

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

WINNIPEG CANADA

SEPTEMBER
NINETEEN FOURTEEN

BETTER FARMING — BIGGER CROPS — BETTER PRICES



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



Hart-Parr Oil Tractor and Hart-Parr Self and Hand Lift Plow doing a Fine Job of Fall Plowing

You Wouldn't Use a Tin Spade for Gardening

Then why do your fall plowing with horses and expect the best results?
Or why neglect it, when a Hart-Parr Power Outfit will do it on time and put more money in your pocket at harvest.

The horse is a weak, unprofitable tool for plowing or for the other heavy power work on the farm. He is costly to buy and costly to keep. He requires almost constant care, especially when working. He creates a lot of disagreeable barn chores that demand your attention after you have put in a hard day in the field.

His power efficiency is low in comparison to what he consumes. Heat and flies make his efficiency still lower. He tires easily and soon wilts under a blazing sun. And worst of all, when you plow with horses, you are merely scratching the surface of the soil, instead of turning up new plant life. You can't get good results that way.

It's different when you do your fall plowing with a

HART-PARR & HART-PARR

-OIL TRACTOR- **SELF AND HAND LIFT PLOW**

A Hart-Parr plowing outfit earns a profit every day you work it. Its first cost is low and its up-keep cost remarkably small. A little care each day keeps it in good condition and ready for hard service when you are ready.

It develops its full rated power on CHEAPEST KEROSENE, works steadily in hottest or coldest weather and never tires even on a 24-hour shift. And best of all, it goes into the field and easily plows 6 to 8 inches deep, turning up new crop fertility, and does this when conditions are just right. There are few delays with a Hart-Parr Power Equipment.

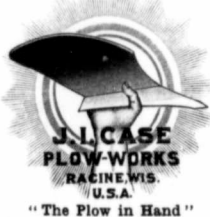
You operate the entire outfit right from the engine platform, save the plowman's wages and board and save yourself a lot of heavy drudgery. This same tractor is also an ideal outfit for the other power jobs on the farm—discing, seeding, harrowing, harvesting, threshing, hauling, etc. In every way it's a profit earning investment.

We have some intensely interesting facts and figures for the farmer who is dissatisfied with the "horse farming" habit and the farmer who is anxious to make his farm pay bigger returns. Write for them to-day.

HART-PARR COMPANY

30 Main Street, Portage la Prairie, Man. 1616 8th Ave., Regina, Sask.
The Chapin Co., 325 8th Ave. W., Calgary, Alta.

THE SIGN
OF
PLOW
EXCELLENCE
THE
WORLD OVER



CASE

The Original and Genuine is

The Standard by which Others
are Judged

TRACTOR GANG PLOWS

September is here—and with it comes the big problem of fall plowing. You want to break up as much of your land as possible within the next few weeks, for you learned long ago that every acre plowed in the fall retains the moisture from the winter snows, and thereby greatly benefits your early crops. In short, fall plowing increases your yield—makes more profits.

The big question, then, for you to decide is: "What style and make of plow shall I buy?"

Of course, you want to plow just as much of your land as possible, and for that reason the progressive farmers in your state have long ago given up the slow, inefficient ox-team methods and have adopted the modern twentieth-century idea of plowing by power. It has been proven time and time again that a

J. I. CASE TRACTOR GANG PLOW

on your farm will replace many horses and men—will save an immense amount of expense—will cover the ground in a fraction of the time when compared to horse-drawn plows—will work at a greater depth, and will increase the yield of your crops.

And this is to be the biggest power farming year in the history of this country, for the warring powers of the Old World will have to look to the United States for their food supply. Europe will need over five hundred million bushels of wheat—two hundred million bushels of corn—two hundred million bushels of oats, and other grains in proportion. There is going to be a market for foodstuffs never before equalled.

Another reason why power farming is rapidly becoming a necessity is, on account of the increased cost of horse flesh, largely due to the present conflict across the waters. The scarcity of farm labor is also becoming a vital problem.

This, then, is a real money-making year for you, provided you buy EFFICIENT equipment that will enable you to make the most of this opportunity. There are big profits to be made if you but go about it in a big way—the power farming way.

Here are some of the features of every J. I. Case Power Lift Engine Gang Plow:

1. They bear our trade mark—"The Plow in Hand"—which is your guarantee of the original and genuine Case plow. They're quality plows to do quality work.
2. Wide Range for Hitch—makes it possible to draw the plow from the middle of the engine, minimizing draft and equally distributing the load on the engine. When one of the bottoms strikes an obstruction that it cannot ride over, the break pin gives way, allowing the bottom to pivot or swing upward, thus preventing breakage of share or bending of beam.
3. Control of bottoms—by power has been secured by very simple device in the J. I. Case Power Lift Engine Gang Plow. Simply pull a rope, and any pair of bottoms is raised almost instantly while the plow is still in motion.
4. Depth never varies. A gauge wheel for each bottom insures uniform depth at all times; without these, the bottoms would go too deep over raised places and too shallow over depressions. Penetration is easily regulated by lengthening or shortening the adjusting rod. Uniform width of furrows is maintained by an ingenious combination of bumpers, line up rod and rear furrow wheel.
5. Extra Brace. An extra brace from heel of landside to heel of share and moldboard is an important feature of all J. I. Case Plow Works breaker and stubble bottoms for engine gangs. This extra brace, together with the regular moldboard brace, makes a very strong support.

6. CAUTION. The stamp of an eagle and the name "Case" on a plow does not make it an original and genuine Case Plow any more than a crow on a dollar will make a genuine dollar. You do not want counterfeit money, neither do you want anything but an original and genuine "Case Plow" if you want "Case" at all.

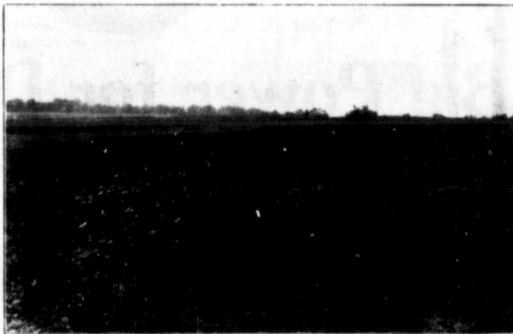
WARNING. When buying your implements be sure that the "Plow in Hand" trade mark shown above, appears on the tool you buy. The "eagle" may be all right on some things but what he does not know about plows would fill a volume. He has never been taught the plow business. Further, in a recent advertisement referring to Tractor Gang Plows, the statement was made that the Case Eagle trade mark would be your guarantee of the genuineness of the machine. The poor bird doesn't know that the plow he is on is not an original and genuine "Case plow"—and what is more, that the plow is not even made in Racine. Do you want the genuine or the counterfeit?

J. I. CASE PLOW WORKS

501-577 Mead St., RACINE, WIS., U.S.A.



Scene Showing Power Lift Control referred to in "3"



Wallis "Cub" 24 H.P. Gas Tractor and J. I. Case Power Lift Engine Gang



Plowing Outfit, Florence, S.D.

A
G
O
O
D
T
R
A
C
T
O
R
A
T



A
R
E
A
S
O
N
A
B
L
E
P
R
I
C
E

Big Power for Deep Fall Plowing

Possibly no other one operation on the farm is more important than deep, early fall plowing. It's the laying of the very foundation of your next year's crop. You must have a perfect seed bed to obtain the best crop results. To make this perfect seed bed, you must plow deep. This requires power, and lots of it—power that's steady and dependable. It's useless to undertake to do fall plowing with horses. It tires them out and proves a costly operation, and then the work is not properly done. Best results are secured by doing this work with an old reliable

AULTMAN-TAYLOR 30-60 GAS TRACTOR

Place your order now for an Aultman-Taylor 30-60 Gas Tractor and save time, labor and money. Do your harvesting and threshing with this big powerful machine and then follow up this work by deep, thorough fall plowing. Then when the rush spring work comes on, your plowing is done. With your plowing done, you need not worry about weather conditions in the spring. You can take this tractor and do your seeding, getting your seed in early, thereby giving it an excellent start. With an Aultman-Taylor 30-60 at your service, you can always get your crops in on record and make every acre of your land yield you big profits.

The Aultman-Taylor 30-60 is not only a good tractor for fall plowing, but it is just as efficient for numerous other power operations on the farm. For belt work, such as silo filling, saw milling, corn shelling, threshing, etc., it can't be beat. For road work, such as pulling graders, levelers and hauling road building material, it leads all others. It's the tractor that makes good everywhere, at any kind of work. Let us prove to you what it will do for you right on your own farm. We can prove every claim made for this tractor of tractors. All we ask is an opportunity to show you.

WRITE US TO-DAY. It takes only a few minutes. Use the Coupon below or send us a post card. We want you to get all the information about this big sturdy tractor. Every farmer interested in raising bigger and better crops and reducing production cost should communicate with us. Act now.

THE AULTMAN & TAYLOR
Machinery Company

LOCK BOX No. 64. MANSFIELD, OHIO

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

COUPON

Please send me full information concerning the Aultman-Taylor Gas Tractor

Name.....

P.O.....

Prov.....

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

Ma
Ti
Mac

Ba
Re

H
F

General I
Thresher
General F
Collectors
General B
and Joseph
Six Thresh
Saskatchewan

Pa
&

W
Pace,

Gener



are being
and Shaft
of Surrey,
Home, Mi

Their

are patron
G.C.M.G.,
which he
specially es
for farm

The wor
one and
supplying
physique
About 1.0
points in

Mr. H. C
has recent
Canada, wi
towards th
quarters, I
England, or
of this pag

You
your
worthy

BIG

C
An excel
lot on one
lial streets—
Avenue and
at a

DE

Owner (a la
at a very
payment, I
practically
decorated in
in the park
purchaser m
A splendi
any family
country to
care of Box

**Mackenzie, Brown,
Thom, McMorran,
MacDonald, Bastedo &
Jackson**

**Barristers, Solicitors, &c.
Regina, Sask., Canada**

Norman MacKenzie, K.C.
Hon. George W. Brown
Douglas J. Thom
T. Sydney McMorran
Hector Y. MacDonald, K.C.
Frank L. Bastedo, LL. B.
Edwin Jackson

General Solicitors in Canada for the National
Thresher Manufacturers' Association of America
General Solicitors in Canada for the American
Collectors' Association.
General Solicitors in Canada for eight Thresher
and Implement Companies and in addition for
Six Thresher and Implement Companies in
Saskatchewan.

**Pace, Harrison
& Millar, Ltd.**

**Winnipeg
INSURANCE**

LIVE STOCK
Fire
Accident
Sickness
Automobile
Plate Glass
Liability
Bonds
Tornado

WRITE FOR AGENCY

**Pace, Harrison & Millar
Ltd.
General Agents, Winnipeg**



**The Right
Lads for
Farm Life**

are being sent out by the Biele Farm
and Shaltesbury Homes in the county
of Surrey, England, and the Twickenham
Home, Middlesex.

**Their Majesties the King
and Queen**

are patrons and the Earl of Jersey,
G.C.M.G., is president of the Society of
which the above named homes are units
specially equipped for the training of lads
for farm life.

The work of the Society is an imperial
one and for many years it has been
supplying lads of excellent character and
physique to the farms of the Dominion.
About 1,000 are now settled at various
points in Canada.

Mr. H. G. Copeland, the Secretary, who
has recently been on a tour through
Canada, will be glad to receive donations
towards the Society's work at the head-
quarters, 164 Shaftesbury Avenue, London,
England, or they may be sent to the editor
of this paper.

**You cannot interest
yourself in a more
worthy institution.**

**BIG BARGAIN IN A
CITY HOME**

An excellent seven-roomed house and
lot on one of Winnipeg's favorite residen-
tial streets—within a few yards of Portage
Avenue and all cars—can be purchased
at a

DECIDED BARGAIN.

Owner (a lady) must sell and will sacrifice
at a very low figure for reasonable cash
payment. House has fine basement and
practically new furnace. Just been
decorated inside and out and altogether is
in the pink of condition. No agents—
purchaser may deal direct with owner.

A splendid investment. Ideal home for
any family contemplating moving from the
country to Winnipeg. Address, M. L.,
care of Box 3164, Winnipeg.

ABOUT OURSELVES

HITHERTO, when speaking of "Ourselves," we have represented the feelings and the interests of those who are immediately responsible for the regular appearance of "The Canadian Thresherman and Farmer." In this instance we include not only the publishers but every reader and every citizen particularly of the western area of the Dominion covered by this magazine.

We were living in strenuous times when we last published. Since then conditions of life have been rendered more difficult and the outlook more obscure by the state of war into which our Empire was plunged almost at the moment of last mailing. We have lived through much anxiety and apprehension during these four weeks, but the clouds have broken; we begin to see the silver lining, and the end is in sight.

How long the war may last need not seriously concern us. Our conviction is that the welcome note of "Cease firing" will not be long delayed, but whether near or remote, we who are not in the battle front have a clearly defined duty to wrestle with and it is this: *Toil as we never toiled before, in our fields and workshops, because there are millions looking to us for what they have not the means to produce.*

This is not the hour of the pessimist: Not on your life! If ever we had the power to help the noblest cause that was ever launched in the great republic of men, and incidentally to help ourselves, that hour has come. Even if the prospect did present some ominous features, that were no reason for dismay.

But we have everything to hope for and believe in and nothing to apprehend. We didn't want to fight. We entered into this conflict for the same reason that the Puritans fought with Spain, because Spain wouldn't let the Puritans live at peace with them. We couldn't shake off the war dog till we had taken out his teeth—not only from ourselves but from a little friend whose existence we had promised to protect.

Had we been after anything but what we took the field for, we had every reason to tremble. But there isn't a flaw in our case. The moral stiffening given to it by the wisdom and humanity of British statesmen, has provided all that was needed to settle us in the assurance we are entitled to hold in any act of duty performed. We may in all conscience appropriate the attitude of the Crusader

"Whose strength was as the strength of ten
Because his heart was pure."

In the language of the advertising man, let us "get busy," and cut out a wider circle of activity than we ever mapped out before. The times need us while the immediate future and the distant future will need our products. It is the hour of the century in which we can enrich ourselves, and humanly speaking we are outside the "statute of limitations."



**Take
it
off
with**



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



THE PREMIER COMPANY

THE PREMIER GOODS



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

THE BUSINESS MAN--FARMER

The Business Man-Farmer is the man who makes the most money in these days of close competition and small margin of profit. He manages his farm just as he would a business, uses the most efficient methods, and buys the most modern labor-saving machinery. So far has this kind of farming reduced the cost of raising wheat that the men who still farm in the old way are having a hard time to make expenses.



A SAWYER-MASSEY Tractor will reduce your cost of raising wheat and increase your profits. The SAWYER-MASSEY 25-45 horse power Gas Tractor won the Gold Medal at the Winnipeg Contest last year, and was proven the best Gas Tractor in Canada. SAWYER MASSEY Steam Tractors are known throughout Canada for their honest worth and fine qualities.

Write for our Illustrated Catalogue and the "Sawyer-Massey Chronicle." You should learn more about these machines.

SAWYER-MASSEY COMPANY, Limited

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

Head Office and Factory **HAMILTON, CANADA**

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

SAWYER-MASSEY

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

Sep
 Vol.
 I ma
 vat
 is
 British
 in war
 British
 British
 This i
 we have
 will not
 continu
 is now
 is forced
 far as it
 and we
 selves l
 the subs
 bulletin
 sued by
 paramen
 tia and
 which
 part:
 "Will
 change
 modities
 ly less
 manufac
 cut dow
 "First
 must l
 that the
 weeks o
 will not
 the real
 istics of
 merical
 certain
 is to be
 at the o
 to uncert
 change
 ditions.
 Second
 the past
 the Briti
 fered, as
 stead th
 During
 Great B
 1793 to
 shipping
 and this
 continen
 an attem
 coted by
 Here, for
 by a con
 "Duri
 war and
 enterpris
 all calcul

A MAGAZINE FOR THE CANADIAN THRESHERMAN AND FARMER THE FARM AND HOME

Vol. XIX.

WINNIPEG, CANADA, SEPTEMBER, 1914.

No. 9.

It may have escaped the observation of many people but it is the historic fact that British trade has always thriven in war times, and when we say "British" we mean, of course, the British Empire.

This is a peculiar anomaly that we have every reason of precedent and present indications to believe will not be reversed during the continuance of the conflict which is now in progress. This belief is forced upon us especially in so far as it has reference to Canada and we are happy to find ourselves backed by the substance of a bulletin just issued by the Department of Militia and Defence which says in part:

"Will the interchange of commodities be greatly lessened and manufacturing be cut down?"

"First of all, it must be noted that the first few weeks of the war will not represent the real characteristics of its commercial side. A certain paralysis is to be expected at the outset, due to uncertainty and change of conditions.

Secondly, in the past the trade and shipping of the British empire have not suffered, as a whole from war. Instead they have thriven upon it. During the great war between Great Britain and France from 1793 to 1815, British trade and shipping increased enormously; and this in spite of Napoleon's continental system, which was an attempt to have Britain boycotted by the whole of Europe. Here, for example, is a statement by a contemporary writer:

"During all the operations of war and finance, the gains of our enterprising people were beyond all calculation; however the un-

A Big Market for All We Can Sell

productive classes may have suffered from the depreciation of money and the inequalities of taxation. Our commerce has become more than double its greatest extent during the happiest

Britain was \$350,000,000. For another thing, with all the activity of French warships and privateers, the losses of British shipping were not more than 2½ per cent a year, and probably were

attacker do not exist to-day; the French coast is friendly, German ships have no foreign bases except a few in Africa, which soon will be captured, and German ships are penned up in the North Sea. Yet a hundred years ago, with all these advantages to commerce destroyed, the risk of capture to the British shipowner was only about 2 per cent.

"When conditions have settled down the risk of capture will be simply one more sea-faring risk, probably considerably less than that of colliding with icebergs at certain seasons of the year.

"So far as freight rates are concerned, there is the fact of state insurance. A system of this has been put in force in Great Britain, and if captures do occur the public treasury will bear the greater part of the loss. If steamship rates rise, it will be due to press of business rather than to danger. The powerful competition of the German mercantile marine will be removed and the British mercantile marine will have more business than ever on its hands.

Hostile Nations Cut Off

The next great consideration is the volume of trade which will offer. Here the general fact is that Germany and Austria are cut off from the trade of the whole world. No small part of the goods which they normally sell to other nations must be sold by others. Great Britain, for instance, will cease to buy large quantities of goods from them; some of these other parts of the Empire can supply. We in Canada shall cease to buy great quantities of German and Austrian goods—we shall buy them



"SOME" HORSES. Parade of thorough bred at Russell Fair, 1913, headed off by Hon. George Lawrence Manitoba's Minister of Agriculture (second figure from left in buggy).

years of peace we have known."

"First, as to attacks upon merchant ships by enemy warships or privateers.

"In the great French war, from 1793 to 1815 there was almost incessant war upon the high seas, and for nearly all that period the French devoted their whole energy to commerce destruction. What followed? For one thing, French commerce itself disappeared. In the year ending September 20, 1800, the whole of the direct trade between France and the three continents of Asia, America and Africa amounted to only \$350,000; while that of Great

under 2 per cent at that time.

"Extraordinary facilities for commerce destruction were possessed by the French at that period. An exceedingly large proportion of British trade went up the English Channel, in slow-moving sailing craft, and small vessels could row out in the night from French ports and board them.

"A great share of the commerce of the day was held by the West Indies, and the French and Spanish Islands abounded in those ports and harbors which served as bases for privateers. These special advantages to the

from Great Britain. The total volume of trading in the world will diminish, because so many men are withdrawn from industry, and capital will be absorbed



"Where do we come in?"

in financing the war; but an immense amount of trade will continue and this will be re-arranged. The United States, Japan, China and many other countries will be clamoring for goods which Germany has been supplying. So far as the British Empire is concerned there will be re-distribution of trade rather than diminution. Agricultural produce plainly will command higher prices, and if Canada's basic industry is kept prosperous, the others will have an opportunity to steady themselves."

In this connection the writer would most urgently invite the attention of readers of the "Canadian Thresherman and Farmer" to what might be called an "unexplored remainder"

in Canada's basic industry which deserves the very best consideration at the hands of the farmer who has the slightest interest in or facilities for raising horses.

The wastage in horse flesh that has already taken place in the frightful carnage of the past few weeks is at present beyond all human reckoning. In the depletion of draft and cavalry horses, when all is over it will mean something that will really stagger humanity almost as much as the loss of human life.

Next to nothing will have been done during the progress of the war in attending to the peaceful employment of breeding and breaking horses raised on the continent of Europe, at all events in Russia, Germany, Austria, Belgium or France. All of these have their big army stables and ranches specially set aside for the purpose of raising army mounts.

They also have their thousands of "mixed farmers" who know what is wanted and who make it their business to breed or (what is nearly the same thing) collect and put in condition the different types of horses in demand.

Faking it for granted that the average farmer in Western Canada knows something of the specified requirements in a horse, say for purely draft purposes, as in the horse and field artillery, the ordnance store corps, etc., or for the various "light" and "heavy" cavalry regiments, is it not the most reasonable thing in the world to expect that Great Britain, France and Belgium will in the near future look to the Western plains for all they can

Some eight years ago the writer covered this subject in the newspaper press exactly as he is outlining it now. At that time and since, the only criticism passed on his proposal was that the matter of price—the maximum figure named by the War Office was so unsatisfactory to the farmers they did not think it worth while and that the stock was more valuable to them if used on the farm. But the fact is, the farmers who carry that impression either could not have come in direct contact with the accredited agents of the War Office or they had not presented "the stuff" that was wanted either in character or quantity.

It must be obvious that it

there, they will readily pay the price and take all chances of finishing the animal to fill whatever purpose it is intended for.

Individual farmers and horse men to whom the writer has spoken invariably turn up this obstacle of price while they all agree as to the practically unlimited opportunity it opens up to Western Canada if the money per capita was stated at an encouraging figure. As already suggested, we fear that those farmers who have been scared hitherto by the matter of price have been getting their quotations second hand, from some itinerant dealer and not from headquarters.

However it may have happened and whatever may have been the reserve prices put on army mounts no longer concern us. A state of war makes unexpected bedfellows and upsets all regulations that have been made on the basis of a peace footing. We are giving some of the best of our blood and treasure in these days to preserve our honor and the sanctity of treaty obligations, while incidentally helping several of our neighbors in their fight for national existence.

All of these neighbors, together with the states against whom we are battling, have been among the biggest supply grounds of the world, and as price is always controlled by the relative positions of supply and demand, it can be more readily imagined than expressed what the present state of Europe opens up in the one line of **light draft and saddle horses** used in common by the British army and the war departments of all the continental states.

As to details which will cover the immediate and distant future we cannot yet speak because, in so far as we know, they are not given out. This, however, we are assured of, a large number of serviceable animals must be got somewhere and that in the near future a series of depots will be established at convenient shipping points out west to which small or large consignments may be sent for acceptance. If a farmer is so unlucky as to find



Rushing to Death or Glory—The Scots Greys at Waterloo.

get to replace what is being mowed down in thousands every day while the war continues?

At this point some wiseacre may throw up the "unsatisfactory experience" he had in offering horses to the British Government agents when the Boer war opened a big market, when Canada had nothing really to offer in quantity that was worth while, and when the Government had to accept all manner of unsalted backs from the Argentine Republic, etc.

That, however, was something like fifteen years ago. Western Canada has put on a big weight of flesh since then and what the Boer war called for at the beginning and required at the finish was but a "drop in the bucket" compared to what will be wanted to fill the gap made by the awful carnage of this European conflict.

would never pay the Imperial Government to send a number of men broadcast over the West picking up an odd half dozen here and there. There must be something really worth going to inspect both in numbers and in quality if a satisfactory deal is to be made and in point of fact the reason why we have done so little business with the W. O. is because we haven't taken the pains to find or to raise "the goods."

What the writer stated on the occasion referred to above was that there is no finer market the world over than that opened up by the British Army Stable Code. If a horse has the making of a horse, the men in charge at Canterbury or any other cavalry depot will "spot" it as quickly as the experts of any school of equitation; and if the service is satisfied that the character is

of I
dep
beca
ing al
ho use
the cons
the cava
the fram
house of
These
at this ti
all is th
which or
men to i
to an op
ably nev
ence of
ever long
war may
But ther
ar it wi
as it tak
en civiliz
will see
coterie c
soudre
have pr
it will
he reme
an "ex
species."
When
sounds
"firing."
probably
that this
has been
for the l
If it was
to predi
thing it
this n
fiction of
necessity
under a
circumstanc
have rec
death blo
direct r
this last
Our
horses w
little acc
ment exc
in the ho
suggested
market i
rectly in
campaign
The best
flesh wou
less there
taught to
are any y
the right
there is a
right awa
grow from
continuanc
many yea
whatever
"diplomati
to think t
throw do
on the day
That is
future to
being trai
affect our
horses, th
the open

of his offerings rejected he depend upon it that it is because of any fancy points being absent in the animal but because it hasn't the bone and the constitution. As the boys of the cavalry depot say: "Give us the framework and we'll make a horse of it."

These observations are made at this time because this, most of all is the hour in our history at which one might hope to arouse men to a sense of their nearness to an opportunity that will probably never recur in the experience of any man living. However long and however costly this war may be no one can foretell, but there is this certainty about it: it will be fought just so long as it takes to so thoroughly sicken civilization that "civilization" will see to it that the small coterie of elect scoundrels who have precipitated it will hereafter be remembered as an "extinct species."

When the bugle sounds "cease firing," it will probably mean that this time it has been sounded for the last time. If it was ever safe to predict anything it is that this monstrous fiction of the necessity for war under any circumstances will have received its death blow as the direct result of this last outburst.

Our Canadian horses will be of little account at the present moment except for draft purposes in the home service. It is not suggested that the immediate market is for animals to go directly into the firing line or for campaigning in the war zone. The best we could send in horse flesh would be worse than useless there until they had been taught to stand fire, but if there are any young horses around, of the right type, well broken, there is a good market for them right away. The demand will grow from day to day during the continuance of the war and for many years thereafter, because whatever may be done in talk or "diplomatic exchanges," it is idle to think that the nations are to throw down their tools of war on the day that peace is declared.

That is a bright spot in the future to which every eye is being trained, but it does not affect our point — the need of horses, the opportunity that this need opens up to Western Canada.

Every Acre Under Crop

If ever the West had a bright outlook since it began to raise wheat and oats, surely the prospect that these times opens up needs no coloring. Much has already been written about what Western farmers ought to do just at this time and as soon as the frost begins to skip next spring. We cannot do otherwise than take our part with the general voice and say that every man who has a piece of land that will grow wheat or oats should have it under a crop that may be harvested in 1915.

It is not altogether a cold-blooded calculating purpose to take advantage of the folly or the misfortune of the warring nations. Directly and indirectly the Canadian farmer cannot fail to be immensely benefited by

laden with the golden promise of harvest are made foul with carnage while the imprecations of furious hate or the supplications of mortal agony come to us from men who but yesterday would have given their life to save a life.

It has gone so far already that we are assured there will be an acreage of enforced "summer fallow" on the face of Europe in 1915 which has no precedent in history. And the awful wastage of human life notwithstanding, there will be no falling off in the number of mouths to be fed. Who will fill the bread-basket if the Canadian West more than any other quarter of the globe does not rise to the privilege?

Recently a big draft has been made on the young manhood of Canada to take its place in the

The farmers are doing their duty pretty well. Some of them have proved themselves heroes in 1914. In spite of a drying-out season of unusual severity they have raised 135,000,000 bushels of wheat in



A Young Man with a future.

the three provinces, 179,000,000 of the coarser grains and five-and-a-quarter millions of flax.

Now the acreage of land which has been laid under tribute to do this is a mere bagatelle to what is available, but by some strange fatality in our economic system the idle land is held up, in many cases at a price and on conditions that preclude all possibility of handling it with any measure of financial success.

Isn't this a great time for moving these land grabbers? We read the other day of many hundreds of forfeited tractors which are at this very moment

boarding like so many white elephants in the Canadian repair shops and warehouses of the manufacturers. Are there not a few enterprising hustlers who see a golden opportunity to hire these and rent (if they do not own) a portion of this vast territory of profitable but profit-less land. Would it not prove a decent investment to these hustling engine builders and gang plow makers themselves to get busy with some portion of their great staff of unemployed?

This is a time for energy. The biggest fool, the poorest patriot, in Canada to-day is the listless pessimist who is simply marking time till something turns up. Let us all get to work and turn something up if it is only a cabbage patch in the city back-yard. If every farmer in Canada were to add but five acres to the land he had under crop this year, the total wheat product of the country would be increased by fifty million bushels. Think of it!



Typical French Cavalry—Watering Horses on a long march.

this war, but there is a something of the humanities in his part that he should not overlook.

Apart from the fact that his own cupidity will make a strong pull on his heartstrings, he should remember that he has a humane part to fill in producing what these millions of European homes will be unable to procure for themselves, that staple food stuffs may not only be available but will be on hand at a price which will never bring the blush of shame into the face of our national life.

This is not the time to make a flag of the old adage about the "Ill wind that blows no one good," but we cannot escape from the bare fact that by the most horrible process known to brutes or men, the forces of nature are being held up over the fairest portion of the old world. Where the grain crops that fed millions were gathered is now a sweltering mess of blood and blackened ruin. Those fields,

Every man left in the country who feels that a country worth living in is worth fighting for would also like to shoulder his rifle, but as his place has been wisely assigned him at home—"abiding by the stuff," he has a duty and a business no less imperative than his brother on the firing line.

Let us, therefore, see to it that there is not a square yard of barren sod or summer fallow that we have the means to cultivate that does not bear its crop of some sort of food stuff at the ingathering of 1915. Talk about "bad times"! If war is now making "bad times" for countless thousands of men, women and children, there is no power on earth at this moment so richly endowed and so powerful to help them to better times than the land owners of Western Canada.

We have purposely put the term "land owners" in black letter because they ought to be distinguished from "the farmers,"

THE CANADIAN THRESHERMAN AND FARMER

CANADA'S LEADING AGRICULTURAL MAGAZINE

E. H. HEATH,
PRESIDENT.

E. W. HAMILTON,
MANAGING DIRECTOR

F. C. BRAY, TREASURER



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



(MEMBER WESTERN CANADA PRESS ASSOCIATION)

PUBLISHED MONTHLY BY

J. D. DUTHIE, EDITOR

C. B. FULLER,
FIELD REP.

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

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

SEPT.

"To The Unknown God"

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."

A MAN IN THE STREET said that there was "just the difference between Abe Lincoln and the German Emperor that there is between a man of God and a sanctimonious rotter." This is not complimentary to William the War Wizard. It looks like a most unkindly reflection on one whom millions of people have been accustomed to look upon as God's anointed, a veritable Joshua to whom the Sword of the Almighty had been given as the only symbol of law. But the man in the street does not often hand out compliments or condemnations that have not been fairly and squarely earned. At the outset it never looked as if he had erred in his strictures about William, and as time unfolds its ruthless evidence the case against him grows blacker and still more

Almighty that has been evolved by the human element in "Christianity."

IS CHRISTIANITY PLAYED OUT? men keep asking, and never with greater reason than it is being urged just now when the standard bearers of Christian thought are at each other's throats. The fact is, as a witty son of the church recently said, "Christianity has never really been played in." All down the ages we have been taught to reverence what is for the greater part a ghastly caricature of the Christ. Since the "scholars" incorporated their different schools of theology and dogma, from which no man may diverge with impunity, "Christianity" has blundered along in sorry plight. While the *Christian Life* has never been without a witness, it would be a hollow farce to say that Christian Britain and thrice Godly Germany had ever risen to a real concept of the God of All Good.



THE MAN
Who incarnates the Conscience of the British Empire.

hopeless.

THE PRESS OF BOTH hemispheres is lurid in these days with the gruesome details of war; not imaginary pictures nor even of scenes through the battle smoke of bygone days, but the actual happenings of the very day in which we are writing, indelible records which are now being written in the red blood of men who, and whose ancestors, for centuries have posed as the standard bearers of the van of "Civilization"! We do not reproduce any of these harrowing stories, but we have a duty to perform no less imperative than the man behind the gun. The awful tragedy that is being enacted in Central Europe points to one thing, viz.: that it must be the price of an everlasting peace, and that there can be no letting up until the world has been let in to a real appreciation of the difference between civilization and chartered barbarism.

WHAT MEN NEED TO-DAY more than anything else is *Knowledge*—KNOWLEDGE OF GOD; not God according to the German exegesis or the catechism of any creed; not the "God of Battles" nor the God who is ready to respond to any or every short-sighted human appeal, but just the God of Love, the God of Justice who works in all things through LAW; the God of Infinite Goodness who has no more part in punishing men or sending judgments upon His children than these bring on themselves by the simple act of violating any of his most beautiful and beneficent laws. Had the War-dogs of Europe really known God there would have been no blood-soaked harvest fields in Europe at this moment. They only had the superstitious notion of the

have conversed with enough of eminent and splendidly cultured minds in my time, but I assure you I have heard higher sentiment from the lips of poor uneducated but God-taught men and women, when exerting the spirit of severe yet gentle heroism under difficulties, than I ever met with out of the Bible. We shall never learn to feel and respect our real calling and destiny unless we have taught ourselves to consider everything as moonshine compared with the education of the heart."

Perish the "Scholarly Attainments" of the State subsidized Benhardis and the Herr Professors of the German universities, if their conception of Christian ethics is what they have blatantly set out in these words: "*The efforts directed towards the abolition of war must not only be termed foolish but absolutely immoral, and must be stigmatised as unworthy of the human race.*" And later on from the same mouthpiece of the Teuton war party: "*For Germany,—it must be world power or downfall.*" The book from which these quotations are taken brought the flower of German youth to the side of the war party which has plunged Europe into the melting-pot. Nay it prove the death-knell of the war party and the resurrection of the world's KNOWLEDGE OF GOD.

SUBSCRIPTION RATES

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

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

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

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

Advertising rates furnished on application.



Two Ways To Reduce Plowing Costs

There are two sure ways of reducing the cost of plowing—one is to use an OilPull kerosene tractor and the other is to use a GasPull gasoline tractor.

Each of these tractors has its own particular advantages of design and construction, but they possess in common the one big point you are interested in, the power to reduce the cost of plowing and to increase your profits.

RUMELY OILPULL TRACTOR — **RUMELY** — **RUMELY GASPULL TRACTOR**

Many farmers report that their plowing costs have been cut to 75 cents per acre by using an OilPull or a GasPull tractor. Compare that with the cost of horse plowing and you will readily see the big saving effected by an OilPull or a GasPull.

The OilPull and GasPull can be used night and day through all kinds of weather. Heat or cold does not affect them. The hot weather of early fall need not delay your plowing if you use one of these tractors.

In spring, the work often crowds and a little set-back at plowing time is felt throughout the entire season. A Rumely tractor enables you to plow quickly and save the time that may represent the difference between a good and a poor crop. With an OilPull or GasPull you can plow, roll, disc, harrow and sow all at one operation, or separately.

The plowing can be deep—deeper than you could afford to do it with animal power—and you can work your soil more thoroughly. This enables you to sow your seed in a deep, moist seed bed and to conserve the moisture as a protection against droughts which may come later in the season.

The OilPull and the GasPull require no attention when not in use and can be protected by a cheap shelter. Animal power has its uses, but it cannot compete with the OilPull or GasPull for plowing and tilling the soil.

The OilPull and GasPull are just as good for any belt job, in fact, they are very successful and popular for running threshers, hullers, husker-shredders, balers, silage cutters and for many other jobs. The OilPull is made in two sizes—15-30 horsepower and 30-60 horsepower. The GasPull is made in one size—15-30 horsepower.

For any size farm or power, we have Rumely Engine Gangs and Sanders Disc Plows.

Every Rumely machine is backed by Rumely service—49 branches, 11,000 dealers. Supplies and parts without delay.

See the Rumely man or ask for catalogues.

Rumely Lines:

Kerosene Tractors
Gasoline Tractors
Steam Engines
Threshing Machines
Engine Plows
Brush Breakers
Gasoline Engines
Oil Engines
Baling Presses

Canadian Branches:

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

Rumely Products Company

(Incorporated)

Power-Farming Machinery

Chicago

Illinois

AD 994



MIXED FARMING

MANITOBA - SASKATCHEWAN - ALBERTA

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



No. 7

Red Clover and Alsike

RED clover is a crop that has not received much attention as yet in Western Canada. This is probably partly due to some failures where it has been tried, and a misunderstanding of the nature of the crop, and to the great amount of advertising which alfalfa has received and which has forced other leguminous crops into the background. Red clover deserves to be more widely grown than it is at present. Especially in the districts where the rainfall is fairly plentiful, it will prove a very useful crop. In arid and semi-arid parts of the country, especially where there is no snow during long periods in the winter, it is not likely to be very successful. For such districts alfalfa is much to be preferred.

While red clover has suffered in popularity owing to the great attention which its cousin, alfalfa, is drawing to itself, the two crops are not really rivals in districts where both are successful. They are quite different in their nature and suited to entirely different places in farm management. Alfalfa is a perennial, takes several years to reach its best and lives on indefinitely; red clover is a biennial, produces hay the year after it is sown and dies the following winter. Alfalfa must be sown alone on land that was well cultivated the previous year either by summer-fallow or a hoed crop; red clover may be sown along with a nurse crop, and while it does best on summer-fallowed land, once the land is well accustomed to growing it, it starts under much less favorable conditions. Alfalfa is usually recommended to be sown by itself; red clover is best suited to mixtures along with grasses such as Timothy and Western rye grass. It takes about twice as much seed for Alfalfa as for Red clover, but alfalfa produces nearly twice as large a crop. Alfalfa is consequently a rather hard and expensive crop to start, but when established it lasts long and yields abundantly. Red clover is started more cheaply and easily and requires no great change in the arrangement of farm crops, and no lost seasons in preparing land, but it lasts only two years and produces less per acre. Alfalfa is therefore suited to permanent

meadow, and red clover to a short rotation, where grain, hay, hoed crop, etc., follow each other in rapid succession. For rotation of crops it is especially well suited not only for the reasons already given but because it is unsurpassed in its ability to store up fertility in the form of nitrogen in the soil and to improve the mechanical condition of the soil by the addition of vegetable fibre from its roots.

While red clover is usually a biennial, there are often plants in a field which prove themselves perennial, in nature, by living on from year to year. This tending

he is obtaining seed that is free from noxious weeds. The lower grades should never be used.

Quantity of Seed

Eight pounds per acre is the amount we use on the Experimental Farm when sowing red clover in a mixture with grasses. Ten or twelve pounds is recommended when it is sown alone. Once its success has been proven on a farm it will be profitable to sow this quantity. However, while it is in an experimental stage a more cautious and economical policy is to use smaller quantities. By using three or four pounds per acre along with

ever may be the preceding crop, the land should be in a fine state of tilth before the seeds are sown. To put clover seed among coarse loose lumps of earth is equivalent to throwing it away. The ground must be fine and firm so that the soil will lie closely about the seeds and carry the moisture to them. After the seed is sown the land should be packed to press the particles of earth close around the seed. Clover should be sown shallow; about one inch deep is best. It may be mixed with the grain if necessary, but the best way is to have a separate grass seeding attachment for the drill.

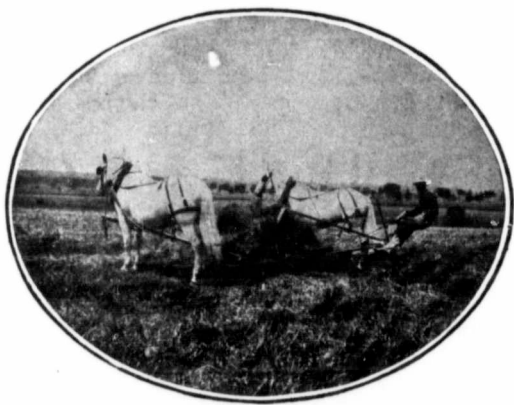
Inoculation

Red clover, like alfalfa and all other members of the legume family, owes its ability to store nitrogen in the soil and to produce such rich fodder, to the bacteria that live on its roots. These bacteria are necessary to the success of any of these crops. When any clover is introduced into new land where it has not grown before, the bacteria should also be put into the soil if the best success is to be attained. The bacteria will gradually establish themselves through the repeated sowing of clover especially if manure is used, but the same results can be obtained more quickly and satisfactorily by the artificial inoculation of the land with the bacteria. This may be done either by sowing or soil from an old red clover field, or by using on the seed a culture prepared at a bacteriological laboratory. Either method is successful and one or other should always be used when clover is sown on a piece of ground for the first time.

Nurse Crop

Red clover may be sown with a nurse crop at Brandon and in all except the driest districts of Manitoba. While the writer cannot speak from actual experience, he would be of the opinion that it would grow with a nurse crop in the Northern parts of Saskatchewan and Alberta. Where there is not enough moisture to start red clover along with a nurse crop, it is doubtful if it will pay to try to grow it at all. The one year's production of hay will hardly justify the loss of a season in getting it started. Under such conditions alfalfa would be preferable as it is more drought-resistant and longer-lived.

Continued on page 37



to become perennial is more pronounced in the West than in Eastern Canada and it is possible that a hardy perennial strain may be developed by the selection of seed from plants of this type. Mammoth red clover is supposed to be a perennial strain of clover, but frequently it is impossible to observe any difference between what is sold under this name and common red clover.

Selection of Seed

As with all other crops the use of pure seed of good vitality is one of the most important points in growing clover. Seed should be obtained from a northern source such as Ontario or the Northern States. Southern seed is likely to produce tender plants that will not stand the winter. Red clover seed in past years was sometimes very foul with weed seeds. It is now subjected to Government inspection and graded. By buying No. 1 grade one can be reasonably sure that

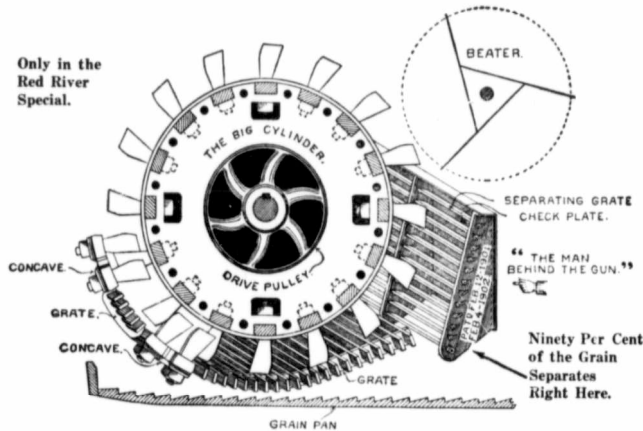
grasses, one may try out what success is possible and gradually establish the growing of clover on his farm.

Preparation of Land

The principal considerations in preparing land are to have it reasonably free from weeds and to have a good supply of moisture. If a thick growth of weeds comes up along with the clover, the weeds will probably choke it out. Where dirty land is to be seeded down it is advisable to summer-fallow it first. If the land is clean and in good tilth and there is plenty of rain, summer-fallowing is not necessary. On the Experimental Farm we have very good results in seeding down after corn. The corn is well cultivated; this leaves the land in excellent tilth and free from weeds. The clover is then sown along with barley, on the corn stubble, without plowing. The field handled this way usually gives us the best catch of clover we have. What-

"The Man Behind the Gun"

Only in the Red River Special.



As the season advances the grain will become more difficult to thresh. You will need to be equipped with the best means for getting good results.

THE MAN BEHIND THE GUN will help you out.

You will find it only in the Red River Special, the only thresher that BEATS OUT THE GRAIN.

The Big Cylinder, The Man Behind the Gun, the Beating Shakers, and the Graduated Adjustable Chaffer are the greatest combination for Threshing and Separating ever built into a thresher.

Note the cuts on this page. Note how the BEATING OUT method used in the Red River Special surpasses the Old Fashioned way.

We have thousands of testimonials like the following:

Patented in the United States and Canada.

Ross, N. Dakota, October 28, 1913.

Mr. W. D. Hartman threshed for us this year with a 32 x 52 Red River Special Separator and did us the best job of threshing we have ever had done. Hartman says one reason your machine saves the grain better than other separators is that the shakers in the Red River Special beat the straw from the bottom, separating the grain from the straw by force instead of depending on the grain dropping out of the straw, as other machines do. You should let every farmer who raises grain know about this. If they knew about the Red River Special they would not let any other machine do their work. We know that Hartman with his Red River Special has saved enough more grain that other machines would waste, to pay our thresh bills, and this is a big thing when crops are poor and prices for grain are low. We are certainly going to wait for the Hartman machine next year.

Robert Graham	Dan Laymond	Henry Lublin
J. H. Chambers	Harley Stotts	Joe Chambers
Hert Klaat	R. M. Chambers	B. F. Hartman.

Deering, North Dakota, November 7, 1913.

This fall I purchased my third Red River Special Separator, a 44 x 64 machine. While I thought it was not possible to build better separators than those I had before I find I was mistaken, for this last one has them all beaten. It will thresh, and thresh good, when other makes are compelled to lay idle on account of dampness. I am willing to stake my reputation as a thresher that I can thresh faster, do better work, and give better satisfaction to my customers with my Red River Special than any one else can with any other make of machine.

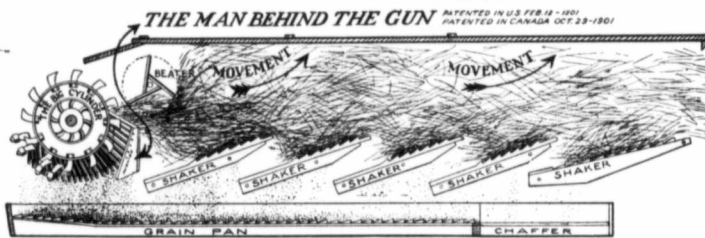
I had no break-downs or delays whatever. Red River Special threshing machinery has the lead in this part of the country and will keep it. My engine is a 25 horse power Nichols-Shepard, has been used ten years and I believe is good for ten years more. Our expense for repairs during the ten seasons has not exceeded ten dollars.

Henry Thompson.

NOTE CAREFULLY THE FOLLOWING ILLUSTRATIONS:



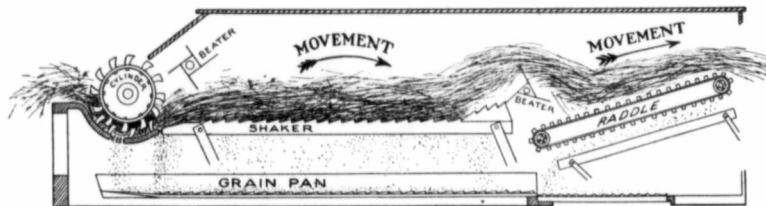
This is the way to Separate by hand with a pitchfork



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



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



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

Send for free Catalog and Thresher Facts.

NICHOLS & SHEPARD COMPANY, Battle Creek, Michigan

In continuous business since 1848

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

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

PRACTICAL TALKS TO THRESHERMEN

Talk No. LXXXIII.

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 all tractors in which the engine shaft is set parallel with the frame it is necessary to use a bevel gear to transmit the power from the engine to the rear

There are a number of good designers, however, who for various reasons have deemed it wise to use spur gears throughout. They are cheaper to manufacture and

gaged. Referring now to the figure it will be seen that power may be transmitted through gears B, E and F or through C, G, E and F. Gears B and C are loose on the shaft, D is a two-faced clutch on a feather key and free to slide to the right or left and engage gear B or gear C. When D engages with B, power is transmitted through the intermediate gear E to the differential gear F and thence through driving pinions M and N to the drive wheels. The tractor is now on high speed and makes two and a fourth miles an hour. The slow speed is obtained by shifting the two-faced clutch D until it engages with gear C, thus locking it to the shaft and setting gear B free. Power is now transmitted through gears C and G to the intermediate shaft L and thence through gears E and F to the differential shaft. The speed, with this arrangement, is one and a half miles an hour and is supposed to be used when going up a steep grade with a load as, for example, plowing on rolling land.

The reverse is obtained by shifting the single faced clutch H until it engages with gear I, clutch D being at the same time in neutral position. Power is now transmitted through gears K-J and I to shaft L. The reverse motion is obtained by the interposition of gear J, which is mounted on a separate shaft in front of and below shaft O. Both clutches are controlled by the

simplest possible elements. The motor is of the horizontal opposed type, having either two or four cylinders, and is mounted on a sliding frame that can be moved forward or back on the main frame work of the tractor by a hand level at the rear of the machine. In the figure the motor is in its extreme rear position, which brings the pinion A on the crank shaft in mesh with the differential gear C. This is the position for forward travel of the tractor. To stop traction, all that is required is to push the motor forward until pinion A is out of mesh with C.

The reverse motion is obtained by the use of the intermediate gear B, which is mounted eccentrically. In the reverse motion gear B is swung upward until it meshes with the differential gear C while at the same time the motor is pushed forward until the pinion A is out of mesh with C and in mesh with gear B as shown in Figure 177. Power is now transmitted through the crank shaft pinion A, eccentric gear B and differential gear C to the drive pinion D. The effect of the gear B is to reverse the motion of the gear C and thus drive the tractor backward. This arrangement of gearing is exceedingly simple and results in a simplification of the entire tractor. It will be noted that there is only one shaft, that on which the differential is mounted, aside

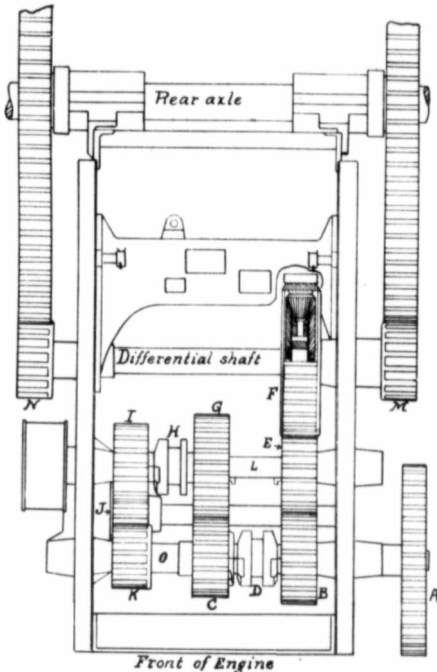


Fig. 175. Plan View of Imperial Tractor, built by Imperial Machinery Co.

axle. The manner in which this is accomplished was described and illustrated in the last lesson. While this style of transmission is unquestionably effective, provided the bevel gears are correctly made, it has nevertheless been attacked on the grounds that there is a considerable thrust against the gears tending to move them along their shafts. There is no question but that such a thrust exists but since ball thrust bearings have come into general use the argument has lost its force. The use of such bearings and theoretically perfect gear teeth for both the bevel gear and its pinion results in a very efficient system. It is the style of construction adopted by all the builders of high grade automobiles and is used by the builders of many other kinds of machinery. Its use may, therefore, be considered good engineering practice.

The fact that some of the largest manufacturers have adopted one style of transmission and some the other would indicate that both styles give satisfaction.

do not require thrust bearings, thus affecting another saving over the bevel gear construction

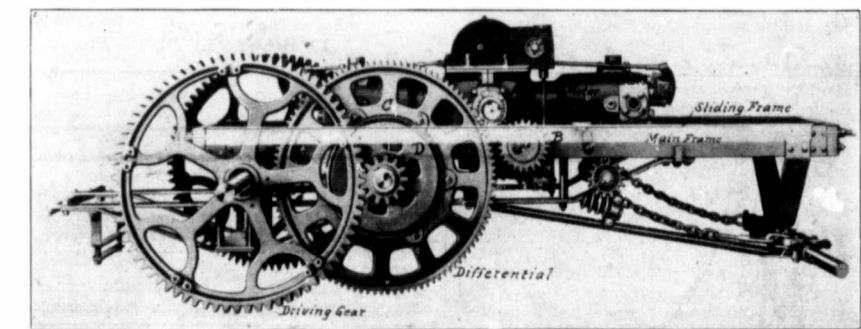


Fig. 176. Side View of Avery Tractor showing transmission and sliding valve.

The two examples of spur gear transmission herewith illustrated and described differ radically from each other and from those described in the last lesson. In figure 175 power is obtained from a four-cylinder opposed, horizontal motor. The pinion on the engine shaft meshes with gear A and revolves loose on its shaft until the clutch, not shown, is en-

gaged. Referring now to the figure it will be seen that power may be transmitted through gears B, E and F or through C, G, E and F. Gears B and C are loose on the shaft, D is a two-faced clutch on a feather key and free to slide to the right or left and engage gear B or gear C. When D engages with B, power is transmitted through the intermediate gear E to the differential gear F and thence through driving pinions M and N to the drive wheels. The tractor is now on high speed and makes two and a fourth miles an hour. The slow speed is obtained by shifting the two-faced clutch D until it engages with gear C, thus locking it to the shaft and setting gear B free. Power is now transmitted through gears C and G to the intermediate shaft L and thence through gears E and F to the differential shaft. The speed, with this arrangement, is one and a half miles an hour and is supposed to be used when going up a steep grade with a load as, for example, plowing on rolling land.

Another style of transmission is shown in Figure 176 in which an effort has been made to reduce the transmission system to the

simplest possible elements. The motor is of the horizontal opposed type, having either two or four cylinders, and is mounted on a sliding frame that can be moved forward or back on the main frame work of the tractor by a hand level at the rear of the machine. In the figure the motor is in its extreme rear position, which brings the pinion A on the crank shaft in mesh with the differential gear C. This is the position for forward travel of the tractor. To stop traction, all that is required is to push the motor forward until pinion A is out of mesh with C.

The reverse motion is obtained by the use of the intermediate gear B, which is mounted eccentrically. In the reverse motion gear B is swung upward until it meshes with the differential gear C while at the same time the motor is pushed forward until the pinion A is out of mesh with C and in mesh with gear B as shown in Figure 177. Power is now transmitted through the crank shaft pinion A, eccentric gear B and differential gear C to the drive pinion D. The effect of the gear B is to reverse the motion of the gear C and thus drive the tractor backward. This arrangement of gearing is exceedingly simple and results in a simplification of the entire tractor. It will be noted that there is only one shaft, that on which the differential is mounted, aside

plidity
by pro
pinions
sever
which
three-q
ter and
miles p
be que
The loy
for plo
of two
an hou
harrowi

The s
trated i
used on
to 80-b
motor r
per mi
used in
either
chines.
velops 7
gears ar
inch pit
ter of o
next ad
inches.
steel an
long by
transmit
of the s
far sucl
tained b
shafting
the cran
inches i
shaft fo
rear axl
diameter
70-brake
sists of
a half b
weight c



Fig. 177.

listed as
The lead
etc., of
very clos
also with
ilar powe



Sweet
is a pla
great dea
years.
the skies
equally
demmed
the truth

plivity of the entire tractor and by providing three crank shaft pinions A of thirteen, fifteen and seventeen teeth respectively, which will give speeds of one and three-quarters, two and one-quarter and two and three-quarters miles per hour. The pinions can be quickly and easily interchanged. The lower speeds are about right for plowing while the faster speed of two and three-quarter miles an hour is desirable for drilling, harrowing or hauling binders.

The style of transmission illustrated in Figures 176 and 177 is used on tractors ranging from 25- to 80-horse power with the motor running at 500 revolutions per minute. The transmission used in Figure 176 is suitable either for heavy or light machines. The one illustrated develops 70-horse power. The gears are four inches face and two inch pitch; that is, from the center of one gear to the center of the next adjacent the distance is two inches. This provides a lever of steel an inch thick and four inches long by about an inch high to transmit the power. Some idea of the strength of parts required for such machinery can be obtained by considering the size of shafting required. For example, the crank shaft is four and a half inches in diameter, the differential shaft four inches, and the hollow rear axle five and a half inches in diameter. The motor is rated at 70-horse power and consists of four cylinders seven and a half by nine inches. The total weight of the complete tractor is

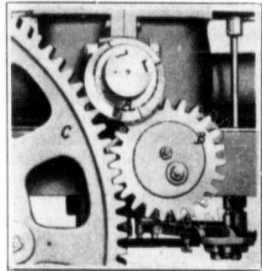
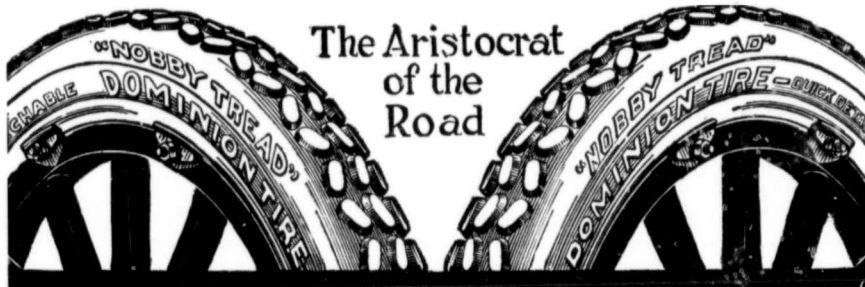


Fig. 177. Reversing Mechanism of Avery Tractor.

listed as twenty thousand pounds. The leading dimensions, weights, etc., of both tractors correspond very closely with each other and also with other machines of similar power and weight.

Sweet Clover

Sweet Clover (*Melilotus alba*) is a plant that has received a great deal of attention in recent years. It has been exalted to the skies by some writers and equally as emphatically condemned by others. Probably the truth lies somewhere about



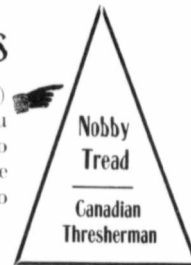
\$100 in Gold

On October 1, 1914

We will present \$100 in gold to the person who sends us the best phrase of ten words or less, descriptive of

Dominion "Nobby Tread" Tires

Mail your answers (together with this coupon) to Advertising Dept., P.O. Box 330, Montreal. You need not have a motor-car or motor-cycle in order to compete, but if you own either, state make and license number. Winning phrase will be announced in Toronto Saturday night, October 10th, and in this paper.



Dominion Tire Company, Limited, Berlin, Ontario

Canadian Consolidated Rubber Company, Limited
Selling Agents, Montreal, P.Q. 23 Branches throughout Canada

NOTE THIS: Dealers who sell Dominion Tires sell the best of everything.

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

half way between. It is a biennial plant, producing a very abundant crop the second season, and then dying. However, it seeds very profusely and unless kept out will reproduce by seed and continue to occupy the land. It is very hardy and vigorous and will grow almost anywhere. In quality it is much inferior to alfalfa, but is claimed by those who use it to be well relished by stock when cut early.

Where alfalfa does well there does not seem to be any need of sweet clover, but it may fill a place where alfalfa is not successful, or may help to inoculate the land for alfalfa in such districts.

It should be sown at the rate of 12 to 15 lbs of seed per acre either with or without a nurse crop. It should always be cut before heading out as it becomes



**"SIMPLE AND STRONG
NOTHING TO GO WRONG."**

The more simple any piece of machinery is constructed, the better, if it will do its work right.

The Practical Force-Feed Oil Pump

is the most simple lubricator ever produced—just two pieces do the pumping, and made adjustable for wear—entire pump can be taken apart and put together again in a few minutes—no ratchet wheel, pawls, etc. to wear and cause trouble.

Pumps any grade of oil no matter how heavy or light—the weather never gets too cold or too hot for this simple lubricator to do its work right.

For seven years it has stood the test—thousands of them in daily use.

You can't afford to waste time and money fooling with a lubricator or common ratchet pump when you can get a "Practical" at the price they are now selling at.

Write for Catalogue 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.

very woody and inedible. It should never be allowed to go to seed as it is a possible danger as a weed.

Compared to that now produced, the early day "canned music" sounds as though it had ptomaine poisoning.



THERE are three things about which I wish to say a few words this month and only trust that every farmer will take time, in the rush of fall work to read what is written. This is not matter written to fill a page, but out of the experience of one who has travelled thousands of miles and secured a comprehensive view of conditions in three provinces.

Just in passing, I hope every farmer in Manitoba realizes that this is the only one of the three prairie provinces where farmers have not had to ask the Government for aid owing to entire failure of crops in certain sections. Manitoba has some poor crops, but it is doubtful if she has one farm that has not produced bread and seed and fully ninety-five per cent of her farms have produced not only bread and seed but a fair amount for sale also. That is a statement worth grave consideration in a year when every bushel of grain has an added value. Again it is the more broken sections of the three prairie provinces, the sections where the land is rolling and there are bluffs of trees, small lakes and more streams that the crops are best; where they have suffered the least from drought and where frosts came too late to do any appreciable harm.

Cut Hay

Hay will be almost as valuable as wheat this winter; it will be needed not only for home consumption and shipment East but there is every prospect also that it will be needed for export. Many hay marshes, which have not been available for years can be cut this fall owing to the unusually dry summer. Every ton should be cut and carefully stacked and if possible baled before snow flies; this latter should depend upon the progress made with other farm work.

Do Not Burn Straw

This is a warning that has been issued many a time and oft, because it is mighty bad farming, but this year the man who burns good straw is burning money. If he is too far from a centre to make the shipping of baled straw profitable, he is not too far to make it profitable to use straw for a portion of the feed for his own stock and ship any hay which he has to spare. Good upland or

extra good marsh hay is being contracted for at the present time at fourteen dollars a ton Winnipeg and even higher, and every man can figure for himself how much he can put up hay for and the cost of freight. There is hardly a doubt that prices will be higher before spring.

Straw stacks should not be left just as they come from the machine. An hour or two of work while the gang is still there will turn a straw pile, from a sponge ready to soak up all moisture into practically a watertight compartment. Whether the farmer feeds the straw himself or bales it for sale, the fact that it has been kept dry and sweet adds to its value.

Plow, Plow, Plow

Every available acre of Western land should be seeded or planted to some crop next spring, and the only way in which that can be done is to do as much plowing as possible this fall.

On the great open plains fall plowing is not favored, the plan being to summer-fallow and disk in the second crop. If that is best for the open plains, that is all right, let them work it that way. For a very great deal of the country, especially the heavy lands in the north, where snow and wet are apt to linger in the spring, fall plowing is good, in fact, next to summer-fallow it is the very best method to pursue, and wherever this is the case plows should run unceasingly until the frost prohibits further work. There is not the slightest doubt about all available grain being needed. If the war ceases before Christmas, which no one has yet had the temerity to suggest, it would make no difference.

September and October are the big seeding months of Europe and to-day the only European country which produces wheat to any appreciable extent, which is not at war is Italy. Italy produces about 200,000,000 bushels, but so large a part of it is macaroni wheat that she usually imports from 25 to 40 million for bread.

With war raging and devastating Belgium, Germany, Austro-Hungary and much of France there will be small chance of anything like the usual amount of land being seeded. While Russian territory is uninhabited at present and may remain so the enormous draft of men into the army will

reduce to some extent her area seeded and it is not likely she will produce more than her own requirements during the coming year.

Europe in times of peace, and her lands cultivated up to a high point, does not come within five hundred million bushels of producing her own requirements in the matter of wheat. Great Britain produces between fifty and sixty million bushels of wheat and imports from two hundred to two hundred and twenty-five million bushels. France produces about three hundred million and usually has about one hundred million for export. Even with the best will and hardest work in the world the French women will not be able to produce on the country available for seeding this fall what the French men and women together have been able to raise in times of peace. It is not likely that France will produce what she needs herself. Austro-Hungary and Roumania together produce about two hundred and eighty millions; heaven alone knows what that distracted country will produce this coming year. Germany produces about one hundred and sixty millions and requires three hundred to feed her people. Canadians will not be interested in what Germany has or has not in the way of bread, but the figures go to show what room there is for export trade.

Of course the United States is the greatest wheat producer of the world and it is not at all unlikely that this season she has already increased her area in winter wheat enormously and will increase her spring wheat areas also; it will with her be a question of whether she will increase her wheat or corn areas the most, but even when she has planted every acre there will be room for all that Western Canada can raise, not only of wheat, but oats, barley and potatoes. Canada does not need to consider European requirement of corn, but she is interested in the fact that Britain has to import sixty million bushels of oats and fifty million bushels of barley. She also has to have nearly a billion pounds of imported beef, most of which she has been getting from the Argentine but much of which she will be glad to take from Canada if it is furnished to

her as chilled meat and not on the hoof.

However that is a matter for future consideration. Even if Canada does not send a hoof to Britain in the next eighteen months it is money in her pocket to feed every steer she can lay hands on.

Good Work

To return to plowing and cultivating land. While it is well to have a large acreage it is infinitely more important to have it as highly cultivated as possible; seed will be dear and it is folly to waste it on poorly tilled fields. Do good work on the land, no matter how much or how little is prepared. Let every man go strong on the crop for which his land has proved best suited. If he can raise better oats or better barley than wheat, plant oats and barley and let the other fellow raise the wheat or vice versa.

Select Seed

Next in importance to well cultivated land is good seed, and good seed will not be so plentiful as last year. Every farmer should select his seed now and he can afford to clean it to the last notch of perfection because whatever he cleans out of it will have a high value as feed whether he feeds it on his land or sells it to someone else to feed. No matter how high prices may go for wheat this year, the man who runs himself short of good seed will be doing something for which he will repent in dust and ashes next spring.

This is going to be a winter when many evenings on the farm may be very profitably spent in hand picking seed. When the hand-picking is done by the wife and daughters it should be on a very definite guarantee that they are to have proper share from the returns, say one bushel an acre or something like that.

In 1913 the Portage Plains gave some very striking examples of the results to be obtained from small fields, from 25 to 75 acres. In one case as high as 60 bushels to the acre was threshed. These fields had been used for corn or potatoes or turnips and were seeded with hand selected seed.

There is no use multiplying arguments or statements, a word to the wise is sufficient, and a thousand words will not help the foolish man or woman to believe

in
the
pre
it.

You
can
say
it

G

E XCF
tho
the
inery is s
of bush
portable

The m
the brush
West, ar
the mill
thresher
the outpu
those into
writer h
sawmill i
the categ

No dot
of this i
competen
subject th
not prett
those who
inery of t
being to
matter fo
ators of t

Also th
see in pr
other mil
change o
mutual he

For the
who are
sawmills i
the portal
name imp
which car
from plac
tye are

The Belt that will Bind the World

in a lasting peace—in a compact of universal prosperity and good will is the belt that supplies the power to the **Threshing Mill**. Let it therefore be a belt that cannot break, slip or wear out prematurely; a belt that will stand the very worst that hard work and hard weather can do to it. Such a bond of guaranteed Service is found in the



Lion Brand

Rubber Belt

OR THE

Maple Leaf

Endless Thresher Belt



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

Gutta Percha and Rubber Limited, WINNIPEG CALGARY

NOT IN ANY TRUST OR COMBINE

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

EXCEPTING the ubiquitous threshing outfit, possibly no form of power machinery is so interwoven in the lives of bush country settlers, as the portable sawmill.

The men hewing homes from the brush and timber areas of the West, are farmers in embryo, the mills are run mostly by threshermen and farmers and as the output is disposed of solely to those interested in agriculture the writer holds that the portable sawmill is entitled to a place in the category of farm machinery.

No doubt some of the readers of this article are much more competent to discourse on this subject than the writer, who does not pretend to offer advice to those who are familiar with machinery of this type, the idea mainly being to supply some reading matter for the farm power operators of the prairies.

Also the writer would like to see in print, the experiences of other mill men, and the interchange of ideas should be of mutual help and interest.

For the benefit of our readers, who are not familiar with small sawmills it may be explained that the portable sawmill is what the name implies: a small light mill which can be easily transported from place to place. Mills of this type are generally run with a

The Thresherman's Saw Mill

By A. W. SMITH, Paddle River, Alta.

traction engine, and fill in the winter months, for the thresherman, when his engine would be idle otherwise.

Some mills are mounted on trucks, and can be set up by merely bedding the wheels in the ground. The objection to this class of mill, is however that it is a difficult matter to set it sufficiently steady, to insure accurate operation, and the lumber cut is often faulty.

In the majority of cases, the mill is taken apart, and re-assembled on reaching its destination, this same operation being very costly, if a man has to buy his experience, for which fact the writer can vouch.

Everything must be absolutely true and level, and if not untold trouble will result, belts will jump, saws will heat, and nothing will be accomplished, except the acquisition of valuable (and expensive) experience. Portable sawmills may be roughly put in two separate classes, those which are always moving from place to

place cutting small bunches of timber on farm lands, and the semi-stationary mill cutting on Government timber and located possibly for two years or more on the same quarter section. The writer's mill being of the latter variety, this type will be dealt with first.

The Dominion Government issues Portable Sawmill Permits to operators upon the payment of \$25.00 ground rental, on each quarter section taken, per annum, and also charges stumpage dues at the rate of 50 cents per thousand feet, board measure.

Permits are granted subject to the recommendation of the Timber Inspector and are for the purpose of supplying only the settlers, living within a radius of 50 miles from the mill.

During the last few months, however, a new ordinance has been issued allowing the mill man to sell his product to settlers and others, outside the 50 mile limit, but an increased stumpage of \$1.50 is called for. The Timber

Department maintains an efficient service of Timber Inspectors, and the mill man must be at all times ready to have his operations scrutinized.

A report must also be sent to the local Timber Office, every quarter, giving full particulars of the logs and lumber cut, sales, stock on hand, etc., and the unbusinesslike mill operator, who fails to keep his books in proper trim, will soon find out that it pays well to have a proper system of accountancy.

It is said that the average small portable mill, gives the Timber Department officials, more work than a dozen of the large operators.

Some of the quarterly reports compiled by the small miller, are truly wonderful productions, and resemble an inscription from the Koran, or a Chinaman's laundry bill, more than a sane business man's account of work done, etc.

No waste is allowed in cutting trees, and all that is merchantable must be taken out and utilized, besides which the sawyer must be careful to send out as little lumber in the slab as practicable.

The winter's work usually commences as soon as threshing is over, depending also a good deal on the settler, as he usually supplies the help necessary to run the outfit.

Trees are cut down, sawn into logs, skidded, and hauled to the mill. Generally one crew conducts both the milling and logging operations, and as soon as a sufficient quantity of logs are on hand, the wheels commence rotating.

Before starting to saw it is well to go over all machinery carefully, and make sure that everything is in good order.

The track and saw frame need particular attention, as the chances are that they have warped out of true during the hot summer.

As soon as everything is oiled (and a sawmill needs the very best, and lots of it) let the machinery run light for an hour or so, and then go over everything again carefully.

Then roll your log on the carriage, and let her hum!

To stand all day in our glorious Canadian winter sunshine, with the throbbing of thirty horsepower under your control, and to hear the big saw screaming its way through the frozen spruce, feels good to your scribe and doubtless many of my readers share the same sentiments.

The fact that your eyes are smarting from sawdust, and that there is a steady stream of the same material, coursing down your spine, cannot alter the fact that it is work for a red blooded man, interesting, healthy and useful. As in every calling, there are many drawbacks, and the chief one in this appears to be the fact that the underlying principles of business are not applied in most cases, resulting in insane competition. When the threshermen and operators of farm power machinery in general adopt systematic book-keeping, and actually know what it costs them to do business, then their profits will be in proportion to the amount of capital and skill invested, but unfortunately at present many men consider that when "the wheels go round," they are making money, when as a matter of fact, they are operating at a loss.

To avoid the editor's wrath, and the perils of the waste paper basket, we will now return to the subject of this article.

The writer's outfit consists of two steamers, one being 17 nominal h.p. and the other twelve, a No. 1 "American" saw rig equipped with friction feed and rope drive, set out knees, spring receder, etc.

A Waterous planer, cut off saw, wood saw, and sawdust conveyor complete the outfit, besides wagons, sleighs, blacksmith's kit, and the usual tools. Have also a 30-44 separator, and 12 inch plate grinder, which are operated during the threshing season by the 12 h.p. engine.

When sawing lumber, both

engines are belted to a counter-shaft, which is really an extension of the saw mandrel, and is a satisfactory arrangement provided the engines are correctly speeded.

The planer and other machinery are placed behind the larger engine, and are run from a wooden pulley or crankshaft.

It takes six men to run the mill itself, cutting on an average ten thousand feet in frozen timber, or twelve thousand feet in green.

The crew consist of canter, sawyer, two engineers, two off-bearers, water team, two logging teams, two loaders, and most important of all, the cook. The two off-bearers pile the lumber, wheel away the sawdust, pile the slabs and generally sleep soundly at night.

The lumber is piled in the various lengths, as close to the mill as possible, leaving room for teams to pull in on both sides.

Dry slabs are laid near wood-saw, and the green are hauled out in the woods, and dumped.

Work commences at 7 a.m. promptly, and the writer (who is sawyer), sees that the saw is filed over night, all machinery properly oiled up, and everything in readiness for the morning.

A stop is made at 9.30 and 3.30 to file saw and oil up, which is also done at noon.

Wages here run about \$1.25 to \$1.50 a day and board, in the winter, and lumber sells for \$10 rough, and \$17 dressed.

Settlers bringing in their own logs pay \$4.50 per thousand feet to have them sawn.

The writer endeavors as far as possible to have a system, and to have plans laid in advance to cover any possible contingencies, so that the stoppage of the machinery does not mean that the crew will be idle. It is to be hoped that this article will induce other saw mill men to publish their experiences in the "Canadian Thresherman and Farmer." Experience certainly teaches, but it is a costly article to buy, so let us use this magazine as a medium for the exchange of ideas.

B. C. Sasaltman.



Up and Doing

Not all city folks are as ignorant of the farmer's surroundings as the farmers sometimes suppose. This was evidenced by an accident in the stay of a young New Yorker on a New England farm.

"Well, young man," said the farmer to his city boarder, who was up early looking around, "been out to hear the haycock crow I suppose," and the sly old chap winked at his hired man.

The city man smiled. "No," said he, suavely, "I've merely been out tying a knot in a cord of wood."

Grinders That Grind

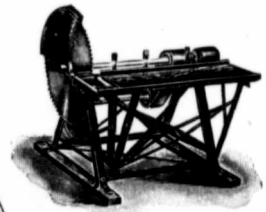


Toronto Grinders do it economically. Some Grinders take a lot of power. Others not so much.

We have the easiest running grinder on the market, because we eliminate friction. This means a saving in cost of fuel. The result, your chop does not cost so much.

It pays to have a Toronto Grinder, and when it is being operated by a Chapman Gasoline Engine, or a Toronto Power Mill, you have the ideal outfit.

The Canadian Saw Frame and Saw gives more service and better service, because you can keep it up to the highest point of efficiency. Pivot boxes on main shaft. Adjustable boxes on second shaft. Write for catalogue, explaining power on the farm and how it can be used.



Have you read about this wonderful Engine? All the parts necessary for operating it are placed on one plate (only twenty pieces.)

If interested write for particulars.

Manufacturers of Windmills, Gasoline Engines, Feed Grinders, Saws, Frames, Pumps, Tanks, Water Basins, Stanchions, Stalls, Well Drills, Pressure Tanks.

Ask for Catalogue C.T.

ONTARIO WIND ENGINE & PUMP CO. LIMITED
223 Liberty Street Toronto, Ont.

Factories—Dundas, Ont. and Toronto, Ont.
Branches—Montreal, Winnipeg and Calgary.



All about Ignition

We have a 32-page book giving full details about the only waterproof, damage proof, economical ignition battery.

COLUMBIA MULTIPLE BATTERIES

can be used for ignition service on tractors, autos, farm engines. Ask your dealer for this book. If he hasn't one, send this coupon to

Canadian National Carbon Co. Limited

Multiple Department
99 Paton Road, Toronto, Ont.

At no cost to me please send me your Information Book.

Name
Address
Dealer
Address

The Eagle Scrub Cutter

WILL CLEAN UP YOUR SCRUB LAND IN A FRACTION OF THE TIME THAT AN ARMY OF MEN AND HORSES WOULD DO IT. It does it positively at a

SAVING OF 75 PER CENT

It costs a remarkably small sum and is of special interest to OWNERS OF TRACTORS IN SCRUB LAND, who can positively and easily make a big source of revenue with this machine. It is simple, strongly built and easily handled. It will cut anything from an inch sapling to trees of 8 or 10 inches clean by the soil.

Write for complete details to

The International Harvester Co. Winnipeg

or THE EAGLE MANUFACTURING CO., Dauphin, Man.

What You Have Waited For and Wanted—

THE STRITE TRACTOR

The all purpose farm tractor has been announced on several occasions, but when it appeared it did not fill the bill. The STRITE TRACTOR, however, after many years of trial and experiment comes to the farmer as a rare all purpose farm tractor, meeting every farm power requirement.

The STRITE TRACTOR can be operated more conveniently and economically than a team of horses. It weighs only 3700 lbs., and does the work of ten or twelve good draft horses. The STRITE TRACTOR will pull three 14-in. stubble plows, 6 to 10 inches deep, depending on the condition of the soil; also binders, mowing machines, grain drills, corn cultivators and manure spreaders, and will also handle small threshing machines and ensilage cutters on the belt.

The STRITE TRACTOR is the most simplified, accessible tractor designed, with all parts standardized and interchangeable. Has three speed selective type, sliding gear transmission, with steel machine cut, bone hardened gears running into a continuous oil bath. All bearings in the



STRITE TRACTOR are of the Hyatt high duty type roller bearings, and ballam anti-thrust bearings, eliminating every ounce of skin friction possible—a construction not to be

found in any other tractor. A tractor without a soft metal bearing. A high duty, low speed motor, with governor enclosed. High tension magneto and circulating pump driven

from same shaft, with cylinders cast in pairs. Equipped with gasoline-kerosene carburetor. One wheel drive, eliminating excessive weight and troublesome differentials. Adjustable spring mounted front axle, which can be adjusted to various conditions, for plowing, handling binders, road work, pulling direct in a line of center draft.

Why You Should Buy a STRITE TRACTOR!

You get more for your money. It plows more ground with less fuel than any other tractor built. Costs less to own, less to operate and maintain. Turns as short as horses and plows. Can be shipped as local freight in box car. You can use your sulky and triple gang plows, and all your standard farm tools. No special equipment to buy. Does not pack the soil. Does all the work of the stationary engine on the belt. Handles the ensilage cutter, silo filler, small threshing machine, etc. Expense is stopped when you pull the switch.

For further information write

BURRIDGE COOPER CO. LIMITED

WINNIPEG and REGINA

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

If the farmer of to-day would be successful he must be a co-worker with nature, aiding her in every possible way in the fulfillment of her laws. To do this he must learn "HOW," "WHEN," and "WHY" he should do certain things, or much that he may do will be of no account on the one hand, while on the other he may destroy such conditions as nature may have established for his benefit, subject to his co-operation. The practical use of this knowledge is the pivot on which works the cost of production—and the cost of production determines success or failure. Economic production is, or should be, the aim of every farmer, even as it is the aim of every successful business man.

Soil culture is the farmers business, and that business is carried on by the use of farm machinery, knowledge of its use being evidenced in the results obtained. If he knows little more about it than how to hitch onto it, well — — —; but if he makes himself acquainted with its action and its results when run under certain conditions, he is then in a position to bring about the most desired results at a saving of time and labor. Let us then get an intelligent understanding of "How, When and Why" we must run the disk in order to co-operate with nature and thus make it do

The Disk Harrow-- Can You Run One Intelligently?

By SAMUEL G. PRATT.

its part in bringing about the desired economic condition.

In the first place we use the disk in soil culture because it aids materially in the process already begun by the plow and packer, in the thorough pulverization of the soil, by which is brought about that physical condition that nature declares is so necessary to plant life, and the reception and retention of moisture, air, light and heat for its continued growth, that is, a fine but firm seed and root bed, capable of receiving and retaining future precipitation and of supplying same with the other elements necessary to the growing crop. If we have not accomplished this as the result of our labor we have not labored intelligently—we either did not know "How" or else worked at the wrong time and under the wrong conditions.

We will assume, however, that we have that fine, firm condition of the soil. It is now necessary for us, by the intelligent use of the disk, to create a cover for the

protection and maintenance of this reservoir, and it is imperative that we do this at once, each and every day as we make progress with plowing, for only at this time can the best results be obtained. Every hour's delay in this operation raises the cost of production and decreases the profits.

As it is the aim of the intelligent stock feeder, by a combination of food stuffs, to produce a balanced ration scientifically prepared, that will meet the needs of his stock and bring about the most economical results in its growth and development, so the soil culturist must seek, by an intelligent cultivation of the soil, to produce a balanced ration that will meet the requirements of the prospective crop. If he allows his plowing to lie over until some convenient time—a week or a month hence—without further cultivation, he is producing conditions which are not conducive to the greatest development, or, in other words, he is supplying the prospective crop with an un-

balanced ration in which there is too much air, heat or light, and too little moisture—a condition brought about by the looseness of the soil and its unprotected state against the ravages of the wind and the sun. Air, heat, light and moisture are all essential to plant life, but each must be regulated to its needs. An over supply of any one may mean disaster. Moisture is the key to the situation. It unlocks and conveys the fertility within the soil to the little feeders which branch out in every direction from the main roots. Without it the soil is dormant.

It will be seen then how imperative it is that we immediately set to work in the preparation of the protective cover, or soil mulch, by which the soil culturist brings largely under his control the regulation of the food supply of the crop.

Many farmers make a practice of hitching the team to the disk and loading it down with rocks, mounting the seat, setting the levers in a certain notch, and half burying the machine in the soil for ten hours per day, without a thought as to what is needful or what will be accomplished toward the desired end. This cannot be termed an intelligent proceeding. Probably nothing has been accomplished by this, but much has been undone, making all prev-

ious work almost worthless. In the intelligent preparation of the ideal soil mulch, which should be from 2 to 3 inches thick, the action of the disk should create one of lumps ranging from the size of a pullet's egg down, and not one of dust, as is so generally understood. This may be accomplished by double-disking—half lapping to the desired depth, the disk cutting through the large lumps and in its rotation lifting and pulverizing the smaller lumps. On examination it will be found that the finer portion of this blanket will be underneath and the coarser part at the top. They will not readily run together and form a crust, as the dust mulch does after a heavy rain. It is thought by some that the purpose of this mulch is to draw moisture, while in reality the contrary is true, the mulch being moisture resistant. The real object is to cut off the action of capillarity—the attraction of water for water—which, being greater at the surface, reduces the water supply and draws on the moisture that may be stored in the subsoil.

The seed and root bed is now in the finest condition, by reason of the mulch, for the conservation of moisture, and also for the reception of further precipitation, inasmuch as the work of cultivation has prepared it so that water readily percolates into it and is held there until it can work its way into the subsoil and be stored for future use. In the original state the greater portion would run off into holes and hollows and but little sink into the soil. Air, light and heat can also more readily act upon the plant life by permeating the soil and administering nourishment.

The foregoing remarks have been intended to apply to the cultivation or "breaking," which is now in readiness for the drill; the mission of the disk has been fulfilled and further culture must be done by other implements until such time as the growth of the crop prohibits more being done.

The next advent of the disk should be in the harvest field immediately behind the binder. This is not always a very convenient procedure, mainly because of the lack of power, but if by any arrangement this can be done its value is inestimable, providing the other work is consistent with it. By double-disking, or if this is not practicable, single-disking, immediately behind the binder the re-establishment of the soil mulch, more or less destroyed during the growth of the crop, is effected, making it possible to retain for the use of the next crop any moisture that may have been left in the soil which now, being exposed to the sun and air, since the shelter of the standing crop

ADAMS WAGONS

"Deliver the Goods"

Over roughest roads—under heaviest loads—you can always rely on Adams Wagons to "get there and back again."

They're built to give MAXIMUM Service with MINIMUM care.

We don't know HOW LONG Adams Wagons last, for one seldom hears of one wearing out.



To give you an idea of the QUALITY of materials used:

Wheels: White oak spokes and felloes. Black birch hubs. Open hearth steel tires.

Axles: Absolutely dry, straight-grained hard maple.

Gearing: White oak bolsters, hounds, reaches and poles. Tough hickory trees and yokes.

Boxes: Best Southern box board sides and ends. Matched yellow

pine bottoms, with maple and oak crossbars rivetted through.

Iron Work: Best open hearth steel.

Painting: Best linseed oil, pure white and red leads. Finest durable varnish. All paints ground in oil and applied by brush. No dipping.

You know the value of different woods. You know the materials used by us are the best money can buy. And you have COCKSHUTT'S word that the construction of every ADAMS WAGON is as superior as the materials used.

ADAMS Service and COCKSHUTT Reputation are two mighty good reasons why your new Wagon should be an ADAMS. Why you should see these Wagons at our nearest Agent's. Why you should write for Catalog of the 20 different Models TO-DAY.

Cockshutt Plow Company, Limited

Winnipeg

Calgary

Regina

Saskatoon

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

has been removed, would soon be lost by evaporation. If the disk is run just sufficiently deep to uproot the stubble, much of it will be incorporated in the soil and form humus, the shelled grain and weed seeds will be covered and in a favorable season sprout and be killed by frost, and if one wishes to do fall plowing, after the crop is removed the soil will be found in an ideal condition—instead of turning over large lumps, which would be the case had no disking been done, the particles will readily separate, showing a fine tilth. If the field is not plowed it should again be double-disked just previous to freeze-up, so that it may be in a fairly rough con-

dition to catch and hold the winter snows.

Spring will again see the disk fulfilling its mission on the stubble field as soon as the frost is sufficiently out of the ground. This work should be done whether one intends to spring plow or not, in order to re-establish the soil mulch which will have become more or less compact by reason of the thaw and rain. Great care must be exercised in getting onto the land. While it is expedient to commence operations at the earliest possible moment much harm may be done by doing so before the land is ready, inasmuch as it will spoil the tilth if worked too wet,

which no amount of work will re-establish. When the soil will not stick to the implement used the time is ripe for action.

When the spring plowing is contemplated, if the foregoing method has been followed, the drag harrow will perhaps be the best implement to use to establish the protective soil mulch, as the soil will be so friable as to not need further pulverization, but only to be smoothed and loosened up on the surface to the required depth. Subsequent spring rains, however, may so pack the surface mulch that further use of the disk may be necessary to re-establish the necessary conditions.

lavi
low th
breakir
may be
same

Sumi
oport
wealth
desire.
helps ti
so that
ther th
not be
great p
the rest
be brot
the mar
much a
help be
dred-fo
a holdi
tiller, a
but is t
resource
season ;
those o
tion of
terial a
conservi
first op
culture
the binc
ciently
may be
with the
and shell
ness to
already
Each an
dition i
should c
time for
ably at t
the earl
disking
seeds or
have spr
these be
than a fa
surface o
as they a
this stag
farmer o
to their
of plant

As the
plowing
those of
perhaps
harrow f
the soil
we must
ditions.
disk will
on any a
required
the mul
inches—
of exces
immediat
evaporate
crust on
the mulch
ing the re
necessary
to break
ing will
shape to
in any
come. T
must be

having got some idea as to how the disk must be used on breaking and stubble a few words may be advisable as to its use on summer culture.

Summer culture is the farmer's opportunity to draw upon the wealth of the soil as he shall desire. As the saying goes: "God helps those that help themselves," so that if the desire goes no farther than its expression, it will not be necessary to make very great preparations to take care of the results, but should that desire be brought into the very life of the man, then he finds that inasmuch as he helps himself so shall help be given—ten, yes a hundred-fold. Summer culture is not a holiday for the land nor the tiller, as is sometimes thought, but is the art of conserving the resources of nature from one season and combining them with those of another for the production of a crop, or creating bacterial action, aerating the soil, conserving the moisture, etc. The first operation toward summer culture should take place behind the binder, double-disking sufficiently deep so that the stubble may be uprooted and incorporated with the soil and the weed seeds and shelled grain covered in readiness to sprout, and the moisture already in the soil conserved. Each and every time this condition is destroyed the disk should come into action until the time for plowing, which is preferably at the latter part of June or the early part of July. Each diskings will destroy any weed seeds or volunteer grain that may have sprouted. At no time should these be allowed to assume more than a faint green tinge upon the surface of the soil. Just as surely as they are allowed to get beyond this stage they are robbing the farmer of his wealth in applying to their use the various elements of plant food.

As the conditions at the time of plowing will be identical with those of spring plowing, it will perhaps be better to use the drag harrow for the establishment of the soil blanket, for this blanket we must maintain under all conditions. From time to time the disk will be necessary, but do not on any account go deeper than is required for the maintenance of the mulch—some two or three inches—except when, by reason of excessive heat the moisture immediately under the mulch may evaporate and by doing so form a crust under the mulch, making the mulch of little use in protecting the reservoir. It may then be necessary to go sufficiently deep to break up this crust. Each diskings will put the surface in fine shape to soak up and take in any precipitation that may come. This is where the culturist must be at hand. He must have

his land always ready to receive the gifts of nature, and as a reward for his diligence mother earth will yield up her bounteous store and make him bless the day that he became a denizen of the soil.

In all things there is a trinity. For the successful culturist it must be "intelligence, consistent effort and diligence." For the unsuccessful culturist it is summed up in "any old way." To distinguish them it will not be necessary to placard for "By their fruits ye shall know them."



Thresher Belts

Here's Where Service Counts

When the Thresher Belt goes wrong at threshing time and another is not instantly available, it simply works havoc. The thresher must be idle, so must the thresher hands, to say nothing of the thresher itself getting away behind schedule, and disgruntled customers on the list.

Wages and other expenses go on regardless when a Belt breaks, which means that the best is always the safest and the most economical.

More Goodyear Thresher Belts are being sold every season. Users have come to know that these belts mean Service. That it is the height of folly to buy a belt on mere price, when so much more than a first nominal saving is to be considered.

Users know that Goodyear Thresher Belts stand up under the hardest work, heaviest weather and roughest handling. They know that all the power is delivered, that Goodyear Belts can be depended upon all the time, every season.

Goodyear Thresher Belts won't slip. They hug the pulleys, deliver maximum power.

"Black Diamond"

This is a belt made from heavy cotton duck and rubber friction. The different layers are vulcanized into one impervious powerful unit.

It is a splendid thresher belt. It "delivers" always and everywhere.

"Reliable"

A fine belt for ordinary work. Not as high grade a belt as Black Diamond, yet far superior to belts made simply to meet a price.

Agricultural Hose

Made for heavy work around threshing time—no break-downs, no money lost. Adds to the efficiency of the thresher equipment.

Consult Goodyear Experts

Before buying Thresher Belting or Hose, consult Goodyear experts. This is the safe way, the

service way. These men have designed the very Goodyear product for each particular purpose.

Goodyear products are Canada-made at the Goodyear Factory at Bowmanville, Ontario. The same master standards govern the making of Goodyear Automobile Tires that have won world leadership. Behind every Goodyear product, however small, is the great Goodyear reputation, which means that no Goodyear product must ever be slighted.

Costs nothing to confer with Goodyear experts. No obligation is involved.

Write to-day.

GOOD YEAR
TORONTO
Thresher Belts

The Goodyear Tire & Rubber Company of Canada, Ltd.

Head Office, TORONTO, ONT. Factory, BOWMANVILLE, ONT.,
Branches at Victoria, Vancouver, Edmonton, Calgary, Regina, Winnipeg, Hamilton,
Ottawa, Montreal, St. John, N.B.

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

Appropriate Texts

"Now, boys," said a Sunday school teacher, "I want each of you to subscribe something toward the mission of the Caribboos. I shall hand the box around, and, as each of you contribute, you will I hope, say some appropriate text. Now, Charlie, show a good example."

A ruddy-faced urchin stepped forward, dropped in his coin and observed:

"It is better to give than to receive."

Then another contributed a copper, saying:

"Waste not, want not."

This was ruled somewhat out of order, but it was fairly capped by a third youngster, who evidently parted with his penny with extreme reluctance, for, as he dropped it into the box, he murmured:

"A fool and his money are soon parted."

2

When the boss tries to do the hired man's job as well as his own, that shows that he ought to have the former instead of the latter.

A MAN'S TALK TO MEN

By
REV. DR. J. L. GORDON



The Nearest Problem

Making Money

THERE is a vast difference between "making money" and "earning a living." For every man who gets a dollar without working for it, there is some man who works for a dollar without getting it. So affirms a modern philosopher. Here is a vital question: "Do you earn what you get?" A New York exchange remarks: "In 1907 a barkeeper in a downtown tavern in New York bought an insurance policy which one of his patrons was about to let lapse, and shortly after the panic found himself in possession of \$8,500 through the other man's death. Steel common stock was then depressed to a price of \$22 a share. The barkeeper bought 100 shares on margin, and when the stock went up a point he sold, clearing \$100 less his commissions. He kept on buying and selling thus until to-day, less than two years from the time he began, he owns 500 shares of steel stock worth \$46,000 and has \$60,000 in cash. He has given up his old job and means to try to double his cash capital. What service has he done that he should have made twice as much money in two years as he had in all his life before? The same question hits every fortune made on Wall Street. Are such possibilities in accord with economical morality?"

Do Your Best.

QUALITY wears well. Quality stands the test of time. Quality outlasts unfair criticism. Quality answers every sneering question. Quality smothered into silence every interrogation concerning past mistakes. Under all circumstances and without regard to surrounding conditions—do your best. It was said concerning Coventry Patmore: "His attitude to poetry was very noble; much as he longed to express his mission, as he regarded it, he would steadily maintain a literary conscience. In 1868 he wrote, "Though, of course, I may not be a competent judge of how good my best is, I am sure that I have given the world nothing but my best."

Work

WORK out your own salvation by working. The man who has nothing to think about will think about himself—a very dangerous thing to do. He will think about his digestion until he has none. He will think about his heart until he can hear it beat. He will think about his liver until it becomes a pill box. He will think about his brain until it becomes too large for his skull. For instance: "Some years ago there came to New York City, from a busy town on the Hudson River, an elderly gentleman of robust appearance, who, after registering his name and residence at an hotel, went to his room and poisoned himself. He left a letter stating that sleeplessness was the cause of his trouble, and that without sleep he could endure life no longer. It was found that he was a millionaire, a successful manufacturer, who had given up his business to his son, and had retired to enjoy the remainder of his days in peace and quietness. He had all that heart could desire; was still sound in wind and limb; and yet so miserable that he thought nothing but death could relieve him. This man became the prey of the demon of idleness; he perished for want of something to do. How can a man sleep who has done nothing to make him need sleep?"

ObeY the Law

OBEY the law, especially when it applies to you. Be law-abiding. Remember our civilization rests on law. If there were no law there would be no society. The first qualifications for a commander is to know how to obey. Jacob Riis in "The Making of an American" says of General Grant:

"He was staying at the Fifth Avenue Hotel when one morning the Masonic Temple was burned. The fire-line was drawn halfway down the block toward Fifth Avenue, but the police were much hampered by the crowd, and were out of patience when I, standing by, saw a man in a great ulster with head buried deep in the collar, a cigar sticking straight out, coming down the street from the hotel. I recognized him at sight as General Grant. The policeman who blocked his way did not. He grabbed him by the collar, swung him about, and, hitting him a resounding whack across the back with his club, yelled out: 'What's the matter with you? Don't you see the fire-lines? Chase yourself out of here, and be quick about it.' The General never said a word. He did not stop to argue the matter. He had run up against a sentinel, and when stopped went the other way. That was all. The man had a right to be there; he had none. I was never so much an admirer of Grant as since that day. It was true greatness."

Three Kinds of Men

ALL thinkers are original thinkers. There are only two original things in the world—"original sin" and original thought. The trouble with the inefficient man is that he fails to apply thought-pressure to the problems of life. He won't think. Ellbert Hubbard remarks: "I find just three kinds of men in this world: The kind you tell once to do a thing, and you can bet your life it is done. The second class you have to tell four or five or a dozen times to do it because they do not think. The third class is the great class of men who have made this country what it is—men with initiative—men who do things, who do things before you have a chance to tell them what to do. I do not say this for any "star-spangled-banner" effect, but I thank God that I was born and reared in a country where poverty is no barrier to success, but where it can often be proven to a mathematical certainty that it is a help."

The Critical Mood

THE easiest mood to get into and the hardest mood to get out of is the critical mood. Nothing satisfies the man who has made up his mind not to be satisfied. Any man can find something to criticize. A perfect house was never built. A perfect coat was never worn. A perfect letter was never written. A perfect shoe was never thrown off the last. In a volume of illustrations we find these words: "A cobbler detected a fault in the shoe-latchet of one of Apelles' paintings, and the artist, recognizing his superior information, rectified the fault. The cobbler, blown up by his success, and over-estimating his importance, next ventured to criticize the legs, for which he was indignantly kicked out. "Keep to your trade," said the painter. "Let not a cobbler overstep his last."

"From all rash censure be the mind kept free—
He only judges right, who weighs, compares."

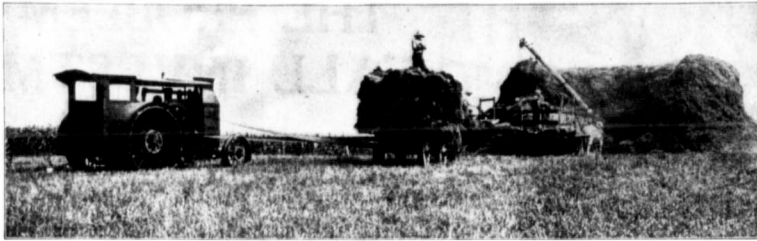
GET up every morning with the determination to face the nearest difficulty. If your accounts are behind hand, bring them up to date. If your teeth are aching seek the dentist's chair. If your correspondence is piling up take your pen in hand. If your orders are growing beyond you, down to the packing room. Get on the track of your hardest job.—To illustrate—"Henry M. Stanley said of Glave, the African explorer: 'He is a man who relishes a task in proportion to its hardness, and greets danger with a fierce joy.' In him was never seen John Morley's "somber acquiescence in duty.' The virile and valiant temper is not born and bred by drifting on the tide of inclination. Only by "rowing hard against the stream" does one ever come in sight of the gleaming gates of that distant Eden which is promised exclusively to the overcomer. A certain graduate having two invitations to teach, one a chair of mathematics and the other of languages, chose for the sake of self-discipline the one which his natural taste and aptitude rendered the more difficult to him. He decided to go ahead on the line of greatest resistance. Will the new education tell us whether he was foolish or wise?"

Go On

GO on. Genius is ninety per cent persistence. Folks get out of the way for the man with a purpose. Go on. If it rains, get an umbrella. If it snows, get a shovel. If it hails, stand between. If it blows, steer toward a lamp post. If a cyclone strikes town, get "from under." But, go on, make progress. Keep astir. Have "a move" on you. I have just read these lines: "The object of life is not to find a pleasant road, but to reach a worthy goal, whatever the road. The one safe way is to do your work, that is, to do your duty, giving little thought to discomforts and dangers. Select the right goal, keep your eyes on that goal, then go always straight forward; "if you meet the devil, cut him in two and go between the pieces."

So Many Knockers

NUMBER one says: "It can't be done!" Number Two whines: "It won't work!" Number Three grumbles: "It ain't safe!" Number Four murrms: "Who would have thought?" Number Five grins: "Did you ever!" Number Six exclaims: "Bless my soul!" Number Seven remarks, prophetically: "Wait!" A pastor being asked how he was succeeding in church work recently, replied, as one of our exchanges reports, "Very well, considering the number of brakemen we have in proportion to engineers." We think that we know something how that pastor feels.



Buy an Outfit Like This and Realize What Neighborhood Pull Means

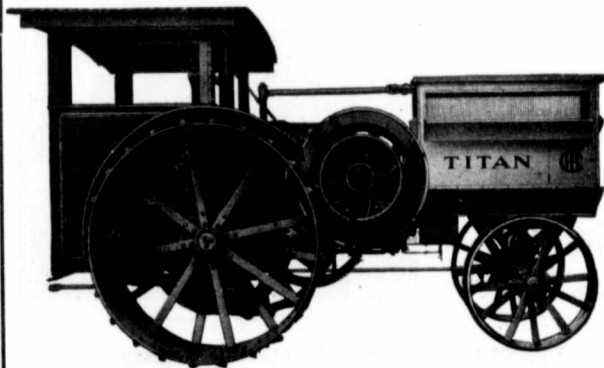
YOU know neighborhoods in which the farmers pull together to get a certain thresherman to work in their community. He owns the threshing outfit which these farmers know will not run the grain into the stack. He's busy all season—the jobs are hunting him. He's making money and he's saving the farmers' grain.

Neighborhood pull and satisfactory threshing jobs have sold many outfits consisting of a

Satisfactory Thresher Driven By An I H C Titan or Mogul Tractor

Repair parts of every description are quickly available to the thresherman who owns an I H C outfit at any time difficulty arises or accident occurs. It is this service which helps to keep the outfit in good working order and keeps the jobs hunting the thresherman owning an I H C outfit.

You probably know that many farmers prefer a thresherman using an I H C oil tractor because of the dependability of I H C rigs. The farmer is the man to be satisfied. He's responsible for the neighborhood pull.



If you will look up the I H C local agent, or write the nearest branch house for catalogues, you will learn much that is interesting about the style and size of tractor and thresher that will make most money for you.

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.



Grading in Wisconsin.

THE PROBLEM OF FALL INVESTMENT

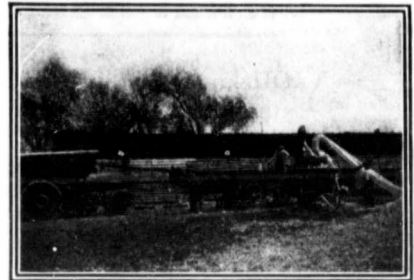
POWER—STEAM, GAS OR OIL. TRACTION, STATIONARY OR PORTABLE

For years CASE has led in the field of Farm Power. No matter what your requirements—from a small portable steam to the 110 horsepower engine, the world's record holder for economy; or a small, medium or large size gas tractor—25, 40 or 60—be sure that you buy a CASE, because for economy and

ease of operation, for safety, for durability, for year in and year out service in the United States, Canada, South America, Europe, CASE tractors have demonstrated their worth. Ask any one who owns a CASE engine.

THRESHING MACHINERY

CASE Steel Threshing Machines are practically fire proof, weather proof, loss proof. We can tell you of numerous instances where these CASE machines have stood between the raging fires of stacks, and have come out just as good as new, with the cost of only a few dollars spent for racks, belts, etc. We can tell you of cyclones and floods that have done no more damage. We can cite you hundreds of instances where CASE machines have done work to the utmost satisfaction of most exacting customers. Grain growers wait for CASE threshing machines. There is no grain or seed grown that cannot be threshed most satisfactorily by a CASE Steel Threshing Machine, with its various attachments.



Shelling in Illinois.



Baling in Iowa.

TRACTOR GANG PLOWS

And when it comes to Gang Plows there is none that contains so many features necessary for real work that you find in those bearing our name. They are like all other products that carry the name CASE. Do you know about the Spring Hitch and the Automatic Dodge that save your plows should you run into obstructions? Then there is the Automatic Lift, the Beam Hitch, the Lever Construction and other features which mark these Tractor Gang Plows as superior.

HUSKING, BALING, CORN SHELLING, ETC.

For all this work your safest investment is the machine that you are sure will produce results. For over seventy years CASE has been producing results that more than meet the needs of the farmers. May we have your name to be sure that you are kept in touch by catalogues, etc., with all that CASE is doing?

J. I. Case Threshing Machine Co.

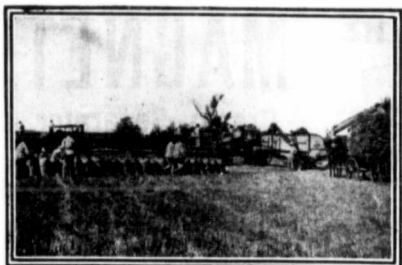
INC.

741-791 STATE ST., RACINE, WIS., U. S. A.



Husking in Virginia.

CANADIAN BRANCHES: Toronto, Winnipeg, Saskatoon, Regina and Calgary



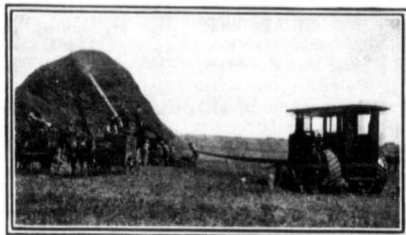
Threshing in Texas.

THE PROFITS FROM YOUR CROPS

Your crop profits—what are you going to do with them? A certain percentage you will put into added or improved equipment, just like every other business man, who each year puts back into his plant a good proportion of its earnings. Thus he increases his producing power, and next year he shows a greater profit. So he grows—out of his earnings—adding each year,

little by little—each step a safe one.

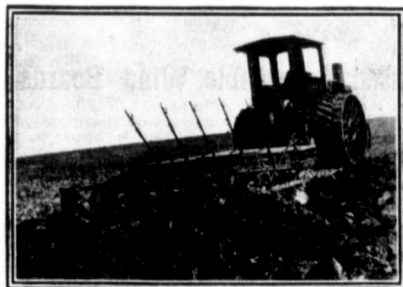
Your sound investment, the best place for your earnings, is in machinery or equipment that will be under your own supervision, whose operation and whose work you can watch; whose efficiency you can guard, and whose profits you can determine. It is tempting to follow the mirage of some new land scheme, that looks good on paper, or some hole in the ground that offers a possibility of an unlimited supply of dividends. But the outcomes of such are comparatively rare; not that people—yes, many of them—have not made money in just such ventures, but what about those who now wish they had not taken the chance? Did you ever hear of a real failure of an intelligent farmer who put his money back into his farm; either in new and better machinery, in more land or in more stock? Perhaps his increase the following year was not very noticeable. It was like the drops of water that finally wore away the stone. Today these are the men who are enjoying the fruits of their labors. Do not think for a moment that they were not tempted many times to follow what seemed an easy road to riches. It was not a simple task to say no to a "sure thing." If many of the hired men had turned their backs on alluring offers, today they would be "bosses" and not be "bossed."



Threshing in South Dakota.

Put your profits where you are sure of them. The safest place is in your own farm, because there you can watch every move—the responsibility is yours. A distant scheme, some one else watches—on his judgment depends your success or failure. You know absolutely what you can do. You are not sure of the other fellow's ability. You are a farmer and know the farming business, just like we, for instance, know the machinery business. Isn't this reasonable?

Of course it is good business for us to have you buy more machinery, but do not take our word alone on such matters. Put the proposition up to any business man. Ask him where to put your money; into increased or improved equipment, or into some other form of investment. Not in some wildcat scheme, but in good security.



Plowing in Manitoba.



J. I. Case Threshing Machine Co.

INC.

741-791 STATE ST., RACINE, WIS., U. S. A.

CANADIAN BRANCHES: Toronto, Winnipeg, Saskatoon, Regina and Calgary



Buying and Raising Calves Profitably

A farmer who raises cows extensively, but who is not a dairyman, ought to be something of a rarity. I have a neighbor who sees the foolishness of keeping a dairy and depending on the chance market for cows, so he has undertaken to supply the deficiency. He buys and raises calves such as he finds have a ready market and then he sells them to dairymen when they will first bring a good price. He has now carried on this branch of business long enough to make sure that it not only pays, but is likely to last as an occupation.

At present he is carrying 75 or more cattle, most of them under the full cow age, though he has a good many cows that are raising calves. It is a rather uncommon sight in this part of the country for these cows as a rule are not milked at all. They each raise a fine calf and if it comes right, two calves at a time. These calves are very lusty animals of course; in fact, they get so fine looking that it is a temptation to send them to the butcher and realize on them at once. But there is a motive in keeping up such a herd that is deeper than merely making a profit on live stock. The remark is made that by means of such animals it is easy to sell hay and grain for more than the ordinary market price and still have left enough manure to keep the farm improving in fertility all the time.

This is one of the facts that many a farmer loses sight of. He sells his hay and grain if there is a surplus and does not reflect that by so doing he is making his farm poorer all the time. The farmer, with close to a hundred cattle on his farm, is adding to his land fertility so fast that he can see the improvement every year, while the man with little gumption or little faith in his land feels obliged to turn a part of its fertility into money every year in order to live. There is only one end to farming of that sort. If the land is naturally rich it may take a good while, but the time is coming when it will not make a living for anyone.

Our farmer figures that his cows each cost him from \$23 to

\$25 a year, and his calves about \$10 the first year, so that there is a big gap to fill in between the yearling and the young cow ready to freshen before she costs \$60 to \$80, which is the price she ought to sell for if she is up to local requirements, which are not always very high. These figures are very attractive. The calves are allowed to wean themselves, so that they are no particular care. They early learn to eat grass and in winter are fed hay and such concentrated feeds as they need to keep them growing.

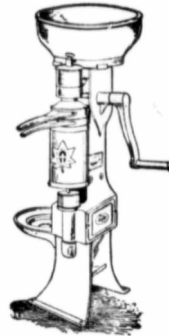
It rather looks as if a cow that can raise calves in that way, especially as heifers can be bought for them to run with in case the bull calves are to be handled in a different way, is fully as profitable as most of the cows that are milked. While such a speciality is necessarily limited, it is not by any means overdone and is not likely to be. If the dairyman happened to be more on the lookout for heifers with some regular milking pedigree the business would be better than it is, but it will have to be confessed that the demand for purebred cows does not appear to be increasing here. One reason for this is that so many herds, particularly Jerseys in this section, have been sold and scattered after demonstrating that the main profit in them was not in the milk they gave but in the ability to sell young stock at big prices, which is not always a possibility.

Of course the average farmer is mistaken in ignoring purebred cows as he does, but he has seen so many of them managed on the rich-man plan and scattered as soon as they were no longer wanted as a plaything, generally as soon as the fancier dies, that he wants nothing of them, holding that they are not money makers in the general dairy. This is too bad, for the legitimate extra expense of purebreds can be obtained from them when rightly managed, unless too much pampering has weakened them.

Intelligent breeding of live stock is still an expert proposition but that should not warrant farmers in giving the matter up and depending on purchases, for then they have little to go by but mere outward appearance. So the raising of heifers as a speciality is, at least, an improvement over the more general haphazard one.

The Unbroken Ranks OF THE "MAGNET"

Cream Separator



Wherever it has pushed its way as a "Fighting force" have been maintained simply because "The Magnet" cannot be beaten on any ground by any "force."

OVER ONE HUNDRED THOUSAND

(equal to two great "Army Corps") of Canadian Dairymen and Farmers have been using it for over 16 years as one of the biggest profit making features in their farming equipment.

ITS UNIFORM SUCCESS

has been due in the past and is guaranteed for all time to the fact that it is built with the only correct SQUARE Gear.

Its perfect skimming is because in its one-piece skimmer the cones are set so that the centrifugal force that breaks the connection between the butter-fat and milk, in order to make perfect separation, has free action. Beware of cones that are placed close together, as is the case with all worn gear separators, as they introduce **Frictional separation** which prevents the full action of the centrifugal force and therefore, irregular separation, and then besides the insertion of many extra pieces which are really **Mechanical obstructions** and are also very troublesome to clean.

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

The Petrie Mfg. Co. Ltd.

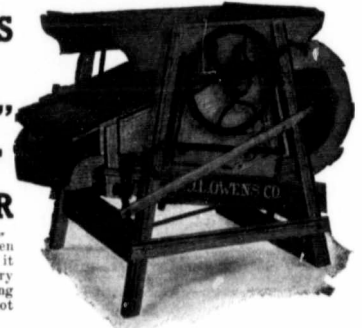
Head Office and Factory: HAMILTON, ONT.

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

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

King of Wild Oat Separators

THE OWENS "NEW SUPERIOR" WILD OAT SEPARATOR



With our patented open and blank space sieves, it positively separates every wild oat seed, causing them to lie flat, and not up on end.

Patented Adjustable Wind Boards

are provided so that blast is always under control. Can blow out as much or as little as you like, making it a perfect oat cleaner and grader. The lower shoe is fitted with a cleaning rack that is adjustable, never touching the sieve, but just close enough to knock out any grain that gets stuck when going over the sieve. It is movable, working back and forth about two inches in opposite directions to the shoe. By this improvement the capacity is increased about 25 per cent.

It Is Strong, Well-built and Bolted—Not Nailed

Our machine is built to clean any kind of grain and do perfect work. What the "NEW SUPERIOR" cannot do, no other can do. Exceptionally easy to operate, it will appeal to your customers.

Made in Sizes 24, 32 and 42 inches wide, with or without bagger, and with power attachment for gasoline engine if desired.

WRITE FOR DEALER'S PROPOSITION AND FULL PARTICULARS.

Cushman Motor Works of Canada, Ltd.
286 Princess Street, Winnipeg

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

Silos and Silo Construction

By E. S. SAVAGE, Professor of Animal Husbandry, Cornell University.

IN this article on types of silos, it is not the purpose of the author to give the details of construction for the various forms of silos; it is to bring to the attention of the readers of this paper the different types that are being built throughout the country, then the advantages and disadvantages and something of the comparative costs of these types.

We have already learned that the silo is a place in which to store green, succulent material to protect it from undue fermentation. Therefore, the fundamental essentials of such receptacle must be considered first of all.

Essentials of a Good Silo

1. The material in a silo must be kept free from contact with the outside air to prevent fermentation. The juices of the silage must also be kept within as far as possible. The walls of the silo must therefore be impervious and of such material that the juices of the silage will have no effect upon it.

2. The walls must be rigid and strong enough to resist the great pressure of the silage within. This pressure is great and is the main factor in causing silo builders to discard the square silo and adopt the round form. The walls must be smooth so as to interfere as little as possible with the settling of the silage. The walls must be so strongly built that the bottom is not disturbed by their weight, which is greatly increased by the friction of the silage against them when it is settling.

3. The material in the silo must be very durable because care and cost of repairs must be added to the cost of the silo, and should be taken into account when the choice of the silo is being made. Some silos must receive considerable care each year, while other silos once built are practically built forever.

4. In many climates, the material entering into the construction of the silo must be carefully considered from the standpoint of frost resistance. Wooden, tile and hollow concrete blocks give perhaps the greatest satisfaction from this standpoint, being the best types for non-conduction of heat and cold.

5. The fact is obvious without explanation that a silo that is fireproof has an advantage over other types.

6. The choice of a silo should be governed somewhat by the appearance that will be presented.

The silo is perhaps the most conspicuous building around the farm. Therefore, it should present a good appearance.

7. It is best to choose a type of silo that will admit of simplicity of construction, that may be erected without too great an outlay of high-priced labor, and that may be constructed perhaps at odd times.

8. It is sometimes best to build with the idea of the ease of taking down and rebuilding in mind. A tenant, for example, might wish to remove his silo to another farm. This possibility is rather remote, and in most cases should never be considered.

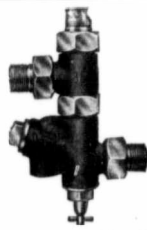
9. To most persons, the most important item to be considered is the cost. In studying the cost of the different types, something more than first cost must be considered. The care and upkeep of the different types must be taken into account, the length of life and the possibility of loss through storm or fire.

The above nine factors are all important in the choice of type. Before discussing how the ordinary types of silos conform to these requirements, something should be said of location and size.

If possible, a silo should be placed so that it is protected as much as possible from the prevailing cold storms. That means, in most localities, a southern exposure, although in a hot dry climate, a northern exposure would be better.

The silo must be located conveniently, so that the smallest amount of labor will be necessary to get the silage out of the silo into the mangers of the animals. The location must admit of good natural drainage, particularly if the silo is to extend beneath the surface of the ground to any extent.

The foundation must be carried high enough above the surface of the ground to keep out all surface water, and should be carried far enough below the surface of the ground to be below the frost line. The type and size of foundation will be governed by the kind of silo to be constructed and also the height of the walls. A wooden silo, of course, is not nearly so heavy as a solid concrete one, therefore, the foundation must be planned to suit the type it is to carry. The top of the foundation must be carefully levelled. Good concrete foundations give the best satisfaction.



The DESMOND MODEL "U" Is the One Injector

That will give Perfect Service under all Conditions

No need to bother with so-called "Special Connections." No "Rights and Lefts," "Fronts and Backs." The one Model "U" will fit all connections. The two-piece body connected with a Union Nut does the trick. Loosen the nut, turn the connections to meet your piping at whatever angle is most convenient. No need to wait until your dealer can secure an injector to fit your piping—if he has but one Model "U" in stock, it will be the right one for your needs.

Model "U" is FLEXIBLE and will meet every demand that can be made on an injector. Starts low at 20 to 25 lbs. and works high to 175 lbs. Special high pressure injectors with a range from 60 to 335 lbs. can be furnished when desired. The Model "U" lifts water 25 feet; handles water at 130 degrees and delivers to the boiler at almost 212 degrees.

Every injector is thoroughly tested before leaving our hands and carries an unqualified guarantee to do perfect work under any test. If your dealer cannot supply you write us direct and give us his name. We will see you are supplied.

DESMOND STEPHAN MANUFACTURING CO., Urbana, Ohio



Steam or Gas Tractors

Equipped with

PICKERING
"THE GOVERNOR WITHOUT JOINTS"

give greatest efficiency

FITTED TO EVERY BUILD OF ENGINE

Patent Ball Ranger Speed Changer Supplied on all Genuine Pickering Governors. Will increase speed 50% or more.

The Pickering Governor Co.

PORTLAND

CONN., U.S.A.



GLARE ACETYLENE HEADLIGHT



"GLARE" spells satisfaction. Operating expense 1c. per hour. Rests on a pivot and is controlled from the footboard of engine.

GULICK SPARK ARRESTER



Fits any engine adapted to fuel. Does not clog and interfere with the draft.

POPE ADJUSTABLE FLUE CUTTER



When in need of a flue cutter try the "POPE." Superior to anything on the market of its kind. Cuts the flue without burring the end.



GREGORY AUTOMATIC BELT GUIDE

Works strictly automatically. Makes the belt run square on the cylinder and saves wear on edge of belt.

POPE WHEELLOCK MFG. CO.,
Successors to E. M. POPE, Watertown, S.D.

Write for prices and special information to

THE MAYTAG CO. LIMITED

Winnipeg, Man.



THE BEST
Anti-Friction
BABBITT
On the Market is

The Frost King

The "Frost King" is the product of our long years of experience and is without doubt the most reliable Anti-Friction Babbitt made to-day. It is specially designed for Threshing Engines, Separators and Machinery of all kinds. If your dealer does not stock this metal, write us for a 30-pound box at 37c. per pound, or a 60-pound box at 35c. per pound. These are delivered prices. Please send money order to avoid delay.

Hoyt Metal Co.

Eastern Ave. and Lewis St.
TORONTO

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

The Size of Silo

The size of the silo to be built must be governed by the number of animals to be fed. It is probably not economical to build a silo less than 10 nor more than 20 feet in diameter. If larger than 20 feet, it is hard to throw out the silage from the back side. If a greater capacity is needed, two silos will probably give better satisfaction. High narrow silos are more economical and satisfactory than low wide ones. The limit in height is about 45 feet, because of the difficulty and power needed to elevate the silage to a greater height, and the difficulty of building and climbing into the top of higher ones. There are solid cement silos in existence that are as high as 90 feet that are giving good satisfaction.

To compute the size of silo needed the following table will be found useful:

Kind of stock.	Feed lbs. silage per day per animal.	Feed lbs. silage for 300 days per animal.
Dairy cows	40	8,000
Beef cattle	35	7,000
Horses	15	3,000
Sheep, ewes	4	800
Sheep, lambs	2	400
Swine	4	800
Poultry (100 fowls)	15	3,000

The usual feeding period is 200 days in length. The above table gives the pounds needed per animal for this period. Multiply by the number of animals to be fed, add up the totals and divide by 2,000. This result will be the tons needed. The following table gives the tons that may be stored in the various sizes, so that the proper size may be chosen:

Outside diameter feet.	Height feet.	Approximate capacity tons.	Outside diameter feet.	Height feet.	Approximate capacity tons.
10	20	30	14	34	120
10	22	33	14	36	130
10	24	36	14	38	142
10	26	40	14	40	153
10	28	44	16	20	80
10	30	48	16	22	87
10	32	53	16	24	95
10	34	58	16	26	103
10	36	64	16	28	111
12	20	45	16	30	120
12	22	50	16	32	130
12	24	55	16	34	142
12	26	60	16	36	155
12	28	66	16	38	168
12	30	75	16	40	181
12	32	84	18	30	150
12	34	94	18	32	162
12	36	105	18	34	175
12	38	115	18	36	190
12	40	125	18	38	202
14	20	60	18	40	216
14	22	66	20	30	185
14	24	73	20	32	200
14	26	80	20	34	217
14	28	90	20	36	235
14	30	100	20	38	255
14	32	110	20	40	275

It is always best to build a silo somewhat larger than the estimated size needed, for persons usually increase the size of their herds after a silo is built, because the great advantage of the silage is felt and they call to carry more animals per farm soon comes. It is best to carry this extra size in

height. For example, if it was calculated that an 80-ton silo would carry the stock at present, instead of building a 14-foot silo 26 feet high, it will not cost any more in labor, roof, foundation, etc., to build it 30 feet high and thus increase the capacity 20 tons, providing for future development of herd and farm.

Comparison of Types

The materials which are being used more than any others at the present time are wood, hollow vitrified tile and monolithic or solid concrete.

Wooden Stave Silos—The old-fashioned, square, masonry silos gave way to the square wooden silos, and then the round or tank silo was invented and has acquired a tremendous hold on the country. Its great advantage lies in its low initial cost. It is durable, does not conduct heat, can be made impervious and is easily erected. Some of the disadvantages lie in danger from fire and wind, and in the fact that constant care and more or less repairing are necessary yearly. In constructing wooden stave silos, they must be securely braced in three ways and securely anchored to the foundation.

In these days of close competition, it is probably more economical to choose some make of manufactured silo and buy it outright. Close competition prevents very much opportunity for cheating, and reliable firms will be found in all parts of the country. There is not space enough here to discuss the building of this type. A few letters to the companies advertising will bring literature and probably agents to the farmers' doors with complete directions. A silo 14x32 feet should hold 100 tons, and should be erected complete for something less than \$300. This means a good wood with labor and everything charged in.

Hollow Vitrified Tile—Perhaps this type of silo has more advantages than any other. With the exception of portability, this type meets all of the requirements noted above. The same size silo in vitrified hollow tile can be erected for very little more than the cost of a good grade of wooden silo. The cost should not exceed \$350 complete with roof. When all things are considered, this type must give great satisfaction.

Monolithic Type—If a number of men can co-operate in the purchase of a cement mixer and a commercial form for building silos, this type can be built for \$300 to \$350 for a hundred-ton silo, 14x32 feet. There are few advantages of any other type over this one. Much has been said of the action of silage juices upon cement. There is good evidence

HARROW WHILE YOU PLOW



Don't go over your land twice when once will do. The ground is always easiest to level when it is just plowed.

The CHRISTIANSEN LINE OF PLOW ATTACHMENTS is the most complete to be found anywhere. Made to fit any style or make of plow, moldboard or disc.

THE CHRISTIANSEN ENGINE PLOW HARROW is the only harrow on the market today that can be used successfully after an engine gang. It can be adjusted to any angle, and does not interfere in the least with turning at the ends. Adjustable to same angle for all sizes of plows.



Can be changed to a horse-harrow in a few minutes
NO DRAW BAR REQUIRED

Don't begin your Spring work until you have investigated our line of harrow attachments. They have no equal. More of them in use than all other makes combined.

PRICES FOR ENGINE PLOW HARROWS

- 6-bottom, 2 sections \$18.00
- 8-bottom, 3 sections 24.00
- 10-bottom, 4 sections 30.00
- Gang Plow, 36-in. 16.00
- Triple Plow, 48-in. 11.00

If your dealer cannot supply you remit us direct. Money refunded if not satisfactory after a fair trial. Dealers wanted in Manitoba, Saskatchewan and Alberta.



The Christiansen Harrow Co.
331 Austin Street, WINNIPEG, Man.

Saves \$2 per day for every plow and man.

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

OXY-ACETYLENE WELDING

Mr. THRESHERMAN:

If anything breaks or is worn out on your threshing machine or traction engine have it welded. Your time is valuable and we are at your service. Tell us your troubles. Send the broken parts to us or ask us to come to your place. No waste of time and no trouble to us. We are the pioneers of the process. We are experts and guarantee our work. Lowest prices.

L'AIR LIQUIDE SOCIETY, 325 William Ave., Winnipeg, Man.
Largest manufacturers of Oxygen and Welding Plants
Ask for information and newest catalogue.

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

CAST IRON WELDING

also CAST STEEL, BRONZE, MALLEABLE IRON, STEEL, COPPER AND ALUMINUM, under a positive guarantee.

Do not hesitate to send us your broken cylinders, cylinder heads, connecting rods, crank cases, engine beds, bull pinions, etc., and we will return them as good as new and stronger where mended at a great saving.

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

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

Inquiries cheerfully answered.

MANITOBA WELDING & MFG. CO.
62½ PRINCESS STREET WINNIPEG, MAN.
Established in 1911.

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

le
ben
the
will
wash
this
This
holdi
cost
be
prob
the ty
Met
cost
the ex
silo
of this
above
presen
tion, d
case it
into co
Man
been u
each h
ular b
blocks,
stone
been u
ing crit
all oth
author
study
first st
fied tile
types at
Manu
all will
to bring
ture an
in the n
as man
many di
Form yo
get the
ment st
and com

By J

ONE
try
bu
about co
tion. Ye
from exp
require tl
inary de
when a
young he
a good a
plied. S
pected w
masticat
by slobb
starts to
On gen
always sh
a young a
well is th
Britain,
"cattle de
as are "I
country.

In one
Enland, I
"and too
the round

lead us to believe that this has been somewhat exaggerated, and in the interior is watched fairly well and a coating of pure cement wash put on from time to time, this trouble will not be felt.

This type lends itself to the building of tall silos. The initial cost is high if only one silo is to be built in a locality, and it would probably be better to choose the tile type.

Metal Silos—The high initial cost of this type will hold back the extended use of this type of silo. The cost of a silo 14x32 feet of this type will come somewhat above \$400. This type, however, presents in its favor ease of erection, durability and portability in case it is necessary to take this into consideration.

Many other materials have been used from time to time and each has its advantages in particular localities; brick, concrete blocks, home-made wooden silos, stone and cement silos have all been useful. At the risk of being criticised and condemned by all other makers of silos, the author must say that after his study of the subject, he would first study hard the hollow vitrified tile types, secondly, the wood types and then the other types.

Manufacturers and agents are all willing and ready to help and to bring to your attention literature and directions. If you are in the market for a silo, write to as many companies selling as many different types as you can. Form your own opinion and then get the opinion of your experiment station experts to check up and compare with your own.

—Farm Engineering.

Cow Dentistry

By A. S. ALEXANDER, M.D.C.

ONE reads a lot about dentistry needed by the horse; but little is heard or said about cows requiring like attention. Yet it is a fact, known to us from experience, that cattle often require the attention of the veterinary dentist. Remember this when a cow, and especially a young heifer or steer, fails to give a good account of the feed supplied. Something may be suspected wrong with the teeth if mastication is slow, accompanied by slobbering, or if the animal starts to eat and quits.

On general principles the teeth always should be examined when a young animal fails to thrive. So well is this understood in Great Britain, that in some districts "cattle dentists" are as numerous as are "horse dentists" in this country.

In one part of Cumberland, England, lived a man they called "aud tooth Harry." He made the rounds of the district in the

spring and examined the mouth of every young heifer and steer. His job was to remove milk-tooth crowns, which often lodge on top of incoming permanent molars, and make chewing of feed painful and imperfect. He had crude instruments, devised by himself and the country blacksmith, but they were effective in his hands, and the critters responded immediately and profitably to his ministrations.

This will be novel reading to many of your subscribers; but it is well worth remembering and acting upon. The teeth of all adult cattle are loose. They have to be loose, shovel-shape and set in at an angle, else they would lacerate the cartilaginous pad which takes the place of upper incisor teeth in cattle. Many a farmer has written us that he had suddenly discovered that the teeth of his sick cow were loose, and he therefore suspected mercurial poisoning, or something of that sort. This looseness also has given rise, in part, to the false accusation that silage loosens the teeth and causes them to drop out. Such is not the case. This is proved by the success of thousands of dairymen in the feeding of corn silage. In fact, the silo is now a necessity on every dairy farm, and soon will be found on all of them in true dairy districts.

Incisor teeth of adult cattle have narrow or small necks and wide, flat crowns. They gradually wear down, as the animal ages, and when a cow is well past twelve years of age examination will show that she is chewing with the small, collar-studlike necks of her teeth. Jaws with such vestiges of incisor teeth may be found about almost any slaughter house, where old canner cows too often are made into the "sinews of war." Such cows, no longer fit for dairying, or having gone wrong in their udder, commonly are sold to the butcher or fattened for sale. It is not the condition of the incisor teeth, however, that makes them fail to chew well; the molar (grinding teeth) are irregular and sharp and need attention. Sharp points should be cut off and filed down; then the old cow may take a new lease of life.

Milk-tooth crowns of molars sometimes are termed "shells," and they are liable to lodge between the tongue and teeth or stick on top of the molars and prevent comfortable and perfect chewing. They simply have to be caught with forceps or tongs and tilted over to one side, when they may easily be completely dislodged. It is an easy matter to operate in this way, and as easy to file down sharp points with a veterinary rasp (float).

The milk-tooth crowns should be shed at from one year and nine months to two years and six

The "California of Canada" The O.K. Okanagan

King of the Fruit Districts

TRUE EDUCATION CONSISTS IN BEING ON GOOD TERMS WITH MOTHER EARTH AND WITH ALL THE WONDERFUL THINGS THAT CREEP, CRAWL, RUN, CLIMB, SWIM AND FLY. How can you receive such an education better than owning a first class Orchard in the SUNNY OKANAGAN. There is comfort, beauty and profit in the occupation of an Orchardist.

We Prepare This Business For You

We Plant and Care for your Orchard for 5 Years

WE GIVE YOU 55 MONTHS FOR THE PAYMENT WITH NO INTEREST AND NO TAXES. If death occurs while you are paying for your Orchard, we return the money. WE SELL FROM ONE ACRE UP.

We will care for your Orchard when in bearing if desired, so that you can have all your time to yourself. WE TAKE NO SALARY, ONLY 20 PER CENT OF THE PRODUCT, PAYING YOU 80 PER CENT.

We plant in large areas and only a few varieties, that we may meet Market Conditions. OUR EXPENSE IS 75 PER CENT LESS THAN THE LITTLE FELLOW.

Come in and see us, or write us for information.

Western Okanagan Orchards Co. Ltd.

Per Okanagan Selling Agency.

205 CONFEDERATION LIFE BLDG.

WINNIPEG.

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

Will run all day without attention, furnish exactly the power you need, maintain a uniform speed and save you money every hour it works.
Use either Kerosene or Gasoline for fuel.
Best economist of time and money you can place on the farm.

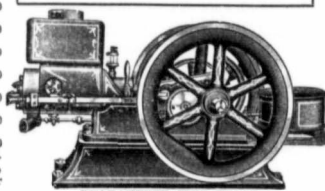
THE WATERLOO BOY GASOLINE ENGINE

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

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.



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, \$35.00 (can only be used where electric power is available). If interested write for Catalogue.

Address all inquiries to Winnipeg.

Canadian Agents

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

Burridge Cooper Ltd. Winnipeg and Regina

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

months. If they lodge they may cause fever, diarrhoea, lack of thrift, harsh hair, tight hides, scurfiness, tucked-up bellies, blood-shot, discharging eyes, listlessness, thirst and other symptoms that may suggest tuberculosis. The months of such cattle should be examined and attended to in the fall, as well as spring, and the teeth should always be examined if an animal has a mysterious sickness. Medicine may fail, where prompt and simple attention to the teeth would be likely to prove immediately helpful.

Selecting the Site for Alfalfa

THE essential points to be observed in starting alfalfa are coming to be quite generally recognized. A great many men have learned through experience that unless the crop is properly inoculated it makes a weak, spindling and unprofitable growth. They have found too, through experience, that on a sour soil alfalfa does not thrive, because of the fact that acid conditions are not favorable to the growth of the bacteria which may have been supplied in inoculation. Lime must be supplied in the form of ground limestone or marl if the land is sour. A wet and soggy field soon shows its effects because standing water will kill the alfalfa out in a short time. Drainage, to a low water table, is of first importance if best results are to be had.

Another factor which will show up to advantage in producing alfalfa is the necessity of a good seedbed. This should be deep and well prepared so that the young plant will have no trouble in taking root; and it should also be maintained with the idea in view of conserving moisture up to the time of sowing the seed. A good, level seedbed, free from clods, should be prepared also because of the fact that the field will likely stand for some time and the smoother it is at the start the easier it will be to harvest the crop.

These four factors are so powerful, if success is to come in growing alfalfa, that one can almost predict with certainty what the outcome will be if an attempt is made to grow the crop without paying proper attention to them.

Nor are these points all that need to be considered in growing this important legume. One of the first questions to be settled refers to the soil which is to be selected for the crop. There is quite a prevalent notion, and a correct one, that alfalfa is a great soil improver. It takes its nitrogen from the air if properly inoculated. Its roots go deep down through the subsoil, feeding as

they go, and more plant food is taken out of the deeper layers than can be obtained by shallower-rooted plants. When these roots decay they leave the subsoil open, allowing air to enter and increasing the feeding area for roots of succeeding crops. There is no doubt about its being a deep-rooting, hence a soil-improving crop.

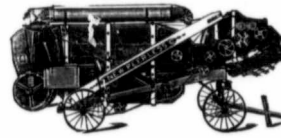
But there is some doubt as to whether it should be used primarily for soil improvement. Red clover is a deep-rooted crop, as are also the other clovers. These clovers can be grown with much less trouble than can alfalfa. There is no question but that it is harder to get a good seeding of alfalfa than it is of the clovers. Then why not seed the poorer land of the farm to these legumes and put alfalfa on the best soil of the farm? As soon as these other poorer fields have been improved by plowing under clover or heavy coats of manure, then it will be more profitable to put them in alfalfa.

There is a very good reason for choosing the best, well-drained soil on the farm for this legume. In a system of general farming alfalfa is one of the most "intensive" crops which can be grown. Because it is possible to harvest three cuttings from it during the year we multiply the good efforts we put forth for it by three or four every season! This is true not only in the selection of a site but also in the fertilization of the crop.

If alfalfa has been properly inoculated and limed, and if the field has been well drained, it will draw its principal supply of nitrogen from the air. On most of our normal soils potash will be liberated rapidly enough from the abundant supplies already in the soil for its best growth, especially if there is plenty of limestone present. Phosphorus, as a rule, will be found to be the limiting element for growing alfalfa. It is better to supply phosphorus to alfalfa in some readily available form such as acid phosphate, steamed bone meal, or basic slag phosphate. A top dressing of a phosphate fertilizer can be made in the spring and disked in after the first crop has been removed, if it has not been applied before the crop has been seeded. Here again we multiply our good efforts by three or four, because alfalfa responds very readily to soluble phosphatic fertilizers, and their application every year or every other year will pay large returns on the money invested.

As soon as the start is made with alfalfa, soil improvement can be more rationally carried out. If a system of grain farming is being pursued the clovers can be returned directly to the soil which produced them. In a system of

GEISER and PEERLESS WINNERS



Peerless Separators

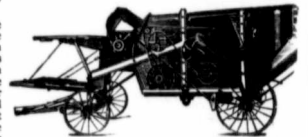
Have made the great repute they enjoy by their light running and grain saving qualities. The "Peerless" is a separator without riddle and with many valuable features not found in any other make of machine.

We do not pretend to say that these Separators will save absolutely ALL the grain, but we do assert that they will save 98 per cent of that which is ordinarily wasted by the best machine now in the field, when it is crowded as it must be for big work; that at least 95 per cent of all the grain is separated from the straw by the time it leaves the big drum; after this we have more separating capacity than any other machine on the market. We can supply with these Separators, Wind Stackers or Straw Carriers, Self Feeders and Band Cutters, Automatic Weighers or Wagon Loaders, Flax and Timothy Attachments.

The Bagger is an Extra Wind Stack, Self Feeder or Wagon Loader can be attached

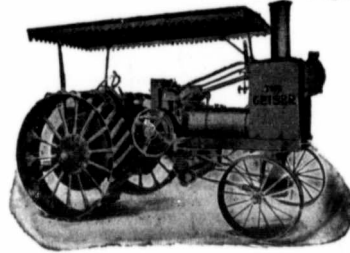
There are no riddles in this machine hence there are none to clog and give endless trouble. No time wasted in making changes for the different kinds of grain. Adjustments all made on the outside and can be done while the machine is being operated. Cylinder contains nine bars of exceptional strength and is perfectly balanced. It will positively pay you to investigate other exclusive features of this fine machine.

Geiser Separators Nos. 4 & 5



Geiser 4 Cylinder, 4 Cycle Engine

Power, Durability and Strength are all embodied in this exceedingly popular tractor — the Geiser, 4-cylinder and 4-cycle type. Forward speeds 1 1/2 and 2 1/2 miles, and reverse 1 1/2 miles per hour. The crank case is exceedingly strong where bolted to other parts. Gearing is of the best open heart steel. Vertical cylinders with cylinder head, valve box and water jacket all in one casing. Connecting rod is made from a steel forging and is extra large and strong. Crank shaft is forged from one large billet of open heart steel; you can't beat it.



Diamond Junior Gas Tractor

The exceptional results secured by users of our Diamond 40-70 Gas Tractor and the large demand for a smaller gas tractor embodying the same practical features has induced us to place the Junior Model, as herewith illustrated, on the market. Two forward speeds of 2 1/2 and 4 miles per hour; reverse speed 2 miles per hour. All controlled by one lever. Burns distillate, kerosene or gasoline. Gasoline consumption averages 8-10 pints per h.p. per hour, with a slight increase when kerosene or distillate are used. Will handle five 14-inch breaking plows in average soil or six 14-inch stubble bottoms.



We are offering very attractive prices and terms—good until August 1st, but cannot guarantee them after that date.

Burridge-Cooper Co. Ltd., Winnipeg Man., and Regina, Sask. Address all inquiries to Winnipeg Office.

In these times of uncertainty bred by War—you will find no better counsel anywhere as to WHAT YOU OUGHT TO DO than you will find in the pages of THE CANADIAN THRESHERMAN AND FARMER. Read them carefully and pass your copy to some friend who needs encouragement and really helpful advice.

Preparation!

In time of peace prepare for war. In time of health and vigor prepare for the unforeseen

Life Insurance affords the surest preparation.

Examine the Policies of The Great-West Life. Their exceptional vogue denotes exceptional value. Low rates are charged, high profits paid, liberal conditions apply, and in the new provisions pertaining to War Service wide privileges are included.

Permit the Company to quote rates at your age—nearest birthday.

The Great-West Life Assurance Company Head Office - Winnipeg, Man.

St
The
drive an
cattered
chopper
should a
Who s
heredity
in the T
too busy
The he
her caw
fast is no
mas egg
Putting
pump in
freezing i
neighbors
That s
the mech
skill to ha
is no arg
tor.

the stock farming they can be pastured and thus returned to the soil or cut for hay and made into manure. The added nitrogen produced by the alfalfa, together with that gathered by the clovers, will be sure to maintain the supply of nitrogen in the soil of the farm in either system.

After a few years of loosening up and enriching every field with more manure or green cover crops plowed under, alfalfa can be more successfully introduced into the rotation. But until this is done, until steps are taken to make one field as rich, as well-drained, and as suitable for alfalfa as the other, this intensive crop should be grown on the best field of the farm. Whether it is being grown there or not can best be answered by the crop itself, and will be—just the same as it answers the questions, "Has this field been inoculated? Or limed? Or drained? Or has it had a suitable application of phosphorus?" For its response to these treatments is so sure and its lack of response is so certain if they have been neglected that the highest success with alfalfa can never be attained unless all of these factors have been properly taken care of. Give the mortgage lifter a chance! It will pay better for a good home and good treatment than any other crop on the farm.



Rising and Setting Sun

There was a little boy who began to keep a diary. His first entry was: "Got up this morning at 7 o'clock." He showed the entry to his mother, and she, horrostricken, said:

"Have you been to school? Got up, indeed! Such an expression! Does the sun get up? No, it rises!"

And she scratched out "Got up at 7" and wrote "Rose at 7" in its place. That night the boy, before retiring, ended the entry for the day with the sentence: "Set at 9 o'clock."



The law says no one should drive an automobile in an intoxicated condition. The Feed chopper agrees that the auto should at all times remain sober.

Who says there is anything in heredity? Here is Teddy's son in the Twin Cities, and reported too busy to talk!

The hen with a lump of ice in her caw as a substitute for breakfast is not going to fill the Christmas egg basket.

Putting manure about the pump in order to keep it from freezing is one way of telling the neighbors one is not civilized.

That some men have neither the mechanical nor the business skill to handle a tractor profitably is no argument against the tractor.



Buyers to Share in Profits Lower Prices on Ford Cars

Effective from August 1, 1914, to August 1, 1915, and guaranteed against any reduction during that time.

Touring Car	- - - -	\$590
Runabout	- - - -	540
Town Car	- - - -	840

F.O.B. Ford, Ont. In the Dominion of Canada Only

FURTHER we will be able to obtain the maximum efficiency in our factory production, and the minimum cost in our purchasing and sales departments IF we can reach an output of 30,000 cars between the above dates.

AND should we reach this production we agree to pay, as the buyer's share, from \$40 to \$60 per car (on or about August 1, 1915) to every retail buyer who purchases a new Ford car between August 1, 1914, and August 1, 1915.

For further particulars regarding these low prices and profit-sharing plan, see the nearest Ford Branch or dealer.

FORD MOTOR COMPANY OF CANADA, LIMITED. Ford, Ontario.

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

Put a Crimp in the Drouth: Plow this Fall and Save the Winter Moisture

By C. S. CORNMAN

It is raining as I write—something to be thankful for, and there is a lesson in the rain. We have had three months of drouth and where the soil was plowed in the spring the thirsty earth is drinking every drop of water as fast as it falls, even though the ground slopes considerably. On the hard, uncultivated surfaces the water ran off. It is easy to tell where fall crops will be raised should enough water fall so we can venture on any planting.

There is as near a general failure of spring planted crops in the drouth sections as the writer has seen in 20 years, still there are

plowed land could turn a furrow. The result is that these fall plowed fields are the only ones that promise any yield.

Hard Work That Was Lost

What of the fields that remained unplowed?

After the long continued rains which lasted till late April, the weather became unusually warm for the season and no more showers came. The surface of the ground baked hard, and those who had sufficient "horse power" and who had faith in rain coming to their aid in subduing the clods, turned over as much land as they could. Their labor has been lost because here was not enough moisture in the ground to germinate any seed that may have been planted, even if the cloddy surface could have been worked into the semblance of a good seed bed.

The writer travelled hundreds of miles through the West in

some farmers who are making fair crops in spite of the dry weather. No rain has fallen on their fields any more than on adjoining fields. But they plowed their land in late fall and early winter and the winter rains and snows were held and stored in the subsoil for use when needed by the growing crops.

The plowed ground was in condition to work early in the spring and by disking or harrowing, or both, a fine seed bed was prepared. This fining of the surface also prevented the escape of the moisture below and crops were planted and growing on such land before the farmer with un-

June, and never before saw so many fields lying idle—unplowed—because the work had not been done at the right season. The contrast between the work of farmers as it was often seen from the car windows was painful. One man would be trying to plow; turning over great hard slices that no disking, harrowing or dragging could ever put in condition for planting without first being soaked with rain. Another man would be cultivating corn that stood two feet high and showed no want of moisture. One of the latter now has corn that will make a fair crop, ears up to ten inches long, and he attributes it all to his early plowing, which was advised by a man whose business it is to put farmers on the right track for obtaining the best possible results from their work.

He Knows Better Now

This farmer, like many others, was a doubting Thomas, but this season's experience has convinced him. He will need no more urging to fall and winter plow his fields. He has become converted to the principles of dry-farming modified to meet his conditions.

If, where the average yearly rain fall is only sixteen inches, a crop can be grown every two years by conserving all the moisture that falls a crop can surely be grown every year whe. the rain fall is around forty inches. But land must be plowed early so it will hold enough of this moisture, and the surface must be well stirred both before and after planting the crops.

Wise old Ben Franklin said: "Plow deep while sluggards sleep, and you will have corn to sell and to keep." This was good advice, but to it should be added, "Do your plowing in late fall and early winter," in latitudes where it is possible, and in early fall, farther north. The writer not being a "poet," does not presume to express the advice in rhyme.

There are those who do not believe in fall or winter plowing. They fear the loss of plant food. Nitrogen is the only element that would be subject to much loss, passing into the air in the form of ammonia or leaching away if fields are very sloping. But in the first place it takes heat as well as moisture to liberate the ammonia—that is for nitrification to take place—and there are many weeks in which there is no heat and yet it is not cold enough to freeze the ground. So very little nitrogen will be lost by late fall and early winter plowing. If a little plant food should be leached into the lower levels, that may be remedied by applying the most manure to the high parts of the fields.

Mellows a Stiff Clay

There is no question but that the soil is put in better mechan-

ical condition by fall and early winter plowing. In our own experience old clay soil that contained very little humus would, after laying rough plowed over the winter, work up well and be loose and friable, and show much less disposition to run together than if plowed in the spring. Cultivation was more easier all through the season. The action of air and frost over winter breaks down the soil particles and sets free some of the mineral elements, which would otherwise not be available for the use of plants, thus insuring better crops than would be possible on spring plowed ground—all other things being equal.

If the present drouth converts us to the necessity of storing the moisture that falls before the crop is planted so as to have a supply to draw from instead of waiting for rain to fall after planting we shall gain much. It will be money in the pockets of every man who is in the fields plowing every day the condition of the soil and weather will allow, after the regular fall work is done, instead of going to town to have a little visit with chums or doing unimportant jobs that can wait without loss.

Instead of waiting for spring to open to get to plowing, spring will find the plowing done, in fact the first of January may find this work out of the way, if not it may be finished during the open spell that always comes some time in January or February.

If this is the happy result on the majority of farms, the lesson of the present drouth is a valuable one and will make up many times in increased crops for the loss of time and money caused by lack of rain in the growing season of 1914.

The Hurrying Habit

It is generally agreed that the bustling, hurrying man is not the best worker. Too much of his energy is expended in stirring up the dust. Some men fall into the habit of hurrying, or feeling in a hurry—which is about the same thing. When bruin goes after a man, he should get up his speed; but that's quite a different matter. This hurrying habit is fatal to good work. Nothing is done right when the worker is possessed by this feeling; the friction is too intense. Such a worker cannot return from his occupation at night with the satisfying consciousness of having his work done well.

Boy—"Quick! Bring a ham-balance down to Paradise Court."
P. C.—"What for?"
Boy—"Mrs. Murphy's caught another lidy sneakin' er broom."

Fitted Shares at Factory Prices



12 inch	-	\$2.00 each
13-14 "	-	2.25 "
15-16 "	-	2.50 "

Freight prepaid to your station on orders of one dozen or more

Every make and style ready to fit your plow

BUY FROM A RELIABLE HOUSE

ALL REPAIRS on SAME BASIS

REACHES, TONGUES, DOUBLETREES, SHAFTS, WHIFFLETREES, NECKYOKES, BOLSTER SPRINGS, BINDER KNIVES and SECTIONS, GRAIN TANKS, WAGON BOXES and IRONS FOR SAME

Write for Catalogue

We will save you money

THE JOHN F. MCGEE CO. 174 HENRY AVE. EAST WINNIPEG, MAN.

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

SEAL OF QUALITY

SEAL OF QUALITY

SEAL OF QUALITY

SEAL OF QUALITY

There are many good reasons why the use of

DUNLOP Thresher Belting

is quite general throughout every threshing community.

Threshermen are beginning to realize that rubber Belting surpasses any other kind of Belting for the work they have to do, and That Dunlop Thresher Rubber Belting embodies all the good qualities of an Ideal Rubber Belt.

Dunlop Thresher Belting is made in the finest, the largest, and the best equipped Rubber Factory in all Canada.

BY EXPERT WORKMEN IN A UNIFORM WAY FROM THE BEST MATERIALS

Wherein lies the secret of **SERVICE, QUALITY AND SATISFACTION**

Ask our nearest Branch for a sample of the Belt.

Dunlop Tire & Rubber Goods Co. Limited
Head Office and factories: Toronto

BRANCHES—Victoria, Vancouver, Edmonton, Calgary, Saskatoon, Regina, Winnipeg, London, Hamilton, Toronto, Ottawa, Montreal, St. John, N.B.

SEAL OF QUALITY

SEAL OF QUALITY

SEAL OF QUALITY

SEAL OF QUALITY

Acetylene Headlights for Traction Engines

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

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

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

Red hay wh before This br or imme ting of a hay is v made. for dair, of any k for hors making same p lowed a for alfa

Alsike red clov likely t widely t there a which it greater (would b farmers.

Alsike in that it and leav blossom of red. excessive than eith It is con very we drainage full of ve holds lar

BALLISTITE

DENSE

· Smokeless · Powder ·



The Life of the Load

lies in the explosive. Less of **Ballistite** is required than any other powder.

BALLISTITE (DENSE) is a waterproof powder of high velocity yet with lower breech pressure than any made. Its successes in the field and at the traps have caused it to be known far and wide as the "fastest" powder ever put into shells. Uniform under all conditions. Will not deteriorate.

NEW EMPIRE (BULK)—in demand with all who prefer an easy load.

At Your Dealer's
in any shell loaded in Canada.

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

MIXED FARMING

Continued from page 12

Making Hay

Red clover should be cut for hay when it is in full bloom, and before the bloom turns brown. This brings it in about July 1st. or immediately after the first cutting of alfalfa. The quality of the hay is very good when it is well made. It is especially valuable for dairy cattle or growing cattle of any kind. It is not so suitable for horses as it is often dusty. In making hay from red clover, the same procedure should be followed as was described in detail for alfalfa last month.

Alsike

Alsike is grown even less than red clover and while it is not likely that it will ever be very widely used in Western Canada, there are special locations to which it is very well suited and a greater knowledge of its nature would be of value to Western farmers.

Alsike differs from red clover in that it is a perennial, the stems and leaves are finer, and the blossom is white and pink instead of red. It is more enduring of excessive moisture in the soil than either red clover or alfalfa. It is consequently best suited to very wet districts, where the drainage is poor, or the land very full of vegetable mould so that it holds large supplies of moisture.

It will stand considerable spring flooding, and is also fairly enduring of alkali. It does not stand drought well and is likely to be killed out in a bare dry winter. On most of the prairie country alfalfa and red clover are more likely to succeed, but in special districts such as parts of the Red River Valley where drainage is difficult, and some of the very black almost muck soils of the North, alsike might be the crop that would succeed better than any other leguminous hay crop. It also does well on very heavy clay even when it is of a gumbo nature, provided the moisture is plentiful.

What has been said in regard to the growing of red clover is also true to a great extent of alsike. The preparation of the land and method of seeding is the same. Alsike is usually sown along with grasses, and 5 pounds per acre is sufficient seed to use in a mixture. Alsike mixed with Timothy makes an excellent grade of hay for horses. It is finer and cleaner than red clover and makes a more palatable feed though no richer in actual analysis. It is relished by all kinds of stock and is a very valuable kind of hay. It is a little easier to cure than red clover and alfalfa but has to be handled in much the same manner, particularly if it is a heavy crop and

forms the bulk of the mixture.

Experimental Farm Results

In connection with the articles on hay crops which I have given you the last four months, the following tabular results obtained at Brandon Experimental Farm will be of interest.

The average yield for 1912 and 1913 of the plots of grasses and clovers is as follows:

Variety	Average Yield per Acre Two Years.	Tons Lbs.
Common Alfalfa	4	1270
Grimm's Alfalfa	4	1920
Montana Alfalfa	5	340
Turkistan Alfalfa	5	530
Common Red Clover	2	1660
Mammoth Red Clover	2	1560
Alsike	2	1320
White Dutch Clover	1	1160

Timothy	1	1940
Brome Grass	3	1980
Western Rye Grass	3	760
Kentucky Blue Grass	1	1640
Red Top	1	1480
Orchard Grass	1	1960
Timothy and Red Clover	2	1450
Timothy and Alsike	2	960
Timothy and Alfalfa	3	600
Western Rye Grass and Red Clover	3	680
Western Rye Grass and Alsike	3	610
Western Rye Grass and Alfalfa	4	360
Timothy, Western Rye Grass and Red Clover	3	320
Timothy, Western Rye Grass and Alsike	3	260
Timothy, Red Clover, and Alsike	2	1500
Western Rye Grass, Red Clover, and Alsike	3	40
Timothy, Red Top, and Alsike	2	1150
Timothy, Western Rye Grass, Red Clover, and Alsike	2	1140
Timothy, Western Rye Grass, Red Clover, and Alfalfa	3	1020

No. 49W. Water Tank, \$30.00

Our Water Tanks are made of first-class lumber by experienced workmen. The body is made of 2 x 3-in. spruce or pine with three oak cross cleats 2 x 3 ins. on top and two oak cleats 2 x 3 in. on each side at the top, into which are fastened the four 3/4-in. steel rods which band the body together. This is a strong and serviceable tank. Painted with two coats of red paint mixed with varnish, which greatly helps to preserve the wood. Capacity 375 imperial gallons. Weight 540 lbs. First-class freight rate.



No. 49W. Price, including two bunks \$30.00

WRITE FOR CATALOGUE

It shows a complete line of **Flowshares** of every make and size. **Harness, Belting, Pumps, Oils, Sieves, Washers, Paints, Beds, and everything in Hardware.**

H. R. HAWKEY & CO. Hardware Specialists WINNIPEG

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



The 1913 crop has now been almost completely marketed and comparisons are valuable, so grain inspections in the Western grain inspection division for the year ending August 31st, 1914, are given below:

	1913-44	1912-13
Wheat	158,013,450	141,715,125
Oats	67,197,000	59,763,600
Barley	15,761,250	14,833,000
Flax	14,093,200	22,981,500

The Canadian visible shows small stocks of old grain carried over in terminals and the quantities in the hands of farmers are almost negligible. Now compare with the foregoing the Free Press estimate of the 1914 crop, which is generally most reliable, and is this season well received in the grain trade:

Wheat	134,445,628 bushels
Oats	139,474,500 bushels
Barley	28,999,916 bushels
Flax	5,250,000 bushels

This indicates that after allowing for seed and bread, about 100,000,000 bushels of wheat will be shipped, though the increased acreage may require another 2,000,000 bushels for seed. For every alert farmer already sees in the depredation in Europe, an excellent reason why he should bend every energy to raise a big crop of wheat and oats next year when food stuffs and feed are both sure to range very high. The new crop already ahead from Manitoba and North-Central Saskatchewan largely represents wheat ripened ahead of the rust, and grades high, while South-Central Saskatchewan is just beginning to ship wheat which must grade No. 3 Northern to No. 4 on account of the damage from rust and frost. Showery weather during threshing is also bringing in its train the inevitable result—some tough grain.

Early in August, British markets were glutted by cargoes bound for the Continent but captured as prizes of war. But after the occupation of Belgium and the continued checking of the allies, it soon became evident that this was to become a mighty and lengthy war. European crops had also suffered from drought this summer, and now on the Continent have been poorly saved, with a heavy loss from wanton waste. Russia is not shipping, but with the Atlantic traffic again resumed, heavy shipments are going out

from both Canada and the United States. Nor will these likely slacken but rather greatly increase. North America must feed the northern and western nations of Europe to a far greater extent than ever before. Germany loudly claims to have a food supply for one year—no careful statistician believes that she can go longer than six months without great imports. Watch her purchases, should she conclude a peace before loss by death and starvation decimates her population, the demand will be enormous! Crops are lean in every wheat raising country save England. France finds her crop rather small and poorly saved, while Belgium and the North-Western districts of France have had their crops devastated by troops.

The spring wheat crop in the United States continued to shrink in yield from rust and extreme heat in the first two weeks of August. Their total crop of both winter and spring wheat is now only about 130,000,000 greater than that of last year. And Canada has an apparent shortage of 60,000,000 bushels to ship. How far will the rest of the surplus go toward satisfying a world which finds the 1914 crop short in Europe alone easily 350,000,000 bushels? And hence the tremendous demand for flour ever since general war became inevitable. The rush by householders to acquire a few months' supply ahead and the tremendous buying by French and British governments, as well as our own, the stubborn holding of new wheat by American farmers and now by our own—all have been factors in bringing on an excellent demand for flour with all the big mills booked with orders to full capacity up to the new year. Never before had Western farmer such an opportunity to command markets, and though the crop be only 60 p.c. to 65 p.c. of last year's, the higher prices, with much bigger returns from cattle and hogs, should mean that Western Canada will receive nearly as much wealth for her products as she did last year.

While heavy receipts might temporarily depress our markets, well-informed grain dealers, as well as farmers, look for ultimate

**WAR MEANS
BIG BULGES IN GRAIN**

And you may take advantage of such by getting our bids on all grains when loading. Farmers who consign are this year getting best prices, as then a live commission house can catch strong spots in the market. Careful attention paid to every detail of your shipment. Get in touch with us for best bid, especially oats and barley for special shipment.

BLACKBURN & MILLS
531 Grain Exchange, Winnipeg, Man.
Licensed and Bonded
Phones Main 46 & 3570

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

Farmers! Local Grain Buyers! Bankers!

Consign your grain to MONARCH GRAIN COMPANY, 635 Grain Exchange, Winnipeg, or, if you prefer to sell on track, wire or phone for our prices. PHONE MAIN 7644

We are always open to buy cars of grain on track, or in store Port William or Port Arthur. Option orders handled with care and despatch. Write for our daily price card, and our weather thermometer.

LICENSED AND BONDED Reference: **BANK OF MONTREAL**

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

Massey-Harris Grinders

Scientific Design—
Substantial Construction.
Patent Quick-Relief Lever.
Safety Break Pin.
Positive Adjustment for grinding fine or coarse.
Improved Device for raising and lowering the Feed Spout.
Burrs are especially hard.
Perfectly balanced and Bearings are well babbited, ensuring smooth and easy-running.

Massey-Harris Gasoline Engines

Famous for Reliability, Efficiency and Economy.
Ready any time—A Simple and Reliable source of Power for pumping water, Grinding Feed, Sawing Wood, Operating the Separator, Churn, Feed Cutters, Grindstone, Washing Machine, Etc.

Massey-Harris Co., Limited.
Winnipeg, - Regina, - Saskatoon, - Swift Current, - Calgary, - Yorkton, - Edmonton.
— Agencies Everywhere —

STATIONARY OR PORTABLE
1½ to 20 Horse Power.

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

higher should sible on More should next sf will like west wi All Eu quire v flour ar are getti this se ample c land pr is being oped r by Euro

As w have st gifts to t the big c the poo oats acc Northern sulted in does the near. T half of many sta normal higher pt the stim in Cana smallest 100,000 b practical taken by purposes. Manitoba consumpt should m spection 1913-1914. There i that the must cons oats for s ably usin vators for the shipn comparati mand will sixty per c probability ring, and i oats. Eve prices bei througho the mome must also she is abot Barley i offerings s poor. All cate a ste grain mov oats. Sou should cor of retaini for the in

Victoria S Have Incident Pan ROYA 403 Spadina Name this mag

higher prices. Good seed wheat should be retained as far as possible on the farms.

Moreover every available acre should be sown to wheat or oats next spring, for the year 1915 will likely bring us a bigger harvest with even improved prices. All European countries will require vast quantities of wheat, flour and horse feed. Farmers are getting their harvest off early this season and should have ample opportunity to get much land prepared this fall. As this is being written, wheat has opened strong, with good buying by Europe.

Coarse Grains

As we have predicted, oats have steadily advanced. The gifts to the Imperial government, the big demand from France and the poor threshing returns in oats across the West and in the Northern States, have all resulted in improved prices. Nor does the end of the advance seem near. The drought in the first half of August reduced corn in many states to two-thirds of the normal crops, with consequent higher prices, and oats have felt the stimulus. Stocks of old oats in Canadian elevators are the smallest in years, being a bare 100,000 bushels at Fort William, practically all the oats being taken by the government for war purposes. Many farmers in Manitoba are now buyers. The consumption of oats in the West should mean a much smaller inspection that shown above for 1913-1914.

There is a well defined opinion that the Canadian government must conserve large quantities of oats for seed next spring, probably using its big interior elevators for this purpose. Hence the shipments of oats will be comparatively small and the demand will likely be so keen that sixty per cent oats seem a strong probability. Sweden is mobilizing, and is now a good buyer of oats. Everything points to high prices being fully sustained throughout the year. Reports at the moment indicate that Italy must also come in the market as she is about to declare war.

Barley is in good demand with offerings small and the quality poor. All market factors indicate a steady demand with this grain moving in sympathy with oats. Southern Manitoba farmers should consider the advisability of retaining some extra barley for the increased seed demand.

The King Needs Your Horses

HE ALSO WANTS YOUR OATS

Your patriotism will be judged by the readiness with which you meet the demand. But, you say "I can't spare my horses, and I must have oats to feed them"—



Sell Two or Three of Your Horses

SELL YOUR OATS, THEN BUY A

BULL TRACTOR

The sale of three horses will more than cover the purchase price, and the cost of their feed will more than meet the price of the fuel required to run a Bull Tractor.

What You Get for \$485.00

1. A Tractor that will pull two 14 in. plows. (Several of our customers are pulling three 12 in. plows.)
2. A Tractor that will do your discing, seeding, mowing, harvesting, threshing, or any other farm work where power is required—whether stationary or tractor.

IT IS NOT WHAT WE SAY THE BULL TRACTOR WILL DO BUT WHAT IT IS DOING EVERY DAY IN THE HANDS OF HUNDREDS OF USERS THAT COUNTS WITH YOU

One Farmer writes: Canadian Bull Tractor Co., Winnipeg, Man. Lasalle, Man., August 20th, 1914. Gentlemen: On July 30th, I purchased one of your engines, and at the same time purchased a two-bottom 14-inch John Deere plow to pull with this engine. I am in town today to purchase a three-bottom 12-inch plow, as I have demonstrated to my entire satisfaction that I have ample power to pull three plows. I have been using this engine from 5 o'clock in the morning until 11 o'clock at night, and have had a six to seven horse load on the engine nearly all the time and can recommend the engine to anyone wanting power. Yours truly, (Signed) Auguste Vouriot.

Sold only for Cash to everyone. YOU are not asked to pay for losses sustained by making bad sales. Fill in this Coupon—

AND DO IT NOW.

Gentlemen: Your advertisement in the Canadian Thresherman and Farmer offering Bull Tractors for \$485. Enclosed is my cheque for \$100, please send tractor to me right away. I will pay the balance on delivery.

Name
Address

Canadian Bull Tractor Co. Ltd., Winnipeg, Man.

Already there is an added enquiry in the less favored districts for barley to blend with oats for horse feed.

Flax

This seed, not a food product, fell away sharply when war broke out as the world does not paint when at war. The crop is poor, being estimated at about one-third of what was raised last year. Europe is not buying oil, while absorbed in war, but should this war end suddenly, flax should advance 50c. per bushel.

Mother.—"I gave each of you boys an orange. Charles, you said you wouldn't eat yours till after dinner. And you, Jack, said the same. Have you deceived me?"
Charlie.—"No, mother, we didn't eat our oranges. I ate Jack's an' he ate mine."

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, allow liberal advances on all bills of lading and make prompt returns.

Donald Morrison & Co.

ESTABLISHED 1914

GRAIN COMMISSION
GRAIN EXCHANGE
WINNIPEG

WE handle Wheat, Oats, Flax and Barley on Commission, obtaining best possible grades and prices. Our work is prompt, accurate and reliable. Let us handle YOUR shipments this season. Daily or weekly market letter on application.

References: Bank of Toronto
Northern Crown Bank and
Commercial Agencies

Durro Violins
Victoria Mandolins and Guitars
Stewart Banjos
Have a World-wide Reputation.
Installment Payments Accepted. Get Particulars
ROYAL MUSIC COMPANY
461 Spadina Ave. Toronto

Name this magazine when writing advertisers

OUR YOUNG FOLK

CONDUCTED BY
Cousin Doris.

Girls' Cozy Corner

A Song of the Camp Bayard Taylor

"Give us a song," the soldiers cried,
And the tawny trenches guarding,
When the heated guns of the camp
allied,
Grew weary of bombarding.

The dark Redan, in silent scoff,
Lay grim and threatening under;
And the tawny mound of Malakoff,
No longer belied its thunder.

There was a pause. A guardsman said:
"We storm the forts to-morrow;
Sing while we may, another day,
Will bring enough of sorrow.

They lay along the battery's side,
Below the smoking cannon;
Brave hearts from Severn and from
Clyde,
And from the banks of Shannon.

They sang of love and not of fame,
Forgot was Britain's glory;
Each heart recalled a different name,
But all sang "Annie Laurie."

Voice after voice caught up the song,
Until its tender passion,
Rose like an anthem, rich and strong—
Their battle eve confession.

Dear girl, her name he dared not speak,
But, as the song grew louder,
Something upon the soldier's cheek,
Washed off the stains of powder.

Beyond the darkening ocean burned,
The bloody sunset's embers,
While the Crimean valleys learned,
How English love remembers.

And once again a fire of hell,
Rained on the enemy's quarters,
With scream or shot and burst of shell,
And bellowing of the mortars.

And Irish Nora's eyes are dim,
For a singer dumb and gory;
And English Mary mourns for him,
Who sang of "Annie Laurie."

Sleep, soldiers! still in honoured rest,
Your truth in valour wearing;
The bravest are the tenderest,
The loving are the darest.

A Prize Book will be awarded to the girl who sends in the best essay on this subject—A Heroine. The character may be one in history, literature, or one living at the present time. It may be a girl in the home community. All essays must be in by Oct. 15th. Send to Pearl Richmond Hamilton, 983, Glenview Ave., Winnipeg.

A Heroine

One of England's most beautiful heroines was Mrs. Lucy Hutchinson, who helped in the defence of Nottingham Castle during the Civil War in England.

The king set up his standard on August 22, 1642, at Nottingham, near which the Hutchinsons lived.

For four years Mrs. Hutchinson was shut up in the castle, acting as surgeon during the siege, tending the sick, supplying food for the big household, medicine, and good cheer. She shared her husband's plans who was Lieutenant-colonel, and encouraged him in his refusal to accept bribes. When the war was over, Mrs. Hutchinson acted as

peacemaker between a band of soldiers preparing to attack the town and the citizens arming for its defense, and later she worked for her husband's pardon. It was denied, and she courageously cheered and comforted her husband in prison in the tower, and afterwards in Sandown Castle, until his death.

The Little Sister of Mercy

Florence Nightingale in her girlhood was named by her father, "The Little Sister of Mercy," because she was so tender to all living things. She made a nest for a little robin who had a broken wing and fed it. When ever she found a bird that was hurt, a dog that was lame, any creature that was suffering she cared for it, and invented ways by which it might be cured.

If any one in her community were sick she carried flowers or fruit, or a present to the suffering. The old

but after Florence Nightingale had been there it were fit for an angel.

Joan of Arc

When Joan of Arc was a girl she felt that voices told her to go to the king's aid, for it was through her that France would be saved. One night when the village priest came to see her father she heard them talk sadly over the country's condition.

"Jesus, have pity on us!" she heard the priest say. "There is a prophecy made long syne by some holy man that our France shall be ruined by a woman, and then be safe restored by a maid from the borders of Lorraine. We know the woman, King Charles' mother—Madame Isabeau; but where is the maid? God grant she come soon."

Joan heard a voice say: Thou art the maid—thou wast born to save this land of France.

Joan was a girl who helped her



"Heaven Helps Those Who Help Themselves"
Indians preparing the covering of their Birch-bark Canoe.

people at the windows waved their hands to her as she passed dressed so simply and dainty.

She would ride her pony to lonely cottages with a basket at her saddlebow, filled with puddings and jellies. Everything about the girl was sunny. She had been born in the beautiful Italian city of Florence, the city of flowers, and was named for it, but spent her childhood in England. She and Elizabeth Fry spent their time trying to help the women in prison. Together they visited many English hospitals and studied methods of nursing. She went to Kaiserwerth on the Rhine to study. When the Crimean War broke out she knew that many soldiers would suffer for want of attention. She felt that this was her call to service, and she offered to take a band of women nurses out to Crimea to serve through the war.

Before the war had ended she had come to be loved by the British soldiers. She was a wonderful nurse, because she was always full of courage and cheerfulness—always trying to ease the suffering.

Thousands of wounded men watched for her to pass by their beds, and declared they were better just for a sight of her face or the sound of her voice.

She often took charge of men whose wounds the doctors had declared beyond curing, and brought them back to health and happiness.

She asked nothing but the chance to serve, and thereby won the love of all the world. It was said by the men that the place would be blue with swearing

mother; she watched the cattle, and helped with the sewing but when alone at her work she heard these voices. In the summer when Joan was sixteen the English soldiers swept down on Lorraine, and Joan—a tall, strong girl with sunburnt face, with her parents fled to a walled city. Here she heard of the awful destruction of war, and for the first time saw what war meant. She then began to realize that God had called her to the wonderful work of saving her countrymen.

In the fall of 1428 the fate of France seemed trembling in the balance—bound up with the fate of the city of Orleans. If this city fell France was lost.

She knew nothing of war, but the voices told her that she would be guided safely—that she must save the city of Orleans.

Being fully inspired with her calling she determined to go saying: "I must go and do this work, for my Lord wishes me to go."

In a short time she was put at the head of the French army, and rode north to raise the siege of Orleans. Clad in full armor, astride a white charger, sword at her side, she carried a banner which had been described to her by the mystic voices. The field of the banner was sown with the lilies of France, in the centre was painted God holding the world, and on each side knelt an angel. The motto was "Jesus Maria." With this banner floating above her she rode to Orleans, and her army was able to enter Orleans. She gave her country new hope and strength.

Canadian Boys' Camp

In Praise of England

(From Shakespeare's Richard II.)
This royal throne of kings, this scepter's
isle,
This earth of majesty, this seat of Mars,
This other Eden, demi-paradise;
This fortress, built by Nature for herself
Against infection and the hand of war,
This happy breed of men, this little
world;
This precious stone set in the silver sea,
Which serves it in the office of a wall,
Or as a moat defensive to a house,
Against the envy of less happier lands,
This blessed plot, this earth, this realm,
This England.

(From Shakespeare's King John.)

This England never did, nor never shall,
Lie at the proud foot of a conqueror,
Come the three corners of the world in arms,
And we shall shock them; nought shall
make us rue
If England to itself do rest but true.

The Ships that Fight Under the Sea

Submarines are ships that travel beneath the surface of the waves. They are long, shaped like a cigar, but flat on the top to afford standing place for the officers and men. In the middle of the deck is a little tower, called a conning tower, and this is the only way into the boat for the crew.

The submarine is a vessel of war. When necessary for the ship to disappear under the water, the men go to the side and close the door in the conning tower, thus making the vessel water-tight. It is steered under the water. Its engines are driven by petrol or gasoline. It has the ordinary rudder to steer it, and two other rudders which work horizontally to make the ship dive down or come up. Valves are opened, and the sea water rushes into tanks to increase the weight. When enough water has been taken in to make the vessel sink to a certain depth the valves are closed and the vessel works along under water at about ten miles an hour. About twelve men compose the crew, and they are the bravest of the brave. They have to remain in this ship under water where no air can reach them. To enable them to do so, the ship carries compressed air, which is released, a little at a time, from special chambers, while air that has become foul from having been breathed is like the exhaust gases from the engine driven out of the ship.

When they creep under the water to attack a ship they fire the torpedoes and after their work is done they force out the water contained in the tanks and drive the submarines up to the surface of the sea, open the doorway of the conning tower, and admit fresh air.

There are other features of the use of compressed air. When compressed it is the force used to drive the water out from the tanks. And should the submarine become stuck in the mud the compressed air blows the mud away and releases the ship, enabling it to rise again.

A marvellous instrument has been invented to enable the officer at the depth of the sea to see what is going on at the surface of the water. It shows him the surface conditions for a distance of thirteen miles all around.

We Prepay All Charges

On Goods Selected From Our Catalogue



**CHARGES
PAID
10.95**

THIS is a clean cut business announcement that anyone can understand. It means that every price quoted in our catalogue is the cost of the article, with all charges prepaid, delivered free to your nearest Express or Post Office. It means that when you order any goods from our catalogue you know just exactly what they are going to cost you even before you order. It permits of absolutely no deception and, in our opinion, is the only fair way to deal with out-of-town customers.

Furthermore, you can compare values. And that is just what we want—because we know that our values are positively the best offered by any catalogue house in Canada.

The reason that we are able to offer the very remarkable values contained in our catalogue, is that we do business in an economical manner.

Low rental, low insurance rate, low taxes and a private railway siding help; but the greatest saving we make is in our simplified method of handling orders received by mail.

WE GIVE SPLENDID SERVICE

Not only has our simplified method greatly reduced the cost of doing business, but it has also greatly reduced the time required to fill orders. In almost every case we ship all goods on the same day that the order is received. Usually where there are delays, the delays are due to getting for our customers goods that we do not catalogue. We are quite sure, however, that our mail order friends will overlook delays of this kind.

Furthermore, our simplified methods prevent many of the annoying mistakes that occur in Mail Order houses that do business in the old fashioned way. As a matter of fact, we have yet to hear of a single instance where one of our customers got the wrong goods.

Then, being a purely catalogue house, we devote our entire attention to the needs of out-of-town customers who send us orders.

HERE IS A STRIKING VALUE

From cover to cover our catalogue is filled with wonderful values. We select this one merely to show what may be expected in this very interesting little book of ours.

Then again, this is the season of the year when women buy suits.

This suit, though exceptionally low priced, has a very stylish appearance. It is made of fine quality cheviot. The tailoring and finish is equal in every respect to that found on higher priced garments. The notch collar of the coat and the back are trimmed with braid ornaments. The coat is lined with a fine quality silk serge that will give splendid wear. The arm holes are protected with shields. The skirt has the popular Russian Tunic effect with box pleat in front.

1 W 34—Women's fine quality cheviot suit, colors, Black or Navy.
Bust size 32 to 44; Waist sizes, 23 to 30; lengths, 37 to 42.
(In ordering be sure to state size and color.)

Price, delivered to your nearest
Express or Post Office..... **\$10.95**

If you have not already had a copy of our Fall and Winter catalogue, drop us a card and we will send you one by return mail.

CHRISTIE GRANT CO. LIMITED
WINNIPEG
CANADA

AT YOUR SERVICE

OUR WOMEN FOLK

CONDUCTED BY
PEARL RICHMOND HAMILTON

Sunshine

By NICHOLAS VACHEL LINDSAY

The sun gives not directly
The coal, the diamond crown;
Not in a special basket
Are these from Heaven let down.

The sun gives not directly
The plow, man's iron friend;
Not by a path or stairway
Do tools from Heaven descend.

Yet sunshine fashions all things
That cut or burn or fly;
And corn that seems upon the earth
Is made in the hot sky.

The gravel of the roadbed,
The metal of the gun,
The engine of the airship
Trace somehow from the sun.

And so your soul, my lady
More sunshine, nothing more!
Prepares me the contraptions
I work with or adore.

Within me cornfields rustle
Niagaras roar their way,
Vast thunderstorms and rainbows
Are in my thoughts to-day.

Ten thousand anvils sound there
By forges flaming white,
And many books I read there
And many books I write.

And freedom's bells are ringing
And bird-choirs chant and fly
The whole world works in me to-day
And all the shining sky.

Because of one small lady
Whose smile is my chief sun,
She gives me any gift to me
Yet all gifts, giving one
Amen.

The Peace of War

(P.R.H.)

All about us is excitement over the present war of the nations, and we look around in bewilderment and bow reverently to breathe a prayer for peace.

Out of the wreckage and tumult will come peace—just as in times of individual strife the great lessons of God's will are learned.

Though absorbed in the awful sufferings that take place on the battlefields and in the broken homes, we in Canada must realize more deeply the blessings we have enjoyed. When all is over we shall better appreciate our environment—we shall understand the real meaning of patriotism. Many of us have not before realized the debt we owe for our liberty. This experience is cementing more closely the American to the Canadian. American citizens in Canada will be more loyal to Canada.

An American said the other day, "I never realized before the value of my home in Canada. Henceforth I shall be loyal to all things Canadian."

"Would you be willing to fight for our flag?" I asked an American resident here.

"I would be proud to do so. I owe patriotic allegiance to the land that gives me a home so wonderfully protected."

War is the price we pay for protection. Let us hope that out of the



"OUR QUEEN"

present conflict peace and protection shall be declared for all time.

Another blessing we see is the burial of petty differences. Internal strife is forgotten as all unite to honor the flag that shall bring peace out of chaos, and the words of Macaulay come to our minds:

"Then none was for a party;
Then all were for the State;
Then the great men helped the poor,
And the poor man loved the great."

Out of the present emergencies, great and powerful men shall be born—heroes and heroines rise from crises.

"Our country's welfare is our first concern,
And who promotes that best, best proves his duty."

Broken hearted wives and mothers bid good bye to brave men departing to fight for their country's honor.

Women's tears and broken homes—where is peace?
Peace—the proper result of the Christian temper—the great kindness which our religion doth us—bringing a settled condition of the mind and a consistency within ourselves.

"Patience and resignation are the pillars of human peace on earth."

Patience is the soul of peace, the best of men was a sufferer—a meek, patient, tranquil spirit.

Jeremy Taylor says: "It is but reasonable to bear that accident patiently, which God sends, since impatience does but entangle us, like the fluttering of a bird in a net, but cannot at all ease our trouble."

Just now when everyone is thinking of the gloom of war it is a blessing to meet the optimist—for a sunny face gilds the edges of life's blackest clouds.

To be sunny and hopeful is to be heroic. The love of happiness and the principle of duty—united—is religion's masterpiece—the sole source of public and private peace.

The present war will produce healthy economy out of reckless extravagance. Men and women who were selfishly extravagant are now making brave self-sacrifices to give money for the country's good and relief to suffering families.

War brings out of chaos tender ministrations among fellow men—the harmony of helpfulness—the proof of "I am my brother's keeper." The tear of sympathy and compassion make men better and women lovelier. These then are some of the signs of peace in war.

"Oh, peace! thou source and soul of social life,
Beneath whose calm inspiring influence
Science his views enlarges, art refines,
And swelling commerce opens all her ports;
Blest be the man divine, who gives us thee!"

Daughters of the Empire

The Daughters of the Empire are proving true to their name. When the request came to Mrs. A. Wilson Smith, Provincial Secretary, for seven thousand dollars, Manitoba's share towards the Hospital Ship, our generous patriotic women responded with nearly twice the amount. Word was sent out that the share from women in the province outside of Winnipeg was two thousand dollars—but they sent about \$6,500—more than three times the amount requested. Even more would have been sent if the fund had not been closed. The committee in charge are enthusiastic in their praise of the women in the country, and Mrs. A. Wilson Smith requested me to acknowledge in this department their extreme gratitude to the H. M.

Order from Dingwall's Jewellery Catalogue and Obtain Good Value

It will ensure your choosing Anniversary, Wedding, Birthday or Christmas Gifts in a most satisfactory and pleasant manner.

Illustrated throughout its pages are hundreds of articles of Fine Jewellery, Silverware, Cut Glass, Watches, Clocks, Brass and Leather Goods, offering you as fine values as can possibly be obtained.

If you have not a copy of this book, write and we will mail you one by return mail, post paid, and free of charge.

D. R. DINGWALL, Limited

JEWELLERS

WINNIPEG

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

Se
Economi
Pro
healty,
con
ante
woman
with
They ar
to by 1
to Wim
with
women
have
Heaven
A Wi
with eve
ism.
Lieute
Comeror
George
Poland
Mayor
ing. T
practical
result in
insured
useful
sounded
West w
that the
ten
FL
In the I
Kings, Lo
a photo t
Forty
pital we
teered to
Isaac
equal spe
a clear
origin of
also spo
the cause
sketching
men in
American
on to de
republic
ized wor
Red Cros
the civili
Geneva
promulga
treatmen
war.
The fi
matter o
real corp
nurses.
real corp
was neve
mark or
attended
ped to t
tion of t
that ins
red grou
ground w
formation
and the
out pre
realize it
engaged
warader
sive t
ould tr
Division
ment to
was capt
site sid

Economics women and other women in the Province for their genuine patriotic loyalty.

A committee of one hundred has been appointed in Winnipeg to see that no woman or child in the city of Winnipeg without food or fuel this winter. They are planning for a permanent local relief fund, to supply assistance to Winnipeg families affected by the war. The protection and care of these women and children is one of the very best examples of true patriotism. "Heaven's harmony is universal love."

The Red Cross Society

A Winnipeg branch has been launched with every evidence of practical patriotism.

Lieutenant-Governor Sir Douglas Cameron was chosen hon. president, George F. Galt president, and C. F. Boland hon. secretary.

Mayor Deacon presided over the meeting. The speeches called forth such a practical display of patriotism as will result in the soldiers at the front being insured proper comforts and every needful attendance and care when wounded or sick. Winnipeg and the West will do its duty, and see to it that those left behind are not forgotten.



FLORENCE NIGHTINGALE.

In the little room where she interviewed Kings, Lords and Commons of all ranks. From a photo taken about a year before her death.

Forty nurses from the General Hospital were present. They have volunteered for the front.

Isaac Campbell, K.C., was the principal speaker of the evening and gave a clear and graphic account of the origin of the Red Cross society, and also spoke with lucidity and force on the causes leading up to the war. After sketching the part played by noble women in nursing the wounded in the American civil war, Mr. Campbell went on to declare that it was to the little republic of Switzerland that the civilized world owed the founding of the Red Cross society. That republic called the civilized nations to a conference at Geneva in order to agree upon the promulgation of an organization for the treatment of the wounded in time of war.

The first thing to be done was the matter of the neutrality of the medical corps, the doctors, attendants and nurses. To guarantee that the medical corps would not be fired upon, it was necessary that there should be a mark or a flag. When this matter was attended to, a high compliment was paid to the Swiss nation by the adoption of their flag, with the difference that instead of a white cross on a red ground the red cross with a white ground was chosen. The notion of the formation of the Red Cross society, said the speaker, was that if we could not prevent war, we would at least minimize it. It was provided that those engaged in hospital work should not be regarded—they should do nothing offensive to the enemy; also that they should treat the wounded on both sides. Provision was also made as to the treatment to be accorded in case a position was captured by belligerents of the opposite side to which the corps belonged.

Great Advance in Conduct of War

The establishment of these regulations made a great advance in the conduct of war, and those wounded in the course of war or who were unfortunate enough to be taken sick. Mr. Campbell went on to say that there was a reason why they should help the boys who had gone to the front, not simply because they knew many of them, but also for military purposes. No army ever did well in the field unless the morale and the encouragement given by the people at home came to them, so that they felt the home folk to be behind them. (Loud cheers.) "The men who go to the front are men of flesh and blood as we are, with palpitating nerves, and they will fight with infinitely more dash, more hope and confidence if they know that the people at home are praying for them, working for them, and if they know that should they be wounded there will be messages, supplies and cheer at the military base sent by those they left behind them. That helps to make the soldier, and all army and navy officers testify that these voluntary organizations are a great aid to the efficiency of the forces on the field. (Loud applause.)"

Mr. Campbell pointed out that there need be no fear that the two organizations, the Red Cross and the St. John Ambulance association would clash in their work. The military authorities had taken steps to define the work of each society. He also stated that it would be as well for those who intended to make donations in kind to wait until the government gave out information as to what kind of supplies were needed, so as to save unfortunate and amusing mistakes, such as occurred in the South African war.

Mayor Deacon then spoke in a most convincing manner. His appeal was intensely earnest. He said:

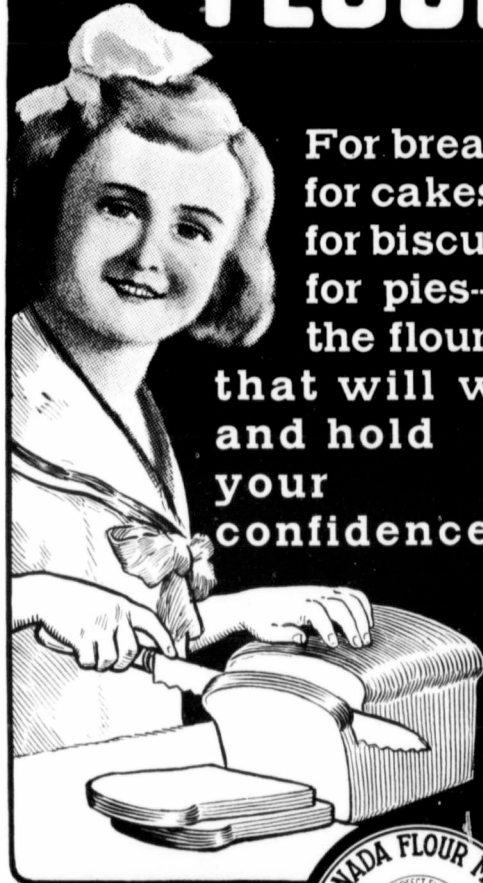
"I think the time has come when the people of this country have the opportunity to pay off some of their debt. You have gone up and down the streets of Winnipeg, free to enjoy the benefits of your citizenship, and you have never thought how much you owe to the soldiers of England and to mutilated men who kept the decks of wooden ships in the days gone by. England has carried the torch of freedom in battle during the centuries. The mayor illustrated this last statement by referring to the gallant part England played in the case of the Spanish Armada, later at Trafalgar and against Napoleon at Waterloo.

Mayor Deacon went on, "We are a race of people that love liberty. This is a time when every man who enjoys the privilege of British citizenship must exert himself to the last, no matter what the sacrifice. We must triumph in this fight. Defeat is unthinkable. If Germany won, she would take Holland, Denmark and Belgium, and it would not be long before the British Empire would be threatened. At this time Britain stands for freedom and for the rights of humanity. Our boys are going to the front in as righteous a cause as ever soldiers fought in. (Loud cheers.) None of us wanted war. We want peace, and the only way we can get peace is to trample this mad, military despot under foot."

Concluding, the mayor said: "Here in Winnipeg, chief city of the province, the centre of the life of the province, we must give life, enthusiastic life, to this Red Cross movement. We must not fancy that this war will be over in a month or two, but go to it with a determination that if it is ten miles to the top of the hill we will put our shoulder to the wheel and push until we arrive at the very top. (Loud cheers.) I appeal to you, as representative of this city, to go into this work enthusiastically. Let us have a thoroughly organized Red Cross society that our boys at the front will have supplies of all kinds to be applied to their comfort, to the comfort of men who fight in the performance of a duty as solemn and sacred as men ever fought in." A final statement was that received with cordial approval.

Col. S. R. Steele, district officer commanding, spoke briefly, and said that there was plenty of work for the society to do, instancing the care of the dependents of the reservists who had left at

PURITY FLOUR



For bread,
for cakes,
for biscuits,
for pies--
the flour
that will win
and hold
your
confidence

"More bread
and
better bread"



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

the call of duty for the front. These men had not gone, and the volunteers were not going, in any frivolous spirit, but inspired by patriotic reasons.

Without—the city's noise—
The clang of car bells in the street,
Hoofbeats of horses ringing clear,
Laughter of workers homeward bound,
The shriek of whistles on departing trains,
Wild, brazen cries of warning or of fear.

The Peace Within
By MARY H FLAGG

'Tis night and prayer time,
No sound within my quiet room,
O sanctuary of my home—
Save the soft ticking of the clock,
Faithful reminder of the passing hours,
And the deep breathing of my sleeping child.

Dear little child of mine,
Within this calm and quiet room,
Thus may it ever be for thee,
Although turmoil, confusion, be without—
et may'st thou ever keep within thyself,
A calm and sweet serenity of soul.

Her Child's Interpreter

By EUGENE C. DOLSON

The truest mother of children
Is her children's truest friend
Who judging a deed, considers
The motive and not the end.

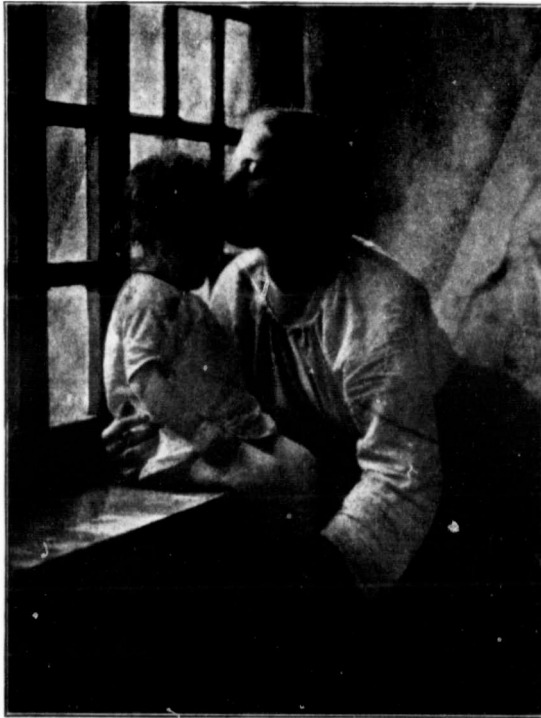
She gains, in this thoughtful study,
To her child's heart clear insight;
An aid in her tireless guidance
To a life of worth and right.

'Tis an adage from olden ages,
But as true to-day as then,
That only the best of mothers
Are mothers of best of men.

Your child's first conception of God's
appreciation of human effort and the
divine optimism of the faith comes
through the medium of the Bible pas-
sages having for their themes, com-

"The sifter" is the individual who
will not take exercise each day for the
purpose of making the body balance the
work of the brain. She never incites
her body to new endeavor. She sits
in an easy chair and gossips and broods,
or vice versa, forgetting the greatest
truth our common Creator ever gave
us—that mind must match body and
body match mind in order to produce
a useful, lasting human being.

Activity along helpful lines is the
spice of life. A mother who frankly
talks with the father about her own de-
sires to do things useful, who joins with
him and the children in doing that which
benefits all, must be moving all of the
working hours of the day, and by so
doing, strengthens herself. Instead of
sitting and brooding she is joining with
the greater life movement of her chil-
dren, her husband and her neighbors.
It is true that for the moment the
housework may be neglected, but



One such little household deprived of its breadwinner is a final reason why the war dog should be wiped off the face of the earth.

fort and praise and God's appreciation,
which you carefully select and read to
him.

Overpraise, if you like; it doesn't do
Jimmy any harm. On the contrary, it
helps him to live up to your ideal of him
now, and later leads him to try to
reach God's pattern of living when
he outgrows yours.

The instant the child is shown that
brains and hands can work in har-
mony, he is ready to do things that
help his body and brain.

The sweetest serenade that a woman
hears in all her life is the first low
tone of her first born.

The booklet—Helps for Expectant
Mothers—will be sent free to any one
who requests it. Kindly enclose stamp.
Address Pearl Richmond Hamilton,
983 Grosvenor Ave., Winnipeg.

"To be cheerful, bright, tender, and
helpful in one's own sphere of contact
is all that is required of us. To let
no influence go out from one's life that
is not helpful, is the secret of a happy
life."

through the fact that in order to keep
in touch with life she lets it pass by a
moment, she and those she has drawn
into her own activity are better able to
finish it later.

Dear Mothers

Dear Mothers:—
If some of the mothers of Western
Canada could read some of my corre-
spondence it might surprise them. Many
letters come to me from girls of from
twelve to eighteen and twenty, asking
me to tell them what their mothers
should tell them—all about themselves.
They are earnest in their appeals, and it
is deplorable that so many girls know so
little about themselves. Mothers dis-
own their fallen daughters when they
are often themselves to blame for allow-
ing their daughters to remain in igno-
rance. Every girl has a right to know
about herself. Let me relate an ex-
perience from a Western home. A young
girl was brought to the city by her
mother, and when the doctor told her
that her daughter had been betrayed she
exclaimed: "I am to blame—I never told



Mason & Risch Pianos

"FROM FACTORY TO HOME"

17 WESTERN BRANCH STORES

The building and marketing of the Mason &
Risch Piano is scientifically directed to the creation
of the HIGHEST possible quality at the LOWEST
possible price. No price reason need debar you from
owning a Mason & Risch, "The Best Piano Built,"
for it comes to you from Factory to Home, and the
immense saving of all middleman's profit is YOURS!

Write TO-DAY for our latest Booklet, "Inside
Information." It tells the important things to look
for and the pitfalls to avoid in selecting a Piano to
give lifetime satisfaction.

MASON & RISCH LIMITED
WINNIPEG, MAN.

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

**ASK FOR
FIVE ROSES FLOUR**

The World's Best



**Send for Five Roses
Cook Book—**

COUPON
Write Name and Address plainly.
Don't forget to enclose Ten Cents
in stamps.

NAME: _____
ADDRESS: _____
NAME OF DEALER: _____

BEING A MANUAL OF GOOD RECIPES carefully
chosen from the contributions of over two thousand
successful users of Five Roses Flour throughout Canada.
Also Useful Notes on the various classes of good things
to eat, all of which have been carefully checked and
re-checked by competent authority.

Address your Envelope to LAKE OF THE WOODS MILLING CO. LIMITED, WINNIPEG

If unable to secure Five Roses Flour from your local dealer,
write the Lake Of The Woods Milling Co. Limited, Winnipeg.

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

**Don't forget that we guarantee our
Advertisers**

**SYNOPSIS
WEST**

This sale is a
section of a
Saskatchewan
in 1914
Sub-Agency
may be nu
but not 25
Duties —
evation of
homestead
roads, etc.
when made
in certai
standing m
side his hom
Duties — 5
years after
some extra
be obtained
certain cond
A settler
right may b
districts. P
reads six m
50 acres and
The area
in case of
stock may
certain condi

N.B.—Un-
statement will

1
Thirty
D
R

tells th

Name this m

\$:
DOM
BICY
\$2

These fa
little more th
The Dominic
but you can
Equipped wi
Dunlop rims
Coaster, rubb
Sundries
prices to eve
traded free

Dominio

224-
WIP

Name this ma



SYNOPSIS OF CANADIAN NORTH-WEST LAND REGULATIONS

This sole head of a family, or any male over 18 years old, may homestead a quarter-section of available Dominion land in Manitoba, Saskatchewan or Alberta. Applicant must appear in person at the Dominion Lands Agency or Sub-Agency for the District. Entry by proxy may be made at any Dominion Lands Agency (but not Sub-Agency), on certain conditions.

Duties—Six months residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres, on certain conditions. A habitable house is required except where residence is performed in the vicinity.

In certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$2.00 per acre.

Duties—Six months residence in each of three years after earning homestead patent; also 50 acres extra cultivation. Pre-emption patent may be obtained as soon as homestead patent, on certain conditions.

A settler who has exhausted his homestead right may take a purchased homestead in certain districts. Price \$3.00 per acre. Duties—Must reside six months in each of three years, cultivate 20 acres and erect a house worth \$300.

The area of cultivation is subject to reduction in case of rough, scrubby or stony land. Live stock may be substituted for cultivation under certain conditions.

W. W. CORY, C.M.G.,
Deputy of the Minister of the Interior
N.B.—Unauthorized publication of this advertisement will not be paid for.—64388.

my daughter anything, and she was so innocent." She had been left alone a great deal with a highly respected young man. Every girl who has opened her heart to me in her downfall has told me the same story. "I did not know—my mother never told me anything." Now these letters are coming to me from girls in Manitoba, Saskatchewan and Alberta—perhaps they may be your daughter, and you do not realize her danger. If you do not know how to tell her, there are books that explain the beautiful mysteries of girlhood in a pure, clean, Christian way. In the name of young womanhood I beg you to make a companion of your daughter. Do not wait until it is too late. Sincerely, P.R.H.

COMPARISONS

Men are like wagons, rattle most when there's nothing in them.

Mrs. Brown says her husband is like a tallow candle, because he always will smoke when going out.

The curiosity of a woman would turn a rainbow to see what was behind it.

The gold that has been refined in the hottest furnace comes out the purest.

The sword kills many, but wine many more.

The weakest spoke in the cart breaks first.

There are no gains without pains.

Though a coat be ever so fine that a fool wears, yet 'tis but a fool's coat.

There is a much shorter cut from virtue to vice than from vice to virtue.

They must hunger in frost that will not work in heat.

Threatened folks live long.

Those husbands are in heaven whose wives do not chide.

'Tis but a little narrow soul which earthly things can please.

'Tis easier to build two chimneys than to maintain one.

To forget a wrong is the best revenge.

Trickery comes back to its master.

We ought not to give the fine flour to the devil and the bran to God.

A drunken man who had slipped down, thought it very singular that water always freezes with the slippery side up.

Flowers fling their wealth upon the vacant air, and rich men often fling theirs upon the vacant heir.

The greatest thoughts seem degraded in their passage through little minds. Even the winds of Heaven make mean music when whistling through a keyhole.

It is more respectable to black boots than to black characters—to sow shirts than to sow strifes.

At bars madness is sold by the bottle.

A hale cobbler is better than a sick king.

Health is the vital principle of bliss.

Friendship is composed of a single soul inhabiting two bodies.

Home Economics

(We regret that the following report from Virden was held over from last month):

The President spoke of the need for medical inspection in the country schools. The women of the country must try to get this.

Mrs. Dayton brought her fireless cooker and prepared a dinner on it. She brought vegetables to the boiling point

You can wash the nickelled oven like you wash a kitchen dish, thereby keeping your

McClary's Sask-alta Range sweet, clean, hygienic. Nickel draws heat—you get a hot oven with less fuel. Ask the McClary dealer.

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

Patriotic Music and Military Band Selections

Were Never So Popular

National Anthems and military marches, played in your home on Columbia Grafonolas are most popular entertainment at the present time. Both old and young appreciate these stirring strains—and for impromptu dances during the winter there's nothing better than Grafonola music.

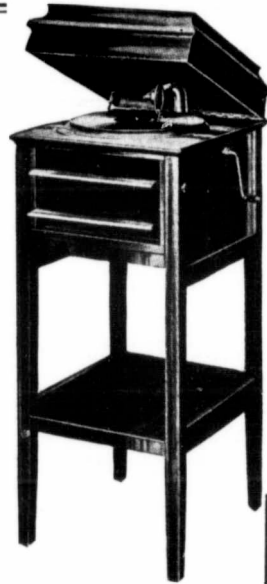
All The World's Best Music



On The World's Best Machines

The model here shown sells for \$65, and our illustrated catalogue shows machines ranging in price from \$20 to \$650—All on easy terms if you desire. Write for our catalogue to-day.

WINNIPEG PIANO CO.
333 Portage Ave., Winnipeg.



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

Paint Your Engines with CARBON BLACK ELASTIC PAINT

It is a Weatherproof Bright Glossy Black 80c. per Gallon

Buy direct from SHINGLE STAINS & SPECIALTIES (LIMITED) WINNIPEG 66 KING ST.



CHALLENGE COLLARS

Acknowledged to be the finest creation of Water-wood Collars ever made. Ask to see and buy no other. All stores or direct for 25c.

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

Name this magazine when writing advertisers

Name this magazine when writing advertisers

Remember to renew your Subscription

1877-1914

Thirty-six years' experience in brewing

Drewry's Redwood Lager

tells the story of its popularity

TRY IT

Name this magazine when writing advertisers

\$35 DOMINION BICYCLES FOR \$25



These famous Bicycles now sold at little more than the cost of manufacture. The Dominion retails at \$35 in Winnipeg, but you can buy it by mail for \$25. Equipped with mud guards, wood or steel Dunlop rims, roller chain, New Departure Coast or rubber pedals, pump and tools.

Sundries and Tires at wholesale prices to everyone. Send for our illustrated free catalog.

Dominion Cycle Company
224-6 LOGAN AVE.
WINNIPEG, CANADA

Name this magazine when writing advertisers

The New Style



Edison Phonograph

and your choice of over 1000 records now shipped direct to you for a full free trial right in your own home. Yes, try it out right in your own home. Enter for your family and friends. Send it back at our expense if you don't want to keep it. A few dollars a month now pays for a genuine Edison at the Rock-bottom Price and without even interest on monthly payments. Write Today for Our Free Edison Book. Tells about the wonderful entertainers. Shows you all the machines and records. Price 10¢. From. No obligation. In asking for our FREE EDISON BOOK, Write Today—NOW! to Wm. G. BARKER, Edison Phonograph Distributor, 235 Postage Avenue, Dept. 725, Winnipeg, Man.

Use
Stephens'
Pure Paint

FREE

ALL CHRISTIANS
Should Read These Pamphlets:
"Where are the Dead?"
"What is the Soul?"
"The Rich Man in He l"
"Thieves in Paradise"
"Calamities: Why Permitted?"
"Battle of Armageddon"
Scripturally explained and mailed free on request.
Or we will mail the above six pamphlets and our booklet, "What say the Scriptures about Hell?" post paid for 10c.
SPECIAL OFFER:
Studies in the Scriptures—4 vols. of 3000 pages, bound in cloth and gold, comprising the following:
I. The Divine plan of the ages.
II. The Time at Hand.
III. Thy Kingdom Come.
IV. The Battle of Armageddon.
V. The Atonement between God and Man.
VI. The New Creation.
All of the above mailed post paid (any language) to any address for \$1.00. In these Studies the teachings of Divine Revelation can be seen to be both beautiful and harmonious.
Bible Study Club
59 Alloway Ave., Winnipeg, Man.

Gas, Automobile and Traction Engineering



Each course may be finished in three months. Enter any time. The young man who completes either course is sure of a job, with good pay. You can learn more about an engine in three months at
Highland Park College
than in that many years at an apprentice. Students work in machine shops, traction engine house and garage, largest in country. Repair and drive gas and steam engines and automobiles. Small tuition fees. Lowest living expenses. No entrance examinations. Send for illustrated catalogue.
GEORGE P. MCGILL, President
Des Moines, Iowa.

on the coal oil stove and put them in the compartments of the cooker, a meat heart and a pudding were also prepared and put in and left to cook while the other items of the program were given. Mrs. Dayton demonstrated the making of a health loaf, for which I now give the recipe. Health Loaf, 2 cups Graham flour, 1 cup white flour, half cup brown sugar, 1 cup fruit (raisins, currants or date), 2 tablespoonfuls molasses, 1 teaspoonful soda, 1 teaspoon salt. Enough buttermilk to mix fairly stiff. Bake in slow oven 1 1/2 hours.

Mrs. Dr. Clingan showed us one of her famous carrot puddings, told us how to make it and passed enough samples for us to taste. The following is the recipe for same: Carrot Pudding, 1 cup grated carrots, 1 cup grated potatoes, 1 cup brown sugar, 1 cup chopped suet, 1 cup raisins and currants mixed, 1 teaspoon spices, 1 teaspoon soda, 1 1/2 cups flour. Boil 3 hours. Sauce, 2 cups brown sugar, 1/2 cup butter melted and browned, 2 tablespoons flour. Add boiling water. Mrs. St. John gave a demonstration on the making of a potato flour cake 4 eggs beaten separately, 1 cup white sugar beaten into yolks, stir whites lightly into this, add half cup potato flour sifted with 1 teaspoonful of baking powder. Bake in a moderate oven for about half an hour. Mrs. St. John spoke of the home economics value of potato flour. It is healthful, easily prepared, cheap and enjoyable.

The secretary read the cemetery report. A good man has been hired and is going on with the work of caretaker out there. The visiting committee of the club reported having called on several new people in the town and securing new members.

The rest room committee reported that they had decided to serve meals on Sports Day and required help to do same.

Mrs. T. Gibbings extended her usual cordial invitation to the members to go to her home for the June meeting. She was thanked by very hearty applause. An auto committee was appointed to arrange the trip: Mesdames Carnahan, Mullins, Bridgett, W. and G. Golding, Megafin, M. H. Simpson, Gibson, St. John, Clingan, H. C. Simpson, Higginbotham, Biggar, S. and A. Carscadden, Joslin, Spooner, Crowe, J. and E. Blake-man, Searth, Schoenau, Goulter and Hosmer. The committee hope to arrange special entertainment for the men who take the autos over. This is to be held on June 18th, Thursday afternoon. It is hoped that Dr. Stewart of Ninette Sanatorium will consent to address this gathering.

After the meeting was over, Mrs. St. John and Mrs. Chennells served tea. Mrs. Dayton's health loaf was passed around and proved to be delicious, also Mrs. St. John's potato cake, which was extremely light and dainty. Nearly everybody stayed to enjoy the tea and social time.

The dinner in the fireless cooker was found to be beautifully done. We felt extremely grateful to Mrs. Dayton for showing us this ideal way of cooking.—Yours, Edith St. John.

There are many excellent papers held over every month—all will be printed later.—P.R.H.

Miami
The directors of the H.E.S. met at the home of the President on Saturday evening, August 8. Much business was discussed. It was decided, owing to the busy season being so early, to have no regular meeting of the society in this month. The annual flower show will not be held because of the scarcity of flowers this season. A committee was appointed for the fall term to prepare the programme for the different meetings, and consists of Mesdames H. Botting (convenor), W. M. Jones, S. C. Angers, H. Wilkins, T. Rumbal, and A. N. Bond. The directors of the society were requested by the president to help when required in the programme. The September meeting will be announced in due time.

Swan Lake
July H.E.S.
The July meeting of the H.E.S. was held on Saturday, 25th inst., with a

very good attendance in spite of the great heat and the hay harvest. The programme was excellent, and two of the papers, both original were specially appropriate to the hot weather. Mrs. Dodd kindly acted as cor. sec.

After the ordinary business the programme was opened by Mrs. Bender, who substituted for Mrs. Irwin and who gave an amusing and practical paper on Summer Salads and Fireless cooking. A home-made fireless cooker can be made as follows: Get a packing case 2 1/2 ft. long by 1 1/2 ft. high, and put a partition in the centre; pad the sides with wool or cotton batten. Take a piece of asbestos and roll into the shape of a stovepipe, taking care to make it the right size for your cooking utensils; put one in each side of box and pad round; leave enough space on top for layer of asbestos or batten; fix on light cover with hinges. The box can be covered and used as an extra seat in the winter. Beans, stews cereals and all foods requiring long hours of cooking can be brought to the boil on the early morning fire, and left to finish in the fireless cooker without further trouble or attention. Even without the cooker, time and heat can be saved by cooking extra and vegetables on baking day; these can be warmed up in a cream sauce, or made into salads. A small sealer of salad dressing should always be kept on hand; cold peas, beans and young carrots served on crisp lettuce leaves make a delicious salad. The need for strict economy in small things was emphasized. Dry bread rolled out and kept in a tin can be used for dressings, muffins, puddings, etc.; dry cheese grated and kept in a jar can be used for garnishings, cheese fingers and straws. Small quantities of milk should be kept in a cool place till enough is saved to make cottage cheese. (Recipes of Muffins and Mock Goose next week).

Miss Docking gave a very topical paper on "Vacations." During the summer people may be divided into two sorts, those who can and those who can't go away. The ideal holiday is the one which gives the greatest contrast to the ordinary routine of life; those who live in the city should go to the country and those who live in the country should choose the city's distractions. When preparing for a holiday, care must be exercised over the packing, only necessities of which easily laundered linen is one should be taken. And in arranging for the holiday, more thought must be given to the mother who but too often, after making, helping and arranging for the others, is left without any holiday for herself.

Mr. Holland contributed a reading which showed how a nation always responds to a heroic action, and explained his choice of subject by his desire to point out to the members of the H.E.S. the importance of impressing on the minds of children that it is deeds of heroism that have made the nation.

Mrs. Harman, who substituted for Mrs. H. Anderson, read a cutting from a newspaper on the "Homeless and Childless Women in Manitoba." This title was used metaphorically to explain the hopeless injustice of the laws of this Province towards the women and children—laws which make the father the sole legal parent of the children and denies the wife all right both in property and parenthood. The paper concluded by urging women to fight for the elemental rights of wifehood and parenthood.

Viriden
The June meeting of the H.E.S. was held Wednesday, 17th, at the beautiful home of Mr. and Mrs. T. Gibbings, about ten miles north-east of the town, and across the Assiniboine River. A drive noted for its beauty and picturesque-ness.

Some twenty-five motors, and a number of carriages from the surrounding country conveyed 145 guests to their destination, and as the day was perfect and the country at the height of its verdant beauty, the drive was a very enjoyable feature of the day. On our arrival we found a hearty welcome awaiting us from our host and hostess, after which a pleasant social hour was spent before the president, Mrs Dayton, opened the meeting by a



ROYAL YEAST CAKES
MAKES THE WHITEST LIGHTS
QUICK PURE
E. W. GILLETT COMPANY LIMITED
TORONTO, ONT. MONTREAL
WINNIPEG

MOST PERFECT MADE
THE INCREASED NUTRITIOUS VALUE OF BREAD MADE IN THE HOME WITH ROYAL YEAST CAKES SHOULD BE SUFFICIENT INCENTIVE TO THE CAREFUL HOUSEWIFE TO GIVE THIS IMPORTANT FOOD ITEM THE ATTENTION TO WHICH IT IS JUSTLY ENTITLED.
HOME BREAD BAKING REDUCES THE HIGH COST OF LIVING BY LESSENING THE AMOUNT OF EXPENSIVE MEATS REQUIRED TO SUPPLY THE NECESSARY NOURISHMENT TO THE BODY.
E. W. GILLETT CO. LTD.
TORONTO, ONT.
WINNIPEG MONTREAL

I Can
save one-seventh of your coal bill.

I Will
prevent any dust or gas from escaping into your house.

I Clean
myself thoroughly without the aid of a poker.

I Provide
enough moisture to every room.

I Will
do this because of patented features of my construction.

I Am The
HECLA FURNACE
WARM AIR FURNACE

More information about me can be obtained from
CLARE & BROCKEST LIMITED
WINNIPEG

Making High Quality...
Canada
92 Alexander...
Name this...
Im
Capital Au...
Reserve and...
Total Asset...
BEAN
Brandon
Pr
Halgonie
Rustern
Saskatoon
Wilkie
Athabaska L...
Banf...
Calgary
Rocky Moun...
SAVIN
Inter...
Drafts and...
Name this...
The Pump...
That Pump...
YE...
Myers St...
Le...
Name this n...
Bori...
THE OLL...
Improved I...
Dre...
Chrocoke...
Name: this m...

Making High-Price Pork while grinding their own Feed.



AGENTS WANTED
in Every Town and District

Shipments made from Galt, Ont. and Winnipeg, Man.

Address to Head Office

Canadian Hog Motor Co. Ltd.

92 Alexander Ave. East Winnipeg, Man.
Name this magazine when writing advertisers

Well Drilling Machines

Over 200 styles for drilling either deep or shallow wells in any kind of soil on wheels or on gines or horse power. Strong, simple, durable. Any mechanic can operate them. Send for catalog.

WILLIAMS BROS., ITHACA, N. Y.

Name this magazine when writing advertisers

Imperial Bank

OF CANADA
Established 1875
Capital Authorized \$10,000,000
Capital Paid Up 7,000,000
Reserve and Undivided Profits 7,000,000
Total Assets 21,000,000

BRANCHES IN WESTERN CANADA

Province of Manitoba
Brandon Portage la Prairie Winnipeg

Province of Saskatchewan
Saskatoon Broadview North Battleford
Regina Fort Qu'Appelle Prince Albert
Weyburn Moose Jaw Regina
Wynyard Hague Wynyard

Province of Alberta
Athabasca Landing Edmonton Strathcona
Banff Lethbridge Wetaskiwin
Calgary Red Deer
Rocky Mountain House Medicine Hat Millet

SAVINGS DEPARTMENTS AT ALL BRANCHES

Interest allowed at Current Rates
Drafts and Letters of Credit issued available in all parts of the world.

Winnipeg Branch
N. G. LESLIE, Manager.

Name this magazine when writing advertisers

MYERS PUMPS
Double-acting, Lift, Tank and Spring
SPRAY PUMPS
HAY TOOLS
Stays, Valves, Chrome and Brass

Myers Stayon Flexible Door Hangers
with steel roller bearings, easy to push and no pull, cannot be thrown off the track—bears its name—Stays. Write for descriptive circular and prices. Exclusive agency given to right party who will bear its name.

W. E. MYERS & CO., Ltd.,
London, Ont.

Name this magazine when writing advertisers

Boring Machine
THE OLD RELIABLE
Improved Up-to-date Drilling Machines

THE ORIGINAL PECH
Easiest to operate
Bores Faster
Most Durable

DESCRIPTIVE CATALOGUE, FREE
CHEROKEE Mfg. Co., Dept. A, Cherokee, Iowa.

Name this magazine when writing advertisers

few well chosen words expressing the pleasure all felt in accepting the kind hospitality of Mr and Mrs Gibbings in entertainin; the society Hearty thanks were also extended to the gentlemen who had conveyed the society out in their motors.

Mrs. Dayton gave a brief talk on the good work being done by the society along the lines of medical inspection, cemetery improvements and instituting of the rest room. We also have the honor of being the largest society in the province, our membership reaching

Mr. T. Mitchell, mayor of Virden, was then called upon for a speech. He very ably responded, and congratulated the society on the good work we were doing and wished us every success in the future.

Rev. P. Scott then gave the address of the afternoon, also speaking of good work done in the past, and asserting that there were no limitations to the good, a society of our numbers might accomplish. Mr. Scott also spoke of the dignity of labor and the need of each member, individually studying the work to be accomplished and of each one doing her share in the work with an eye single to its accomplishment.

Mr. H. H. Goulter also made a few remarks tending along the same lines.

A dainty and elaborate lunch was then served by the hostess, after which games were enjoyed by the gentlemen.

Dr. St. John took several snip shots of the party.

About sunfown all started for the return trip, feeling that they owed a debt of gratitude to Mr. and Mrs. Gibbings, and also to the gentlemen who had conveyed out in their cars, for the pleasant afternoon they had spent.

L. Burge, Sec.-Treas.

Kelso, Sask.

June 24th, 1914.
The regular monthly meeting of the Kelso Homemakers' Club was held on Saturday afternoon, June 13th, in the school basement. The President occupied the chair with her usual ability. The minutes of the previous meeting were read and confirmed.

Arrangements were made for a picnic at "Lake Sixteen" on July 8th, the proceeds of which were to be devoted to the Organ Fund. (Our minister, Mr. Harry Cox, was then called upon to take Mrs. Cox's place (if that were possible) who is absent in England. Mr. Cox gave a very interesting address on "The Influence of a Homemaker." In the unique cal of life that had come to the Canadian women to-day, she was developing new powers and new needs, and their lives must be continually re-adjusted to meet new conditions. The modern demand upon women might be summed up by saying that they were called upon to retain the old "womanly" virtues—gentleness, purity, love and sympathy—and learn as well those virtues usually associated with men—loyalty, magnanimity, patience, justice and breadth of view. The members were reminded that always better than to be rich, or clever or famous was it to be pure, and holy and good. Did they really believe that goodness is the greatest thing in the world, that however richly dowered life may be, better not be at all than not be good. It was the spirit of their lives—they themselves—that they would see reproduced in their children. Every member was led to feel her responsibility, as a very high ideal was held up as to the true nature of a genuine Homemakers' Club, and also their privilege of being able, through its membership, to help forward the life and work of the great West. A stirring address was concluded with the following inspiring "Battle Hymn of the Women" by Ella Wheeler Wilcox:—

They are waking, they are waking,
In the East and in the West;
They are throwing wide their windows
To the sun;
And they see the dawn is breaking,
And they quiver with unrest,
For they know their work is waiting to be done.

They are waking in the city,
They are waking on the farm;
They are waking in the boudoir and the mill;

No Change In Price of Blue Ribbon Tea

THE BLUE RIBBON TEA CO. have pleasure in announcing that they do not propose to take advantage of the advance in price of tea. This company is in a position to supply all the Tea required in Western Canada, and will sell at old prices indefinitely.

P.S.—In spite of the heavy duty which has just been imposed upon Coffee, we will continue to sell Blue Ribbon Coffee at old prices.

Blue Ribbon, Limited
Winnipeg Edmonton Calgary



REPEATING SHOTGUN

Solid Breech Hammerless Safe

EVEN if you are not shooting a Remington-UMC Repeating Shotgun yourself—you have seen it in action at the trap or in the field.

You hear the opinion expressed by keen sportsmen about it—"Finest gun of its kind."

A pump gun that you can depend on—Breech mechanism perfected by the century-experienced Remington-UMC inventors. Get your dealer to show you the Remington-UMC Pump Gun—the dealer who shows you the Red Ball Mark of Remington-UMC. To keep your gun cleaned and lubricated RIGHT, use Kem Oil, the new powder solvent, rust preventer, and gun lubricant.

REMINGTON ARMS-UNION METALLIC CARTRIDGE CO. Windsor, Ontario

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

BABBITTS Buy Direct from the Manufacturers and Save Money

THE OWL METAL CO. LTD.
OWL BABBITT METAL
WINNIPEG, MAN.

OWL BABBITT METAL
For Trashing Machines, Small Gas and Steam Engines.
Cash with order price 50c per lb.

OWL TRACTION METAL
For Gas and Steam Tractors will stand heaviest work. Worth \$1.00.
Cash with order price 65c per lb.

Scientifically alloyed Babbitt metals made in Winnipeg by
The Owl Metal Co., Ltd.
Metallurgical Experts
151 Notre Dame Ave. WINNIPEG

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

Get Your Neighbours Interested in
The Canadian Thresherman and Farmer
It will educate them and we will PAY YOU

E. V. Chaplin, J. R. Young, C.A.
T. Anderson, C.A.

CHAPLIN, YOUNG & ANDERSON
Accountants and Auditors

545 Somerset Building Phone
WINNIPEG, Man. MAIN 2153

Name this magazine when writing advertisers

Fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with Fleming's

Fleming's Fistula and Poll Evil Cure
—even bad old cases that skilled doctors have abandoned. Easy and simple to use, just a little attention every five days—and your money refunded if it ever fails. Cures most cases within a thirty day period and leaves the horse sound and smooth. All particulars given in Fleming's Test-Packet Veterinary Adviser.

Write us for a free copy. Fifty-six pages, containing more than a hundred veterinary subjects. Durable bound, in-teresting and illustrated.

**FLEMING BROS., Chemists,
236 Church Street, Toronto, Ont.**

Name this magazine when writing advertisers

GRAND TRUNK RAILWAY SYSTEM

Double Track Route

TO
Detroit, London, Hamilton, Toronto, Montreal and New York via Niagara Falls

Smooth road-bed, polite employees, unexcelled dining-car service, and latest standard equipment

AGENTS, COOK'S TOURS AND ALL STEAMSHIP LINES

Rates, reservations and all particulars at Ticket Office

Phone Main 7098 260 Portage
WINNIPEG

Dealers Increase Your Sales!

Take a Look at the

Strite Governor Pulley

It's the original and the only thing for driving cream separators with gear-like rollers. One tried, always used. TRY ONE. More in use than all other combined. Costs no more than imitation. Also, ask about our friction clutch pulleys.

STRITE GOVERNOR PULLEY CO. 310 S. 3RD ST., MINNEAPOLIS

Name this magazine when writing advertisers

PATENTS

LLOYD BLACKMORE & CO. LTD.

Hope Bldg., 63 Sparks St., Ottawa, Ont.

Write for Free Book of Information.

Don't Burn Out the Temper of Your Tools

Here's a grinder that puts a sharp cutting edge on farm tools without injuring them. Never wears humpy. Anyone can use a

CLEVELAND Grindstone

made from the only Berea stone, famous for its even grit, just right for farm use. The standard by which all grinders are judged. A host of every 12 makers of farm implements use CLEVELAND GRINDSTONES in their own shops. They know what grinds best. We guarantee every stone to do good work. If it doesn't, we refund your money.

Farmer's Special

Here's the identical stone you need, specially selected by our experts. Grit of the Berea stone. Hard wood frame. Ball bearings. Hand or engine power. Write for booklet, "The Grind that Grinds," and name of dealer who will supply you.

THE CLEVELAND STONE CO.
1125 LEADER NEWS BLDG., CLEVELAND, OHIO

And their hearts are full of pity.
As they sound the loud alarm,
For the sleepers, who in darkness, slumber still.

In the guarded harem prison,
Where they smother under veils,
And all echoes of the world are walled away.

Though the sun has not yet risen,
Yet the ancient darkness pales,
And the sleepers, in their slumber, dream of day.

And their dream shall grow in splendour,
Till each sleeper wakes and stirs;
'Till she breaks from old traditions and is free;

And the world shall rise and render,
Unto woman what is hers.
As it welcomes in, the Race that is to be.

Unto Woman, God the Maker,
Gave the secret of His plan;
It is written out in cipher on her soul;
From the darkness you must take her,
To the light of day, Oh! man!
Would you know the mighty meaning of the scroll.

Great regret was expressed that the club was not represented at the recent convention, and that consequently the "echoes" were not forthcoming that would have meant additional life and inspiration to the members.

The singing of the National Anthem brought a very helpful meeting to a close after which luncheon was partaken of.

Mrs. Oscar Hamilton, Sec.-Treas.

Homemaker's Clubs
Willowmoor

Record of meeting held on July 9, 1914. Meeting held at home of Mrs. Blades. Meeting opened with singing of the Maple Leaf. Roll call—Seven members present. One new member was enrolled Mrs. C. Simpson.

Minutes from last meeting read and adopted.

Moved by Mrs. C. Laycock, seconded by Mrs. Partridge, that a delegation be sent to the grain growers' meeting, to ask consent for the homemakers to take charge of the refreshment booth at the agricultural show and picnic in August.

The following four members were appointed to attend—Mrs. C. Laycock, Mrs. Groves, Mrs. Partridge and Mrs. Blades.

A letter was read from the Battleford H.C. asking for help to support the Rest Room. It was decided to send two hundred dollars for same.

Refreshments were served, and the meeting closed with the National Anthem.

Next meeting at the home of the President, Mrs. H. Simpson.

Mrs. Blades, Sec.

Willowmoor

Record of meeting held on August 6, 1914. Meeting held at home of Mrs. H. Simpson. Meeting opened with singing of the Maple Leaf. Roll call—Eight members present.

Minutes from last meeting read and adopted.

Letters read from Local Council of Women, Regina.

Moved by Mrs. Groves, seconded by Mrs. Southgate, "That we answer the letter, and owing to the dry season and shortness of marketable produce, we let it stand over for another year."

Moved by Mrs. Partridge, seconded by Mrs. Laycock, "That we purchase the book, The Eugenic Mother and Baby: A Complete Home Guide for the use of the club."

Moved by Mrs. Partridge, seconded by Mrs. Groves, "That we solicit the help of Mr. Camm in getting a circulating library for the club."

Two readings were given by Mrs. Groves and Mrs. Partridge.

Sunshine Committee rendered help to a needy case in the district.

Refreshments were served, and the meeting closed with the National Anthem.

Next meeting at the School House.
Mrs. Blades, Sec.

HINTS ON BUTTER-MAKING
By Mrs. H. Laycock

In the first place, have the cows kept clean. The milkers must be careful that their milk is handled in a clean way. When through milking, strain your milk

UNION BANK OF CANADA
Established 1868

Head Office Winnipeg

Paid-up Capital	\$5,000,000
Reserve	3,400,000
Total Assets, over	80,000,000

HON. PRESIDENT WM. PRICE, Esq.
PRESIDENT - JOHN GALT, Esq.
VICE-PRESIDENTS
R.T. RILEY, Esq., G.H. THOMPSON, Esq.

DIRECTORS
W. R. ALLAN, Esq.
Hon. S. HARKER, P.C., M.P.
M. BULL, Esq.
Col. J. W. CARSON,
R. B. CRONIN, Esq.
E. L. DREWYER, Esq.
E. E. A. DU VERNET, Esq., K.C.
S. HAAS, Esq.
F. E. KENASTON, Esq.
WM. SHAW, Esq.

G. H. BALFOUR, General Manager
H. B. SHAW, Assistant General Manager
F. W. S. CHRISPO, Superintendent of Branches

London, Eng. Branches—4 Princess Street and West End Branch, Haymarket, S.W.

This Bank, having over 310 branches in Canada, extending from Halifax to Prince Rupert, offers excellent facilities for the transaction of every description of banking business. It has correspondents in all cities of importance throughout Canada, the United States, the Continent of Europe, and the British Colonies.

Clearings made in all parts of the Dominion, and returns promptly remitted at lowest rates of exchange.

Head Office, Winnipeg.
Two Central Offices in Winnipeg—Main St. & William Ave., D. M. Nevee, Manager. Portage Ave., Cor. Garry St. (adj. Post Office), F. J. Boulton, Manager.

Other Branches in Winnipeg as follows: Cordoyan Ave., Logan Ave., North End, Sargent Ave., Portage Ave. and Arlington St., Sargent Ave. and Arlington St., 490 Portage Ave.

Branches and Agencies West of the Great Lakes.

Manitoba—Baldir, Hurtle, Boussevain, Brandon, Carberry, Carman, Carroll, Clearwater, Crystal City, Cypress River, Dauphin, Deloraine, Glenboro, Hamota, Hartney, Holland, Killarney, Manitow, McCreary, Melita, Minnedosa, Neepawa, Newdale, Newell, Nings, Rapid City, Roblin, Roland, Russell, Shoal Lake, Somerset, Souris, Strathclair, The Pas, Virten, Waskalia, Wawanesa, Wellwood, Winnipeg.

Saskatchewan—Abbeey, Adams, Ainslie, Arook, Aswath, Assiniboia, Bouthy, Buchanan, Cabri, Canora, Carlyle, Craik, Cupar, Cut Knife, Dinsmore, Dunmore, Eastend, Esterhazy, Estevan, Eyebrow, Fillmore, Gravelbourg, Guernsey, Gull Lake, Herbert, Hughton, Humboldt, Indian Head, Jansen, Kellogg, Kerrobert, Kindersley, Landis, Lang, Langdon, Lemberg, Loversa, Lumsden, Lussland, Macklin, Maple Creek, Maryfield, Macrae, Melfort, Milestone, Moose Jaw, Moosomin, Morse, Netherhill, Neudorf, Ogema, Outlook, Osbow, Penase, Perdue, Pipart, Plenty, Prince Albert, Qu'Appelle, Regina, Robart, Rosneath, Rosetown, Saskatoon, Seely, Seely, Shaunavon, Simpson, Sisseton, Southey, Strathburg, Swift Current, Tessier, Theodore, Togo, Tompkins, Vangard, Vedora, Verigin, Viceroy, Wapella, Wawota, Watrous, Webb, Weyburn, Wilkie, Windthorst, Wolsley, Yorkton, Zealandia.

Alberta—Airdrie, Airds, Barons, Bashaw, Bassano, Bellevue, Blackfoot, Blairmore, Bowden, Bow Island, Brooks, Bruderheim, Calgary, Carbon, Cardston, Carleton Place, Cereal, Chinook, Claresholm, Cochrane, Consort, Cowley, Didsbury, Edmonton, Empress, Foremost, Fort Saskatchewan, Grande Prairie, Grassy Lake, Hanna, High River, Hillcrest, Innisfail, Irvine, Jermer, Lacombe, Langdon, Lethbridge, Macleod, Medicine Hat, Okotoks, Pasburg, Pincher Creek, Seven Persons, Standard, Strathmore, Swainsville, Three Hills, Wainwright, Windford.

British Columbia—Enderby, Glacier, Hazelton, Lillooet, Nanaimo, New Hazelton, Newport, New Westminster, Prince George, End of St. G.T.P. West, Prince Rupert, Smithers, Squamish, Telkwa, Vancouver, Vernon, Victoria.

"Forward! March!"
Homestead, Rent or Buy Land

There will be soldiers of fortune; we cannot all go to the war, but we can get to be heroes at home. Our King has the land, and we ought to have the energy in us to cultivate and produce the food for his Army.

To the Canada Thistle and Sow Thistle Farmers:

You are invited to motor out to Dr. Harvie and Son's farm at Stonewall, or Hon. John Taylor and Sons, Headingly, and examine a Cycloned summerfallow, and find the dust much and moisture present, and the wheat bacteria multiplied and wholesome—something you do not find in a dry worked and weedy fallow.

The proper way to go about it is to plow the land good and deep, and surface cultivate. Cut out the thistles and other moisture robbers with the D. & D. Cyclone Weed Destroyer; pull out the roots of the couch grass and sow thistle with the D. & D. Goo-neck Cultivator, the only tool that will do the work well.

The man with a vision of the opportunities, who has nothing to do in the cities, will soon be "back to the land" for clean farming.

The last Russian war made wheat \$2.00 per bushel. Grow wheat, barley and hogs. Pig weed seed makes poor soup for British soldiers.

Carnegie, Man., August 6th, 1914.
Dadds & Detwiler, Winnipeg, Man.

Dear Sir:—Just a line to let you know how my Cyclone Weeder is working; just say it is doing fine. I have done eighty acres with it and I have not had to clean trash off the blades more than two or three times. I think it is the best thing I ever saw in thistles.

Hoping you have many more sales, I remain,
Yours very truly,
(Signed) H. T. Johnson.

Write
THE G. L. DODDS IMPLEMENTS WINNIPEG
for free literature on dry land soil culture.
Care of The Leland Hotel.

War G Ca

Has I A Saf Our Stru Pdu Rie Cur Thr Bus is a Sprains Every year per boot. Its use, load. The Law

Name this

PA
Write fo
FETE
FRED. B
36-37 Ca

Name this

\$1500

have been
operating
Machin
\$0 regul
output of
facturer
make

MAGHIE
Made in
earth and
mineral
produced
with as
ated with
y glue.
On page
Cats

**THE AME
WELL**

General
Office
and
Works:
AURORA
ILL.,
U.S.A.

Chicago
Office:
First
Nat.
Bldg.

Name this ma

**ERZI
C**
Lends then
Tob
**JOH
McIntyre I
Phone C**

Name this ma

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for
Curb, Splint, Sweeney, Capped Hock,
Strained Tendons, Founder, Wind
Fuffs, and all lameness from Spavin,
Ringbone and other bony tumors.
Cures all skin diseases or Parasites,
Thrush, Diphtheria. Removes all
Bunches from Horses or Cattle.
As a Human Remedy for Rheumatism,
Sprains, Sore Throat, etc. it is invaluable.
Every bottle of Caustic Balsam sold is
warranted to give satisfaction. Price \$1.50
per bottle. Sold by druggists, or sent by ex-
press, charges paid, with full directions for
its use. If send for descriptive circulars,
testimonials, etc. Address
The Lawrence-Williams Co., Toronto, Ont.

Name this magazine when writing advertisers

PATENTS TRADE MARKS AND DESIGNS

Write for booklet, circulars, terms, etc.
FETHERSTONHAUGH & CO.
FRED. B. FETHERSTONHAUGH, K. C. M. E.
GERALD S. ROXBURGH, K. A. Sc.
36-37 Canada Life Bldg. WINNIPEG

Name this magazine when writing advertisers



\$1500 to \$5000 Per Year

have been made by hundreds of people
operating the "American" Drilling
Machines. 40 years' experience,
50 regular styles and sizes and the
output of the world's largest manu-
facturers of this kind of machinery
make

"AMERICAN" MACHINE STANDARD

Made in types for every kind
of earth and rock drilling or
mineral prospecting, equip-
ped with any power, or oper-
ated with your traction en-
gine. Our new 196
Page Catalog Free.

THE AMERICAN WELL WORKS



Name 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

Name this magazine when writing advertisers

through cotton cloth; if double, so much
the better. After separating, your cream
should be cooled each time before mixing
with your ripening cream. The oftener
you stir your cream it improves it.
Churn before it gets too sour. Must not
keep too warm while souring. When
churned I rinse it well; then drain off
the water and take the butter out and
mix it just a little to get the water out.
Mix the salt in, about a cup of salt to
twelve pounds of butter. Let it stand
for a short time; mix well, and print it
up in pound prints.

Recipes

MARINE SALAD

Scoop out the inside of unpeeled
cucumbers so that they resemble little
green boats. Chop the pulp fine, add a
little onion; drain, then add chopped pep-
pers or celery. Add French dressing. A
place card attached to a toothpick will
give each of the boats a sail.

INDIVIDUAL EGG SALADS

Take an egg for each guest and boil
until hard. When cold remove shells.
Cut a slice from each end, and with a
small spoon remove the yolk, just work-
ing from one end. This will leave a cup
of white. To the yolks add some finely
mixed celery and olives, and mayonnaise
dressing. Work them well together, then
fill into the cavities. Place the slices
removed from one end on top. Set each
egg on its flat end in individual lettuce
cups, and place a spoonful of mayonnaise
around the egg. Sprinkle the top over
with finely chopped parsley.

BEEF SALAD

Slice beefs very thin and place on
white leaves of head lettuce. Put the
yolks of six hard-boiled eggs through
a potato ricer and make a rosette
decoration around the edge of the beefs.
Chop the whites very fine and place out-
side the yolks. Season with salt and
pepper, serve with French dressing and
garnish with parsley.

Real Canadian Patriotism

When so many manufacturers
and wholesalers are taking ad-
vantage of the dislocation and
panic that follow a declaration
of war, it is comforting to find at
least one patriotic firm moved by
a common sense idea of the fit-
ness of things.

When in common with general
precedent they might have "fol-
lowed the crowd," the Blue Rib-
bon Co., Ltd., have announced
that they will supply all the tea
required in Western Canada at
old prices, and to do so indefi-
nitely. Further, in spite of the
heavy duty which has just been
imposed on coffee, they will con-
tinue to sell their celebrated
brand of this wholesome bever-
age at old prices.

Bravo, Blue Ribbon! This is
the true spirit in which to face
the music. If you lose quite a
few thousands temporarily, you
are playing the straight game
and neither Providence nor the
people ever forget these little in-
cidents. You will be remem-
bered when the salmon packers,
who are now engaged on a buc-
caneering raid, are forgotten, be-
cause "the memory of the just is
pleasant, but the name of the
wicked shall rot."

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

SAFE DEPOSIT VAULTS SAVINGS DEPARTMENT

D. H. COOPER, Manager, Winnipeg Branch, 323-325 Main Street.

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. MATHESON, Vice-President
A. F. KEMPTON, Sec. and Mgr. C. D. KERR, Treasurer

Subscribed Capital \$500,000.00
Security to Policy-holders 640,817.29

Full Deposit with Dominion Government
Agents wanted in unrepresented districts

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

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

The WAWANESA MUTUAL INSURANCE COMPANY

HEAD OFFICE: WAWANESA, MAN.

A. F. KEMPTON, Secretary-Manager

Amount of Insurance in force Dec. 31st, 1913 \$38,542,194.00
Assets over Liabilities \$682,467.96

THE NUMBER OF FARMERS INSURED, 31st. Dec. 1913, 28,498

The Largest Farmers Mutual Fire Insurance Company in Canada. Agents wanted in un-
represented districts

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

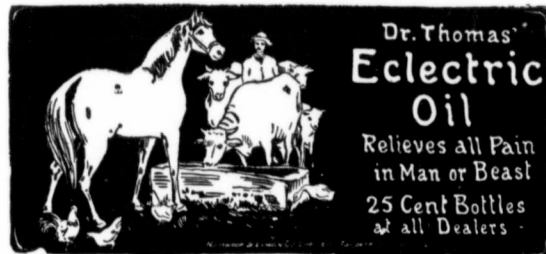
Family Group Photos a Speciality

AT

STEELE & CO., LTD.

MAIN ST. AND BANNATYNE AVE. WINNIPEG

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



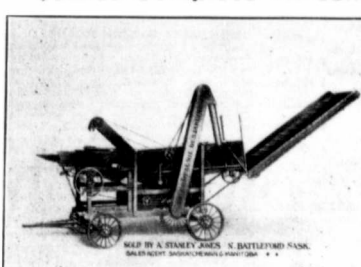
Dr. Thomas' Eclectic Oil

Relieves all Pain
in Man or Beast

25 Cent Bottles
at all Dealers

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

"\$612.00 Complete Threshing Outfit."



8 H.P. Engine, Carrier,
High Loader, Chaff
Return. All belts, can
be mounted on one plat-
form on any wagon.
Capacity four hundred
to one thousand bushels
according to grain.
Large stocks at North
Battleford. Smaller
sizes from \$183. engine
and separator. Carriage
paid in Saskatchewan.
Cut shows separator at
\$284 and \$317, freight
paid Manitoba and Sask-
atchewan, mounted on
special \$65 truck. Ex-
tensible to 16 feet to
carry whole outfit.
WRITE FOR FREE
CATALOGUE and time
terms also.

A. STANLEY JONES, North Battleford

General Agent for Saskatchewan and Manitoba, La Compagnie Des Jardins. Established 1864.

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.

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 \$2,000. Write now and I'll send it six months free. H. L. Barber, 496-20 W. Jackson Blvd., Chicago.

FARMS WANTED. We have direct buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property from American Investment Association, 15 Palace Bldg., Minneapolis, Minn.

OXY-ACETYLENE WELDING—Save your cracked or broken castings from the scrap heap. We weld cylinders, crank shafts, gears, levers, etc., retain original form and strength at a small cost. Metal added to worn-out parts. All metals welded satisfactorily. The Manitoba Welding & Manufacturing Co., 624 Princess Street, Winnipeg.

FOR SALE.

We have on hand at present a very full line of Rebuilt and Second-hand Engines and Separators, which we are offering at attractive prices. Write us fully what you are thinking of buying, when we shall be pleased to tell you what we have and quote prices. All our rebuilt goods are sold under same guarantee as new ones and of course are carefully repaired and look exactly like new. If you write us at once we are sure to have the size you most want.

SAWYER-MASSEY COMPANY, LIMITED, Winnipeg, Man.

BARGAINS.

- 30 H.P. double undermounted Avery engine with Alberta and Saskatchewan Boiler. This engine has been repaired and fixed up in first class shape.
30 H.P. undermounted Avery engine, with regular boiler, repaired and fixed up in first class shape—this would make a dandy threshing engine.
20.35 Avery gas engine—has been out seven days in 1913, is practically as good as new.
18 H.P. double undermounted Avery engine, coal burner, is in first class shape.
1-ton Avery farm truck, has been repaired and over-hauled and is in first class shape.
135 x 60 Avery separator, complete with feeder, weigher, wind stacker; has only been out 30 days. Has been repaired and repaired, looks like new.
32 x 54 Avery separator, only been out 20 days, and is in first class shape.
142 x 70 Avery separator, has run 50 days, has been repaired, repainted and over-hauled and is in first class shape.

If you are interested in second hand goods and none of the above suit you, let us hear from you, stating just what you want, and we feel sure we can fix you out all right. CANADIAN AVERY COMPANY, LTD. Winnipeg and Regina.

BUYERS, ATTENTION!

RE GEORGE WHITE & SONS COMPANY LIMITED, BRANDON, MAN.

- ENGINES
25-35 H.P. White tractors thoroughly rebuilt and in good shape. Each... \$ 160.00
16 H.P. American Advance tractor... \$ 700.00
18 H.P. Minneapolis tractor... \$ 800.00
20 H.P. Brandon Cornsil, Portable... \$1000.00
20 H.P. White tractor... \$1200.00
SEPARATORS—Second Hand
Aultman & Taylor, 28x50, all attachments... \$ 400.00
40x62 Waterloo separator, all attachments... \$ 400.00
30x50 Goddison separator, all attachments... \$ 300.00
30x50 American Abert, all attachments... \$ 325.00
32x50 Pelbie separator, all attachments... \$ 300.00
32x50 Great West separator, all attachments... \$ 300.00
2-White Challenge separators, thoroughly rebuilt, all attachments, Each... \$ 900.00
Write us re new goods—We have the best.

FOR SALE—Oil Tractor 15-30 H.P. Fairbanks-Morse, separator, second hand, complete. Good as new, snap price. Drury, 402 Lindsay Bldg., Winnipeg. Phone M1330.

BIG BARGAIN in 3 sets of 4-bottom Moline gang plows (with platforms). Two double dials 14-16 engine gang. Also a 32 x 52 "New Huber" separator, second hand, in excellent condition. Will accept good notes. Address G. Berialut, St. Claude, Man.

FOR SALE.

- No. 15 Horse Case Simple Portable Engine... 20540
15 Horse Case Simple Portable Engine... 15833
18 Horse Compound Portable Engine... 13436
18 Horse Simple Traction Waterloo... 323
18 Horse Portable Sawyer-Massey... 329
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... 7721
20 Horse Simple Traction Engine, Case... 16912
32 Horse Simple Traction Engine, Case... 19019

I. CASE THRESHING MACHINE COMPANY, Winnipeg, Canada.

FOR SALE—1 110 H.P. simple traction J. I. Case engine, 1 80 H.P. simple traction J. I. Case engine, 1 75 H.P. simple traction J. I. Case engine, 2 25 H.P. simple traction J. I. Case engines, 1 60 H.P. simple traction J. I. Case engine, 1 45 H.P. simple traction J. I. Case engine, 1 45 H.P. simple portable J. I. Case engine, 1 30-60 oil tractor J. I. Case engine, 2 40-62 separators, J. I. Case, 2 36-58 separators, J. I. Case; 1 32-54 separator, J. I. Case; 1 28-50 separator, J. I. Case; 1 24-42 separator, J. I. Case. The above separators are all equipped with feeders, windstackers, and automatic grain handlers. The 110, 80 and 75 H.P. engines are equipped with contractor's fuel pumps. We also have for sale two second-hand J. I. Case 30 H.P. automobiles, which will be sold at reasonable prices. J. I. Case Threshing Machine Co., Regina, Sask.

WANTED to hear of good farm or improved land for sale. Send description and price. Northwestern Business Agency, Minneapolis, Minn.

HALL'S RED RIVER EMPLOYMENT OFFICE, 188 Logan Ave., East. Successors to old established Red River Employment Office. Farm hands, engineers, steam and gasoline plowmen and all other farm help. Phone Main 7298.

LIGHTING PLANTS—For farm buildings, hotels, theatres. Dynamos, motors, storage batteries and switchboards at reasonable prices. We wire buildings in the country. Distance no object. Experts on engines and electric plants. Thomson Electric Co., 390 Hargrave Street, Winnipeg, Canada.

FOR SALE—Complete threshing outfit, 20 H.P. J. H. C. engine and Bell City separator. Belts complete, all in good running order. A snap for \$800. Apply, John Fowles, Jr., Oak Lake, Man.

THREE EMERSON ENGINE DISCS FOR SALE—Cheap—Discs 100 acres. E. A. Rivers, Gorfield, Sask.

FOR RENT (Cash or share)—Large improved power farm in Alberta, fully equipped with modern power farming machinery. A fine chance for the right party. Good location. Write at once. Address, Caswell Brothers, Cherokee, Iowa.

ENGINEER WANTED till freeze-up for threshing and fall plowing. Man having run two cylinder Rumely. State experience and wages expected. R. A. Reby, Duval, Sask.

6% MONEY 6% MONEY 6% LOANS may be obtainable for any purposes on acceptable real estate security; liberal privileges; correspondence solicited. A. C. Agency Company, 758 Gas, Electric Bldg., Denver, Colo. 446 Pierce Bldg., St. Louis.

MEN AND WOMEN WANTED in all localities no matter how small the village to show samples to their friends and neighbors, position will pay \$20 weekly with a few hours work in spare time. This is a new co-operative plan of trading. For example: Regina's best granulated sugar, 4 cents per pound; Christie's large boxes sodas for 15 cents; Comfort, Surprise or Sunlight soap, 2 bars for 25 cents. These are merely a few sample prices, everything sold at factory prices to the consumer, men making as high as \$50 weekly with our plan. No experience required as the prices do the work. Sample case with samples and supplies furnished free. Write to-day for your territory. The Consumers' Association, Windsor, Ontario.

WANTED TO BORROW, \$1,200, 1 year and 3 months. Mortgage on clear title quarter section. 203 Ave. F., South, Saskatchewan.

43 VARIETIES POULTRY, PIGEONS—Special prices on young stock. Incubators, Supplies. Catalogue free. Missouri Squab Co., Kirkwood, Mo.

CANADIAN GOVERNMENT EXAMINATIONS for railway mail clerks everywhere soon. Citizens over 18 eligible. Big pay, life job. Yearly vacation with full pay. Common education sufficient. Write immediately for free sample questions and list of examination places. Franklin Institute, Dept. G 180 Rochester, N.Y.

CASH FOR YOUR FARM OR BUSINESS—I bring buyers and sellers together. No matter where located, if you want to buy, sell or exchange any kind of farm, business or machinery anywhere, at any price, write me. Established 1881. Frank P. Cleveland, 1881 Adams Express Bldg., Chicago, Illinois.

TWENTY HORSE POWER I. H. C. Tractor, five furrow P. & O. gang plow, breaker bottoms, New Century 28-in. separator with feeder and windstacker complete. FORTY-FIVE HORSE POWER Mogul I. H. C. tractor, new Oliver 8-furrow gang plow with bale attachment, cook car, twelve disc gang plow, P. & O. The above all in good condition; will sell for cash or exchange for good farm lands. Apply, Wm. Anderson, 2562 Smith St., Regina, Sask.

AGENTS WANTED—Having the sole agency for the Dominion of Canada to handle The Richmond Auto mobile Fire Extinguisher we are willing to pay big commissions to agents to represent us. Just a few more agents wanted. Write immediately. The Hobart Mfg. Co., 210 Enderton Bldg., Winnipeg.

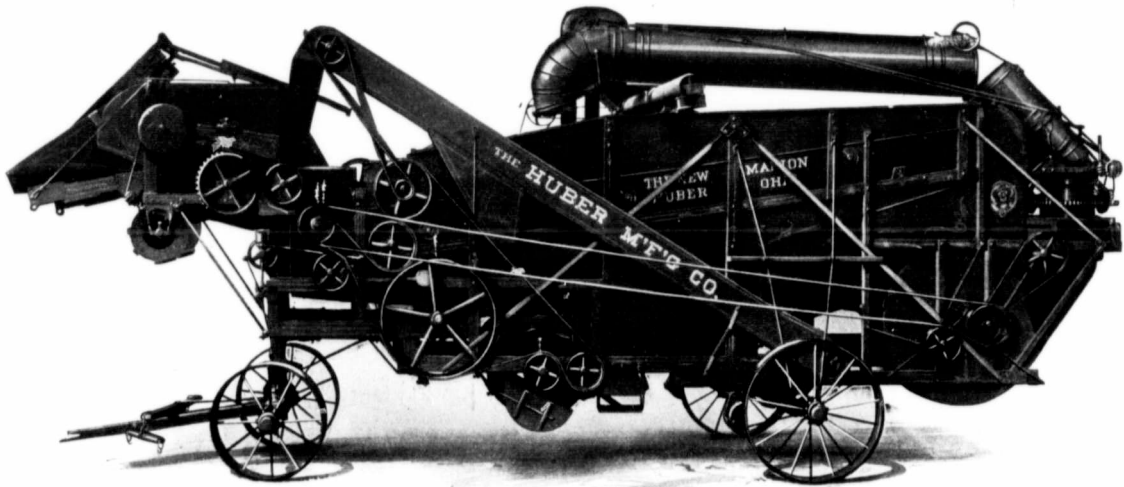
FOR SALE—Half section with 200 acres under cultivation, good frame buildings, windmill, telephone connection, fine neighborhood, four miles from Vegreville, Alberta, in the richest farming land in Alberta. Every acre of this land tillable. Will sell the half section or one quarter on liberal terms. An ideal home for anyone wishing to locate in Alberta. M. A. Redding, Box 246 Edmonton, Alberta.

'HEAVEN AND HELL' and the world of spirits. Swedenborg's great work on the life after death. 400 pages. Only 25c. post paid. W. H. Law, 486-G, Euclid Ave., Toronto, Ont.

Advertisement for 'Plow Shares Direct to Users!' featuring an image of a plow and a price list. Price list includes 12 in. Shares at \$2.00, 14 in. Shares at \$2.25, and 16 in. Shares at \$2.50. The Canadian Stover Gasoline Engine Co. is mentioned.

Large advertisement for 'The Farmer's Best Helper—His Wife's, Too. On the Job For Any Work, Anywhere, Any Time' featuring a detailed image of a Cushman tractor and text describing its features and availability.

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



Huber Grain Thresher

With All Attachments

WHEN you consider the purchase of a threshing outfit, you have in mind certain qualities that you desire in your machine. You will want to have capacity for handling the heaviest straw with the least possible power, so that you will not be held up at any time in your work. With the capacity to handle the straw, you will want assurance that the grain will be properly separated and thoroughly cleaned and saved. These are vital qualities of the successful and profitable threshing machine, and such as are to be found in the New Huber.

You cannot operate the outfit economically if the thresher runs hard and takes more power than it should. The Huber is noted for its light running. The motion is steady and uniform, the vibrating racks are nicely balanced and have the weight properly distributed, the stacker handles the straw as fast as it comes, and the machine runs up to its capacity without undue jar or strain. Cylinder shaft boxes are automatically oiled, reducing friction, and requiring no attention during a day's run.

Our cylinder construction, system of vibrating racks, and arrangement of fan and sieves, have proved by many years of service in the field that they will separate, clean and save the grain. The proof is in the results obtained, and they back up our

claims that there is no thresher that will clean and save the grain like the Huber.

All the modern attachments designed to make a thresher complete are found in the list of Huber products. In placing an order for a Huber you have the best guarantee of getting the outfit that will do the work right and satisfy your customers and yourself.

Another matter to consider is the power to run the thresher. Your preference may be for a steam engine, or for a gas tractor.



HUBER THIRTY-SIXTY TRACTOR

five regular sizes; gas tractors in three sizes. Whatever the requirements of your work, threshing or plowing, we have a power outfit to suit. Get in touch with the Huber, and let us quote you on the outfit you need.

We can supply either. The steam engine is mounted on return-flue boiler economical in use of fuel and water, and powerful in steam produced.

The tractor is regularly equipped for using both gasoline and kerosene. Change from one fuel to the other as you may wish, and have a highly efficient power with either.

We build the steam engines in

The HUBER MANUFACTURING CO.

Corner Logan and Arlington, WINNIPEG, MAN.

Home Office, MARION, OHIO, U.S.A.



№ 1



№ 2

TAKE YOUR CHOICE!

For Winter Travel

No. 1 shows a dirt highway as it should be left in the fall.
No. 2 shows a country road that was not fixed for winter.

Which will it be? Some day a condition such as No. 2 will be a rarity, because it costs more money to leave a road like this than to put it in shape.

No. 3 shows the work of a CASE Grader, drawn by CASE Power—the unbeatable road combination.

Features of CASE Graders—study them closely. Do you wonder that these Graders are the most popular? Some of their superior points are illustrated in No. 3.

1—The Extensible Axle—With this device the truck never has to travel over the moved dirt.

2—The Pivotal Axle—With this mechanism the Grader can be set so that the weight of the moved dirt is always at the proper angle to the blade to produce the most satisfactory work.

3—With its capacity for moving the greatest amount of dirt, this Grader does more work in the same time

than others. It lasts longer, too, because of the superior stuff that is in it; hence, its greater value as a machine for you.

4—Its Full Circle Ring, its design with all operating parts within easy reach of the operator, its ball and socket joint, and various other features are described in our catalog.

If you are doing or thinking road work, better let us send you a copy of this book. It shows what CASE Road Equipment is made of, what it does, and what it costs.



№ 3

J. I. CASE THRESHING MACHINE CO.

(INCORPORATED) 741-791 STATE ST. RACINE, WIS., U. S. A.

CANADIAN BRANCHES, TORONTO, WINNIPEG, SASKATOON, REGINA & CALGARY