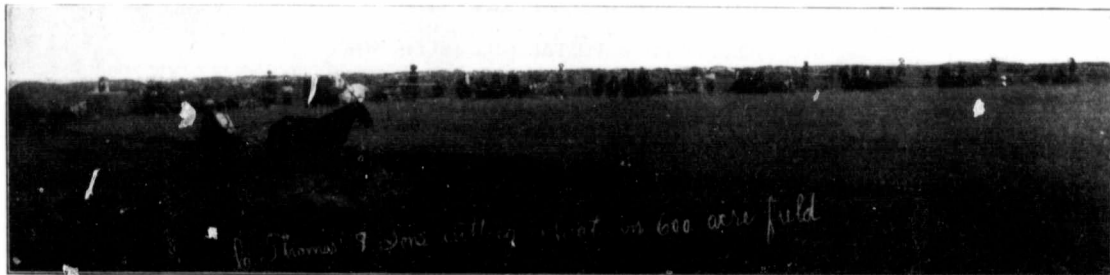
Only, however, by curtailing needless expense and attaining greater efficiency can business men honestly increase their annual income.

The manufacturer is governed by the same laws. Captains of industry are ever on the alert to lessen the cost of production. This may be accomplished by utilizing by-products, eliminating waste of raw material, by the installation of improved machinery, and more especially, by promoting the efficiency of the labor they employ. Small savings made in this way aggregate tremendous totals and materially increase the dividends of stockholders. What was formerly wasted in many important industries is now relied upon as the principal source of profits. In short, how to avoid waste is given quite as much concern as the improvement of labor-saving machinery.

### The Farmer Has Been Wasteful

Agriculture has been exceedingly wasteful. The spirit of waste still abounds. This is more

Continued on page 28



One who has safeguarded his plant food.

## A Move in Line with the Spirit of the Times

**T**O the Farmers of Canada we offer for consideration a new tractor sales policy. By eliminating certain selling expenses we have been enabled to effect a remarkable saving in marketing *Twin City* Oil Tractors. We are confident you will appreciate the spirit and determination which has prompted this. We are not pocketing this saving but we are giving it to you. The high prices of the past few years were the result of the top heavy sales expense, an expense which the farmer always paid but for which he never received a penny's worth of value. The Man in the Middle is the man who made the most out of it. You can make it now by buying on our direct sales plan.

### Direct from Factory to Farm

**C**UT out the non-producer, save the money for yourself. Better values, if possible, can be given. Better service, if possible, can be rendered. You pay for nothing you do not get. We have stopped the senseless waste of marketing expense; saved it for you. Do you want to take advantage of it? Here is our plan:

Eliminate Salesmen's salaries and high expense accounts and do business direct with you instead of thru the dealer, thus saving that commission. This amounts to several hundred dollars per machine and up to now you have had this to pay. Deal direct with the manufacturer, and put the money in your own pocket. The saving is enormous. In our plan you get all you pay for. Remember this is

### Not Price Cutting but Value Giving

**O**UR new sales policy gives the farmer the commission usually paid to the dealer. Our sales expense has been reduced to the very lowest possible figure. We do not have the expense of high salaried salesmen. We will deal direct with you—sell you an engine at Manufacturer's price, eliminating the dealer, the canvasser and other middle men. This commission goes to you, goes to the man who spends his money, to the man who buys the engine, to you who pays the bill. You are not paying a high price to cover lost accounts, salesmen's expenses, dealer's commissions, but

### An Honest Price for an Honest Tractor

**W**E have a fund of detailed information on this new proposition, which will appeal directly to you as a careful buyer. Write and learn how and why we are able to offer you the dealer's commission on your individual order.

REMEMBER—A POSTAL WILL DO IT—NOW.

## MINNEAPOLIS STEEL & MACHINERY CO. OF CANADA, LTD.

L. L. BROCKETT, Mgr.

Winnipeg, Manitoba

166 PRINCESS STREET

BRANCHES: REGINA—JOHN GIBNEY, Representative

CALGARY—C. F. LEIF, Representative

SASKATOON—R. E. SMILLIE, Representative.

Address All Inquiries to the General Office at Winnipeg

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.

# The 1914 *Twin City* Tractor

¶ The *Twin City* Oil Tractor has made a truly remarkable record for the farmers of Canada. ¶ The large number of these tractors now operating throughout the country have demonstrated to Canadian Farmers that the *Twin City* is the high-class tractor on the market today. We believe those who know will concur in the statement that it is superior to any American, Canadian or foreign tractor yet produced. ¶ Our policy in the future, as in the past, will be to build the very highest quality of tractor possible. ¶ The high class workmanship and material in the *Twin City* Tractors make them cost more to build than any other tractor on the market, but our new policy of selling

## Direct from Factory to Farm

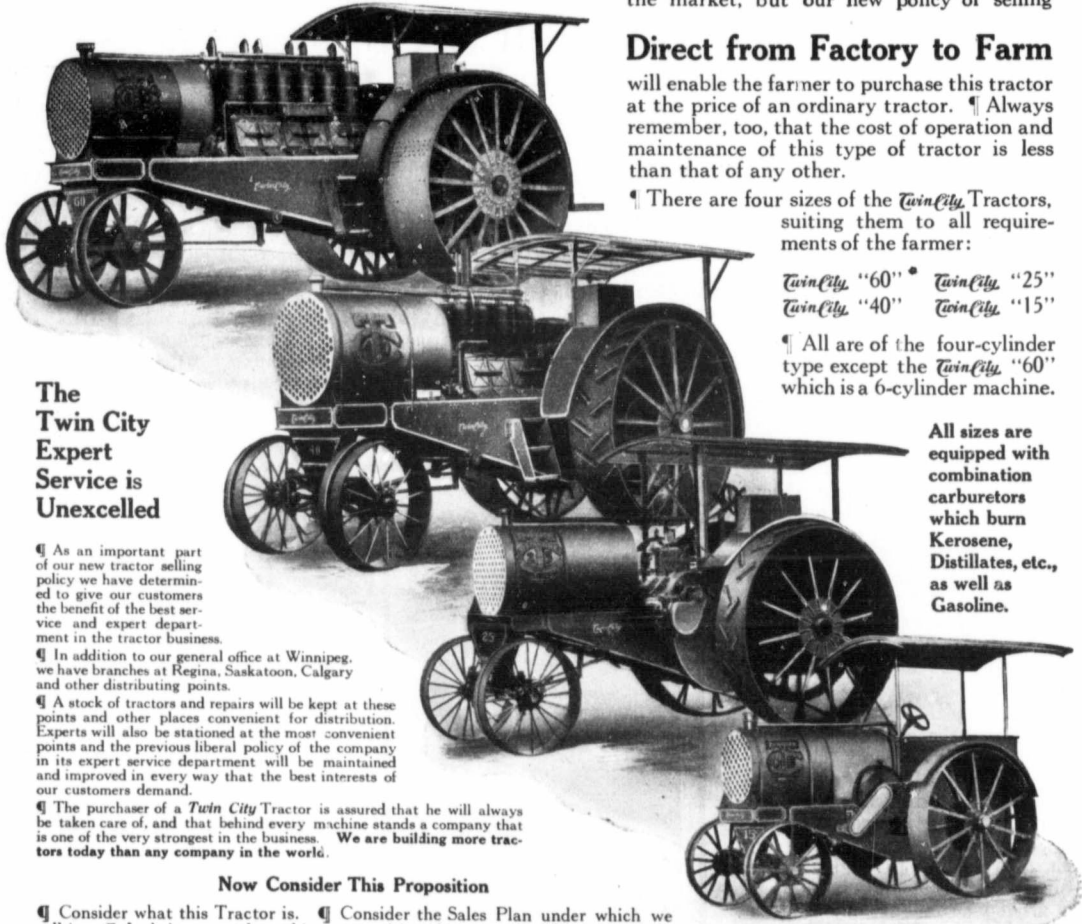
will enable the farmer to purchase this tractor at the price of an ordinary tractor. ¶ Always remember, too, that the cost of operation and maintenance of this type of tractor is less than that of any other.

¶ There are four sizes of the *Twin City* Tractors, suiting them to all requirements of the farmer:

*Twin City* "60" \* *Twin City* "25"  
*Twin City* "40" *Twin City* "15"

¶ All are of the four-cylinder type except the *Twin City* "60" which is a 6-cylinder machine.

All sizes are equipped with combination carburetors which burn Kerosene, Distillates, etc., as well as Gasoline.



## The *Twin City* Expert Service is Unexcelled

¶ As an important part of our new tractor selling policy we have determined to give our customers the benefit of the best service and expert department in the tractor business.

¶ In addition to our general office at Winnipeg, we have branches at Regina, Saskatoon, Calgary and other distributing points.

¶ A stock of tractors and repairs will be kept at these points and other places convenient for distribution. Experts will also be stationed at the most convenient points and the previous liberal policy of the company in its expert service department will be maintained and improved in every way that the best interests of our customers demand.

¶ The purchaser of a *Twin City* Tractor is assured that he will always be taken care of, and that behind every machine stands a company that is one of the very strongest in the business. We are building more tractors today than any company in the world.

### Now Consider This Proposition

¶ Consider what this Tractor is. ¶ Consider the Sales Plan under which we sell it. ¶ Isn't it an epoch making proposition that you are able to buy from this wonderful line of machines on a **Direct from Factory to Farm Plan**?

¶ If it were a cheap, low grade tractor it wouldn't mean so much. ¶ If other companies were doing it, it wouldn't mean so much. ¶ But here is the leader of all Tractors—a Tractor known in every part of the world—the great "*Twin City*."

—The *Twin City* "60"—The *Twin City* "40"—The "*Twin City* "25"—The *Twin City* "15"—all wonderful four and six cylinder machines. There are no other machines like them. There is no other machine sold on such a policy as ours—no other Company can sell Tractors **Direct from Factory to Farm**.

¶ Read about our policy on the other page and **write for more information about it.**

REMEMBER—A POSTAL WILL DO IT—NOW.

## MINNEAPOLIS STEEL & MACHINERY CO. OF CANADA, LTD.

L. L. BROCKETT, Mgr.

Winnipeg, Manitoba

166 PRINCESS STREET

BRANCHES: REGINA — JOHN GIBNEY, Representative

CALGARY — C. F. LEIF, Representative

SASKATOON — R. E. SMILLIE, Representative.

Address All Inquiries to the General Office at Winnipeg

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.

# THE CANADIAN THRESHERMAN AND FARMER

CANADA'S LEADING AGRICULTURAL MAGAZINE

PUBLISHED MONTHLY BY

E. H. HEATH,  
PRESIDENT  
E. W. HAMILTON,  
MANAGING DIRECTOR  
F. C. BRAY, TREASURER



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



J. D. DUTHIE, EDITOR

C. B. FULLER,  
FIELD REP.

(MEMBERS WESTERN CANADA PRESS ASSOCIATION)

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

F E B.

STRATHCONA

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 be made to us in writing with proofs, not later than ten days after its occurring, and provided, also, the subscriber in writing to the advertiser, stated that his advertisement was seen in "THE CANADIAN THRESHERMAN AND FARMER." Be careful when writing an advertiser to say that you saw the advertisement in "THE CANADIAN THRESHERMAN AND FARMER."

SOME men who were born to an inheritance of poverty have been ennobled from the hour of their birth. Others who have come of a long line of patrician ancestry owe their coronets "for services rendered," not to the commonwealth of mankind but to the sinking fortunes of a royal line of libertines whose title to nobility began and ended with the cold type of the peerage list.

Donald Alexander Smith was one of Nature's Noblemen, and whatever distinction or superinduced virtue might be in the title of "Lord Strathcona and Mount Royal," every person who knew him and the majority of men who knew of him gave their testimony to the fact that no child of humble circumstances ever more

richly merited the honors that were thrust upon him.

From the mean, little, "theekit-butt-an'ben" on the grey hill-side he stepped out into the world, humanly speaking, without a friend except the strong foundation of his own indomitable spirit, but on that proud possession he stood as firmly as ever did anointed monarch. No other birth-right would have suited the man, and from that vantage ground he fought and cleared a space around him such as rarely falls to the lot of a single purpose.

This man neither sought nor shunned greatness but found glory simply because glory lay in the plain path of duty. "Along the cool, sequestered vale of life he kept the noiseless tenor of his way," till forced from a privacy he loved, then first appearing with all those great qualities ripened around him of which in that humble Morayshire home he had never given any crude or ostentatious promise.

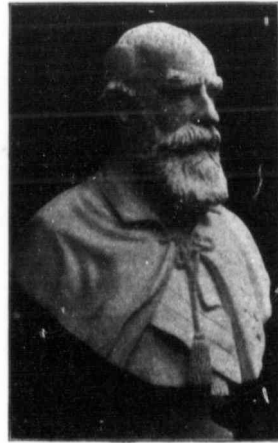
His countrymen, first of all of Scotland and then of the British Empire, are proud of the great facts of his public life. Its splendid contributions to the national progress in so many departments are still fresh in the public memory. To education, to the interests of unfettered commerce, to the amelioration of human suffering, these gifts were bestowed in such a way that their munificence was forgotten in the still more happy insight the act of giving unconsciously opened up to the heart of the man.

To those who were admitted to the inner sanctuary there was a warmth, a simplicity and an enthusiasm not so readily apprehended in the outer courts. There are luxuries that every man is entitled to keep to himself, to screen from the eyes of the world and when all his public benefactions have become en-crustured with the course of time, there are acts of private benevolence scattered all along the pathway of this man's life of which the world had no account. "The world" had neither the means to understand nor the prescience to forecast in them their eternity of influence.

Those thirteen years of apparent barrenness in Labrador! What an object lesson do they not offer to the growing impatience of the age we live in with its epidemic of get-rich-quick! Those thirteen years of isolation and toil were perhaps more than all others in his long life the formative years of Donald Smith's character, and they sufficiently explain all that followed.

One of the greatest forensic successes Scotland ever produced (John Scott, Lord Eldon) said, thinking no doubt of the "hard luck" story of his own early life: "Some men succeed by one thing and some by other means, but the best men who have succeeded began without a shilling." The experience of all time has been invariable on this subject of material success, viz.: that nothing worth possessing that has the quality of permanence has ever been secured except at the cost of working and waiting. Certain it is that the men who have continued to hold the public confidence, whose "success" has never rankled in the minds of the people, have belonged, like this grand old pioneer and statesman, to the Aristocracy of the Soil.

They have earned their pay. Strathcona's "pay" is not reckoned in acres or dollars. He had a purpose which he never paraded if he ever so much as mentioned it to himself. Subconsciously it was the atmosphere in which he lived—it was meat and drink to him, his life's work which he stuck to like a limpet to its rock until within a day or two of his passing to the silent land. Whatever the beginning, the end of it was to lead millions of many languages to a freedom and fortune denied them in the land that gave them birth.



## SUBSCRIPTION RATES

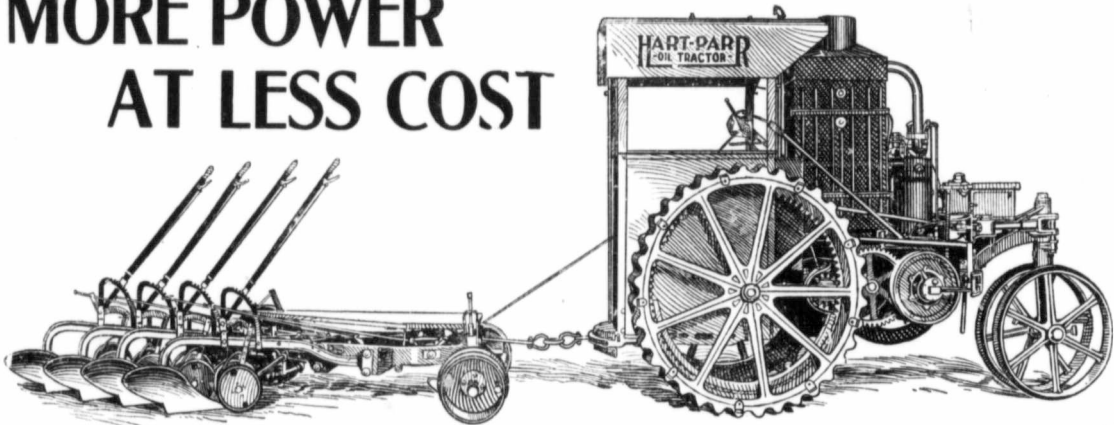
Postage prepaid, Canada and Great Britain, \$1.00 Per Year.  
Postage prepaid, United States and Foreign Countries, \$2.00 Per Year.

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 are positively discontinued at date of expiration unless renewed.

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

# MORE POWER AT LESS COST



**F**arming with Hart-Parr outfits is a proven economy and success. We have letters from hundreds of satisfied farmers who say they are making more money every year, with Hart-Parr power outfits, than they ever did, farming with horses or mules.

Just think of the big saving possible on your own farm, if you replace

12 to 30 horses and several hired men, with a Hart-Parr tractor and plow, operated by one man, and still do as much or more work, better, quicker and cheaper!

Working or idle, horses eat every day. A Hart-Parr tractor requires fuel only when working and then it uses **CHEAPEST KEROSENE**, costing much less than horse feed.

## HART-PARR & HART-PARR -OIL TRACTOR- SELF AND HAND LIFT PLOW

The Outfit with the "Big Pull," Illustrated above, can Plow

deeper, turn better furrows and finish the job quicker, than horses or mules. One man operates the entire outfit from the engine platform. You save the plowman's wages and board.

The tractor can also be used for any kind of field or belt work—discing, seeding, harrowing, harvesting, threshing, hauling, silo filling, road making. It saves money at every turn. Easily pays for itself in a few seasons. It is light and simple. Contains 80% less parts to get out of order than any other. Drivers are

solid steel castings—not built up or pieced. Wave form driver lugs afford greatest surface contact. Drivers can be equipt with "Hold Fast" extension lugs—the lugs with a bull dog grip on soft soil. They enable this tractor to get on the job earlier in the spring than any other outfit.

The complete line of Hart-Parr power farming machinery includes:

**Oil Tractors Self and Hand Lift Plows "Money Maker" Threshers**

Investigate! Write to-day for descriptive catalogue, special circulars and literature on power farming costs.

# Hart-Parr Company

30 Main St., Portage la Prairie, Man.  
57 West 23rd St., Saskatoon, Sask.

1616 8th Ave., Regina, Sask.

THE CHAPIN CO., 325 8th Ave. West,  
Calgary, Alta.

# TRACTION PLOWING AS TOLD BY THE MEN WHO DO IT

### Horses Good but too Slow

Dear Sirs: In reply to your letter regarding my experience. I have a 25 horse power Case steam tractor and use about a ton of coal to twelve acres and about 1,500 gallons of water per day. We had only one man to haul water besides myself when plowing. We used two horses with the outfit, they hauled the water and coal to the engine once a day; the coal we hauled on a pile before we started to plow. We can plow for \$1.50 per acre. I can disc harrow and seed at 50c. per acre, that is double discing and seeding with one machine, and pull the drag at back of disc and seeder. I do not think a tractor is detrimental to plowed land. But we all know that the most of the plowing and breaking done in the spring is to be cropped the same year, and it is done too fast and consequently not as well done as if they were not going to crop it. We all know there is no power as good as horses when it comes to good plowing. The biggest trouble is that the horses are too slow and one would have to have so many of them and more men to do the same work that the engine and a few men can do.

Yours truly,  
L. O. Valkers.  
Lathom, Alta.



### More Profitable than Horses

Dear Sirs: I have a 26 horse power American Abel steam engine and a 7-bottom Cockshutt gang, which I have been breaking with for the past two summers. In 1911 I broke about 100 acres and in 1912 about 300 acres. I averaged 10 acres per day. I employed two men and a team of horses; one of the men fired and the other drew coal and water. We used about 150 gallons of water and about 200 pounds of coal per acre. It costs us about \$1.50 per acre.

I think that plowing by steam is more profitable than with horses.

As I have not had any experience seeding with my engine, I would like to hear others' experience.

Yours truly,  
R. Venn.  
Creelman, Sask.

### Gasoline the Coming Power

Dear Sirs:

I am glad to give you my experience and answer your question about the use of gas power on my farm. My engine is an International 25 H.P. type C. The engine gives lots of power when threshing and breaking. My separator is a Rumely 28 x 44. I threshed for 58 days and put through about 67,000 bushels of grain, mostly oats. I use between 25 and 30 gallons of gasoline and 60 gallons of water per day in threshing or plowing. My plows are the Vanslyke Brush Breaker with rods. My land is very rough and covered with brush and willows. On level

### Too High Priced

Gentlemen:

On your request, I will give you my experience with my traction engine, but I will first answer your questions.

I use a 45-22 Hart-Parr gasoline tractor, and use on an average of 65 gallons of gasoline per day of ten hours, and 45 gallons of water.

For plowing, I have one engineer and one man to handle the plows, and for threshing, seven bundle teams, one extra team, one engineer, a separator boss, one spike pitcher, two to three field pitchers, and one cook. Prairie breaking costs me on an average of \$1.80 per acre. Seed-

tors is that they are entirely too high priced. I paid \$2,750 cash for mine, of which sum the selling agent got a commission of 40 per cent, or 1,000, which the farmer has to pay. Besides, it is not dust proof enough to make the gears last. On this account I did not use the machine for discing and seeding. Without doubt these faults will be in time eliminated, and then, when that is accomplished, the tractor may be called a modern farm horse.

When I made my report to the government of my threshing operations this fall, I had as a reward my choice of several Canadian farm papers, so I chose The Canadian Thresherman and Farmer to start March 1st. I would therefore appreciate your speed indicator.

Yours truly,  
Robert Hansen,  
Castor, Alta.



### Advocates Extension Rims on Drivers

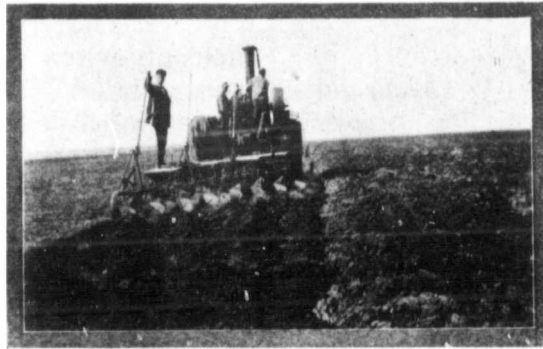
Dear Sirs:

I bought a 15-30 Rumely in the spring of 1912 to work on the farm. I have a farm of three quarter sections. I used the engine for seeding (this engine having two speeds will pull two drills at 3 miles per hour). I did not keep track of the oil used on each job. There are less stops with the engine than with horses as the grain can be piled on the drill and emptied while running. I had one man on the engine and one on the drills.

I broke 100 acres in eight days of 12 to 15 hours each. I used 8 barrels of oil breaking and moving 15 miles and return. We also used about one barrel of water per day. I used four furrow Cockshutt gang.

In summerfalling I used 6 discs, John Deere engine gang. The engine pulled this and two sections of drags and made barely two miles per hour, low speed.

We used about the same amount of oil at this job as breaking and plowed about the same amount. The plow is wider but makes less speed on the soft ground. The summer fallow is very dirty on the engine. I have two horses with the outfit when working away from home, but when at home only have them



"Plowing the deep under all canvas."

ground I can pull three 22-inch plows but on rough ground I pull two. I can break plow from six to nine acres per day, and it takes about 3½ gallons of gasoline per acre. It was so wet last year that I did not get a chance to use it for plowing. It takes two men to operate the outfit, one on the engine and the other to tend the plows. I have one team to draw water and gasoline. I consider gasoline to be the coming power on the farm. I have never tried seeding with my engine, but have disc and harrowed. I can start my engine in very cold weather with very little trouble. I put gasoline in tin cans and hang one under the igniter, one under the cylinder and one at the water pump.

I trust my experience may be of some use to you.

Yours truly,  
A. Goldstrom,  
Hill End, Alta.

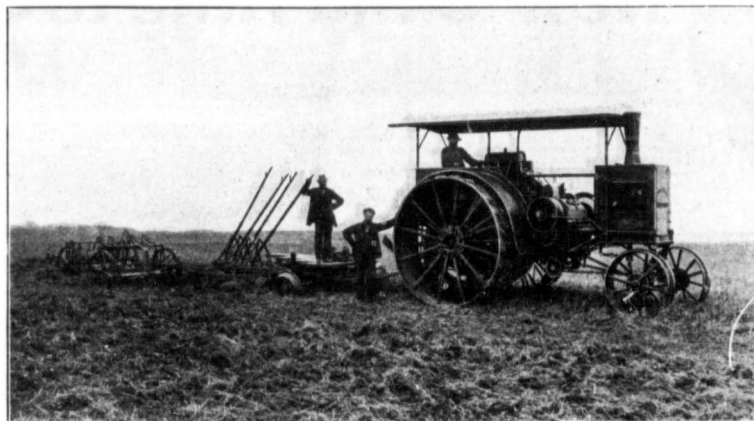
ing and discing we do with horses.

For threshing, we used a Case 32 x 54 separator, which gave good satisfaction.

The first season we broke 700 acres, but by this time, the machine needed costly repairs, as nearly all the gears were worn out, because it was not made to protect the gears from dust, also the drive wheels were not made strong enough, the spokes breaking often, so I decided to use the machine little for traction work, but for belt work on a grain separator. For that purpose it did well, although on cold mornings we had trouble in getting it started. We overcame this difficulty by starting a fire under the machine, and using a blow torch.

Though the machine is made for oil-cooling, we used water, as that lessened the heat of the cylinder.

Now, my opinion about trac-



## How about that Tractor for Next Season?

You certainly can't afford to pass through another season with insufficient power and help. You know from experience that horses are unreliable and costly. You know that it is almost impossible to procure hired help, except at exorbitant prices. You know that each succeeding year shows an increase in your operating expenses and a reduction in your profits. These are existing conditions which confront every farmer. He, to be successful and lay away a competence for a "rainy" day, must seek a more reliable and economical way of tilling the soil.

Why not start right now to devise ways and means to meet these conditions? It's an absolute fact, attested to by thousands of wide-awake, progressive farmers, that there's a cheaper way, a better way and an easier way to farm. It's with the reliable economical power of the AULTMAN-TAYLOR 30-60 GAS TRACTOR. Place your order right now for an

### Aultman-Taylor 30-60 Gas Tractor

And the minute spring opens up start farming for bigger profits. Just the minute you start to work the farm with this famous tractor, you'll increase your profits and reduce your operating expenses. With an Aultman-Taylor 30-60 Gas Tractor and one or two men, you can do the work of 30 to 35 horses and 10 to 15 men. You can not only do your work at an enormous saving, but it can be done when conditions are most favorable. Just think what this means to you!

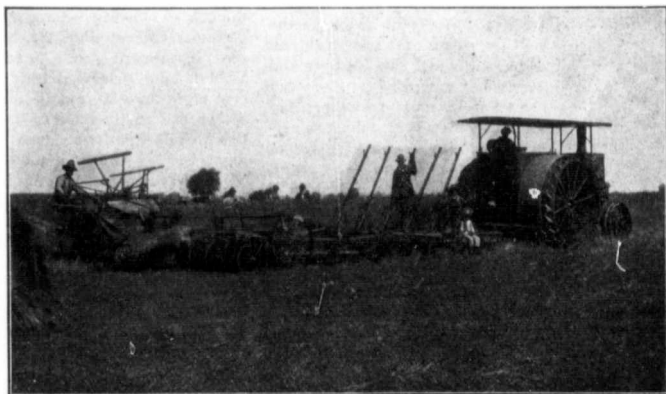
Let us figure with you on your requirements. We have the tractor that will do your work quickly and economically. You'll make a sad mistake if you don't investigate the AULTMAN-TAYLOR 30-60 before you buy. Don't be misled by glaring advertisements and glittering promises. Results are what you want. You'll get the desired results if you buy an Aultman-Taylor Gas Tractor. The Aultman-Taylor 30-60 burns either gasoline or kerosene with unequalled economy.

BY ALL MEANS GET OUR CATALOG BEFORE YOU BUY. WE HAVE THE TRACTOR YOU WANT. A POST CARD OR COUPON BELOW WILL BRING YOU ILLUSTRATED LITERATURE. WRITE FOR IT TO-DAY.

## The Aultman & Taylor Machinery Co.

Lock Box No. 64, MANSFIELD, OHIO

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



<p>CUT THIS OUT</p>	<p>MAIL IT TO-DAY</p>
<p>THE AULTMAN &amp; TAYLOR MACHINERY CO. Mansfield, Ohio</p>	
<p>Please send me Catalog and interesting literature about the Famous Aultman-Taylor 30-60 Gas Tractor.</p>	
<p>Name.....</p>	
<p>P.O.....</p>	
<p>Prov. ....</p>	

## Now is the Time to Order



**The old reliable dependable Caswell Adjustable Belt Guide.**  
Holds the belt steady in every wind that blows. As necessary as a self-feeder. Always on the job. Saves the belt and lasts a lifetime. It has been saving time, labor, belts and money for thousands of threshermen for over a decade. Let it save yours.

**The CASWELL AUTOMATIC BINDER HITCH**  
IS simple, easily attached cheap.  
Each binder steers itself and cuts as desired on, in-curves, out-curves, round corners, square corners, and points, without any attention whatever.  
After three years of success, everybody says "The best at any price". Address to-day,  
**Caswell Manufacturing Co.**  
Cherokee, Iowa, U.S.A.

**THE CASWELL DISC and DRILL HITCH**  
IS BUILT IN SIZE FOR ANY tractor. It handles Discs, drills, seeders, packers, harrows, etc., to perfection. The greatest work and worry saver of the age. It will pay for itself every year. No Power Farmer can afford to be without it.

We also manufacture a full line of **POWER FARMING EQUIPMENT** including, engine-wagon trains, packers, etc. Send a postal card to-day for full information. See your dealer. Dealers send on your letter head for contract.



once every two or three days to haul fuel and water.

When cutting I pulled two binders on high speed or a little better than three miles per hour. The engine would pull three binders on high speed but the grain was very heavy and tangled, that horses could hardly pull the binder through. I cut 35 acres of oats in 8 hours. The engine uses 30 or 35 gallons of kerosene per day when cutting. Oil costs 19½ cents per gallon.

I do not consider an engine detrimental to plowed land but think if extension drivers were used the engine would travel easier and the weight would be spread more.

I figured that it cost me about \$1.00 per acre to plow, break or summer fallow. I think an engine should be about 20 H.P. for farming as work would be done quicker with the same number of men and easier on the engine.

This year I intend to drill on low speed and cultivate the ground at the same time. It takes less horses with the engine and the work is done quicker as the engine can work longer days without rest. I estimate the cost of running engine to be about 10 cents per day, this is cash, whereas you can grow the feed for your horses and save expense.

Ernest Leng,  
Caron, Sask.



**Good Investment for a Big Farm**

I have been operating a Hart-Parr gas kerosene engine rated at 60-30 H.P. In our work we have been using a Rumely separator, 34 x 56 and a P. & O. six-furrow plow. I will say that I made one mistake in selecting equipment, that of under estimating the working power of my engine.

I believe that an engine of the above type can easily handle a 36 x 60 separator. Then our six furrow plow, while all right for breaking was much too small for stubble. We have been using about three gallons of kerosene per acre for breaking at a cost of 20c. per gallon at the Imperial Oil Company's tanks at Est. van. I try to keep three men on the job when plowing, keeping two on the outfit and one to haul oil and

water, sharpen shares, etc. I estimate the cost of one day's work at breaking as follows:  
2 gallons of gasoline .....\$ .60  
48 gallons of kerosene ..... 9.60  
2½ gallons of lubricating oil 1.05  
Engineer ..... 5.00  
Two men ..... 5.00  
Team ..... 2.00  
Board three men and team. 3.50  
Sharpening shares ..... 2.00

Total expense .....\$28.75  
16 acres at \$3.50..... 56.00

Of course, this takes no account of interest, depreciation or repairs, etc.

about my experience regarding traction work and will be only too glad to give same, if it will be of any help to my farmer and thresher friends.

The size of my engine is a 20 H.P., I.H.C. gasoline, which I consider one of the best makes because of its simplicity. One has enough to look after and repair, be it ever so simple. I use about 25 gallons of gasoline for each 10 hours hard work and probably two quarts of gas engine oil. The engine requires nearly 60 gallons of water for the same time. In the plowing season, two

to the profit of using one, I do not see any profit in raising wheat at 50 cents per bushel with either engine or horses. They are both too high for a farmer. My advice is for a farmer to let an engine alone unless he is a good machine man and can run his own rig and do the most of his own work.

Wishing your valuable paper every success, I am,

Yours truly,  
L. O. Hart,  
Claresholm, Alta

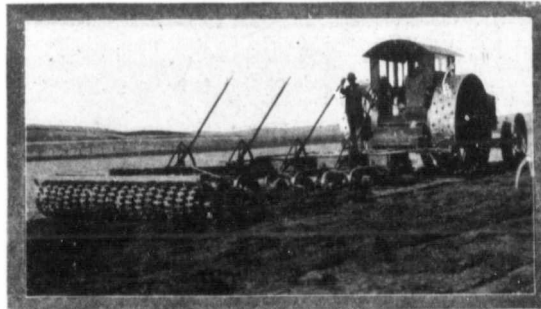


**Splendid Satisfaction**

Dear Sirs:

My engine is a Rumely Oil Pull, 30-60 H.P. It has given splendid satisfaction both on traction work and on the belt. I use a ten-furrow Cockshutt plow in stubble work but in deep breaking, we only use eight plows. The fuel used is distillate, which we get from an American firm direct in tank cars, and which costs us, laid down at our nearest station about 14 cents per imperial gallon. Two and a half or three gallons of their oil will furnish power to plow an acre of land. Fifty to sixty being the quantity needed for an ordinary day's work. Practically the same amount of water is required. Two men handle the outfit but a man and team are needed one day a week to draw water and oil. I believe \$1.00 per acre would cover the cost of plowing, wear and tear of the machinery and interest on the investment not included. Seeding and discing should not cost more than 20 cents per acre as we can easily cover seventy-five to one hundred acres per day. For threshing I have a 34-36 Rumely separator which is an easy load for the engine. Traction engineering is certainly a great advantage on a large farm owing to the scarcity of manual labor, but it is doubtful if they are any cheaper than horses in the long run, as the original cost is so high and the life of the machine comparatively short.

Yours truly,  
R. H. Edwards,  
Arlington Beach



Killing two birds with one stone.

We have never used the engine for seeding and we think on the average farm it can be done better by horses. We did a little discing with very heavy discs and made a fine job. We double discing about 45 acres per day at the cost of 35 cents per acre.

I do not consider an engine detrimental to plowed land if the soil is in the right condition to be worked properly.

As a general proposition I do not think the average man will get rich buying a tractor to do custom work. For the farmer who has a large farm to crop, I believe a tractor of the right kind to be a good investment.

I believe the larger type of kerosene burning engine will be found to be the most economical for a given amount of work, everything considered.

Frank D. Sutherland,  
Estevan, Sask.



**Another Advocate of Broad Tires**

Dear Sirs:  
Your letter to hand enquiring

men can handle the rig, take water, gasoline and supplies to the rig each morning also sharpen lays, if they are at all handy with tools. Two horses are all they will need as one can handle the engine and plows after once starting while the second man can go for gasoline or any necessities.

I find that my plowing here costs me nearly as much as the regular price of such work, all the advantage I can see over and above horse work is one can crowd 18 or more hours per day and rush a crop in, which is certainly an advantage here where the cropping season is so short.

I do not consider a light engine of any damage to the land it runs over, rather an advantage I think as I find where the drives wheels run over sod, the crop is better. My choice would be one with broad tires on all four wheels so as to cover as much surface as possible.

I find that my engine does all that the company recommended it to do but I think it could be made out of better material. As



# Plow the Rumely Way

**A** Rumely OilPull or GasPull outfit will do your plowing easier, better and cheaper than it has ever before been done.

Get down to the rich sub-soil—have your ground ready to plant at the right time to produce the biggest yields. A Rumely tractor and a Rumely mouldboard, or Sanders disc plow works fast and plows deep.

A Rumely tractor needs but little attention, does not require an expensive shelter, does not tire out or get sick, and never dies. It eats only when working, is ready for work every day, and will work night and day when you are in a hurry.

Whether you have an average sized farm or a larger one, we can furnish just the tractor you need. The OilPull uses kerosene. The GasPull is a gasoline tractor. We have a tractor of the right size, that burns the fuel that is most convenient for you to obtain.

For drilling, harvesting, hauling and road making—for threshing, grinding, baling and pumping, a Rumely tractor gives you big advantages over other forms of power. When your own work is done, you can help your neighbors and be well paid for your work.

We have a full line of steam tractors, and can furnish a wide range of separators to complete your tractor outfit, as well as Rumely brush breakers, a complete line of gasoline and kerosene stationary engines and the machines to go with them.

Be ready when spring opens. Ask the Rumely man near you to explain all about our tractor plowing outfits and other machines.

Be sure to get catalogs.

## Rumely Products Company

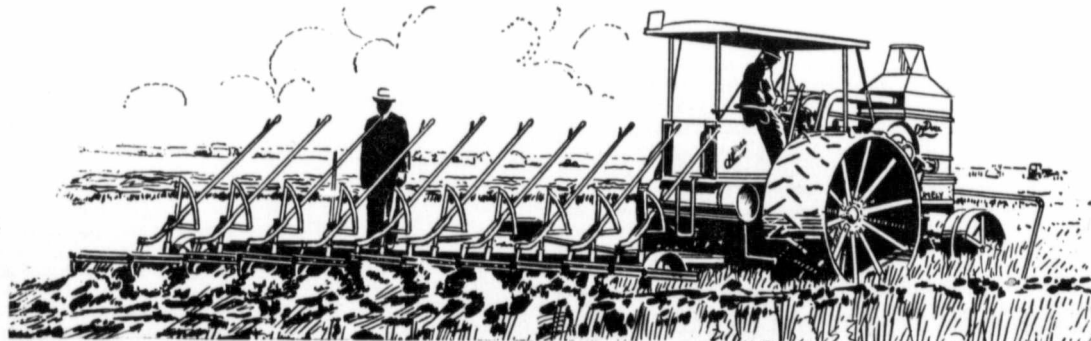
Incorporated

Power-Farming Machinery

Chicago

Illinois.

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



A. D. 931

Theory and Practice Hand in Hand

KNOWLEDGE of any subject may be divided into theoretical and practical, and in order to have the best acquaintance with any subject, the more of each kind we have the better we are equipped. The truly educated man recognizes this fact, but there are many so-called "practical men" who look upon the "theoretical man" with disgust, and vice versa. And yet, if all men belonged to either one or the other of these classes, it would be very difficult for either class to get along without the other. It is necessary, therefore, that the practical man who has learned what he knows from actual experience to acquire as much as he can of the theory of what he practices. It is likewise essential for the man who has learned from books the why and wherefore of this and that to get by experience some additional knowledge which cannot be secured in other ways.

I once heard of a young man in a college class who was given the dimensions of a certain gas engine and asked to figure out the size of pipe necessary to supply the engine with gas. The young student in question gave as his result, a 1/4 inch pipe. The professor in charge claimed that 1 1/2 inch pipe would be sufficient, but was met by the answer: "Where will you get your 1 1/2 inch pipe? Standard pipe is made 1 inch, and the next large is 1 1/4 inch."

Experience is, no doubt, an efficient, but wearisome, and oftentimes, a costly teacher, and sometimes from the experience of others we can learn a great deal. Oftentimes facts stick in our minds and are called to mind when needed, when the bare statements of the principles they illustrate would never be thought of. Sometimes these practical experience of others will save one a great deal of both time and money, and they are, therefore, often worth remembering.

When an engine fails to explode its charge, there may be any of several causes for it, among which is the failure of the igniter to work. This also may be due to several things, and it is usual in testing for the cause to place together the wires from the battery and see if they make a good spark when separated. If they do, we know that the battery is all right. The next step is to learn if we get a spark inside the cylinder. Most engines are provided with a small hole near the igniter points, and in this hole a plug is screwed. The plug may be removed to clean points or test for a spark. Several years ago an engine was being

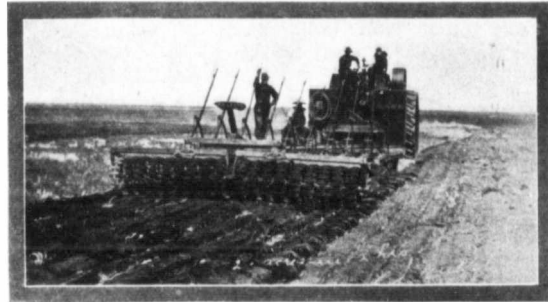
Course in Gas Engineering

Conducted by PROF. W. J. GILMORE

tested in this way. The engineer called to a man nearby to see if the gas was turned off. The man reported that it was, and the engineer snapped the igniter, at the same time peeping into the hole to see if there was a spark. At that instant there was an explosion in the cylinder, and, of course, the flame blew out through the peephole into the engineer's face. That he was not rendered totally blind was only a miracle. As it was, he was taken to a hospital, where it was two weeks before he could see at all. As for the cause of the explosion, it was never known just what caused it, whether there was in the cylinder a charge of gas, which had not been exploded after the gas was turned off, or whether the person who stated

attempt to look for the spark, and when you do look, keep your face some distance away from the hole and a little to one side, or else use a mirror to reflect the spark. While these may seem to be rather extraordinary precautions, nothing should be overlooked unless one wishes to run the chance of losing both his eyes.

A somewhat similar accident was told to me by an expert from a gasoline engine factory. He had been sent to locate and correct some reported difficulties in an engine. These were soon fixed all right, but the people had been using a self starter to operate the engine, and found that it was just as easy and a little less trouble, to start it without the self starter. They, therefore,



A good bit of hard practice.

mistaken. Or, possibly, the gas cock was accidentally opened, even if it was closed at the time the gas was turned off was gas was reported as shut off. Since the first case of this kind that came to my attention, I have heard of several others, although none resulted so seriously.

In making this test on the igniter, it is well to bear in mind the old saying: "If you wish a thing done well, do it yourself." First see that the supply of gas or gasoline is shut off from the engine. Then turn the engine over several times and operate igniter so as to explode any charge which may be in the cylinder. It is also a good idea to turn the engine over once or twice with the valves and cocks open so as to blow out any charge which may be in the cylinder, for the igniter may not work for several times, and then, just at the moment you happen to be looking in for the spark, it may ignite the charge. As a further safeguard, operate the igniter several times before you

asked the expert if he would disconnect the engine and starter. They were exceedingly busy and did not wish to be out of the use of the engine any longer than necessary, especially as they had been shut down for several days already. The expert told them that he could easily disconnect them without stopping the engine, and proceeded to do so. There was a pipe leading from the compressed air tank to the engine cylinder. All that was necessary was to disconnect this and put a plug in its place. This could easily be done by throwing out the switch in the battery circuit, when the engine would run without exploding for several revolutions, during which time the pipe could be unscrewed and a plug put in. Then the switch could be thrown in and the engine would begin to explode the charges, not having lost more than two or three impulses, so that it would soon be up to speed again.

But again, "If you wish a thing done well, do it yourself." Everything was ready. The expert

was at the engine with a pipe wrench, plug, etc. A man stood at the switch, and at the word through out the circuit. The pipe was unscrewed and the plug was just going in when the engine fired. The switch had fallen back into contact and completed the circuit. The expert's hands went "chunk" into a bucket of oil that happened to be standing near. A doctor was summoned and dressed the hands, but it was several weeks before they were of much use to their owner.

Sometimes troubles with gas engines occur in a place where the cause is seldom looked for because the trouble may have come about gradually and seem to be due to other things. For instance, when an engine heats too much there are several things which may be the cause of it, and yet one of them often escapes the mind of the operator. A steam engineer usually uses some kind of boiler compound to prevent deposits in the boiler, a gas engineer often overlooks the fact that these same causes may occur in the water jacket of the engine.

In one case an engine was reported as heating a great deal more than it had formerly done. When the expert examined the engine he found the lower portion of the jacket space practically filled with mud, lime, etc., which had baked hard. Of course it had taken several years for this to occur, but as the result of it the water did very little good and the engine became very hot. In another case, while the jacket space had not become so completely filled up, the space around the inlet pipe had become pretty well clogged up, so that the water supply was choked down and the engine heated too much.

These jacket spaces should be thoroughly cleaned out about once a year, depending on the nature of the water used, if the tank is used, and the same water circulates through the engine over and over, a boiler compound may be used or rain water instead of water containing lime and other substances which will deposit. This will prevent the trouble to a large extent.

Sometimes the cause of trouble seems to be rather ludicrous when the explanation is known. When large engines are placed in office buildings, it is usual to draw air from outdoors through a pipe instead of from the engine room, as the sound of the suction is then reduced and is then not annoying. In one case an engine was so arranged, and the end of the air pipe was just outside the building about ten feet from the ground. Some street urchin happened to hear the noise of the air being drawn in

# The "Dreadnoughts" of the Prairies

## The "Marshall" British "Colonial" Tractors

For PLOWING, THRESHING, AND HAULING, ROAD GRADING, Etc.

NOT IN ANY COMBINE

**BUILT LIKE A BATTLESHIP**

**RUNS LIKE A WATCH**

MADE IN 2 SIZES—

16 H.P. Draw Bar

30-35 Brake H.P.

and

32 H.P. Draw Bar

and 60-70 Brake H.P.

**ECONOMICAL**

**DURABLE**

**RELIABLE**

**GUARANTEED**

**OF**

**FINEST MATERIAL**

**AND**

**BEST WORKMANSHIP**

**WANT FEW REPAIRS**

The "MARSHALL" Engineering Specialities are known in every corner of the earth and known to be good, sound, and above all, Reliable.



The above represents a 32 H.P. Draw Bar and 60-70 Brake H.P. "CLASS F" Tractor, with two travelling speeds.

HAVE STOCKS OF TWO SIZES ON HAND

HAVE COMPLETE LINE OF REPAIR PARTS

HAVE SKILLED MECHANICAL ENGINEERS FROM WORKS IN GAINSBOROUGH, ENGLAND

CUSTOMERS MAY RELY UPON PROMPT SERVICE AND CAREFUL ATTENTION

REFERENCES TO THOROUGHLY SATISFIED USERS. HAVE MANY TESTIMONIALS

Send for Illustrated Catalog with full description and—DO IT NOW

### MARSHALL, SONS & CO. (Canada) Ltd.

ENGINEERS

SASKATOON

::

CANADA

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

and began to throw his cap up towards the end of the pipe, and was amusing himself by seeing the cap suddenly diverted from its course by the air going into the pipe, but once the cap went too near the pipe and was sucked into it, and, of course, shut off practically all of the air supply causing the engine to stop.

If the boy had not wanted his cap back the engineer might have hunted a long time before he discovered the cause of the trouble. But caps are not to be thrown away by street arabs, and so he went into the building to inquire as to how he could get his cap back. This, at once, may claim the cause of the engine stopping. After trying in vain to blow the cap out by exploding a charge in the engine and holding the air valve open, the pipe was finally taken down and the cause of the trouble restored to its owner. Since then I have noticed a wire screen is placed over the end of this pipe.

Frequently we are inclined to laugh at the mistakes of others, and say that if that particular trouble happened to our engine, we would not be long in finding it. But this is not always a safe position to take, as the following incident will show: A gasoline salesman went to see one of his

engines, which was reported by the owner to be giving him continual trouble. He found that the real cause was that the man that was employed as engineer did not seem to be able to understand the engine at all, and as a result it easily got out of adjustment, and so on.

After making some slight adjustments and cleaning up the engine, the salesman proceeded to give the engineer some instructions in the presence of the owner. He illustrated trivial causes of trouble by relating an experience he had had two days before, when he went to find what was the matter with another engine. He found that the engineer in wiping up the engine had allowed a string of waste to get fastened to the gasoline feed, and it had lodged in such a position that it practically cut off the supply of gasoline. When the waste was removed the engine started off at once with no further trouble.

The engineer to whom the incident was being related, said, "Well, I'm not that dumb anyway; I'll bet I'd have found it." Soon after he went out of the engine room and the salesman placed a piece of waste in the feed just as he had described. When the engineer returned the

engine was evidently in trouble, and his face seemed to say, "I told you so; you think the whole trouble is with me, but I know it is the engine."

The salesman refused to look for the cause of the trouble, as he said he wanted to see how the engineer went about looking for the cause of the trouble. After some fifteen or twenty minutes of vain endeavor, the engineer finally gave up. When the salesman went up to the engine and picked out the waste, it, of course, made the engineer angry, as he thought a trick had been played on him. Nevertheless it showed that he was unable to locate the slightest trouble with the engine.

The greatest trouble with engineers seems to me to be that

they do not have any idea as to how the engine works and what its various parts are for. They can start it or stop it, but when trouble comes, they are not sufficiently acquainted with the theoretical part of the engine to understand where to look for the trouble. Many of them will see that the spark was all right, but forget to see whether the engine is getting gas or gasoline. Others will see to the fuel supply and forget that if their muffler is choked up the burned gases cannot escape. Still others test the engine for compression, but forget that a spark is necessary.

When an engine gives trouble, unless it is very apparent that the cause is in some particular part, it is well for the engineer to have some one method of going

Continued on page 30

### FRUIT LANDS

### Unexcelled

In the famous Similkameen Valley; the Choicest Fruit District in British Columbia.

All kinds of Fruit and Vegetables mature two weeks earlier than any other district in Canada.

The finest natural conditions of soil, climate and location with an ideal home life are to be found in this celebrated district.

### Similkameen Fruit Land Company Ltd.

300 GREAT WEST PERMANENT BUILDING  
P. O. Box 2997  
Winnipeg, Man.

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

PRACTICAL TALKS TO THRESHERMEN

Talk No. LXXVII.

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.

IN the case of a steam engine when the operator wishes to reverse the machine he merely reverses the direction of the motor. This is easy enough to do because all that is necessary is to

In the case of a steam engine when the operator wishes to reverse the machine he merely reverses the direction of the motor. This is easy enough to do because all that is necessary is to change the time of the opening and closing of the valves by shifting the mechanism which operates them. It might seem to one not versed in the intricacies of the gas engine that it would be just as easy to devise a mechanism which could change the time of opening of the inlet and exhaust valves and the instant of igniting the spark as it is to shift the motion of the valve in a steam engine and thus reverse the motion of the engine itself. It would seem as though this might easily be done but the problem presents so many difficulties that it is seldom attempted. Theoretically, it is easy enough. All that is necessary is to cut off the fuel, let the engine slow down and then shift the mechanism, consisting of cams or gears, until the valves open at the right time for the reverse motion. The matter of changing the spark is simple and easy to arrange, but not so with the valve mechanism, though it has been attempted with some of the large sized four cycle marine engines. It is possible to devise a reversing mechanism for any gas engine but not easy to make one that will be certain in action and durable, because of the heavy

versible gas engine is that in order to be reversed the load must be thrown off because at low speeds it has little power and would stop, whereas if the reversing is done by means of gearing it may be accomplished

designing combinations of gearing of this kind in which one or more gears travel around a central gear. The planetary gear is a little more difficult to understand and to explain than the sliding gear transmission, and so we shall have to refer very frequently to figure 189, in order to obtain a clear understanding of its operation. The names of the principal parts are all clearly marked on the drawing. The first thing to be observed, is that the planetary gear is mounted on the engine crank shaft since this is the source of the power which is to be transmitted to different parts of the system. The central unit of this aggregation of parts is the clutch wheel which is securely keyed to the engine shaft and revolves with it. Surrounding the clutch wheel there is a pulley made up of an outer and an inner half bolted together and carrying on the side next to the engine the engine shaft gear. On the back of the clutch wheel and bolted thereto will be found the planetary gear which also revolves with the engine shaft. To the left of the planetary gear which is keyed to the friction disc sleeve which in turn is free on the engine shaft. On the ends of the planetary arm there are two gudgeons each of which carries a planetary pinion which meshes with the planetary gear. Surrounding the two planetary pinions and meshing therewith may be observed an internal gear which forms a part of the inner half pulley. There are thus four gears in mesh the central planetary gear the two planetary pinions on either side and the internal gear surrounding the three. In order to understand how the mechanism works it will be

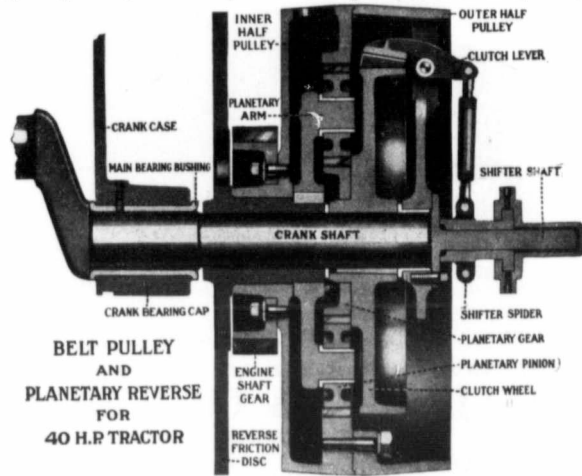


Fig. 189

almost instantly and under the full power of the engine. Since in almost every position where a reverse motion is used it must be instantly available, and as this cannot be obtained as we have seen with a reversible gas engine it follows that no great efforts have been expended in inventing reversible valve and ignition mechanism.

On traction engines a quick acting reverse motion with the

sliding gears; second, planetary gears; third, friction transmission. These three types of reversing gears are all used on traction engines. The first named is the one most commonly adopted just as it is for automobiles. Several reverses of this type have been described and illustrated in the preceding lessons, so now we shall proceed to a description of the second or planetary reverse gear. To do this we shall describe in detail the type of planetary gear used on the Hart-Parr line of tractors. Automobile gears of this type differ somewhat in details of construction from the one we shall describe but the principle of operation is the same in all.

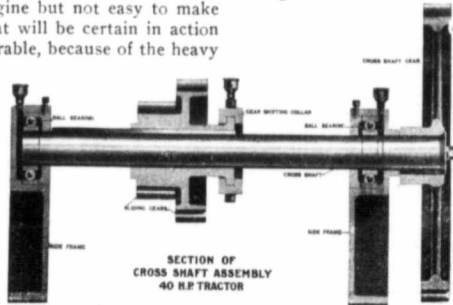


Fig. 190

loads, vibration and wear to which it is exposed and the necessity for very accurate timing of all the movements. Small two cycle engines used for marine work are usually made reversible by merely changing the time of ignition. There are no valves to shift and the operation is very simple.

One serious objection to a re-

full power of the engine is a necessity, as there are many occasions for backing up to hitch to a load, to turn around or to escape danger. It would never do to have a slow acting mechanism. The same is true of hoisting engines, marine engines and many other kinds of engines. All of this being true, reversing is accomplished in the case of

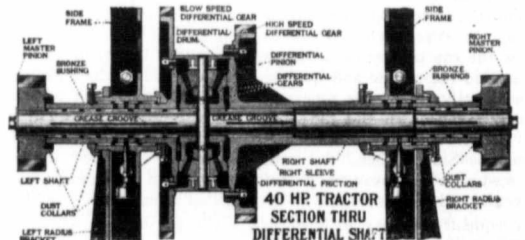


Fig. 191

The term planetary gear derives its name from the fact that the outer gears travel around a central gear like the earth does around the sun. Sometimes the term elliptic gearing is used in

necessary to keep the relationships of the different parts clear in mind as follows:

- 1. The clutch wheel is keyed to the engine shaft and must r-

Continued on page 30

# Buy What the Farmer Wants

## It will be most Profitable to You

The farmer wants you to come prepared to do his work quickly  
You can do that only with an outfit that will do lots of work and do  
it without bother.

Such an outfit is the Nichols-Shepard  
**THE FARMER WANTS HIS GRAIN SAVED**

You should have a thresher that will do that best  
That thresher is the **RED RIVER SPECIAL**  
**IT BEATS OUT THE GRAIN**

No other thresher does

All others depend upon the grain dropping out

This beating-out process is found only in the **RED RIVER SPECIAL**  
The farmer knows it. He knows that

### It Saves His Thresh Bill

The Farmer wants the **RED RIVER SPECIAL**

Fred and W. A. Reitmeier, of Crookston, Minnesota, say, under date of October 6th, 1913:

"In the fall of 1903 we bought one of your 20 horse power Engines and a 36 x 56 Red River Special Separator complete. This fall's run will complete the eleventh fall. She has had from 30 to 40 days' work each season for eleven falls, and we still feel safer in taking this outfit out for a good fall's run than we would a new outfit of some other make. The outfit is still in good running order and is good for several seasons more.

"We have threshed in the same locality and for the same farmers each fall. The farmers are well pleased and always want us back to do their threshing.

"We can truthfully say to anybody who is interested in threshing machinery that he can make no mistake in buying the Red River Special line. I have had 21 years' experience in threshing and I have tried other makes, and we are satisfied that none can give the satisfaction that the Red River Special line will. For good work and fast and clean threshing it cannot be beat. The machine is built to run steady and last long.

"Outside of one set of flues for the engine, our total repairs during the eleven falls has not been over \$100.00."

Get in line  
Get the best machine  
Get the best jobs  
Get a Red River Special  
It costs no more than any other good Thresher  
It will thresh more grain  
It will do better work  
It will please the farmer most  
It will make you most money  
It will last longest  
It requires less tinkering  
It runs more steadily  
It will thresh well when conditions make other kinds stand idle  
It is not built by a trust  
Try it once and you will always use it  
**IT SAVES THE FARMER'S THRESH BILL**  
Send for Catalogue

**NICHOLS & SHEPARD COMPANY**  
**BATTLE CREEK, MICHIGAN**

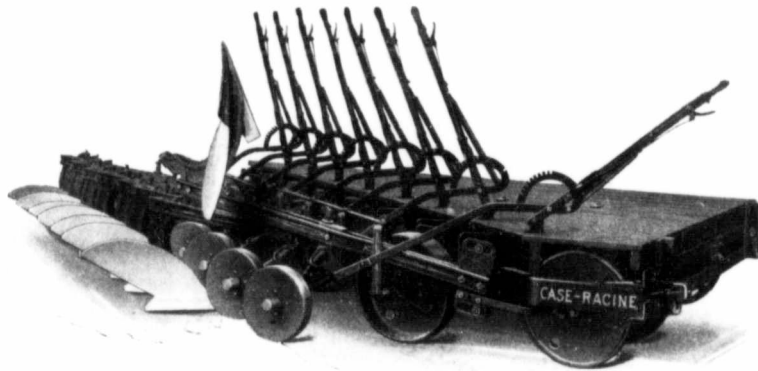
In continuous business since 1848

Builders of the Red River Special Threshers, Steam and Oil-Gas Tractors, Wind Stackers, Self Feeders and all attachments

Canadian Branches: WINNIPEG, MAN. REGINA, SASK.



# CASE



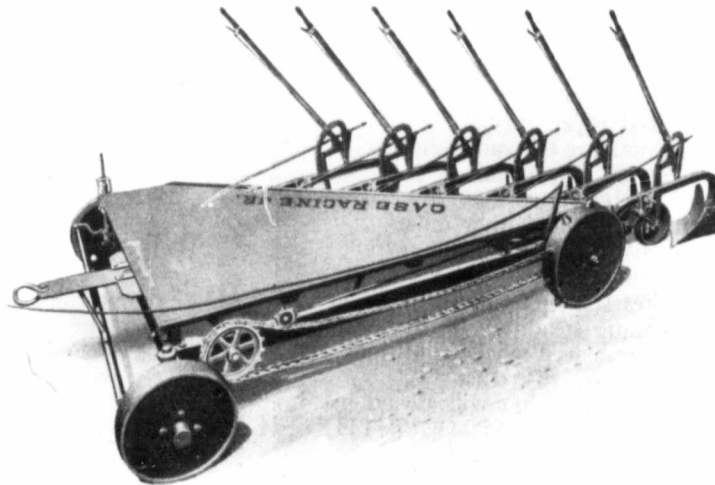
## The Plow for Your Work

How many acres have you to plow? What sort of soil is it? What are the general conditions under which you have to work?

The Case-Racine is the power plow for you. It has the answer to any plowing problem you may have. Considered simply as a PLOW, it is all you exacting plowmen can ask. Weighed by the service it gives it is the best investment you can make. For heavy plowing, the Case-Racine fills the bill without a rival.

If it is a smaller plow you want, the Case-Racine, Jr., cannot be surpassed for efficiency and accuracy of work. Both types are equipped with the spring hitch, automatic dodge, side tension spring, cast breakpin device and others, EXCLUSIVE with Case.

These features make for good plowing, deep plowing, all-season plowing at a good profit, without vexing and costly breakdowns. Send for the catalog describing these power plows. Figure on the work you can do, the profit you can make with a Case-Racine Tractor Gang Plow pulled by a Case Steam, Gas or Oil Tractor. Other wise plowmen choose and use them—why not you?




# J.I. CASE THRESHING MACHINE CO.

741-791 STATE ST.

INCORPORATED

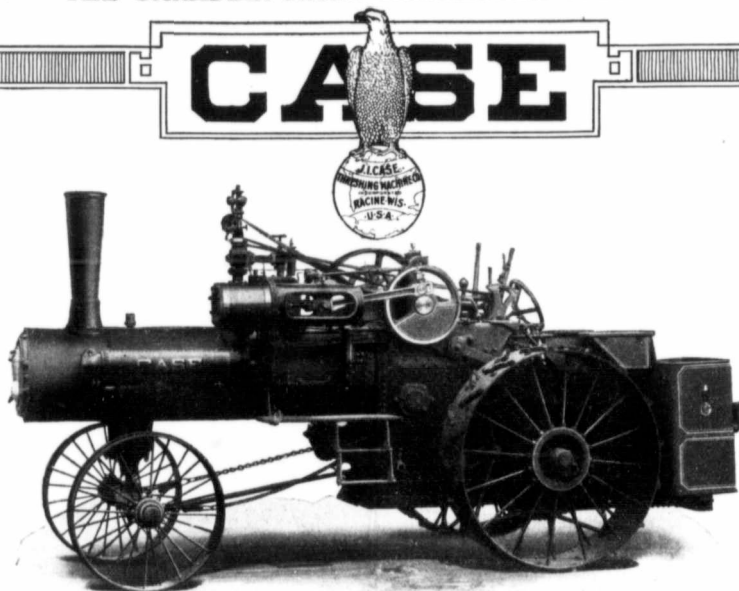
RACINE, WIS. U.S.A.

CANADIAN  
BRANCHES

TORONTO · WINNIPEG · SASKATOON · REGINA · CALGARY



# CASE

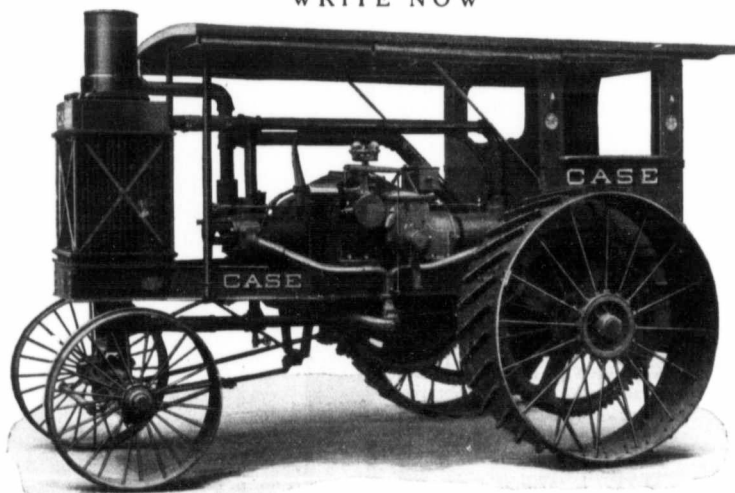


## Dependable Power for Plowing

Right now is the time for YOU to figure on a power outfit for Spring Plowing. No matter how much or how little you know about steam, gas or oil tractors, of this you may be sure: Case tractors cannot be excelled for simple, easy and economical operation, long wear of parts and most service at least cost. The records of the many Case users prove this, the test at Winnipeg proves it. Their daily increasing sale proves it.

You know as well as we do that we can not afford to put ANY Case product on the market unless it maintains in every way our reputation as manufacturers of the most efficient power farming machinery. Investigate this equipment today. It will stand up unequalled under any test you care to put it to. Get our Catalog. See what the Case 1914 line offers you, no matter what your needs. It is the line that has always made good, the one that puts your money to work to best advantage.

WRITE NOW



# J.I. CASE THRESHING MACHINE CO.

741-791 STATE ST.

INCORPORATED

RACINE, WIS. U.S.A.

CANADIAN  
BRANCHES

TORONTO · WINNIPEG · SASKATOON · REGINA · CALGARY

# The Thresherman's Question Drawer

ANSWERS TO CORRESPONDENTS

**Q. G.A. 1.** I ran a twenty-five horse power engine for a couple of days this fall in threshing. It acted rather queerly at times when pulling in the belt. The governor valve seemed to stick—it would jump up and down at every revolution of the fly wheel, cutting off the steam only on one side. The engine was equipped with a Waters governor, and to all outward appearances it seemed all right in every way. There was something the matter with the valve stem or stuffing box, and the belts and pulleys were all in good shape. When moving, the governor seemed to work all right, but when threshing the only way I could manage was to partly close the throttle. What do you suggest as a remedy?

**2.** Will this rule always hold good with the Woolf single eccentric reverse gear? "When the engine is on dead center and the eccentric is properly set, moving the reverse lever from one end of the quadrant to the other will not move the slide valve."

**A.** The governor is certainly not acting right. There are a number of things which may be wrong and which would cause it to act in the manner described. The first thing that occurs to us is that the belt may be a little too loose or, what is even more likely, that it is oil soaked and slips. This is a fruitful cause of trouble and one that has occurred many times in the field. It may be also that there is a tooth out of one of the beveled gears or the gear itself may be loose on the shaft. There may be a nick in the valve stem or a drop of paint or it may be slightly bent. If you will look into the matter carefully we are sure you will find the trouble at one of these points.

**2.** As a general rule the quotation which you refer to is correct, but unfortunately there are a number of Woolf valve gears which are not designed exactly in accordance with this principle, and there may be a very slight movement. We do not hesitate to say, however, that this should not exceed one-sixteenth of an inch and in general, there should be no movement at all. The engine, however, must be placed exactly on dead center, and this can only be accomplished by using the trams and by careful measurement.

**Q. P.S. 1.** Does it do the flues any harm if water is allowed to remain in the boiler all summer?

**2.** Does it do the flues any harm if, when burning straw, the straw chute is allowed to become empty once in a while? I have had a considerable amount of trouble with the flues during the past fall. The engine is only twenty horse power, and it has to work very hard to handle the 36 x 60 separator. Would working the engine hard have any tendency to make the flues leak?

**A.** It is not good practice to allow water to remain in the boiler all summer. There will be considerable corrosion at the surface of the water. If the boiler could be kept full and some soda were put in the water there would be no trouble, but this is something that few threshermen will do. and, furthermore, the boiler is liable to leak slowly and let some of the water escape. We prefer to drain all of the water off the boiler and then store in a dry place. One of the best ways is to let the water all out when there is a pound or two of steam pressure. The heat left in the boiler plate will evaporate all the water and leave the inside of the boiler perfectly dry. The hand hole plates should be removed and the boiler left open during the time it is not in use.

**2.** It is very harmful to the flues to allow the straw chute to become empty, because cold air will be drawn in, which, striking the flues, will cause them to contract quickly and leak. This is one of the most fruitful causes of the leaking of flues. The fact that your engine works very hard made it necessary to maintain a heavy fire and heavy draft, and that also is a cause for the leaking of flues.

**Q. P. 1.** Will it make any material difference in the distribution of the steam in a Woolf reverse engine if the position of the main shaft is slightly altered in the boxes, provided it is in correct alignment? What is meant by the term guide pivot as applied to Woolf reverse engines?

**2.** Why do some engines require heavier fly wheels than others of the same size? Do not single cylinder engines require

## \$15,000,000.00 Lost

H. T. Gussow, Dominion Botanist, estimates that the yearly loss to the farmers of Canada through smut diseases is over \$15,000,000.00. On a basis of the acreage of 1911, an average loss of eighty-four cents per acre. **What was your loss last year?** Do you know that every dollar of that great loss could have been saved if all grain growers had treated their grain properly, yes every dollar of it! Do you know that from September 1st, 1913, to January 31st, 1914—just five months—3,948 cars of wheat were rejected at Winnipeg alone for smut! Over 3,300,000 bushels! Do these facts not interest you? We manufacture and sell smut machines. During twelve months of each year we do nothing but study this great question, which is so vital to every grain grower. It is not just a side line to engage part of our attention during a few months of each year, but it is our **only business**, and it is a recognized fact that what we don't know about smut and smut machines isn't worth knowing. Over six hundred live implement agents in Western Canada have sold our machines. Thousands of farmers have purchased our machines with our famous guarantee of money back and freight paid both ways if not perfectly satisfactory in the user's estimation and we have yet to have a user who is not more than satisfied. The "Great West" Automatic Pickler is the product of all our years of study and is far ahead of anything ever put on the market before even ahead of the machine that we sold last year, both in the work that it does and as far as the price is concerned. We are building it in the West for Westerners, and it certainly is a most perfect pickler. Write for full particulars to-day and ask your agent to show you this machine in actual operation. He handles it.

### The Great West Implement Co., Ltd.

Successors to  
**The Dominion Specialty Works**  
**WINNIPEG, MAN.**

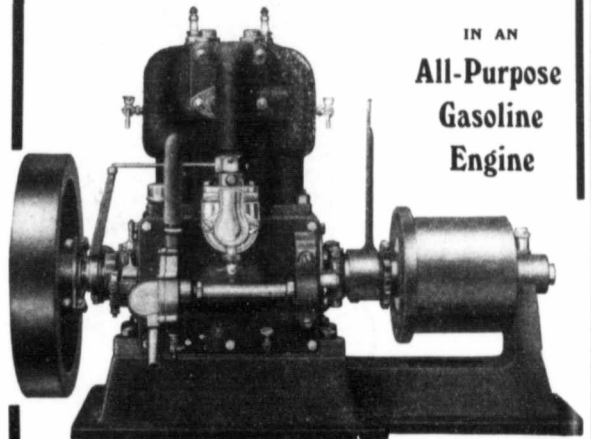
C.  
CUT OUT  
AND  
MAIL TODAY

Kindly send me full particulars and prices for your Automatic Grain Pickler.  
NAME.....  
P.O..... Province.....  
Dealer's Name.....

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

## LAST AND BEST

IN AN  
**All-Purpose  
Gasoline  
Engine**



**6-8 H.P. 4 Cycle 2 Cylinder**

Weight only 325 lbs. Speed 600 to 900 R.P.M.  
Cylinder 4 x 4 inches. Power 4 to 8 H.P. Fly Wheel 14 x 4 inches.

The remarkably light weight of this engine is obtainable only in this advanced type of construction. With its light weight it is the most compact and convenient engine to handle on the market. Its size adapts it perfectly to every kind of work on the farm. Length of base 29 1/2 inches; height of base, 29 1/2 inches; width, 8 inches and 12 inches; height of base, 4 1/2 inches; to crank shaft, 8 1/2 inches; total height, 24 inches; shaft, 1 3/4 inches.

Also built in special electric light type with double fly wheels. Regularly mounted on wooden skids; includes ignition system, etc., ready for operation. Magneto to order. Get our full specifications.

WRITE FOR DEALERS PROPOSITION AND FULL PARTICULARS

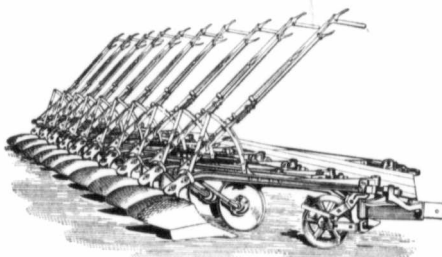
**Cushman Motor Works of Canada, Ltd.**  
202 Chambers of Commerce. Winnipeg

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



# Buy An Oliver Plow

**O**LIVER Plows are made to meet Western Canadian plowing conditions. Oliver sulky and gang plows have landed beams which enable you to work four horses abreast with no horse walking on the plowed ground, and without side strain on the beams. Shares and moldboards are correctly curved; the extra high wheels have adjustable bearings and extra wide tires. These features mean light running, long wear, better work—the right plow to buy.



Oliver tractor-gangs are built in 4, 5, and 6-base sections, enabling you to use a gang with any desired number of bottoms. This construction also makes the Oliver tractor-gang the most flexible of all. It follows the engine steadily and plows evenly.

We call your attention here to only a few of the many important features of Oliver plows. You will find just the plow you need in the Oliver line. See and study the plows for yourself at the I. H. C. local agent's place of business. Get a catalogue from him, or write the nearest branch house.

## 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.

heavier wheels than double cylinder engines?

3. Why do not all traction engine builders put inch injectors and fittings on their boilers? Are not the three-quarter inch pipe harder to keep from clogging with scale than the larger size, where the pipes enter the boiler?

4. I have been troubled with grain going over the shaker in 42 x 64 separator. The speed of the cylinder is 1,100 r.p.m. in dry grain and 1,200 in damp grain. We put in new cylinder teeth every second year and feed the machine as evenly as possible with either three or four men pitching. Can you suggest a remedy?

A. 1. The Woolf reverse gear is very sensitive to any changes in the relative positions of the different parts, such as the position of the main shaft, the center of the guide back, the center of the eccentric, and length of eccentric rod. If you have altered the position of the main shaft even one-sixteenth of an inch from the position it was designed to occupy, it will make considerable difference in the steam distribution. The mere fact that you have the shaft lined up properly with the center of the cylinder is not sufficient; it must be placed right relatively to the guide back pivot or pivot about which the guide back

rotates.

2. The weight of the fly wheel of an engine depends on the general design of the whole machine. If the engine has two cylinders it will require a lighter fly wheel than if there is only one. Traction engine fly wheels are made as light as possible and still retain fairly close regulation in speed. You will understand that heavy fly wheels conduce to steady running, while light fly wheels cause the motion of the engine to be somewhat jerky. On the other hand, the heavy fly wheel when in rapid rotation strains the shaft enormously if the engine is suddenly reversed. For this reason the fly wheel is made as light as possible without sacrificing too much in the matter of close governing.

3. This is a question you will have to put up to the manufacturers. Doubtless the reason they use the smaller size is largely a matter of economy—and besides there has been very little trouble experienced, except in certain sections of the country, with the filling of the feed pipe with scale.

4. We suggest you change the angle of the blast or drop the front wheels an inch or two lower than the rear ones. These means are often resorted to to overcome the trouble you are experiencing.

# QUALITY SEEDS

Make more money by sowing more productive seed. Buy "Quality Seeds", the only kind we sell. Our line of seeds is more complete than ever before, and we can supply choice seed of the varieties best suited to Western Canada. Write for prices and samples of any of the following:

- Wheat ..... Marquis, Red Fife.
- Oats ..... Gold Rain, Banner, Abundance.
- Barley ..... Eclipse (Registered) O.A.C. No. 21.
- Flax ..... Premost, Common.
- Grasses and Clovers ... Western Rye, Brome, Timothy, Kentucky Blue, Canadian Blue, "Regina" Brand Lawn Grass Seed, Alsike, White Clover.
- Alfalfa ..... Montana and Turkestan.
- Corn, Potatoes, Rape, etc., etc.

Write today specifying requirements.

## The Mooney Seed Co. Ltd.,

"Seedsmen to men who care."  
Regina, Sask.

# A CASE Tip

Consider first the problem of the Engine Gang Plow best suited for your soil, and if you decide upon a CASE made in RACINE, be sure to look for "The Plow In Hand" trade mark here shown.

Without taking into consideration the merits of any particular type, figure out just what this means to you. If you are not familiar with the facts, let us assure you it means Your Guarantee of a Quality Plow to do Quality Work—in lightness of draft; clean, smooth furrows (see cut below); a flexible, automatic power lift whereby you can raise or lower any pair of bottoms at any time. This is a big advantage, especially in actual field work, as one plow may gather something on the point, or clog up in trashy ground, or you may want to lift one or two plows up to clear a rock or stump. In other automatic lifts, if you raise one plow, you have to raise them all. Not so with the CASE made in RACINE. You simply pull the rope controlling the bottom you wish to raise, and up it comes, and to lower it you pull the same rope again.

The ONE Plow that possesses the essentials in a greater degree than any other—as can be proved by competitive tests any day—the Plow that wins the approval of hard-headed farmers in practical daily use is the

## J. I. CASE made in RACINE Power Lift Tractor Gang Plow



Our catalog describes more in detail many other features of superiority and explains why we take less engine power. Write for catalog now.

# J. I. CASE PLOW WORKS

# On Spring Buying

J. I. CASE

one of the early pioneers in the implement business of this country, and whose photograph is shown here, was



THE FOUNDER

of the only original and genuine CASE Plow

made in

RACINE

There is only one original and genuine CASE

J. I. CASE

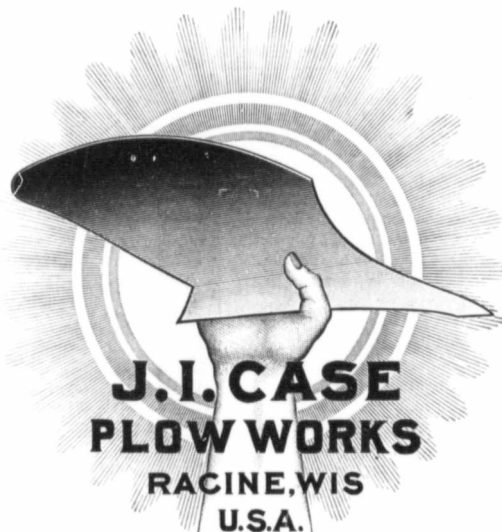
or

CASE RACINE

PLOW

made in

Racine



And every one

bears this

"Plow in Hand"

trade mark

Case implements are fully described in our new 1914 catalog. If you are not on our list, send for catalog and you will be convinced, as others have been, point for point, of J. I. CASE superiority.

J. I. CASE,  
PLOW DEPT.,

**RACINE, WIS., U.S.A.**

Continued from page 9

especially true of a state during the period of its pioneer development. But as every section of our great country at some period has experienced pioneer conditions, the evil effects of exploitation are every where more or less apparent. And what is worse, the habit of wastefulness thus contracted is most difficult to restrain or overcome.

As population swept westward across the continent, the virgin soils were everywhere exploited with sinful prodigality. Like a swarm of locusts that devour and spare not, so the pioneer took no thought for the future. In most instances, he could not. Conservation was out of the question. He had to support his family as best he could. Hence, how to get the most out of the soil in the briefest time and with least effort became a logical characteristic of the American pioneer, even before the Alleghanies were crossed and the Western prairies were discovered.

**Not Yet Self-Sustaining**

It may safely be asserted that the age of economic agriculture has not yet fully dawned upon the American continent. Indeed, it may safely be asserted that a permanent self-sustaining system of agriculture has not been established in any country. The marked advance in cereal production made in Germany, Holland, Belgium and Denmark by means of applied fertility cannot be considered conclusive or self-sustaining, for the reason that much of the fertilizing material they employ on their farms is imported from other countries. They maintain the fertility of their soils at the expense of other and less provident nations, of which the United States cannot be excepted.

Chili is robbed of her potassium nitrate beds to enrich the fields of the European farmer. The South Sea Islands contribute thousands of tons of bird guano to maintain the fertility of English and continental soils. Moreover shiploads of linseed and cotton seed oil meal are annually imported into European countries which, together with the bran and shorts made from the large volume of wheat annually imported by those countries and all fed to beef and dairy animals, produces a prodigious amount of the choicest and most active fertilizing agents with which European and English farmers maintain, at least temporarily, the fertility of their lands.

The United States contributes a very large proportion of the live stock food just mentioned, and to the positive detriment of our country. No single state contributes a larger share than North

Dakota, for our principal exports are wheat and flax seed. Every bushel of grain we export of wheat, flax or of any other cereal, whether sent to Europe or only across the state boundary, means an ultimate loss to the state by the commercial value of the fertilizing material it contains. This annual loss of fertility cannot be wholly checked, nor is it necessary that it should. We should, however, practice such systems of farm management as will, as nearly as possible, annually restore to the soil the equivalent of what each crop takes out of it. For the intrinsic value of any agricultural land depends, almost entirely, other things being equal, upon the available fertility it contains.

If a large quantity of plant food is withdrawn by the cereal crops and a nearly equal amount is restored again by keeping live stock on the farm, many, many years must elapse before the depletion of fertility will visibly diminish the yield of crops. Not so, however, if large drafts are annually made upon the fertility of the soil, as is the case where exclusive wheat, corn or cotton farming is practiced, and nothing returned to it.

**Some Startling Figures**

When we come to scientifically estimate the value of soil constituents which a crop mines from the soil, the figures, to say the least, are startling.

According to the very best authority one acre producing 20 bushels of wheat, including the straw, mines from the soil:

Four-four pounds of potash, worth 5 cents per pound, \$2.20.

Twenty pounds of phosphoric acid, worth 4 cents per pound, 80c.

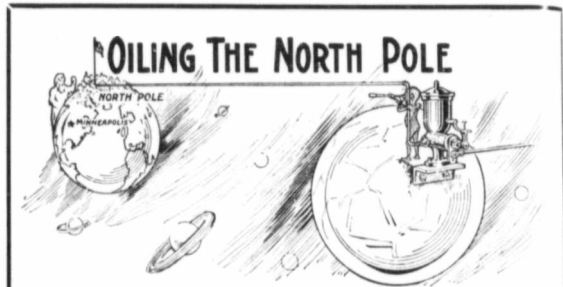
Forty-two pounds of nitrogen, worth 15 cents per pound, \$6.30.

This makes a total of \$9.30 per acre, or 46½ cents per bushel. As a matter of fact, these items are never taken into account; but in the long run, they cannot be evaded. They are related as essentially to correct farm book-keeping as the farmer's check book is related to his bank account.

Where the wheat is shipped out of the state and the straw burned—which is largely true of both our wheat and straw—it should not require much mathematics to determine whether the average farmer, after making due allowance for cost of production, is getting the commercial value of his plant food, to say nothing of making a legitimate profit.

**What Wheat Costs to Produce**

When a good farmer closes the season's account with any particular field, he certainly should not feel satisfied with receiving



is not the main business of  
**"THE PRACTICAL FORCE-FEED OIL PUMP"**

It's business is oiling the cylinders of steam engines, and the fact that it will pump any grade of cylinder oil, no matter how cold the weather is—no matter how stiff and heavy the oil gets—has won for it the title.

**"The Great Cold Weather Lubricator"**

It has no ratchet wheel with its troublesome pawls to get stuck, slip and "refuse to ratchet" on a frosty morning—everything about the engine may appear to be frozen up, but when you start your engine the pump starts feeding—keep the oil bowl filled and the pump does the rest.

The weather never gets too cold or too hot for this simple oiling device to do its work right. It is the one pump that can be relied upon 365 days in the year regardless of climatic conditions.

If you would be interested in hearing more about it, write for catalogue prices and full information.

**MCCULLOUGH MFG. CO. Minneapolis, Minn. U.S.A.**

CRANE & ORDWAY CO., Winnipeg, Man.  
 Distributing Agents for Western Canada.

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



**Are You Holding Your Engine Back?**

Are you letting it give the service it will when you supply perfect ignition—a strong, hot spark every time it's needed? Most engine troubles are ignition troubles due to poor equipment. You will never be troubled by them if you insist that the maker of the engine you buy equip it with a Wizard Magneto. It is so simple in construction there is nothing to get out of order. It is so strong and rigid it will last as long as the engine. And it's waterproof. If you want the best service from the engine you buy, don't accept it without a Wizard. There's a Wizard for every engine. Every one is guaranteed.

If you own an oil or gas engine now, a Wizard will cut out many of the troubles that reduce its value to you. Write us. For sale by all reliable dealers or we will supply if your dealer cannot. Let us send you

**"The Happy Engine Owner"—Our Free Book** which explains fully about ignition and shows also how to remedy or prevent most engine troubles.

**HERCULES ELECTRIC CO.**  
 2155 N. Western Ave. Indianapolis, Ind.

150,000 Wizard's used on such engines as:  
 Pullman motor  
 I. H. C.  
 White  
 Reo & Vander Voort  
 W. Fargo Boy  
 Stover  
 Challenge  
 Ames  
 Deuster  
 Ford Tractor  
 New Way



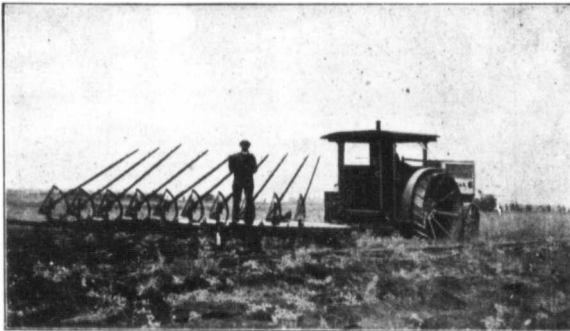
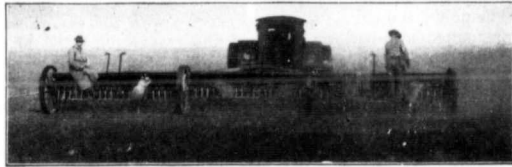
You saw this advertisement in this magazine. Don't forget to say so when writing.

less the best of mention Uni cult less per of v cial mov \$1.0 If vert to tl cent to tl of a amo cost shor on appl bush still mak appr On bran live port vert

## From Start To Finish

FROM the beginning to the end of the year, in every month, International Harvester oil tractors reduce the expense of heavy farm work—plowing, disking, harrowing, grubbing, harvesting, threshing, hauling, and furnishing power for stationary machines.

To know the remarkable capacity and year-round efficiency of International tractors send for our tractor catalogues. They explain all the features to you—the power engine starting system, the throttling governor, the dust and grit proof engine, the simple construction, the ease of operating, etc. They tell you how the modern tractor has revolutionized field and farmyard belt and drawbar work—saving time, labor, and money.



I H C tractors are simple and strong. They are built in several styles and all sizes, from 6-12 to 30-60 h.p. operating on kerosene and gasoline. The I H C line also includes all styles of general purpose engines from 1 to 60 h.p.

Write to the nearest branch house address below for instructive illustrated catalogues of I H C tractors and engines.

### 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.

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

less than the full market value of the material the crop takes out of the soil, and a reasonable profit besides. To this value, moreover, the farmer must add labor, cost of production, interest on investment, cost of marketing, depreciation, etc., which, according to the United States department of agriculture's estimate for land worth less than \$50 an acre, is 58 cents per bushel for wheat.

This brings the cost of a bushel of wheat (including the commercial value of the constituents removed from the soil) up to \$1.04½.

If, however, the straw is converted into manure and returned to the field, the equivalent of 23½ cents per bushel goes with it, back to the soil, which lessens the cost of a bushel of wheat by that amount, or reduces its intrinsic cost to 81 cents. If the bran and shorts also were fed to live stock on the farm and the manure applied to the land, the cost of the bushel of wheat would be lowered still further, by probably 15 cents, making a bushel of wheat cost approximately 66 cents.

On the other hand, where the bran and shorts are not fed to live stock on the farm, but exported, and the straw is not converted into manure, but burned

instead, the farmer must estimate his absolute profits by what he receives for his wheat above \$1.04½ per bushel—which is nil. Instead, he produces at a positive loss, when he takes into account overhead expenses or the value of the fertilizing constituents which the wheat mines out of the soil. And this he should do. There is no other fair way to reckon the actual cost of a bushel of wheat. The mere fact that owing to its providential abundance, we may draw upon the fertility of the soil for many years without replacing it is masquerading under false colors; it is flaunting present prosperity by discounting the future. No more can a man withdraw valuable constituents regularly from the soil without making due compensation in the form of manure than he can preserve his credit at the bank without compensating it for the checks he issues against it.

#### Millions Lost in a Single State

Assuming then, that 46½ cents per bushel represents the commercial value of the nitrogen, phosphoric acid, and potash which every bushel of wheat takes from the soil and carries with it to some foreign market—carries it away, never to return—then the account stands thus:

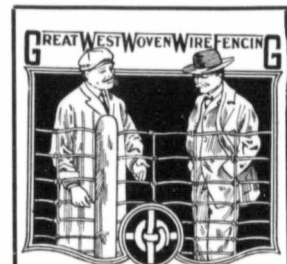
By last year's export from North Dakota to foreign lands and to other states of, let us estimate, 150,000,000 bushels of wheat, at 46½ cents per bushel we dispose of fertility to the value of \$69,750,000. In other words, the state of North Dakota is worth less, as a crop factory, by approximately \$70,000,000 than before the past season's wheat crop was grown. Add to this all other grain exported and the figures just quoted will be materially augmented. Now, by deducting from the above sum the value of all fertilizers returned to the soil during the season, be they much or little, and they are more apt to be little than much, the difference will represent the net loss the state has sustained and the extent the commonwealth has been impaired for the future production of wealth. From these conclusions, which are approximately correct, at least, there is no escape.

Were it not for the tremendous store of fertility locked up in our northwestern soils, one might become pessimistic. This fertility is not inexhaustible.

#### Live Stock a Necessity

The breeding and feeding of live stock, therefore, is rapidly becoming a necessity. The live stock is not only profitable as a

business but less affected by adverse climatic conditions than are wheat and other small grains. The high price of beef and dairy products and the unlimited demand for both are strong arguments in favor of farmers giving more attention to animal husbandry.



#### THIS LOCK

Mr. Farmer, is the one used in our "Great West" Fencing.

You might possibly get some cheaper Fence than ours, but you will look in vain for any better.

Our Fences are made in the West, designed especially for the Western Farmer and we guarantee every Rod as to strength and durability.

It is the "Standard Fence" of our "Great West."

Write for our Illustrated Catalogue.

The Great West Wire Fence Co., Ltd.  
76-82 Lombard Street WINNIPEG MAN.

Calgary Office—Care of Reynolds & Jackson Box 2953. Edmonton Office—Care of Race, Hunt & Giddy Cor. Fifth and Columbia Avenues.

Mention this magazine when writing advertisers.

**Practical Talks to Threshermen**

Continued from page 20

volve as it does. It also carries the planetary gear.

2. The pulley and engine shaft gear are bolted together and revolve freely on the sleeve of the reverse friction disc.

3. The reverse friction disc and the planetary arm are keyed together but are free to turn on the engine shaft.

With these relationships fixed in mind let us now see how the device operates to run the tractor forward or backward at the will of the operator. We will first look at how it works when the belt pulley is traveling forward or in the same direction as the drive wheels. The shifter spider will be shoved in and the clutch shoes set as shown in the figure. It will be noted that the clutch levers are bolted to the belt pulley, hence when the shoes are locked against the clutch wheel both it and the belt pulley, together with the engine shaft gear, must all revolve together. The latter gear is in mesh with the train of gears leading to the drive wheels, hence the tractor moves forward. The forward movement of the belt pulley carries with it the planetary arm and pinions, and these in turn cause the reverse friction disc also to revolve. Thus it will be seen that when the tractor is in its forward road motion all parts of the planetary gear revolve as one.

Now let us see what happens when we throw in the reverse. The same lever that throws the shifter spider in and locks the clutch levers against the clutch wheel, when moved in the opposite direction, releases the clutch wheel and permits it to revolve independently of the belt pulley. An instant after the clutch levers are unclamped a pair of friction blocks, not shown in the figure, and operated by the same lever, clamp the reverse friction disc to the truck frame. This holds the planetary arm stationary. The planetary gear revolves forward with the engine shaft and being in mesh with the planetary pinions causes them to revolve, but in the opposite direction. These pinions are in mesh with the internal gear in the rim of the belt pulley and cause it to revolve in the same direction or in a direction opposite to the engine shaft. This also carries the engine shaft gear backward and reverses the tractor.

The operation of changing from forward motion to reverse is very simple. There is only one control lever. When it is pushed as far forward as it will go, the drivers will move forward; when clear back, the drivers are reversed.

When the controlling lever is

in its neutral or middle position both the clutch wheel and the reverse friction disc are unclamped. The belt pulley is not compelled to revolve with the engine shaft and the reverse disc and planetary arm are free to revolve. The planetary gear still drives the planetary pinions and they continue to revolve around inside of the belt pulley but without causing it to move.

To show how the belt pulley is made to revolve without moving the drive wheels, it will be necessary now to refer to figures 190 and 191. The former is a sectional view of the cross shaft and its gears. The large cross shaft gear is keyed to the cross shaft. It is also in mesh with and revolves with the engine shaft gear, figure 189. In the middle of the cross shaft and secured thereto by means of a feather key are a pair of sliding gears which mesh with either the high speed or the slow speed differential gears shown in figure 191, thus providing two road speeds forward and two reverse. If, however, the sliding gears are set in neutral position so that they mesh with neither of the differential gears, then the cross shaft will revolve, the belt pulley will revolve but the tractor itself will stand still.

A planetary gear of this type combines both clutch and reverse and gives the operator very complete control of his machine. The reverse lever can be moved over to set the clamps only slightly, providing for slippage and a slow movement of the drivers or they may be set hard, utilizing the full speed and power of the drivers. A very flexible system of control is thus provided.



**Course in Gas Engineering**

Continued from page 19

over the engine. And even when the trouble seems surely to be in one place, if he is unable to locate it there, let him not forget that his diagnosis may be defective. For instance, a firm recently telegraphed the manufacturer of the engine stating that the fuel valve did not seat properly, and asking that a man be sent at once.

When he arrived he found that the trouble was not with the fuel valve at all, but that the spring which regulated the mechanism by which the exhaust valve was held open until the proper time was not tight enough. On tightening this spring the trouble ceased at once. Thus it will often happen that trouble in one place will so affect the working of the engine so as to make it appear that the cause of the trouble is in an entirely different place.

These are only a few illustra-

**NO MORE WASHDAY DRUDGERY**

You wouldn't think of cutting your grain with a Reaper yet your wife to-day is probably doing the washing with a Washer just as much a relic of the past as the old Reaper is.

Make life pleasant for the women folk by having a Canada Power Washing Outfit, consisting of Canada Power Washer with Wringer, Belt and our new one H. P. Engine, all complete for only

**\$52.50**



The biggest labor-saving device ever invented.

WRITE FOR OUR BIG CATALOG

The Canada Power Washer has a reversible ball-bearing wringer, five-year guarantee. Will wash and wring at the same time. All gears are enclosed, no chains to tear the clothes, size of washer tub, inside measurements 12 inches deep by 22 1/2 inches diameter. Will wash clothes in a few minutes for the largest families. Price of washer only \$22.50.

The Gasoline Engine supplied with this outfit is our new one H.P., guaranteed in every respect, and is built on most approved lines. Price of Engine \$32.50. It will run a Pump Jack just as well. We can supply a reliable Double-gear Pump Jack complete with belt for \$7.50 extra.

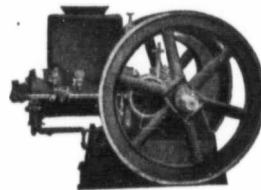
We Let You Test This Outfit for 30 Days before you need keep it. Send us your order-to-day and be convinced that the Canada Power Washing Outfit is one of the best values and labor savers ever made.

When you want the right engine, at the right price, get a "Judson"

**C. S. Judson Co., Limited, 179 Market Street WINNIPEG, Canada**

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

**BUYERS OF Gasoline Engines Beware!**



Certain unscrupulous dealers are selling imitations of Stover Engines and rating a 2 1/2 h.p. engine as a 3 h.p.; a 4 h.p. engine as a 4 1/2 h.p.; a 6 h.p. engine as a 7 h.p.; an 8 h.p. engine as a 10 h.p., etc.

DO NOT BE DECEIVED. Buy the ORIGINAL STOVER, manufactured and guaranteed by the Stover Engine Works, of Freeport, Ill., the largest exclusive gasoline engine factory in United States.

The STOVER represents the highest quality Engine and will develop at least 25% more than rated power. The STOVER is in fact the lowest price good engine made to-day.

Prices of STOVER Engines:

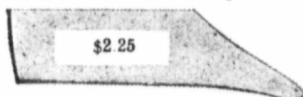
8 H.P.	295.00
6 H.P.	195.00
4 H.P.	130.00
2 1/2 H.P.	85.00
1 H.P.	36.25

Prices all f.o.b. Brandon, Manitoba

**Get Your Plow Shares Now. Buy from The Farmers' Company. Cut Out The Middleman and Save Money.**

Cheap plow shares kill horses. These fitted plow shares are absolutely guaranteed first-class in every respect. Standard in make and quality. We have them for every make of plow, and, Remember, we are the originators of low prices and first-class goods.

**BWARE OF MUSHROOM COMPANIES!** Deal with a concern that has a reputation for square dealing and first-class goods.



**PRICE LIST**

12-inch Shares,	each \$2.25
14-inch "	" 2.50
16-inch "	" 2.75

Write for Catalogue

**Canadian Stover Gasoline Engine Co. BRANDON, Manitoba**

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

# 26 THRESHER COMPANIES 26

all doing a large business in Canada can and will supply you with

## RUTH FEEDERS

These concerns have years of reputation and millions of dollars at stake and consequently could not afford to put their stamp of approval on anything but **THE BEST**

We believe what you all want is a Feeder that for more than the past 12 years has been doing good, satisfactory work in the CANADIAN FIELDS. A Feeder may do good work in South America, Russia, or even in the United States and then fail to handle the Canadian crops right. Without hesitation we refer anyone intending to get a new Feeder this year to any one of the Ten Thousand Threshermen in Canada who are using the

## Ruth Feeders

The reason why the largest Threshing Machine Companies doing business in both Canada and the United States equip their separators almost entirely with RUTH Feeders is because they have learned from actual experience that in the first place it is easier to sell the separator, and they also know that the separator does better work and lasts longer, because it is properly fed, than if they used their own Feeder or any other that they could buy.

THE RUTH has been tried out and proven to be the only Feeder that can make good under any and all conditions. Wheat, Oats, Barley, Rye and Flax all look alike to the Ruth. Buy the Feeder that has been proven out in CANADA. If ever one has it it is THE RUTH. Do not buy an experiment. BUY A RUTH. Below is the RUTH WARRANTY; please read it carefully. You will notice that the Ruth Warranty covers Three Years, that is 1096 days. We know of other Feeder Warranties that cover Five Days. This is a difference of 1091 days in favor of the RUTH.

### Ruth Feeder Warranty

The Ruth Feeder is warranted to feed any make or size of Separator to its full capacity, with any kind of grain in any condition whatsoever, bound, loose, straight, tangled, stack burned, wet or dry without slugging the separator cylinder or loosening a spike, and to do a faster, cleaner and better job of feeding and to wear longer and to cost less for repairs than any feeder manufactured by any other Company in the world.

The Maytag Company.

Read the Warranty

It tells the Whole Story

WHILE OUR HEAD LINE IS THE

## Ruth Feeder

We sell practically all else that a thresherman wants. If you need any of the following, drop us a line and you will have an immediate reply with prices and complete information.

Acetylene Gas Headlight. Headlight Attachment to change oil burning headlight into a gas light. Gas Tail Light for rear of engine. Oil Pumps. Spark Arresters. Tooth Straighteners. Belt Guides. Cylinder Wrenches. Canvas or Rubber Drive Belts. Leather Belting. Carbide. Tank Pumps. Suction and Discharge Hose. We handle NO SECOND GRADES. Everything the best, and prices are right.

## The Maytag Co. Ltd.

WINNIPEG



They all know that the Ruth Warranty is genuine



Sawyer-Massey Co.

International Harvester Co.

Waterloo Manufacturing Co.

Fairbanks-Morse Co.

American-Abell E. & T. Co.

Haug Bros. & Nelermoe Co.

Gaar, Scott & Co.

Burridge Cooper Co.

Buffalo Pitts Co.

Canadian Port Huron Co.

Compagnie des Jardins

Matthew Moody & Sons

A. & T. B. Farquhar



That is Why They Can And Will Supply You With RUTH FEEDERS

### WARRANTY

The Ruth Feeder is warranted to feed any make or size of Separator to its full capacity, with any kind of grain in any condition whatsoever, bound, loose, straight, tangled, stack burned, wet or dry without slugging the separator cylinder or loosening a spike, and to do a faster, cleaner and better job of feeding and to wear longer and to cost less for repairs than any feeder manufactured by any other Company in the World. THE MAYTAG CO.

They all know that the Ruth Warranty is genuine



John Goodison Thresher Co.

Aultman & Taylor Machinery Co.

Minneapolis Threshing Machine Co.

W. S. Cooper Co.

Geo. White, Sons & Co.

Nichols & Shepard Co.

Reeves & Co.

J. I. Case Threshing Mach. Co.

The M. Rumely Co.

C. Smith & Sons

Huber Manufacturing Co.

Geiser Threshing Machine Co.

McDonald Thresher Co.



That is Why They Can And Will Supply You With RUTH FEEDERS

### WARRANTY

The Ruth Feeder is warranted to feed any make or size of Separator to its full capacity, with any kind of grain in any condition whatsoever, bound, loose, straight, tangled, stack burned, wet or dry without slugging the separator cylinder or loosening a spike, and to do a faster, cleaner and better job of feeding and to wear longer and to cost less for repairs than any feeder manufactured by any other Company in the World. THE MAYTAG CO.

# A MAN'S TALK TO MEN

By  
REV. DR. J. L. GORDON



## The Selfish Member

THERE is always a selfish member in the family circle. Some one who "doesn't care." Some one who likes to be coddled. Some one who imagines that the whole vast universe is run for his particular benefit. He asks for the best room in the house, for the best seat in the sitting room, for the best bits from celery dish, for the first look at the magazine, and for the first consideration in the question of domestic finance. He must be regarded as the favorite of the fireside and the darling of the home. History is full of just such characters. John Lamb, brother of the gentle essayist, left Charles to bear the whole burden of the home and the afflicted sister, and bought bric-a-brac to please his fancy, generous with nothing save good advice.

## Act On Your Inspiration

CRYSTALIZE your tears into diamonds. Act on your inspirations. Turn your emotions into handsome deeds and noble acts. Do it while you are in the mood. Do it while you feel like it. Let Monday see the thoughts of Sunday enthroned. Act quickly, before the tide recedes, before the mercury goes down, before the liquid silver cools into a solid mold, before the fires of the soul die out. Dr. Babcock remarks: "A friend once said to me: 'I would not mention it, only we are talking between ourselves. For years I have made it a rule to do at least one kind act every day, and one night, no longer ago than last week, I got into bed, and suddenly remembered that I had done no consciously kind act that day; so I got up, made a light, wrote a letter to a woman in trouble, and enclosed a check.' Tell me that man would not hear angel voices! Yes, and see angels, too!"

## Quo Vadis

WHITHER goest thou, O World? Are things getting better or worse? "Worse!" says the chronic pessimist. "Children are lawless, crime abounds, religion wanes, politics are corrupt, business methods are unchristian, society has gone pleasure mad, poets are without vision, and for years no prophet has appeared—worse!" But I turn over the page of history, and comparing George I with George V, I read: "England, in the reigns of George I and George II, was a sink of iniquity. George I imprisoned his wife for thirty-two years without trial or proper hearing. He was a drunken, besotted monarch, utterly wanting in knowledge of or sympathy with the best of England. He detested his own son, saying, 'He is the greatest ass, the greatest liar, the greatest brute in the world, and I well wish he were out of it.' But he was no worse than many of the Court. Drunkenness, licentiousness, brawling—"

## Hold Your Tongue

AS a rule, you will never be sorry for the things you don't say. In politics the available man is very often the man without a record—that is, the man who has said little and written less. He is a wise man who can talk a great deal and not entangle himself. The silent man is always a mystery to his enemy. The man whose lips are closed keeps the enemy guessing. Of course, it is possible to say much and divulge little—the man who can do that is a diplomat. A certain historian remarks concerning John Quincy Adams:—"While he was President, his party, that of the Federalists, was ruined. He served but one term, and was succeeded by his great rival, Thomas Jefferson.

"The night before the inauguration of Mr. Jefferson, Mr. Adams left the city of Washington. On reaching an inn, a short distance from Baltimore, it is said, he noticed a portrait of Washington, hanging in the public room. Walking up to it, and placing his fingers on his lips, he exclaimed:—

"If I had kept my lips as close as that man, I should now be President of the United States."

## Go To Church

ARE you a business man? Go to church. The "dressing up" process will do you good. Social intercourse with your neighbors will strengthen your vitality. The preacher will give you an idea or two for the purpose of brain fertilization. Your commercial standing will be improved by association with respectable people. Your family will appreciate your presence in the sanctuary, and it may be that God will be pleased. Gladstone had a profound respect and reverence for the house of God; and once, after a long and arduous Saturday, when he sat up long past midnight, talking with Lord Granville and Mr. Bright on matters of state, he wrote in his diary the next day: "Church, morning and evening. A stiff task for a half-exhausted brain; but I cannot desert from a sacred task."

## Good Nature

GOOD nature is better than polish. Good nature is better than culture. Good nature is better than style. Good nature, which is real good, is the friend of morality and next door neighbor to religion. If I can be persuaded that a man is "sound at heart" I will pardon that which is peculiar and eccentric in his character. Samuel Johnson was rough, impatient and imperial in the manifestations of his wrath; but his biographer says: "It must not be forgotten that at the same time he could be very tender—women who knew him bore witness to that—and was the soul of generosity. His house became an asylum of refuge for the strangest imaginable collection of poor dependents. At one time he harboured in it two poor old ladies (one of them blind) the daughter of one of these, another reduced gentlewoman, and a rather disreputable old quack doctor. They presumed grossly on Johnson's goodness, and frequently made his own house unbearable to him; but he bore it all for the sake of being able to help them. Two pleasant traits recorded of him are his love for children, and his so-called favourite cat."

## Letter Writing

BE careful what you write. A letter is a document. It can be filed. It can be published. It can be photographed. It can be held as a bit of evidence. It can be shaken in your face by an angry orator. It can be held over you as a threat. BE careful of your mood when you write. A famous American divine once said:—"When at some injustice

inflicted upon you, or some insult offered you, or some wrong done, the best thing for you to say is to say nothing, and the best thing for you to write is to write nothing; if the meanness done you is unbearable, or you must express yourself or die, then I commend a plan that I have once or twice successfully adopted. Take a sheet of paper. Date it at your home or office. Then put the wrong done, name at the head of the letter-page, without any prefix of 'Colonel', or suffix of 'D.D.', and begin with no term of courtesy, but a bold and abrupt 'Sir'. Then follow it with a statement of the wrong he has done you, and of the indignation you have felt. Put into it the strongest terms of execration you can employ without being profane. Sign your name to the red-hot epistle. Fold it. Envelope it. Direct it plainly to the man who has done you wrong. Carry the letter a week, or two weeks if need be, and then destroy it. In God's name, destroy it!"

## Old Furniture

I ENTERED the home of a millionaire some years ago and gazed on such a collection of old family photographs, weather-worn carpets, disjointed chairs, out-of-date mottoes, and dismantled gas fixtures as would have made a prospecting junk dealer chuckle with hope, and I muttered to myself, "Cast without culture, money without manners, and things without thoughts." Relatives of a past generation looked down from the walls through photographs which were ghostly and frame which were ghastly. Heavens! what a collection of worthless bric-a-brac. Remember the words of William Morris:—"Have nothing in your house that you do not know to be either useful or beautiful."

## Brains and Business

QUALITY is produced by forces which are invisible. The engine room and the power house are comparatively quiet in their operations. The quietest spot in a man's anatomy is his brain. Thought is silent, subtle and invisible, but well nigh all powerful. The man who thinks the clearest is king and conqueror in the realm of human achievement. Everything depends on how much "brains a man puts into his work. Dr. Hillis says in his book, entitled, "The Investment of Influence" (a great book, by the way):—"Mille bought a yard of canvas for one franc, paid two more francs for a hair brush and some colors; upon this canvas he spread his genius giving us 'The Angelus.' The original investment in raw material was 60 cents; his intelligence gave that raw material a value of \$105,000."

## Character

THERE is nothing like a good character. It is the rose among flowers, the diamond among stones, Venus among the stars of the evening, the lion among animals, Mont Blanc among the everlasting hills, the Mississippi among the rivers of the earth, the Bible among books, and approaches the proportions of that one who is spoken of as the Perfect Man. Character! Prof. Henry Drummond, whom the students called "the prince," possessed character. When an artisan of Possil Park was dying, his wife knocked hurriedly at Drummond's door late one Saturday night and begged him to come at once to her house, saying, "My husband is deen', sir; he's no able to speak to you, and he's no able to hear you, and I dinna ken as he can see you; but I would like him to hae a breath o' you aboot him afore he dees."



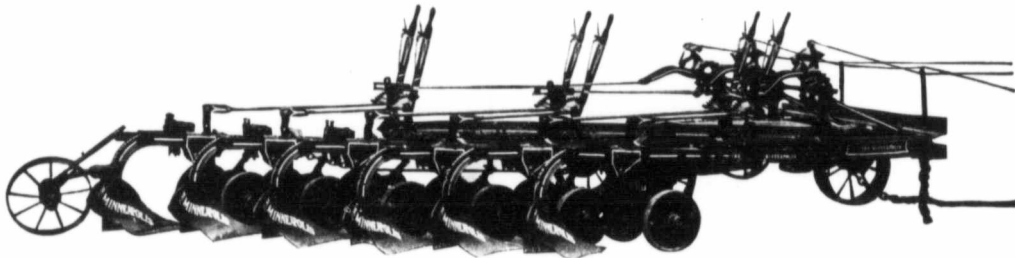
# "The Great Minneapolis Line"

The remarkable evolution of the gas engine in the last few years has made it possible for the average farmer to use gas power for general farm purposes at a lower cost, per acre for tillage than with the use of horses. A good gas engine properly operated means economy to the farmer. Look over our line before placing an order. It is all we ask. It speaks for itself and means satisfaction and prosperity to you.



The Minneapolis forty at work. No stopping, no trouble, no extra expense because it is built of the highest grade material by the best skilled mechanics in the country. It is intended to stand up and do the work required of it.

The Minneapolis Self Lift Plow has no equal in the American market, operates easily and gives satisfaction.



We also carry a full line of steam engines, grain separators, power corn shellers and thresher supplies. The Minneapolis, "Is the Line of Satisfaction." We guarantee satisfaction. Let us send you our beautifully illustrated book of thresher and plow scenes entitled, "Satisfaction." Sent upon request free.

## The Minneapolis Threshing Machine Co.

Hopkins (West Minneapolis) Minnesota

Branches

REGINA

WINNIPEG

CALGARY

EDMONTON



# Peerless in Belt Service

No Farmer or Thresherman can afford to take the slightest risk with his power transmission that QUALITY can cover. A belt that can be depended upon to work continuously in all weathers without breaking or losing its hold on the machinery is worth its weight in gold. The very best service that a thresher belt can be made to give is guaranteed from the world renowned specialities known as the



## Lion Brand

Rubber Belts

AND THE

## Maple Leaf

Endless Thresher Belts



These matchless brands of thresher belting are supplied by nearly all thresher companies doing business in Canada. They HAVE to carry them as part of their regular equipment, and this notwithstanding the glut of lower priced goods sent out by our competitors. This is unanswerable testimony to the outstanding merits of the "LION" and "MAPLE LEAF" brands. Time and experience have been our best salesmen.

## 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.

large amount of water falling at one time runs away over the surface, at least in a considerable degree. Let the soil be opened up sufficiently and it will enter the soil and work downward. The more deeply that the ground can be loosened up by the plow or other implements, the more deeply will the moisture penetrate.

Theoretically the more deeply the land is broken the better. But to this there may be the two objections, first, breaking beyond a certain depth is costly, and second, that it may not be best in all instances for the first crop or even for the first crops. It is usually considered better to plow to a reasonable depth at first, say 6 inches, and to deepen the plowing gradually. Shallow breaking, say to the depth of only 3 to 4 ins. has led to much crop failure in dry areas.

The best time for breaking in all areas is when the soil has the largest amount of moisture in it. This in nearly all areas north of, say Wyoming, and east from the Rocky Mountains, is the months of April, May and June. In the inter-mountain States it is considerably earlier. If the land is followed the first season on judicious lines, the moisture will go downward to the depth of say 2½ to 4 feet the first season.

If cropped with grain, the first season, the moisture will all be absorbed by the grain. When the land is followed subsequently, the aim should be to plow as in the case of the breaking when it is moist. In many instances it is better to plow the land in the autumn if sufficiently moist rather than in the spring. The exceptions are where the soils blow badly and where the frost does not penetrate far enough to hinder blowing in the early spring. When it is improbable that the land will be plowed in the fall, the aim should be to disc it soon after harvest, that any moisture falling may penetrate it more easily. This plan is good even though it should be plowed subsequently the same season.

### Holding the Moisture That Falls

One chief reason for plowing when the land is moist is, that the work may then be done most easily. A second reason is, that it furnishes the opportunity to conserve moisture. If the soil is devoid of moisture when it is plowed, of course it cannot be conserved. Unless when the weather is moist, summer fallow land should be packed and harrowed the day that it is plowed.

Usually the ordinary disc properly used will pack it sufficiently,

but on very light soils some other form of packer may be better. The harrow that follows will make a dust mulch, and as long as this is maintained, much of the moisture from below will be prevented from escaping. Should rain go down through the soil mulch, the ground should be harrowed when it is drying to renew the mulch.

When corn for fodder or other uses is grown, or potatoes or any crop that calls for cultivation while it is growing, the moisture will be conserved by the cultivation. It is different, however, with a grain crop. It cannot be cultivated during the period while it is growing. It will usually be profited by harrowing just when the points of the grain first begin to appear, and again when the grain is say 5 to 6 inches high.

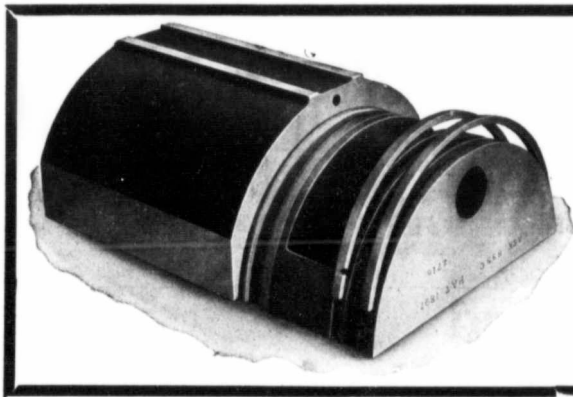
### Adjusting Seed to Moisture

The quantities of seed to sow in dry areas are much less than would be required in humid areas. In the former grain stools much more. If too many plants occupy the ground for the moisture present, there will not be enough to perfect the plants, hence all the crop will be on a supply so short as to hinder it from being perfected. The yield, therefore, cannot be large.

While conditions may and will call for variations in the amounts that should be sown, the amounts now submitted may be taken as averages. These are as follows: Winter wheat 3 pecks, spring wheat of the five, marquis or blue stem varieties 3 pecks, Durum spring wheat 4 pecks, winter and spring rye 5 pecks, oats and barley 4 pecks each by measure, pease 5 pecks, speltz 5 pecks, flax 1½ pecks, alfalfa 5 to 6 pounds when all the ground is occupied, and 2 pounds when the alfalfa is drilled in rows 36 inches apart. Corn and potatoes are usually best planted in squares 42 inches apart, as then the cultivation conserves the moisture more perfectly.

### Crops Adapted to Dry Conditions

The crops that may be sown in the autumn are the most suitable among grain crops for dry land conditions. These include winter wheat, winter rye, and where the winters are not too severe, winter barley and winter speltz. Where these grains come through the winter safely, they have the great advantage of ripening as a rule before the weather becomes severely dry. Of all the grain crops grown, winter rye will best stand adverse conditions, but it does not yield as much profit as wheat. Among winter wheats



## GOULD BALANCE VALVES

The SUCCESSFUL THRESHERMAN of to-day must practice EFFICIENCY—an increase in power of his engine—a saving in the consumption of fuel, water and lubricating oil—the elimination of wear and tear on valve gear, all appeal to him because they are big factors in his profit and loss account.

To these threshermen we have sold thousands of Gould Balance Valves in the last nine years. They are enthusiastic. They know it is a paying investment, because they have tried it. In the "Evidence," on page 40, one thresherman says: "I would not sell my Gould Balance Valve for \$500 if I could not get another."

Send for the Evidence and a copy of our 1914 catalog. A post card with your name and address will bring both books postpaid. Address:

### Gould Balance Valve Company,

MANUFACTURERS OF

Gould Balance Valves

Iowa Ensilage Cutters

Gardner Grain Conveyors

KELLOGG, IOWA.

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

the Turkey Red is one of the best. Among spring sown wheats the Durum is usually considered the best, and the white hullless among barleys.

Flax will stand conditions more dry than any other spring grain. It usually grows well on newly broken land, but when grown as the first crop it usually leaves the land without moisture in both the soil and subsoil. Potatoes and artichokes are both relatively well adapted to dry conditions and the same is true of corn. In northern areas it is only grown for fodder. Among the clovers alfalfa is by far the best, and next to it is probably sweet clover. The conditions are too dry to meet the needs of other clovers and also to meet the needs of a considerable number of the tame grasses in good form.

#### Avoid Growing Crops Too Frequently

The attempt to grow grain crops every year on the same land will not succeed in dry areas, and for the reason that enough moisture cannot be secured to accomplish this. The frequency with which they may be grown will depend largely on the amount of the precipitation.

To grow grain crops continuously on the same land where the rainfall is under say 9 inches, would almost call for two years of moisture conservation, for each crop grown, and this would not pay. Where it is 9 to 12 inches, one grain crop each alternate year is about the best that can be done. When it is 12 to 18 inches, three crops may be grown in four years, providing one of the three is a crop that calls for cultivation during the period of its growth, as corn or potatoes.

The order would be as follows: Summer fallow, grain, cultivated crop, grain and summer fallow again. In our experience such a rotation has been quite successful on a rainfall of say 12 to 15 inches. When the rainfall is more than 20 inches good crops may be grown

upon the land every year, under proper conditions of farming. When the rainfall is less than 15 inches in a year, and where subterranean irrigation is absent, it is somewhat doubtful if the growth of alfalfa for hay will be completely successful where it is not planted in rows and cultivated.

#### Fodder Crops in Dry Areas

One of the most difficult problems for the dry land farmer is to secure an ample supply of forage for his horses and such other animals as he will keep on the farm. Chief among these in Northern areas are alfalfa and corn for fodder. The straw produced by grain is also much more valuable than the same in humid areas, because of its very superior quality. The question of pasture has not yet been fully worked out, but it would seem probable that the best plants for such use will include winter rye, sweet clover, alfalfa and Russian brome.

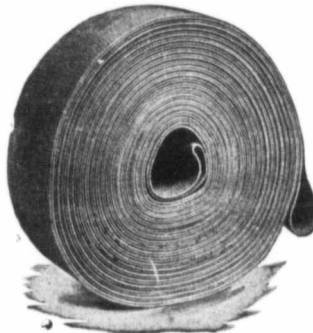
#### Soils That Blow in Dry Areas

No problem confronts the Dry Land farmer that is more difficult than the management of soils that lift with the wind. The difficulty arises with the fact that some of the methods by which moisture is conserved cannot be followed with blow soils. The summer fallowing of the land accompanied by much harrowing only facilitates the blowing. When handling these soil the aim should be to keep them well stored with humus.

The burial of winter rye sown the previous autumn on land that is to be fallowed should help greatly, and as soon as alfalfa can be established it will prevent the land from blowing while it occupies the land, and for two or three years after it has been broken up. The aim should be to disc rather than to plow these lands when plowing can be avoided, as the stubbles are then kept on and near the surface.

## We Sell More "DREADNOUGHT"

Sewn-Canvas Thresher Belts  
Than any other Concern in Western Canada



Manufactured in England from the Highest Grade Cotton Duck to specifications called for by the Western Canadian market. Perfect satisfaction guaranteed. We are the sole importers and carry a large stock. All our belts are seasoned with non-freezing oil and therefore will not harden in cold weather.

Write at once for our samples. Handled only by first class Dealers.

Dealers Wanted Everywhere.

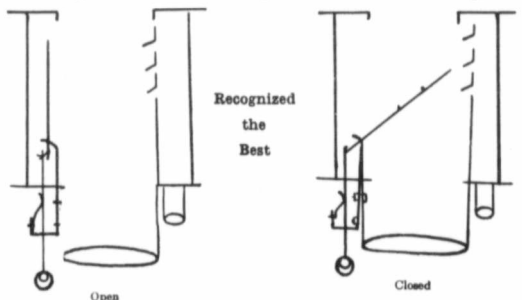
General Supply of Canada Ltd.  
88 Water St. Winnipeg.  
Ottawa, Toronto.

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

#### Patent Rights for Sale OF

### Wiley's Adjustable Spark Arrester

A snap for small manufacturing concerns and machine shops



I will sell the rights to manufacture this device in provinces or counties on easy terms. It is easy and cheap to manufacture, and has a big demand. Write for particulars early so as to get choice of districts or the entire patent rights.

C. W. WILEY, Manufacturer

Box 2, BIRNIE, MAN.

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

Remember to renew your Subscription

**Windbreaks in Dry Areas**

One great need of the homes in dry land areas is that of windbreaks. Because they are dry by nature, they are treeless, and because they are treeless they are wind swept at least in some degree. Such protection can be furnished but not without some labor. It would be well to summer fallow some land on the exposed sides of the buildings, and not too near. The object of the following is to store moisture for the trees and to bring the land into a condition that will make it susceptible of cultivation subsequently on the surface.

The following spring, and quite early, a furrow should be opened and willow cuttings about a foot long inserted in the same. The earth should then be filled in, leaving 3 to 4 inches of the cutting projecting. This windbreak should be cultivated like corn for several years. If two rows are wanted they should not be closer than a rod and as much farther apart as may be deemed best. When the windbreak is well started, other trees may be planted, but only on its leeward side and on land that has also been previously well summer fallowed. The trees must also be given cultivation for several years.

**Pure Bred Stock Sale at Saskatchewan Winter Fair**

At recent meetings of the executives of the Saskatchewan Horse and Cattle Breeders' Associations, it was decided that both these organizations would hold sales of pure bred stock in conjunction with the winter fair. This is the first occasion on which the Horse Breeders' have taken this step, and it is to be hoped that they will receive liberal patronage from Saskatchewan breeders. The entries, for this year only, are limited to residents in the province of Saskatchewan, and the age limit for males is two years; entries will be accepted for females of any age. Instead of charging an entry fee and commission on the sale price, it has been decided to charge a straight fee of \$5 on every animal entered. This will cover all charges exclusive of freight and feed. An upset price of \$250 has been set upon males over one and under two years of age, whilst females over one year old have an upset price of \$200. Males under one year will be withdrawn unless receiving a bid of \$200 and females under one year must reach \$150.

The cattle sale will be held under similar regulations to last year. The upset price of males over eighteen months has been increased to \$100 and that of females of the same age to \$90,

whilst animals under that age have been increased to \$80 and \$90 respectively.

Entries for both sales must be in the hands of the secretary by February 25th. Applications for rules and further information should be made to the secretary, Saskatchewan Live Stock Associations, Department of Agriculture, Regina.



A woman hired a taxicab. The door of the cab was hardly closed before the engine started with a jerk, and the cab began to race madly along, narrowly missing lamp-posts, trams, policemen, etc. Becoming frightened, the woman rapped on the window of the cab and said:

"Please be careful. This is the first time I ever rode in a taxi."

The Chauffeur reassured the passenger as follows:

"That's all right, ma'am. This is the first time I ever drove one!"

**Frost Proof Polarine Carbon Proof**



Don't risk a shutdown of your tractor and all the loss of time and money that means by using an oil of a poor cold test. Polarine Oil

**Keeps a Tractor Running Right**

because it starts a tractor running right even on a zero morning.

Polarine does not stiffen or freeze—gives the fullest possible lubrication with every drop. A very light-colored oil, and leaves practically no carbon.



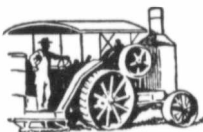
A distilled refined product, not a mixture. Gives full power always. Does not carbonize in cylinder. Best and most reliable gasoline on the market.

**Silver Star**

A Refined Oil for use on Traction Engines.

Recommended by leading engine builders. Used by every kerosene engine in the Winnipeg Motor Contest of 1912.

Premier Gasoline and Silver Star are carried in bulk at over 300 Imperial Oil Company stations throughout western Canada. Fill your own tank wagon or steel barrels and avoid leakage and waste. Price list at any agency.



**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.

**You SAVE MONEY by buying our**

Absolutely Guaranteed

**Fitted Shares**



When ordering give number stamped on back of old share

Write for Catalog to Dept. T

Every Make, Every Style

12 in. \$2.00

14 in. \$2.40

16 in. \$2.75

**H. R. HAWKEY & CO.**

Hardware Mail Order Specialists  
66 Notre Dame Ave. E., WINNIPEG

Reference Bank of Hamilton



**Western Canada's Leading Taxidermist**

The Oldest and Best

Expert Mounting of Game Heads and Birds

Highest Prices for all kinds of Raw Furs, Hides and Game Heads. Will buy Wolf, Lynx and Bear Skins.

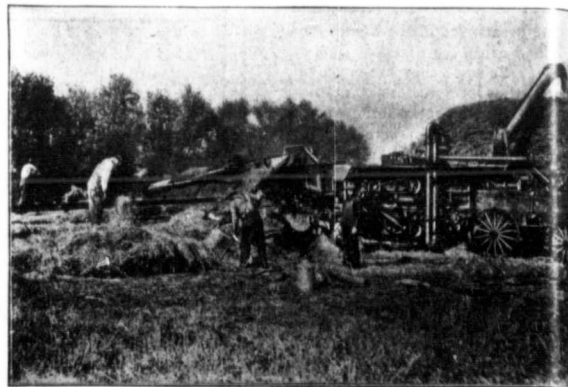
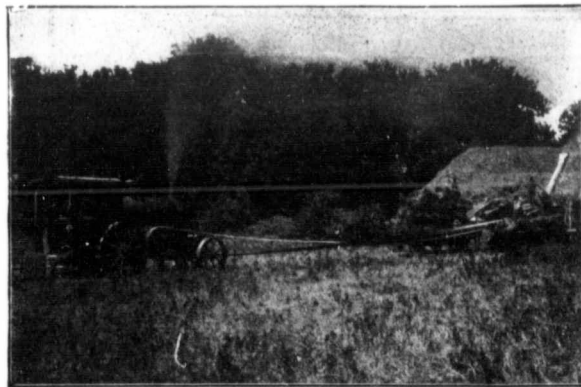
**Taxidermist Supplies**  
Write for New Fur List

E. W. Darbey, 231 Main St., Winnipeg

A Moose Head, Horns with Spread of 72 inches.

Official Taxidermist to Manitoba Government.

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



# BUILT RIGHT

## Avery Steam Engines and Separators are the Strongest Guaranteed Engines and Separators Built

### Here are some of the Strong Warranties you get when you buy an Avery Steam Engine

**Warranty on Engine Shafting and Gearing**  
We guarantee against breakage for a period of one year following date of purchase, all gearing and shafting, including crank shaft (not only on our plowing engines, but all of our engines). We guarantee to replace, free of charge, not at the factory, but freight prepaid to the owner, anywhere in the United States or Canada, and supply a mechanic, if necessary, free of charge, to install any gearing or shafting, including the crank shaft, broken during any usual or unusual use of the engine, upon receipt of notice that such replacements are required.

### Warranty against Leaky Brackets

All Avery Undermounted Engines are warranted for one year, or longer, against leaky cap screws attaching any brackets to the boiler, and defects of such nature will be made good free of charge.

### When you buy an Avery Separator you are backed up by these and other Special Strong Warranties

#### Warranty on Avery Jumbo Razor Steel Cylinder Teeth

Our cylinder is guaranteed to thresh One Hundred Thousand (100,000) bushels of grain without breaking or losing a single tooth, and any replacements necessary to make good this warranty will be made free of charge, and any replacements on account of wear will be made with the same proportionate discount from the list price. Avery Jumbo Teeth are further warranted for five years or longer against breakage caused by pitchforks, bolts, spades or other foreign materials accidentally entering the cylinder.

#### Warranty on Separation

The separating device will shake out 99.52/100 per cent. or more, of the loose grain that is in the straw, the grain to be dry and in fit condition to thresh. When desired we will submit the machine to test.



### Get an Avery Bull-Dog Watch Fob

It's a Dandy. Representation of the Famous Avery Bull Dog Trade-mark.

Send us the lists of names mentioned below, together with 10 cents in stamps or silver, and we will mail same at once.

- These are the lists of names to send:
1. List of Threshermen in your neighborhood.
  2. List of Plow Outfit Owners in your neighborhood.
  3. List of those talking of buying an Engine, Separator or Plow this year (if you know of any).
- Names, initials and addresses must be correctly given.

### Special General Warranty on Steam Engines and Separators

Furthermore, if any purchaser of Avery Machinery prefers the form of warranty adopted by any other manufacturer of this class of machinery, we will allow him the privilege, when placing the order, to substitute such other manufacturer's form of warranty for ours, and such purchaser is hereby authorized before signing the order, to write across the face of the warranty in our order blank, the following:

"This order is given with the understanding that the warranty and all conditions of (insert name) Company are substituted in place of the warranty printed herein."

### No other Company gives such Strong Warranties as these

And they mean just what they say. There's no "Joker" anywhere in them. No bluff or big talk. No impossible conditions. No hidden meaning. Just out and out straight-forward agreements and guarantees that are printed right in every Avery order blank and that you can fall back on when you buy Avery Machinery if it doesn't do just what is represented here and the Avery Company stands right square back of them and will make good on every point.

### Why we can give these Strong Guarantees on Avery Engines and Separators

The reason we can make these strong warranties—much stronger than those given by any other manufacturer—is simply this—because Avery Machines are built with the right kind of high grade raw materials and workmanship and we have perfected them in design and detail to the point where they will go out into the field and do the business and stand up under the work and make good at every turn.

### Get all the Facts. Write for Catalogs.

If you are going to buy a machine this year you should for your own best interest find out all about the machines that are backed up by such strong warranties as these. Write for complete free catalogs and tell us what size machine you want to figure on. Use the coupon or write us a letter or postal.

AVERY COMPANY 675 Iowa Street  
PEORIA - Illinois

# Canadian Avery Co.

Limited

Winnipeg, Regina, Calgary  
Western Canadian Distributors.



# SOLD RIGHT

## Avery Tractors and Plows are Sold on Approval, at Low Prices and Fully Guaranteed

### You can Buy an Avery Tractor and Plow on Approval

Test it out right on your own farm. Think what this means! It must mean that we have thoroughly tested out these machines and know that they will do what we say. It must mean that you can depend on what we say about Avery Tractors and Plows, for we give you a chance to test their truth before you accept the machinery. How many of the companies making strong advertising claims about their Tractors and Plows will back up what they claim by selling you their Outfits on Approval?

It's simply like this, as we see it—If an Avery Outfit pays you, it will pay us. If you can't afford to have it, we can't afford to have you have it. That's the long end short of it, and that's why we have adopted this "Sold on Approval" policy. This selling policy on Tractors and Plows is right in line with the general Avery policy of "Dealing with the customer on a basis of mutual benefit." We believe that the average man is on the square, and we are willing to trust his fairness.

### Avery Tractors and Plows are backed up by Strong Guarantees

And we not only sell on approval, but after you have tried out an Avery Outfit and tested it to your satisfaction and have accepted the machine, we continue to back you up with the strongest guarantees given with any make of Tractor and Plow. These are the guarantees you get on Avery Tractors and Plows:

We guarantee against breakage for a period of one year following date of purchase, all traction gearing and shafting, including crankshaft, broken during any fair use of the Tractor, and will replace any broken parts free of charge.

Avery Tractors are guaranteed to develop more than their rated horse power, either in the belt or on the drawbar.

All castings and shafting on Avery "Self-Lift" Engine Gang Plows are warranted against breakage for one year from date of purchase, and if broken will be replaced free of charge.

We guarantee an Avery "Self-Lift" Engine Gang to plow cheaper and faster than any hand-lever plow of its size built, and, in addition, to save hard work.

### Why we can offer this Strong Selling Plan on Avery Tractors and Plows

Avery "Light-Weight" Tractors and "Self-Lift" Plows have been on the market over two years and have so thoroughly proven that they will do what we claim for them that we can make this strong selling proposition. Avery Tractors are the lightest weight tractors built considering their drawbar efficiency and the simplest tractor of any. Avery "Self-Lift" Plows save expense, hard work and time. Thousands of these machines have been sold during the past two years and we can refer you to users all over the country who have proven them out. Our own tests and the tests of thousands of users, are behind this strong selling proposition.

### Get all the Facts. Write for Catalogs

Our new 1914 catalogs are ready for mailing. They contain a large number of new illustrations of our old machines as well as illustrations and descriptions of the new sizes of machines we are putting on the market for 1914. When you buy a machine you want the company you buy it from to stand right square back of the machinery you buy. That's just what the Avery Company does. And we not only say we will do it, but we give you positive strong written guarantees. Fill out the coupon below, or write us a letter right now and get our new catalogs and read them over carefully. We can only give a little information about our machines in these advertisements. Get all the facts. Write for free catalogs and let us know what sizes of machines you want to figure on.

AVERY COMPANY 675 Iowa Street  
PEORIA - Illinois

# Canadian Avery Co.

Limited

Winnipeg, Regina, Calgary  
Western Canadian Distributors.

Avery Company, 675 Iowa St., Peoria, Ill.

Gentlemen—Please mail new 1914 catalogs as checked here:

- Steam Engine
- Separator
- Tractor and Plow
- Truck

What machinery are you thinking of buying in 1914? .....

.....

Name.....

Town.....Prov.....



**Farmer His Own Butcher**

Hog Killing at Home Saves Money—By A. M. Paterson.

THE animal to be butchered should be in perfect health, fat, and gaining in flesh. Twenty-four or thirty hours before slaughtering it should be taken off feed and given nothing but water. During this time gentle handling is very important, for an animal which has been run around or bruised before butchering will not bleed well, will not keep well, and its meat will be dark and blotched.

**Don't Shoot a Hog.**

The work of killing and dressing must be done rapidly. A dry, clean, place must be used and the necessary tools—a sticking knife, a scalding barrel, a gambrel stick, and scrapers—should be close at hand. Never stun or shoot a hog before sticking. To do so retards bleeding and affects the quality of the meat. Throw the animal on its back and cut a gash four or six inches long just through the fat from the end of the breastbone toward the jaw. Then, with the sharp edge downward, run the knife below the breastbone, toward the back of the head, at an angle of 45 degrees. When the knife is inserted four to six inches, depending on the size of the hog, raising the handle will cut the arteries leaving the heart, and proper bleeding will follow.

The scalding barrel is set at an angle of forty-five degrees, so that the carcass may be more easily handled. Water for scalding should be very hot and should have wood ashes or a small quantity of lye in it, which will loosen up the scurf and hair. The temperature of the water may be tested by running the fingers rapidly through it three times. If one can scarcely stand to put the fingers in it the third time, the temperature is correct. Put the hog in the barrel and work up and down until the hair comes off easily. Do not scald too long, however, as that will set the hair and it will then have to be shaved off. In scraping, always clean the head and feet first and then scrape the remainder of the carcass with a scraper or corn knife.

**How to Hang Up.**

After the hog is thoroughly cleaned, open the tendons in the hind legs, insert the gambrel stick, and hang it up. Wash it thoroughly with hot water and shave and scrape it with a sharp knife to remove any remaining hair or scurf. Then throw cold water over it to whiten and bleach it. Wipe thoroughly dry, and it is ready to be gutted.

In gutting, first split the hog between the hind legs through the bones. Separate the bones and with a knife cut down the belly to the incision made when sticking, shielding the knife with your two fingers to avoid cutting the intestines, and split the breastbone with an axe. Loosen the rectum by cutting around it, and then pull the entrails downward, cutting the places where they cannot be pulled out. Remove the intestines and the paunch together, after which take out the liver. The gall bladder should be cut off carefully. Cut around the diaphragm and remove the heart, lungs, gullet, and tongue. Place a corn cob between the jaws to allow drainage and then wash thoroughly with cold water and a cloth. If the weather is warm, the backbone may be split to facilitate cooling.

**Cool it Thoroughly.**

Before the pork is cut up, it should be thoroughly cooled through. Lay the carcass on a block and remove the head, cutting an inch back of the ears, remove the shoulders between fourth and fifth ribs, and cut off the hams two inches in front of the pelvic bones. Split the hams and trim them neatly and smoothly. The feet may be removed at the hock joint, though it is advisable to cut them off two or three inches above the hock, as the hams will then pack closer when cured. Split the middle pieces of the carcass with a saw or an axe and remove the leaf lard, if this was not done when the hog was dressed.

In removing the leaf, begin at the front and peel toward the back with the fingers. The kidneys come out with this fat. Take off the loin and spare ribs, leaving the lean meat of the back on the loin, which may then be used fresh as a roast or as chops. When cutting the meat from the ribs the separation should be

**TIME HONORED FRIENDS**



Who never fall down in their assurance of profit earning service are the well bred dairy cow and the well-conceived, well made Cream Saver.

The Petrie Manufacturing Company, makers of the

**"MAGNET" Cream Separator**



have been making and selling this humanly perfect dairy machine for many years in Canada. They are Canadians who have spent a long life-time in Canadian dairy practice. They know from costly experience in the routine and practical work of the dairy what will do and what will not do and the square-geared, solid and mechanically accurate machine known and used all over Canada as THE MAGNET is the outcome of their experience.

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.

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



**WILD OAT SEPARATOR**

We positively guarantee our Separator to remove EVERY KERNEL of Wild or Tame Oats from your SEED WHEAT and NO WHEAT LOST with the oats.

- Made in Three Sizes:
- 6-Shoe Power Separator
- 3-Shoe Hand Separator
- 1-Shoe Elevator Wheat Tester

Perfect Separation of OATS from BARLEY or RYE for Seed.

**WM. H. EMERSON & SONS**  
DETROIT, MICH. AND WINDSOR, ONT.

Write for Circular fully explaining this wonderful Separator

made as near the ribs as possible, as this improves the quality of the bacon. Cut the sides into even size pieces to be cured and smoked, trimming the edges up square and cutting off all ragged end pieces to be used for sausage or lard. Trim the shoulders,

taking out the ribs and neck bones and cutting off all bloody spots. Remove the feet at the knee joint. Next, split the head. On heavy hogs the jowls are removed and used for salting, but ordinarily they are used for head cheese or sausage.

## POULTRY

See that the chickens have plenty of pure water during cold weather. The water freezes so easily that the fowls often go without anything to drink.

While we have always contended for one variety of chickens on a place, we have no objection to trying to raise ducks, geese or turkeys as well as fowls. Like the farmer who raises a variety of crops, the poultryman may succeed with one variety of poultry when he might fail with another.

Success is detrimental many times by the amount of care in attending to the details of the poultry plant. A little leak here, and a little waste there, often bring failure. When one cannot see these things, and they run on in this way for some time, failure is bound to come. It would be better to run a small poultry plant, and do it well than to run a large one and not be able to look after the details.

Remember that on very cold mornings the hens would like a warm breakfast almost as well as yourself. If you do not feed mash, you might warm up some shelled corn in the oven and feed it to them while warm. The drinking water should also be warmed on very cold days. You may say that this is too much trouble, but if you want fresh eggs and plenty of them in the winter, you must go to considerable trouble before you can get them.

Some paint the chicken roosts with kerosene, others with liquid lice killer, but now comes a suggestion of painting them with hot tallow. It is claimed that the tallow will stay on the roosts longer than kerosene and that the latter is good only as long as the odor lasts. We think the suggestion of tallow a good one, for we all know that grease is fatal to lice. We would add quite a dose of crude carbolic acid to the tallow, which would make it still more effective.

While the hens are confined to their houses, they must have plenty of litter to scratch in, if

eggs are expected. The litter used should be clean and free from filth. Some people think that because the chickens like to scratch in the manure piles, that soiled straw from the barn is good for litter. But litter that is too soiled for horses and cows is not fit for poultry. It is a different proposition to have soiled litter in a tight poultry house to that which is out of doors. The best litter than one can use is oat straw, and if not threshed it will be all the better. The hens will do the threshing.

Failure to remove sick birds from the rest of the flock often leads to serious consequences, as the disease is likely to spread through the whole flock. It is better to take away the sick bird as soon as it is discovered. The trouble, whatever it may be, can be treated much better where the bird is alone, and the precaution may save your entire lot of birds. There are some diseases which are easily communicated from one fowl to another, such as colds, roup and chick-pox. If you will look after the sick birds at once, you may stamp out an epidemic which would mean a severe loss to you. If they are removed at once, they can be treated for their trouble, and be where it is quiet and where they will not be disturbed by others. If you will keep one coop for this purpose, and then disinfect it after each occupancy, you will find it will pay you. By doing this you can treat the individual case to advantage and at the same time save the balance of your birds from possible infection.



### Had to Draw the Line

The evidence against an old Georgia negro, charged with stealing a pig, was absolutely conclusive, and the judge, who knew the old darky well, said, reproachfully:

"Now, uncle, why did you steal that pig?"

"Bekase mah pooh family wuz starvin', yo' honnor," whimpered the old man.

"Family starving!" cried the judge. "But they told me you keep five dogs. How is that uncle?"

"Why, yo' honnor," said uncle, reprovingly, "you wouldn't 'scept mah family to eat dem dogs!"

**Horse Sense About  
Gas Engines**

Here is a Gas Engine Book you will read with interest from cover to cover

## The Alpha Engine Catalogue

is full of "horse sense" about farm power

It tells all about an engine which is so well built that you can always depend on it; which is so simple that a boy can run it; that can be run on either gasoline or kerosene; an engine that starts on the magneto and that does not stop until you want it to.

*This book is free. Send to our nearest office for it.*

**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.

### INTERNATIONAL STOCK FOOD

#### The Greatest Animal Tonic In The World

And the greatest feed saver in the world. This wonderful tonic will keep stock in better condition with 25% less feed, than regular feed without it.

It aids digestion and assimilation — keeps the blood clean and the flesh firm — and protects the animals against disease.

**THREE FEEDS FOR ONE CENT**

If you will write and tell us how many head of stock you own, we will forward to you free our \$3,000 Stock Book. 100

**INTERNATIONAL STOCK FOOD CO. LIMITED, - TORONTO.**

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 heavy  
YOUR MONEY BACK if not exactly as represented

Can. Pat. 144464. Dec. 3rd, 1912

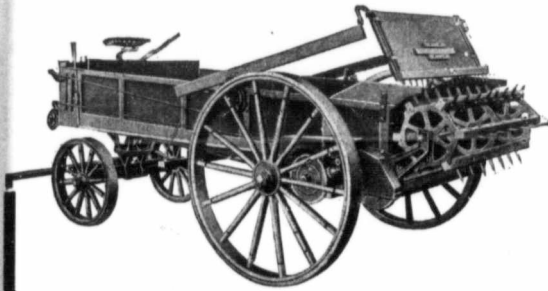
Write for our Pump Governor Pamphlet which gives all information, and also a plan to MAKE A LITTLE MONEY without soliciting, collecting or obligation on your part.

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

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







## You Need This Manure Spreader to Increase Your Crops

### Read these Superior Features

Careful construction and reducing friction to a minimum have made this "the Light draft Spreader."

The teeth on the cylinder are so arranged, and of the size and length, to handle all the different grades and conditions of manure.

Because the teeth are wide and graded only one-third as many are necessary as on other makes; this reduces friction.

The Kemp pulverizes the manure, it cannot throw it out in chunks.

When the load is discharged, the apron is brought back into place by touching a foot trip; this is a time saver.

The teeth are reversible and as one side wears dull the other wears sharp thus always insuring a sharp edge.

The body is low hung, making it easy to load.

**Cockshutt Implements are making better crops everywhere. Why not put them to work for you?**

Every farmer must return plant food to his soil if he expects to continue taking crops from it. Barnyard manure is the best fertilizer that can be used, but for best results it must be spread properly. The Kemp Manure Spreader spreads evenly and in any desired quantity; it saves time and labor.

### It makes more fertile fields

and more prosperous Farmers. One top dressing of manure applied with a Kemp Spreader immediately after seeding, will result in an increase of from five to six bushels per acre. The Kemp thoroughly pulverizes and spreads evenly all classes of manure. The Kemp has several exclusive patented features which make it superior to all others for satisfactory work and light draft. This spreader is so simple and easy to operate that a boy 12 years old can operate it as well as a man.

Write us a card to-day for special "Manure Spreader" booklet, or call on the Cockshutt Agent in your locality and examine the Kemp Spreader.

## Cockshutt Plow Company, Limited

Western Branches: Winnipeg, Regina, Calgary, Saskatoon

Distributing Points: Red Deer, Lethbridge, Edmonton, Brandon, Portage la Prairie

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

2nd, a uniform small size. If lignite is broken to lumps from 2 to 3 inches in diameter, when green, it dries without badly slacking and is then light and convenient for consumer. The present commercial lumps of from 20 to 50 pounds mingled with slack, are of unpopular size. A coal crusher must be operated at every mine to yield a saleable economic size of lump. Once the coal company will sell "un-slacked" lignite (i.e. lignite that has lost its 20-40 per cent of water without crumbling badly)—of convenient sized lump, creating a demand for the product, the stove works will gladly construct the right grate to burn it on. In fact the author has already been interviewed by representatives of one of the leading stove companies of the United States for specifications for a stove and boiler grate especially adapted to lignite.

As to the type of construction required by this fuel, we have found that a simple stove is satisfactory. A good draft is requisite; as lignite is a "flashy" fuel, like wood, good dampers should be put in the pipe to control draft when fuel is well started.

A grate, somewhat closer than that used with other coal, is required to prevent the sifting through of fine unburned coal, with the ash. Lignite crumbles

greatly when it burns and much will be lost if grate is of coarse mesh. Thus a rocking grate, which is well adapted to this fuel, should not be shaken too hard when shaking down ashes. This is usually all that is necessary as lignite ashes are light and fluffy, relatively small in amount, and do not clinker very readily.

Lignite requires a fire-box large enough to permit a large body of coal; this insures economy by complete combustion of gases and with two good dampers the fire can be shut down as desired.

The rocking grate and a forced hot air draft are found effective in boiler firing. Here too the coal lumps should be of small size in order to give sufficient surface for combustion. Fifty pound lumps do not give as hot fire.

Many farmers in western North Dakota use the lignite because they own it or can buy it very cheaply, but the consumption in the eastern part of the state has remained relatively small for above stated reasons that it has been put on the market as slack or enormous lumps, to be used in poorly adapted fire-box, or at excessive transportation cost.

Big business is just beginning to realize the scientist's well established fact that lignite yields producer gas, as an economical

fuel for brick, tile and pottery making, for milling and general steaming and manufacturing purposes. Instance of this is the plant now building at Hebron, which will use the gas to make brick and sell the solid residue in briquettes as a by-product. These briquettes have heating value near to that of anthracite and will sell at a lower price owing to the shorter haul.

For further information on the subject write Prof. E. J. Babcock, Grand Forks, N.D., or the United States Bureau of Mines, Washington, D.C., for their bulletins, or the writer at the Agricultural College, P.O., North Dakota.



Young Jack was talking to the new visitor soon after her arrival. He eyed her critically for a few moments, then looked up and said:

"So you're my grandmother, are you?"

"Yes, dear. On your father's side," remarked the old lady, smiling.

"Well, you're on the wrong side; you'll find that out," replied Jack, without removing his gaze.

## THE GATE THAT SERVES YOU BEST



### THE PEERLESS

#### Braced Like a Steel Bridge

JUST as the engineer strengthens the points of strain in a big, mighty bridge, so we have designed braces, stronger than was necessary, to make our gates stiff and rigid. They can't sag—they can't twist—they are a great improvement over gates made the old way.

#### Peerless Gates

are made of first-class material. Frame work of 1 1/2 inch steel tubing electrically welded together. Peerless pipe braced gates are all filled with heavy No. 9 Open Hearth galvanized steel wire—built for strength and durability—weather proof and stock proof.

Send for free catalog. Ask about our farm and poultry fencing, also our ornamental fence and gates. Agents nearly everywhere. Agents wanted in open territory.

**BANWELL-HOXIE WIRE FENCE CO. LTD.**

Windsor, Man. Hamilton, Ont.

Mention this magazine when writing advertisers.

**Patronize Those Who  
Patronize This Magazine**

Delivering Agricultural Machinery in Mexico  
 During the Month of May, 1913

(In view of the recent troubles and continued turmoil in Mexico, the following experiences of a representative of the J. I. Case Co. will no doubt prove of the greatest interest to a large number of our readers.—Ed.)

ON May 6th, I arrived in Aguascalientes having some days previously shipped from Mexico City, one Case 110 h.p. traction engine. It arrived on the 7th. On that afternoon I started for Hacienda "La Punta", where the engine was to plow. The owners, Don Francisco y Don Jose Madrazo, a Comisionista from Aguascalientes, Ruiz de la Polla and a neighbor Don Federico Loyola, accompanied me in two automobiles.

We were well started when a mozo came running up to advise us that the bandits were about to attack the Hacienda. The boys immediately started for the Hacienda leaving me with the engine. They had been gone about an hour when a group of 35 or 40 showed up in the road near the engine. They circled about me questioning as to whose it was? What was it intended for? Where was it going, etc? While some were peppering me for information, others started to dismantle the engine. That made me pretty "sore" and I got down from the engine, picked out the leader and knocked him about 30 ft. I then put the nearest four men to sleep. Someone threw a rock and it struck my left shoulder. With that I pulled my gun and fanning the entire group speaking in Spanish, "Do me the favor to throw another stone." Over half of them were armed, so repeating my request I backed to the engine and sprang up between the fuel bunkers. Keeping them covered. I ordered them off the field. They took to the bushes, mosquit and cactus, leaving on the ground the five I had struck. I was able to "turn this little trick," as the first man down was the leader and these people are completely lost the moment their leader is gone.

I then turned and went to Aguascalientes leaving the engine in a lumber yard. Meanwhile the boys had arrived at the Hacienda. Quickly putting their wives and children in the cars they left for Aguascalientes. As they went out of the rear door the bandits entered the front, shooting down a mozo who got in the way. The autos arrived in Aguas at 2 a.m.

Next day we loaded the four cars with 12 men all heavily armed. We each had about the same equipment—a gun on each hip and a rifle with 250 rounds of ammunition. We got to "La Punta" late in the evening and found the place a wreck—furniture and dishes smashed, trunks, grips, broken; the safe in the office blown open. In short everything ruined. We immediately started in pursuit, driving until one in the morning, along those mountain trails and with no lights. There was a moon but it only made matters worse, for it showed the trail smooth, while at times the wheels dropped into holes a foot deep. Returning over this trail two days later, I marvelled that we ever made the trip. At one o'clock we pulled off the trail and lay down for a few hours rest. At daybreak we were going again. At eleven we caught our one and only prisoner. He had a two wheeled cart—used here commonly, instead of lumber wagons. In it were eight to ten grain sacks stuffed full of grass and hay. Unloading it we found pistols, eye-glasses, shoes, zarapes, blankets, silk dresses and everything that had been stolen from the Hacienda "La Punta," for the Madrazo brothers recognized it all. Their rage was something to see as the gowns and different articles belonging to their wives were drawn out of this bunch of grass or that one.

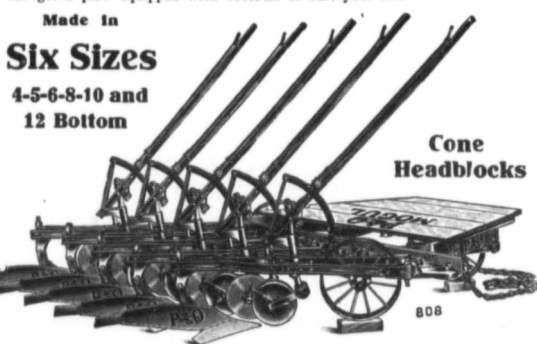
We held an impromptu court martial and it was unanimously decided that the man must be shot. So telling off five men as a firing squad, he was placed under a palm cactus and the man in charge of the execution paced off the distance. The prisoner then asked for a priest. I, being the only smooth shaven one, was "elected." In his confession he disclosed secrets that were valuable, but as he mentioned names of men and places with which I was not familiar, the information became badly jumbled. We therefore decided to postpone the deed until we got a genuine priest.

We had with us a portable telephone outfit and tapping a wire, learned that the bandits were drawing near to "Matansilles," another Hacienda belonging to Don Nicolas Madrazo. We arrived there late, but immediately started preparations to receive the visitors. We hunted up about all

P & O  
 MOGUL Engine Gang  
 Plows

Trade Mark  
 INDIVIDUAL hand levers, long and powerful, afford instant adjustment and absolute control of bottoms under all conditions. These levers are arranged to converge toward a common center, thereby facilitating their operation. By the latter feature you may know a Mogul as far as you can see it for it is the only plow which is so constructed.

The construction of the whole plow is symmetrical and substantial. It is built to stand the hardest kind of work. The frame is built of heavy angle iron, securely braced and bolted. The bottoms are as good as experience, the best material, and the most rigid inspection can make them. The various styles of bottoms are interchangeable. The styles include Scotch Clipper, Stubble, Prairie Breaker, Rod Breaker, etc., so that you can get a plow equipped with bottoms to suit your soil.

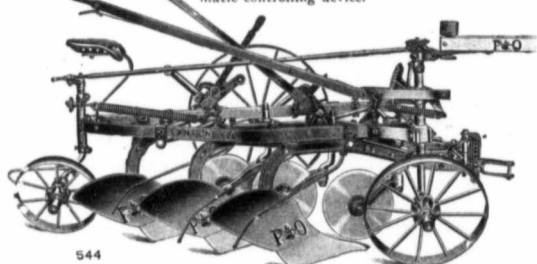


Other important features are: Pin break, spacing blocks between beams to insure alignment, ratchet stops to gauge depth, and cone head blocks for taking up looseness in beam couplings resultant from wear.

Write for Pamphlet "Traction Engine Plowing"  
 We protect purchasers of P. & O. implements from litigation or damage suits because of patents.

P & O  
 Three Furrow Diamond

The "Three-Furrow" is the largest of our famous line of Diamond Riding Plows, and is intended for use with 6 or 7 horses. It has all the good features of the two-furrow gang, which has been a favorite for years. Some of those features are: Extremely high lift, light draft, easy working foot lift, perfect bottoms, and an absolutely automatic controlling device.



The P. & O. Three-Furrow Diamond is especially suited to the needs of the man who has too much plowing for the ordinary riding plow, but not enough to warrant the purchase of an engine outfit. It will stand the hardest usage, and like every other tool we make, is backed by our UNQUALIFIED GUARANTEE. Write for circular.

Parlin & Orendorff Co., Canton, Ill., U.S.A.  
 International Harvester Company of Canada, Ltd.  
 SOLE AGENTS FOR CANADA  
 Winnipeg, Brandon, Regina, Saskatoon, Yorkton, North Battleford, Estevan, Calgary, Edmonton, Lethbridge.

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

# THE BIG QUESTION

IS

## What Will It Do For You?

We realize fully the responsibility we assumed when we undertook to build a machine that would reduce the farmer's labor bill, and at the same time produce an implement that would meet every condition for which it was designed:

## The Stewart Sheaf Loader

is the connecting link between your fields of stooks and the elevator. It supplies what has heretofore been a missing link in the all-important chain of harvesting the grain crop.

A. C. Leslie, Watrous, Sask., Nov. 6, 1913.—"The Loader saved me at least \$23.00 per day. It picks up the grain better than any man and this saving alone is a big item to the farmer."

R. A. Montgomery, Oak Lake, Man., Nov. 7, 1913.—"The Loader certainly does a clean job and appears to be a durable machine."

George Smith, Maple Bush, Sask., Nov. 3, 1913.—"It does not shell as much grain as pitching by hand does, as it lifts the stooks up bodily and is carried up nice and easy. It also picks up scattered grain between the stooks and cleans up the stooks better than hand pitching."

G. A. Ellis, Radisson, Sask., Oct. 28, 1913.—"It is very hard to get stokers that will tie the loose bundles. I have had lots of men that will stand up the loose stuff rather than bind it by hand and without the Loader most of this is left in the field."

S. G. Brevick, Radisson, Sask.—"The Loader was very satisfactory to the farmers on account of its picking the grain up so clean and to myself on account of its being a great labor saver."

A. L. Nutting, Radisson, Sask.—"Bissell Bros. threshed six hundred acres of wheat, oats, flax and barley for me, using the Stewart Sheaf Loader. It leaves nothing on the field and does not waste the grain."

Hundreds of STEWART SHEAF LOADERS rendered invaluable service to as many hundreds of farmers and threshermen during the season of 1913. Above are appreciations from a few of them.

Stewart Sheaf Loader at Work. W. D. Brown, Yorkton, Sask.



See Your Neighbour Who Has a Loader Or Write For Full Information.

SAVE YOUR CROPS  
SAVE MEN AND TEAMS  
SAVE YOUR MONEY IN 1914  
WITH A STEWART SHEAF LOADER

**The Stewart Sheaf  
Loader Co. Ltd.**

804 Trust and Loan Bldg.  
**WINNIPEG, MAN.**

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

the different kinds of arms known, rounded up on the Hacienda everyone who, we thought, could aid us or be depended upon. Three bombs which were found, were placed in charge of a Spaniard on the roof of the main building. The auto headlight we used to throw a light down on the courtyard. Those who could shoot and were well armed, were stationed on one roof and the rest on another. The ambush was prettily arranged and had the Bandits shown up, it is doubtful if any had ever lived to tell of it, for that light would have dazzled them and the horses would have been startled by the bombs exploding in their midst while rifle and shot-gun fire were pouring down on them from the roofs. But some unfaithful peon had slipped out through the cactus and given the alarm. At daylight we went into the house to sleep for we were cold and tired. We slept several hours, when Don Jose woke me and motioned to be quiet and follow him outside leaving the others sleeping. He had decided to have some fun. We went to the corral and roped a two year old bull, coaxed and pushed him through to

the bedroom. Closing the door we immediately got to the windows which in this country are always barred with iron bars four or five inches apart. The bull was looking about sizing up the place, then getting lonesome he bellowed. The men woke up startled, one springing out of bed grabbing the sheet he used it as a bull fighter would a cape; the other one crawled under the bed. The one with the sheet tripped over the blankets and mattress and fell down. With this test of bravery we let the bull out.

That day we drove to Hacienda "Chilinamples" as the rebels were headed in that direction. Spent the night there; next day to Lesdesma and Cienega, but lost track of them and returned to Aguascalientes.

I then wired to Merico City for a negro who had helped me on several occasions. Next day he arrived and we started for the Hacienda with the engine. The going was bad, trails around and over two mountains, grades were from 6 per cent to 38 per cent and hills from 1½ to 2 miles long. This necessitated slow going. We got a late start and I ran as long as possible, in fact until dark and

because of that got into trouble. Going through a river my wheels buried themselves, and trying to pull out, I broke the steering gear, so I decided to stop there that night. I took the curtains from the cab and walking up on the bank lay down under a cactus to sleep. The negro gathered up all the newspapers and made a bed out of them on the other side of the cactus. I dozed off and on for an hour or so but could not stand it any longer. I had laid my bed on an ant heap and these desert ants sure can bite. I got up telling Johnson that I would have to move. He said his "Hobo bed" would not stand moving, he therefore proposed to remain. So taking my curtains and rifle I started hunting a favorable spot. I found a corner or curve in the river a couple hundred yards down and lay down on the sand. I had just fallen asleep when several "Mauser shots" rang out in rapid succession. Springing up I got behind a corner of the bank as a great noise came down the river—sounded like a stampede. It sure was. As it drew nearer, I heard Johnson shouting "White folks—White folks! for the Land sake where am you?" I answered

him and he came over his eyes rolling. Even in the darkness I could see the whites. He had decided to move not even bothering to take his "Hobo bed" along. The shots soon died down and we again lay down and slept until daylight. We then started to repair the engine. Soon some peons came along and told us that the bandits had attacked a ranch about 1½ miles away. These were the shots we heard.

Again in the afternoon I started and made a good run getting over the mountain onto as pretty a plateau as I have ever seen. I drove until I could not see any longer, then again camped for the night. But there was absolutely no bare spot—cactus everywhere. Where the cactus are plentiful the snakes are more so, so I slept on the floor of the engine cab. Nothing happened. I had banked my fire so at daylight I started, arriving at the Hacienda at eight o'clock, having made the trip in 13½ hours running time, 1900 lbs. of coal, two tanks of water. I could have done it on less if it had not been necessary to stop these two nights.

I reached there tired and hungry, for from Friday noon to Sun-

day morning, Johnson and I had one can of salmon, one of sardines and a pound of crackers, water warm and dirty from the tanks to drink. We had not expected to be left alone until after we were started, then the Madrazo boys took the autos and followed some 50 soldiers who had been sent to clear the road.

Well, I took a cup of chocolate and lay down on a bed not even removing my guns or cartridge belt for I was really too tired. I slept about 20 minutes when I realized something unusual was happening. Soon I woke sufficiently to hear the house-keeper shouting in Spanish "Awake Senor—for God's sake wake up." She was speaking to me and crying and shouting by turns, "The bandits are upon us." I gradually understood that a trusted mozo had run up stating that the bandits were in a strip of timber about three miles away. It seemed that the bandits had circled around the soldiers and had returned to wreck vengeance on the Hacienda. I immediately tried to work out a plan of defence, as I was the only one of authority. I could only get two others on whom I could depend to any degree at all, so decided to run for it. Ordering the coach and six horses I grabbed the books of the Hacienda that had escaped the previous attack, threw them into the coach and "beat it" for Aguascalientes. We went over that trail all six horses galloping and running. I sure admired that coachman, he took turns on the run that would have been dangerous on a walk. On making a sharp curve about 10 kilometers from the Hacienda, we ran into a group of men on horseback. They were spread across the road, but as they still had their hands in the bolsters I beat them to it jerking out both guns and covering the bunch, demanded to know why they obstructed the trail, not giving a satisfactory answer, I ordered them around the turn and covered them until they were out of sight. We arrived in Aguascalientes in three hours and a half, making 48 kilometers over a mountain trail is sure going some.

I immediately went to bed and slept 15 hours without waking up. After this rest I went at once to Mexico City. Next day I returned to Aguascalientes and again went out to the Hacienda to start that engine.

The owners were now at the Hacienda. With the soldiers they had chased the bandits into an ambush set by the soldiers who had come out from Guanajuato. Fifty-three bandits, including the leader Jose Quiros, died fighting; Forty-seven surrendered and were

placed before the firing squad in groups of five. Thus the entire bunch was eliminated.

I started the engine in a table land 6 by 9 miles square, level but very hard. It never had seen a plow. Some places the plows refused to enter more than two inches, in some we plowed six to seven inches deep. For fuel we used cactus dried, shoved in, in pieces as large as the fire door would permit. It works very well and had no trouble keeping up steam. The owners immediately ordered a 36 x 58 inch separator and an 80 h.p. plowing outfit. So I feel that this one of my experiences during this revolution was profitable as well as interesting (now that its over.)

Yours truly,  
H. E. Burchard.



Course in Gas Engineering

Continued from page 30

tions of troubles which have occurred in the operation of various engines, none of the trouble having been due to faulty design or workmanship but to carelessness or ignorance in some form or other. If a steam plant is handled with as little care or intelligence as gas engines often are the list of casualties from boiler explosions, etc., would soon be so large as to drive the steam engine out of existence.

The operator of the gas engine, however, is dependent upon principles which, if not followed out, seldom result in more than unsatisfactory work or a complete shutting down of the engine. Sometimes, however, a gas engine is handled in just such a way so as to cause almost as disastrous results as a steam boiler explosion. If the engineer, in addition to the practical knowledge gained by handling the engine, will add some theory to his knowledge so as to know the why of this or that operation, it will enable him to locate the cause of trouble much more readily, as well as in a large measure to prevent trouble.

A Wonderful Pump Governor

A new device which is being shipped in large quantities by the Western Steel & Iron Co., of Winnipeg, will mightily increase the pump service of any one using such a thing in their water supply, and at the same time cut out all of the hard work the continuous pumping that is necessary on most farm homes, means to the hard labor usually employed in getting the water.

An illustration of the device will be found on another page, and we have the greatest pleasure and confidence in recommending it to the notice of our readers.



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.

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

IGNITION and LIGHTS

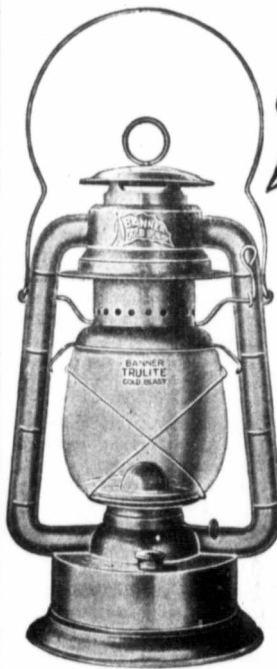
We furnish the magneto for ignition and lights for your automobile, motorcycle, gasoline tractor, motor boat or stationary gasoline engine. Either direct current or alternating current types of magnets furnished for every purpose.



Henricks Novelty Co.

1504 St. Paul St.  
INDIANAPOLIS - IND.

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



The Trulite

Gold Blast Lantern

The Latest and Best Thing in Lantern Manufacture

Glass will not break, crack, or become smoked.

They give 12 candlepower bright white light.

They burn 24 hours with one filling.

Bowl shaped glass is easily cleaned.

Sold by all Dealers

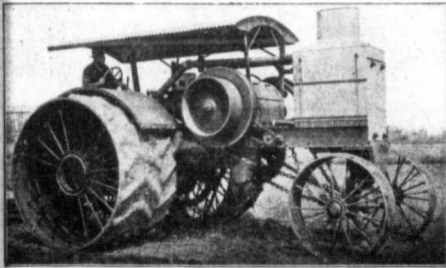
Manufactured by

Ontario Lantern & Lamp Company, Limited

Hamilton • • Canada

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

# Spring Work in Western Canada will Demand Many Fairbanks-Morse Oil Tractors



The Time to Order is NOW

Farmers everywhere are realizing what is possible with the Tractor. Just as this knowledge increases, the preference for Fairbanks-Morse Tractors is still more clearly evidenced. By ordering now, you ensure delivery of your machine in time for a full season's work.

## Features that Make the Fairbanks-Morse Tractor Predominant

The frame is built of steel throughout—reinforced, and joints welded or riveted like a bridge.

The 30-60 (as illustrated) possesses a guaranteed draw-bar pull of 9,000 lbs. Transmission gears are of cut steel, running in oil-baths.

Burns gasoline, motor spirits, kerosene or low-priced 30-degree distillate.

There is less weight to these machines per horse power actually developed than with any other tractor on the market.

Write for FREE Booklet on the Fairbanks-Morse Oil Tractor and learn still more reasons for making it your choice.

### A Fairbanks-Morse Engine Will Lift You Out of the Rut.

If you have been used to farming in the old-fashioned way, let the opening of a new busy season see a change in your system—instal a

#### Fairbanks-Morse Skidded Oil Engine

—a semi-portable Engine which cuts the drudgery out of all classes of work around the farm.

The Fairbanks-Morse Oil Engine is an all round help which may be installed at surprisingly low cost, and, better still, is inexpensive in upkeep because it uses cheap, low-grade fuel oils instead of gasoline. Fairbanks-Morse Engines have been made for 33 years—many are still running perfectly that were built 25 years ago.

Other reasons which make the Fairbanks-Morse the Engine above all others for you to have on your farm will be found in our Free Booklet.

### We Manufacture

Fairbanks-Morse Oil Tractors, 15-30, 20-40 and 30-60 H.P.

Oil Engines, Portable and Stationary, 1 to 500 H.P., for all purposes.

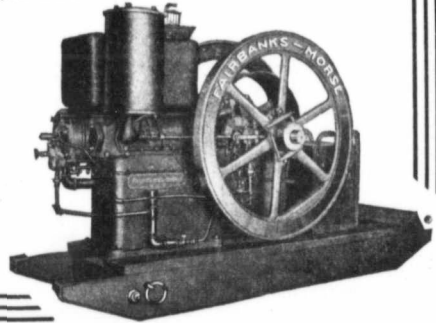
Marine Engines, 2 and 4 Cycle, 3½ to 100 H.P.

Binder Engines, adapted to all makes of Binders.

Hand and Power Pumps for every purpose.

Truck and Pitless Scales, specially designed for farm use.

Electric Lighting Plants, suitable for country residences.



## The Canadian Fairbanks-Morse Co. Limited

WINNIPEG REGINA SASKATOON CALGARY  
Montreal St. John Ottawa Toronto Vancouver Victoria

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

It is called the "Hercules" patent pump governor, and can be adjusted to fit any pump. The makers give a very strong guarantee and the most satisfactory condition that if it is not exactly as represented in their announcement, the money will be refunded at once. They also undertake to replace all parts proving to be of defective workmanship or material within one year from date of purchase.

### What I saw and Learned at the Exhibition

Continued from page 59, Jan.

(Portion of First Prize Essay awarded to boys who were the Guests of the Winnipeg Exhibition Association, 1913—Won by Robert Coulter, (age 16) Swan River, Man.)

The people are changing from grain to cattle, and to make more money they should have more high class animals. The man who makes the most money is the man who keeps his eyes open and knows the reasons for everything that occurs when he is raising the stock.

After this lecture we went to look at the pigs. Prof. Curtis gave us a little talk on pigs. He told us there were two types of pigs; the bacon and the lard types. In the United States the

lard type is mostly raised. They should be of good length, width and depth. Bacon pigs should also be of good length and depth but not quite as wide. The lard type is low set and the uniform width. They should be heavily fleshed along the bank and hind quarters. The Berkshire pigs are of this type. They are always black with six white spots, one of which is on the forehead. The end of the tail is white and it has four white feet. The face is short and dishd and the ears are erect. The Poland China is the same color as the Berkshire, but its ears hang down. The nose also is shorter than that of the Berkshire, the face is not dishd. Breeding pigs should be strong in the legs.

Yorkshire and Tamworth pigs are both bacon types. In the Yorkshire pig the ears stand erect. It is white in color. The Tamworth pigs are red; they are easily distinguished, from the Duroc Jersey, which are also red, by their long nose. The ears of the Doric Jersey fall over. The Chester White has a straight face. The ears hang forward and the points break over.

After looking at the pigs, we went and had a look at the sheep. Prof. Curtis told us that sheep were by far the most difficult

animals to judge, because of the wool. The wool should be fine, crimped, close and compact. To examine sheep you should not stick your fingers into the wool, because this spoils it. The wool can be parted at any place on the body where there is a fold in the skin, by parting it with the back of the hand. After dinner we took a special train to the new agricultural buildings. At the college there were quite a few men working on the large horse stable. This stable will be well supplied with windows, because a horse should not be kept in a dark stable.

Prof. Jones said that one great fault about the stables in Manitoba was that they were not sufficiently lighted. Of the stock judging pavilion, the foundation is only laid as yet. This building when finished will have seating room for 600 people. In this building students will have lessons on stock judging. They will judge with score cards, and will have to give reasons for placing stock both orally and written. There is also a dairy house. This will be used for anything pertaining to the dairy. The boys' and girls' residence has a frontage of 560 feet, and it is three-quarters of a mile around.

Continued next month.

## Hillcrest Steam Coal Will Save You Money

It gives more heat and power than any other coal. It contains less slate, burns clean, and has proven itself the ideal steam coal for tractors. Give Hillcrest coal a trial—

### It Means Faster, Easier and more Economical Tractor Service

Hillcrest is the best coal produced in the Rocky Mountains. Order a supply for your spring work; you will be delighted with the result.

Hillcrest Collieries Limited  
Hillcrest Alberta



### Steer Feeding for Boys

The Brandon Winter Fair has established an excellent precedent by offering \$100 in six prizes for steers fed by boys under seventeen years of age, the steers to have been in possession of and to have been fed by the boys for at least two months prior to the exhibition.

The Western provinces of Canada since the 1st of October, 1914, have shipped to the United States over 26,000 head of stockers and feeders. Every man has a right to do what he likes with his own, but no thoughtful person can view this large movement of unfinished cattle to another country without regret. Every one of the 26,000 should have been fed and finished in Canada or kept for breeding purposes, for one of the most regrettable features of the whole movement was the number of nice, thrifty young heifers that were sold; heifers that were, everyone of them, needed to breed and increase the holdings of stock in this country.

A good deal has been said about legislation to prevent female stock, under a certain age, being sent out of the country or slaughtered. Legislation of this kind would be difficult to enforce and a questionable good. There is an old saying that you cannot make people good by an Act of Parliament, and while no sensible person believes in doing away with prohibitory laws, they are only in a precautionary measure intended to meet the case of a very small percentage of people.

Every thoughtful person knows that the majority of people refrain from stealing, not because there is a law making it a crime, but because they have been trained in right ways of thinking and know that it is wrong. The

law against stealing is effective against people who have a low moral standard and to whom fear of punishment is a powerful deterrent, but the great mass of citizens are honest because they know and feel that honesty is the best policy, not only in the sense of avoiding punishment, but in the sense of building up a nation in strength and stability.

A prohibitory law up to a certain point, though it might avail to prevent the sale and slaughter of female live stock, would not be really advantageous. The realization that it is poor business to cut off your source of supply would be the only thing to prevent the sale and slaughter of females. The more that can be done to educate the rising generation on the farms in the wis-

dom against our shipping stockers and feeders to the United States. As it proved beyond peradventure, that even for the critical Chicago market, our steers can be fed perfectly with the feed on our own farms.

### Dehorning

While I am on this subject of steers and feeding, let me urge that all who are feeding steers or intend to feed steers for the American markets the necessity of having them dehorned. This question was discussed at length with very many of the large commission houses at Chicago, and with one accord they said: "Urge the Western Canadian cattle men to have their animals dehorned before shipping them here, it makes a difference of from 50c. to 75c.

on the development. The most notable feature was the increased spirit of unity and the wider outlook of the delegates.

It is regrettable, however, that so little attention is paid to parliamentary procedure, especially in view of the fact that the members are so fond of calling these meetings a farmers parliament. The lack of order and the lack of knowledge of parliamentary form leads to a very great waste of time. Libraries are being put in many of the local branches and the organization is to be warmly congratulated on the high class of books asked for.

It would be well, however, if every library would include a copy of Bourinot's Parliamentary Procedure, and that the members of the local branch make a study of it. In fact a parliamentary drill might prove a very interesting feature of local gatherings and would have the effect of sending delegates to the central meetings, who would be prepared to do business in a more orderly manner.

There were a number of prominent questions before the convention, the most outstanding being the need of a third party, Inter-Municipal Hail Insurance and Co-operation. The third party as such was never mentioned, but great stress was laid, first by the president in his annual address, and later by very many of the speakers, on the need of cutting loose from existing parties. In the next breath almost they dwelt on the need of united action on the part of the farmers, and it was not difficult to put two and two together which upon this occasion made three instead of four, or at least suggested the third party.

With reference to the Inter-Municipal Hail Insurance, a draft

Continued on page 73



"Contented with little, they find it in plenty."

dom of stock raising the less need there will be for laws to prevent the destruction of female stock.

The passing generation on the Western farms have been a generation of grain growers, the urgent need of the moment is methods whereby the rising generation may be trained into a generation of stock men, and the offer of the Brandon Winter Fair is certainly a step in the right direction, and it comes at a psychological moment, for there are few boys on Western farms who have not been inspired by the success of young Harry Bowman in feeding the champion for Chicago.

The winning of that championship is itself the very best argu-

and even \$1 per head in many cases."

Every man who is feeding cattle with any idea of shipping them south should bear this in mind.

### Farmers Meetings

January and February are particularly the farmers opportunity for holding meetings and discussing problems that are of interest to them. In these months come the annual meetings of the various Grain Growers' Associations. The Manitoba one held in the last month was the eleventh and unquestionably the best which they have held. It has been my privilege to attend eight of the eleven conventions and therefore, I can speak with some authority



Faultless Foundation Stock is at the root of all Success.

Continued from page 32

bill was presented for discussion and the members of the committee, of which the convener was Frank Simpson, of Shoal Lake, who drafted that bill, are to be warmly congratulated on their work. If it can be got through the legislation in its present form it should be an even more valuable one than the one passed in Saskatchewan last year, which has proven, in spite of some defects, very successful.

There was a report from Saskatchewan dealing with the success of the Inter-Municipal Hail Insurance, and nothing was more startling than the tremendous difference in the cost of the administration of the Inter-Municipal as compared with the ordinary insurance companies.

Perhaps the most dominant note of the whole convention was co-operation—the need of co-operative trading. The convention was addressed by Geo. Fisher, Canadian manager of the Scottish Co-operative Society, and much enthusiasm was engendered by reports of the success already attained by the small co-operative trading organizations which have been organized at country points.

The outlook for the increase of co-operative trading among the farmers is certainly good, and action was taken looking towards a large central co-operative trading organization. So much for Manitoba Grain Growers.

The Alberta meetings are being held January 21st to 24th, but the reports of these meetings will have to be deferred to a later issue. The great questions before that convention were the quarrel between the Alberta farmers and the C.P.R. Natural Resources branch over irrigation; the Alberta Co-operative Elevators and the question of ranch leases.

In February the Saskatchewan Grain Growers meet at Moose Jaw, and they, too, have some important problems before them. The annual gatherings of the agricultural societies of Manitoba will take place in February and will have an added attraction in being held at the new Agricultural College. These gatherings of farmers are full of educational opportunity and, while the on-looker may think there is too much valuable time wasted, on the whole they are proving a highly educational factor in the lives of Western agriculturists.

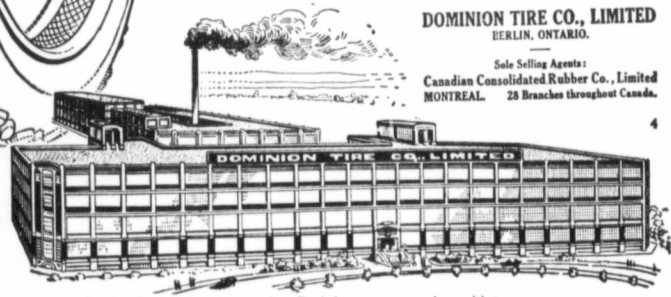


Enthusiasm is that secret and harmonious spirit which hovers over the production of a genius, throwing the reader of a book or spectator of a statue, into the very ideal presence whence these works have really originated. A great work always leaves us in a state of musing.

# DOMINION Nobby Tread



DOMINION  
TIRES ARE  
GOOD TIRES.  
THEY HAVE THE  
NOBBY TREAD

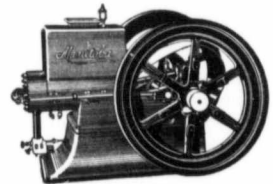


DOMINION TIRE CO., LIMITED  
BERLIN, ONTARIO.

Sole Selling Agents:  
Canadian Consolidated Rubber Co., Limited  
MONTREAL 28 Branches throughout Canada.

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

## The Manitoba — An Engine of Certainties



**Certain Quality** Every piece of raw material that goes into Manitoba Engines is procured from the best source of supply—hydraulic tool steel direct from Sheffield, England; cold rolled steel, ash firing bars, open-hearth nickel steel, steam hammer forgings, etc., and nickel steel valves of the most approved design, each from its most representative maker in Canada or the United States—and every Manitoba Engine is made in one of the most carefully operated shops in Canada.

**Certain Service** A long life free from troubles—is a direct result of the care which goes into material and workmanship.

**Certain Satisfaction** is assured by this care and by our policy of taking as great an interest in the purchaser of a Manitoba Engine after he has bought and paid for it as before the purchase.

**WE MANUFACTURE**

Gasoline Engines, 1½ to 25 H. P.  
Wood Saws, all sizes;  
Grain Grinders, 6 to 12 inch;  
Wood and Iron Pumps;  
Pumping and Power Windmills, 8 to 14 feet

"MADE IN THE WEST FOR WESTERN NEEDS"

OUR CATALOGUE,  
full of interesting Engine facts  
FREE ON REQUEST

**MANITOBA ENGINES, LIMITED**  
Brandon, Man.    Saskatoon, Sask.    Calgary, Alta.

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



## Repairing Farm Equipment and Roads

Continued from page 44 Nov.  
**Rubber Belts**

The term "three ply" or "four ply" mean that the belt is made up of three or four ply of canvas. Sometimes the belt is stitched its entire length with several rows of stitches; this tends to keep the plys securely fastened together.

**Care of Rubber Belts.**—Rubber belting is not affected very much by damp weather, and is very satisfactory for outdoor use, but should never be left on the pulleys when idle in damp weather as it will shrink and cause excessive strain on the belt. The seam should always be on the outside, never next to the pulley. Care should be taken with rubber belts that the edges do not get frayed by rubbing against some rough surface. Many drive belts on threshing machines are spoiled because the engine and separator are not properly in line, thereby causing the drive belt to rub against guides or the cylinder casing, which frays the edges, separates the plys and ruins the belt. Rubber belts also require a dressing occasionally. A cheap and very satisfactory dressing is the common hard laundry soap. By applying it to the pulley side it will cause it to grip the pulley tighter, and is about as good as anything that can be used. Avoid the use of sticky dressing as it causes the rubber to peel off when the belt runs over the pulleys. Mineral oil tends to rot rubber.

**Canvas Belts.**—Canvas belts are made from a good grade of canvas, which is sewn together and then thoroughly saturated with a special kind of paint which fills the fibres and prevents moisture from acting on the cotton. Canvas belting stretches and shrinks very readily, depending on the conditions, and is not very satisfactory unless run over a tightener. It requires a similar care to rubber. Soap or boiled linseed oil also make a satisfactory dressing for canvas.

**Belt Fastening.**—The ends of belts may be fastened together by metallic fasteners, lacing or glueing. Glueing is the strongest method, and when it runs over a tightener is the best, especially if the belt runs at a high speed. It makes a smooth joint, there being no knock or pound as there is in a large lace joint.

To glue a leather belt, the ends are tapered off and a good grade of fish glue is used. Glueing is

not a practical method for the farmer, so will not be discussed at length.

It sometimes happens that the glued laps open up at the points. This may be caused by an excessive amount of oil getting on the belt, or the belt being run in the wrong direction. All belting should be run so that the point of the lap on the side away from the pulley points opposite to the direction in which the belt is run. If the belt is very oily it will be necessary to clean free from oil. This can be done by using naphtha or gasoline, and then repair by using glue or prepared cement, which can be purchased. Do not drive in a string of tacks in the joint as it will only tend to make matters worse and eventually the belt will break where it has been injured by the tacks.

There are many kinds of metallic fasteners on the market, some of which give good satisfaction, while others tear the belt and are very short lived.

**Lacing.**—Leather lacing is perhaps the most common way of fastening the ends of belts together. It is a satisfactory method when properly done, and can be adopted under most conditions which the farmer would be likely to encounter. Figure 3 shows the tools used in lacing; the hammer, the square, theawl, belt punches, and lace cutter.

There are many different methods of lacing belts. Some men have the idea that the larger the lace, and the more lace used, the stronger the joint will be. This is a mistake because a large lace makes a thick joint, and every time the joint comes to the pulley it tends to jump and pound. This causes extra strain on the belt and also jars the machinery, takes more power, and tends to heat the bearings.

The main thing to keep in mind when lacing a belt is to get a smooth joint, arranging the holes so as to get the greatest strength. Small laces and lots of holes generally prove to give the best satisfaction. The following table will give the number of holes for various widths of leather belting:

2 to 2½-inch belting	..	3	holes
3-inch belting	.....	4	"
4-inch "	.....	5	"
5-inch "	.....	6	"
6-inch "	.....	8	"
8-inch "	.....	12	"
10-inch "	.....	14	"

### "FLOUR CITY" TRACTORS



1914 Should be the Biggest Year for the Flour City

The year that has just closed has witnessed the appearance of some new tractors and the disappearance of others, but after all has been "said and done" the "FLOUR CITY" stands out pre-eminently as the one Successful tractor that continues to hold the most advanced position in design, construction, simplicity and efficiency.

Such features as the bevel gear transmission, the over-head valves, the large diameter drivers, the proper distribution of weight, and the one lever control are special "FLOUR CITY" features and have made possible our claim of power, development, durability and economy, all of which has been verified by six years of continuous service.

The "FLOUR CITY" is not a so-called assembled tractor, but is built in its entirety in our shops. It has received the highest honors in all contests and demonstrations in which it took part. Naught can be said against it and much can be said in its favor.

It is a tractor worthy of your consideration, built in three sizes—20, 30 and 40 H.P. Send for descriptive catalog.

828 44th Ave., No.

KINNARD-HAINES CO.  
 MINNEAPOLIS, MINN.

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

## Brandon Tannery

LIMITED  
BRANDON, MAN.

NOT a Departmental Store but  
a Tannery and Factory

We have just issued a Special Harness Catalogue, showing every kind of Harness used on the farm, and all the parts belonging to the Harness. This Catalogue will save you money. Glad to send sample of Leather, or supply you with a side for repairing purposes.

SHIP US YOUR HIDES. We pay the Highest Market Prices.



## Manitoba Winter Fair AND Fat Stock Show

PROVINCIAL POULTRY SHOW  
PROVINCIAL SEED GRAIN FAIR

BRANDON, Manitoba, MARCH 2nd to 6th, 1914

### Canada's Greatest Winter Fair

Will be Bigger and Better than ever

Entries close February 21st. Write for Prize List.

SINGLE FARE RATES ON ALL RAILWAYS

**J. D. MCGREGOR**  
 President

**W. H. ENGLISH**  
 Vice-President

**W. I. SMALE**  
 Sec. and Manager

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

The holes should not be less than  $\frac{1}{2}$ -inch from edge of belt, nor nearer the end than  $\frac{3}{8}$ -inch, and should only be large enough to take in the lace.

Canvas belts do not need so many holes and should be  $\frac{5}{8}$ -inch from edge, and  $\frac{3}{4}$ -inch from end and about  $\frac{3}{4}$ -inch apart as near as can be had. The holes in the canvas should not be cut with a hollow punch but made with an awl.

The width of lace generally used is as follows:

Belts up to 5-inch,  $\frac{1}{4}$ -inch and 5/16-inch.

Belts from 6-inch to 12-inch,  $\frac{3}{8}$ -inch to  $\frac{1}{2}$ -inch.

In the illustration (figure 4) are shown four different lacings in common use, viz., straight, hinge, lock stitch and the hinge lock stitch, in order named from left to right. The top row shows the lacing on the side away from the pulley, and the bottom row the lacing next the pulley.

The first column shows the straight lacing, often the first lace, as it is the easiest to lace. It is suitable for light work. As is shown, on the pulley side the laces run straight and are crossed on the opposite side.

The lock stitch, shown in column two, is a good lace for heavy work, has an advantage over the straight and hinge laces, viz., that if a lace breaks it is not so liable to pull loose.

The hinge lace is shown in column three, and is suitable for running over small pulleys as it is very flexible. It is seen that both sides are alike, and no laces run straight across as in the straight lace. It is a little harder to lace than the straight lace, but a very desirable lace for heavy work.

Column four shows the hinge lock stitch, which is a combination of the hinge and lock stitch. This makes a flexible lacing, as well as having the advantage that the lace is locked if broken.

**Belting Suggestions.** — When rubber belts are to lie idle for a time they should be dusted well with powdered soapstone, rolled up, covered with some cheap covering—such as old sacks—dusting the covering also with soapstone, and stored in a dark cellar. Light, heat and extremely dry air tend to rot rubber, while darkness and moist air tend to preserve it.

When it is not convenient to use a tape to find the length of a belt needed, add the diameter of the two pulleys together, multiply by three and one-seventh, divide the product by two and add to the quotient twice the distance between the shafting. The product will be the required length.



## Farmers, Buyers and Dealers

This complete THRESHING OUTFIT will easily solve the threshing problem. It's an ideal machine at work, a perfection in construction, a standard in quality and durability.

This thresher and cleaner is mounted on truck with steel wheels, equipped with bagger, tailings elevator, straw carrier.

The machine is especially built to run with gasoline or steam power.

LARGE CAPACITY. GUARANTEED. MODERATE PRICES.

### REPRESENTATIVES WANTED

We would like to communicate at once to take agreement with experienced dealers or agents for the sale of our Threshing Machines in Manitoba, Alberta, Saskatchewan.

Write to

## P. T. LEGARÉ LIMITED

Manufacturers,

QUEBEC

CANADA

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

Run all belts as slack as they will work efficiently.

The larger the diameter of the pulleys, the smaller the belting expense.

A belt a little larger than is absolutely necessary running slack, shows less wear on itself and causes less wear on the bearings.

Always cut ends to be laced perfectly square.

#### Soldering

A little money expended for a soldering outfit for the farm will save the cost of the equipment in a very short time in repairing the tinware of the home, and the other many leaks about the farm and dairy. Not only is the expense of repairing saved, but there is quite a saving of time which otherwise would be expended in taking the work to the tinshop and waiting for the repairs to be done.

Almost anyone about the place can learn to do practically all the soldering necessary on the average farm; and no doubt more farmers would do their own soldering if they knew how easily and cheaply it could be done. It is the intention of this article to give the equipment necessary and a few general instructions on soldering.

Figure 5 shows the equipment necessary to do all the ordinary soldering required on the average farm in Manitoba.

1. A soldering iron.
2. Flat file.
3. Stick of solder.
4. Bottle of muriatic acid.
5. Small pair of snips.

The soldering iron is made of copper, the ordinary size weighing from  $1\frac{1}{2}$  to 2 pounds. The file is used for cleaning and scrap-

ing the part to be repaired. The best solder to buy is what is known as "half and half." Another name for the acid is hydrochloric acid. It can be obtained at any drg store. The small snips come handy for other work about the farm as well as for soldering. The other materials required, but not shown in the cut, are a little rosin, a piece of sal-ammoniac, and some strips of zinc. This equipment can be purchased in any town for a cost not exceeding two dollars.

In order to work properly, a soldering iron must be tinned so that the solder will stick to it and follow the iron. There are two common ways of tinning soldering irons, one by the use of rosin, and the other by the use of sal-ammoniac. The sal-ammoniac is the better as it cleans the iron more quickly.



During the past month wheat enjoyed a net advance of about two cents, only to lose about one cent of that in the decline in the last two days following the government's action in voting down the Free Wheat Amendment. Big American houses carrying long lines of Winnipeg May wheat sold out their holdings, bringing liquidation in our market, leaving American markets steady and strong. While receipts past Winnipeg have dropped off greatly, there has been no scarcity of world supplies, in fact the world's visible is considerably over that of a year ago, being now 208,130,000 bushels, against about 201,000,000 bushels, and Canadian visible about 3,000,000 bushels over that of a year ago. Country elevator stocks, all grains, are estimated at 33,000,000 bushels, about 23,000,000 bushels being wheat, while the quantity left in farmers' hands is likely not over 5 per cent—a comparatively small amount. The United States visible is about 60,806,000, against 64,019,000 bushels a year ago. Receipts of all grains at their primary markets (that is, the 8 or 9 big internal receiving markets) have been running considerably less than a year ago.

A noticeable feature of the world situation is the fact that last week clearances from North America (wheat and flour) ran about two and one-half million bushels under the average of the last few weeks, showing that Europe is buying more heavily from Russia and Australia just now, so Canadian and American markets are just now in a waiting attitude watching the winter wheat crop. Just now it has a partial snow covering, but the weather is so changeable across the winter wheat belt, that any day the crop, now so promising, may suffer freezing damage, and a sharp advance in the wheat markets result. Yet the Winnipeg market is in a rut, and something like this, or an improved export demand is really needed to widen and stimulate its activities. Our market has backed and filled with long pauses in between, but on the comebacks from the downturns the futures have managed to get into new high ground. Naturally, this is

not an infallible sign of assured strength, but it certainly is an indication of a constructive market despite its recurrent reactions. It is a fair inference that our market will work irregularly higher, with the advances each time carrying the price into new high ground.

It is generally conceded that stocks of flour in the hands of jobbers are nowhere heavy, and the big American millers report a good cleaning up of old orders with a fair enquiry for new business. The Canadian millers complain of the usual January dullness in flour demand, but expect an improved demand directly. If it be true that the Argentine and Australian exportable surpluses are away under those of last year, and India has almost nothing to ship, Europe must fall back on Russia and North America principally, for supplies for the next eight months. This is the most bullish factor.

European crop conditions are fair, the alternate freezing and thawing across Northern Europe causing some apprehension. Winter wheat is fairly well ahead in most countries. Poor harvesting weather in the Argentine has hindered threshing and marketing, and similar conditions have prevailed in Australia, in each case reducing the exportable surplus. In the United States the winter wheat is in a most satisfactory condition, but it is still in danger from freezing unless protected by snow.

Our own Canadian terminal stocks are not burdensome. On January 30th they compare as follows:

	1914	1913
	Bushels	Bushels
Wheat	10,682,068	13,678,281
Oats	3,936,069	4,033,460
Barley	1,293,394	1,646,990
Flax	2,541,413	3,122,155

Likewise the wheat in boats is about 1,000,000 bushels less than a year ago.

Reviewing the whole situation, farmers yet holding grain can with confidence look forward to better prices. Those holding clean wheat, fit for seed, can frequently make good sales of same near home. This year the rail-ways have declined to grant a seed grain rate, which is a hardship to many farmers in the older

### Improved Demand for Cash Grain

Wheat prices are now about three cents over those a year ago and will likely improve rapidly. Grain producers, ship your grain to the Secondary Markets. Our long experience and careful attention will insure you best results. On all grains we can get you good premiums for special shipment. Try our service.

**BLACKBURN & MILLS** (A. M. Blackburn)  
(D. K. Mills)  
531 Grain Exchange Winnipeg, Man.

Telephone—Main 46

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

## FARMERS! SHIP YOUR GRAIN

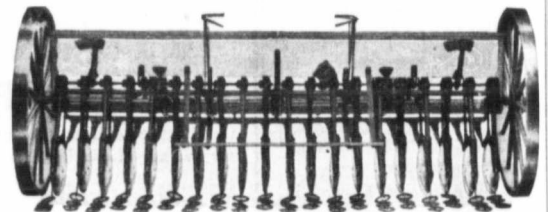
TO THE

### CANADIAN ELEVATOR CO. LTD. GRAIN COMMISSION MERCHANTS, WINNIPEG

It is as much our business to give satisfaction as to secure grain shipments. We watch the grading of each car and allow liberal advances on all bills of lading.

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

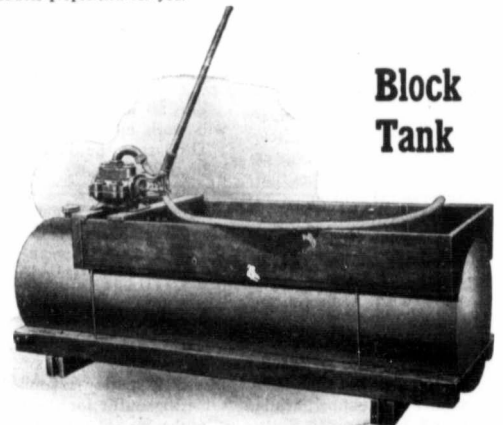
### Block Double Disc Drill



We manufacture all sizes, both single and double, from 14 inches to 22 inches, and believe it to be one of the most satisfactory Drills on the market. Its superiority of construction high grade material and workmanship combine to make it SECOND TO NONE.

Write for our prices and terms of sale. We have a most interesting business proposition for you.

### Block Tank



Our tank has ELECTRICALLY WELDED SEAMS and is GUARANTEED AGAINST LEAKAGE. It has a capacity of 400 gallons, with internal division plate, parcel carrier, force pump, and is mounted ready to fix on your wagon. Sold for either cash or terms. Send for full specification.

**The North American Machinery Co.**  
Higgins Avenue (Near Louise Bridge)  
WINNIPEG

dist  
clea

O  
little  
mild  
in co  
oats  
on a  
not g  
ever  
in f  
any  
like  
tinuo  
oats

B  
It is  
barle  
Impt  
the  
bette  
grad

Fl  
adva  
profe  
ago,  
stron  
of th  
that  
enter  
will  
State  
optin  
follov  
mess;  
progr  
consu

# Guess Again

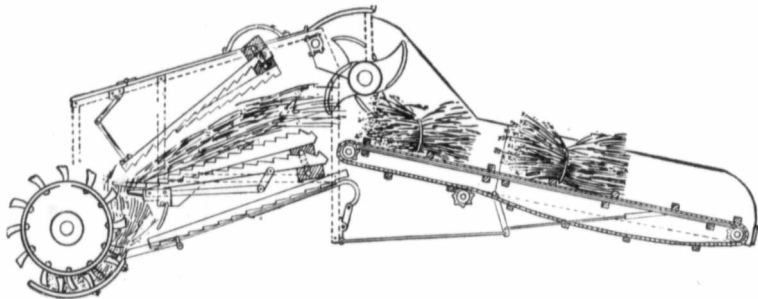
Is that what you are going to do?  
**GUESSING is the the mother of POVERTY.**

Would it not be **BETTER to KNOW?**  
**KNOWING is the handmaid of WEALTH.**

If you wish to succeed as a Thresherman and get your work done in the **shortest** time with the **least** expense, it is "up to you" to quit guessing and learn the **facts** relating to the cause of your Threshing troubles.

If you really desire to **know** how to improve your rig, let us mail you our catalog which contains **facts** that are helpful.

We want you to read this book and find out for **yourself**, just what the **garden city feeder** is like, what we claim for it, and what those who have used it say about it. It will interest you.



Here is **OUR GUARANTEE.**

The **garden city feeder** is positively warranted to feed any separator to its full capacity, with any kind of grain in any condition, without slugging the cylinder, breaking any concaves or spikes, winding on any part, littering underneath, or causing any burned belts; and to deliver all bundles to the cylinder **end first**, regardless of how they may be piled upon the carrier.

Did you ever see a feeder that could **make good** on that warrant?  
 How would you like to **know** all about it? Send for our catalog to-day, it is **free.**

**The Garden City Feeder Co. Ltd.**  
**REGINA SASK.**

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

districts who wished to procure clean seed.

### Coarse Grains

**Oats.**—There has been very little movement in this grain, the mild fluctuations following those in corn across the line. However, oats has been almost constantly on an export basis, and should not go lower, as stocks are smaller everywhere, especially stocks yet in farmers' hands. Nor does any material improvement seem likely. All rail shipments continue to take care of rather more oats than is arriving at terminals.

**Barley.**—This grain lacks snap. It is a long time since Winnipeg barley has been so dull before. Improved business conditions in the United States may mean a better malt demand. Stocks are gradually decreasing.

**Flax.**—Flax seed has had a nice advance the past month, with a professional decline a few days ago, probably engineered by strong holders to get the holdings of the smaller speculators. Be that as it may, fears have been entertained that Argentine flax will undersell that of the United States and Canada. Yet the optimism abroad in the U.S.A. following the president's last message may mean a big building programme and a more general consumption of oil. Altogether,

the market outlook seems to favor the holders. Flax receipts in all three big receiving markets will henceforth be very small.

### Sowing Alfalfa on Sod.

Sod land, on which alfalfa is to be planted, should be manured, if possible, early in the spring and plowed as soon as the frost is out of the ground. It is considered a pretty good practice to disc the sod at least once before plowing. After it is plowed it must be thoroughly disced and harrowed in order to make not only a smooth, level seed bed but to help pack the furrow slice with the soil beneath.

Sod is not the best kind of land for alfalfa. It is better to sow some other crop for a year or two before sowing alfalfa, but if care is taken to work the sod sufficiently to make a good seed bed, fairly good results can be obtained by sowing alfalfa on sod. The lime should be applied after the soil is broken. This gives it an opportunity to work through the upper part of the soil which invariably is most acid, and also places the lime directly in touch with the roots of the young alfalfa plants.

Soil taken from a sweet clover field will give the proper inocula-

tion and it may be scattered over the field just before or just after seeding. As soon as possible the land should be harrowed so the sunlight will not destroy the bacteria. Alfalfa should be sown early in the spring, or about the time barley is sown. A nurse crop of three pounds of barley per acre may be used.



On his eighty-fourth birthday, Paul Smith, the veteran Adirondack hotel-keeper, who started life as a guide and died owning a million dollars' worth of forest land, was talking about boundary disputes with an old friend.

"Didn't you hear of the lawsuit over a title that I had with Jones down in Malone last summer?" asked Paul. The friend had not heard.

"Well," said Paul, "it was this way. I sat in the court-room before the case opened with my witnesses around me. Jones bustled in, stopped, looked my witnesses over carefully, and said: 'Paul, are those your witnesses?' 'They are,' said I. 'Then you win,' said he. 'I've had them witnesses twice myself.'"



"No man can live up to his reputation very long unless he proves that the mark he hit was the one he aimed at."

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.

## Deafness



Perfect hearing is now being restored in every condition of deafness or defective hearing from causes such as Catarrhal Deafness, Relaxed or Sunken Drums, Thickened Drums, Roaring and Hissing Sounds, Perforated, Wholly or Partially Destroyed Drums, Discharge from Ears, etc.

**Wilson Common-Sense Ear Drums**  
 "Little Wireless Phones for the Ears" require no medicine but effectively replace what is lacking or defective in the natural ear drums. They are simple devices, which the wearer easily fits into the ears where they are invisible. Soft, safe and comfortable. Write today for our 168 page FREE book on DEAFNESS, giving you full particulars and testimonials.

**WILSON EAR DRUM CO., Incorporated**  
 683 Inter-Southern Bldg. LOUISVILLE, KY.

Mention this magazine when writing advertisers

## Ring-Bone



There is no case so old or bad that we will not guarantee

**Fleming's Spavin and Ringbone Paste** to remove the ignorance and make the horse go sound. Money refunded if it over fails. Easy to use and only a three to five minute application cure. Works just as well on all bones and bone spavin. Before ordering fill out and send for a remedy for any kind of a blemish, write for a free copy of

**Fleming's Vest-Pocket Veterinary Adviser**

Ninety-six pages of veterinary information, with special attention to the treatment of bloodless, lumpy, bony, indented and illustrated. Make a right beginning by sending for this book.  
**FLEMING BROS., Chemists,**  
 45 Church Street, Toronto, Ont.

Mention this magazine when writing advertisers.

# The Canadian Bank of Commerce

## ANNUAL MEETING

At the annual meeting of The Canadian Bank of Commerce, held at Toronto on the 13th January, the report of the Directors showed that profits of \$2,992,951.10 had been earned during the year, forming a record in the history of the Bank and indeed of any bank in Canada. After paying the usual dividends the shareholders received two bonuses of 1 per cent. each, which were paid in June and December. The sum of \$1,000,000 was transferred to Res. account, \$500,000 written off Bank Premises account and \$384,529.98 carried forward as unappropriated profits. The total assets of the Bank are now over \$260,000,000, an increase of \$14,000,000 during the year. In accordance with the plan adopted last year the Bank is issuing as a supplement to its report a review of business conditions in 1913, which covers the whole of Canada, Newfoundland, the United States and Great Britain, the countries in which the Bank now does business. This review is very highly regarded by business men generally and a copy will be sent to any address on application to the Head office of the Bank.

After the reading of the report, the General Manager, Mr. Alexander Laird, addressed the shareholders as follows:

### General Manager's Address

We have closed our accounts for the past year and have great pleasure and satisfaction in presenting you with a statement of the results of the Bank's business, which you will realize is the best record in its history, and should be a source of gratification to the shareholders and those actively engaged in its administration.

There was enough difficulty and perplexity in the general financial situation at the close of 1913 to make us apprehensive at the beginning of the past year. Canadians had some reason to hope for an early return to normal conditions, but were doomed to disappointment, and the continuance of the unfavorable influences then evident, and the aggravation of some of their worst features has made the history of 1913 memorable in the annals of international trade. While the year has been full of anxiety and much actual strain, there is cause for congratulation that, notwithstanding the long-deferred arrival of peace in Continental Europe, the uncertainty as to how the adjustment of immense war expenditure will be made, and the distressing delay in bringing order out of chaos in unfortunate Mexico, the general position of financial credit has, on the whole, been fairly well maintained. In our own country we were seriously disturbed lest we should have a failure of the crops, as this would certainly have added to our difficulties; but we were fortunate in securing an abundant harvest of excellent quality. This was marketed with extraordinary celerity and realized good values which enabled us to make a substantial measure of liquidation of our debts and largely increase our cash capital. Canada is so closely allied with and influenced by the movements of our neighbors to the south that there was great satisfaction when the radical and important measures initiated under the recent change of administration were brought to a successful conclusion without any serious disturbance in financial affairs. Taken as a whole, and keeping in mind all the adverse conditions, the past year has been marked by astonishing evidence of strength to meet great emergencies.

You will readily see from the statements included in the Report of the Directors that the Bank has had another satisfactory year in the matter of profits. After a very careful re-valuation of our assets, making liberal allowances for depreciation in securities, and providing for all bad and doubtful debts, you will be pleased to know that the Directors remembered the staff, to whose faithful and zealous efforts our success is largely due. Before closing the books a substantial sum was set aside out of the year's earnings and distributed as a bonus, leaving the declared net profits \$2,992,951.10, being 10.88 per cent. on the Capital and Res combined. We were enabled

to pay dividends amounting to \$1,800,000, including the usual dividend at the rate of 10 per cent. per annum, and extra bonus dividends of 2 per cent. for the year; and we have reason to hope that we shall maintain this rate until the Rest equals the Capital, and thereafter make the permanent basis 12 per cent., with whatever advantage may come with extra good fortune.

In our last report the urgent necessity for providing an extension of the Head Office and Toronto Branch premises was referred to; and arrangements have since had to be made for the temporary accommodation of some departments of the Bank outside the present building. We are now pleased to say that we have purchased the two properties adjoining, and will proceed to consider plans, although we do not expect to make much progress towards altering or erecting a building for 2 or 3 years. We have acquired property in Windsor, Ont., where a suitable office building will be erected during the coming year, and are also engaged in planning the erection of an adequate building in the City of Quebec. In both these places it was absolutely necessary to provide for our growing business. Bank Premises account now stands at \$4,281,481.60, and in this connection we would direct your attention to the item of \$979,915.61 in the statement under Real Estate. This includes bank premises acquired by the amalgamation with the Eastern Townships Bank, which will be disposed of in due course at considerably more than the book value. With this sale and the sums from time to time written off Bank Premises we should be able to keep this account within reasonable bounds and still show our properties at approximately 50 per cent. of their value.

We think it advisable to give you an assurance that in the midst of the troubled and dangerous state of affairs in Mexico our interests are being safeguarded and every precaution exercised in handling a difficult problem. Our Manager enjoys our full confidence and he has shown unusual ability and judgment under these trying circumstances.

We deemed it prudent to restrict the opening of new branches to the carrying out in some measure of a programme we had planned early in the year; and we consequently confined ourselves to districts where we had no representation, except in some cases where we opened for the protection of other branches. The geographical distribution of branches and agencies as to 30th November, 1913, was as follows:

Alberta	53
British Columbia	44
Manitoba	23
New Brunswick	5
Nova Scotia	13
Ontario	82
Prince Edward Island	5
Quebec	82
Saskatchewan	57
Yukon	2
<b>Total in Canada</b>	<b>366</b>
Newfoundland	1
London, England	1
United States	4
Mexico	1

Total number of Branches ..... 373

The number of the Bank's shareholders is now 6,926, as against 5,656 a year ago, an increase of 370. The following table indicates how widely our shareholders are scattered, not only in Canada, but abroad:

	No. of Shareholders	Amount Held
Ontario	1,468	\$4,077,350
Quebec	1,162	3,011,900
Maritime Provinces	758	1,571,650
Western Provinces	126	255,700
Great Britain	1,723	3,315,650
United States	684	2,599,550
Other Countries	105	168,200
	<b>6,926</b>	<b>\$15,000,000</b>

There has been a widespread agitation in the Central Western district as to the supposed need for greater recognition of the claims of farmers to accommodation

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.

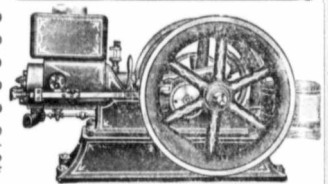
PRICES FOR CASH WITH ORDER

1½ H.P. Air Cooled Engine	\$ 38.40
1½ H.P. Hopper Cooled Engine	39.20
2½ 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. All prices quoted are at Winnipeg.

## 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.

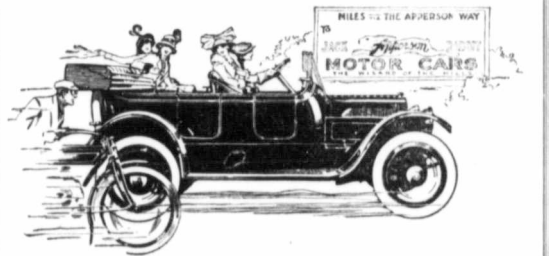
Prices for cash with order: Hand Machine (with free pulley), \$12.40—No Wringer. Power Machine, complete, \$22.40. Electric Machine, complete, \$55.00 (can only be used where electric power is available). If interested write for Catalogue.

Address all inquiries to Winnipeg. Canadian Agents **Burridge Cooper Ltd. Winnipeg and Regina**

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

# THE APPERSON

[Built by the Father of the Automobile.]



YOU have been reading about the new comers. You have been buying them, and you have been using them. Why not get acquainted with the old pioneer. It possesses more good qualities than any three of them combined.

Here are some of the exclusive features: A water vein which will distribute the water equally and in proportion to the speed of the engine, hollow crank shaft oiled under five pounds pressure. All gears and transmissions are 25% stronger than on any other car of the same rating. The fulcrum band disc.

These features are patented, owned, and controlled, and found only on the old pioneer. With reasonable care this car will last you for 25 years.

Why not investigate? Made in different sizes. Write for catalogue and full particulars.

**Be sure and call on us during Bonspiel.**  
**HENRY RUSTAD,**  
108 Carlton Building, WINNIPEG, MAN.

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

from the banks, but investigation does not support this contention, so far as this bank is concerned. A carefully prepared statement of the business of this bank in the three western provinces shows the percentage of total deposits to total loans in this district to be 55.55 per cent., which means that for every one dollar on deposit in these provinces we lend two. A compilation of the figures of the business of this bank in Saskatchewan made at the request of the Royal Commission on Agricultural Credit, appointed by the Saskatchewan Government, give the percentage of farmers' loans to farmers' deposits in this province as 278.29 per cent., while the percentage of farmers' loans to total deposits was 88.25 per cent. This means that for every dollar which the farmers of Saskatchewan have deposited with us, we have lent them nearly three. These facts should convince those interested in this important subject that our farming customers have been generously treated by us.

The decennial revision of the Bank Act was an important feature of the last session of Parliament. A most searching examination and discussion of every conceivable phase of banking, as it affects this country, resulted in a measure evidently framed with the object of meeting every reasonable requirement, and the Act is generally regarded as a piece of unusually good legislation. The most prominent of the new features are the provisions for the creation of a Central Gold Reserve and the appointment of auditors for the independent examination of banks.

In view of what has been accomplished in spite of so many adverse influences and taking into account the natural disposition to look at the bright side of things after having passed through a trying period, it is not easy to forecast what the coming year will bring. We are inclined to the thought that with the correction and adjustment of important matters now pending—such as the settlement of European political and financial difficulties and the attempts to bring about a return of peace and prosperity to unhappy Mexico—an important factor in the situation—we shall see a revival of better conditions and our problems may be easily solved. We fear there will be a slow recovery, and great circumspection will be required before we again sail in smooth waters. We are likely to have an accumulation of idle money in the financial centres, but this will probably not have any appreciable effect on rates for general business for some time to come, because of the depression in all first class securities and the difficulty of disposing of the large amount awaiting a favorable market. On the other hand, trade has been prosperous and is fundamentally sound, and while considerable restriction must be expected, we are hopeful that the coming year will be one of reasonable prosperity.

The adoption of the report was then moved by the President of the Bank, Sir Edmund Walker, whose address follows:

**President's Address**

At our last annual meeting for the first time we presented the information at our disposal regarding industrial conditions in Canada, and in the foreign countries in which we do business, in the form of an appendix to the ordinary report to our shareholders. The advantage of presenting the views of our chief officers regarding the various districts directly to the shareholders, instead of compressing them into the addresses of the President or the General Manager, seemed clear, and we think the experiment has justified itself and may be adopted hereafter.

A year ago the tide of expansion seemed still to be in flood, although in some quarters a check was either in plain sight or had here and there made itself felt. Money for certain purposes, notably in connection with real estate, was not so easy to obtain as in former years, yet little heed was apparently paid to the oft-repeated warning of bankers and others who tried to forecast the future, although at the end of the year we must conclude that, after all, such warnings did have some beneficial effect. Clearly we have come through a time of difficulty in a most creditable manner, and we can look forward to the future cheerfully if the spirit of prudence which now characterizes our people remains unchanged at least until another good crop has been

OUR CATALOG THIS YEAR IS THE FINEST IN CANADA



McKenzie's SEEDS Quality

- your very door.
- The Best Equipped Seed House in Canada. Located almost at
- A Guarantee to you that our Seeds are the Best—Built upon the foundation of Quality.
- Upon your success only can we succeed—8 floors, each 70 feet by 120 feet.
- Everything for the Garden, Field and Lawn—the Quality Seed House of Canada.
- The Choice of the Most Critical and Discriminating—The Choice of the Most Careful and Economical.
- The House with a Reputation from Coast to Coast—The Seeds worth sending across the Continent for.
- The Seeds true to Name, True to Type and full of life—The Seeds with the Real, Strong, Robust Seed Life.
- The Seeds that Grow from the Very Start—A Strong, Robust Plant from Every Seed.

BRANDON, MAN. **A. E. MCKENZIE CO., Ltd.** CALGARY, ALTA.

WESTERN CANADA'S GREATEST SEED CATALOG

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

A post-card will bring our catalog

The "Bissell" Double Action Disk

is a two-in-one Implement. This Harrow is both In-throw and Out-throw. By hitching 4, 6 or 8 of the Bissell Disk Harrows together in a group, you can have a double action outfit for Engine power and disking on a large scale. The gangs are flexible on the Bissell Harrow and are not too long to fit the hollows made by heavy Engine Drive Wheels.

These same Harrows may be used for double action or single disking with horses.

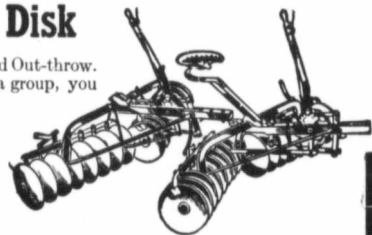
The "Bissell" will make a proper seed bed for you.

Another Bissell special is a 28 plate wide sweep, 4 gang flexible Harrow covering 14 ft. It is nicely handled with 6 horses and is a favorite with many farmers. For further particulars write Dept. L. Manufactured Exclusively By

**T. E. BISSELL COMPANY, LTD., ELORA, ONT.**

Write to any of the Jno. Deere Plow Company's Branch Houses

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



marketed. Much of that part of our expansion which went too far reminds one of the diseases through which the young have to pass. We are doubtless glad if they escape them entirely, but we have no reason to expect that they will be so fortunate. Some undue speculation in real estate, and some over-building in connection with public improvements, is inevitable amidst such astonishing growth and prosperity, and it would be foolish to expect anything else. We are now realizing more accurately the value of real estate and through the process we are gaining an experience which is absolutely necessary to the foundations of a sound prosperity. The Western country as a whole will not again have to suffer from this particular ailment of young communities. We have repeatedly deplored the fettering of the country by the high rent-charge which inflated real estate values impose, and the unfortunate effect of such a rent-charge on the cost of living, and if there is now to be a pause in the upward movement of values, there will in any event be a corresponding gain to all landless people.

Immigration has not yet been much checked by the curtailment of industry; indeed, except from the United States, there has been a large increase during the year. The British immigrants exceed in number the combined total of those from Europe and Asia and very much exceed those from the United States. The largest increase as compared with the figures of previous years, however, is in the division which includes all countries except Great Britain and the United States. Here the increase, December figures being estimated, is 32 per cent. From Great Britain the increase is 8 per cent., while from the United States there has been a decrease of 17 per cent. There is thus a total increase of 6 per cent., as

**Peerless**  
**Guaranteed Fencing**

Strongly made and closely spaced—making it a complete barrier against large animals as well as small poultry. Top and bottom wires No. 9—intermediates No. 12 wire—made by the Open Hearth process which time and other tests have proven to be the best material made for the manufacture of wire fencing. Send for literature. Ask about our farm and ornamental fencing. Agencies nearly everywhere. Live agents wanted in unassigned territory.

**The Banwell-Hoxie Wire Fence Co., Ltd.** Winnipeg, Man., Hamilton, Ont.

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

against 13 per cent. in the previous year. The total number of immigrants, December figures again being estimated, was 417,709, as compared with 395,804, the revised figures for 1912. The total for 1913 is made up as follows: British, 156,873, United States, 115,805, all other countries, 145,031. These figures are again eloquent in explaining the conditions of our foreign trade, the total of which for the year ending March, 1913, passed the billion mark for the first time, being \$1,085,175,000. The imports were valued at \$691,943,000 and the exports at \$393,232,000, showing the largest excess of imports we have ever had, namely, \$298,711,000. In the six months of the current fiscal year ending September, the complete figures for which have been published, there is some improvement in the proportion of exports to imports, and since September a greater improvement has taken place. As to our exports we are glad to report an increase during this period in every group,

while there has been a decrease in many of the classes of imports.

We again draw attention to the large proportion of our imports which consists of iron and steel in various forms, not only as raw materials, but as manufactured goods. The total value is about \$140,000,000. May we once more point out that in the main these are articles used in building or in equipping the country for its future, and that such purchases differ in effect from the import of foodstuffs and other rapidly perishing objects? At the same time we regret that the greater part of these iron and steel goods is not made in Canada now, as certainly will be the case in time. To the extent to which, by making these goods in Canada, we could have lessened the debt represented by the securities we have sold to pay for the difference between imports and exports, we have burdened ourselves for a long time to come. Of course, while workmen are busily engaged in other things, as they have been

# PATMORE NURSERY CO.

## OUR RELIABLE SEEDS, TREES, SHRUBS AND PLANTS

Russian Golden and Laurel Willows 2-3 feet at \$5.00 per 100 or Cuttings at \$4.00 per 1,000

### GARDEN SEEDS, GRASSES AND FODDERS

COUPON No. 1

Please send me your Catalog and Two Dollar Combination Collection of Vegetable Seeds, Postpaid.

2 lbs. Peas	1 oz. Onion
1 lb. Beans	1 oz. Parsnip
1 oz. Beet	1 oz. Radish
1 oz. Carrot	4 oz. Turnip

and 2 packages of Vegetables (Cabbage, Cauliflower, Celery, Lettuce, etc.)

Enclose \$2.00.

Name.....

Address..... C.T.F.

TESTIMONIAL

Webb, Sask., Jan. 21, 1914

Patmore Nurseries,  
Brandon, Man.

Dear Sirs,  
Will you please send me one of your Catalogues for 1914?  
I am pleased to say that the seeds I used of yours last year did the best of any I had, and I had tried several different firms' seeds.  
It was a 4-7 year with us, but I was surprised at the difference in quality of my vegetables, from the seeds from you and the others.  
Wishing you every success this coming year, I am,  
Yours truly,  
(Signed) S. MITCHELL

COUPON No. 3

Please send me your Catalog and Ten Dollar Collection, best varieties, Express prepaid to Manitoba, Saskatchewan and Alberta.

50 Currant and Gooseberry bushes  
100 Raspberry bushes  
1 dozen Young Fruit trees for trial  
25 Strawberry plants  
6 Rhubarb, 5 Horse Radish and 6 Mint plants. Enclose \$10.00.

Name.....

Address..... C.T.F.

WRITE TODAY FOR OUR 1914 CATALOGUE—It is compiled jointly with Messrs. SUTTON & SONS for whom we are Special Agents for Canada and is a safe and profitable guide to Horticulture in the Canadian West, as we list and describe only such varieties as we have found reliable in our 21 years of practical, steadily-acquired knowledge of Western Horticulture.

SASKATOON,  
SASK.

THE PATMORE NURSERY COMPANY

BRANDON,  
MAN.

## RELIABLE SEEDS-TESTED FOR WESTERN CONDITIONS

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

in Canada, it may be said that they are not available for more work in iron and steel, but as soon as railroad and other building lessens in volume, not in the aggregate but in proportion to other industries, we may hope that we shall be able to make in Canada the larger part of the iron and steel goods now imported. The increased output of our coal and iron mines, of our blast furnaces and of our manufacturing, which would result, would be of inestimable value to the country as a whole.

It was evident to any student of the situation a year ago that Canada, and other borrowing countries, would be put to a severe test during 1913. What we were not prepared for was that this country should be singled out as, in some measure, chief among the sinners of this kind. It is well, however, to remember that when money becomes scarce in the great markets of the world the chief borrower is always told that he has obtained too large a share and that he must stop borrowing for the time being. We had scarcely realized that Canada had become the chief borrower, or practically so, and somewhat resentful being held responsible for a situation created by the combined financial requirements of all the active mercantile nations of the world. However, we have had our warning and shall doubtless act upon it.

The fact remains that under all this pressure England has taken more of our securities this year than ever before. She has patiently remembered that we are obliged to finish the many sound and important enterprises, public, semi-public and private, which had been undertaken before the financial clouds began to gather. That such enterprises will command the money of the investor in preference to loans for the rehabilitation of foreign countries devastated by war, or in preference to securities based upon new ventures, we need not doubt, and out of the vast sum available each year in the markets of Europe for new investments, we may be sure of getting a generous share. We shall have to face a keener analysis of the nature of the security offered, and the necessity of paying higher rates to the investor, and we shall do well to abstain during the next year or so from seeking to market any unnecessary securities, in order that we may do what we can to restore the balance between the investment resources of the world and the securities offered for sale. It is pleasing in this connection to see that the higher rates of interest offered have opened the markets of the

United States to our securities to an extent quite unusual in the past.

Now that we have come to a slight pause in the growth of North America, it is well to bear in mind some of the more important things accomplished during this period of expansion. In Canada, in addition to growth in many other directions, we have in sight the completion of two new transcontinental railway systems, and while they have been building, the existing system has successfully established its claim to rank as one of the foremost railway systems of the world. As regards the United States the Panama Canal is practically finished; a tariff adjustment, the mere thought of which would have created panic a few years ago, has taken place, leaving the outlook in this respect a certainty instead of an uncertainty; a currency and banking bill, for which the country has been waiting about twenty years, has been passed, and a more reasonable attitude has been adopted towards the question of railroad rate adjustment. These are all events of the greatest importance which must profoundly affect the future of the two countries, and so far as Canada is concerned we may surely feel that we are now entering upon a new and more important phase of industrial life for which our equipment is more adequate than ever before. No more positive evidence of the need and value of such equipment could be offered than the ease with which the present year's crop was harvested, moved and warehoused. This has been done in a manner which would have seemed impossible only a few years ago, and the value of the smoothness and rapidity with which the work was handled can scarcely be estimated.

In connection with the opening of the Panama Canal, there will be held at San Francisco in 1915 the Panama-Pacific International Exposition, for the purpose of impressing upon the world the vast change in its commerce likely to accrue from this new waterway. It is peculiarly gratifying to know that in this exposition Canada will take a very prominent place. It is proposed to erect a building covering 65,000 square feet, considerably larger than the Canadian building in any previous exposition, and in this space the natural products of our country in agriculture, horticulture, minerals, forestry, fish, game, etc., will be adequately displayed. We understand that it is the intention of the Government to make this one of the best exhibitions that has ever been placed be-

fore the public in the interest of this country.

We turn to the Clearing House returns with unusual interest at such a time as the present. There are now twenty-two Clearing Houses in Canada, but leaving out two with records for part of the year only and comparing the figures of the twenty in operation a year ago, we find that there have been ten increases and ten decreases during the year, as compared with increases in every Clearing House the previous year. The increase in the total is 1.27 per cent., as against 23.74 per cent. a year ago. Increases appear in the figures of seven eastern and three western cities and decreases in those of eight western and two eastern cities. After the phenomenal increases in 1912 we may be glad that we have held our own in 1913. Montreal, Toronto and Winnipeg, three cities which account for 72 per cent. of the total, all show increases.

The building permits of the four cities were as follows:—

	1911.	1912.	1913.
Montreal—	\$14,580,000	\$19,642,000	\$27,032,000
Toronto—	24,374,000	27,401,000	27,038,000
Winnipeg—	17,550,000	20,475,000	18,621,000
Vancouver—	17,652,000	19,388,000	10,423,000

We have made the comparison for three years in view of the contraction which has begun in some cities. Toronto has just kept even and the decline in Winnipeg is trifling. The marked contraction is in Vancouver, and this no doubt represents conditions in many other western cities. In Montreal, however, there is a great increase in value, although the number of permits is practically the same. The figures for Montreal always exclude large suburbs, the building in which last year is said to approximate \$10,000,000 in value.

The comments of our Canadian, United States and English officers upon the trade and financial situation are so clearly set forth that I hesitate to repeat in any form their conclusions. It may be well, however, at such a difficult time to sum up the case as concisely as possible. The world has two problems before it: (1) How to render available a supply of money sufficient for the carrying out of such physical betterments as must be financed by the sale of securities? (2) How to enlarge the credit facilities of the

world for those shorter term transactions which consist of the manufacturing and distributing of perishable goods.

The first problem can only be comfortably solved if there is sufficient money saved—that is, profits withdrawn from active use in business, or money not expended by the owners, etc.—to provide for the necessary borrowing of those who are expending money for permanent improvements. For 20 years the world has been more extravagant than in any period known before since Roman times, and this extravagance has been accompanied by a rise in prices which has made it very hard for those who are not extravagant and who are the most regular savers in ordinary times, to save by the usual margin against life's contingencies. When securities cannot readily be sold because of a shortage of these savings, the money necessary for the short term transactions above referred to is used to some extent for the strain produced by this cannot continue indefinitely, and such permanent improvements must lessen in volume until savings catch up and the equilibrium has been restored. The situation during the past year, however, has been aggravated by many other factors. In many countries, notably in Canada, where large sums are being expended for permanent improvements, there is a relatively small number of those who have savings to lend, and the vast majority of all the borrowers in all the countries have exerted upon the lending countries of the world a combined pressure greater than ever before known. On the other hand, the extravagance of individuals represented by motor car palatial houses, social display, etc., beyond the capacity of their incomes, has been added colossal expenditures in armaments, and for many purposes which are useless from an industrial point of view. Armaments are necessary as part of the police system of the world, but the money sunk in their creation is none the less a burden to the industrial world. We have thus come to a time when, coinciding, as they do, with the hoarding money by timid owners consequent upon the Balkan and Mexican troubles, unusual requirements coming from almost world-wide prosperity cannot be fully met. All business activities, therefore, throughout the world, must be sent in some one thing right themselves, which they will do quite speedily if people generally are willing to pro-

by the lessons to be drawn from recent experience.

In accordance with the provisions of the revised Bank Act, Messrs. T. Harry Webb, C.A., and Mr. James Marwick, C.A., were appointed Auditors of the Bank for the ensuing year. The usual resolutions of thanks to the Directors and to the staff of the Bank were passed, Mr. William Davidson, K.C., taking occasion in the course of his remarks as the mover of the resolution of thanks to the Board to draw attention to the strength of the statement presented to the shareholders of the Bank. He added: "It shows that the Canadian Bank of Commerce is in a position of very great strength and one which enables it to meet any emergency which may arise. I think also it will be seen that this Bank, in common with many other large institutions in the Dominion of Canada, has done much to avert what might have been a very serious financial crisis during the past year or eighteen months in the history of this country." At the election of Directors the retiring members of the Board were re-elected without change.



**NEW MIXED FARMERS FOR MANITOBA**

A Dutch colony for Manitoba, for Dutch farmers, who are exceptionally well versed in the peculiarities of a wet, crude soil such as this province possesses, has been successfully promoted by W. J. Ryckman, of the Million for Manitoba League, who, with Mrs. Ryckman, has just returned from a three months' visit to Holland in the interests of the scheme.

Mr. and Mrs. Ryckman visited Amsterdam, The Hague, and Rotterdam, besides spending much time looking over the agricultural colleges at Wegening. They motored throughout the southern part of Holland, and Mr. Ryckman describes the country as being a most beautiful one. He says there is absolutely no doubt that the Dutch farmers are the very best on earth to bring to Manitoba, as the soil conditions here and in Holland are quite similar. Some time was spent in the wheat and cattle country of the Netherlands also, and investigations were made as to whether the celebrated Friesland cattle of Holland would be suitable animals for Manitoba farmers. Mr. Ryckman thinks they would.

**Expert Coming in June**

"Holland is a country about a third the size of Manitoba," said Mr. Ryckman, "and yet it is populated with 6,000,000 people. They all seem to be doing well in the way of good living. The windmills, which are seen everywhere, constantly swing, and as constantly drain the land, which is below sea level. I visited many model farms, dairies and co-operative organizations. A Holland farm and dairy expert is coming to Canada in June and he will probably deliver lectures before several of our agricultural colleges. We have much to learn from the Holland farmers, especially in Manitoba, as our soil here is similar to the soil conditions of that old country."

**Care of Cattle**

The cattle on the model farms in Holland are much better housed and taken care of than the people themselves, says Mr. Ryckman. "They live in palatial buildings which may be likened to the Royal Alexandra for us," said he, "and every cow-comfort is provided for them." A Holland farmer allots one acre of his land to each cow and her calf. Half of this acre is planted in grass and the other half to carrots. This constant diet of carrots gives to the Holland butter its rich tint, for the farmers use absolutely no artificial coloring."



**ANNUAL REPORT OF THE DEPARTMENT IS LAID ON TABLE OF LEGISLATURE**

The progress made along agricultural lines in Manitoba during 1913 is fully and clearly set forth in the annual report of the Department of Agriculture by Hon. George Lawrence, Minister of Agriculture. The report is most complete, and deals extensively with the work done by the department and the strides that are being made by the farm-

ers of Manitoba in scientific farming.

In 1913 the grain crop of Manitoba totalled 178,775,946 bushels, and was grown upon 6,364,880 acres. Of this large crop 6,755,465 bushels made the wheat crop; the oat crop amounted to 81,410,174 bushels; barley, 33,914,093 bushels; and flax, rye and peas together totalled 130,105 bushels. The average yield per acre was: Wheat, 20; oats, 42; barley, 28.6; flax, 11.3; rye, 19; and peas, 20.9. The potato crop amounted to 9,977,263 bushels from 55,743 acres, while 16,275 acres in crop produced 4,196,612 bushels of field roots. Fodder crops totalled 398,965 tons from 195,181 acres.

**Dairy Farming Income**

Dairy farming proved to be the source of a large income to the farmers of Manitoba during last year. With the exception of dairy butter, there was a substantial increase in the amount of dairy produce marketed during the year. In dairy butter the decrease was so slight that it was a negligible quantity. Dairy butter marketed amounted to 4,288,276 pounds and was valued at \$1,023,723.44, or an average price of 23.9 cents per pound. Creamery butter gave the farmers the sum of \$1,080,646.05, being the value of 3,929,622 pounds, at an average price of 27.5 cents per pound. The value of cheese, milk sold as cheese, and sweet cream amounted to \$1,311,880, making a total value of \$3,416,249.57 for the dairy products of the province. The increase in the amount of creamery butter marketed in 1913 over 1912 was about 1,000,000 pounds; about 3,000,000 more pounds of milk were consumed, and the amount of cream used for sweet cream and ice cream is represented by 77,000 pounds of butter fat.

**Demonstration Farms**

The report pays considerable attention to the work done in alfalfa demonstration and establishing of small demonstration farms. In 1911 ten one-acre plots of alfalfa were set out, and with one exception all are doing well. Last summer seven more plots were set out at the following places: Dugald, St. Pierre Jolys, Sandy Lake, Hinesarth, Grandview, Swan River and Roblin. All these new plots made a good growth during the summer, and the prospects for them going through the winter in safety are excellent.

In the matter of demonstration farms mention is made of the interest taken in those already established by the farmers in the communities in which they have been placed. Applications have been received from numerous parts of the province for other farms to be established, all of which are under consideration.

Literature distributed throughout the province, demonstration trains and farmers' meetings are given as reasons for an increased interest being taken by the farmers in the development and improvement of their live stock. The following tables briefly tell of the progress being made by the farmers along various lines:

**Farm Statistics**

Live stock in the province:		
	1913	1912
Horses	300,753	273,305
Sheep	52,142	42,085
Pigs	248,254	216,640
Poultry disposed of by farmers:		
	1913	1912
Turkeys	176,964	167,438
Geese	79,940	71,951
Chickens	777,808	779,850
Land prepared for crop of 1914:		
	1913	1912
Breaking	155,942	232,945
Summer-fallow	1,144,405	1,016,575
Fall-fallow	1,581,824	695,703
Total	2,882,171	1,945,223

Wheat marketed Dec. 1, 1912, 40 per cent, or 23,164,097 bushels.  
Wheat marketed Dec. 1, 1913, 68 per cent, or 42,673,709 bushels.

**The Best Investment**

You can make or advise a friend to make in 1914 is a reading interest in the "Canadian Thresherman and Farmer." Present your friend with a Year of it. It's only a dollar.

**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 BULLDOG CLYINDER. With these our low-down spreader has plenty of traction without making any change in size of wheels and tires.

**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.

Address all inquiries to Winnipeg.

**Burridge Cooper, Ltd. Sole Canadian Agents Winnipeg**

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

The World-Famous Reputation of



Is easily maintained by the superior Canadian Service

In operation between Southampton (via Queenstown) to Halifax and Portland and Liverpool (via Queenstown) to Halifax, Portland and Boston. The splendid service in effect to Canada; the magnificent appointments of the ships; the courteous attention of all employees, are characteristic of the

**Cunard Company** And are strong features in making our decision to have friends and relatives come out from the OLD COUNTRY to Canada

**The Cunard Way** Frequent sailings. Magnificent new (1913) twin screw steamers carrying one class (I.L.) cabin and third class only. The Cunard Co. also maintains services between: New York, Queenstown, Fishguard, Liverpool, Boston, Queenstown, Fishguard, Liverpool, New York, Mediterranean, Adriatic, "Lusitania," "Mauretania" including the fastest steamers in the world, "Lusitania," "Mauretania" Now building S.S. "AURANIA" 14,000 Tons for Canadian Service. Full information as to sailing dates, rates, reservations and descriptive literature to be had from any railway or steamship agent, or

**The Cunard Steamship Co. Ltd** 304 MAIN STREET, WINNIPEG

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

*The Business World*

offers you a good place at a good salary as a graduate of one of our schools. Why not prepare for and enjoy time results as so many do every year? Catalogue free. Enter any time. Write W. H. SHAW, President, Shaw's Business and Shortland Schools. Head Offices: Yonge and Gerrard Streets, Toronto.

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



OUR YOUNG CONDUCTED BY Cousin Doris. FOLK

Girls' Cozy Corner

I Must Not Tease My Mother

I must not tease my mother, for she is very kind, And everything she tells me, I must directly mind; For when I was a baby, and could not speak or walk, She laid me on her bosom, and taught me how to talk.

I must not tease my mother, and when she likes to read, Or when she has a headache, I'll silent be indeed; In play I'll not be noisy, or trifling troubles tell, But sitting down beside her, I'll try to make her well.

I must not tease my mother, she loves me all the day, She tells of God and heaven, and teaches me to pray; How much I'll strive to please her, she every hour shall see; For, should I lose my mother, what would become of me?

A Little Princess

By Pearl Richmond Hamilton

All boys and girls like to read about a beautiful princess or a manly prince. "Once upon a time" about six years ago a beautiful little princess came to live in a home where there were no other children. She had blue eyes—big, bright and wonderful—and lovely golden hair. When she was two months old she smiled so sweetly and filled the home with happiness so completely that it became a Castle of Sunshine.

Her face reflected the pink of the roses that blossomed in the garden. The little fairies that hold the keys to the secrets of baby-land unlocked one by one treasures that only babies possess. First, they opened the box of dimples, and dimples played about the mouth and chin every time her father and mother came to her crib. Then they unlocked the gate to her heart, and every time she awakened her parents could hear the music of her cooing just like that of the little white doves that nested under the eaves of the roof above her head—interpreters were they of the music of hush-a-bye-land, and they gave her first lessons in voice sounding—real love lessons. At these times her father and mother would stand over her and beg for smiles. Then how pleased they looked when the little mouth opened like the petals of a flower into real baby joy-greetings. How all the great kings and queens of the world kneel in submission to a baby's smile!

The most wonderful influence in the world is a baby's smile. It makes bad men good and wicked women sweet—for the soul's eternal flame burns in a baby's heart and warms the cold curdling blood of hard humanity. So this little princess in the Castle of Sunshine blessed every one who came near her. She slipped into the waiting hearts of her father and mother and made them glad. They saw in her a glimpse of Heaven.

Sometimes big blinding tears would cloud the blue in her eyes—then every one in the home would do their level best to bring back the sunshine from hush-a-bye-land.

Ah, little Princess, how God must have smiled when he sent to hungry hearts such a sweet treasure! Somehow babies turn our hearts to prayer. Heart-throbs

are divine that thrill a mother's breast. This little princess would watch her mother's eyes for they were the barometer of the baby's mind. Babies like to see mothers happy.

One day, after the little princess was named, she wanted to sit up, and from that time on she grew very fast until she was strong enough to stand on her feet, then her father and mother and her grandparents watched for the first step. They were an admiring family group, for they loved her very much. There were changes every day in the Castle of Sunshine, for every day the princess presented a new accomplishment—perhaps it was a tooth, or a pat-a-cake, or bit of mischief. Then the little princess began to talk and she would sit in front of the Castle of Sunshine and preach sermons to Mrs. Chicken-Hen with her family of downy ducks—for really her children were so different from their mother that people laughed. Now Mrs. Chicken-Hen lived in a tiny shed not far from Sunshine Castle, and she came over every day to see the little princess. Sometimes she became very saucy and then the little princess would throw a pebble at her. It was very funny to hear Mrs. Chicken-Hen quarrel with the little princess, and very often the mother would have to interfere and send Mrs. Chicken-Hen home. The little princess loved the downy duck children, but thought their mother was awful. One day she actually took a stick and drove Mrs. Chicken-Hen out of the yard—just like a real policeman.

One time the little princess visited some strange homes not far from Sunshine Castle. In one home, which was like a huge box, lived a terrible big black creature that had four legs. The little princess thought she was the ugliest thing in the whole world, but she was the mother of six of the cutest little pig children with funny feet and queer little noses and strange eyes. Their mother talked to them in a language that shocked the little princess and made her feel that the pigs had a horrid old mother to live with. A great big man, with a pair of food that smelled bad, walked into the square little home and emptied the contents of the pail into a long wooden trough and the little princess clapped her hands in delight to see the little pig children fall over one another to get their share of the banquet. Why one little fellow with black spots on his back actually jumped right into the trough and ate his soup while standing in the very best part of the dish. That was really "piggish," and the little princess walked away in disgust. Mrs. Moo-Cow lived next door in a much larger house. She had a dear little calf-child only three days old, all wiggly it stood as its mother washed the red and white face with her tongue. The little princess was much interested in this process. After Mrs. Moo-Cow washed her child's face she began to chew gum, and she chewed so long that the princess was shocked to see a mother so rude—a terrible example to set before a new little calf-child.

In the next house, which was really outdoors fenced around, lived the most beautiful family of all. They were a noisy family and talked the "baa-a" language. From morning until night this family of children disturbed their neighbors. The little princess had often heard them from her play-place in front of Sunshine Castle, and was anxious to see them. They were really beautiful children—they wore coats of curly white fur even in summer, and as they frolicked about on their dainty pink legs they looked very happy in their play. The

little princess wanted to adopt one of them for a pet, but Mrs. Baa-a-a objected. She said she loved her children and could not part with either of them. She had twins and the other lamb children belonged to her friends. Then the mother of the little princess told her of an experience that had happened when she was a little girl. One time she had a little lamb-child for a pet and she colored it with chalk and when the lamb-child went to see its friends they would not notice it because it had disgraced the family, since in the aristocracy of the lamb-people, only white coats are allowed to be worn, and the poor little red-coated lamb-child was a social outcast.

Into a big building, painted red, the little princess went next. This building was divided into several rooms. The father of the little princess called them "stalls." The floors of these rooms were covered with straw. In front of each room a box-like place was filled with hay—this was called a manger. By the way, you remember, children, a manger was the cradle-bed of the most wonderful Baby in the history of the whole world—the Christ-Child.

At the top of the manger the little princess saw a box. In this particular stall live the son of Mr. and Mrs. Shetland, who came from an island far away across the ocean. Strange to relate, the name of their son was Prince, and he became the very best friend of the little princess. Every morning she visited him in his home and put fresh straw on the floor, for he slept on the floor, and she wanted him to have a clean, comfortable home. Then she would put his breakfast into the box over the manger. He always ate two ears of corn for his breakfast. Prince allowed the little princess to take care of him, and never bit or kicked her when she worked or played in his home. Sometimes he carried the little princess on his back; at other times he would allow her to drive him. They were good friends and loved each other. After the little princess became acquainted with Mrs. Chicken-Hen, Mrs. Pig-Black, Mrs. Moo-Cow, Mrs. Baa-a-a and Prince, she spent nearly all of her time with them. She did not care for toys or fine clothes, for she had such good times with the interesting barn yard folk. Her mother was pleased to see her little girl so happy among the live things near the Castle of Sunshine and dressed her in a costume that would allow her full freedom. The little princess in her play never had to worry over starched petticoats or dresses that would soil and tear. Is it any wonder she was always happy? Now this little princess is a real girl living on a farm, and this is a true story; the name of this little princess is Francis Shimer and her picture is on the cover

of this copy of the Canadian Thresherman and Farmer. She has the best times on her father's farm, and she fills her home with so much happiness that it is a Castle of Sunshine, for everybody loves Frances and she in turn loves all. I trust every boy and girl who lives in the country will enjoy life on a farm as much as little Frances Shimer who in this picture is hostess of a party."



THESE WATCHES, which we offer absolutely free, to every boy and girl, are made in the latest model style. Guaranteed Swiss movement, silver nickel case, fancy dial and hands, and heavy French crystal. Each picture is a beautiful illustration of a watch. You can secure either of these watches by selling only 36 of our beautiful illustrated motto-pictures. These pictures are full size, 16 in. by 12 in., and richly colored with a beautiful motto on each. They sell regularly as high as 50 cents an art store. For a time you can get them for 10 cents a piece. At this price you can easily sell the whole lot in less than an hour. We have proved this fact. Order your pictures now. You send us no money until you have sold them, then remit us our \$3.60 by next mail, and you will receive your choice of the watches with full by return mail. In order to help you make sales quickly, we give you coupons to distribute among your customers, which entitle them to a present from us. This will help you considerably. We prefer postage on both mottoes and premium. Ask for our Big Catalog of Premiums. Address: COLONIAL ART CO. DEPT. M-4 TORONTO, ONT.



FREE COMPLETE HOCKEY OUTFIT BOYS—Don't pay \$1.00 or \$2.00 for a hockey outfit when you can get ABSOLUTELY FREE, this magnificent outfit, complete, consisting of a pair of splendid, strong, polished steel, hockey skates (all sizes). A good hockey stick, and a strong, well made rock-sole hockey sock, and in addition every boy can secure an extra present, a sturdy pair of well padded hockey covers with fingers and wrists protected by cane splints, padded with leather, or a pair of strong, heavy hockey boots with specially padded soles and reinforced toe-caps across the instep. WITH THIS SPLENDID OUTFIT YOU WILL GET THE BEST EQUIPPED PLAYER ON THE TEAM. Write for details, coupon, and we will plan. Address: REGAL MANUFACTURING CO. DEPT. H-41 TORONTO, ONT.

Canadian Boys' Camp

Left Alone

Its the loneliest house you ever saw, This big, gray house where I stay; I don't call it livin' at all, at all, Since my mother went away.

Four long weeks ago, an' it seems a year, "Gone home," so the preacher said, An' I ache in my breast with wantin' her, An' my eyes are always red.

I stay out of doors till I'm almost froze, 'Cause every corner and room Seems empty enough to frighten a boy, And filled to the doors with gloom.

I hate them to call me into my meals, Sometimes I think I can't bear To swallow a mouthful of anything, And see her not sittin' up there.

A-pourin' tea an' passin' the things, An' laughin' to see me take Two big lumps of sugar instead of one, An' more than my share of cake.

"I'm too big to be kissed," I used to say, But somehow I don't feel right Crawlin' into bed as still as a mouse, Nobody saying "good-night."

An' tuckin' the clothes up under my chin, An' pushin' my hair back so— Things a boy makes fun of before his chums, But things that he likes, you know.

There's no one to go to when things go wrong, She was always so safe and sure, Why, not a trouble could tackle a boy That she couldn't up and cure!

There are lots of women, it seems to me, That would be missed so much— Women whose boys are about all grown up, An' old maid aunts and such.

I can't make out for the life of me Why she should have to go, An' her boy left here in this old gray house, A-needin' and wantin' her so.

I tell you, the very loneliest thing In this great big world to-day, Is a boy of ten whose heart is broke 'Cause his mother is gone away.

Adventures of Johnnie-Boy By Cousin Doris Number One

(This is the first of a series of adventures by a real boy)

One day I visited Johnnie-Boy in a queer little place that he called "home." Now Johnnie-Boy was a lad who liked adventure but his father ordered him to confine his adventures to the back yard. There was little space back of the house so Johnnie-Boy decided to dig down. With spade and shovel he began an excavation that looked as if it might be his own grave. However it turned out to be the basement of a cave—a real cave. Johnnie-Boy's big brown eyes sparkled with pride as he threw "spadeful" after "spadeful" of black dirt over the side of the hole.

Johnnie-Boy's mother watched him from the kitchen window and wondered what her son had in mind. "He is all right," assured the father. "It's good exercise for him." So Johnnie-Boy continued digging; his mother continued looking, while the father smiled behind his paper. He, too, had been a boy at one time—very much like Johnnie-Boy. Father knew. After dinner Johnnie-Boy gathered planks and spent the afternoon building a roof—one that would keep out the rain.

The next morning a queer der was made to keep out policemen and such-of-ficers. A padlock on the outside would frighten any officer of the law. A hole was then cut into the board roof and a funny piece of black stove-pipe, topped by a joint, made the strange, little hut seem more like a real haunt of cave-

dwellers than anything else. The whole place took on an air of mystery. For several days Johnnie-Boy sawed sticks of wood and carried blankets, tin dishes and planks into the cave—for it really was a cave. They could hear him busily hammering at something inside.

His mother exclaimed in anxiety: "I wonder what the child is doing?"

"Exercising his muscles and keeping out of mischief," answered the father with queer twitches about the mouth as he marked an interesting sentence in the book he was reading. The father was not curious—not in the least.

Then for days Johnnie-Boy was quiet—inside of the cave. From morning until noon and from noon till night Johnnie-Boy stayed in the cave—only coming out for a few raw potatoes and un-cooked bacon. Finally one day he invited his mother and father to go into the cave with him. This was really an important event. They walked in single file toward the place. Johnnie-Boy took the lead, his mother, son—what nervously excited, followed, and his father, biting his lip in amusement, walked behind of the mother.

Johnnie-Boy very seriously un-locked the padlock and went down four steps leading into the cave, and the mother stood amazed at the furnishings of the place. At one side Johnnie-Boy had made a couch of planks and a mattress stuffed with hay. A little stove in one end solved the problem of Johnnie's absence from his meals of late. Stools made of fire-wood and covered with cushions of hay were placed about a square table. Two shelves were covered with papers and books, and on the walls a few pictures made the place more attractive. In front of the couch the mother discovered her discarded kitchen rug. The whole room was just the kind of place boys like, and Johnnie-Boy was proud of his accomplishment.

The mother and father expressed a feeling of delight to Johnnie and left him busily carving a mantle above the table.

During the dinner Johnnie-Boy spent many hours in the cave where his mother and father often visited him and occasionally accepted his invitation to dinner.

Dear Campers: You see in this number I am beginning a series of stories of adventures by a real boy. Let us gather round the camp-fire every month, boys, with a bundle of adventures. I know our Campers must have in this great Western country interesting experiences, because they farm, hunt and work at all kinds of trades. Let us have for next month many experience letters. To the boy who writes the best description on "Preparing for Spring" I will send a prize book. Come, boys, let us beat the girls in the Cozy Corner.

Sincerely, Cousin Doris.

FUEL FOR THE CAMP-FIRE

Emerson said: "An institution is only the lengthened shadow of a Man."

"If you are set to polish a desk, and if that's your job, and if you accept it as your job, make up your mind that you will polish that desk just a little better than anyone else ever did it."

"Cultivate accuracy; the other thing is something to be ashamed of."

A bishop noticed a bare-headed Irishman drawing buckets of mud from a deep well, the sun shining fiercely on his bald head. "Pat," said the bishop, "aren't you afraid the sun will affect your brain?" "Brains, is it?" replied Pat. "Ain't faith, your rev'ence, do yez think I'd be a-doin' this if I had an-ny br-a-ins?"

"Does what you would do if you were sole owners of the business."

"Every people has exactly the kind of government it deserves."

"Human will is the strongest force on earth. Make yours serve you well."

"Nobody has a mortgage on success."

The best recipe for the development of genius and personality is: "Be yourself—and use common-sense."

"If I were selling real estate, I would never talk of houses; I would talk of homes."

FIELD AND GARDEN SEEDS SELECTED FOR THE WEST

Booklets on Culture "HOW TO GROW THE BEST"

ALL LEADING VARIETIES

Eleven booklets, (copyrighted, all but one) 152 pages. The first of the kind printed in Canada. \$1.00 per set, but FREE TO OUR CUSTOMERS.

\$\$\$\$ in Prizes for Competition

The Big Fact in connection with this Business is Absolutely Reliable Qualities.

Alfalfa, True Grimm's—(limited quantity).

Alfalfa, Baltic—McGregor's lot.

Alfalfa, Turkestan—Our own importation.

Alfalfa, Hardy Northern Seed.

Alfalfa, True Montana.

Timothy, Rye Grass, Bromo—Finest re-cleaned selected Stocks.

VICTORY or SEGER Oat—Bred by Prof. Nilsson, Svalof, Sweden, introduced to the West by Steele, Briggs three years ago. Lot A—From seed imported direct from the breeder last season. Lot B—From our original importation of five years ago. Our yield 1913 12 1/2 bushels per acre.

REGISTERED MARQUIS WHEAT

REGISTERED BANNER OATS

REGISTERED RED PIPE WHEAT

REGISTERED ABUNDANCE OATS

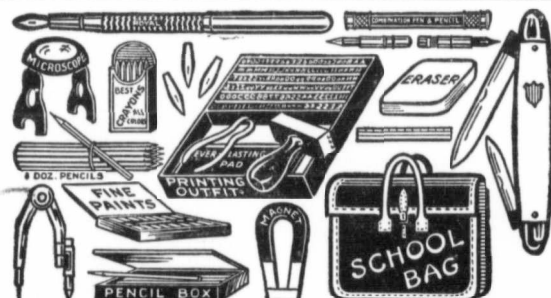
REGISTERED ECLIPSE & ROWED BARLEY

All fully described in our beautiful and carefully compiled 136-page Catalogue, which is free to all on request. Write today for a copy.

Steele, Briggs Seed Co. Limited

Canada's Greatest Seed House.

WINNIPEG



FREE Grand 28-Piece Scholar's Outfit and a Dandy Bin Camera

THE GREATEST PREMIUM IN CANADA—EASY TO GET

BOYS AND GIRLS—We want to give you, without a cent of cost, this magnificent scholar's outfit so complete and handsome that you will be the pride of the school. JUST READ WHAT EACH OUTFIT CONTAINS—one high grade fountain pen with three-quarter gold finished nib, one all steel, silver finished pen knife, one combination safety pen and pencil, a big, complete printing outfit with six rows of type, one dozen 1 1/2 high grade lead pencils, a fine pencil box with lock and key, a microscope or magnifying glass, one box of fine crayons, one tin box of fine paints containing 24 colors, one horseshoe magnet, one school compass, one 12 inch ruler, and last, but not least, a fine eraser. This is just simply the chance of your life to get the finest scholar's outfit that has ever offered, in big costly articles, as easy as can be. Now if you wish this wonderful outfit, and a fine big Eastman camera as well, write us today and get by return of mail, two \$2.00 boxes of flowers, the great PARIAN PERFUME, to sell among your friends at only 10 cents each. They go like hot cakes. Everybody wants this delightful new perfume—eight delicious colors, Beauty Rose, Lily of the Valley, Wood Violet, Carnation, etc., and our best ten cent size will perfume more articles than a dollar's worth of ordinary perfume. It won't take you five minutes to sell them all. Then return our \$3.20 and the Complete Scholar's Outfit—every piece exactly as you see it above—will be sent to you complete. We want to introduce this great new perfume to every lady in the land, and are sparing no expense to do so. When you get your beautiful Scholar's Outfit show it to all your friends. Get only a few of them to sell our grand perfumes and earn our premiums as you have done, and we will give you this beautiful, big, genuine Eastman Camera as an extra present. We arrange to stand payment of all transportation charges. Don't miss this chance—Write today. Be first. Address DEPT. O. 125 TORONTO, ONT. 51

THROUGH LIFE'S SIEVE

By R. D. Meek

Some time ago, I stood in a canning factory and watched them grade peas. The inspector didn't carefully sort out the large peas from the small ones as the great containers were brought to him. He just dumped the whole lot into an inclined chute with a sieve bottom, and as the peas rolled down they sorted themselves. The little fellows were the first to roll through the meshes and disappear. Down a little farther the meshes got larger and the next size dropped out of sight. And so on until only a few large sized ones rolled out at the end of the chute. None of these peas were deliberately selected. They that's the way we all go through Life's Sieve.

We are poured in at the top, a chaotic green mass, and we gradually sort ourselves. As we come opposite the mesh which seems to fit our capacities, in we pop and there we stay until another day comes. We are not personally selected. We just sort of select ourselves, and if we wind up in what we think is the wrong bin we may curse our miserable luck, but there we are, and we are generally there because we were so small in some dimension that we just couldn't help slipping through. And bear this in mind as you travel down the chute. Near the beginning the crowd is so great and there seems so much competition among the little fellows that some chap may roll past his proper destiny. But at the end, after most of the sorting is done, so few are left that there's no slipping by.

# OUR WOMEN FOLK

CONDUCTED BY  
PEARL RICHMOND HAMILTON

## Our Women Folk

The editor has changed the name of our part of the magazine from Woman's Department to Our Women-Folk, and I am pleased with the change. I do like the word "our" — it seems sisterly, human. Then the editor asked me to write this month something about "Our Women Folk." Out of the many thousands of our readers, I know only a few personally, but I do feel that we are all friends inasmuch as our interests and ambitions are similar, for we are "women-folk."

Before me is a vision of an audience—Our Women-Folk—all assembled in one great auditorium to discuss affairs that concern ourselves. The very best seats in the building are given to that group of women whose lives touch my heart most sympathetically. They are the women in isolated places of our country who are suffering and have suffered because medical attention for them is not possible. They are so brave — the bravest women in our land, and they are helpless. Most of them have families of small children depending on their mothering and they live in continual fear lest they be called away. We are often unjust to Providence and lay the blame on Him when a mother is taken. He has very plainly proven that the laws of Nature must be obeyed and that He helps those who help themselves. If He takes away an overworked woman who did not have proper care when she needed medical attention we turn right around and console the family by telling them that "her time had come." Now, I believe this is unjust to Providence. He has made very strict laws regarding the abuse of the physical body. The body must have rest and care or it will break down just like a threshing machine will break down and wear out if it is not kept in good repair and oiled. If we do all in our power, calling on Providence in the meantime for help, then we are not at fault if a loved one is taken. But we are not doing all we can. This group of women I see before me—many of whom have written me asking for a booklet to aid them through maternity—need protection. The Western world is painting humanity's most glorious pictures and these women, in answer to the painted visions, are facing privations and hardships they are not strong enough to endure. The crying need for women in isolated places of the West is medical attention. The best orators of the day, armies of social workers and teachers and preachers are laboring and pleading for all that make a race stronger, while the cries of crying babies are rocked by strange hands that try to take the places of mothers who were hastened into eternity. The world's worthiest warriors are the mothers of boys and girls, and out on the battlefields of Western Canada's homesteads they suffer and fall by hundreds under the sword of neglect. All the women in my audience weep with bowed heads for their suffering sisters.

In another part of this gathering of "Our Women Folk" is the bright energetic, ambitious, inspiring Home Economics Society. Every member of this splendid organization is present. They are thinking, acting, building and planning every possible improvement for their own communities, as well as the country at large. They are practical patriots working for and encouraging better home-making. I quote the following from their manual issued by the

Extension Department of the Manitoba Agricultural College:

"New and broader lines of study and effort are opening up for the women as they come to realize that the best and truest life of a community centers largely around the home, the church and the school, and that the development of these powerful influences for good lies largely in the hands of the home-makers of the country. Mutual help, encouragement and instruction in these things which make better men and women and higher standards of living are the true meaning of the Home Economics movement, and form the basis of its work."

More than a thousand women in Manitoba belong to this organization of women, and one thousand women in a province have it in their power to make the Manitoban home-life a Garden of Eden. There is plenty to do in the homes of our country. When I see the girls struggling under the clutches of dangerous villains; gangs of boys growing in germ-infested back lanes of

crime; infants dying for want of proper food and the care of the mother-nurse, and husbands hunting haunts of sin and vice—I plead in the interests of these hungry hearts of humanity for better home-making. Yes, let me say to "Our Women-Folks" there is more work to do in the home than most of us realize.

Let me announce here an important notice. The Manitoba Agricultural College will give a free course in Maternity Nursing to the women of the province during the month of February. Efficient women physicians, such as Dr. Mary Crawford and Dr. Ellen Douglass, will deliver the lectures. This is surely a move in the right direction. It will promote neighborly responsibility, as many women have written me they would like to help their neighbors at these times, but do not know how. I hope the agricultural colleges of other provinces will follow this plan.

I congratulate every member of the Home Economics Society because she

stands for better home-making. In the natural division of labor in this work, the man is the bread-winner, the woman the care-taker. A sacred trust of this creates a home of perfect harmony, for true home-making is the guiding principle of nation building.

In this audience of "Our Women-Folk" are scores of other women — housewives, women, teachers, and lecturers. And these women are many who are working hard for their sisters who are suffering helplessly for assistance. Some are waiting for a dower law, others for temperance, many for equal political rights, and still others for educational reform. They are a noble class—these women who toil for protection and justice for their sisters who are not in a position to work for their rights, and I am glad they are among "Our Women-Folk." "Our Women-Folk," then, is a large brotherhood, including women of many nations—a cosmopolitan "Women-Folk" if you will. They have brought from their country their best. Let us give to them our best. Then shall Canada respect and admire "Our Women-Folk."

Pearl Richmond Hamilton

## Home Economics

### MANITOU

The third annual meeting of the H.E.S. was held in the Opera House in November owing to our regular meeting in December being so close to Christmas. The president was in the chair. The reports of the secretary-treasurer were read by Mrs. McNamara in the absence of Mrs. Rowe, who was complimented for the very complete and ably written reports.

The talent money was handed in and amounted to \$84.65. The prize offered to the woman who earned the most money for the rest room was won by Mrs. McNamara, the amount being \$10. The prize was a beautifully bound copy of Myrtle Reed's "Threads of Grey and Gold" and a sterling silver book mark.

A letter was read from Mrs. Salisbury outlining a course of study for the "Personal Hygiene" was the subject chosen by this society.

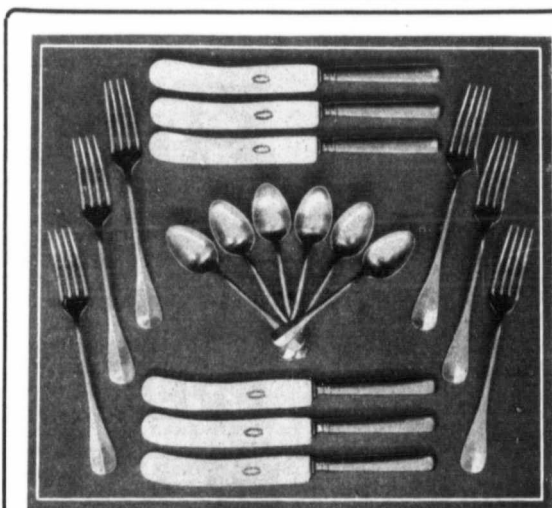
A motion was passed that this society was in favor of medical inspection in schools, and Mesdames Sharpe, McFarlane, Tait and Cram were appointed a delegation to wait on the School Board regarding same.

During intermission refreshments were served and the election of officers proceeded with. Mrs. McCharles was in the chair. Hon. pres., Mrs. C. H. Brown, pres., Mrs. G. T. Armstrong; 1st vice-pres., J. Tait; 2nd vice-pres., E. E. Moore; secretary-treasurer, Mrs. W. Rowe. Directors: Mesdames W. McFarlane, T. A. Pybus, A. Hamilton, W. Duke, R. McTavish, R. W. McCharles, A. Yemans. Auditors: Mrs. C. H. Brown and E. J. Moore.

The December meeting was a very interesting one though the attendance was not large.

The executive have drafted a programme for the coming year. Four members are to take charge of each meeting. Mrs. Sharpe read a paper on "Principles of Home-Making," and Mrs. E. Jones read "Bethlehem," both of which were much appreciated.

Our rest room is a success. It is large, bright comfortable room, clean, warm and well patronized, and much appreciated by the people of the district.



## A SPECIAL OFFER

6 KNIVES  
6 FORKS  
6 SPOONS

# FREE

The above illustration is an exact photograph of our offer. The forks are of the regular dinner size, and the spoons are generous teaspoons, and both are made of a solid metal superior to white metal and cannot wear in spots and always keeps bright and shiny. The knives are also dinner size and have genuine steel blades and a convenient sized handle.

**OUR OFFER.** Send us in your renewal subscription and two new subscriptions, together with your remittance for three dollars for same and we will send you a complete 18-piece set as illustrated above FREE AND PREPAID to your own post office. They won't last long. Send in your subscriptions right away and secure a set.

Cutlery Dept. **E. H. Heath Co., Ltd., Winnipeg**

A rest room has been started in Carman by the Dufferin Home Economics Society. On October the 15th the opening of the rest room took place when a shower of useful articles for the rest room was given and tea served. A goodly number of things were contributed at the shower which were greatly appreciated by the ladies who are interested in the establishing of the rest room.

A cooking demonstration was given on November 13th and 14th in the rest room by Miss Ross, of the Agricultural College, when apple dishes, fruit salad and cereal dishes were demonstrated.

At the regular meeting in November the making of candy was demonstrated by two of our members, one showing how fondant was made, and the other showing how to make "Divine Divinity." The candy made was sold and the money given to the rest room fund.

The annual business meeting was held on December 11th, when reports were read and election of officers took place.

A home-cooking sale was held on December 20th in the rest room when \$20 was added to the rest room fund. Our society is looking forward to a visit from Miss Gowsell, of the Agricultural College.

H. C. F.

SWAN LAKE

On Monday afternoon, January 19th, the Swan Lake H.E.S. was honored by a visit from Mrs. Dayton, of Virden, the Provincial President of Manitoba. It was a thousand pities that the town was also visited by the first serious blizzard of the season on the same afternoon; in spite of the unpleasant weather, however, there was quite a good gathering, and several of the country members managed to drive in.

After the president, Mrs. G. B. Gordon, had said a few words of the pleasure it gave the society to welcome their visitor, Mrs. Dayton opened her address by giving the members a cordial greeting from Virden. The address which followed was very interesting and commanded the attention of the audience as much by the sympathetic and clear delivery of the speaker, as by the importance of what she had to say. Mrs. Dayton spoke fearlessly on the subject of women, their work and their influence not only on the home and family, but in the much wider sphere of public affairs; and to prove women's capacity to carry out what she undertakes. Mrs. Dayton instanced a few of the important things these societies had already done.

The primary idea of these societies is, naturally, to help the members to become perfect in all household sciences and arts, to make of the home a real home and resting place and not merely a house in which one eats and sleeps, but the scope and influence is much wider than that. Each town and centre had to choose the work that was most needed there and which the members can best take up. Several towns had opened rest rooms, others had undertaken the care of the cemetery, or encouraged a love of gardening by giving prizes for school and home gardens, or had taught girls how to sew and make their own clothes, had inculcated a love of reading by opening reading rooms and magazine exchanges and all had tried to ameliorate and brighten the lives of all those with whom they were brought into contact.

For work of a wider scope, Mrs. Dayton emphasized the need for all societies to work together; for instance, there was great need for the appointment of a woman on every school board throughout the province, and there should certainly be systematic medical inspection in our schools. At Virden when this inspection was first started, two-thirds of the scholars were suffering from preventable diseases, and one little lad had a curvature of the spine, and only prompt treatment saved him from becoming a cripple. Indeed it is impossible to mention the good these societies have already done or to limit the scope of their work.

And Mrs. Dayton specially emphasized the fact that women often do not receive sufficient consideration in their homes, nor do they take enough care of themselves; they are entitled to a regular allowance and to as many labor-saving appliances in proportion as the man buys for himself on the farm.

The Bake-Day Smile of Perfect Satisfaction



PURITY FLOUR More Bread and Better Bread

WESTERN CANADA FLOUR MILLS COMPANY, LIMITED MILLERS TO THE PEOPLE

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

And, above all, the societies should be an influence for good; every member should try to help her neighbor, to abolish all cliques, to frown down all gossip and to try and say "something good" of everyone. Altogether it was the most helpful and inspiring address that could be given and every member felt strengthened by hearing what others had done and what she herself could do. These personal visits cannot fail to be a great help and inspiration to all the societies.

THE BRANDON WINTER FAIR

The woman's section of the Brandon Winter Fair is promised a rare treat this year, as Mrs. Gray, of Chicago, has been secured to take charge of the cooking demonstrations. Mrs. Gray is a graduate of the University of Chicago. For some time she was Instructor of Home Economics in Rockford College of Women. Later she became head of the Home Economics Department of the

Illinois Woman's College at Jacksonville. From there she accepted the position of Associate Professor of Home Economics in the Iowa State College at Ames.

While there she gave demonstrations before thousands of women from the farms in Iowa. She is a woman bright, enthusiastic, sympathetic and practical, and the women of Manitoba who attend the Brandon Fair will be greatly pleased and helped by her personality as well as her demonstrations.

Mrs. Gray fills a prominent place in domestic science circles in the States, as she is National Vice-President of the Associated Clubs of Domestic Science and is on the Faculty of the "People's Institute of Domestic Economy." She is also a regular contributor to the "Country Gentleman" and to the "North American" which has a very large syndicate connection, through which her articles go all over the United States. Mrs. Gray knows Canadian women, having travelled through Canada with her

husband, who is secretary of the Aberdeen-Angus Association of America.

I remember with pleasure my visit at the Brandon Winter Fair last year. It is an education that women cannot afford to miss. The live stock exhibits and poultry show are Western Canada's most splendid and most convincing advertisement to the man of the stock farm, for the animals exhibited are well-nigh perfect. I can never understand the woman who does not admire fine cattle and splendid horses.

This year the woman's section will be held in the armoury building, which is just across the street from the Winter Fair. President McGregor and Manager Smale are putting in larger equipment and are making it more comfortable for the women who attend. Every woman who can possibly attend should go so. The Brandon people always put forth every effort to welcome the stranger—and the Brandon Winter Fair as a whole

is excelled by none. It is to be held from March 2 to 6 and promises to be the best of its kind in every feature.



Mrs. Gray, of Chicago University, who will take charge of the Cooking Demonstration at the Manitoba Winter Fair Brandon.

Mothers' Corner

ROCK ME TO SLEEP

Backward, turn backward, O Time, in your flight.

Make me a child again just for to-night! Mother, come back from the echoes ashore,

Take me again to your heart, as of yore; Kiss from my forehead the furrows of care,

Smooth the few silver threads out of my hair;

Over my slumbers your loving watch keep,

Rock me to sleep, mother, rock me to sleep!

Backward, flow backward, O tide of the years!

I am so weary of toil and of tears—Toil without recompense, tears all in vain—

Take them and give me my childhood again!

I have grown weary of dust and decay—Weary of flinging my soul-wealth away; Weary of sowing for others to reap;

Rock me to sleep, mother, rock me to sleep.

Tired of the hollow, the base, the untrue, Mother, O Mother, my heart calls for you!

Many a summer the grass has grown green,

Blossomed and faded, our faces between. Yet, with strong yearning and passionate pain,

Long I to-night for your presence again. Come from the silence so long and so deep;

Rock me to sleep, mother—rock me to sleep!

Mother, dear mother, the years have been long.

Since I last listened your lullaby song. Sing, then, and unto my soul it shall seem

Womanhood's years have been only a dream.

Clasped to your breast in a loving embrace,

With your light lashes just sweeping my face,

Never hereafter to wake or to weep—

Rock me to sleep, mother, rock me to sleep!

—Florence Percy.

The booklet entitled "Helps for Expectant Mothers" will be sent free to any wife who requests it. Address Mrs. Pearl Richmond Hamilton, 983 Grosvenor Ave., Winnipeg, Can.

SOILED BOOTS AND SOILED SOULS

Never mind if your boy tracks in mud—better soiled carpets than soiled souls. The country is a splendid place to put fat on your souls, to say your prayers, to commune with Nature and with God, and to earn a good, clean dollar, and to give the boy and girl a chance to grow in the open into strong, pure manhood and womanhood.

THE BOY PROBLEM

The following letter I quote from a magazine for mothers. It may help some of our mothers.

"We sold our beautiful home in the city of X—, left our lifelong friends and relatives, and invested in twenty-seven acres of land on the shores of Lake—, to save the soul of our boy. We know nothing of farming or fruit raising, but the future looks rosy. We are progressing and our boy is contented here. He has cleared some land which his father has given to him and will plant strawberries, potatoes and fruit trees.

"My husband was secretary of the Sunday school of the church which we attended in the city, and for eight years I had a Sunday school class. I knew that our boy smoked, because I saw him come out of some high weeds one day with some other boys and all were smoking. I was dumbfounded, but I did not know just what to do.

"Then, one rainy, dark Sunday afternoon, the door bell rang and when I went to the door, there on the porch stood four men. I know that I looked surprised, but I asked them in. They left their dripping umbrellas on the porch and came into the hall. They refused to sit down, and seemed ill at ease. At last one asked:

"Is your boy at home?"  
"How my heart leaped! I feared—I did not know what. I answered that he was at home, and then the man asked me if I knew that our boy was one of a number of little boys who took plumbing out of the new houses and sold it to a rag-man. I can remember how faint and chilly I felt, and—I could have torn to pieces the man who said that our boy stole! But I called our boy in, and he came hopping along on one foot in a way that he had—I can see him yet, little fellow—he was only eleven. He looked surprised to see the men, but he looked straight into their faces, answered all of the questions truthfully—said, yes he helped to rob the houses! Dear mothers of boys, you know how I felt! Then he went out and got two brass faucets from under our back porch and handed them to the men. He gave me one quick look, and then hung his head for the first time in his life.

"There was a lump in my throat as big as the Presbyterian Church! One man groaned, another sobbed, and one blew his nose hard. The man who had asked the questions was a detective. We all stood and looked at the boy—the little boy—so little—it just seemed as though it could not be that he had done such a terrible thing!

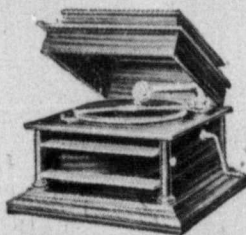
"Then the man asked for my husband. He was out doing some Sunday School work! One of the men said that the fathers were to meet that evening and talk over what had happened. The detective said that as the boys all came from good homes nothing would be done and the fathers could settle the bill.

"And the four men in their black coats walked out of our house into the rain like four pall-bearers.

"My husband was struck dumb that evening when, with other fathers of the neighborhood, he learned of all that had happened. How did I spend the evening? I threw myself face down on the rug and cried my heart out! Then I washed the tears away and went up to the boy's room to see if he had heard me cry. He was sound asleep and he looked like a little baby!

"That evening we made up our minds if there was any way of getting out of the city we were going to find it! And we did. We sold our home, of which we thought so much, at \$500.00 less than its value, and we are now on a fruit ranch in a house made out of lumber cut off the land, and covered on the outside with tar-felt.

City Pleasures On the Farm



That's What A Grafonola Means To You

Music from all the best operas—solos by all the world's great artists—selections by bands with an international reputation—violin—piano—harp—cornet—and all classes of best music heard only in the expensive theatres and concert halls of the larger cities. With a Grafonola in your home you can have any of these advantages with which to entertain your friends at any time.

\$12 Cash \$8 Monthly

On these convenient terms we will sell you the above Columbia machine complete with 12 standard double disc 10-inch records for \$82. If you prefer to pay cash, the price is \$65 (without records). No investment that you could make would bring more enjoyment and pleasure in your home.

Let us send you our Catalogue showing different models—all on easy terms if desired

WINNIPEG PIANO CO. 295 PORTAGE AVE. WINNIPEG.

Eating Oranges in a Canadian Orchard



would attract everybody. Down at Fontana, California, only two hours' ride from Los Angeles city, happy, care-free men, women and children are enjoying the balmy ocean breezes among the green-leaved trees with their wealth of oranges, grape-fruit and olives. The Fontana Company have spent One Million Dollars preparing this land for you. Five, ten or twenty acres can be bought on payments so light that you get most of them out of the products. Price \$300.00 per acre, nine years to pay. Mr. Wright's five acre orange grove gave him a net profit of \$3,000.00 per acre, season 1912. Wouldn't you like a home with an income like that attached? Our Mr. Stephens has spent many days at Fontana among these groves and can tell you much about them. Ask him for FREE descriptive folders, booklets, etc Write him to-day.

New Canada Investment Company, 910 Lindsay Bldg., Winnipeg, Canada

**BLACK KNIGHT STOVE POLISH**

FOR BRIGHTNESS BLACK AND LIGHTNESS, USE KNIGHT

A PASTE NO WASTE | THE F.F. DALLEY & LTD. HAMILTON, ONT. | NO DUST NO RUST

"We see porcupines and woodchucks, deer run across our clearing, and at night we hear the owls hoot and the wolves howl.

"A friend said: 'I do not see how you, a city woman, live in that wilderness.' But I smiled and did not say much. We know what we are doing. The city isn't big enough for me for a few years! We have our boy to bring up and his future means more to us than anything else in the world.

"Now I would not have you picture my boy in your mind as all bad, for he is not! He is thirteen years old—all of this happened two years ago, and so far as we know he has not done anything for us to be ashamed of since that dreadful day. He has so many good traits, and he is helping to bring up his mother. I am twenty years older than he, but he is bigger than I, and I will tell you why:

"One day when he was ten years old I noticed our yard full of boys, and, looking closely, I saw the wash-woman's boy 'all tattered and torn,' two hare-lipped boys, and a ragged, lame boy with a crutch.

"I called my boy in and said: 'Where did you find those boys? What will the neighbors think of such a yard full? Why will you insist on playing with such children? Why not play with some of the nice boys of the neighborhood?'

"He looked up at me with his eyes full of surprise. 'Why, mother,' he said, 'that boy's father drinks, and his mother washes to buy things for 'em to eat. The boy can't help it that his father drinks and his mother washes!'

"Never mind," I said. "You keep away from him. And those other boys, too—why do you pick them out—of all the boys there are to play with?'

"Oh, mother," he said, reproachfully, "they can't help it—having hare-lips—they were born that way. And, mother, why isn't a wash-woman's boy as good as any other boy?'

"So you see my boy is teaching me. He was just sorry for them all. One day on the street we passed a little negro boy, and the two children spoke to each other. I pulled my boy along by the sleeve, and said: 'Do you speak to everybody?' I can feel his hand tugging at my skirt even now as he hopped along on one foot and looked up into my face. He had felt the reproach in my tone.

"Say, mother, he can't help it—'cause he is black! The Lord made him that way. And if the Lord wanted him that way, why isn't he just as good as a white boy?'

"Women who enter into partnership with the Almighty to create in His image a little child, need all of the help that they can get to lead them into clean manhood and womanhood!

"I am glad that I am a mother. I wish that it was in my power to take some of the money used in beautiful public buildings and help some of the poor mothers who are trying so hard to bring up the little ones that God has given to them.

"We prefer to live in the country. It is better to hear the wolves howl here than to have our boy caught by some of the human wolves which we know talk about for prey in city streets.

"The country is a splendid place to put fat on your soul, to say your prayers, to commune with nature and with God, and to earn a good, clean dollar, and to give the boy a chance to grow up in the open into a strong, true manhood.

"R. H."

We give this splendid letter as a part of our parents' problems knowing that it will help some other mother in the solution of her own. This mother has solved her problem. Many other mothers confronted with the same great problem. A recent issue of a Chicago paper said that the greatest menace to the city of Chicago was not its lack of subways, not its political conditions, not the congested loop, but the gangsters of the city who were making its lanes, burns and alleys veritable schools for crime!

DISOBEDIENCE

Frances McKinnon Morton

I am convinced as I grow older and see more of children and am better able to project myself into their world, that it is very rare to meet with actual intentional disobedience in young children. Most very young children fail of a full understanding of the requests made of them, and many poor little tender hands have been spanked when their owner was ignorant not only of his offence but more than that, still in ignorance of the meaning of the original request. The feeling that a parent has been cruel or unjust rouses anger, ill-will and fear in a child and finally out of this mental disease there grows the desire to deceive—to withdraw the inner self from the misunderstanding parent. It is safe, in our dealings with very small children, to

go on the general principle that none of them really wish to displease or to be disobedient. One very frequent cause of disobedience in little children is the bad habit so many of us have of giving commands in the negative rather than the positive form. A little child does not understand the meaning of the word "don't" and as it represents no concrete object it is not a word easily defined to a child's limited intelligence. One baby that I knew, when I asked if she understood "don't," replied naively, "Yeth, it'th the thpauk word." I saw a mother once tell a two-year-old child not to touch a rather perishable pillow that was in the room. They were in the house of a friend and the mother feared that the child would injure the pillow, which he at last did in desperation at his failure to understand. The little fellow

started to pick up the pillow, which was bright and attracted him. "Don't touch that pillow, Johnny!" said the mother in a hasty, impatient way. Johnny looked about him with a pleased smile. He was glad that his mother had mentioned "pillow" and it showed that she understood him and their minds were at work on the same objective point. Because he had no idea what the word "don't" signified and did know the meaning of the word "pillow," he discarded from his mind the unknown concept and clung to the visual image of the thing that he did know, and gathered the bright pillow recklessly up into his little arms. His mother got up in the midst of a sentence, took the pillow from him, put it back in place and repeated very sternly, "Don't you touch that pillow any more!"



Mr. Edison's Wonderful New Instrument NEW! MASTER Instrument

Mr. Edison's Latest Invention

Just Out—The perfected musical wonder of the age. And shipped on a stupendous special offer direct from us.

WRITE today for our new Edison Catalog—the catalog that tells you all about the wonderful new model Edison with Mr. Edison's new diamond point reproducer. It will also tell you about our new Edison offer! Now read:

Mr. Edison's Pet and Hobby



among all his wonderful inventions is his phonograph. He worked for years striving to produce the most perfect phonograph. At last he has produced this new model Think of it: over 25 years of work on all these epoch-making inventions—then his pet and hobby perfected!

Free Loan Offer: We will send you the new model Edison and your choice of all the brand new records on an absolutely free loan. Hear all the waltzes, two-steps, vaudevilles, minstrels, grand operas, old sacred hymns, every kind of comic and popular music, also your choice of the highest grade concerts and operas, as rendered by the world's greatest artists. Entertain your family and your friends. Then, when you are through with the outfit you may send it back at our expense.

Remember, not a penny down—no deposit—no guarantee—no C.O.D. to us—no obligation to buy—a full free trial in your own home—direct from us—direct to you. Returnable at our expense or payable (if you want to keep it) at the actual rock-bottom price direct from us.

Endless Fun

Happiness is life—and real happiness is found only in a real home where the happy and united family gather together for mutual enjoyment and recreation.



Such a variety of entertainment! Hear the latest up-to-date song hits of the big cities. Laugh until the tears stream down your face and your sides ache from laughing at the funniest of funny musical shows. Hear the grand old church hymns, the majestic choir, hear the roiling organs, the crashing brass bands, the waltzes, the two-steps, the solos, duets and quartets. All will be yours with the Edison in your home. Send the coupon TODAY.

The Reason: Why should we make such an ultra-liberal offer? Well, we'll tell you—we are tremendously proud of this magnificent new instrument. When you get it in your town we know everybody will say that nothing like it has ever been heard—so wonderful, so grand, so beautiful, such a king of entertainers—so we are pretty sure that at least some one, if not you, then somebody else, will want to buy one of these new style Edisons especially as they are being offered now at the most astounding rock-bottom price and on easy terms as low as \$2.00 a month.

Our New Edison Catalog Sent Free!

Your name and address on a postal or in a letter, (or just the coupon) is enough. No obligations in asking for the catalog. Get this offer—while this offer lasts. Fill out the coupon today.

F. K. Babson, Edison Phonograph Distributors Dept 7702 355 Pertape Ave., Winnipeg, Manitoba U. S. Office, Edison Block, Chicago

To F. K. BABSON Edison Phonograph Distributors, Dept 7702 355 Pertape Ave., Winnipeg, Manitoba. Gentlemen:—Please send me your new Edison Catalog and full particulars of your free trial offer on the new model Edison Phonograph. Name: Address:

Johnny was somewhat discouraged with his attempt to interest his mother, but with the natural buoyancy of youth he went for the pillow again, and again it was snatched from his little hands and put into place with another repetition of, "Don't you touch that pillow again."

This performance was repeated several times until the exasperated mother had given a wholly undeserved spanking to ignorant and innocent little Johnny. This upset his developing sense of justice and left his mind for a minute in utter confusion, so he was set down on the floor none too gently and ordered again, "Now, don't you touch that pillow any more." Poor little man! He knew he had made a great mistake in his conduct, but his heart was right and he meant to do well and he was very sure that he knew what the word "pillow" meant. Perhaps his mother didn't know what a pillow was. Maybe that was why she couldn't understand, so with the light of a great determination shining in his blue eyes still wet with tears, he toddled over to the sofa and gathered the offending pillow in his little arms again. He knew his mother had punished him but she kept calling for a "pillow" and he meant to do his small best to get one to her even if he was misunderstood. Maybe he had carried the pillow wrong, maybe that was why she was not pleased. This was a happy thought, so he dropped the bright pillow on the floor, caught hold of the gilt cord that bound it behind him. At sight of this the mother jumped up and rushed wildly across the room — snatched the pillow away from him and administered a second spanking. I could endure it no longer. "He thinks you want the pillow," I said. "He has no idea what 'don't' means, but he does understand 'pillow.' I was once travelling in a foreign country and a man called to me not to go through a certain gate. I did not understand his form of the negative, which was provincial, but I did understand the foreign word for gate and I made for the gate quite as proudly as Johnny is going for this pillow. I was proud that I knew the word for gate and the poor man almost had to lay violent hands on me to keep me from going into the gate just to prove my knowledge. Now if you will try my plan with Johnny I believe you'll see the connection." The mother did try. Instead of saying "don't" any more she said "Bring mama the pillow baby!" and the brave little man, forgetting all the injustice of the past, brought the pillow proudly across the room and laid it in her lap. "Thank you, baby," she said gently as she took the pillow, and the dear little soul trotted off to his play happy in being understood and appreciated. There were tears in the mother's eyes as she told me good-bye. "Oh," said she, "I am so glad you gave me that idea about baby! I have thought he was stubborn and disobedient when really he was only trying so hard to please me. I only hope he will forgive me and not think his mother a brute."

"Never fear for that," I assured her. "God has kindly made the little mind and heart soft so that it may forget as well as remember, but the less he needs to forget about his mother the better it will be for you both."

Notice—Kindly address all communications to this department to Pearl Richmond Hamilton, 983 Grosvenor Ave., Winnipeg.

**A "SOCIETY" WOMAN**  
And How She Found Herself

Young Mrs. Harrison was growing impatiently weary of the fashionable world of which she was a part. Card parties, dancing parties, motoring parties and dinners took up every waking hour. She had long been dissatisfied with herself as well as the life she led, but in the whirl of it all she scarcely knew how to extricate herself. She was rich, she was beautiful, she was popular, and she knew no other life. No wonder society claimed her as its own.

She was just leaving to go down to the city in search of a prize to be given at her bridge club that week, when she heard a timid knock at the door. She opened it herself—an unusual thing for her. There, facing her on the doorstep, stood a shabby little woman with a worn,

sweet face. She looked at the smartly-gowned woman, hesitating a little. Then she smiled gently. "Mrs. Harrison?" she asked.

"Yes."  
"I am Mrs. Lyon. I feel I must apologize for intruding, but," she went on timidly, "I came from our Mission Circle. We"—she hesitated—"we were wondering if you would sing a little hymn for us at our meeting to-morrow. It would encourage us so much."

Young Mrs. Harrison drew back a little. "How do you know I sing?" she asked, a trifle abruptly.

The shabby little woman smiled again. "Every one in Randolph knows that, do they not?" she replied, still gently. "Yours is a voice that, having once been fortunate enough to hear, one longs to hear again. My daughter heard you, not long ago, at some sort of musicale. She has been talking of nothing else since. She said to me: 'Mother, if you could get a voice like that into your Mission Circles, they would not drag so.' We do have such hard times," she went on. "There isn't the interest or enthusiasm there should be. So many of the women nowadays have their clubs and their card parties. Missionary meetings are languishing, because other things are being considered first."

Young Mrs. Harrison did not reply. There was a pause.

"It's a great gift to be able to sing," went on the gentle voice.

"Perhaps; but I rarely sing nowadays, I am going out so much. There is a club meeting almost every afternoon in the week, and dinners and the theatre."  
"She did not herself understand her readiness to talk to this shabby little woman, but there seemed to be something so restful about her face.

"I am going down to the city now to select a prize for my bridge club," she added.

The sweet, pale face suddenly sobered. Young Mrs. Harrison caught the look, and half resented it.

"You, I suppose, don't belong to any clubs," she added.

The little shabby woman shook her head. "Oh, no! I belong to the Mission Circle. I teach in Sabbath-school, and I always try to go to prayer-meeting."

"But your amusements? What are they?" demanded young Mrs. Harrison. A quiet smile lighted the pale features. "Amusements? Why, hearing the birds sing, reading my Bible, meditating on God's goodness, and the privilege of working for Him. This is my life, and I am so happy in it."

She looked at the beautiful eyes regarding her. "Do you know this life?" she asked softly.

Young Mrs. Harrison shook her head. Something moved her to a sudden confession. "I don't know any life, but the same old round" she answered, half bitterly. "I go home from gay gatherings actually sick at heart. Oh, I don't know what is the matter with me, but I'm tired of everything! Sometimes the mood passes, and then I say to myself: 'What is the use?' One must, I suppose, go on in the station one is born in."

The little shabby woman took the jeweled hand in both her worn ones. "Not unless God goes with us," she said earnestly.

Young Mrs. Harrison looked reflective. She had never thought of that.

"Was God in her gay parties? Would he be pleased with the life she led?"  
"No," the answer came itself. "No, no!"

The little woman saw the look. "I'm sorry," she said gently, "sorry. You could do so much. You have such a fine face. Surely a noble spirit lies behind it. Begin now. Give the Lord a portion of your time at least. Ask him to guide you. Shall I tell you the secret of every happy Christian's life? Just one word—surrender."

She smiled.

"What a sermon I have preached!" she added. "And I am detaining you. May I tell the ladies that you will sing for us?"

"Yes," young Mrs. Harrison replied. "I shall miss a bridge party, but I will sing for you to-morrow."

She brought her prize for the bridge party home and put it on her writing-desk. It was a cut-glass candle-stock. She looked at it in silence. "And I must



## FUR SALE---BIG ATTRACTIONS TO BONSPIEL VISITORS

Highest quality in style and workmanship, Ladies' and Gentlemen's Fur coats, children's furs, and various styles in fur sets and pieces. If you are coming to Winnipeg on the cheap excursions that are offered by the various railways you will do well to take advantage of our great clearance of furs at from

**33 1/2 to 50 % DISCOUNTS**  
Off Marked Prices

### LADIES' FUR COATS

Worth from \$50.00 to \$500.00, and made in the latest styles in Persian Lamb, Muskrat, Pony, Hudson Seal, Marmot and Astrakan.

### FUR SETS AND PIECES

Fur sets and single pieces in Mink, Fox, Lynx, Hudson Seal, Muskrat and Persian Lamb.

### CHILDREN'S FURS

An excellent selection in variety of furs and all reduced to half price.

### MEN'S FUR COATS

In Beaver, Raccoon, Muskrat and Chamois Lined Coats. All to be disposed of at one third less than the marked prices.

## FAIRWEATHER & CO. LIMITED

297-299 Portage Avenue, WINNIPEG  
TORONTO MONTREAL

# RENNIE'S

EARLIEST, HARDEST

# GARDEN SEEDS

SEND CARD FOR CATALOGUE TO-DAY.

WM. RENNIE CO.,  
394 Portage Ave., WINNIPEG

# SEEDS

### 130-Egg Incubator and Brooder for \$13.90

If ordered together we send both machines for only \$13.90 and we pay all freight and duty charges to any R. R. station in Canada. We have branch warehouses in Winnipeg, Man. and Toronto, Ont. Orders shipped from nearest warehouse to your R. R. station. Hot water, double walls, dead-air space between, double glass doors, copper tanks and boilers, self-regulating. Nursery under egg tray. Especially adapted to Canadian climate. Incubator and brooder year guarantee—30 days trial. Incubators finished in natural colors showing the high grade California Redwood lumber used—not painted to cover inferior material. If you will compare our machines with others, we feel sure of your order. Don't buy until you do this—you'll save money—it pays to investigate before you buy. Remember our price of \$13.90 is for both incubator and brooder and covers freight and duty charges. Send for FREE catalog today, or send in your order and save.

Write us today! Don't delay.

WISCONSIN INCUBATOR CO., Box 310, Racine, Wis., U. S. A.

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

**FREIGHT AND DUTY PAID**

go t  
gett  
tired  
-y  
band  
It  
the  
red l  
-y  
Th  
voice  
-N  
"W  
little  
I w  
meet  
of M  
miss  
a mi  
sing  
when  
hadn'  
had t  
Sh  
book  
"I  
you l  
great  
world  
a ca  
somel  
ferent  
Her  
The  
to the  
keys,  
then t  
the ro  
"Do  
F.  
Eve  
F.  
"Fo  
Fill  
The  
F.  
How  
the ch  
his br  
"F  
I  
F  
Her  
-Julia,  
could s  
all kin  
before  
beautif  
dear."  
She  
did yo  
to thos  
little h  
And  
someth  
her, S  
She di  
meant,  
had cal  
that we  
lift the  
comfort  
sad and  
She d  
went h  
ing, sh  
"Hari  
head o  
back."  
He ur  
not spe  
broke i  
said."  
that by  
back. J  
ons."  
And  
society,  
and bea  
ville (Ch  
Ft

go on doing this for years and years, getting prizes and giving them. How tired I am of everything!

"What are you doing, Julia?" her husband asked, that same evening. It was after dinner, and she sat under the electric light. In her hands was a red hymn-book.

"You'll not laugh if I tell you!" There was a note of entreaty in her voice. Her husband felt it.

"No, indeed." "Well, this afternoon, a sweet, shabby little woman came here and asked me if I would sing a hymn in a missionary meeting to-morrow. It is the afternoon of Mrs. Sales' bridge party, but I promised I would do it. I don't know what a missionary meeting is like, and I never sing hymns. And, do you know, Harry, when I came to look for one, I found I hadn't a hymn-book in the house? I had to borrow one from Norah."

She was turning the leaves of the red book as she spoke. "I don't go to church, either. But, do you know, of late I've been thinking a great deal! Of what use am I in the world? Around I go, like a squirrel in a cage, without getting anywhere. I sometimes think I was born for a different life."

Her husband looked at her. Then suddenly she rose and went over to the piano, running her hands over the keys. "I believe I will sing this." And then the exquisitely beautiful voice filled the room.

"Do you know the world is dying For a little bit of love? Everywhere we hear the sighing For a little bit of love."

"For the love that rights a wrong Fills the heart with hope and song. They have waited, oh so long, For a little bit of love!"

How grandly the wonderful voice sang the chorus! Her husband almost held his breath as he listened.

"For a little bit of love, For a little bit of love. They have waited, oh so long, For a little bit of love!"

Her husband came and stood near her. "Julia," he cried, "I did not know you could sing like that. I've heard you sing all kinds of popular music, but I never before heard you sing a hymn. It's beautiful, beautiful. Sing it again, dear." And she did.

She went to the missionary meeting, did young Mrs. Harrison, and she sang to those earnest, consecrated women her little hymn.

And in the singing of it, somehow something new and vital took hold of her. She felt her feet set in new paths. She did not herself realize what it all meant. Afterwards she knew. For God had called her—called her to sing with that wonderful voice His songs, songs to lift the burdens of His people, songs to comfort those who mourned, to gladden sad and lonely hearts.

She did not say much; but when she went home from the missionary meeting, she went straight to her husband.

"Harry," she said softly, laying her head on his shoulder, "I'm not going back."

He understood. For a moment he did not speak. There was a silence. He broke it. "It's all right, dearest," he said. "I felt it when I heard you sing that hymn. Of course, you cannot go back. And we will go on together, dear one."

And that was the way in which society, so-called, lost forever the young and beautiful Mrs. Harrison.—In Nashville Christian Advocate.

FOUR ITALIAN RECIPES From The Ladies' World Spanish Puree

Wash and boil till tender two pounds of fresh spinach; drain, chop fine and place in a saucepan in which one-quarter of a pound of butter has been melted. Let it simmer, stirring it till thoroughly mixed, and adding salt to taste. Remove then from the stove; add a pinch of nutmeg, a tablespoonful of grated cheese and two beaten eggs. Have ready some simple broth (from meat or chicken stock, or milk and water in proportion

as wished), and when boiling pour into it the spinach preparation. Let all simmer together for three or four minutes, when remove and place, uncovered, on the top shelf of a very hot oven five minutes, watching to see that it does not scorch. The Italians use a salamander for clapping over the top of the soup, but the heat of a brisk oven will answer the same purpose. The eggs will coagulate and the puree will be a delicate green substance. Serve with croutons.

Spinach Pudding

Wash some spinach thoroughly (about two pounds); boil it ten minutes, then

drain and squeeze the water out of it with a cloth, and pound in a mortar till fine enough to pass through a sieve. When pressed out, put in an earthen pot with a lump of butter the size of an egg and half a teaspoonful of lemon juice; let boil a few minutes; remove to a bowl, and when it is cold mix in it the beaten yolks of two eggs. (Three may be used.) Put them into a buttered mold, leaving a hole in the middle, and cook slowly an hour in an outer vessel of boiling water, with good steady heat above and below in the oven. When done, turn out on a platter and fill the cavity with cooked mushrooms.

One Form of Polenta

Into three pints of last-boiling water put a tablespoonful of olive oil and a pinch of corn-meal; stir smooth and cook for an hour or more—longer (from two to three hours) will be all the better, and if a fireless cooker is available the long, slow cooking may be quite as convenient. If cooked on the stove, however, the corn-meal must be put in a double-boiler and the water in the outer vessel kept at a gallop for an hour at least. Stir frequently. Have ready some thick gravy and a half-pint of strained, thickened tomato. Fill up a baking-dish with the cooked mush, gravy and thickened tomato, alternating them in layers.



HANDSOMELY DECORATED 97-Piece Dinner Sets GIVEN FREE TO CANADIAN WOMEN

By Canada's Greatest Home Magazine

"EVERYWOMAN'S WORLD" wants 150 married ladies at the heads of homes to obtain these magnificent dinner sets. You are not asked to spend any money or buy anything in order to obtain one of them for your home. Read this offer if you want one of these sets.

We want every Canadian housewife to become acquainted with "EVERYWOMAN'S WORLD," Canada's greatest monthly home magazine. SINCE NOVEMBER LAST OVER 50,000 WOMEN IN AS MANY CANADIAN HOMES HAVE SENT US YEARLY SUBSCRIPTIONS TO THIS GREAT MAGAZINE, but we are not satisfied. We are determined to have 100,000 subscribers for '14 and are sparing no expense to reward the ladies who will assist us in reaching this mark and who by their advice and suggestions for the improvement of "EVERYWOMAN'S WORLD," will help us to maintain it, not only as the greatest Canadian magazine, but to make it so necessary to every reader that it will become an absolute institution in every Canadian home. A very little effort on your part—just a few minutes conversation with one of your friends—will help us in this work. It is our aim to get you one of these magnificent complete 97-piece dinner sets. This offer is absolutely unique in the history of Canadian journalism.

The wonderful thing about "EVERYWOMAN'S WORLD" is that this great magazine is sold at a subscription price of only 50c. per year. Just think—only 50c. for 12 whole months' subscription.

This Free Sample Copy for You

If you want to gain one of these beautiful dinner sets, write to us to-day and we will send you postage paid, absolutely without charge or obligation, a copy of the current number of "EVERYWOMAN'S WORLD," which we ask you to read over carefully and prove to yourself that it is all we claim for it—the greatest magazine value in Canada. Then take it among your friends and neighbors, show it to them and let them see what a magnificent magazine they can bring into their homes for an expense of only 50c. a year. Get their opinions on it. We want you to tell us what they say about "EVERYWOMAN'S WORLD," and we will send with your copy some very interesting literature telling of many big features that "EVERYWOMAN'S WORLD" will give its readers during 1914.

To qualify for one of these magnificent dinner sets we ask that you secure us only eight yearly subscriptions to "EVERYWOMAN'S WORLD" from among your friends at 50c. each and remit to us the \$4.00 you will have obtained for same.

We will promptly acknowledge each subscription and at once send the current number of "EVERYWOMAN'S WORLD" to your subscribers—the forerunner of twelve big, bright, interesting numbers, they will receive each month for a year to come. This little task will be a pleasure from your own opinions and the conversations and experience you have when getting your eight subscriptions, we will ask you to answer a set of questions we have compiled giving us your advice and suggestions on improvements in "EVERYWOMAN'S WORLD," which we have under consideration for 1914. We want to give our readers what they want, how they want it and when they want it, and we are sparing no effort to make "EVERYWOMAN'S WORLD" to your subscribers the most valuable member of every Canadian home. We cannot go among our people when they subscribe and ask them what they like best about "EVERYWOMAN'S WORLD," or what they would like to see published in this great magazine, so we ask you to answer our questions, which deal with these very points. Thus by telling us just what your friends say about "EVERYWOMAN'S WORLD," and what they like best in it, you will help us to keep it in its position of household favorite.

You can easily give us the information we seek after having spoken to and secured eight new subscribers, for which we reward you handsomely, and it is for the value of these suggestions and your advice to us that these 150 magnificent 97-piece dinner sets are being awarded. "EVERYWOMAN'S WORLD" Dept. 33 12 Front Street East, TORONTO, ONT.



90... 10... 11... 12... 13... 14... 15... 16... 17... 18... 19... 20... 21... 22... 23... 24... 25... 26... 27... 28... 29... 30... 31... 32... 33... 34... 35... 36... 37... 38... 39... 40... 41... 42... 43... 44... 45... 46... 47... 48... 49... 50... 51... 52... 53... 54... 55... 56... 57... 58... 59... 60... 61... 62... 63... 64... 65... 66... 67... 68... 69... 70... 71... 72... 73... 74... 75... 76... 77... 78... 79... 80... 81... 82... 83... 84... 85... 86... 87... 88... 89... 90... 91... 92... 93... 94... 95... 96... 97... 98... 99... 100...

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



sprinkle the top layer well with grated cheese; place in the oven and let cook until browned.

**Creamed Macaroni**

Have a good-sized saucepan of fast-boiling water well salted; drop into it three-fourths pounds of macaroni and cook fast for forty-five minutes, adding at the start an onion stuck with two cloves, also a generously heaped teaspoonful of butter. Remove the onion, drain the macaroni, and replace in the saucepan with four ounces each of grated Parmesan and Swiss cheese, a pinch each of pepper and nutmeg, and a half pint of hot meat broth (preferably veal or chicken) and four tablespoonfuls of cream or rich milk. Cook five minutes, stirring thoroughly, and when the macaroni is "ropy," serve it hot.

**Economy in Cutting Bread**

A successful boardinghouse-keeper cuts all kinds of bread and cake in very small pieces. There is always plenty of each placed on the dining table, and each person can take as many pieces as are needed. The waste of broken pieces of bread and cake on the individual plates is thereby greatly lessened, and the untouched pieces on the serving plates can be utilized for toast and puddings. In even a small family this plan might be pursued to advantage, for it is the habit of many persons to take a large piece of bread and eat only a small part of it. L. M. C., Ohio.

**An Appetizing Meat Loaf**

When I make a meat loaf, I place three hard-boiled eggs in the middle, end to end. When the meat is served, a slice of egg is in the center of each piece. This makes a very attractive luncheon dish. M. C., Rhode Island.

**"Perfect" Mashed Potatoes**

When making mashed potatoes, add the cream and seasoning and whip them until light. Then add two teaspoonfuls of grated onion and juice and whip again. They are simply perfect served in this way. E. G., District of Columbia.

**Marshmallows**

2 tablespoons of granulated gelatine or jelly powder,  
6 tablespoons of cold water,  
2 cups of granulated sugar,  
1 cup of boiling water,  
1 teaspoon of vanilla extract.

Soak the gelatine or jelly powder in the cold water. Boil together the granulated sugar in the water until a little dropped into cold water forms a stiff ball. Pour this boiling syrup over the gelatine or jelly powder and, as soon as it cools, beat the mixture for fifteen minutes. Add the vanilla extract and turn into a deep dish which has been lightly greased and dusted over with corn-starch. When thoroughly set, cut into squares and roll each in powdered sugar.

**Butter-Scotch**

2 cups of sugar,  
Nuts, if desired,  
2 tablespoons of water,  
Butter the size of an egg.

Put all together into a saucepan and cook without stirring, for about fifteen minutes or until a little dropped into cold water is hard and brittle. Pour into a well greased shallow tin, and when nearly cold mark off into squares. Shelled English walnuts, almonds or pecans may be added to the butter-scotch just before it is turned into the cooling pan.

**Chocolate Creams**

White of 1 egg,  
2 tablespoons of cold water,  
Confectioners' sugar,  
6 drops of any desired flavoring,  
¼ lb. of sweet chocolate.

Beat the egg and water together only till mixed; add the sugar till the ingredients form a stiff paste—about a cupful and a half will probably be needed. Work in the flavoring with the sugar, then form into small balls. Grate

the chocolate and put into a cup, over hot water, to melt; dip the balls into it, one at a time, using a fork for the dipping. Lay separately on waxed paper, and, if necessary dip a second time.

**True Lovers' Knots**

2½ cups of flour,  
1 cup of sugar,  
½ cup of butter,  
1 egg,  
1 teaspoon of baking powder.

About ¼ cup of milk,  
Sift the flour and baking powder together; rub the butter into the flour and baking powder with the hands; add the sugar, and mix to a firm dough with the egg and milk. Roll out and cut into strips; twist into the form of knots and bake in a moderate oven until golden brown.

**Mignons**

½ cup of butter,  
½ cup of sugar,  
Yolks of 3 eggs,  
1 teaspoon of baking powder,  
½ teaspoon of cinnamon,  
¼ lb. of almonds, ground,  
½ cup of flour,  
1 teaspoon of vanilla.

Cream the butter and sugar; add the yolks of the eggs and then the almonds ground fine; sift the flour, baking powder and cinnamon together and add to the mixture, with the vanilla. Roll very thin, cut into fancy shapes, brush over with white of egg or milk and sprinkle with granulated sugar. Bake on a greased pan in a quick oven.

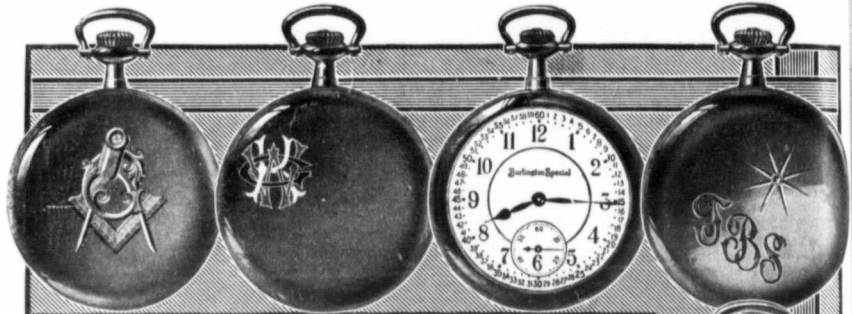
These are a dainty, crisp and very popular confection.

**Quick Mince Pie**

This can be made almost any day with but little work. Run any left-over beef through the meat chopper, mix three times as much apple sauce sweeten and spice to taste, add a tablespoon lemon juice or vinegar, and some raisins and currants. Just enough can be made for one pie. Put between pastry, and bake the same day.

**One Egg Custard Pie**

Beat three tablespoons sugar, one egg and one heaping tablespoon flour and cornstarch together, add salt, three cups milk, and stir thoroughly. Line a pie plate with pastry, and turn in prepared custard. Bake in a moderate oven. Flavor with nutmeg, if liked.



**Just Out! Superb New Ideas In Watch Cases!**

The latest products of the craft. Exquisitely beautiful. Your own initials handsomely engraved on this superb gold strata case. Your choice of *Inlay Enamel Monograms, Block and Ribbon Monograms, Diamond Set, Lodge, French Art, Dragon Designs.* Open face or hunting cases, ladies' or gentlemen's 19 and 16 sizes. A watch to suit every taste. And—DIRECT—at the rock-bottom price.

The masterpiece of watch manufacture—19 jewels—adjusted to the second—adjusted to positions—adjusted to temperatures—adjusted to isochronism.

**Special A Remarkable Special Offer**

For reasons explained in our letter to you (special trade reasons) you can now get direct the Superb Burlington Watch at the rock-bottom price—the same price that even the wholesale jeweler must pay—and in order to encourage everybody to secure this watch at once, purchasers may pay this rock-bottom price direct from us either for cash or \$2.50 a month on this great special offer! We send the watch on approval, prepaid.

**Sent—No Money Down—Prepaid.** Remember, the highest grade watch direct (for special reasons, now) at the same price that even the wholesale jeweler must pay! You risk absolutely nothing—you pay nothing—not one cent—unless you want this exceptional offer after seeing and thoroughly inspecting the watch.

**Send Coupon for Our New Book on Watches**

Learn the inside facts about watch prices and the many superior points of the Burlington over double-priced products. Also illustrations of all the newest up-to-date ideas in exquisite watches, and our letter to you sending the rock-bottom price direct. Just send the coupon, or a letter, or a postal.

**Burlington Watch Company**  
Dist. 7702 287 Carleton St., WINNIPEG, MAN.

**Exquisite New Designs**

in watch cases. Are winning favor everywhere. And wherever the great Burlington Special has been introduced it is noted for its wonderful time keeping qualities. Ask any railroad man what he thinks of the Burlington Special. Ranchmen, engineers and men in all walks of life whose duties require them to put a watch to the hardest test prefer the Burlington because they know they can depend upon it.

**In the U. S. Navy**

Every fighting vessel has the Burlington Watch aboard. The S. S. Connecticut alone has over 200 Burlingtons aboard; the Battleship Georgia has 120 Burlingtons; the new dreadnought Wyoming already has over 100 Watches. Many other battleships, such as the New Hampshire, North Carolina, Minnesota, have over 100 Burlingtons aboard.

Think of the constant vibration, the extreme heat in the boiler rooms, the salt air and the change of climate from the Arctic to the Tropics; if a watch will stand up and give accurate service abroad a man of war it will stand up everywhere.



**Watch Book Coupon**  
Burlington Watch Co.  
Dist. 7702  
287 Carleton St., Winnipeg, Man.

Please send me (without obligations, postpaid) your free book on watches, showing the new designs, including monograms, and full explanation of your cash, or \$2.50 a month offer on the Burlington Watch.

Name.....  
Address.....

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 72 January

"Why does the sheriff want me killed?"

"Nothing personal, I assure you," answered Kent with mock courtesy. "I've already explained that he will not arrest you. But you're the suspect, and if you were put out of the way every one would believe you the murderer. There would be a perfunctory investigation, the whole thing would be hushed up, and the body in Annalaka churchyard would rest in peace—presumably a profitable peace for the sheriff."

"Flat out, Kent, do you know who the dead woman is?"

"Flat out, I don't. But I've a shrewd guess that I'll find out before long."

"From Gansett Jim?"

"No hope there. He's an Indian. What I'm going to see him about now is your safety."

"Now? Where do you expect to find him?"

"In the village, I hope. It wouldn't do for you to come there. But I want you to go to the spot where you met the circus-wagon man, and wait, until I bring Jim."

It was a long wait for the worried artist, in the deep forest that bounded the lonely road along Hawkhill Heights. Ten o'clock had chimed across the hill from the distant village, when he heard footsteps, and at a call from Kent, stepped out into the clear, holding the lantern above him. The light showed a strange spectacle. Kent, watchful, keen, ready as a cat to spring, stood with his eyes fixed upon the distorted face of the half-breed. Terror, rage, overmastering amazement, and the soul-panic of the supernatural glared from the blue-white eyeballs of the negro; but the jaw and chin were set firm in the stoicism of the Indian. In that strange racial conflict of emotions the fiercer finer strain won. Gansett Jim's frame relaxed. He grunted.

"Good boy, Jim!" Chester Kent's voice, at the half-breed's ear, was the voice of one who soothes an affrighted horse. "I didn't know whether you could stand it or not. You see, you didn't shoot Mr. Sedgwick, after all."

"Dun'no what you mean," grunted Gansett Jim.

"And you musn't shoot at him any more," continued the scientist. The tone was soft as a woman's; but Sedgwick felt in it the tenacity of a man ready for any extreme. Perhaps the half-breed, too, felt the peril of that determination; for he hung his head. "I've brought you here to show you why. Pay good heed, now. A man travelling in a wagon was met here, as he says, by a woman—you understand—who questioned him and then went on. He followed the trail through the brush and found the signs of a fight. The fight took place before the death. Here's the lantern. Take his trail from here."

Without a word the half-breed snatched the light and plunged into a by-path. After a few minutes swift going he pulled up short, in an open copse of ground. Hound-like, he nosed ash, and set the lantern on the about the trodden earth. Suddenly he darted across and, seizing Sedgwick's ankle, lifted his foot, almost throwing him from his balance. Sedgwick wrenched himself free and, with a swinging blow, into which he put all the energy of his repressed wrath, knocked the half-breed flat.

"Hands off, damn you!" he growled.

Gansett Jim got to his feet a little unsteadily. Expectant of a rush, his assailant stood, with weight thrown forward; but the other made no slightest attempt at reprisal. Catching up the lantern, which had rolled from his hand, he threw its light upon Sedgwick's forward foot. Then he turned away. Kent whistled softly. The whistle had a purring quality of content.

"Not the same as the footprint, eh?" he remarked.

"Footprint too small," grunted Gansett Jim.

"How many people; two?"

"Three."

"Three, of course. I had forgotten the circus-wagon man. He came later. But, Jim, you see it wasn't Mr. Sedgwick."

"What he follow for?" demanded the other savagely.

"No evil purpose. You can take his trail from the circus wagon and follow that, if you

CHOOSE YOUR GIFTS OF  
**Jewellery and Silverware**  
 FROM THE DINGWALL CATALOGUE

In it page after page of beautiful illustrations show you articles of Fine Jewellery, Watches, Silverware, Brass and Leather Goods, the best which it is possible to buy.

You can choose from this selection pleasantly and at your leisure Wedding or Anniversary Gifts which will give those receiving them the same pleasure felt by you when choosing and sending the different articles. Besides you will in every instance buy at the lowest reasonable price, for we are particularly careful to make sure that not only shall every article we sell through our Catalogue be of fine quality, but also of the best value. To obtain a copy of this book—for you can have one postpaid and free of charge—fill in the coupon below and mail it to us.

**D. R. Dingwall Limited**  
 JEWELLERS WINNIPEG, MAN.

Name.....  
 Address.....  
 C.T. & F.

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

**Mason & Risck Pianos**  
 "FROM FACTORY TO HOME"  
 17 Western Branch Stores

**MUSIC** is no longer a luxury to be understood and enjoyed by a select few! Music has come to be an actual necessity—and

**THE VICTOR VICTROLA**

is one of its foremost exponents to-day.

If you believe in the power of Music to elevate your thoughts and broaden your intellect, to stir your imagination and quicken your emotions, to soothe your mind and lighten your toil, a Victrola is the thing for You!

There are Victor Victrolas in great variety of styles and prices. For as little as \$20 you can secure, **Not a Toy, but an Instrument** that will yield royal returns in pure joy and delight—**A Producer of Music at its Best!**

Small monthly payments will soon make you the owner of the instrument you select. A large stock of records always on hand.

Write for Catalogue C.

**MASON & RISCK LIMITED**  
 WINNIPEG, MAN.

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

**Don't forget that we guarantee our Advertisers**

**KNITTING MACHINES**



Home Knitting is quick and easy with any one of our 6 Family Knitting Machines. Socks and Stockings, Underwear, Caps, Gloves, Mittens, etc.—Plain or Ribbed can be knitted ten times as fast as by hand, and for far less than they cost ready-made.

A child can work our machine. Besides your own family work, you can make good money knitting for others.

6 Illustrated Catalogues—No 633—FREE

Agents wanted in every locality or typewriters and home-money-maker knitting machines. Address—

**CREELMAN BROS.**  
Box 8 Georgetown, Ontario

Mention this magazine when writing advertisers.

**CHALLENGE COLLARS**

Acknowledged to be the finest creation of Water-proof Collars ever made. Ask to see, and buy no other. All stores or direct for 25c.

**THE ARLINGTON CO.**  
of Canada, Ltd.  
66 FRASER AVENUE  
TORONTO

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

**DUNLOP**

"The Original Red Canvas Belt." Holds 46 medals and diplomas for "highest efficiency." Thoroughly waterproof, absolutely endless and jointless. Anti-friction edges. 1/2 greater tensile strength than other belts. D. 17

**THRESHER BELTS**

SEAL OF QUALITY

**TRAVELING SALESMEN**

EARN \$1000 TO \$5000 A YEAR

You are sure to be a salesman in eight weeks by mail and be earning while you learn. No former experience required. Write today for particulars, list of hundreds of good openings and testimonials from hundreds of our students who are earning \$100 to \$500 a month. Address nearest office. Dept. 124

National Salesmen's Training Association  
Chicago New York Kansas City San Francisco

**BIBLE HELPS**

Eminent Bible Students may harmonize the Scriptures by reading our Booklet "About Hell." Based on the latest authorities. The last word on this important subject, with other valuable information. Price ten cents. (To the poor free).

**INTERNATIONAL BIBLE STUDENTS ASSOCIATION**  
89 Alloway Avenue, Winnipeg

Mention this magazine when writing advertisers.

want to satisfy yourself further that he wasn't here. I'll let you have the lantern. Only, remember, now! No more shooting at the wrong man!"

The half-breed made no reply. "And you, Sedgwick. Here's the destroyer. Do you still want to kill him?"

"I suppose not," replied the artist lifelessly.

"Since his design was only against your life and not against your picture," commented Kent with a smile. "Well, our night's work is done." Lifting the lantern, he held it in the face of the half-breed. "Jim!"

"Huh?"

"When you really want to know who made those footprints, come and tell me who the body in Annalaka burying-ground is. A trade for a trade. You understand?"

The eyes stared, immovable. The chin did not quiver. Reaching for the lantern, Gansett Jim, now nine of Indian to one of negro, turned away from them to the pathway. "No," he said stolidly.

As the flicker of radiance danced and disappeared in the forest Sedgwick spoke. "Well, do you consider that we've made a friend?"

"No," answered Chester Kent; "but we've done what's as good. We've quashed an enmity."

CHAPTER XI

Hedgerow House

Answers to the telegrams Chester Kent had despatched arrived in the form of night letters, bringing information regarding the Blairs of Hedgerow House: not sufficient information to satisfy the seeker, however. Therefore, having digested their contents at breakfast, the scientist cast about him to supply the deficiency. The feet of hope led him to the shop of Elder Ira Dennett.

Besides being an able plumber and tinker, Elder Dennett performed, by vocation, the pleasurable duties of unprinted journalism. That is to say, he was the semiofficial town gossip. As Professor Kent was a conspicuous figure in the choicest titbit the Elder had acquired in stock for many years, and as the Elder had been unable to come to speech with him since the inquest (Kent had achieved some skillful dodging), there was joy in the plumber-tinker's heart over the visit. Unhappily, it appeared that Kent was there strictly on business. He did not wish to talk of the mystery of Lonesome Cove. He wished his acetylene lamp fixed. At once, if Elder Dennett pleased.

Glum was the face of the Elder as he examined the lamp, which



**Spring is Almost Here**  
**The "Big Four" Farmer Is Ready**

Each Spring, the "Big Four" farmers have proved that they were ready. Full acreage—well plowed and well seeded—was the proof. Another Spring will soon be here. Again the "Big Four" farmers know that they are ready.

Big Four Tractors are producing results all over the world. There are more Big Fours in successful operation than any other four cylinder Tractor made. The first four cylinder Tractor ever built was a Big Four. Every Big Four represents the combined force of these "year after year" results. We know the Big Four is the very best tractor built. Ask us to prove it.

**Always a good Tractor**  
**The Big Four "30"**

Write to-day for illustrated Catalog  
**Emerson-Brantingham Implement Co. [Inc.]**  
Good Farm Machinery  
Regina, Saskatchewan

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

**Ford**  
THE UNIVERSAL CAR

**Buy It Because**  
**It's a Better Car**

Model T.  
Touring Car  
f.o.b. Ford  
Ontario **\$650**

Get catalog and particulars from Ford Motor Car Company of Canada, Limited, Winnipeg.

SHIP YOUR  
**FURS AND HIDES**  
TO **McMILLAN FUR & WOOL CO.**  
Write for Circular  
**WINNIPEG, MANITOBA**

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.

needed very little attention. It lightened when his visitor observed:

"I've been thinking a little of getting an electric car, to run about here in. There was a neat little one in town yesterday."

"Old Blair's," replied Dennett. "I seen you in it. Known Mr. Blair long?"

"He offered me a lift into town, very kindly. He was a stranger to me," said Kent truthfully, and with intent to deceive. "Who did you say he was?"

"Gosh sakes! Don't you know who Aleck Blair is?"

"Blair? Blair?" said Kent innocently. "Is he the author of Blair's Studies of Neuropterae?"

Elder Dennett snorted. "He's a millionaire, that's what he is! Ain't you read about him in the Fabric Trust investigations?"

"Oh, that Blair! Yes, I believe I have."

Kent yawned. It was a well-conceived bit of strategy, and met with deserved success. Regarding that yawn as a challenge to his vocational powers, the Elder set about eliminating the inhuman indifference of which it was the expression. Floods of information poured from his eager mouth. He traced the history of the Blairs in and out of concentric circles of scandal; financial, political, social—and mostly untrue. Those in which the greatest proportion of truth inhered dealt with the escapades of Wilfred Blair, the only son and heir of the household, who had burned up all the paternal money he could lay hands on, writing his name in red fire across the night life of London, Paris, and New York.

Tiring of this, he had come home and married a girl of nineteen, beautiful and innocent, whose parents, the Elder piously opined, had sold her to the devil, per Mr. Blair, agent. The girl, whose maiden name was Marjorie Dorrance—Kent's fingers went to his ear at this—had left Blair after a year of marriage, though there was no legal process, and he had returned to his haunts of the gutter, until retribution overtook him, in the form of tuberculosis. His father had brought him to their place on Sundayman's Creek, and there he was kept in semi-seclusion, visited from time to time by his young wife, who helped to care for him.

"That's the story they tell," commented the Elder; "but some folks has got suspicions."

"It's a prevalent complaint," murmured Kent, "and highly contagious."

Dennett stared. "My own suspicions," he proceeded firmly. "is that the young feller hasn't got no more consumption than you have. I think old Blair has got him here to keep him out of the papers."

**20 Years' Reputation**  
**Back of**  
**BLUE RIBBON**  
**TEA**

That means high quality all the time and explains why the demand keeps on increasing. **YOU** try it.

Send this advertisement with 25 cents for the Blue Ribbon Cook Book. Write name and address plainly.

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

**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.

**Concrete Grain Elevators**

Are the best grain insurance that you can have against fire or damage of any sort. They are proof against rodents that gnaw their way into ordinary buildings and carry away the farmer's profits. They save storage charges by enabling you to store your own grain until you can

**Obtain Better Prices**

Elevators built of concrete maintain a dry, even temperature. They cannot rot, rust or burn and require no repairs or paint—in short, they are the cheapest kind of elevators the grain farmer can build.

Let us send you the free book "What the Farmer can do with Concrete". It tells all about concrete farm buildings and how to build them, and about dozens of other things that the farmer can build of concrete.

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

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

Making High-Priced Pork while Grinding their own Feed.



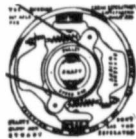
Canadian Hog Motor Co. Ltd. 372 Portage Ave. Winnipeg, Man.

Mention this magazine when writing advertisers.

AGENTS WANTED in Every Town and District

Shipments made from Galt, Ont. and Winnipeg, Man.

Address to Head Office



STRITE GOVERNOR PULLEY CO., 310 S. 8th St., MINNEAPOLIS

Desires Increase Your Sales!

Take a Look at the Strite Governor Pulley. It's the original and the only thing for driving cream separators with gas-tight pistons.

DON'T READ THIS if you have a good job and are satisfied with it; we want a few men who are willing to work at a nice, clean, warm inside job; we will pay good wages, and will secure a position after graduation; we will teach you the barber trade in the newest, clean, modern, hygienic barber school; our instructors are real experienced barbers, who have worked in some of the biggest cities and largest shops in America.

OMAR SCHOOL OF TRADES AND ARTS, 447-483 Main St., WINNIPEG, MAN.

Books \$1.00 Each

- Physical Life of Woman - - - Napheys
Home Cook Book - - Ladies of Toronto
Transmission of Life - - - Napheys
Advice to Wife and Mother - - Chevasse
Chase's Recipes - - - Dr. A. W. Chase
Family Physician - - - Leading Doctors
Gleason's Horse Book - - - Gleason

The Hunter-Rose Co. Ltd.

15 Sheppard St., Toronto, Ont. Mention this magazine when writing advertisers.

THE GRAND TRUNK RAILWAY SYSTEM Double Track Route TO

Detroit, London, Hamilton, Toronto, Montreal and New York via Niagara Falls

Smooth road-bed, polite employees, unequalled 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 7098 260 Portage WINNIPEG

Mention this magazine when writing advertisers.

Erickson Leg

Arms, Braces, Wheel Chairs, SOLD ON EASY TERMS. E. B. Erickson Artificial Limb Co., 14 Wash Av. N., Minneapolis, Minn.

Mention this magazine when writing advertisers

"Publicity is not to Mr. Blair's taste, then?"

"Not's no word for it," declared the human Bureau of Information, delighted at this evidence of dawning interest on the part of the hearer. "He's crazy against it. They say he pays Town Titbits a thousand dollars a year to let young Blair's name alone. I don't believe the old man would hardly stop short of murder to keep his name out of print. He's kind o' loony on the subject."

"You've been to his country place?"

"Only wunst. Mostly they have one o' them scientific plumber fellers from Boston." The Elder's tone was as essence of gall and wormwood. "Wunst I had a job there, though, an' I seen young Blair moonin' around the grounds with a man nurse."

"Quite a place, I hear," suggested Kent.

"Sailor Milt Smith is the feller that can tell you about the place as it used to be. Here he comes, up the street."

He thrust his head out of the door and called. Sailor Smith, sturdy and white, entered and greeted Kent courteously.

"Mr. Dennett was saying," remarked Kent, "that you know something of the history of Hedgerow House, as I believe they call it."

"They call it!" repeated the old sailor. "Who calls it? If you mean the Blair place, that's Hogg's Haven, that is! You can't wipe out that name while there's a man living as knew the place at its worse. Old Captain Hogg built it and lived in it and died in it. And if there's a fryin' bacon out of old Hogg to-day for the things he done in that house."

"How long since did he die?" "Oh, twenty year back."

"And the house was sold soon after?"

"Stood vacant for ten years. Then this rich feller, Blair, bought it. I don't know him; but he bought a weevilly biscuit, there. A bad house, it is—rotten bad!"

"What's wrong with it?" "Men's bones in the brick and women's blood in the mortar."

"Was the old boy a cannibal?" asked Kent, amused by the sea veteran's heroics.

"Just as bad: slave-trader."

"Have you ever been in the house?"

"Many's the time, when it was Hogg's Haven. Only once, since. They do tell that the curse has come down with the house and is heavy on the new owner's son."

"So I've heard."

The old white head wagged bodingly. "The curse of the

The First Complete Riley Set

The publication of an absolutely complete and definitive collection of the works of the People's Poet is the most notable event of the year in the literary world and the happiest event to the enormous public who delight in Riley. Some special features are:

- (1) Two hundred and twenty poems and many prose sketches not previously published in any book.
(2) All poems and prose works arranged in the exact order of their composition.
(3) Notes for each and every poem, of intense interest to all Riley lovers.
(4) The first authorized sketch of the poet's life, told largely in his own words.
(5) Complete indexes and elaborate bibliographies.
(6) Illustrations from rare photographs and manuscripts in facsimile.

Furnished in several leather bindings at various prices, or in cloth, 6 vols., \$12.00 net. Edited by Edmund H. Eitel. For sale by all Booksellers



James Whitcomb Riley

THE COMPLETE WORKS OF

JAMES WHITCOMB RILEY

Biographical Edition

The Bobbs-Merrill Co., Publishers: McLeod & Allen, Toronto

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

CROWN BRAND CORN SYRUP. For Cooking—Candy Making and Table Use. CROWN BRAND should be in every home. Pure—nutritious—a cold weather food product.— Get it at your Grocer's.

THE CANADA STARCH CO. LIMITED MANUFACTURERS OF THE EDWARDSBURG BRANDS

Works: Cardinal and Brantford, Ont.

Offices: MONTREAL, TORONTO, CALGARY, VANCOUVER

Write for Recipe Book

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

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.

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

Don't Fail to Renew Your Subscription Before it is Too Late.

**THE BEST LINIMENT**

OR PAIN KILLER FOR THE HUMAN BODY

**Gombault's  
Caustic Balsam**

IT HAS NO EQUAL

For... is penetrat-  
ing, soothing and  
healing, and for all old  
sores, burns on  
the  
Wounds, Fists,  
Scalds, Chancres, Bells  
Gonorrhea, Corns and  
Human Bunions  
CAUSTIC BALSAM has  
no equal as  
a Liniment.

A  
Perfectly Safe  
and  
Reliable Remedy  
for  
Sore Throat  
Chest Cold  
Backache  
Neuralgia  
Sprains  
Strains  
Lumbago  
Diphtheria  
Sore Lungs  
Rheumatism  
and  
all Stiff Joints

We would say to all  
who buy it that it does  
not contain a particle  
of poisonous substance  
and therefore no harm  
can result from its ex-  
ternal use. Persistent,  
thorough use will cure  
any old or chronic  
affection and it can be  
used on any case that  
requires an outward  
application with  
perfect safety.

REMOVES THE STIFFNESS—STRENGTHENS MUSCLES  
Gombault, Tex.—"One bottle Caustic Balsam did  
my rheumatism more good than \$100 paid in  
doctor bills."  
Price \$1.00 per bottle. Sold by druggists, or sent  
by express prepaid. Write for Booklet B.  
The LAWRENCE-WILLIAMS COMPANY, Toronto, Can.

Mention this magazine when writing advertisers

**PATENTS TRADE MARKS  
AND DESIGNS**

Write for booklet, circulars, terms, etc.

**FETHERSTONHAUGH & CO.**

FRED. E. FETHERSTONHAUGH, F. C. M. E.  
GERALD S. ROXBURGH, E. A. S.C.

Portage Avenue, WINNIPEG,  
209-10 Bank of Nova Scotia

Mention this magazine when writing advertisers



**\$1500 to \$5000 Per Year**

have been made by hundreds of peo-  
ple operating the "American" Drill-  
ing Machines. 40 years' experience,  
85 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 190  
page Catalog Free.

**THE AMERICAN  
WELL WORKS**

General  
Office  
and  
Works:  
AURORA  
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.

blood," he said. "It's on all that  
race."

"But that wouldn't affect the  
Blair's."

"Not Aleck Blair. But the  
boy."

"How so?"

"Didn't you know there was the  
same strain in young Wilfred  
Blair, as there was in old Captain  
Hogg?"

"Hogg's oldest sister was the  
grandmother of this young feller's  
mother, wasn't she?" put in Elder  
Dennett.

"That's right. Wilfred Blair's  
great grandmother."

"And a bad 'un, too, I guess,"  
continued the Elder relishingly.

"Don't you say it!" cried the  
old seaman. "The curse of the  
blood was on her. Strange she  
was, and beautiful, so my mother  
used to tell me; but not bad. She  
came in at Lonesome Cove, too."

"Drowned at sea?" asked Kent.

"They never knew. One day  
she was gone; the next night her  
body came in. They said in the  
countryside that she had the gift  
of second sight, and foretold her  
own death."

"Hum-m," mused Kent. "And  
now the Blairs have changed the  
name of the place. No wonder."

"There's one thing they haven't  
changed, the private buryin'-  
plot."

"Family?"

"Hogg's there, all right, an'  
never a parson in the countryside  
dared to speak to God about his  
soul, when they laid him there.  
His nephew, too, that was as  
black-hearted as himself. But the  
rest of the graves has got no head-  
stones."

"Slaves?"

"Them as he kept for his own  
service an' killed in his tantrums.  
Nobody knows how many. You  
can see the bend of the creek  
where they lie, from the road, and  
the old willows that lean over  
'em."

"Cheerful sort of person the  
late Mr. Hogg seems to have  
been. Any relics of his trade in  
the house?"

"Relics? You may say so!  
His old pistols, and compasses,  
guns, nautical instruments, and  
leaded whalebone whip that they  
used to say he slept with.  
They've got 'em hung on the  
walls now for ornaments. Orny-  
ments! If they'd seen 'em as I've  
seen 'em, they'd sink the dummed  
things in a hundred fathom o'  
clean sea."

"Sailor Smith was cabin-boy on  
one of the old Hogg fleet one  
voyage," explained Elder Den-  
nett.

"God forgive me for it!" said  
the old man. "There they hang;  
and with 'em the chains and—"

"Isn't that lamp finished yet?"  
demanded Kent, turning sharply  
upon Elder Dennett.

**Big Ben**



**Hitch Your Sleeping Schedule  
to Big Ben**

Big Ben will wake you early enough  
for profitable before-breakfast action.  
His gentle get-up call starts the day  
with a flying start on thousands of  
farms.

For your accommodation he rings  
TWO WAYS. He'll get you up by  
degrees or in a hurry. Set him either  
way you wish—to give one long five-  
minute ring, or ten short rings at  
one-half-minute intervals, until you're  
wide awake.

He stands 7 inches tall; is triple-nickel plated  
over a tested implement steel case; the handsomeness  
and trustworthiness in the clock world. He  
has big, bold numerals and hands that show the  
time plainly at a glance, large keys that anyone can  
wind easily, and such a pleasant tone that you are  
glad to get up when he calls.

Big Ben makes early rising easy. He's the  
leader of the early morning brigade. His cheerful

"good morning" ring calls millions of live wires to  
action. Thousands of successful farms are run on  
a Big Ben schedule. He starts you off right in the  
morning and keeps you right all day. From "run  
up" to "lights out" he regulates your day. He'll  
work for 36 hours at a stretch and overtime, if  
necessary. The only pay he asks is one drop of  
oil a year.

He is sturdy and strong—built to last a lifetime.  
Yet under his dust-proof steel coat is the most deli-  
cate "works." That's why his on-the-dot accuracy  
has won him fame.

Big Ben's wonderful sales are due to his having  
"made good." His biggest hit has been with folks  
with the "make good" habit. He stands for suc-  
cess—that's why you'll like him for a friend.

With 3 million families find Big Ben a good  
clock to buy and 20,000 dealers prove he's a good  
clock to sell, it's evidence that he is worth \$3.00 of  
your money. Suppose you trade \$3.00 for him today.

A community of clockmakers stands back of him.  
Their imprint, *Made in La Salle, Illinois, by Wren-  
dow*, is the best alarm-clock insurance you can buy.

**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.

**A Most Excellent Year**

The Great-West Life was favored with the widest  
measure of public approval in 1913.

Applications for \$27,166,754 of Insurance were received  
—a record amount.

Interest earnings were the best on record and collec-  
tions excellent.

The Business in force now exceeds \$97,000,000.

In short, during a difficult year, many were more  
than ever disposed to consider good Life Insurance.

And the best in Life Insurance is found in the Policies  
of

**The Great-West Life Assurance Company**

Head Office, Winnipeg Man.

Ask for one of the "OLD-TIMER" Calendars.

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



**THE VARNISH THAT GLEENS AND GLEAMS**

*Stephens'*  
**LUMINETTE**

**RAW FURS**

We Pay Highest Values  
Write for Price List  
and Shipping Tags

**Siere Fur Co., Ltd.**  
King and Alexander WWINNIPG, Canada

**WANTED**  
More Workers

AT ONCE, families, sons and daughters to color pictures in the home, for the trade, by a **NEW COLORING PROCESS**. We furnish everything you do the work. We send plain outline pictures which you color and return to us. No experience required. Work is easy and fascinating. Good wages. Work all year round for whole or spare time. No canvassing our travelers sell the goods. Write today for instructions and contract (free) and start work at once.

Highest Award Toronto Exposition, 1912

**Commercial Art Studio**  
316 College St. TORONTO, Canada.

**FREE**  
\$10,000  
IN CASH PRIZES  
Given Away  
FIRST PRIZE \$3000 IN GOLD

This is just a plain business proposition to advertise Mountview, Hamilton's new high class residential district, and is open to every person in Canada. There is no catch or fake about it, and everybody stands an equal chance of securing one of the magnificent prizes. Write today and start on the road to fortune.

ENCLOSE STAMP AND FULL PARTICULARS WILL BE MAILED YOU

**COOKE & GOULDING**  
Federal Life Building  
HAMILTON - ONT

**PATENTS**

**LLOYD BLACKMORE & CO. LTD.**  
Hope Bldg., 63 Sparks St., Ottawa, Ont.  
Write for Free Book of Information.

**J. M. Reid**  
REAL ESTATE & INVESTMENT BROKER  
649 Somerset Block, Winnipeg  
Specializing in Warehouse and Trackage Property

If thinking of locating in Winnipeg, write for list of choice properties.

Mention this magazine when writing advertisers.

"His death is officially expected any day."  
Sedgwick examined his friend's expression with suspicion. "Officially? Then he's very ill."  
"No, he isn't ill at all."  
"Don't you think you overdo this business of mystification sometimes, Kent?"  
"Merely a well-meant effort," smiled the other, "to divert your mind from your own troubles—before they get any worse."  
With a cheering farewell Kent stepped out and into his waiting car.

CHAPTER XII

The Unbidden Visitor

One of Kent's Washington friends once criticized the scientist's mode of motoring, as follows: "Kent's a good driver, and a fast one, and careful; but he can never rid himself of the theory that there's a strain of hunter in every well-bred motor-car."

Cross-country travel was, in fact, rather a fad of Kent's, and he had trained his light car to do everything but take a five-barred gate. After departing from the Nook, it rolled along beside Sundayman's Creek sedately enough until it approached the wide bend where it indulged in a bit of path-finding across the country, and eventually crept into the shade of a clump of bushes and hid. Its occupant emerged, and went forward afoot until he came in view of Hedgerow House. At the turn of the steam he leaped a fence, and made his way to a group of willows beneath which the earth was ridged with little mounds. Professor Chester Kent was trespassing. He was invading the territory of the dead.

From the seclusion of the graveyard amid the willows a fair view was afforded of Hedgerow House. Grim as was the repute given it, it presented to the intruder an aspect of homely hospitable sweetness and quaintness. Tall hollyhocks lifted their flowers to smile in at the old-fashioned windows. Here and there, on the well-kept lawn, peonies glowed, crimson and white. A great, clambering rose tree had thrown its arms around the square porch, softening the uncompromising angles into curves of leafage and bloom. Along the paths pansies laughed at the sun, and mignonette scattered its scented summons to bee and butterfly. The place was a loved place; so much Kent felt with sureness of instinct. No home blooms except by love.

(Continued in March)



"The man with a head for his business keeps ahead of his business."

**The Safest Breech-Loading Gun Built!**

**The Marlin** hammerless repeating shotgun is a fine-appearing, beautifully-balanced gun, without any objectionable bumps or bumps no holes on top for gas to blow out through or water to get in; can't freeze up with rain, snow or sleet; its solid steel breech (not a shell of wood) permits a thoroughly symmetrical gun without sacrificing strength or safety; it is the **safest breech-loading shotgun ever built.**

It is **Hammerless with Solid Steel Breech** (inside as well as out)—**Solid Top—Side Ejection—Matted Barrel** (which costs \$4.00 extra on other guns)—**Press Button Cartridge Release**—(to remove loaded cartridges quickly from magazine without working through action) **Double Extractors—Take-Down Feature—Trigger and Hammer Safety.** Handles rapidly; guaranteed in shooting ability; price standard Grade "A" 12-gauge gun, \$22.00; 16-gauge, \$24.00.

Send 2 stamps postage for big catalog describing all repeating shotguns (hammer and hammerless), all *Marlin* repeating rifles, etc. Do it now!

**The Marlin Firearms Co.,**  
111 Willow Street, New Haven, Conn

**12 and 16 Gauge Hammerless "Pump" Guns**  
Six Quick Shots!

**Mackenzie, Brown, Thom & McMorran**  
**Mackenzie, Brown, MacDonald & Bastedo**  
Barristers, Solicitors, &c.

Regina, Saskatchewan, Canada

Norman MacKenzie, K.C. Hon. George W. Brown Douglas J. Thom  
T. Sydney McMorran Hector V. MacDonald Frank L. Bastedo

General Solicitors in Canada for the National Thrasher Manufacturers' Association of America  
General Solicitors in Canada for the American Collectors' Association.  
General Solicitors in Saskatchewan for Fifteen Canadian and American Thrasher and Implement Companies.

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

**The Occidental Fire Insurance Co.**  
Head Office: WAWANESA, MAN.

A. NAISMITH, President R. M. MATHIESON, 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**

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

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 - - - \$54,606,660.00  
Assets over Liabilities - - - - - 887,537.67

THE NUMBER OF FARMERS INSURED, 31st. Dec. 1912, 23,261

The Largest Farmers Mutual Fire Insurance Company in Canada. Agents wanted in unrepresented districts

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

**National Trust Company, Ltd.**  
TORONTO, WINNIPEG, EDMONTON, MONTREAL, REGINA, SASKATOON  
Capital and Reserve, \$3,000,000

The strain and worry of managing Estates will all be borne for you by this Company.

A PRIVATE Executor may die or become incapable of acting before the completion of the Trust. A Trust Company is PERMANENT and will survive the longest Trusts.

This Company's financial strength and expert staff ensure responsible and capable administration.

We act as Trustee, Executor, Administrator, Guardian, Liquidator, Assignee, Financial Agent

Money to loan on Improved Farm Property.

SAFE DEPOSIT VAULTS SAVINGS DEPARTMENT  
D. H. COOPER, Manager, Winnipeg Branch, 323-325 Main Street.  
C. Y. STANIER, Secretary.

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

**CAEW**  
**"BAT"**  
PLUG TOBACCO

THE ROCK CITY TOBACCO CO. LIMITED - QUEBEC.

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





Conducted for the benefit of Dealers, Threshermen and Farmers who have anything to sell or exchange. Five cents a word for each insertion.

NOTICE—A really good Safety Razor set, consisting of Frame, Handle, Six Blades, Strop, Brush, Williams Soap in Nickel-plated Case, all contained in handsome leatherette case, only \$2.00. Buy your own barber. Satisfaction guaranteed. Sterling Supply Company, Toronto.

HOW TO MAKE AN ORCHARD IN BRITISH COLUMBIA—Send ten cents for book written by J. F. Beasley, B.A., the prize-winning B.C. fruit grower. International Securities Company, Ltd., 844 Somerset Building, Winnipeg.

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 getting lowest price. We help buyers locate desirable property free. American Investment Association, 15 Palace Bldg., Minneapolis, Minn.

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.

HOW TO START YOUR GAS ENGINE in the coldest weather, first clip. No hot water (save time). Formula 90c.

P.S. For your information—This Formula is a liquid, very high explosive, will evaporate in coldest weather. I use it myself at all times in cold weather. J. W. BARRON, 2112 Louise, Brandon.

LEARN RAILROADING and earn good wages. Our New Home Study Course is all you need. Write for particulars. Address Shaw's Railroad and Telegraph School, 395 Yonge St., Toronto.

OLY-ACETYLENE WELDING—Save your cracked or broken castings from the scrap heap. We weld cylinders, crank shafts, gears, levers, etc., retain original form and strength at a small cost. Metal added to worn-out parts. All metals welded satisfactorily. The Manitoba Welding & Manufacturing Co., 624 Princess Street, Winnipeg.

FOR SALE. We have on hand at present a very fine 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 repaired 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 44x72, rebuilt. With all connections. 1—32x54 Avery Separator complete, just rebuilt. 1—36x91 Avery Separator to be rebuilt complete. 1—Avery 30 H.P. double undermounted engine. 1—30 H.P. Northwest engine, not rebuilt, cheap. 1—J. I. Case steel, 42x60 separator complete with all attachments. 1—42x70 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 fix you out with almost anything you want, either in new or second hand goods.

HAUG BROS. & NELLEMOE CO., Ltd. WINNIPEG.

Mention this magazine when writing advertisers.

BUYERS, ATTENTION! THE GEORGE WHITE & SONS COMPANY LIMITED, BRANDON, MAN.

- ENGINES 2—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. Brandon Cornell, Portable. \$490.00 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—36x56 Feahie separator, all attachments. \$ 300.00 2—32x56 Great West separator, all attachments. \$ 200.00 1—36x50 Great West separator, all attachments. \$ 200.00 2—White Challenge separators, thoroughly rebuilt, all attachments. Each \$ 90.00 Write us re new goods—We have the best.

FOR SALE.

- 15 Horse Case Simple Portable Engine. No. 20540 15 Horse Case Simple Portable Engine. 15833 15 Horse Compound Portable Engine. 13426 15 Horse Simple Traction Water Pump. 323 16 Horse Portable Sawyer-Massey. 8299 20 Horse Portable Sawyer-Massey. 1419 20 Horse Simple Traction Sawyer-Massey. 1116 20 Horse Compound Traction Engine, Case 7936 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.

LEARN TELEGRAPHY and railroad work. Result is good wages. Take our inexpensive Home Study Course and get ready. Sample lesson free. Shaw's Railroad and Telegraph School, Yonge and Gerrard, Toronto.

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—A Cuddy steering device for a 20 H. P. International Gasoline Engine. Quite new. Terms: \$35 f.o.b. purchasers shipping point. Box 34, Pelly, Sask.

A SIX CYLINDER ENGINE—If you have a new Six Cylinder Gas Engine get an engineer that knows his business, and keep it new. Address, Six Cylinder, Box 186, Wapella, Sask.

FOR SALE—25 H.P. Gas Tractor in excellent condition, price \$800 or 300 acres of back-setting. James Myers, Bowell, Alta.

FOR SALE—30 H.P. Rumley Steam Plowing Engine, entirely rebuilt and repainted by the Rumley Company. Good as new. Located in Canada. Will pay freight to your town. Address, R. A. Caswell, Cherokee, Iowa.

COMPLETE THRESHING OUTFIT—25 H.P. Case engine, 40-62 separator, newly new, also tank, cook car, trucks, tender, eight bottom gang, packer, everything to go to work, all in fine condition; also half section of good land, all steam plowed, 1/2 mile from siding and four miles from two good towns, with improvements. Will sell cheap all or part of the above. Write Box 40, Carleton Place, Alberta.

IMMORTALITY CERTAIN—Swedenborg's great work on "Heaven and Hell and the Life After Death" 400 pages, only 25 cents, postpaid. W. H. Law, 456 G. Euclid Ave., Toronto, Ont.

POSITION WANTED—As Engineer on gasoline plowing and threshing outfit, experienced. Can send references. Rumley gas pull, or Pioneer preferred. Start early spring—stay till freeze up. A lumbar, Apply, stating wages, to Lew. F. Harrier, Elbow, Sask.

Mention this magazine when writing advertisers.

ALFALFA GRASS, CLOVER AND ROOT SEED—Garton's catalog contains some surprising information about these seeds. Write to-day. Garton Pedigree Seed Company, Ltd., under new management of, Harris McFayden, Farm Seed Expert, Winnipeg, Manitoba.

HAVE YOU HEARD ABOUT SEGER OATS—The new breed introduced from Sweden? It certainly does wonders. Get to know about it. Write, Garton Pedigree Seed Company, Ltd., under new management of, Harris McFayden, Farm Seed Expert, Winnipeg, Manitoba.

GARTON'S ABUNDANCE OATS—Won world's championship Tulsa, Okla. They weighed 71 pounds per measured bushel. Write for free booklet describing how farm seeds are bred up, from Garton Pedigree Seed Company, Ltd., under new management of, Harris McFayden, Farm Seed Expert, Winnipeg, Manitoba.

FOR SALE—Cockshutt Engine Gang, 10 furrows, 14-inch. Stubble and breaking buttons. Good order. Will sell cheap. R. A. Brodie, Pierson, Man.

WANTED TO TRADE—A 35 H.P. steam tractor and a 10-bottom Cockshutt plow for cattle or horses. Outfit guaranteed in first class shape. J. F. Crosby, Warrington, Man.

FOR SALE—Five 30 H.P. Big Four traction engines, latest model, nearly new. Will sell at a great sacrifice and on easy terms to suit the purchaser, providing collateral furnished is satisfactory. Apply McK., c/o Canadian Thresherman and Farmer.

EXPERIENCED STEAM ENGINEER—Wants job for season on plowing outfit. Have final traction certificate for Alberta and Saskatchewan. Arthur Calh, Pochomas, Iowa, U.S.A.

WANTED—Six furrow sod breaker engine plow. Cockshutt preferred, cheap. S. E. Nizer, Praelate, Sask.

GOLD RAIN OATS—The wonder bred direct from Prof. Nilsson's wheat plant breeding establishment last year yielded over 100 bushels per acre. Was touched by early frost when Marquis was cut six inches. You can get a catalogue about it from Garton Pedigree Seed Company, Ltd., under new management of, Harris McFayden, Farm Seed Expert, Winnipeg, Manitoba.

FOR SALE—Bargain. Established machinery repair business, containing necessary machinery tools and equipment, one of Manitoba's oldest and best farming districts. Also 8 roomed dwelling, on good property. Reason for selling, owner too old to handle business. Address J. J. Box 3164, Winnipeg, Canada.

MARQUIS WHEAT—Grown on over 2,482 acre seed farm from our own stock seed. Put through our specially constructed seed cleaning machinery. Get genuine seed. Sold subject to money guarantee. Garton Pedigree Seed Company, Ltd., under new management of, Harris McFayden, Farm Seed Expert, Winnipeg, Manitoba.

FOR SALE—20 H.P., I.H.C. 1910 gasoline engine, with 8 in. Fleury fan. In first-class condition. Cheap. Cash. Fletcher Bros., Eastbrook, Sask.

EXPERIENCED GAS ENGINEER—Wishes position on plowing outfit for season. Strictly temperate and stable Large engine preferred. References furnished if desired. Apply, stating make and size of engine, also highest wages you are willing to pay, to J. R. Hislop, Pelly, Sask.

EXPERIENCED ENGINEER PLOWMAN—Position wanted on Rumley plow. Eight years experience threshing and plowing. Address, Arnold Bros., D'Arcy, Sask.

WANTED—Position as engineer on line traction outfit. Fully experienced. Furnish references. Apply Gus. A. Campbell, 141 James St., Winnipeg, Man.

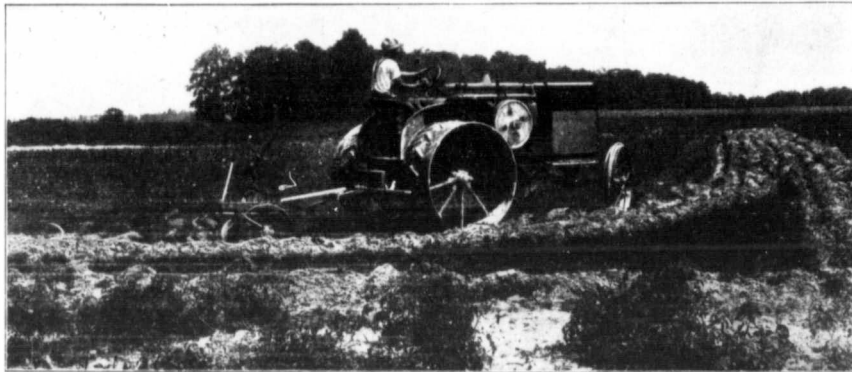
Advertisement for RAW FURS and FREE HALLAM'S TRAPPERS GUIDE. Text includes: 'We pay highest Prices For RAW FURS And Remit Promptly', 'Sixty Thousand Trappers send us their Raw Furs. Why not you?', 'We pay highest prices, and extra charges, charge same day goods are received.', 'Address JOHN HALLAM, LIMITED, 111 Front St. East, TORONTO'.

Advertisement for 'There Is No String To This Pipe'. Text includes: '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 the nominal sum of \$1.25', '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.', 'Weekly Free Press and Prairie Farmer, 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'.

# EVERY MAN'S OUTFIT

## Simplest Of All

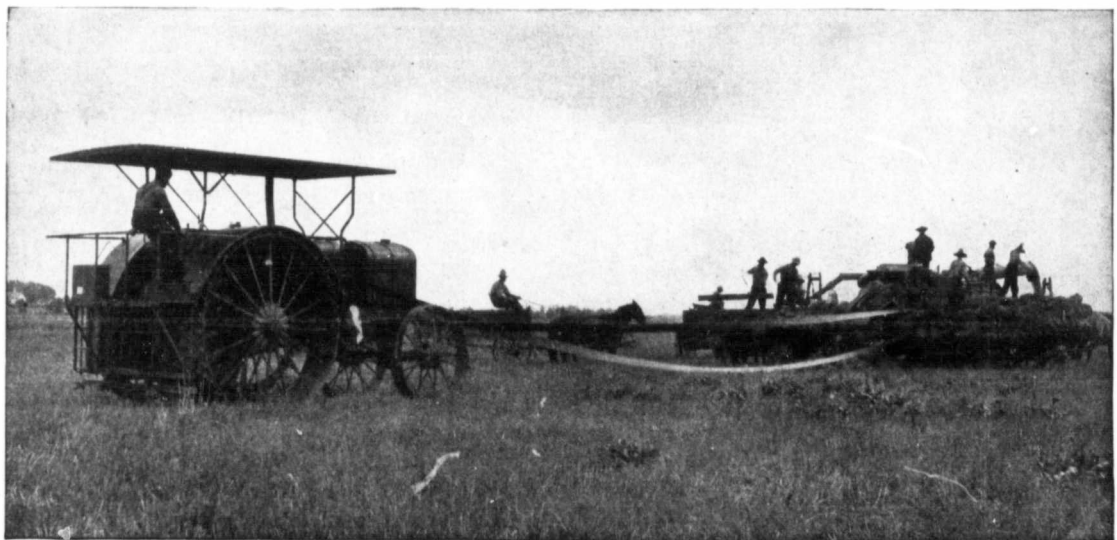
Any man with the most elementary mechanical skill can handle a HUBER TRACTOR with perfect facility. The Huber Company's representatives see that every purchaser is "at home" with his machine and can handle it as an expert before leaving it on the farm. Made of the very finest material that can be used in traction engineering, grip and strength with big fuel tank capacity are distinguishing features of the HUBER LINE. The Engines illustrated cover every need for any size of farms.



Above is the SMALL FARM (15-30) HUBER at work in the field; it is "a dandy" at all sorts of belt work. Adelbert Green & Son, Liverpool, N.Y., say:

"We filled fourteen silos this Fall, most of them sixteen by thirty; and everywhere our 15-30 Huber Tractor was favorably commented upon. The Huber runs as smooth and silent as most steamers.

"We have a four-gang plow, which the engine pulls with ease. Some of the land is rolling and rather heavy clay; but hills or heavy ground do not bother the Huber. We can plow an acre per hour, and estimate the cost as about 35c. per acre for fuel and oil, plowing 9 inches deep in heavy soil. With horses the cost is nearly doubled and with the Huber, one can get the ground plowed when it is fit, and it doesn't eat when not working. The Huber seems to travel on soft and plowed ground with the same ease that it does on hard ground."



Thirty-Sixty Tractor Threshing

Write for Specifications of this big-power tractor. They will surprise you. They guarantee the biggest service at the least expense you ever heard of. The "30-60" is matchless as a plowing engine, and it has an unbroken record in road-grading and general haulage on difficult ground. It will pay you to write for our big line of complete illustrated matter before committing yourself to any Engine.

# THE HUBER MANUFACTURING COMPANY

Canadian Office: Arlington and Logan, WINNIPEG, MANITOBA  
Home Office and Factory: MARION, OHIO, U.S.A.

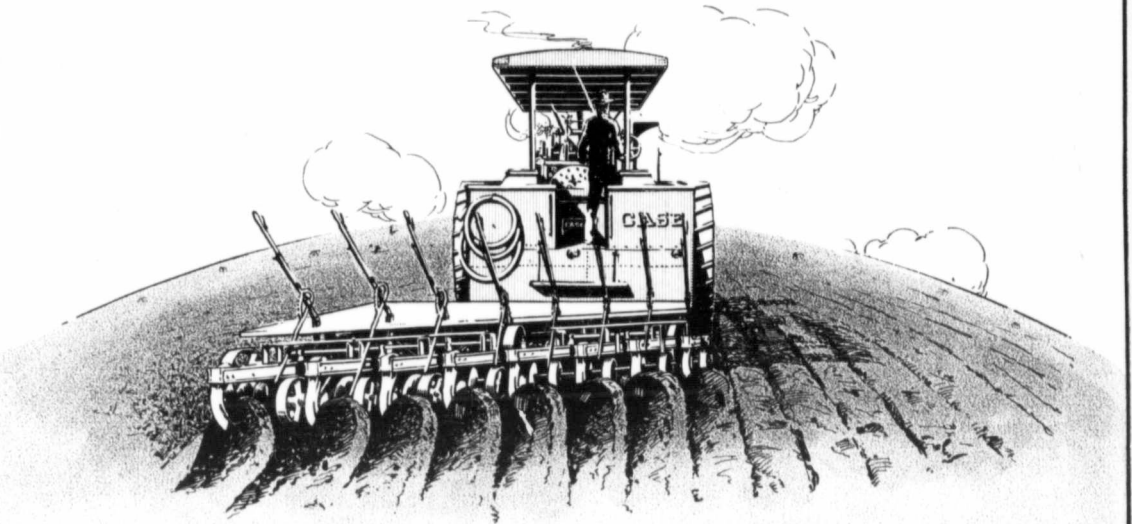
You saw this advertisement in this magazine. Don't forget to say so when writing.



# Profit Ahead



For Users of CASE Power Plowing Machinery



*Case has the Power Plowing Outfit which will net you most profit. No other can equal the prospects held out to you by these proven Case Money-Makers.*

**Case Steam Tractor**  
**Case Gas and Oil Tractors**

**CASE-RACINE**  
(formerly called Case-Sattley)  
**Automatic Lift Heavy and Light Duty Tractor**  
**GANG PLOWS**

All are equally efficient. All give you "Clear View Ahead" in more ways than one. Each type possesses tremendous reserve power. Both types won the Gold Medals of the Winnipeg Motor Contest. Don't these points dovetail into **your** ideas of what **your** Engine should do? Figure your profits from an extended season's use, for, in addition to Plowing, you can do Harrowing, Discing, Seeding, Harvesting, Threshing, Road Grading, Land Clearing, Silo Filling, Hauling. Seventy years of building dependable Farm Power Machinery is your guarantee of a Tractor that will stand up under hardest service, without profit-paralyzing break-downs, and will render the best return on the money invested.

These unequaled Power Plows, sectional in construction and made with 4, 6, 8, 10 and 12 Bottoms, take a business-like hold in any kind of soil. There's a suck to the shares that keeps them plowing at even depth all day long. The patented Case Spring Hitch guides bottoms by obstructions in a way that seems almost human and you need not lift the shares when turning the ends of furrows. These Case-Racine Engine Gangs won easily all Gold Medals and Sweepstakes Honors for plowing at the 1913 Winnipeg Contest, and the only prize at the Wheatland-Illinois Contest. They had the lightest draft, the greatest evenness of draft, gave the best lay to the furrow slices, plowed the straightest and most even furrows. Every year their ever-widening sale makes more and more acres of wild and tame sod turn up new reasons for Case power plowing equipment.

**CASE-RACINE Jr.** A lighter type of Automatic-Lift Tractor Gang Plow than the above but with the same sturdy construction and efficient plowing qualities. Unequaled for the ordinary run of farm plowing and orchard cultivation. Built in 4, 6 and 8 bottoms.

A CASE POWER PLOWING OUTFIT insures your getting the cream of the Spring Plowing in your neighborhood. This outfit is easily transported from one place to another. It means little or no repair bills and greater profit. Decide now and act quickly. Write us for convincing literature and prices.

## J. I. CASE THRESHING MACHINE CO.

(INCORPORATED) 741-791 STATE ST. RACINE, WIS., U. S. A.

CANADIAN BRANCHES, TORONTO, WINNIPEG, SASKATOON, REGINA & CALGARY