

BACKING THEM UP"

The ANADIAN THRESHERMAN AND WINNIPEG CANADA DECEMBER NINETEEN SEVENTEEN THRESHERMAN AND ARMER

BETTER FARMING - BIGGER CROPS - BETTER PRICES



Probably you never thought of it that way before—but it's true. Your contribution will assist the Red Cross Society in its great work of mcrcy—ministering to the needs of our fallen soldiers on the battlefields. The gift that you withhold, and fail to give, curtails the work of this great organization and may be the cause of some wounded hero being left to die—without a chance for life. Increasing needs mean ever-increasing expenses. The need was never greater than it is to-day. If you have not contributed something to this noble work, do so now.

Secure from bursting shells and the myriad agonies of war, it is easy for us to forget the great responsibility we carry for the men "over there"—who are fighting for us. The least we can do is to relieve their suffering. Your contribution to the Red Cross will make possible the carrying on of this great work. Your contribution in dollars will be small compared to the sacrifices our brave boys are making on the firing line. So give till it hurts—give generously. He gives twice who gives quickly. Whatever you give will be gratefully received and thankfully acknowledged.



Your Contribution Sent Today May Save a Fallen Hero's Life



This special opportunity for giving is offered to enable you to perform a duty that we know you will appreciate and recognize. The farmers of Western Canada have given generously to this worthy necessity—but they have not been afforded the opportunities for consistent giving that has been given in repeated canvasses made for the same patriotic cause in the city. The chance to do your part is now given you. Do not neglect it. Your duty is plain. Give what you can. The need is great. Give now—you may later forget.

Thousands of Canada's best sons have sacrificed home life, business, friends and all that life holds most dear to them. Sacrificed life itself for those of us who remain at home—unable to fight the just battles of a noble cause. Our part is to see that these heroes of many battles are cared for to the limit of our possibilities. Your contribution to the Red Cross will bring comforts to the wounded—and maybe life to the dying. You cannot withhold your gift from such a cause. Send your contributions now before you forget. In the spirit of Christmas—give.

Give Generously

Mail your contributions to your provincial headquarters as shown below and make cheques or money orders payable to

Give Immediately

The Canadian Red Cross Society

Manitoba Headquarters Industrial Bureau Winnipeg Saskatchewan Headquarters New Armour Block Regina

Alberta Headquarters Rex Theatre Calgary



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Smashing Plowing Records

with a Sawyer-Massey

Another plowing record has been smashed to pieces this week by Mr. Haibert Thompson who has been acting as engineer on Mr. Ray Kidder's plowing outil. A Sawyer-Massey steam outfit. Mr. Thompson plowed a quarter-section last spring, doing the job in nine days, but beat that when he plowed a quarter section belonging to Mr. T. Heylar in cight days and a half. This quarter was also double disced and harrowed at the same time. The outfit pulled seven plows and was fired with straw. It there are any outfus beating this record in the district we would like to hear of them.

The above is reproduced from the Youngstown, Alberta, "Plaindealer" for Oct., 1917, and the Engine referred to is a Sawyer-Massey Rear Mounted Steam Tractor, purchased by Mr. Ray Kidder, of Youngstown, in 1916.

These big powerful Engines, mounted on Alberta High Pressure Boilers, carry 175 lbs. pressure, are built in two sizes, 22-68 and 25-76 horse-power. Regular equipment includes Jacketed Boiler, Straw Burning Attachment, Rocker Grates, Duplex Steam Pump, Balanced Valve, Water Columns both side and rear, large peep-hole inside of boiler for cleaning off flues when burning These Engines have exceptionally strong wide-faced gearing, over-size shafting, cannon bearings, wide-faced heavy duty road wheels, semi-enclosed gearing.

If you are interested in Steam Power for plowing or threshing, the doing of an immense amount of heavy work at low cost in a short time, fill out the coupon below for free information telling what these powerful steamers will do for you.

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For 1918 the Sawyer-Massey line will include the following sizes: 11-22, 12-25, 18-36, 20-40, and 27-50. These tractors are all the four-cylinder type, and are very similar in general appearance and design. All have four wheels with traction drive to both rear wheels, two speeds, spring-mounted enclosed system tubular radiator. All are oil burners, and burn kerosene successfully both in winter and summer under all loads. One of the most important features in connection with these tractors is the almost total absence of vibration; being four-cylinder they have practically no more vibration than an automobile, are easy to start, and easy to look after and care for. If you can handle an automobile, you should be able to handle one of these tractors successfully.

Talk with our local agent in your town, or write for free detailed information.

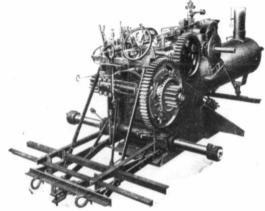
We manufacture Grain Separators in sizes ranging from 22inch to 40-inch Cylinders, and Combination Threshers, also a complete line of Road Making Machinery.

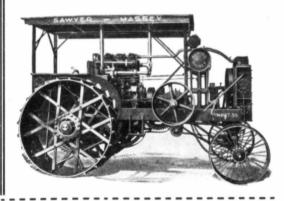
1918 literature will be ready for distribution at an early date. If you wish copies fill out the coupon below.

Remember in dealing with Sawyer-Massey Co., Ltd., you are doing business with a strictly Canadian firm, established in 1836 and who have earned an enviable reputation for building honest, serviceable goods, and for dealing fairly and squarely with their customers. Fill out the coupon.

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Sawyer-Massey Co., Ltd. Hamilton, Ontario.

Kindly place my name on your mailing list to receive free 1918 Litera-ture just as soon as issued, covering the Machinery which I have marked

with an (X) below,	
	Steam Engines
	11-22 Gas-Oil Tractors
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	27-50 Gas-Oil Tractors
	Individual Threshers
	Large Custom Threshers
	Combination Threshing Outfit
	Road Machinery

A Merry Christmas and a Happy New Year to All

Magazine

The FARM

Vol. XXII

WINNIPEG, CANADA, DECEMBER, 1917

No. 12

"BILLY" --- A Christmas Carol



HO'S your lady friend, Billy?"

"My mother."
I knew it, but lord! how I loved to hear the fellow say that word!

We were standing-to on the trench firestep, within three minutes of the word "go!" It wanted a good half-hour of day-light and I know the boy couldn't see the picture he took from his pocket. But, bless you, he only wanted to feel that it was there.

It was Billy's first time over the top. He had been in our section less than a month and only yesterday had been promoted to full corporal! But the responsibility had been well placed. He was a peach at any job, and there wasn't a man

us from the section commander down who would have grudged

down who would have grouged Billy anything in promotion. We were all cheerful—or pre-tended to be—in those tense moments before the pipe of the

"How goes it, Billy?" "All right, Sergeant, but I wish we were off—"

And we were.

Now you know all about the Somme advance. It has been described in a way by newspaper men, but "The Somme" isn't the point of my story. It's Billy and Billy only I am concerned with, and I think any of us chaps could tell you better about him than the writer Johnnies could.

Nervy? Lord bless ye, no sir! I never saw anything of the jumps about Billy, and yet he looked more like a good-looking girl than most girls I have

known.

In the minutes before that attack when we fellows fairly ate up the fags to steady our nerves, Billy looked as I have seen him at church parade back of the line. Ye see we're all right when we get going, but it takes "some" man to play the waiting game before a big scrap.

Well we got there-and a few hundred yards beyond—but we dropped quite a bunch on the way. I was knocked out, as I thought, pretty early in the game, but they tell me I was picked up within ten

but they ten me I was prometed and so the Hun second line.

That's the time—between clearing the time—between when you "see red" or see nothing. But one thing I did

A True Story of the Canadian Army of Liberation, told by a Sergeant of the Line in the Citizen Army, and specially transcribed for the "Canadian Thresherman and Farmer."

see and can remember was Billy digging

himself in like a ground-hog, with a couple of fellows lying dead or senseless beside him.
Well, sir, I woke up at the dressing station—concussion and left leg done to a pulp. They trimmed it at the base hospital teart do not be a constant of the state of the state of the state. next day, and there I was, out of the show.

recognized me. Lord, sir! the light of Heaven was in that boy's eyes. The nurse wouldn't give me any details but said it would be a miracle if he lived many hours.

He knew he was going out. To the rest of us that would have felt like taking our medicine, but to see Billy, you'd have thought the war was over and he had won it.

The night he went west, he gave me that picture 1 saw him take from his pocket on the fire-step. He pointed to an address on the back and I read all he wanted to say in his eyes for he couldn't speak. They pulled my bed close to Billy's and when he knew I had his message all right he gripped my hand—and it was

still there when he passed on.

Well, here we are in Halifax harbor-home again, a company of "broken men," they call us! But we'll give them the lie yet, won't we, Ginger? They gave me a new peg at Rockhampton and now I can do almost any-

thing with it that I could do with the old leg.

Them three fellows are all from our section. They knew Billy and were with him when last post was sounded. We got him a nice little cross and there's a bunch of angels over there who will never let a weed grow on Billy's grave

Ginger and Weedon and Gillie can speak for themselves, but as for me-well if I'm not a better man I'm a different chap from the bo-hunk I was when I enlisted at Regina. And Billy

You see it's like this—we boys have discussed it on the way across and we're all agreed. Last Christmas eve our old padre was preaching his best Christmas preach from that text where it

preach from that text where it says that Emmanuel means "God with us."

Well you know what a professional Bible puncher would have to say about that, but we chaps got to debating on how it was possible for us to have a date with God all the time if the Huns with their "Gott mitt uns" were in line with the Almighty as well.

We were a rough bunch and we could make a single and the single well.

make nothing out of it until some time after we got to know Billy. One night he took a



I could have stood that, sir, but the worst as yet to come. They got Billy, too, and his lights were on the blink, they said. He rallied and lived a week and I wouldn't swap that week for the whole lifetime of any other man on earth. As luck would have it, he was put next me in the ward, and you should have seen Billy's face when he first

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hand in the discussion while we were in billets, but for the life of me could I tell you now what he said. It was so mighty little. It was more what he did that got us chaps.

Wasn't it, Ginger?
"Ginger" and his mates nodded an em-

phatic assent.

No sir, I never was what ye might call an atheist. The biggest fool and the wisest guy living know very well that there's an O.C. somewhere on top of this world who keeps things goin' and everything on

When I was a kid, old grannie sent me to Sunday school, rain or shine, and when the roads were blocked she gave me a solid hour's pack drill with the shorter catechism.

There was an awful lot of it I couldn't understand and never will be able to square with my humble horse sense. But if it was that dope that made the old lady what she was to me, she's welcome to it (rest her worthy soul) and maybe I'll get the lay of it

D'ye know, sir, Billy said something of the sort to me one day when we were dis-cussin' "Predestination." He said it beat him to see how the God that

made his mother could treat

anyone worse than she did Billy.
Good old Billy! I'll never
meet another pal like Billy. By gosh! he was a clean sport and played the game if ever a man did. Yes, sir, I'd rather take my chance in the hottest corner of hell with Billy than share a front pew in the gallery of Heaven with some sky pilots I have known.

Thank God! I haven't met any of that sort up the line. They couldn't stand it, and the boys wouldn't listen to their Our padres are all men and talk to us chaps as men, but, like Billy, they do a darned sight more for us than talk. Yes, sir. you could take our chaplain at his face value any day, whether it was preaching or digging in, or lending a hand with a stretcher.

You know, sir, we miserable hoo-doos need something we can see, an' feel; something reasonable, so to speak. We are simple chaps on the whole. Few of us know much or anything of theology and Greek, but we can spot a straight proposition put

up by a straight man.

If your doctrines line up with the horse sense the Almighty gives to every sane man-we're right with you. What we can't understand, we can take on trust if we find it delivers the goods. I don't believe there ever was a mystery that had anything to it that did not at the same time carry some samples of its real goods.

Now there's where our Billy came in. Give us a chap we can bank on like Billy and I'll begin to understand what you mean by "the Lord's handiwork." Billy told me one night up the line that he never found his mother out with a lie; that she never forgot anything or any soul but herself, and that she never failed if she promised a thing

Lord, sir—what a record! I could say the same o' Billy. And so could you, Ginger. Did I tell ye, sir, that the shell that laid out Billy would have done for Ginger, there, if Billy hadn't blocked the way when he was fixing up Ginger on a stretcher?

The preachers tell us sometimes about the Lord never being without a witness anywhere. Billy and his sort are the only "witnesses" that will ever get a hearin' in the trenches, and for that matter from me for the rest of my natural life.

What's the use o' sendin' "theological students" to a gang of men who have tasted more of hell in their teens than the whole outfit of grey-beards who invented the doctrine of predestination by which the Lord (according to Burns)

"Sends ane to Heaven and ten to hell
A' for His glory?"

I tell ye, sir, if your "professors" and preacher chaps had turned out more "Billys" and fewer theological wind-jammers, there would have been no war.

Funny thing, sir, the night Billy went west had a wonderful dream about him. thought one of our chaps was facing a court-martial for getting drunk. He was one of the few black sheep we had in our company, but he had a wonderful crime-sheet record.

The O.C. was giving him hell and I could see the poor fellow getting the worst that was coming to him. Billy was principal witness; in fact, it was he who brought the drunk into the guard room.

When the O.C. asked if he had anything to say before sentence was passed, the poor beggar collapsed and cried like a kid. Then, sir, Billy saluted and asked if he might say

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"Thrice Noble Souls! Spirits that would neither bend nor break against any odds; and yet their chief care was the Women and Children"—The Heroes of Vimy Ridge

a word on behalf of the man. Dream though it was, there was Billy as plain as I ever saw him, with a quarter section of Flanders "real estate" on his feet and puttees

He told the Colonel that only the night before the prisoner had led a raid, corralled nine prisoners, and afterwards went back into no-man's-land for a wounded Hun he had heard groaning in a shell hole as he came back with his bag of prisoners.

That settled it. The fellow was given another chance. But that wasn't the end of The Colonel at once recomthe dream. mended that same old booze-artist for the Military medal and placed him in charge of a big rationing party. That's our Colonel's way, sir.

Next thing that is clear to me-we were passing through the wreck of what had once been a village. Never saw such a crowd of happy folk in my life as the civilians we found after the Boche had cleared out -chiefly kids and old women.

There was our old drunken pal, as sober as the chaplain, handing out grub to everybody like a great, big, mud-caked Santa Claus. Our boys were giving the kiddies

joy-rides on all sorts of wagons, gun-limbers and bikes, and there was Billy in the centre of a full score of them with a little dot on each knee. I couldn't hear what he was telling them, but they all seemed to understand him, although I knew our Billy couldn't parley-voo more than six words in French. Of course we actually saw that sort of

thing very often in course of the advance, but d'ye know, sir, the sight of Billy with the kiddies in that dream was the greatest sight I saw in the war. Whatever I have suffered or lost by going into the scrap, that was worth it all. If ever a mortal got a peep through the gates of Heaven, to me that

I remember the first Sunday I spent in France, one of our haw-haw chaplains down at the base was telling us chaps the story of the fiery serpent and "explained" the meaning of the text: "I will draw all men unto Me." We knew as much about it when he was done as we did before he started. but (dream though it was) that picture of Billy and the kids was the last word I needed as an "explanation."

No man in our crowd needed any help to understand how Billy was such a drawing card. He wasn't the biggest man nor the "smartest alick" in our bunch by a long bit; but he was the best man in the show: You could see through him: he had all his cards face up on the table: he was the simplest kid and the one honest man we could bank on: no, sir, you couldn't trip up

> The first sight we fellows got of those wonderful French sev-enty-fives working, we thought they were the most complicated bits of gun machinery "on the market," as the tool catalogues say. But when you "get" their working principle, the very simplicity of the thing beats anything I have the supplied to the supp thing I have ever seen.

> Yes, sir, there's one thing this war has taught us chaps: that it is the simple things that win out. We saw it in those famous seventy-fives; we have seen it time and again in the great headquarters plan of attack when we were able to figure it out at the end of a show.

Why, sir, do you know the simplest man I saw out there was our O.C. He never leu us a dance, and whether we were going in or coming out he was

always around to give us a word of cheer. I even saw him hand round his packet of whiffs to Ginger there and a bunch of hooligans like him when they were taking

cover one day.

And it's the same with the higher command. One day we saw the great chief himself, and talk about simplicity—man, I've seen a grander looking floor walker many a time in a cheap boot store in Winnipeg! No, sir, there's no useless trimmings about

these boys.

But oh! Sir, Billy was the prince of the lot! The simplest, kindest, straightest pal God ever gave to a man.

I never saw him in a temper, but by heck there was none of the milksop about Billy. You ask that red-headed giant there who it was that took him by the hand one day, when time was up, and he was in a blue funk that nailed him to the trench floor.

Billy is sleeping on the banks of the Somme; but, bless you, he isn't dead. No, sir, Death can't give our Billy the knockout. He'll "carry on" while one man who knew him is left to tell his story.

Meanwhile, we boys are going to find Billy's mother.

THE LOGICAL ENDING OF ALL WAR

A Christmas Message to the People of Canada from Nellie L. McClung

(Specially written for "The Canadian Thresherman and Farmer")

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DON'T suppose I could start an argument, if I state casually that there is something wrong with the world.

We see it more since the war which has shed a strong light on our social and national and international life; just as we see the need for spring housecleaning, when the strong, bright sun of spring pours in the windows, revealing the spots in the carpet and the draggled grayness of the hall

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The war has speeded up the camera of life, and given us a clearer vision of what is going on, like the moving pictures which show us in a few seconds the development of the seed into a full-grown plant. The process was just the same, in Nature's slow way, but we could not get a grasp of it until we saw the hastened picture.

We are appalled by the wastage of war, and yet there has been going on a steady process of waste all these long, weary years, almost unnoticed because it was spread out and diffused.

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Talk about destruction of property! To begin at the bottomwhich is the right way to begin everything-with the possible exception of digging a well. The Conservation of Forests Committee report that twenty-two times as much timber was burnt last year as was used!

Talk about waste of life! There have been more children under five years of age who have died since the war began than there have been men slain in battle!

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We cry out in horror over the women and children killed by zeppelins in England and yet there raises its head in very London the iniquitous Liquor Traffic which kills more women and children in

one month than all the zeppelins that have been made!

Thinking of these things, and many others, I believe it is no hysterical exaggeration to say there was something wrong with the world, even before the war.

It isn't lack of cleverness. Not at all-we do not even need to explain or prove that. We can take the minutes as read and pass on!

It is not lack of determination, resourcefulness, executive ability, forcefulness. It lies deeper than all these things.

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What is wrong with the world is a lack of

spirituality, and it took a war to show it to us. We all know what's wrong with Germany. That's easy. The German folks have been led away by false teachers and have grown materialistic and godless.

It isn't quite so easy to diagnose our own case. We're nearer ourselves, and nearness does not always mean clearness of vision! And besides, we are all disposed to be generous to a fault-when it is our own!

But we cannot evade the question any

of good cheer and hope to the boys who go out and go over.

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Ideas are epidemic, good as well as bad. They go from one mind to another, and now in this fourth year of the war, there is a troubling of the waters that is full of healing.

We are tired of hatred, suspicions, misunderstandings, slanders, grouches-mean-

ingless phrases, and bumptiousness. We want something simple, and solid, and comforting. And it is coming. Anything comes when enough people want it!

1 1 1

Out of the carnage and waste of war is coming a new sense of individual responsibility. People are thinking of it, and talking of it. It finds expression in the pamphlets which the American airmen have been dropping over the lines to the Germans, telling them that the American people are not the enemies of the German people, but only of the military autocracy which threatens the peace of the whole

The leaflets go on to tell the Germans that if they will throw off the Kaiser's yoke and be willing to form a republic, the allied nations will help them to reconstruct their country. If they are in earnest, and will come over, with the pass word "Republic," they will not be treated as prisoners, and the Germans are coming!

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This is the logical way for the war to end, and, unlike other warendings, it will end all war! It will be the triumph of the spiritual over the material.

Germany stands as the embodiment of material power to-day. Germany understands no other.

It is for the Allied Nations to demonstrate the power of the spirit, and in this demonstration

every one has a part who has the determination to do justly, to love mercy, and to walk humbly with their God!

4 4

"All is Love but all is Law." The world is suffering because of its violation of the Law of Love. Every Law of God is a most beautiful and beneficient Law. In harmony with Law we know what "happiness" means. At variance with it-we suffer.

Let us each determine to make a real Christmas gift to the world by sending out a thought of healing, a thought of brother-

Nellie L. McClung.



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longer. There is a curative force in evilwhen it goes the limit something happenswhen the pot boils hard enough, it boils over.

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This brings us to the time of writing! The pot of evil has boiled over, and its poisonous fumes are filling the house. We've got to do something now! We realize that material forces cannot save uswe must be saved by spiritual means.

Harry Lauder says trouble drives the soul to despair, to drink, or to God. The loss of his dear laddie has turned him to God, and now behind the lines he sings gospel hymns

THE CANADIAN THRESHERMAN AND FARMER

CANADA'S LEADING AGRICULTURAL MAGAZINE

E. H. MEATH

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Dec.

Backing Them Up

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The Foot-path to Peace

To despise nothing in the world

except falsehood ar 1 meanness,

and to fear nothing except cow-

ardice: to be governed by your

admirations rather than by your

disgusts; to covet nothing that is

your neighbor's except his kind-

ness of heart and gentleness of manners; to think seldom of your

enemies, often of your friends,

and every day of Christ; and to

spend as much time as you can,

with body and with spirit, in God's

out-of-doors - these are little

guide-posts on the foot-path to

peace.—Henry Van Dyke.

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1917

GUARANTEE

No advertisement is 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 appeared, and com-plaint be made to us in writing with proofs. days after its occurring, and provided. 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 ad-vertisement in "The Canadian Thresherman and Farmer."

66 O far, France is the only one of the belligerents that is ready for vic-Not only is that the view tory. of the eminent statesman who used the words, but it is the settled conviction of every well-informed man who has the courage to face the evidence of his own eyes. We cannot check all that is taking place elsewhere, but in so far as Canada is concerned her unpreparedness

for peace is deplorable. We are thinking of a state of domestic discord that has rarely if ever been known in Canada; and this circumstances under which, more than anything else in the conduct of affairs, require the most complete agreement of parties.

Nearly half million of the best of the country's young manhood has been withdrawn from the

reproductive wing of the community life. How this affects "production" is dealt with elsewhere. Here, something far more than a passing word is due to what those men of the fighting forces

expect and are entitled to receive at the hands of their countrymen. The women are all right, but that creature now masquerading as a man who seeks by political side-stepping to delay for one hour the reinforcements of men, munitions and food so sorely needed by those brave lads at the front, is the base wretch who would betray his own offspring.

Let us not be misunderstood. We are at war, not only in France and Flanders but here, in Canada, right up to our own domestic hearth-stone. We believe that the boys across the line are getting ready to make good what they have undertaken to do-their best. We believe that America's contribution to the war will be stupendous; that the pooling of her moral and material forces will ultimately force a victory; that but for her dropping the cloak of neutrality some months ago, the outlook for us at this moment would not be so comfortable as it is. We believe all that, but in the name of decency and simple honor, we have no right to presume upon it to the extent of a man while a single slacker is gadding about the streets of our cities.

The man who, by reason of his circumstances, the law says is wanted for the fighting strength of the country, cannot escape the clear duty. The man whom the law says will be better employed in producing, ought to be producing food, clothing and other necessaries for his brother in

the trenches. We desire to back the lawnot as slaves, but because in doing so we offer the surest evidence of our liberty,

the chief security for our indefeasible freedom. The law is taking care of the man who ought to fight, but as to the man on the farm, there is something about him and his moral obligations that the machinery of the law cannot adequately

In discriminating between the man to go and the man to stay, we feel that not a single trained agriculturist

should be taken from the farms until the last half-dozen has been reached of those thousands who are still holding down "positions" in the cities which (for the duration of the war at least)

can be fairly filled by older men, by returned soldiers, or by women. Having said this, may be beg in the most earnest terms we can employ that every man who can will do something to increase the product of his farm—beginning right now. The opportunity to render really great service never knocked so loudly at any man's door.

deal with.

SUBSCRIPTION RATES

Postage prepaid, Canada and Great Britain.

\$1.00 per Year. Single copies 15 cents
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Failing to receive paner, you should notify the office at once, when mistakes, if any, will be corrected immediately. be cor-

A 11 Subscriptions nust be paid for in advance and no sub-scription will be scription 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 applica-

We are not telling any man what his duty is at this crisis. He knows it all right. No citizen of Canada can close his eyes to the needs of the hour. What he can and ought to do requires no elucidating. That is his business, .not ours. But we will venture the prayer on his behalf that God will have mercy on his withered soul if he neglects or seeks to belittle the duty. The production of food is the business and privilege of Canada at this moment and will be for years to come. Men and women we are placed on our honor! No "law" except the injunction of the heart and conscience can police our domiciles and mark the limit to what we may or may not do in the face of this call. Let us do our part as well as sing: "God save our splendid men!"



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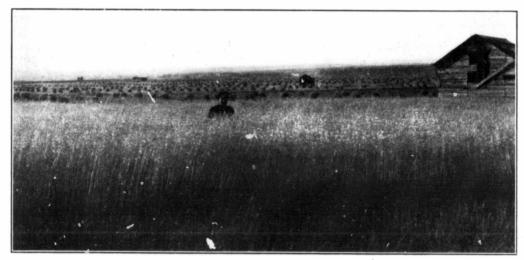
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Province of Alberta



ALBERTA HARVEST SCENE

For the third consecutive year, the Province of Alberta stands first in the Dominion for crop production. In this critical time in the world's food situation, we are favored with a splendid crop of better than average quality. At present prices such a crop will be the most profitable ever harvested in the province.

Following two heavy crops, this year's crop has put the farmer in a strong position financially. Land values are stronger and sales have been more frequent, especially in the wheat districts, than ever before.

Prices for grain and live stock are record-breaking. The live stock industry for the province has been strengthened by the accession of many famous animals and the live stock exhibits this season were the best in the history of the province.

Alberta's supremacy as a stock-raising country is becoming more and more apparent. Great expansion is taking place from year to year in all lines of live stock. Experience and available figures support the prophecy that although grain prices may recede after the war, live stock prices must continue high for many years to come.

Alberta dairy products are still in the lead, winning high honors at all the important exhibitions against the exhibits from every Canadian province and was pronounced the finest display in Canada. Alberta butter is preferred over all other Canadian butter for domestic and export trade.

The prosperity of Alberta's farming population is having some effect in the towns and cities in making general trade good and somewhat raising the sub-normal level of rents. The general situation as affected by Alberta farmers' earnings is well illustrated by the fact that twice as many licenses for automobiles were issued in the first six months of 1917 as during the whole of 1916. A single agent in one of the smaller cities placed an order for one million dollars' worth of a certain car, for delivery within fourteen months.

Immigration of United States farmers into Alberta is greater than at any time in the last four years. During the first ten months of the present year, immigration returns show over 100 per cent increase and 200 per cent more than 1915 figures.

Alberta still has thousands of free homesteads, many of which are within close proximity to railway facilities awaiting settlers.

For Full Particulars apply to

HON. DUNCAN MARSHALL,

Minister of Agriculture,

EDMONTON, ALBERTA.

CHARLES S. HOTCHKISS,

Chief Publicity Commissioner,

Department of Agriculture,

EDMONTON, ALBERTA.

Manitoba!---To The Last Man and The Last Hog

BANKS TO THE RESIDENCE OF THE PROPERTY OF THE

N Thursday, 29th November, one of the most memorable gatherings in the history of Manitoba was convened in the Provincial Legislative Chamber in Winnipeg. The floor of the house was filled with a crowd of representative men and women of a character and under circumstances such as it never had to provide for at any point in

The Nation is at war, and every man and woman who came to that meeting showed in the most unqualified terms that he or she knew it, and that if fighting was not to be the forte of the farmers and women of the Manitoba farm homes, it was to be their business until the last shot was fired to produce and to conserve for the maintenance of the fighting men and all else in a world shortage that the condition of war imposed.

Just a week before, the Minister of Agriculture called an informal meeting of representatives of the agricultural press, the Live Stock and Dairy Commissioners, etc., the object being that of a purely consultative character. The press gave every assurance of its unlimited support to any measures the Department might see fit to set in operation.

At once the Deputy Minister, J. H. Evans, and his staff got on the wires to the end that every outpost of the province was reached within a few hours and on the evening of that day-week something like 120 delegates had arrived in Winnipeg to attend a great conference on the following morning.

The meeting was called to order by the Deputy Minister at 9.30 in the morning and remained in session till noon, reassembling after a brief luncheon interval.

There were many remarkable statements made, several stirring speeches were delivered, some unrehearsed humor crept in, but not a single acrimonious or discordant note was heard throughout the entire conference. Perfect unanimity prevailed. An enthusiasm born of deep-seated seriousness and an impressive realization of the situation swept the proceedings like a flood.

If the finding of breeding stock in all that has proved successful in pork product was to be the main problem for the immediate future, it was perfectly evident that the human "hog" does not seem to claim a single representative among the farmers of Manitoba. If there was to be any fighting it looked from the faces of these men that the "scrap" would resolve itself around the question of who could do most to produce and conserve food for the boys at the front and for the women and children of those countries which were now suffering under the merciless heel of the

Space is not available in our narrow limits to begin to do justice "at one sitting" to all this means. For the benefit of those who were not within hearing of all that was said, we give a synopsis of the proceedings as embodied in a series of resolutions passedunanimously in every case as has been stated, in some cases by standing vote.

Shall We Fail Them?

"Back from the jaws of death— Back from the gates of hell"

A party of our Canadian boys on their way back from the fire trench. Recall if you can what was the chance they took when they went in! These are MEN than whom there never were braver or more devoted souls in the world's history.

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Let it be said that any man in this awful crisis who dares to allege that any reputable citizen of Manitoba would be diverted from the great purpose by monetary consideration—such as a "guar-anteed price" for hogs—simply does not know the calibre of the men of this province. A few slackers there may be hidden away in some odd corners, but their kin, far less the atmosphere of their shrivelled souls, was never felt or in evidence at this historic meeting.

Pledge of Support

"That this conference representing the Agricultural Societies, the Grain Growers' Associations, the Livestock and Dairy Associations, the Home Economics' Societies and the Boys' and Girls' Clubs, realizes the seriousness of the food situation in regard to Britain and her Allies, and the members piedge themselves to do their utmost to present the situation to the whole people and to secure united action in increased livestock production as in other

measures recommended."-Carried by unanimous standing vote.

Farm Help

"That while the members of this conference are fully aware of the military necessity, yet we have been assured that the necessity of provisioning the Allies and the allied armies is the paramount obligation of Canada; that, therefore, trained farmers, farmers' sons and farm help, in view of the food situation, are of greatest national service if allowed to remain in their present occupations."

"That the labor crisis can be met only by the registration and organization of all labor resources, and that this should at once be proceeded with in the name of national service."

Feeds Branch

That this conference mends the action of the Dominion Government in establishing a Feeds Branch pursuant to the resolution of the Ottawa confer-

The previously passed resolution, which throws light on the purpose of this new branch, reads:-"Your special committee herewith recommends that a Feeds Branch should be immediately created with an officer in charge who is not only well informed on feeds and feed values, but who will further investigate the question, and who, by the use of various measures, will facilitate the distribution of feeds in Canada to the farmers in a manner that will establish their confidence, and make available regular supplies of these feeds. will prevent adulteration, will carry on an educative campaign in respect to the purchase of the various grades of feed, and by these and other measures establish a confidence and permanency in the feed business, which is very necessary if the movement for the keeping and feeding of more hogs and other livestock on the farms of Canada, is to become effective."

Appreciation of Banks' Action That the banks be commend-

ed for their policy of helping members of Boys' and Girls' Clubs to buy feeding stock, and that the policy be commended to all banks of the province."

Pig Keeping in Towns and Villages

"That the municipal and town and village councils be requested to make it feasible for residents of towns and villages, under

Continued on page 12

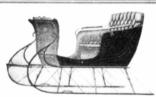
U.G.G. Needs for Farm and Home

U.G.G. Sloop Sleighs are strongly made and will stand up under heavy work on all road conditions. All wooden parts are of selected hardwood. The runners, made of straight grained oak, are bent to form, giving greater strength to the sleigh.

The roller ends of the sleighs are protected with steel bands. Runners have wide steel band from shoeing, completely around nose and back down the top of runner. Also a steel strap runs from nose on outside of runner extending 18 inches back.



The draw rods pass through the 18in. steel straps which allow the strain of draft to come from body of runner instead of the nose, as is the case where only a six or eight-inch strap is used.



This is the Standard Cutter for Western Canada

This is the Standard Cutter for Western Canada A cutter that will hold its shape and finish for many years. Gearing is constructed entirely of hickory fitted with steel shoeing, extra well ironed and braced. Body has maple frame and basewood panels. Three-ply wood is used in the back and and basewood panels of the property of the back and construction of the back and the steel panels of the back and the steel doors and storm top, weight 365 lbs. Winnipeg, \$43.96. Regins, \$71.06. Calgary, \$72.06.

Bunks and Bolster and Runners for Poles are made of carefully selected hardwood. Roller Rods for tongue and reach are full length with nut and cotter pin. Runners are made in two sizes. The two-inch size is 5 inches deep and 6 feet long; the two and one-half inch size is 5½ inches deep and 6 feet 6 inches long (finished size). King Bolt and Draw Pin carry cotter pin and washer. Poles are made of straight-grained selected oak and well ironed. Painted a substantial red with black striping. Tress sleighs will give you good service and will last for years.

Prices

		1 /100	0	
		WINNIPEG	REGINA	CALGARY
V1	23A-2-in. steel, 365 lbs	\$31.50	\$32.75	\$33.75
V1	24A-2½-in. teel, 450 lbs	35,50	37.00	38.00
V1	26A-2-in. ast, 480 lbs	34.50	36.00	37.25
V1	25A-2½-in. ast, 580 lbs.	38.50	40.50	42.00

Takes second class freight rate

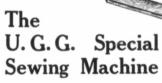


The Grain Growers' Special Fanning Mills are low down machines, which do their work of cleaning and separating throughly. Substantial wirescreens are used. The feed dam above the feed with the feed is once set, no regulating is needed. Lower shoe is equipped with cleaning bar, thus ensuring a clean acreen all the time. Clogging is impossible. A long mesh screen is used in the lower shoe for taking out oats. Made in 3 sizes. No. 3 Mill is always sold with both power and hand equipment. Shipped with 1 shoe of 9 screens and 6 sizes. Hopper capacity: MI, 2 bus; M2, 3 bus; M3, 4 bus; M3, 20 sizes, M1, 20 sizes, M3, 20 sizes

M1-24-inch, capacity 20-25 bushels, hand power, weight 0 lbs. Winnipeg, \$28.00. Regina, \$29.00. Calgary, \$30.00.

M2—32-inch, capacity 35 bushels, hand power, weight 220 bs. Winnipeg, \$37.50. Regina, \$38.85. Calgary, \$39.80.

M3-40-inch, capacity 60 bushels, hand and engine power, weight 285 lbs. Winnipeg, \$54.00. Regina, \$55.75. Calgary, \$57.00.



Machine, guaranteed for 10 years—a machine that will give you continuous service for years and years. Wood-work is of pleasing Colonial design, quarter-sawed oak, all hand rubbed finish. Automatic drop head is constructed of oil hardened material and includes the most modern devices for saving time and doing excellent work. The most important of these is the automatic or regulating tension, which requires absolutely no adjust-ment. It also carries an automatic tension release, automatic bobbin winder, self-threading shuttle, self-threading needle, steel-forged double-width four-motion feed and a removable nickeled face plate. Complete set of attach-ments furnished with each machine, and also illustrated book covering the use and care of the machine come to you with your machine.

Prices WINNIPEG REGINA CALGARY \$33.75

\$33.00 €

Other Seasonable Farm Needs Kerosene engines, grinders, crushers, washing ma-chines and tank heaters. We have a good stock in our warehouses and can make shipment to you im-mediately. Mail the coupon for full information.



The woodwork of this sewing machine is of oak, finished in golden shade. Four large-size drawers with brass pulls, also a centre drawer. Automatic shifting device raises sewing head to position. Stand is ball bearing. Easy and quiet operation. This machine comes to you with a complete set of attachments and is backed with a U.G., guarantee for 19 years.

WINNIPEG

Prices

CALGARY

\$23.00

\$23.75

\$24.25

U.G.G. No. 2 Sewing Machine

A low-priced machine, slightly smaller than the two above, also guaranteed for 10 years, and will give you years of service. Four side drawers, and a convenient centre drawer. An easy-running machine, furnished with complete set of attachments.

Prices

CALGARY

\$21.50 \$22.00



\$34.25

UNITED GRAIN GROWERS LIMITED,	C.T. Dec.
Winnipeg, Regina, Calgary.	
Please send me full particulars about the articles I have checked.	
Sleighs	
Grinders Crushers Tank Heaters	· · · · · · · · · · · · · · · · · · ·
Washing Machines Sewing Machines Grain Tanks .	
NAME P.O	

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necessary supervision, to raise and feed pigs or other livestock."

Request for Co-operation of Organizations

"That the municipal councils, grain growers, agricultural societies, banks, railways and all other available agencies, be called upon by this conference to work in the interests of increased hog production and that the delegates at this conference be commissioned to present the needs to their own districts and to assist in organization."

Manitoba Department of Agriculture to Direct Propaganda

"That the Manitoba Department of Agriculture be recognized as the proper agency for the direction of this propaganda."

Pulpit to Assist

"That the Ministers of all Churches be urged to preach a sermon on food production."

Approval of Appointments

Resolutions approving the appointment of H. S. Arkell as Livestock Commissioner for Canada and J. D. McGregor as Food Controller for the western provinces were passed.

Perhaps the most impressive and complete statement of the case was provided by the address of President Reynolds, of Manitoba Agricultural College, and as its points are of such transcendent moment to every thoughtful man and woman in these times, we give them in detail so far as we may

Points from Address of President Reynolds

1. The war has caused a greater demand for meat.

2. There has been a wholesale slaughter of livestock in Europe to supply the demand.

The livestock industry has seriously declined on the continent of Europe in the last three vears.

4. The submarines of Germany destroyed 923 British mercantile vessels in the first seven months of 1917. This represented a tonnage of 2,000,000, or and feeding livestock.

about one-tenth of the British mercantile marine.

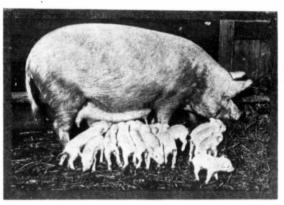
5. The United Kingdom previous to the war, had been procuring most of its meat supplies from distant countries-Argentine, New Zealand and Australia.

6. Owing to the destruction of British shipping there has been almost a complete stoppage of meat supplies from distant coun-

At present, Great Britain and the Allies are dependent al-

11. The needs now are: Capital to enable some farmers to start in the livestock business, and others to enlarge their present operations; farm labor to help make mixed farming more general; a faith in the possibilities of agriculture and livestock raising. that will invite capital and labor and skill to the aid of a more intensified farming.

The war had created an extraordinary demand for beef, bacon, and wool. Hence the need to



One litter of pigs will (roughly) produce about one ton of pork. The soldier's daily pork ration is ½ lb. Figure out how many soldiers you can supply

most entirely upon Canada and maintain and to increase producthe United States for their meat imports.

8. Relatively to her population, area, and opportunities, Canada's exports of livestock and of livestock products have been very

9. In cattle, sheep and swine, and their products of beef, mutton, bacon, hides, wool, milk, butter and cheese prices are now ruling very high and are likely to rule high for some time after the war.

10. Canada has the climate, the land areas, the railroads and water routes all favorable to a greatly increased livestock production. She has also the farmers who are skilled in breeding

tion of cattle, hogs and sheep.

The rations for British soldiers at the front are 1 pound of beef per day and 4 ounces of bacon. In peace times, the average consumption in Britain was one-fifth pound of beef and one-tenth pound

In 1914, the imports of bacon to Great Britain were 5,098,080 hundredweights. These were increased by war demands in 1916 to 7,35,955 hundredweights.

Canada an Infant in Export of livestock

Mexico has been exporting 41/2 times as many cattle as Canada, Argentina 5 times as many sheep, and nearly 400 times as much beef as Canada. Denmark has exported over 4 times as much

pork and pork products, and Australia 3,000 times, and New Zealand 4,000 times as much mutton.

Compared with those of the United States Canada's exports have been, of beef and beef products 1 to 90; of pork and pork products 1 to 16, of mutton 1 to

Decrease of British Imports from Distant Countries

In 1914, Argentina supplied Britain with 5,993,126 hundredweights of beef. This year, 1917, Argentina is practically off the British market, because of the shortage of shipping, and the decline of imports from Australia and New Zealand is even more marked.

How these imports have fallen off is shown by the figures for the first two months of the year:

January and February 1915 1916 1917 Cwt. Cwt. Cwt. 474,697 617,744 349,138 Argentina Australia 294,939 23,343 49,436 New Zealand . . 114,327 109,709 85,737

These figures sufficiently explain why Britain has been unable to carry mutton and beef from Argentina, Australia and New Zealand. She has not ships to spare for the long haulage. She must look to Canada and the United States for beef and bacon as well as wheat.

How much Great Britain is dependent upon the beef supplies of North America is shown by the increased imports from the United States for January-February in three successive years:

1914-15 1915-16 1916-17 Cwt. Cwt. Cwt. United States . . 39,983 94,287 150,538

The total British imports for the same months show a serious decline:

1914-15 1915-16 1916-17 Cwt. Cwt. Cwt.981,234 919,761 696,736

Britain, for the period of the war, will be dependent upon Canada and the United States for practically all her imports of meat. And after the war, until shipping is restored to its normal

Continu d on prege 14



Heroes of the Manitoba Boys' and Girls' Club with their prize-winners. The soldier's daily beef ration is 1lb. Boys! here is where you can fight



BOB LONG

WISHING YOU A MERRY XMAS And PROSPEROUS NEW YEAR

This is my message to you, Mr. Farmer of the West, and your family, not because you are among my most valued customers, but because I love the West and the people of the West and because I have made the west my home

Bob Long

R. G. Long & Co., Limited, Toronto, Canada

Makers of the famous

"BOB LONG" Brand

OVERALLS---GLOVES---SHIRTS---PANTS HIGH GRADE KNIT GOODS---MOCCASINS, ETC.



KNOWN FROM COAST TO COAS'

tonnage, Europe will be largely dependent upon us for livestock and livestock products.

Decrease in Supply of Livestock in Europe

"A total decrease of 115,005,000 head in the world's meat producing animals is shown in a comparison of present with prewar conditions made up as follows:

	N	ı	11	m	ıł	н	r	of	head, decr	reas
Cattle									28,080,000	
Swine									32,425,000	
Sheep			,						54,500,000	

"Europe has been eating into its herds at an alarming rate, and this condition will continue to grow worse. The world's supply of meat and dairy products, of animal fats, wool and hides are all involved, not only now, but far into the future.

"We can contemplate a high range of prices for meat and for animal products for many years to come."—Herbert C. Hoover, U.S. Food Controller.

How Canada Stands in Livestock Production and Export

Canada, which claims to be mainly an agricultural country, covering nearly half a continent, produces one-sixteenth of the world's supply of wheat. In livestock products, she has managed to do little more than supply her own needs. With one-twelfth the population of the United States, Canada's exports of beef and beef products, in 1912, were one-ninetieth of those of the United States; of pork and pork products, one-sixteenth; of mutton, one-seventieth.

In response to the needs of the Allies, and to make up the short-age from other sources, Canada has increased her exports to Europe very greatly since 1914.

But that has been done at the expense of her own capital supply.

Our Canadian Herds are Decreasing

		1914	1917 1	Decrease
		Animals.	Animals.	Animals.
Milch	Cows	2,673,000	2,642,000	31,000
Other	Cattle	3,363,000	3,325,000	38,000
Sheep		2,058,000	2,099,000	49,000
61		2 424 000	0.519.000	001 000

The meat consumption per capita in normal times, for some of the principal countries of the world, is as follows:

Annual per capita Consumption

		f me		imper	
Australia	260	lbs.	per	year	
New Zealand	210	66	***		
United States	170	66	66	66	
Canada	140	66	66	66	
United Kingdom.		44	66	66	
France	80	46	66	66	
Belgium	70	66	66	66	
Russia	69	66	6.6	66	
Italy	45	44	66	66	
Germany	115	66	66	66	
Austro-Hungary	65	66	66	66	
Average, abou	t 93	pou	nds.		

In the United States the consumption decreased from 181 pounds in 1900 to 171 pounds in 1909. This saving of consumption, by a population of 100,000,000 would amount to 1,000,000

pounds, or more than one-fourth of the total meat exports of the world.

In Canada for the same period we had an increase of meat consumption from 109 pounds to 137 pounds. This increase amounts to 230,000,000 pounds a year, or three times the total meat exports of Canada for 1912.

HOYT METAL PRODUCTS

To the manufacturing engineer, the mechanic, the black-smith, and all men who have anything to do with the handling of mineral products, a supply house which can be absolutely banked on to deliver goods of unquestioned character is of the very first importance.

In this respect we have the greatest pleasure in referring our readers to the Hoyt Metal Company, of Toronto. This is a very old-established house with an all - white reputation which has been steadily built up on the character of its goods. The house is represented by extensive plants located in London (England), St. Louis, Mo., and Toronto, Canada, with an annual output exceeding five million dollars.

They are specialists in babbitting metals, manufacturing the best anti-friction babbitts on the market. With over forty years concentrated effort on the one thing of manufacturing alloys for all classes of machinery, the Hoyt Metal Company has evolved two alloys which are unsurpassed by anything of the kind now in use.

These are the "Hoyt Nickel Genuine," specially designed for heavy duty gas tractors, and the "Hoyt Frost King" for threshers, separators and stationary engines of all classes. On another page will be found the announcement of the Hoyt Metal Company, and from our own experience and that of many scores of friends who have had dealings with the house we have the utmost pleasure and every confidence in recommending any interested party to get in touch with those people, either direct or through their agents.

The Mission of the Red Cross

The Red Cross Society is the great world's monument to woman's love and her sympathetic regard for human suffering. Florence Nightingale founded the Band of Mercy of which the Red Cross is the universal badge. Its purpose is to save life and alleviate human suffering. Its disciples are now so numerous, so skilful and so well organized that when your boy



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> HIS is a time when all men rest awhile—a time of family re-union a time to consider matters requiring "setting right."

> To the man having the real well-being of his family at heart, what could be more appropriate at this season than the timely consideration of protecting their continued welfare and happiness by LIFE INSURANCE?

In the contracts of The Great-West Life Assurance Company all this is provided and more. A man does not necessarily have to "die to win," but may be reassured of comfort in his old age at the same time. Rates are low and the profit returns being paid to policyholders are the highest.

The Great=Ulest Life Elssurance Company

DEPT. "U"

HEAD OFFICE: WINNIPEG

A Christmas Surprise! See Page 63

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Do Not Scrap Broken Castings

We make them equal to new at low price. Cylinders, Engine Bases, Gear Wheels, Steam Boilers, in fact any broken or cracked parts, welded and guaranteed by us. Scored or worn cylinders re-bored. Please write for our circular and estimates. We were the first to operate the OXY-ACETYLENE WELDING PROCESS in the West.

Established since 1911.

Manitoba Welding & Mfg. Co.

56 and 58 Princess Street, WINNIPEG, Manitoba

Rennie's Seeds Always Grow

THE BEST VEGETABLES AND THE BEST FLOWERS

ANADA'S National Importance this year will be measured by the resourcefulness of its production. The patriotism of the Canadian farmer will be proven by the efforts expended to grow all the Grain, Fodder, Vegetables and Roots that our bountiful Dominion can produce. It is our means of contributing to the Nation's need, and the golden opportunity of enlisting the Canadian farming community in the Honor Roll of the Empire.

NEW HIGH GRADE SEEDS ... Order Now

Seeds Bulhs and **Plants** Delivered Free

Astermum, the big Comet Aster, pink, white or mixed	
Mammoth Cosmos, crimson, white, pink or mixed	Pkr. 10c., 3 for 25c.
New Red Sunflower, beautiful and showy	Pkg. 25c.
Scarlet Runners, popular climber	
Spencer Sweet Peas, choice mixed colors	
XXX Imperial Japanese Morning Glory, all colors	
Triple Curled Parsley, dwarf dark green	Pkg. 5c , oz. 2cc., 4 ozs. 75c.
Ninety-Day Tomato, smooth and firm	Pkg. 10c., oz. 1/2 35c. oz. 60c.
Squaw Table Corn (ready in 60 days)	
Crimson Giant Radish, early crisp	
Little Marvel Peas, large luscious Dwarf	
Rennie's Extra Early Red Onion	
Rennie's Frize Swede Turnips, best for table or stock	
Nonpareil Lettuce, Canada's best for open air	
XXX Guernsey Parsnip, smooth high grade	
Rennie's Stringless Golden Wax Beans	4 ozs. 20c., lb. 65c., 5 lbs. \$3.00
Rennie's Fireball Beets	
All-Head Early Cabbage (solid heads)	
Golden Bantam Sugar Corn (for table)	
XXX Table Cucumber (for slicing)	
Yellow Dutch Onion Sets	
Extra Early Red Onion. Best for West	
	Rennie's Seed Annual—Free to All
ORDER THROUGH YOUR LOCAL DEAL	ER OR DIRECT FROM

Wm. RENNIE Co., Limited Adelaide and Jarvis Streets, TORONTO

Also at 190 McGill St., Montreal 394 Portage Ave., WINNIPEG 872 Granville St., Vancouver



All

manly possible to reach him, he is no longer left in the open with of his wounds.

Red Cross, and from that moment anything else at Christmas?

falls on the battlefield, if it is hu- everything that human tenderness, humane surgery and the solicitude of the best men and nothing to remind him that he is women on earth can do for him is alive save the insupportable agony his until he can again resume his place among his own. Will you He is gathered in to the care of think of the Red Cross before Let 'Em Do It

Geraldine Farrar, the grand opera singer, was asked a short while ago how she stood on the votes-for-women question.

"I don't stand at all," she replied, and then told a story about a farmer's wife in Connecticut who, hurrying from milking the cows to the kitchen, from the kitchen to the churn, from the churn to the woodshed, and back to the kitchen stove, was asked if she wanted to vote. She vehemently replid:

"No, I certainly do not. I say

now, if there's one little thing that the men folks can do alone, for heaven's sake let 'em do it!"

Too Fast For Him

A Georgian from up in the mountains came to town on his yearly trip with a wagonload of corn, sweet potatoes and other produce to exchange for groceries. As he approached the city limits he saw a sign: "Speed Limit 15 Miles an Hour."

Poking his oxen frantically with the stick he muttered: "By golly! I don't believe we can make it."

CAN YOU FORGET HIM



"Out in 'No-man's-Land' with no companionship save the everlasting jangle of hell's orchestra.

PURE WATER

is an essential element of good living conditions for man or beast.



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Winnipeg, Man.

HOW SOILS ARE MADE FERTILE

By C. C. SHERLOCK

SUALLY, when we think of soils we think of them as a finished product; that is, we consider them as something that was made and completed when the Creator commanded that there should be light, and that man now has no more power or influence over their making than he had over the making of light or of rocks and mineral ore. We seem to think that God made the soils in the beginning, and that all we can do now is to farm them.

The writer contends that this is a very mistaken idea. Strictly speaking, soils are not a finished product; they are constantly undergoing changes. As a general rule, if they are unmolested by man, they are constantly mak-

ing those changes that w ill increase heir fertility. This is true in the forests and in the prairies. If they are unmolested in any way, their fertility is constantly increasing, no matter how heavy the growth of trees or grass may be each year. If the soils are tilled by manif they are molested by man -as a rule they are constantly decreasing in fertility. I am

safe, I think, in saying that almost no soil in the West or Southwest that has been farmed ten years is as fertile as it was the first year it became thoroughly fit for cultivation after it was broken up. The reason for this is because the soil is constantly undergoing changes; therefore it is not a finished product. It may either increase or decrease in fertility.

We simply speak of this to show the farm reader, or rather impress upon the farm reader, that soils are not a finished product, but that they have been left for him to improve as the circumstances may demand. If the farmer looks upon this question in the light that the soil may be improved, or that soils may wear out if the proper attention is not given them, he will use more care in his attempt to maintain their fertility. If he knows how Nature makes soils and how she maintains their fertility, he will know

how to go about it to maintain the fertility of his soil, if it is sufficiently rich, and how to build it up if it is worn out. Let us see how Nature makes soil.

Formation of Soils

Before we take the formation of soils into consideration we should know what soils are. We are told that soils are the top stratum of the earth's crust in which the plant has root and obtains the greater part of its food. While the above is the most common definition of soil, it does not explain the composition of the soil. If we know of what soils are composed, we have gone a long way in learning how they are formed.

Soils are the union of two materials—the organic and the inorganic. By organic matter we pollen and the stigma; without this union the ear will not "fill." To produce the infant it requires the union of male and female. To make the something we call fertility of the soil it requires the union of the acquired organic matter and the latent inorganic matter; without this union we cannot have fertile soils. It has been by affecting this union that nature has made the soils.

Beginnings of Plant Life
Ages ago this earth was a
molten mass. There was, of
course, no form of life, either
plant or animal, in existence. In
time the surface of the earth
cooled into solid rock. As the
substance beneath the earth crust
cooled the crust itself cracked and
broke into pieces. As the cooling

died, fell back to the earth, and in the decay of their leaves, branches and stalks more organic matter was given to the inorganic matter, enabling other plants that made a heavier growth to come into existence. Finally, plants producing seed and trees producing heavy leaves and fruit began to grow.

After Plants, Animals

After the first forms of plant life appeared, the lower forms of insects came into existence. These died and their bodies were mixed with the leaves and stalks of the plants and returned to the soil to increase their supply of organic matter. Later higher forms of insect life appeared, and finally birds and animals were present. During these years, or

ages rather, the excrement and dead bodies of these numberless insects. birds and animals were returned to the soil, with the leaves and stems of plants and trees, till we find the soil rich enough to produce cultivated crops for man.

This formation of soil was going on in every crack and crevice on the mountain side and hill slope.

When a rain descended all these particles of newly formed soil were washed into a valley or ravine below, forming a plain or field of soil capable of producing a forest or prairie and in which the highest forms of animal life had their being. These animals lived on these plains and in these forests, consumed the vegetation and gave their manure back to the soil. Finally they died and their bodies decayed and returned to the dust from whence they came to increase the amount of organic matter. Man himself is no exception to the rule, for he, too, has ever lived under the di-vine sentence: "Dust thou art, and unto dust shalt thou return." This sentence may have been pronounced to punish an erring man, but the return to the dust of that which came from the dust has been the means of making soils and maintaining their fertility after they have been made.



A powerful soil could only produce such a crop

mean the decayed plants, animals and animal excrement. When well decayed it is called humus. By inorganic matter we mean the decayed rocks and minerals. These materials are usually called mineral elements. Without organic matter there can be no soils that will produce profitable crops. The clay bank is an illustration of this fact. There is an abundance of inorganic matter there, but crops will not grow and make profitable yields, because there is not the proper amount of humus or organic matter. Without inorganic matter in the soils there can be no crops. The manure heap and the peat bog are illustrations of this fact. Crops cannot grow and make profitable returns on them, because there is an absence of mineral

To produce most anything in the world it requires the union of two things. To make the ear of corn it requires the union of the

continued moisture entered into the cracks and crevices, dissolving many of the smaller portions into finer particles. Finally the surface was so cool that freezing in certain seasons of the year was possible. The moisture in the rocks expanded by freezing, broke them into smaller pieces and particles. All the forces of nature seemed to be at work pulverizing the rocks. In due time there appeared certain forms of plant life. Perhaps, the first was some of the mosses and lichens that grew upon the rocks and particles of rocks, but obtained their food principally from the atmosphere. Their growth may have been very small, but it was ample to pave the way for other and higher forms of life that were to follow. After a while dead portions of them became mixed with the finer particles of the rocks and a little soil was made in which a higher form of plant life could grow and mature. These grew.

Continued on page 22





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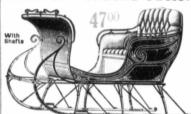
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Large Cabinet

Any Make of for Holding Fumed Record Finish Records BANNATYNE AVE. EAST

Will Play



Large Supply of Hog Feed Available

The farmers of Canada and the United States are asked to do their utmost to increase the production of hogs in order to relieve the critical situation in regard to the shortage of meat and fats in Great Britain, France and Italy, there being a shortage of 32,425,000 hogs in Europe.

Government Co-operation

The Dominion Government and the Provincial Governments are co-operating in every way possible to bring the gravity of the situation before the farmers of Canada and to safeguard the producers from loss in the undertaking.

Bran and Shorts

By licensing the Flour Mills, the Government allows a profit of but 25 cents a barrel on the flour only—the bran and the shorts are to be sold at cost, which ensures the farmer getting this feed at a moderate price.

Steps have also been taken to prevent the adulteration of bran and shorts.

United States Corn

The United States has the greatest corn crop in her history—more than 600,000,000 bushels in excess of 1916 and nearly 250,000,000 bushels more than the bumper crop of 1915. The United States will have a large surplus for export which will be available to Canadian producers.

Because of the shortage of the 1916 crop, and to prevent speculation, the United States has sold its corn under license.

The licensing system will not likely be used in connection with the 1917 crop which will be on the market about the middle of December, but the United States Government will exercise some form of control that will prevent speculation.

In the meantime, anyone in Canada can import American corn for any legitimate purpose, such as for feed, by obtaining a license. Application for license is made through the Canadian Food Controller.

World Shortage of Meat

The world shortage of meat indicates security as to the market. The depletion of the herds of animals in Europe is proceeding with increased rapidity, there now being 115,000,000 less animals in Europe than before the war.

Allies Killing Animals

On account of the scarcity of ocean tonnage the Allies are adopting the policy of slaughtering their animals to save the space on the ships occupied by the grain hitherto imported for feeding these animals. They prefer to import bacon rather than to produce it, because a given weight of bacon occupies very much less space on board ship than would be required to accommodate the grain it would be necessary to import for the production of hogs.

The Government of Canada is making arrangements to control the spread between the price received by the grower and the price paid by the consumer. The producer will be assured his fair share of the price paid by the consumer.

Bought Through One Channel

The buying of the meat for the Allies will all be done by the one Commission representing the Allies which will be an influence in stabilizing the market and preventing wide fluctuations in price.

The Allies are dependent upon Canada and the United States to save the meat situation in Europe. Many shops in Britain have no bacon at all for sale—and for some months past the rising price of bacon has been simultaneous with deterioration in quality, indicating an increasing and general scarcity of this commodity.

United States Committed

The United States has committed itself to increase its hog production by 25 per cent in 1918.

The determination and fighting spirit of the heroic Canadian troops in Flanders is one example of what Canadians can do when called upon. The appeal is to Canada as well as to the United States to provide the boys in the trenches with their daily ration of $\frac{1}{4}$ lb. bacon per man, and to supply the women and children of Great Britain, France and Italy with the food they so urgently need

SAVE THE YOUNG SOWS

Their progeny will be a vital factor in winning the war. A young sow slaughtered now will only produce about 150 lbs. of meat. One litter will yield many times that quantity.

Dominion of Canada Department of Agriculture

LIVE STOCK BRANCH

L

The House of Massey-Harris

ROMOTED from the ranks" is one of the proudest, as it is one of the most familiar headlines in Canadian his-The soul of the worker has proved the soul and salvation of Canada in more than one tremendous crisis, not only in war but on the still greater field of industrial contest.



THOMAS FINDLEY President and General Manager Massey-

The whole story of Canadian history is built on the achievement of rankers who have forged ahead by sheer wit, wisdom and invincible energy. Not only have they shot to pieces all precedent in leadership in their own domain,

Something like thirty-one years ago, Thomas Findley was but a farm lad. He is now president and general manager of the Massey - Harris Company which may be very properly described as the greatest manufacturing establishment in Canada at the present date. First in the field of manufacturing agricultural implements and machinery, it was also among the first in the "Quick Change" which a state of war imposed on every factory and workshop of the Dominion that could in any way contribute to the essentials of war.

Mr. Findley was born in 1870 in York County, Ontario, so he is still a young man. He was orphaned at an early age, and subsequently taken in hand by grandparents of a very pronounced Scottish type, which meant above most things a devotion to certain principles, a certain "dourness" of disposition involving a determination to get there-to find a way or make one.

Young Findley left the farm to become "odd-man" in a general store which included the responsibilities of driving her Majesty's mail twice a week, summer and winter, to outlying post-offices. Four and a half years were spent at this all-round occupation during which period he studied or "dabbled" in telegraphy as so many boys have done when the



but they have out-generaled some of the world's greatest industrial field-marshals.

The rise and progress of the Massey-Harris company opens up some wonderful illustrations of this seemingly extravagant claim. Not to speak of its founders and other brilliant chiefs who have passed on, the simple record of its present head provides one of the most gratifying bits of biography in our national life.

fever of finding out things laid a heavy hand upon them.

The Morse instrument, however, proved no idle hobby, for it led to this young man's next step in life, that of telegraph operator with the Massey Manufacturing Company, Toronto. This was in Mr. Findley's twentieth year, and just before that great reorganization upon which the greatest expansion of the already historical house was to be based.

Continued on page 18D



MASSEY-HARRIS WORKS, TORONTO

Boys and Girls!

THE HAPPIEST DAYS OF YOUR LIFE will begin if You Win this FORD TOURING CAR.

A real automobile. Au automobile of your very own—something to think about all day and dream about all night! Here you see the handsome Ford Touring Car—the car that YOU may win—just as it will look in front of YOUR home when YOU are ready to jump in and speed away for a great old ride! Isn't it a wonder?



The Bottle Contains Two Pounds and 13 Ounces of No. 1 Northern Wheat

year's crop, Marquis, grown in Manitoba, weighing 64 pounds to the bushel.

The wheat was obtained from the Dominion Grain Inspector at Winnipeg.

The bottle of wheat now lies in the vault of the Union Trust Company, Winnipeg, where it will remain until the contest closes.



BOYS!

Boys! Don't think for a minute that you can beat out the girls without trying hard. A girl can run a Ford Car as well as a boy, and girls can count the wheat just as easily, so look out for them.

GIRLS!

Girls! Don't let the boys beat you out in the content. Have your parents or friends hand you their subscriptions, and send these in this office with your estimates right away. The boys may think you can't win—but we know beten't win—but we know beten't

Everyone who sends us a subscription direct to this office between the dates mentioned, for The Canadian Threshold of The Canadian Threshold of These estimates from the canadian Threshold of These estimates have or renewal in sentitled to estimates as explained below. These estimates may be credited in whatever way you desire, and you may send in as many estimates as you wish in accordance with the schedule below. Remember every additional estimate increases your chance to win the car. Estimate now and increase your chance of winning, because it is the first presmy who estimates nearest to the number of winning. Because it is the first presmy who estimates nearest to the number of winning because it is the first presmy who gives you if estimates a years, subscription at \$1.00 gives you if estimates years, subscription at \$2.00 gives you if estimates years, subscription at \$2.00 gives you if estimates years, subscription at \$3.50 gives you if estimates.

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All you have to do is to donate—say five subscriptions to five of your friends, using the additional estimates obtained in this manner yourself. You may not wish to donate five, however—well, donate three, two or one if you wish, but send them all into us in one envelope.

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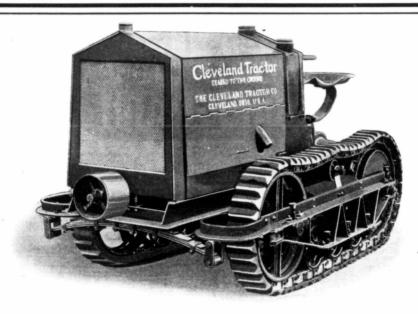
E. H. HEATH CO. LIMITED, Winnipeg.

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Address Prov. My estimates as to the number of whole kernels in 2 lbs. 13 ozs. of No. 1 Northern Wheat are

If more space is required for names and estimates, use a blank sheet and attach securely to this coupon.

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-- a tractor that will work in every part of the country—on farm and in factory alike

That Tractor is the CLEVELAND. It will speed up farm production. It will lower the cost of farm operation. And both the farmer and the country will benefit accordingly.

Forget the old routine. Adopt improved methods. That's the only way to solve your labor problems and boost production in 1918.

Munition plants and factories in general are working at top speed. They have steadily drained farm labor from the fields. Now the draft has taken many more men.

Now the draft has taken many more men.
You must cut down on labor requirements. That is exactly what the CLEVELAND Tractor is helping wide-awake farmers the country over, to do.
THIS WONDERFUL LITTLE MACHINE WILL DO YOUR WORK BETTER, FASTER, AND AT MUCH LESS COST THAN YOU CAN POSSIBLY DO IT WITH HORSES AND MEN.

It plows at the rate of three and one-half miles an hour—eight to ten acres a day. That is more than you can possibly do with three good horse teams and three farm hands. And at this high speed the CLEVELAND Tractor turns over the prettiest job of plowing you ever saw.

Figure the saving—not only in labor—but in time and good hard cash.

In addition, the CLEVELAND enables you to plow when you need it and where you need it. Because it crawls on its own tracks, it can go over almost any soil at any time. That is something you can't do with horses and men. Think of the extra yield that means.

The CLEVELAND is the one tractor that almost every farmer in the land can operate at a profit.

The CLEVELAND is small and light. Yet because it has no wheels, but crawls on its own tracks, the CLEVELAND will go anywhere—over ditches and gullies, wet land and sand—over level and hill alike.

Moreover, the CLEVELAND does not pack your seed-bed. It weighs only 2,750 pounds, and has 600 square inches of continuous traction service. The pressure on the soil is only five pounds to the square inch.

The CLEVELAND is small enough for use among young fruit trees, 52 inches high by 50 inches wide. Yet it gives you 20 horse power at the pulley and 12 horse power at the bar—economical power to do your hauling and stationary engine work.

Rollin H. White builds the CLEVELAND Tractor with all the scrupulous care he put into the manufacture of motor trucks. He uses only the best materials—only the finest motor truck parts and gears. He has protected all gears with dirt-proof, dust-proof casings.

He has so designed the Cleveland Tractor that it steers by the power of its engine. Just a light turn of the wheel and the motor does the rest. Anyone can drive it. It will actually turn in a twolve-foot circle—less than it takes to

These are real advantages—too big and too important to be overlooked. There are others just as big. Combined they make the CLEVELAND the biggest labor-saving, timesaving, money-making implement introduced into modern

Prepare now for bigger, better crops next spring. Decide now to make the CLEVELAND make money for you, as it is doing for hundreds of others.

TO DEALERS:

The Cleveland presents greater money-making possibilities than any other tractor ever put before the public. Its field is enormous—the demand for it widespread.

Automobile and implement dealers-anyone who can sell the Cleveland-make money quickly. Territories are being rapidly allotted. Write or, better still, wire for dealer's proposition at once.

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This Sweetest Tone Phonograph and a number of good records will bring a World of Educational Entertainment and Enjoyment into your home.

Let us place, it in your see the NEWEST DESIGNS illustrated in Colors Ranges with White Enancelled 8 dasher Backs and Given Door Pacies Alto other saintay features. Highest Quality. L west Wholesale to Consumer Prices

If you like it and decide to keep it, pay \$20 down and then

\$10 Monthly

until the full price is paid. After you have heard the Sweetest Tone Phonograph you will realize what it means to own a real high quality musical machine. There is not an instrument of any kind which you can place in your home which will give you the same amount of pleasure, satisfaction or contertainment. entertainment

You save \$50

by ordering now. This is a full-sized \$137 Model. To quickly introduce the Sweetest Tone Phonograph, our price for a short time is only \$86.50.

This Sweetest Tone Phonograph plays Edison, Victor, Columbia, Pathe, and all other Flat Disc Records—with a Pureness and Sweetness of Tone unequalled by any other machine made.

We include Free 10 Double Disc Records, 20 Selections, with every order for Model B 100 Phonograph, As evidence of good faith we ask you to send us \$6.50 with your order, and on receipt of same will make immediate shipment of the Sweetest Tone Phonograph and Records. After two weeks 'trial. If you like it, pay \$20 down and the balance \$10 monthly, until the full price of \$86.50 is paid. Ask for Model B 100 Sweetest Tone Phonograph. Mail your order to-day.

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Winnipeg

WINGOLD COMPANY. 181 Market Street, Winnipeg
Gentlemen,—In consideration of your 2 Weeks' Free Trial Offer I enclose herewith \$6.50, for which
kindly ship me one of your Model B 100 Sweetest Tone Phonographs, finished in.
It is understood that this offer includes 10 Double Dise Records free of charge, and if the machine
suits me I will pay \$20 down and the balance \$10 monthly until the full price \$85.50 is paid. Your truly

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In the fall of 1891 these arrangethe then greater Canadian Imple- Massey, W. E. H. Massey, Ches-

The new organization pooled ments were completed and merged the brains and interest of Hart A.



MASSEY-HARRIS WORKS, BRANTFORD

Harris Company, Limited, with a of the old Massey-Harris Comcapital of five millions, of which pany. The A. Harris & Son Comthree million five hundred thou- pany gave it Lyman Melvin Jones, sand was paid up.

ment houses in one as the Massey- ter D. Massey and R. Harmer, all J. Kerr Osborne and J. A. Shen-

stone. Wareham S. and C. L. Wisner came from the J. O. Wisner & Son Company and A. S. and J. D. Patterson of the Patterson Bros. Co., Ltd.

For the next twenty-five years

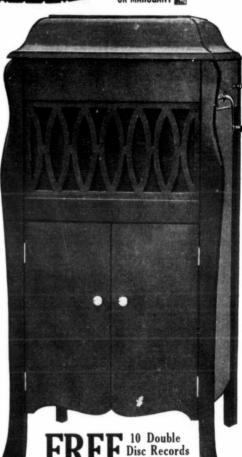
these men managed the company, with the three Masseys as presidents in succession, Sir Lyman Melvin Jones as general manager from the beginning, and president from 1902 until his death in 1917.

20 Selections

Continued on page 59



BAIN WAGON WORKS



The Nichols-Shepard Steam Engine

Built for Service

HE NICHOLS-SHEPARD STEAM ENGINE is the present-time standard power plant for farmers and threshermen.

It represents the accumulated experience of years of successful steam engine building.

It is the highest achievement in traction engine building this country has ever seen. It embodies all that works for effectiveness, economy of fuel, convenience and safety.

Built upon a high-pressure homogeneous steel-plate boiler, with seamless steel flues and double and triple riveted seams, in its entire proportions and equipment, it stands for all that is best in traction engines.

You owe it to yourself to investigate the NICHOLS-SHEPARD STEAM ENGINE, if you are in need of power, whether for driving a thresher, saw-mill or silo-filler, plowing, grading, hauling or any of the many uses to which a traction engine can be put.

The NICHOLS-SHEPARD STEAM ENGINE has a surplus of power, is built to do heavy work day after day and year after year. It stands for absolute dependability and represents an investment that always yields big returns to the purchaser.

You can't go wrong in buying a NICHOLS-SHEPARD STEAM ENGINE. It won't be lying idle in the field, neglected because of expense of operation, complication of parts or breakages next year or the year after. It's an engine that will stay with you long after others are forgotten.

You won't need an expert to operate and care for it. If you want a tractor for real service, you can't afford to overlook the NICHOLS-SHEPARD STEAM ENGINE.

Write for Catalogue

NICHOLS @ SHEPARD CO.

In Continuous Business Since 1848

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

BATTLE CREEK, MICH.

REGINA, Saskatchewan

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BRANCH HOUSES (with Full Stock of Repairs) at H. P. NORTON COMPANY, CALGARY, Alberta

WINNIPEG, Manitoba



It's here — Rumely Oil Pull 14-28

The same famous Oil Pull smaller in size

Oil Burning-

Guaranteed to burn kerosene, distillates and other cheap fuel oils, at all loads, under all conditions.

Oil Cooled-

No water to carry—even temperature for motor—non-freezing.

Light Weight-

Ony 8700 lbs-most powerful light weight outfit on the market.

Two Cylinder Motor

Heavy duty, horizontal, valve-in-head, slow speed engine-no vibration.

Enclosed Transmission-

Cut gear transmission—completely enclosed and running in oil.

Roller Bearings

Hyatt high duty roller bearings in transmission and rear axle.

Two Speeds-

Two forward speeds of 2.1 and 3 miles per hour.

Close Regulation-

Governor controlled—speed of engine automatically adjusted to load.

Perfect Lubrication

Combined force feed and splash system—constant lubrication to all parts.

Easy To Operate-

Self-starter, low platform, all levers within easy reach—turns in 17 ft.

radius. Accessibility

All working parts easy of access.

All Around Usefulness

Handles all power jobs-100% efficient on drawbar or belt.

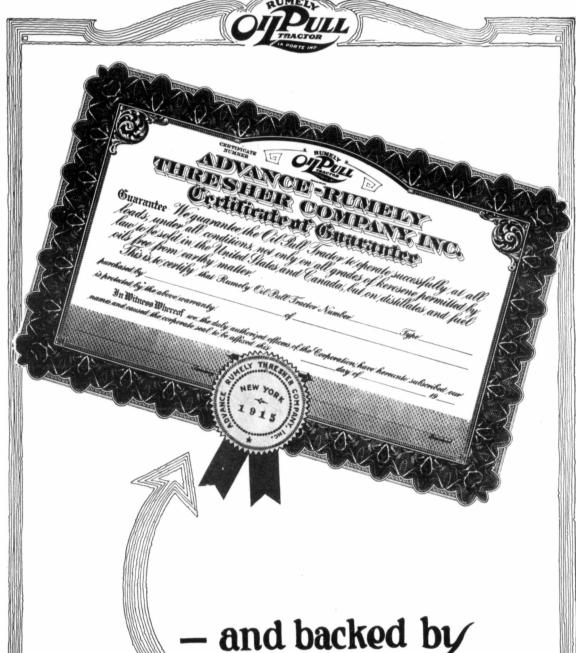
Large Capacity-

Guaranteed to pull up to 5 fourteen inch moldboard plows-will operate a 24 to 28 inch separator.

La Porte Indiana

Advance-Rumely





and backed by
 Ironclad written
 Guarantee

What others claim — Advance Rumely guarantees

HOW SOILS ARE MADE FERTILE

Continued from page 16 What is the Soil?

Of what are soils composed? They are the union of organic matter or humus and inorganic matter or mineral elements. How were they made by Nature? By the constant returning to the original soil everything that came from the soil or was produced upon the soil. If a plant, tree or animal died it returned to the ground, making the soil a little richer than it was before the plant, tree or animal lived.

The formation of soil did not cease with the creation of the Soils are now being world. formed around us on every hand with a greater rapidity than they were at any time before man became a factor on this world. Let the farmer neglect to cultivate one corner of his field and without delay Nature begins to produce a crop of weeds. Thousands of insects appear and live upon these weeds and cast their insect excrement upon the neglected soil. In due time both insects and plants die and give their bodies back to the soil, where they decay and increase the supply of organic matter. The increase of organic matter increases the fertility of the soil. In clover and timothy meadows soils are being made and fertility increased in this very way. In the pasture where the animals are kept the formation of soil is even more rapid than in the timothy meadow

Layers of Earth

If a farmer will take a spade and dig down into the forest or meadow, he will see how soils are now being formed. The first layer he will notice is purely of vegetable matter. In the most cases this layer is very thin, but it is there nevertheless. The next layer is a mixture of organic and inorganic matter. This layer is



Officer.—"Want a new mess-tin, do you? Where's your old one?" Private.—"I haven't got it, sir." Officer.—Why not?" Private.—"Please, sir, there's a chat-eau on top of it, sir."

the soil proper and may vary from one inch to eighteen inches in thickness. Beneath this is the subsoil, which consists almost entirely of inorganic materials. In other words, it is decayed rocks. Under this is found, usually, the rocks from which the subsoil is made. Of course, there are exceptions to this, but it is the general rule.

The reader can see that all there is to the formation of soils is the application of organic matter to the inorganic. Nature has done this by growing crops and producing insects and animals, and when these die they are returned to the soil. If man wishes to build up his soil and maintain, if not increase, its fertility, he must keep the supply of organic matter or humus ample. This can best be done by growing those crops that will return a great deal of their growth to the soil and by keeping enough animals on the farm to eat up at least all the hay and forage, and a great deal of the grain produced and to return all of the manure produced by these animals to the ground that grew the crop. If it is nature's way to return the crops grown on the soil to that soil and to keep animals, birds and insects also on these soils for their excrement and bodies when they die, it should be the aim of the farmer to return as much of the crop as possible to the ground, and to keep animals that will produce a great deal of manure. If crops are grown that will return a great deal of organic matter to the soil, and animals are kept that will produce a great deal of manure. and that manure is returned to the soil, the supply of organic matter will be maintained, as well as the fertility of the soil.

The forest and prairie, as said before, are examples of how soils are made. No matter how heavy the growth of grass or trees may be, the fertility of the soil in which this growth is made is constantly increased; in fact, the heavier the growth the more fertility there is returned to the The falling of the leaves, the death of the year's growth of grass and the thousands of insects, birds and animals that excrete fertility and finally die, pay back to the soil more of the materials that make soils rich than were needed to produce the growth. This is nature's way: Pay back to the soil as much or more than is needed to produce the growth made upon the soil, whether that growth be plant or animal life.

STOCK FARM CENTRAL ALBERTA. STOCK FARM CENTRAL ALBERTA.
1,280 acres, with open range adjoining;
140 head of choice range cows, 20 horses,
175 hogs and farm equipment; feed and
seed. Will sell with or without live
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Size of rolls 12 ins. x 6 ins. Minimum power required 6 H.P.

Weight 475 lbs.

The machine that appeals to every farmer. Grain is fed between two grooved rollers, which rotate at different speeds. Fineness of grinding, regulated by two convenient set acrews, solid fly wheel. Supplied with pulley for drive belt; can also be equipped with shaft and gear for horse power drive. Write for prices and full particulars. drive. W particulars.

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A Christmas Surprise! See page 63

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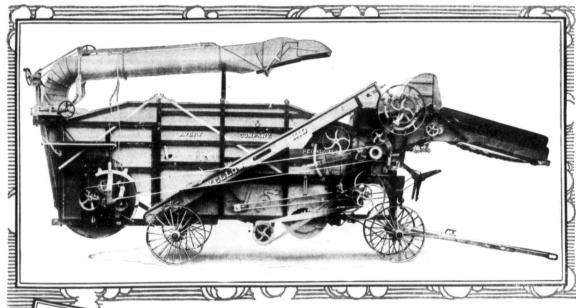
BEING HELD IN MANITOBA THIS WINTER

Dates	Circuit 1	Circuit 2	Circuit
Nov. 26—Dec. 7	Morden	Kenton	
Dec. 11—Dec. 22	Crystal City	Melita	Plumas
Jan. 2-Jan. 12	Reston	Virden	Grand View
Jan. 15-Jan. 26	Souris	Carberry	Russell
Jan. 29-Feb. 9	Hartney	Langruth	Rossburn
Feb. 12-Feb. 23	(Farmer's	Week at Winnipeg)	
Feb. 25-Mar. 8	Roland	Portage la Prairie	

	LECTURERS AND	DEMONSTRATO	RS
	Circuit 1	Circuit 2	Circuit 3
LIVE STOCK	Geo. H. Jones	Geo. H. Jones	J. R. Bell
	A. J. Mackay	A. J. Mackay	K. McGregor
FIELD CROPS	J. H. Kiteley	E. G. Wood	A. J. McGregor
		H. Walker	8
GAS ENGINES	D. R. A. Drummor		M. Smyth
	E. Kincaid	W. Ferguson	T. E. Allen
HOME NURSING	G Miss L. Clarke	Miss Winram	Miss Winram
COOKERY	Miss R. M. Atkinso		Miss Mitchell
DRESSMAKING	Miss M. Smith	Miss C. Senior	Miss E. Blackburn
MILLINERY	Mrs. C. Graham	Miss E. Blackburn	
Also Lectures or	Electric Lighting	Plants for the F	arm, and, at some

places, on Poultry Raising and Dairying. A \$7,000 Car Load of Equipment taken to every point where a School is held. For further particulars write:

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OU can get a size Avery Thresher to fit any size run you have. There are eight sizes from a small 22x36-inch up to a large 42x70-inch.

They all have the same general features in their construction—the small ones as well as the large. All sizes are regularly equipped with the famous I X L grain-saving separating devices, guaranteed for life Jumbo tool steel cylinder teeth, nocross-blast fans, conical pulley belt guides, compressed paper cylinder pulleys, belt tighteners on all principal belts, and many other improved and original features.

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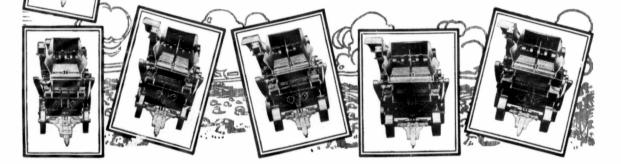
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WINNIPEG REGINA



A GREAT HOME INDUSTRY

AND WHAT IT MAY LEAD TO

ment.

ducts of earth, air and sea.

The old Irishwoman did good

work-still does it-but it would

take many years of the dear soul's

life to spin sufficient yarn to

clothe the human "livestock" of

a small Manitoba town.

LITTLE over two years ago there appeared in this magazine some particulars of one of our most enterprising home industries-the Northland Knitting Company Ltd. of Win-That particular article nineg. was not "dragged in by the ears," so to speak, but was used as a practical and very pointed illustration of the unlimited scope there is to the manufacturing of our own raw materials-which is not being utilized.

We pointed out then that this big concern imported the greater portion of the knitting yarns. These yarns are spun in Scotch and English spinning factories from wool of the same staple we find on the fleeces of sheep which can be bred most successfully on the farms of Western Canada.

While the "Northland" people

nipeg. They are now turning out an exquisite article in fine Look at the shawls worn by the girls in the "rooing" picture.

The process of "rooing"—plucking the finest wool from the fleece (before shearing) in the Shetland Isles

ceedingly fine hand-spun yaru made of the softest of "Shetland" wool. This is a detail in feminine finery that even the "Northland" cannot approach, far less outclass. But then the product of the "Northland" will wear. The shawls (as most of our lady spongy and deliciously comfort-

These are hand knitted from ex- leather gloves, equal and probably in more than one detail superior to and less expensive than some of the much advertised imported "brands."

able, but they will not stand any-

Since we last wrote, the North-

land Company have added a large

leather department to their fine

plant on Arlington Street, Win-

thing but the most kindly treat-

Mocassins have also become a big line in the fine assembly of "Northland" specialities. These are turned out in great volume friends know) are extremely light, and in shape, style and finish which can hardly be distinguished





"When Adam delved and Eve span"-"Eve" spinning

from the real Indian product.

Not the least impressive feature of a visit to the "Northland" factory is the fine warehousing system for the storage and preserving in perfect condition of the various tanned leathers and yarns, etc., used in the various manufacturing

These are effectually guarded from deterioration by atmosphere or the natural predatory foes of such animal and vegetable products-they are placed "where neither moth nor rust doth corrupt," but there are other enemies than moth or rust to be warded against.

The chief, if not the only real difficulty in these times, is the obtaining of raw material in sufficient quantity to meet the very large and increasing demands made on the output of the factory.



C. E. HARVEY, Sec.-Treas.. Northland Knitting Co., Ltd.

At the present date, and notwithstanding the severe handicap of war conditions, by ceaseless vigilance and having the ready wherewithal in hand, the management is fortunate in having under its control from six to nine months' supply actually in storage or in sight.

Not only is the company making additions all the time to its already long list of branded goods but some wonderful improvements have been effected recently in detail of their original staples. One of these is a patented untear-able button-hole now used in all "Northland" sweaters and for which the company holds the sole Canadian rights.

Some two years ago this firm was instrumental in placing on the market what was conceded to be the very best dollar glove then made-the celebrated "Casey Iones.'

They have this beaten, if possible, by another which has been designed, to meet the enormously increased prices due to war condi-

Continued an page 61



T. J. FERNIE, President, Northland Knitting Co., Ltd.

have greatly increased their plant and the volume of their output since we wrote, the circumstance of imported yarn remains unchanged. But we continue to cling to the belief that when the war drum has been finally silenced there is going to be a peaceful revolution in many departments of our home industry to the end that raw material found around our doors may also be manufactured within sound of our own dinner bell.

On this page are a couple of pictures which the reader might have in mind if it should be his or her privilege to inspect the great factory in Winnipeg. A very cordial invitation to do so is extended to every reader of The Canadian Thresherman and Farmer. No "introduction" is needed. All you've got to do is to present yourself at the office on Arlington Street and say we sent you!

These illustrations complete a remarkable contrast between primitive methods and the modern idea of manufacturing the profacing ous

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Know the Greater Satisfaction

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For Winter Days and Nights

Your Friction Tax

How You Can Reduce It Permanently

Every motor operator must pay, when his machine is in motion, a friction tax. The burden of this expense is heavy or light, according to the owner's thoughtful care in selecting lubricants.

Even the most finely ground and polished surfaces are known to consist of thousands of minute projections. These metal-to-metal surfaces must be "cushioned" with a film of good lubricating oil.

But this film is not the only requirement to bring positive satisfaction and low friction tax. The lubricant must perform its function under extreme heat-often 1200 degrees—with a minimum carbonization.

Use En-ar-co National Motor Oil

The quality of En-ar-co Motor Oil has been proved by 34 years of scientific tests and actual performance in thousands of farm motors. Your automobile, tractor or gasoline engine will develop a more responsive, flexible power and last longer if you use this power saving lubricant. It successfully withstands extreme heat and cold, doing its work with the least possible carbonization. Thus your friction tax will be reduced to a minimum-your satisfaction increased to

Try En-ar-co products now. Use En-ar-co National Motor Oil and White Rose Gasoline this winter. Test them under winter's most trying conditions. Then you'll be prepared to meet the coming season with a new and greater power.

There is a quick and certain way to know the right oil for you. Send us the name and model of your motor and tell us how long and under what conditions you have operated it. Our experts will give you valuable information free.

Send the coupon now for handy oil can and valuable lubrication and power facts.



Keep Your Home Warm, Cozy and Bright

Don't subject yourself, family and friends to un-certain warmth and cheerless light any longer—use National Light Oil in your

Oil Stoves and Lamps

This "better" oil burns evenly and cleanly. No smoke, no smell, and every drop burns. No more dirty carbon residue or clogged burners in oil stoves. In your lamps it will impart a wonderful light. Clear, white rays replace the flickering, yellow flame of "just oil." And there's an end to clouded chimneys, charred wicks and poisonous fumes.

For Incubators and Brooders

These burners require pure oil. The heat must be uniform and continuous. Deadly gases penetrate and clog egg shell pores and kill live chicks in the brooder. You cannot afford to take chances on low grade oil. To obtain the ideal heat—a chick from every hatchable egg—use National Light Oil.

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Auto and Tractor Owne

This long can with a long spout that enables you treach the hard-to-reach

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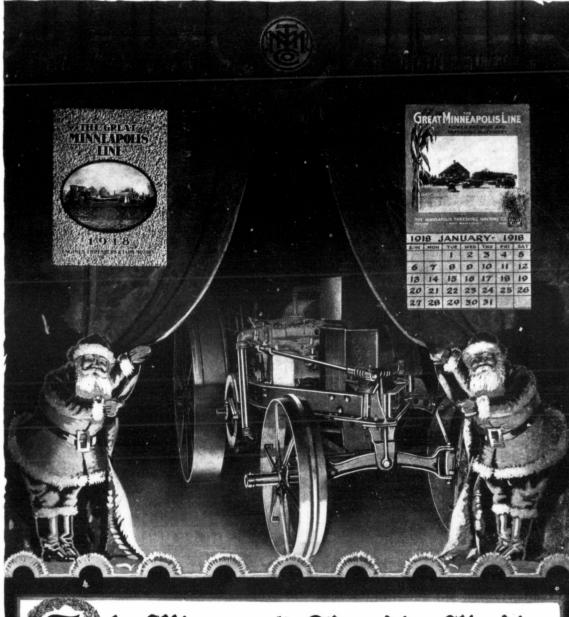


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The Minneapolis Threshing Machine Co.

WINNIPEG, Manitoba

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he Minneapolis Threshing Machine Company extends to all the Season's Greetings and Best Wishes for a Happy, Prosperous New Year.

Hopkins,Minnesota.

The Tractor on the Farm

(The Carburetor)

7OU often hear it said of some young fellow that "he's a good mixer." Such a fellow will usually succeed. The same thing is true of the carburetoreven more true, for the entire success of the carburetor depends upon its ability to "mix."

It is not necessary here to discuss the minor ills of the carburetor, such as water in the gasoline, clogged feed pipe, and so on; it seems to me rather more worth while to give attention entirely to carburetor adjustment.

The old type of carburetor was equipped with a needle valve to adjust the quantity of gasoline fed to the air pipe, an air valve to regulate the amount of air taken into the carburetor, and a throttle to regulate the amount of gasoline and air mixed that was taken into the engine cylinders.

In the new types of carburetors, the air valve has been dispensed with. A certain amount of air is fed, and the gasoline feed may be regulated to suit this amount of air; then the amount of mixture used can be regulated by the throttle.

The air valve has really never been of any value, and its elimination tends to make carburetor adjustment less confusing.

There are three different ways of regulating the mixture fed to engines. On stationary engines the most common type is the carburetor that furnishes the same amount of mixture at every explosion, the speed of the engine being regulated by the number of explosions. Another type of stationary engine and tractor is the throttle governor, in which the carburetor furnishes a mix-



Jock: "Man it's an awfu' puir day for fetchin'

Donald: "Ay. But it's a grand day for gettin' the full comfort oot o' the rum ration"

ture regularly and the explosions come regularly; but the amount of mixture used and therefore the speed are controlled by the governor, which opens the throttle when the engine slows down and closes it when the engine gets too fast. In the automobile the operator controls the mixture.

Never try to adjust a carburetor under a load; if you do you will fail. Always do it when your engine is running idle. Let's take the automobile first. With your engine running free, speed it up to a fairly rapid rate, and then slowly close the needle valve that controls the flow of gasoline until the engine threatens to stop. Then slowly open the needle valve. The engine will pick up rapidly and will go faster and faster, though the throttle has not been moved, and finally the needle valve will have been opened so wide that the engine will threaten to stop from "flooding." Then veer back and forth between these two extremes until your ear tells you that "it runs better here than anywhere else." When this happens your carburetor is adjusted.

The novice usually turns the needle valve too much. Remember that just a fraction of a turn will make a big difference. The adjustment of the other types of engines mentioned is primarily the same as the one discussed

The condition of the atmosphere makes a considerable difference in carburetor adjustment, and it will have to be changed several times each year with the change of seasons. This is also true with the change in altitude. A carburetor adjusted for mountain climbing will not run well at sea level. The motorcycle engine carburetor is even more sensitive than that used on the automobile, and it will sometimes need adjustment from day to day, being affected by damp weather, cold weather, hot weather.

One or two other things should be mentioned: Most carburetors are of the float-feed type and have a cork or hollow-metal float to regulate the flow of gasoline from the main tank to the carburetor reservoir. Sometimes the metal float gets punctured and fails to work, or the cork float gets watersoaked. When this happens no amount of adjusting will make the engine run right. To remedy this, remove the float from the carburetor; if metal solder the hole, and if cork lay it in the sun, let it dry and then coat it with shellac. P. T. Hines.







BISSELL Double Action Harrows will thoroughly cultivate and pulverize any soil.

One Harrow is Out Throw; the other is In Throw. They are simply constructed, rigid and durable. The Ganga are flexible and the Disk Plates are so designed that they "hang" right into the soil. Bissell Harrows are built in sizes and weights suitable for horse or tractor use. Write Dept. L for free catalogue. free catalogue. T. E. BISSELL CO., LTD., Elora, Ont.

Christians come good cheer and happiness. With the crops all garnered, v is better able to enjoy the many blendings of the sensen than the original control of the control

Buy the 18-36 Stinson Tractor

It will pull 4 plows in stubble and three in sod; it will plow from 21/2 to 3 miles per hour and burn ALL the kerosene. The 18-36 STINSON has performed wonders in the field in the past two seasons and the farmers who appreciate REAL tractor quality are buying this practical machine. The front wheel is telescopic and can be set at the righthand side for plowing, at the left-hand side for grain cutting and in the centre for other field work or road work; this exclusive feature makes the STINSON easy to guide and being equipped with the patent Bailey Non-Stall differential lock it is possible to make the shortest turn to either right or left side of any tractor of its size and weight on the

There is not an exposed gear, sprocket, chain or pinion on the entire STINSON tractor, ALL GEARS are enclosed and run in a bath of oil.

This powerful 18-36 STINSON is simple, yet strong and practical, and is made for REAL HEAVY FARM WORK.



BRIEF SPECIFICATIONS

MOTOR: BEAVER-STINSON 4 cyl. valve in head 4½ x 6 inches, heavy duty tractor type, guaranteed to burn kerosene.

FRAME: One piece, semi-steel, rigid and strong; main bearings are machined in the frame.

BEARINGS: Hyatt roller, heavy duty throughout.

TRANSMISSION: Both transmission and differential gears are enclosed in a dust proof housing and operate in a bath of oil.

housing and operate in a bath of oil.

IGNITION: Dixie high tension magneto with impulse starter.

CABURETOR: Kingston, equipped with patent STINSON dust separator, which separates the dust from the air through water.

CAPACITY: 18 Horse Power on draw bar, 36 H.P. on belt.

WEIGHT: \$880 pounds.

Write at once for our latest Catalogue and learn more about THIS DUST-PROOF TRACTOR

Stinson Tractor Company

Office and Works: 1611 Central Avenue

MINNEAPOLIS, Minn.

Were I a musician I should compose a song entitled "Listen, Hear Dat Engine Talk!" For engines do talk and they tell you what is the matter with them in as plain language as that of a baby with the colic. This article deals with knocks and poundsand as a rule they are hard to locate. Nothing worries a mechanic more than an engine knock that he can't locate.

I call to mind an automobile that was brought to me once with what you might call a bad knock. I looked, I listened, I tinkered, but locate that knock I couldn't for a long time. At last I found it was a loose bolt that held the engine in the frame of the car. It was a knock that did no special damage in this case, but it was annoying. Here are some of the things that cause knocks and pounds: Lack of oil, pre-ignition, worn main bearings, loose bearings, loose flywheel.

A pound that comes from lack of oil is a sound that will never be forgotten if once heard. It is different from all others. Most pounds or knocks are "dead" in sound, but the oilless knock is keenly alive and has a clear metallic ring to it.

The pound made by pre-ignition, especially in automobiles, is distinguishable. Many motorists set their spark levers or

Knocks and Pounds

shifts for fast driving and do not change them when the motors are pulling up a hill.

A hill necessarily slackens the speed of the motor and when the spark is very far advanced this will cause pre-ignition, and will be accompanied by a steady pound that is clearly distinguishable but not harmful.

When an engine is doing this it is working against itself and fuel is being wasted. At the sound of this pound the spark should be immediately retarded. Then the engine will develop much more power than it otherwise would and most hills may be pulled on "high" if this is done in time. Pre-ignition in stationary engines and tractors may be remedied by the directions given for "timing an engine" in an earlier article.

The other pounds mentioned are similar in sound and are somewhat hard to distinguish—that is, the three pounds or knocks caused by worn bearings, loose bearings and loose flywheel. They are more cléarly distinguishable than the pound caused by preignition, but are not so sharp as that caused by lack of oil; the best definition I can give for them

is a "compromise" between the other two explained. It is impossible to describe these sounds so that they may be distinguished from the description, but when one is discovered, listened to and remedied, the man who does all these things will have it labelled, classified and located in his mind for use at all times thereafter. It

will never be forgotten.

Do not confuse the "chug" or "thump" of an engine with a pound. All engines make a sound caused from the recoil after the explosion. After a little experience there will be no confusion. however.

A "real" pound is injurious. It crystallizes metal and makes parts work loose all over the engine, and soon other pounds will be mixed in-or will be singing in chorus-with the original pound. It pays to look after these things closely.

Of course you may hire a mechanic to do all your repair work, but there is much more satisfaction in doing it yourself. In fact if you are at all adept in mechanical work you can look after your engine or automobile better than a mechanic can, for he is unfamil-

iar with it. Every engine or car has an individuality; by working with and using it every day you come to know it as no other man can. Home repairing saves money too.

There is a saying that if you want a thing well done do it yourself. A good many so-called mechanics are not fit to touch an engine, and the farmer with less experience will be more careful in many cases than will the careless mechanic. Also if the farmer does not learn the principles that underlie engine operation he may ruin his engine unknowingly, or he may get scared and send for an expert when nothing serious is the matter.

My advice to the farmer who is buying an engine is to learn that engine from A to izzard. It does not need expert attention occasionally, but it needs careful attention all the time. Don't let anything work loose and stay loose. Keep things "snug," but not "tight" or "binding," and treat your engine like the piece of thoroughbred mechanism it is, and you will always praise the day you bought it.

ACCURATE

Examiner: "What Military must a man be to be buried with military honours?"

Recruit: "Dead."

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CHRISTMAS 1917

Another Christmas finds us with patriotic duty dominating all else.

The day cannot represent the cheer and unalloyed joy that Christmas stands for in normal times.

But it must stand for faith in ourselves and belief in the ultimate outcome.

For we'll win—that's certain.

Canada has from the start asked to bear its full share of the burden and responsibility.

And we know the indomitable spirit with which she has accepted and is fulfilling the obligation—whether at the front or here at home.

When duty is our first thought and sacrifice is a privilege.

We'll win—yes. But that steadfastness of purpose and unity of devotion that have characterized Canada in these three years of strife must continue to be the uppermost thought of each and every one of us.

Spurred on by the knowledge that our neighbor to the South of us—the United States—has put her all in the balance for the common cause.

So if we glory in the opportunity to do—each of us—his appointed task, have we not fulfilled the Christmas Spirit?

ADVANCE - RUMELY

Calgary, Alta.

Saskatoon, Sask

Regina, Sas

Winnipeg, Man

Smith Starts a Balky Engine

By JAMES FRANCIS

THE owner of the engine said that three men had tried to run it and each had given up or had been sent home. When Smith came on the job, he never said a word but took off his coat and went to work. First he went straight for the gasoline tank and made sure that plenty of gas was inside and that the connecting pipe was free so the gasoline could and would get to the carburetor and to the engine cylin-

It took Smith quite a few minutes to find out these matters to his satisfaction, but he made sure finally that the gasoline pipe was really free and wide open. I have seen a man testing gasoline pipes who was satisfied as soon as a bit of liquid seeped through. But Smith was not. He got the pipe so a little gasoline would come through, then he took the pipe down bodily and poked wires into it until a ball of dirt was dislodged which left the pipe completely free and clear.

Smith's next move was to make sure that there was a spark at each plug and rich enough to ignite the cylinder charge. didn't guess at those points either. He used a tester on each dry cell and threw out two, replacing them with others which tested twenty amperes each.

Each plug was removed and placed beside its hole in such a manner that when the engine was cranked, the spark plugs were operated. Smith didn't like one of the plugs and so ex-changed it for a new one. He said he would take no chances with a plug which would let a spark sneak along over the porce-



WET NIGHT UP THE LINE Sentry—"Oo goes there?" Jock—"Twa scotches, an' awfu' under

lain and then snap to the engine metal. Smith wanted the spark to jump across right at the points and he had it that way before he tried to start up. When each and every plug sparked freely when the engine was cranked, then Smith put the plugs back, screwed them fast and got ready to make the engine start.

The first thing Smith did was to cut off all the gasoline. Then he raised a valve or opened a pet cock to kill the compression and cranked the engine until he was sure that all gasoline vapor had been driven out of the cylinder and until he was satisfied that no free gasoline was present in the cylinders, either in any corner or pocket or dripping down from the intake pipe. He made sure that all gasoline had been evaporated and carried out of the cylinders before he stopped spinning the crank and released the raised valves.

Smith says, that next to the engines which won't start because of lack of gasoline, there are a whole lot more which cannot start because of too much gasoline or gasoline vapor in the cylinders. Therefore, he always fans out all traces of gas, then lets in a small amount, either through the usual course or by priming it directly into the cylinders. Thus Smith makes sure that there is gasoline in the cylinders, but that there is not too much.

The engine started the second pull on the crank, and Smith said that after he had made sure of the three things above noted, namely, fuel, free passage and a good spark, not one engine in ninety fails to start after two or three turns of the crank.

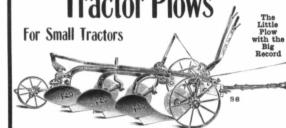
If the engine won't start then, Smith remarked, it is in order to look after the compression, and see that the packing is tight under the cylinder head or other bolted-on sections of the cylinder. "The engine never fails to start and run," said Smith, "when it is in perfect order as above described." He also added: "There is nothing mysterious about the gasoline engine except the ignorance of the parties who try to operate the engines which will not start or run. It is usually the man who cares for the engine who needs overhauling when his engine won't start, more than the engine does."

From a small boy's letter to his chum: "You know Bob Jones's neck? Well he he fell in the river up to it."

Helping to Feed the World

EYOND a doubt, food, or the want of food, will be the greatest factor in restoring peace among the nations now at war. This being true, all those who have to do with the production of food have a duty fully as important as that of the men in the trenches. The farmer must make his acres produce more than they have ever produced before, and he must do it with less human labor. It is our bit to furnish him with implements which will help him to solve his power and labor problems. We want you to know that we realize the importance of giving you the very best we can-of making your problems our problems.

Little Genius Power Lift **Tractor Plows**



Tractor plowing is helping the farmer a long way toward the solution of his alsor problems. One man with a P. & O. Tractor Plow and any good tractor an accomplish as much as one, or even several men (according to size of tractor plow), with ordinary gang plows. The P. & O. Little Genius is made in 2, 3 and 4 furrow sizes. It is an ideal plow because it is simple, strong, easy to handle, light in draft and always on the job. Examine the following merit points:

Points of Special Merit

Power furnished by the land wheel raises and lowers the bottoms at the will of the operator. High level lift on all three wheels gives ample clearance for trash when turning or transporting.

Only one trip rope required. Rear wheel lift responds instantly to action of power lift device. No sliding parts.

of power list device. No sliding parts.

Bottoms are forced—not merely dropped
—into the ground by the whole weight
of the plow.

Only one-half as much power required
to raise the bottoms of the P. & O.

Little Genius as is required on any
other similar plow.

other similar plow.

When the plow is at work, the levers are
within easy reach of the operator from
his position on the tractor, but when
the bottoms are raised the levers are
at the same time thrown back out of
the way and will not interfere with the
tractor in turning.

The hitch is provided with a pin break coupling, which insures both plow and tractor against breakage on hidden roots or stones.

The hitch is adjustable and adaptable to any tractor.

any tractor.

Notice that spuds are not required on the land wheel—indicating an easy lift. Will plow to depth of ten inches.

The No. 2 Little Genius is furnished in two and three-furrow sizes. An extra plow attachment can be furnished to convert the two-furrow into a three.

Any of the standard types of P. & O. Bottoms, in 12 or 14-inch.

Extra wide clearance between bottoms enables the Little Genius to work in trashiest ground.

No. 3 is a four furrow plow with 14 inch bottoms.

High-grade Rolling Coulters with chilled cone take-up bearings, and extra heavy

Beam braces extend clear down around throats of beams, adding great reserve strength at points subjected to strain.

Made by PARLIN & ORENDORFF CO., Canton, Ill., U.S.A.

International Harvester Co. of Canada, Ltd.

SALES AGENT FOR CANADA

SASKATOON NORTH BATTLEFORD YORKTON REGINA

EDMONTON LETHBRIDGE



17

Bacon Is A Military Necessity

Bacon is the most compact form in which meat and fats can be supplied to the armies.

It takes up the minimum of space in freight cars, ships, transport wagons and in supply depots at the front. It is easily handled, and it keeps.

Bacon, on account of its large percentage of fat, is the great outdoor food. Men who work and travel hard, sleep in the open air, and are exposed to the wet and cold, require a large amount of fatty foods, because such foods best supply the nutriment, the energy and the heatproducing qualities necessary. Bacon fortifies the body against exposure, repairs the wear and tear of hard work and is easily digested. It is also easily and quickly cooked.

The Allied Armies require enormous supplies of bacon, the British Army ration allowing ½ pound per man per day. With the United States raising great armies, the demand for bacon will be still further increased. Where is the supply to come from?

32,425,000 Hogs Short

There is a shortage of 32,425,000 hogs in Europe. The hog population of the United States is 10% below normal. The number of hogs slaughtered in Canada in September, 1917, shows a decrease of nearly 27% compared with September, 1916. Despatches from Denmark state that the total prohibition of exports of pork products is

anticipated in order to insure an adequate supply of meats and fats for the Danish population.

The situation is serious. The armies must be assured adequate supplies of bacon. A great increase in the production of hogs in the United States and Canada is a military necessity.

Save the Young Sows

Young sows which are slaughtered now only produce about 150 pounds of meat per sow, whereas each of these sows, through her progeny, could produce at a moderate estimate 1,500 lbs. of meat within a twelve-month period.

The United States has committed itself to greatly increase its hog production. Canada will do her share. Every pound of pork that can be raised is urgently needed.

The Dominion Government and the Provincial Governments are co-operating to encourage greatly increased production in hogs and to safeguard the growers.

Already steps have been taken to control the spread in price between that received by the producer and that paid by the consumer. The grower is assured his fair share of the price paid by the consumer.

The Flour Mills are under a form of license and allowed a profit of 25 cents per barrel on the

flour only—the bran and shorts will be sold at cost, and are to be free from adulteration.

The huge United States corn crop is under effective American control to prevent speculation and to insure none of it going to Germany. There will be an abundance of feed from this source as the 1917 crop is 600,000,000 bushels greater than last year's.

The buying of the meat for the Allies will all be done by the one Commission representing the Allies which will be an influence in stabilizing the market and preventing wide fluctuations in price.

The great shortage of hogs in Europe and the vast demands of the Allied armies for pork products indicate a bright future for the swine industry in Canada.

There is individual responsibility, and every man who can raise hogs should seriously consider the possibility of raising one or two extra litters in 1918.

Dominion of Canada Department of Agriculture

LIVE STOCK BRANCH

14

The Seal of Quality in Belting

There are few things in industrial life around which a more fascinating story could be written than is associated with the simple detail of Belting.

"It's only the strap or belt," an inert innocent looking thing as we see it tossed aside on the work bench, or a bit of rubber, leather or composite "tape" as we find it stretched between the pulleys, taking its Sunday rest when all the wheels are still

But just think of what it accomplishes in the transmission of power-from the toy-like halfhorse-power unit of the amateur turning lathe to the mighty connecting link between engine and dynamo that provides a whole city with its light and power.

One of the most comprehensive stories of the belt in industrial progress yet written will be found in the finely illustrated new trade catalogue of the Dunlop Tire and Rubber Goods Company of

Starting out without the slightest pretensions to literary claims, it is for this very reason a treatise that the man who wants to possess himself of the knowledge and experience it contains will be glad to read. Its descriptive details are set forth in simple language without any mystifying technicalities and the photographic reproductions are superb.

The Dunlop Company markets its product under the well-known trade signal of the two open hands, palms outwards, standing for the "seal of quality," a trade mark which has stood the test of a quarter of a century with a result in establishing public confidence which might be the envy of any manufacturing house.

While there is no more complete and efficient outfit in Canada for the manufacture of belting, the Dunlop Company's plant has turned out some of the largest belts ever made in Canada and executed many of the most extensive belt orders ever placed with a Canadian institution.

These are not only connected with power-transmission but include those massive, wear-resisting fabrics which are used so extensively for the conveyance and elevation of ore, sand, coal, grain, etc. An impressive effect of all this can be obtained by a visit to some of our great elevators, smelting plants and other big concerns using belt service for conveying an endless supply of raw material to the stamping mills and other machinery.

One of their great transmission lines is the Dunlop "Gibraltar Red Special"—a real rubber product of extraordinary durability, a frictioned-surface belt constructed of the highest grade rubber and a specially-woven duck of tremendous tensile strength and of perfect uniformity throughout.

The "Peerless" is another highwater mark brand and is acknowledged to be one of the finest rubber-covered heavy-duty belts on the market, but space is not available to individualize the galaxy of first quality belting specialities which have been designed or are manufactured in immense quantities by this one house.

The book before us is also replete with instructions as to splicing and lacing belts; hints as to the maintenance in prime condition of various beltings; suggestions as to pulleys; handy rules for the measurement and character of belting necessary for particular jobs, etc.

Altogether we could not more highly commend any piece of economic literature to our readers than this fine expository of belting. If you are within reach of a Dunlop agent, Mr. Reader, get one of these books. If there is no representative of the celebrated firm near you, send a note to headquarters in Toronto stating you are interested in belting. and we doubt not a free copy will he sent you with pleasure.

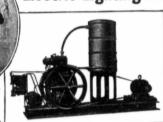
FIRE LOSS SUSTAINED BY ONTARIO WIND ENGINE AND PUMP CO.

We regret to know that the Ontario Wind Engine and Pump Co., of Toronto, have recently suffered from fire. Their stable, garage, storehouse and silo plant, together with four horses, an automobile and a large stock of manufactured silo material has been totally destroyed. The material loss of about \$5,000 is probably but a small part of what will be actually suffered by the mishap. There is the inconvenience and loss of time and business. Our friends have our sympathy in their misfortune and also we feel sure that of many personal and business friends throughout Western Canada.



Suffragette Wife-Going home to your mother, eh! A lot of sympathy you'll get from an incubator! LISTER BRUSTON AUTOMATIC

Electric Lighting Plants



STARTS ITSELF STOPS ITSELF

MOST MODERN AUTOMATIC PLANT

Requires no attention except to fill the gasoline and lubricating oil tanks. Ideal for farms, homes, churches, etc., and hundreds are now in use in Canada. Plant consists of three parts; engine and generator on base, switchhoard and small battery. Can be placed on any floor, in the basement or as far away from the house as you may desire. The "Lister Bruston" Automatic Lighting Plant is the simplest, most economical, and efficient means of providing electric light. Let us send you our illustrated booklet giving you full particulars.

"Lister" Gasoline Engines 2, 3, 5, 7 and 9 H.P.

equipped with high tension magneto ignition (no batteries) and automatic lubricating system. Nothing to get out of order, starts easy in any weather. Sold under the "Lister" Guarantee and gives years of satis-

"Lister" Grain Grinders

"Lister" Grain Grinders
We guarantee the "Lister" Grinder to
do more work than any other grinder
its size (with the same power). The
strong well cut reversible plates do
clean satisfactory work, grinding uniformly fine or coarse as desired.
Spare plates supplied with each
grinder. Equipped with each
for driving bagger.

OTHER RELIABLE "LISTER" LINES

"Lister" Ideal Threshers; "Canuck" Kerosene Engines; Melotte Cream Separators; Ensilage Cutters and Blowers; "Lister" Sawing Outfits; "Lister" Milking Machines; "Lister" Storage Battery Electric Lighting Plants.

R. A. LISTER & COMPANY, LIMITED

Toronto

WINNIPEG

Montreal

Complete Crushing Outfit \$234.50

Consisting of 7 H.P. Engine with magneto, \$195.00 8 H.P. Cyclone Grinder, - - \$39.50 Drive Belt, - - - - FREE 9 H. P. Engine with magneto \$225.00

\$24.00 All Engine are equip-ped with self-starting mag-netos.

EASY RUNNING. GUARANTEED TO START IN ANY WEATHER

Get our advice purchasing. We will save

Cyclone Crusher

7-in. \$35.00 8-in. \$39.50 10-in. \$45.50 12-in. \$56.50 Extra plates

furnished with each Flat Plate

POLE SAW FRAMES..... \$27.50 CORD SAW FRAMES.... \$21.50

SAW BLADES (DISSTON) \$6.00 28-in.

\$7.50 30-in. ... \$10.00



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Reversible Wringer

PURE RUBBER ROLLS EASY CONTROL

PLOW SHARES AT LOWEST PRICES WRITE FOR CIRCULAR

Canadian Stover Gasoline Engine Co. BRANDON, - MANITOBA

17

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ARE AUTOS LUXURIES?

There was a time when the automobile was considered a device by which the wealthy classes could waste time easier than by any other method they had discovered. The farmer with an automobile was considered on the road to ruin, bankruptcy was theoretically supposed to be staring him in the face and kindly neighbors could scarcely help feeling that he would get what was coming to him and that he thoroughly deserved it. Now things have changed and a moderate priced car does not cost much more than a team of horses with the wagon and harness. With the present prices of feed the horses will be about as expensive to use as the motor car. Whether the car is a luxury or a business necessity of course depends upon the individual farmer and the manner in which he uses the car.

It is said that many manufacturers "guessed wrong" when the farmers first became interested in automobiles. They thought that the farmer would buy a combination of a runabout and a delivery wagon. The farmer buys the same style of a car as the city man nine times out of ten. He uses his touring car for pleasure

drives and for business errands in the same manner as the city business man. If the farmer needs an auto truck in his business he buys a truck. The city men who thought farmers would generally use auto trucks for Sunday pleasure rides have been mistaken. Many farmers who purchase cheap cars at first soon buy more expensive machines. The experience with a moderate priced car proves to them that the automobile has a value in their business and pleasure and slowly they begin to feel that the better the car the greater the pleasure. Many farmers now own fine large touring cars who never would have owned any car if it had not been for the cheap car which they were able to procure for the first experiment.

The farmer's automobile to-day places the farmer in close connection with the city. He can attend city meetings after supper and get home in time to sleep before milking time. He can visit friends or business acquaintances and not make it an all day event. Time costs money and the farmer who saves time whenever he can soon finds out that his automobile is not near the luxury that he supposed when he purchased it. It becomes one of his necessary implements the same as the hay wagon, the gas engine or the cream separator.





THE INDIVIDUAL ELEC-TRIC LIGHTING AND POWER PLANT

Murray E. Main

HE individual electric lighting and power plant is becoming fairly prominent to-day, as the farm resident realizes the urgent need of a modern, safe and reliable lighting system which is inexpensive to operate, and which is within his means to

The farmer, as a rule, is still dependent for light upon the oldtime kerosene lamps and lanterns. He has every other modern convenience except good light. He has the telephone, free mail delivery, parcels post, modern heating systems, water pressure systems (affording bathroom conveniences), automobiles, etc. He has electric lights on his car and an electric starter motor for starting his engine, but as a rule has no better lighting system for the home than he had forty years ago.

Much time and money have been spent in efforts to invent and discover some better lighting system. One system after another has been invented and tried and found wanting. Some were found to be exceedingly dangerous, causing the loss of hundreds of lives, others too expensive to operate to be practicable; and some both dangerous and expensive.

Until the advent of the tungsten lamp, the small electric plant was impracticable on account of the high cost of installing and operating. The discovery of the tungsten (Mazda) filament, however, requiring only one-third the current to produce a given amount of light the old carbon filament lamp required, has completely revolutionized the electrical industry and it is now possible for the farmer, even in the remotest district, to economically produce his own electricity for lighting and power purposes, no matter how much nor how little light and power he may need. Electric current is the one commodity that has been decreasing in cost, while all other commod ities have been advancing.

The electric system is the only system that is absolutely safe, convenient, efficient and economical, both to install and to operate.

Its advantages to the farmer consist not only in the fact that it is a convenient and safe lighting system, eliminating entirely the use of lamps and lanterns, acetylene and the ever present danger of explosions and fire from these systems, but that it is also a power plant as well as a lighting plant.

On every modern farm there is much work to be done and much of it can be done more economi-



Successful men have time to smoke Cigars

F ever a man a farmer—is entitled to be pleased with himself, it's at Threshing time. To pilot a field of grain from infancy to maturity from the time it shoves its green tips up in the Spring, until it is yellow and heavy-headed with age - is creditable and useful work.

Cigars help things along at Threshing time. When you run out of bundles, while you are waiting for the wagons to come back from the elevator, at noon -when you knock off for the day - a cigar is a

mental and physical holiday. As a matter of fact, there is a place for cigars in every man's work-day.

A cigar-a good cigarseems to put a man's wits to work, gives him a better, broader and brighter outlook on life in general.

And it must be a good cigar, a cigar with a flavor and aroma that come only from pure, mellow, highgrade tobacco.

Tuckett's Cigars have been smoked for years inWestern Canada, from the days when settlers had to fence the buffalo off their breaking. They are the same good cigars to-day that they always have been.

Why don't you buy a box

of Tuckett's and have it on the place?

Get a box of "MARGUERITES" or "CLUB SPECIAL." Marguerites usually sell 3 for 25c. They differ slightly in size, in shape and in blend from the Club Special, which sells should be supported by the box. Almost every cigar store, restaurant, hotel in Western Canada sells these two brands. You will find this winter that the evenings will pass much more enjoyably if you can go to your box after supper and select a fresh, unbroken and fragrant cigar to keep you company until it is time to turn in.

*P.S.-

TP. 5. —
There is a cigar known the length and breadth of Canada (and very popular in the West) as the last word in Cigars. No doubt you know it — Tuckett's PREFERRED PERFECTO — a big, handsome cigar made of the very first grade of imported tobaccs. There is no finer cigar made than this. Try it. no finer cigar made than ture. See if we over-rate it when we say it is as good a cigar as money can buy ! *Perfect Smoke.

THE TUCKETT TOBACCO CO., Limited - Hamilton, Montreal, London, Vancouver

Makers of Fine Cigars, Tobacco, Cigarettes, all well and favorably known in the Great Canadian West.

Western Distributors: TEES & PERSSE, Winnipeg, Calgary, Saskatoon, Regina, Moose Jaw, Edmonton.

cally and quickly by machinery than by manual labor. And as farm labor is high priced and exceedingly difficult to secure and hard to hold, the alleviation of manual labor, wherever possible, is a desirable aim.

The isolated electric lighting and power plant is all that the name implies, for aside from producing light for the house, barn and all outbuildings, it will pump water, run a washing machine, operate an electric fan, a vacuum cleaner, an electric iron, electric cooking utensils, sewing machine, ice cream freezer, warming pad, soldering iron, grindstone, drill and machine tools of various kinds, a churn, cream separator, milking machine, feed grinder, etc., etc. Such a plant is a profitable investment and will earn large returns on the investment in the saving of time and labor on any farm.

The market affords plants which the average man can set up, and operate readily without an exact knowledge of their de-

sign, as the ordinary farmer has purchased and set up this type of plants without a hitch of any kind and is able to care for it properly. Not until very recently was it possible to obtain such a plant, as formerly it required the services of an expert to set up and operate it as a rule.

A large number of farmers own and operate their own gasoline engines which enables almost any of them to operate an electric plant. The electric plant is simple to care for, as only the

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Moliday Greetings

From the Manufacturers of the

Hart Line of Automatic Registers, Loaders and Baggers, Langdon Ideal Self-Feeders and other Grain Handling Machinery

Bart Brain Weigher Co.

PEORIA, Ill.



It is said on good authority that there are approximately one million gasoline engines in use throughout the United States, of the stationary type, the majority being installed on farms. Consequently, the great majority of farmers owning their own engines need not go to the added expense of purchasing another engine to drive their electric lighting plant, as their present engine will operate the dynamo of an electric plant by belt and in many cases charge the battery at the time of doing other work, which the engine originally was installed for. The simplicity as to the care of an electric plant is such that the average farmer can operate an electric plant very successfully.

A remarkable feature is the low cost of operating, as current is produced for from two to three cents per kilowatt per hour, while the average city user buys his current from the large central station at from ten to twelve cents per kilowatt, as a rule.

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Thirty volts is the accepted voltage for farm lighting plants, as anything under this voltage will not carry far enough to be practicable. This low voltage being direct current will not shock as the 110 volt city current does. It will not penetrate the skin, consequently it is absolutely safe and harmless, which is a feature in its favor.

HOW THE WAR STARTED

The following amusing explanation as to how the war started is given in the British American:

The Crown Prince was having a nice little chat with his father, and, apropos of nothing, said: "Father, who started this war?"

"I know," said the father playfully, "but I won't tell."

"Did Cousin George start it?" persisted the youth.

"No," said father.

"Did Cousin Nicholas?" "No," said papa.

"Did Francis Joseph?"

"No," said the old man. "Well, who did, then?"

"I'll tell you, son. You remember Teddy Roosevelt came out of Central Africa and called on us several years ago, and I showed him our magnificent army; showed him our great and glorious navy; I showed him the Zeps. and the submarines and the gas bags; and Teddy, greatly impressed, slapped me on the back and said:

"'Bill, my boy, you can lick the

"And, like a fool, I believed



To Our Many Friends and Shippers, Have Confidence and Trust.

Your shipments of Raw Furs, Hides, Wool, Sheepskins, Seneca Root, and anything else in our fine, we guarantee that we will never betray your trusts as we have serve yet done so, and we will always follow the honest side of business as we have lound it the only aske way to build up our business, which has grown each year, small but sure. We are not paying the highest price for furs or goods in our line, but we do say we are paying a good fair price at which we make a profit on, and we also pay you a big price for a Mo. I skin and a medium price for a No. I skin and so on down the that goods shipped to us will bring a better average price than shipped elsewhere, as we don't give you a big price for one skin and rip you up the back on the rest of your lot, but we pay for goods as they grade, and we also wish to say that we know what furs are and no matter from what part of North America or United States you may ship furs from, we will grade them in their right section and pay accordingly, so you we further wish to say that the members of this firm know what work there is to trapping and hunting, as they have done some for a living in years gone by, and used to think nothing of sleeping in a snow bank overnight in the dear old rabbit skin blanket, 46 to 50 deg, below zero—Ha! Hai it's hard work, and we intend to carry out to the letter. Just as we say we will be honest as honest can be; but look here, all be satisfied. We only want what is coming to us, and what we mean by this is we have to make a fair profit in order to do business. We all want to understand this: that there is no one in this world going to get it all; and any person who is looking for to get all a thing is worth is out on a limb, and will fall hard; for if we were to way will be done to make a fair profit in order to do business. We all want to understand this: that there is no one in this world going to get it all; and any person who is looking for to get all a thing is worth is out

The B. E. HOGAN HIDE & FUR CO., LIMITED

362 Pacific Avenue

Winnipeg, Man.

REFERENCE: Canadian Bank of Commerce

A FEW FACTS ABOUT FLAX

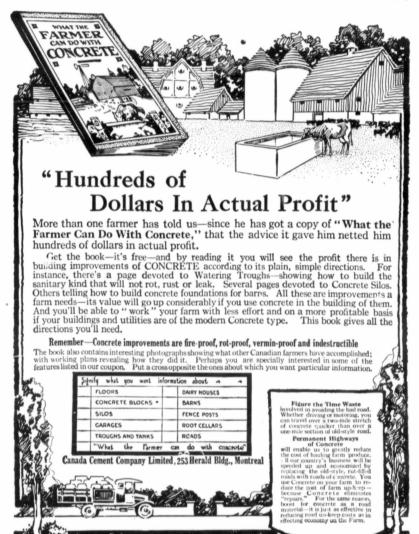
Flesh-Building Fat-Forming Flax Meal should be Fed at Home

OIL cake is the solid compressed refuse from flax-seed, after the linseed oil has been removed by compression. It comes from the great Canadian West, where flaxseed is grown in large quantities, and it used to be shipped to Germany or some other country, where its value as a stock food is understood and appreciated. In Germany, the farmers know all about its wonderful flesh-forming, milk-producing, as well as manurial value for the land. There they call it "kraft-futter," which means "strong fodder."

Canadian farmers have been receiving such an overdose of education in regard to other plant foods for their stock, that it seems as if the balance of the whole matter had been lost to their minds, and they seem to know or care very little about oil cake. Ask a farmer or stockman what he thinks about oil cake as a food for his stock, and he is just as apt to tell you that he never tried it, as he is to say that at \$33 per ton he considers it far too dear. But it is a pretty sure bet that his answer will be one or the other.

Yet the facts about oil cake will demonstrate the folly of either views of the matter. For the man of scientific leanings, it may be said that pound for pound oil cake contains three times as much protein as does corn. This means that it has three times as much available matter for building up lean meat and tissue as corn has. Protein is the most costly and necessary element in foods. But in regard to the fertility contained in oil cake, there is much more than three times as much as there is in the same weight of corn, and this makes it evident that if you had to pay three times as much for oil cake as for corn it would still pay well to do so. Old Country farmers know this, and it is a fact easy to prove, that in many parts of the Old Country tenants get a reduction in their rents in proportion to the amount of oil cake which they feed while on their farms.

Oil cake can be fed to advantage to almost all of the domesticated animals. But nowhere does it tell to such good purpose as when fed to young cattle. A lot of calves and yearlings, fed principally on straw, are not apt to show very heavy gains through the winter months. But a handful or two of oil cake or meal per day will change all of that. Where young cattle are fed straw and nothing else they are apt to soon look rough, dry and harsh in their coats. Feeding oil cake will mellow their skin, improve the bloom





OXY-ACETYLENE WELDING

APPARATUS and SUPPLIES

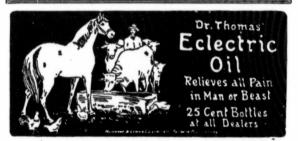
We can supply a thoroughly practical outfit from \$100.00 up. There should be at least one plant in every district to repair braskages quickly and SAVE TIME and MONEY. Up to-date farmers with Traction Engines are putting in welding outfits and doing their own and their

neighbours repairs. We give free instructions to purchasers. SEND YOUR BROKEN CASTINGS

Scored Cylinders or any kind of Repairs. We Re-bore Cylinders, True Up Crank Shafts, Re-tip Boiler Flues and are in a position to handle any repair job promptly.

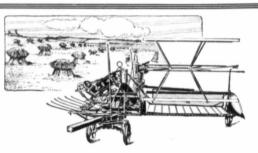
Nothing too large or too Small

GIEGER WELDING WORKS, SASKATOON



17

"DEERING" has become a HOUSEHOLD WORD



EERING means millions of acres successfully harvested, because the DEERING name has been on so many thousands of binders and mowers, and because DEERING reliability has been the basis of so many successful harvests. The minds of many people can hardly think "harvest time" or "haying time" without thinking of this well-known line at the same time.

The farmers of America—the men who have had grain to be cut and hay to be mowed—have demanded DEERING binders and mowers year after year because they wanted farm machine value for their money, and their keen observation and

experience has told them where real value is always to be found.

To-day the result of this past unvarying reliability is to be seen in the fields in every section of Canada. DEERING binders and mowers are there giving harvesting satisfaction. Careful farmers buy them and careful dealers sell them, knowing that the same high quality is to be found in them, coupled with the latest improvements.

For a catalogue, write to the nearest branch house. This is a good time to be planning for the coming year.



International Harvester Company of Canada, Limited

BRANCH HOUSES

WEST—Brandon, Man.; Calgary, Alta.; Edmonton, Alta.; Estevan, Sask.; Lethbridge, Alta.; N. Battleford, Sask.; Regina, Sask.; Saskatoon, Sask.; Winnipeg, Man.; Yorkton, Sask. EAST—Hamilton, Ont.; London, Ont.; Montreal, Que.; Ottawa, Ont.; Quebec, Que.; St. John. N.B.

in their coats, and they will conmence to put on weight and make steady gains instead of remaining in a starved, stationary condition, if they do not actually lose weight.

Throughout much of Ontario, lightness of crops through the droughts of the past summer, has made fodder for young stock very scarce. Better even than supplementing the feed of the young cattle in these parts with grain, would be the addition of a small ration of oil cake.

But it is not in the case of young stock alone that oil cake is so profitable a feed that it pays to buy it where it can be obtained and use it constantly. Dairymen use it, because it not only increases the flow of milk, but adds to the general health and thriftiness of the dairy cow. In the case of the dairy animal it is best to feed it in the form of meal. Old Country dairymen feed large quantities of it, and they feed it in the cake form, but use a machine for breaking it into lumps.

As a butter and milk producer, oil cake probably has no equal. This is apparent because of its richness in protein, and because of the fact that the milking cow must have enough of this to supply her own needs and those for the production of milk as well. With a cow being milked in the

winter time, fed on a ration of fodder, corn meal, bran, shorts and the like, an increase of from one to two quarts of milk per day is easily made by the addition of a ration of flax meal or oil cake.

Hogs gave a good account of themselves when fed a daily ration of oil cake, and a much better result is always obtained than when fed grain alone.

It is a splendid food for young horses, especially colts, if fed in moderation. A small ration per day is enough. But it improves the growth and health of the horse, purifies the blood, opens the bowels, and gives a glossy finish to the skin, which is always an indication of good health. Beside this, in the case of working horses, it is a great regulator, and while keeping the system right, at the same time prevents scouring. Being a strong food, and at the same time of easy digestibility, it suits the small carrying capacity of the horse. Horses fed with a daily ration of oil cake are never afflicted with worms, and there is little danger, with care in regard to other grain

rations, of colic, much less than when horses do not get it.

Where steers are being

Where steers are being "roughed through" the winter, the addition of a handful of oil meal to their hay or straw rations pays a great big bonus back to the feeder. And this grain is unlike that made by heavier grain feeding, for it does not argue any future loss by falling back when the animals are turned out to grass.

While it pays to feed an animal even a very small daily ration of oil cake, it pays still better to feed it in larger quantities. Many Old Country feeders make it a rule to feed up to one-quarter of the entire grain ration.

Oil cake and flax meals may be fed dry either with the grain or fodder ration. But the best way to feed it is to mix with water and allow it to stand for twelve hours or so before being fed, and when commencing to feed it is best at first to mix with bran or corn meal.

If it payed the German and the British farmer to ship our oil cake and flaxseed meal 4,000 miles to feed their herds and flocks, and to fertilize their soils, it would much more pay the Canadian farmer to feed his own flax at home.



TRIALS OF A CAMOUFLAGE OFFICER

C. Officer.—"Now, then, what's the meaning of this?"

C. Painter.—"I was telling 'im 'e didn't know nothing about camerflarge, sir, and 'e says, "Ho, don't I? I'll soon show yer. I'll make yer so's yer own mother won't know yer; an' 'e ups with the paint-bucket all over me, sir."

My Shop and the Work we Have Done Therein

By JOHN W. WYMAN

AM going to tell you about a machine shop on a farm, situated five miles from a railroad or town of any size, and about some of the work we have done here.

The main part of the shop consists of a room 25 x 25 feet, with two adjoining store rooms. Also there is plenty of room outside in front to assemble machinery.

The equipment consists of an eighteen inch turning lathe with eight foot bed which cost us \$300 about sixteen years ago. It will cut any thread from two to forty and has a keyway and gear cutting attachment which we made ourselves. It will cut any ordinary spur tooth gear up to eight inches diameter. The last gear I cut was a sixty-four tooth half time gear for a 4-horse-power gasoline engine to replace one that I broke last summer.

We have a power hack saw that will saw up to five inches, square or round, which cost twenty-four dollars about six years ago. We have three emery wheel stands of our own manufacture and two power drills, which were also homemade.

All these machines are connected to an overhead lineshaft; the engine I will tell you about later on.

We also have a blacksmith's outfit, forge, blower, anvil, stoving block, set of tongs and a few other miscellaneous items scattered around.

There are two vises, a set of threading tools for both rods and pipe and a full stock of old bolts, scrap iron and other miscellaneous tools such as will gather about a shop that is eighteen years old.

The first lathe we had was an old foot power. The other one was put in about sixteen years ago, and has been used every winter since.

Outside of what farming we do, we run a well drilling business through the summer and do our repairing and build new machinery through the winter.

We have made the patterns and had castings made for several engines. My brother made the first auto that was in this country; engine, wheels, roller bearings and all. The engine was a 5 x 6 stroke, air cooled, single cylinder. The wheels were steel tired. It was a thoroughly upto-date machine at the time it was built. He ran it for about three years and could get over the

ground at about fifteen miles per hour.

Everything about it wore out but the engine, and we are using it still as a hit-and-miss, to furnish power to run the shop. It has good compression still and never been rebored.

We do practically all the farm repair work of running a one hundred and twenty acre farm and do some for the neighbors occasionally. Of course, all the equipment that we have isn't necessary for a very useful farm shop but I think that every farm ought to have at least a smithing outfit, thread cutting tools, vise and a hand drill. But in doing ordinary farm work I find use occasionally for everything that we have.

I stayed on a fruit farm last spring during the spraying sea-During the time I set up a shop for the manager, consisting of a vise, thread cutting tools, hand drill, anvil, forge and a few other handy tools which I made myself. The whole outfit cost him about eighty dollars, and he says that he wouldn't do without it at all and is going to get more equipment, as that isn't sufficient for keeping all his machinery in My main business there was to keep the sprays all in running order through the spraying

One of the worst breaks I had was a half time gear. The pin that held it in place worked loose and let the gear out against the governor. It was a cast gear and it split square across the middle. The only sure way to fix it was with a new one, but I repaired it so as to finish spraying. First I drilled the holes so as to pull the parts together, then used four small patches, two on each side and used eight penny nails for rivets.



"You can't always depend on the mailorder houses. See what they sent me when I ordered a medium-sized pair of duck pants!"

SEED GRAINPurchasing Commission

This Commission, appointed on the recommendation of the Honorable the Minister of Agriculture, by the Federal Government of Canada, has for its aim the procuring of a supply of clean, sound seed grain to meet the requirements of municipalities, farmers' organizations and farmers in districts affected by drought, frost and other causes. All seed grain purchased and distributed by the Commission is handled at the Government Interior Terminal Elevators at Moose Jaw, Calgary and Saskatoon. It is all inspected by the seed inspection staff of the Dominion Department of Agriculture on arrival at these elevators, and must conform to the following standards after re-cleaning:

WHEAT

CLASS No. 1 MARQUIS SEED WHEAT

No. 1 Hard and No. 1 Northern Seed Wheat shall be composed of practically pure Marquis wheat, sound, clean and free from other grains, and free from noxious weed seeds, under the meaning of the Seed Control Act, and weigh not less than 60 pounds to the bushel.

OATS

CLASS No. 1 SEED OATS

No. 1 Seed Oats shall be composed of grades Nos. 1 and 2 C.W. Oats, shall contain 95 per cent of white oats, sound, of strong vitality, clean and free from other grains, free from noxious weed seeds within the meaning of the Seed Control Act, and weigh not less than 34 pounds to the bushel.

BARLEY

CLASS No. 1 SEED BARLEY

Canada Western Seed Barley shall be composed of the six-rowed variety, sound, plump, clean and free from other grains, of good color and free from noxious weed seeds within the meaning of the Seed Control Act, and weigh not less than 45 pounds to the bushel.

("Within the meaning of the Seed Control Act" means not more than one noxious weed seed per pound of grain).

The Government Seed Inspectors have been instructed to select and specially bin such cars of grain as can be cleaned, at reasonable cost, up to the above mentioned standards.

The Commission will purchase Nos. 1 and 2 C.W. Oats, 3 C.W. Barley, and Nos. 1 Hard and 1 Northern Marquis Wheat, subject to official grading and weighing, accepted as suitable for seed by the Seed Inspectors, and stored in the Interior Terminal Elevators at Moose Jaw, Saskatoon and Calgary, and pay therefor a premium of 5 cents in advance of the closing cash price on the Winnipeg Grain Exchange on day of purchase; all purchases to be made on basis Fort William. When requirements are nearly filled, the Commission will notify farmers and grain dealers, through the agricultural press, that no more grain will be purchased after a date specified in such notification, which will be given at least two weeks in advance.

The Commission invites the co-operation of farmers and grain dealers in carrying out its objects, so that there will be no possible danger of any shortage of seed grain for next spring's seeding, and the expectations of the Allies for a plentiful supply of foodstuffs from Canada will be fulfilled. In purchasing and inspecting seed grain, the services of the Commission and the staff of the Dominion Seed Branch, will be available, free of charge, and the grain will be sold to farmers at actual cost plus cleaning and other necessary charges.

All correspondence should be addressed to A. E. Wilson, Commissioner and Chief Agent, Post Office Building, Regina, Saskatchewan.

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Canadian Government Seed Grain Purchasing Commission

A. E. WILSON, Commissioner and Chief Agent

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Christmas Greetings



to every Canadian Thresherman and Farmer, and with the sincere hope that the New Year will find the shafting of the whole industrial world belted to the great motor of peace and goodwill. Nothing ever heard of in transmission has contributed more to the harmony of the working world than the



LION BRAND Rubber Belt

AND THE

YELLOW FELLOW

ENDLESS THRESHER BELT



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

Gutta Percha and Rubber Limited, Not in any trust or Combine

WINNIPEG FORT WILLIAM REGINA SASKATOON CALGARY LETHBRIDGE EDMONTON

"DON'T LET WORRY WORRY."

"Don't worry" is the easiest truism in the world to utter and the most difficult to act up to. If anyone, no matter who, could adopt the above motto and apply it to all matters of life he would hold the secret of life itself in the hollow of his hand.

Unfortunately it is given to only a favored few to have the faculty of throwing off trouble and of being able at will to close fast the doors of their minds on things intensely worrying and disagreeable and turn to the world smiling faces. Great men of history seem to have possessed this ability to an extraordinary degree. And there are a lot of minor personalities in the world who are near solving or who have solved this great life problem, that of never allowing worries to worry.

The fact that they are seemingly able to shuffle off worries doesn't at all mean that they don't experience them. They do. One must always look a trifle askance at people who go through life untouched by worry of any description, whether their own or other people's. There must of necessity be something unsympathetic in their natures. Their butterfly detachment from

the realization of cares of any kind gives one the impression of cold callousness. And the impression is nearly always correct.

But there is the other extreme. There are people who walk the earth with lugubrious, downcast faces because of some private woe. It may be inevitable and serious. But this is no reason why they should become menaces to themselves or their friends, is it? And yet their very gloominess does exactly what they

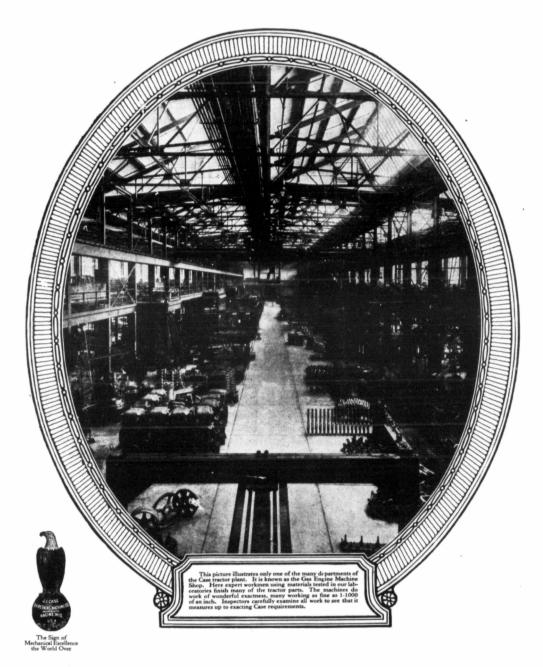
don't want—estranges sympathy from them. For sympathy, like every other affection or passion, sometimes wants a rest or desires reciprocation, which the person with an all-enveloping worry never dreams of giving.

There is also the type that worries over trifles. This kind of worrier is harder to beat than any other. Many persons trade upon a big worry until it assumes gigantic proportions. They get out of focus with it, as it were,

and allow themselves to think that the end of their little world is approaching because they happen to be passing under the black shadow of some great trouble.

So they pass along life's highway scattering gloom instead of sunshine. They entirely forget the simple though stupendous truth that to listen to another's sorrow is the most wonderful remedy in the world for their own.





Case Kerosene Tractors have demonstrated their ability to burn kerosene economically and efficiently. This was proved by the University of Nebraska tractor tests in which Case tractors were used. These tests, printed for publication give the results in black and white. They are authoritative proof regarding the economic capacity of Case tractors. Send for the Tractor Test Bulletin which will give you valuable information on Tractor performance under different operations.

Where Tractors Are Built Right

When a visitor goes thru the Case tractor plant he is immediately impressed with the fact that back of Case kerosene tractors is a real institution. He marvels at Case facilities which are second to none. With interest he views the batteries of huge machines, which work with such exactness.

From the time he leaves the designing rooms until all the processes of building are revealed to him, the one fact that stays with him is this, "Case certainly understands how to build quality

We believe we do know how to build real tractors. Backed by 26 years of tractor and field experience we lead the field with quality tractors. Our policy is not to make cheap tractors, for you know that you can't get something for nothing. Quality is the byword in the Case organization. Case tractors are built for continuous economical, efficient performance over a period of years - that is what Case offers in tractors.

The Case institution is 76 years old. It is a world-wide concern respected by farmers everywhere. A product bought from a concern of reputation whose success speaks for itself, is an absolute guarantee of honest value.

There are five sizes of Case kerosene tractors, 9-18; 10-20; 12-25; 20-40; and 30-60. May we send you interesting detailed information explaining Case kerosene tractors?

> J. I. CASE T. M. CO., Inc. 882 LIBERTY ST.

RACINE. WISCONSIN

Most farmers today are not judging a tractor by the price mark attached. Men who did this have "orphan" tractors on their hands. Now they are considering the experience, the reputation of the manufacturer.

This is the logical way to get the right tractor because the old concern whose reputation is at stake cannot afford to jeopardize its business by building anything but the best.



Fences a Necessity on the Live Stock Farm

THE farmer owning stock worry the most about the fencing can save many losses, both in his herd and in his neighbor's friendship, if he carefully fences his pastures and prevents the animals from constantly intruding on other people's pro-perty. Several instances of stock trespassing have recently occurred in a community with which I am familiar. One farmer has a drove of pigs and also a sow and several pigs which persist in breaking out of a fence, which no one could expect to hold them, and then wandering over neighbor's property. front yard of a neighbor has been graced with hogs at intervals for several months. He does not appreciate this in any way but dislikes speaking about it because the neighbor owning the hogs is a gentleman and he likes him very much.

The same farmer has a heifer which he turns out to "pick its living," as he terms it, along the roadside. The heifer is a nice little animal and very friendly. It enjoys the neighbor's garden and likes to prance through the flower beds and clean up the green tops of vegetables. Of course, every farmer should have his own place well fenced to keep other people's stock off the premises, but on the other hand a man hardly feels like barricading his entire front yard with stock fence. The owner of the stock should

proposition.

The owner of a good dairy bull confers a favor on his community by that ownership and yet bulls are dangerous. The farmer who allows his bull to occasionally wander down the road is risking a great deal and should fence the animal in a corral or be sure that his pasture fences are high enough and stout enough to hold under all circumstances. It is never wise to take chances with a bull no matter how gentle he may seem to be.

Nothing improves the farm more than well built fences, and since concrete and steel posts have been thoroughly tried and proven satisfactory for that work there is nothing better for the farmer to buy. In pastures where the fences were poor and broken down it might pay to even sell a few head of cattle and spend the money for fencing. Of course, wire is high this year but it is necessary and the owner of stock can scarcely afford to spend his time chasing cattle on neighbor's farms especially if it does the cattle no good and endangers the friendship of good neighbors in the community.

Very few farmers can avoid fencing. Even where little or no live stock is kept there are the line fences to be kept up, which are sometimes considerable, and with the advancing price of fenc-



Deputy Minister J. H. Evans, Principal Reynolds, Walter Cummings, and a friend, wrapped

in admiration of a celebrated Holstein Bull



May the Cheer of hristmas

brighten every home in Canada at this season and lift the load of sorrow from every sad heart. Language is inadequate in these times, but while "hearts are trumps," the unexpressed thought needs no vehicle. The iron has en-tered the soul of every true Canadian heart since 1917 dawned and we are all on common ground. May 1918 usher in a peace that will never be broken is the prayer of the men who

Cream Separator

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

MAGNET ALWAYS SKIMS CLEAN

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

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

The Petrie Mfg. Co. Ltd.

Head Office and Factory: Hamilton, Ont.

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Be sure your overalls, shirts and jumpers are made of Stifel's—it hasn't an equal anywhere for all-round satisfaction. Look for the label on

round saussaction. Look for the label on the back of the cloth inside the garments seasonates when you buy. Insist upon STIFEL'S and you'll never be disappointed in service. Remember, it's the CLOTH in your overalls that gives the wear!

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Indigo Dyers and Printers WHEELING W. VA

ing material the problem is becoming a most serious one. It may truly be said of fences that they neither enrich the land nor beautify it and therefore have no right to exist except as they are absolutely needed in confining live stock. But it requires no little discrimination to determine just where the fences are most needed, for where mixed farming is followed it is convenient to have most of the fields fenced so as to occasionally pasture them. But unless the need is more than an occasional one it might be best to pass it by with the conclusion that such a field will not pay for fencing.

On the farm of the writer there are seven miles of fence to be kept in repair, more than two side and some of it does not have to be kept in the best condition. This seven miles, if built new. would represent a capital of about \$240 a mile or \$1,680 in all. The annual interest on this is about \$100 while the depreciation may be a little less than 10 per cent yearly. As the average life of a woven wire fence is probably not over 15 years, it will be seen that in order to keep seven miles of fence in repair, about half a mile of it must be annually reconstructed.

To reduce the number of fences to the minimum should be the aim of the average farmer, but it is not an easy thing to do especially where both sheep and cattle are kept on the same farm. Yet, I am convinced that on most farms at least a few rods can be saved. Sometimes the lane fence can be dispensed with, or a cheaper one put in its place designed to turn cattle and horses only. Often the cultivated fields can be made square so as to take less fencing; partitions between such fields can largely be cut out for when it is very desirable to pasture any of them a temporary fence can be constructed at no great expense. We often do this on our own farm and it not only saves expense but it is convenient in not continually having partition fences to work around. If only a few rods can be saved by making the change it pays well to

Like most other investments, the best constructed fence is cheapest in the long run. A poorly made fence will cause trouble almost the first years of its existence. The wire will sag, or the post heave out allowing small animals to pass throughan aggravation which would not have been had a good fence been constructed in the start. In building woven wire fence good material and proper workmanship are equally important. Use good substantial posts if it is possible to get them, and in low wet places anchor a few of them

so that they will stay in the ground in spite of freezing and thawing. Set the anchor posts at the end deep and solid so that when the fence is stretched tightly it will budge but little. If there must be any poor material or slack work in the construction let it be along the line posts, for it is upon the anchor posts that everything depends.

Another important thing in fence building is to have the proper tools. Not every farmer can have all the most up-to-date tools for doing the work, but they can usually be rented for a trifling sum and will greatly facilitate the work. A good stretching outfit costs from \$3 to \$10 and is indispensable in stretching heavy wire. A single wire stretcher for putting barbed wire over the top can be bought for a dollar or less. At least two kinds of post diggers will be needed-one for dry dirt and the other for soft mushy ground. Wire pliers, staple pullers and crowbars are indispensable for fence builders' outfit.

Fences are usually built in the spring when the ground is soft and digging easy. This is entirely practical. However, I think the best fence ever made on our farm was built when the ground was hard and dry. This was because the loose dry dirt could be tamped around the posts more evenly and was consequently in better shape to resist the action of frost. On the other hand if stiff clay mud is placed around a post it is difficult to tamp it that it will settle evenly.

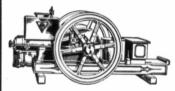
THE FEEDING AND HOUSING OF SWINE

On account of the high value of concentrated foods suitable for swine feeding, it is important that the foods that are used be so combined as to produce the maximum of results. The question of housing also enters largely into the profitable production of pork. To encourage farmers to raise as many hogs as possible, and to make the most money therefrom, the Department of Agriculture at Ottawa, has issued Pamphlet No. 22 on the "Feeding and Housing of Swine." This pamphlet which may be obtained free at the Publications Branch, Department of Agriculture, Ottawa, deals also with the questions of breeding and care of the animals at different ages and at different seasons of the year.

Mr. Archibald, after much experimental work, lays down the principal that an expensive piggery is unnecessary. Brood sows may be kept under most circumstances, even in the winter season in a single board hog cabin. This pamphlet gives specifications and plans, not only of a large piggery, but of a cheap and portable cabin.

"MACHINES MUST TAKE THE PLACE OF MEN"

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Grind Feed Saw Wood Pump Water Run Separator Churn or Washing Machine

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

Ask for catalogue, prices and complete information. Made in eleven sizes, 2 to 38 H.P. Each furnished in stationary, semi-portable or portable style, and with hopper or tank cooled cylinder.

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HOG KILLING TIME

We believe in getting everything ready the day before we intend to butcher. The kettles are filled and the kindling ready to fire early the following morning. Ere the first rosy tints of dawn appear, breakfast is over and the men folks are ready for the killing. The hogs are not fed anything for thirty-six hours before killing. They may be given When hogs are killed water. with a full stomach the meat is often slightly tainted so it is best to fast them and especially if the

Some say never to cut up a hog until all the animal heat has escaped, but we always cut them up at once. This is all right because the pieces are spread out to cool and not put away until just at night and then it does not hurt to pile them up if necessary. Some people often over-salt their meat. Better not enough than too much, for too much ruins the flavor. Here is a standard recipe: Eight pounds of salt, two pounds brown sugar and two ounces of saltpeter to each hundred pounds of meat. When used for pickling it is dissolved in four gallons of boiling water. This is allowed to cool before pouring over the meat which has been packed in a barrel or jars. It requires from four to seven weeks for all pieces to

The smoking is then done. Use hard wood, such as green hickory or maple. If you have not a regular smoking room, place your fire in a big iron kettle that has plenty of ashes in the bottom to prevent burning the floor. Sawdust is good to smother the fire to make it smoke. Over-smoking is bad for the flavor of the meat. slight brown is enough. We like it so we can taste the rat without that strong taste and smell of smoke. After smoking, hang away in muslin bags. Some wrap the meat in paper before putting in the bags, but this will cause it to mold. Before putting the meat in bags we rub on borax. If one has a closed room which is flyproof, one need not use the bags.

We fry and pack the sausage and tenderloins in jars, sealing them with lard. We use fruit jars and therefore get double use of them. The cracklings are used for soap. Try this for a hard soap: Five pounds of cracklings, one box lye and nine quarts of soft water. Boil until it resembles strained honey, adding two handfuls of borax. Remove from the fire and let it stand a couple of days and you can cut it into cakes. All soap improves with age.

Mrs. Ralph Riggs in "Farmer's Guide."

CUTTING UP AND SALTING PORK

Cutting up and salting the pork is a job that requires no particular skill when once a few first principles are understood. We believe a sharp ax is better for cutting through the bones than is a saw for the reason that the saw leaves more or less bone sawdust on the meat. Particularly is this true in cutting down the back bone. The only bones in the hog hard enough to dull a sharp ax are those in the head. A dull ax can be used to cut through the jaw bone.

The carcass is cut down the centre while still hanging and half is put on the bench at a time. The bench should be built of oak plank, as softer wood will not withstand the blows of the ax. First remove the kidney or "leaf" lard by pulling it away with the hands, then cut out the spare ribs with whatever amount of meat attached that may be desired. The ribs, with all the back bone, are better eaten fresh than salted. A small strip of lean meat clings to the backbone, which is known as the "tenderloin." It is the best part of the animal for eating fresh, but not as good when salted. After the ribs are removed the ham and shoulder are separated from the rest and trimmed as desired. All clippings work in for sausage.

The pork to be salted is cut into strips about four inches wide from back to belly. The thin ends toward the belly make the best bacon. These also may be salted if desired. For salting the pork, oak barrels may be used, but care must be taken that the brine does not leak through the staves. Large earthen jars, holding about 25 gallons, are much used at present and are better for the purpose in every way. They never leak and are much easier to keep clean than the wooden barrels. Thick backs should be salted separately, and there should also be a jar for the thin belly pieces and perhaps another for the hams and shoulders. reason for this is that the thick cuts require more salt than do the thinner pieces, while the hams and shoulders are relished better if salted less.

The thick pieces are packed solidly in the jar, a layer of meat and a layer of salt. All open spaces are also filled, coarse salt being used for the purpose. After two or three days a brine is made and poured over the meat so that all is covered. The brine is also poured over the hams and other pieces, which, of course, cannot be packed as closely as the thick cuts and do not require so much of the coarse salt. In fact, if it is not intended to keep these pieces long, the brine is usually sufficient.





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THE RESERVE TO SERVE THE PERSON NAMED IN

There are several recipes for making the covering brine. A good one is made for 100 pounds of meat as follows: Eight pounds of fine salt (this dissolves better than the coarse), three quarts of molasses or three pounds of brown sugar, and two ounces of saltpeter dissolved in four gallons of water. Enough brine should be made in these proportions to cover all the meat. Hams and shoulders which are to be smoked should be thoroughly salted in five or six weeks if no salt, other than that in the brine, comes in contact with the meat.

C. H.

TRAINING A BALKY COLT

Cola was a beautiful dark iron gray of half blood German Coach. At two years of age she was brought from a neighboring farm to our place to be "broken" to work. The man who was to use her first hitched her to a wagon on the off side beside a steady, well-broken horse. She was little trouble and worked all right at various things, such as plowing corn and hauling quite heavy loads. After two or three months she was taken back. Two or three months later than this we bought her.

The steady working mate had been sold. She was put with a young mare that usually started on two legs. Whether it was the nervous-working mate, the play time after the work, or she had been tampered with at the other farm, I could not say, but Cola refused to work. She just pranced along in the traces and wouldn't pull a pound except by jerks. The driver used the whip and she liked to be whipped and came to expect it, but it did no good and she got to looking mean out of her eyes. She did some better in field work, plowing and harrow-ing, etc., but either through her pulling sideways or carelessness on the part of the driver her shoulders became very sore. We had tried her to the buggy once but as she had to be led most of the time it was a tedious proceeding.

After the other horse had pulled her and the mowing machine, too, for one round, she was turned out to pasture until fall. Her shoulders healed and she became smooth and fat. In the fall I wanted her very much for a driver, so I decided on a little strategy and kindness with her. I took a small bucket of apples, cutting them in pieces to make them go farther and be more convenient and set them in the front of the buggy. Then I took the harness to the stall. Her eyes looked mean when she saw the harness coming. I gave her a piece or two of apple and put the harness on, led her to the buggy

INTELLIGENT FARMING IS A PATRIOTIC DUTY

MANITOBA FARMERS DO YOU KNOW?

- That in Europe to-day there are 28 Millions of Cattle fewer than before the war began?
- That this decrease is about four and one-half times as many cattle as we have in Canada and over 40 times as many as Manitoba possesses?
- That European sheep flocks have decreased by 54 million head?
- That this decrease is 27 times as many sheep as Canada owns, and 367 times as many as there are in Manitoba?
- That the European swine population has decreased by 32 million head, or 13 times as many pigs as Canada owns, and about 100 times as many as exist in Manitoba to-day?
- That previous to the war the greatest suppliers of cattle, sheep and swine, and their products to Great Britain were Argentina, Uruguay, Mexico, New Zealand, Australia and Russia?
- That for the duration of the war Canada and the United States must, because of their geographical position, supply a very much larger part of the food needed by the Allies?
- $\begin{array}{c|c} \text{That the Allies to-day} & \underline{\text{will buy}}, \text{ at very high prices, all} \\ \underline{\text{the beef, mutton, bacon, hides, wool, wheat, oats and barley we}} & \underline{\text{can raise?}} & \underline{\text{eggs,}} \end{array}$
- That the prices for farm products will likely be even higher during 1918 than during 1917?
- That even if peace were declared next week it would take years for the world to make up its deficit in some lines of production?

Therefore the Call to the Manitoba Farmer is--

- To sow only clean seed.
- To learn all there is to know about weed fighting— Attend the Weed Conferences.
- To raise every calf to at least two years of age-
- To save every ewe lamb for breeding purposes.
- To increase the swine production greatly.
- To keep as many live stock as will utilize all the surplus of pasturage, hay and straw in the neigh-
- To breed up herds and flocks by using only high-class males.
- To feed and care for sheep in such a way as to $\underline{\text{keep the}}$ wool free of chaff and dirt.
- To increase dairy and egg production.
- To feed all screenings on the farm after destroying the germinating power of all weed seeds.
- To use as many vegetables and perishable foods as possible in the diet, and so permit of exporting the maximum amount of beef, bacon and flour.
- To waste nothing.
- To avoid, so far as possible, the erection, during the war, of expensive buildings that are not positively needed.

- To leave till the summer no work that can be accomplished during the winter.
- To study the latest government agricultural bulletins, Federal and Provincial. (For List of Manitoba bulletins, write the Publications Branch, Manitoba Department of Agriculture, Winnipeg)
- To encourage the boys and girls to study farming through the Boys' and Girls' Club movement.
- To attend the Farmers' Week Conferences if possible, and to send the boys who are at home to the Agricultural Short Course Schools or the Agricultural College.
- To take the keenest interest possible in the work of the Agricultural Society, Grain Growers' Association, Home Economics Society or any other organization which stands for a progressive type of agricultural life.
- To feel free at all times to write to the Manitoba Agricultural College, the Extension Service and Manitoba Department of Agriculture for agricultural information of any sort.
- To exercise the greatest freedom in suggesting to this Department any constructive way in which the Manitoba Government can further assist Manitoba farming.

Manitoba Department of Agriculture

Raw Furs Wanted

Ship us your Raw Furs. We pay highest market prices.

References: Bank British North America

Dominion Fur Co. 241 Princess St. Winnipeg, Can.

DON'T SCRAP YOUR BREAKAGES

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

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Lowest Prices consistent with Best Workmanship.

and hitched her in the shafts, meanwhile giving her more apples and petting her. I fastened the tugs at a greater length than fitted her. Then I fastened the girth rather tight and fastened one end of a hitching strap to each side of the girth and fastened the other end of the strap to the singletree shorter than the traces, so that she pulled entirely by the girth, no weight whatever coming on the breast strap.

I kept on petting her and giving her the apples frequently as I led her down the hill to the road, where I got in the buggy. At the word she started off cheerfully. Whenever she stopped to look at fancied bugaboos, I let her take her time for it, never touching her with the whip, only talking to her and urging her with the voice, until she started. We made about a three-mile trip the first day. The next, one of five miles. About half way on the second trip I removed the hitching straps by which she was pulling and tightened the tugs. She did not seem to notice the difference. The next day I drove her eleven miles away, returning in the afternoon. She made the returning eleven miles in an hour and a half at her own gait. She did not mind the whip and obeyed a touch of it when she saw imaginary things. I drove her all fall and winter without any trouble whatever. She never cared for the touch of the whip, although I rarely needed it. She would pull any amount hitched to the buggy as tested in some mud on a new road. The next spring she was sold. The man who bought her used her for coal hauling. V.B.H.

ANTHRAX

The disease of anthrax occurs among sheep, horses, cattle and other herbivora or grain eating animals. No animal of any of these classes is capable of resisting anthrax infection providing suitable conditions obtain. The disease is also liable to attack human beings, although it does not appear epidemically in man. Many cases have been reported where men have died as a result of contracting anthrax from the skimming of an infected animal or from handling the wool or skins of animals that have died from the disease.

This information is brought out in Bulletin No. 23 of The Health of Animals Branch of the Dominion Department of Agriculture entitled "Anthrax." The bulletin is written by Dr. Chas. H. Higgins, Pathologist, and deals with the subjects of ocurrence, methods of infection, soil infection, diagnosis, etc. Every livestock man should possess himself at once of this important bulletin.

Does He Smoke? Then give him Cigars

HERE we are around the heater. Outside it's cold—but the stock is O.K.—fed, watered and snug for the night. Inside the spirit of Christmas reigns. All over civilization Christmas is marked by good fellowship, good wishes and gifts.

If you want to please a smoker, give him cigars for Christmas. He may like other things. He surely will like cigars.

If you are afraid you might be overlooked—make yourself a present.

But be careful. Don't buy cigars hoping they will be good. They may be—or they may not. Avoid any chance of disappointment.

Get Tuckett's—either "Marguerites" or "Club Special" Cigars,

Tuckett's Cigars go back a great many Christmases in Canadian history. And no man has had anything but good to speak of them. And neither, we believe, will you.

It is difficult to describe the flavour of a cigar. But you will recognize the quality of Tuckett's Cigars the minute you light one. They are fresh and fragrant with a fascinating aroma that comes only from pure, carefully blended tobacco.

Cigars have a place in a man's home all the year round. But especially is this true at Christmas. You know we are right—Christmas is surely the time to have a box of cirars within reach.

And Christmas is "right around the corner" now.

The next time you are in town—buy a box. Either "Marguerites" or "Chub Special." They come in 10's, 25's and 50's, and are sold generally throughout the West. "Margurites' at 3 for 25 cents, "Club Special" at 10e. each—but cheaper by the bo1.

Buy yourself a box—buy your neighbor a box. If he is buying you a box, so much the better, for cigars are one of the few gifts that stand duplication. Two boxes are better than one. A Suggestion to Wives, Mothers, Sisters



Tuckett's Cigars are specially wrapped and decorated with holly seals and Christmas labels.

WITHOUT question your men friends who smoke would rather have Cigars for Christmas than almost anything else. So when in town go into your local dealer's and tell him you want a box of Tuckett's Marquerites or Club Specials—tell him you want them in their specialChristmas wrapping—both excellent cigars but differing somewhat in size, blend and shape. He will give you courteous and careful attention.

THE TUCKETT TOBACCO CO., Limited - Hamilton, Montreal, London, Vancouver

Makers of Fine Cigars, Tobacco, Cigarettes, all well and favorably known in the Great Canadian West.

Western Distributors: TEES & PERSSE, Winnipeg, Calgary, Saskatoon, Regina, Moose Jaw, Edmonton.

i. 6



For Careful, Reliable Work, Ship Your Grain to

Donald Morrison & Co.

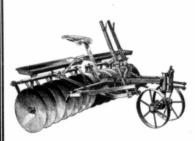
Grain Commission Merchants

ESTABLISHED 1904 LICENSED—BONDED

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McCormick Tillage Tools Make Real Seed Beds



NLY downright good seed-bed-making service can make a line of tillage implements popular. If tillage tools are wrong in design or in materials, in the big points or the little details, they may struggle along for a while but they won't pan out.

McCORMICK TILLAGE IMPLEMENTS—disk harrows, spring-tooth harrows, smoothing harrows, cultivators, scufflers, land packers and drills—continue year after year playing their big part in the making of Canadian seed beds because they pass all field tests that must be met before any machine can get the careful farmer's O.K.

Men who design McCORMICK tillage tools, or design improvements for them, know conditions as thoroughly as it is possible for men to know. That is why you will find betterments on your implements this year that were not there a year ago. Next year they will be better still. It is this interest in better-seed-bed-building that accounts for rapidly-increasing sales of McCORMICK tillage implements in Canada.

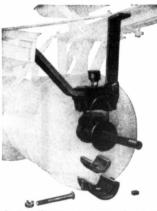
Ask the dealer for particulars concerning McCORMICK tillage tools. Write the nearest branch for a catalogue. This is a good time to consider your 1918 plans.

International Harvester Company of Canada, Limited

BRANCH HOUSES:

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

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



Detail of McCormick disk bearing. Observe that hard oilers are used, also that the upper and lower bearings can be reversed and that they can be turned and for any given practically four warrs in one

NTIL quite recently, rats were as rare around the farm buildings of Western Canada as chimpanzees or piebald beavers. Now their appearance is looked for everywhere and we are threatened with an invasion that may give still greater trouble than the plague of mice which is now over-running por-

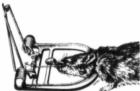
tions of South Australia. A correspondent writes:

"I stayed at Kadina a month and all the farmers were suffering from the plague. They think it is the cause of their horses being ill, as some of the mice are diseased, but it is the loss of their wheat which is the worst thing. Coming after such a good harvest, it seems so hard, and a lot of the wheat eaten by the little beasties was going to England. All along the line the wheat had been stacked; there were three or four lots each of 4,000 to 5,000 bags at each station. When I saw them there was not one sound bag left; the mice had eaten through them all, and there was just a heap of loose, halfeaten wheat. In Mr. H's barn the mice had turned the wheat into a sort of meal. Then Mr. H- made a stage, and put his bags on that, but the mice dropped from the rafters. When I left he had built a high stage out of doors for his wheat, which the mice could not get up. The night

RATS!

A Growing Menace in Western Canada

before I came away I went to the barn and saw the mice piled one on top of another about eight inches high, to keep themselves warm. When disturbed, they ran



Method of Baiting a Guillotine Trap

over the floor in thousands, and I kept jumping, as I didn't want them to run up me. Would you?

"The mice are here in millions, though millions have been killed. I can't tell you what damage has been done. Men are now sifting and retagging the stacks in the hope that the cold weather will kill the mice, and some of the wheat may be saved.

"Another letter, of a later date (July 15th), says that 'the mice plague is still "flourishing" in the North, notwithstanding that thousands are caught every night. The wheat stacks are ruined."

Unless the rodents are checked

in time, there is more than a possibility of Canada suffering from a plague of rats before it is many years older. There is only one way to prevent anything of the kind happening, and that is for everyone to keep his own farmyard clear of them and this can be done by ceaseless vigilance.

The common brown rat is not a native of this continent, but was introduced from Europe about 1775. Its dominance is due to its fecundity and its ability to live under almost any kind of conditions. Rats breed three or four times each year and there are from six to twelve in each litter. The best way to repress rats is to exclude them from places where they find food and a retreat for rearing their young. To keep rats away from any building use cement construction. Rats are able to gnaw through wood and this is, therefore, not a ratproof material. The foundation of all farm dwellings should be of concrete or some form of masonry construction and should extend quite a little ways down in order that the rats will not burrow under it. Concrete floors should be underlaid with gravel so that the rats cannot loosen the layer immediately under the floor. Gravel also guarantees drainage. Tile drains in cellars should have a screen of some sort over them in order to keep rats from coming into the cellar by that route. Owing to the cunningness of rats it is often difficult to clear premises of them by trapping, especially if the food supply is abundant. A few of the old rats refuse to enter the most innocent-looking trap. Yet trapping, if persistently followed is one of the most effective ways of destroying the animals. For general use the common rat trap with a wire fall released by a baited trigger and driven by a coiled spring has marked advantages over the old forms of steel



Two methods of arranging a barrel trap; stiff paper and hinged cover

traps. It can be baited in such a way that the least pressure on the bait will spring it, while a steel trap requires some little weight on the trigger before it closes. The guillotine traps, as the bove are commonly called, should be



baited with small pieces of fried bacon or with any small piece of fresh meat. Seeds of various kinds are often successfully used.

Where the rats are numerous the large wire cage traps can be



HE COULDN'T ASSIST HER

Stout Party (who has managed with difficulty to climb into the street car):"If you'd been 'arf a man you'd 'ave 'elped me in"

me in."
Very Small Man (with a sad smile):
"If you'd been 'arf a woman I might 'ave 'ad a try."

used to an advantage. The wires should be stiff and strong because with a light flimsy wire, a full-grown rat can bend the light wires and escape. These traps should be baited and left open for several nights until the rats are accustomed to enter them to obtain food. They should then be closed and freshly baited and a large catch of young rats can be expected. Drowning is the best way to kill rats caught in a wire cage trap.

Another scheme for catching rats where they are thick around a building is to cover the open end of a barrel with heavy paper and place food on this for several nights. Then fill the barrel one-third full of water and cut a cross in the paper. The rats jump upon the paper to eat the bait and fall fato the barrel and are drowned. Poison is the quickest and best way to rid a place of rats, but the odor of the dead animals makes its use impracticable around the house.

Poisons can be used to advant-

age around barns, sheds, etc. One of the cheapest and most effective poisons for rats and mice is barium carbonate, it having the advantage of being without taste or smell. It has a corrosive action on the lining of the stomach and is poisonous to larger animals if taken in sufficient quantities. In the small doses fed to rats, it would be harmless to larger animals. This poison usually causes rats to leave the buildings and go in search of water and then die. It is usually fed in a dough compounded of four parts cornmeal and one part of the mineral. Another plan is to place a small amount of poison on bits of fish, meat or toasted bread which has been moistened. The bait should be placed in the rat runs, about a teaspoonful in a place. If a single dose of the poison fails to work, repeat, using a different bait. Strychnine is a very rapid poison and therefore can not be used about the house. Strychnia sulphate is the best form to use. The

small crystals are inserted into pieces of meat or bread and are placed in the rat runs. A dough can also be prepared with this poison. Arsenic is probably the most widely used of all rat poisons. Powdered arsenic may be fed to rats in any of the ways mentioned above. If a dose of arsenic does not kill a rat it is often hard to induce him to take another. Probably the most popular method of ridding the premises of rats is by keeping a dog and several cats. Cats are cheaper to have around than rats, and when the cats get rather numerous just consider the good they are doing. Feed the cats some milk, because a rat diet alone is not healthful.

A Temporary Lady

"Why did your wife leave you, old man?"

"Force of habit, I expect. Used to be a cook before I married her."

The Tragedy of Foul Air

Foul air or "vitiated atmosphere" has proved more fatal to man and beast than all the wars of the ages. Pure air will sustain life and restore health when neither food nor physic, without fresh air, would ever replace a wasted tissue.

Stockmen are at least beginning to understand what this means to the housing of their herds and live-stock units, especially during the winter months when it is often impossible for weeks on end to give them full access to the undiluted air of heaven.

Not to be too scientific about it, let us say that the crux of the whole matter is in having the barns and stables so equipped that there is not the slightest impediment to the free intake of pure air and the constant passage outward of the foul air created by the breathing of the animals.

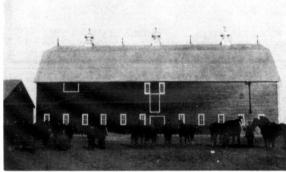
One of the very best, most simple and on the whole least ex-

of space and adjustment to the last degree.

Some illustrations will be found on this and another page, but we strongly urge our readers to write to this firm for a free copy of their wonderful literature on the subjects. It is "a liberal education" to anyone, most exhaustive and free from all mystifying technicalities. Our friends will gladly respond to any request for gratuitous advice and specifications from any applicant who owns a home, barn or building of any sort, or who is interested in the maintenance of church, school or any such institution in his town or municipality.

WORKING THE STALLION

It is peculiar that the practice has so long prevailed in the management of a stallion that keeps him shut up in a box stall or in a small lot where he is idle,



THE MODEL BARN OF A COMMON-SENSE FARMER
A perfect system of ventilation and thoroughly guarded against electric storms

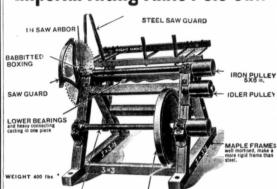
pensive ventilating system yet introduced is that of the Townsley Company, whose manufacturing plant is located in Brandon, Manitoba. (This is a very old manufacturing house, of Minneapolis, who, a few years ago incorporated in Canada to handle without hindrance or handicap certain ventilating and electrical specialties which have made their name a household word in the United States.)

Space is not at our disposal to do justice to these systems of ventilating and lightning protection. In both departments the Townsley Company have earned a great and far-reaching reputation. Apart from the simplicity, effectiveness and economy of their products, these are altogether distinct from the old-time, clumsy outfits we are still familiar with. The external fittings in every detail are light and artistic and the inside work is economic

everything pointing to the injury of him and to prevent his doing his best as a foal getter. There is no real good reason why the stallion should not work as do other horses, and a good authority upon this question says: "A stallion is no more difficult to work than a gelding or a mare; in fact, he makes the best of all workers which is due to the fact that he is not timorous and is not easily frightened, and it is far better for the stallion. If a stallion is worked carefully and judiciously he will be all the better for his other duties."

One very successful breeder of horses works all of his stallions and has them do as much work as is done by his other horses and all of them more or less earn their keep. This man is a firm believer that he has an increased number of foals over the old method of keeping the stallion in idleness and he recommends the

Imperial Tilting Table Pole Saw



COLD ROLLED STEEL SHAFT

HEAVY 95 LB. BALANCE WHEEL

Weight 400 lbs. This strong well made saw is a favorite with us as well as with our customers. We know of none better. It is heavier by a good deal than most saws. The frame is built of good hard maple, see the size marked on cut. The feet are well mortised and bolted from underneath. The top of the frame is supported by the heavy connecting iron on which the boxings are fitted—this heavy connection too keeps the boxings always in perfect alignment. The tilting table is a splendid one, it has two chains to support it instead of one as is generally used. The balance wheel as you can see in illustration is heavy and is low down bringing the weight well to the bottom and leaving the top of the saw frame free to saw any length of poles desired. EATON price too saves you money, with satisfaction guaranteed. Frames sold separately or with saws as below. The price of coal is creating a demand for wood.

97F375—Frame	only,	weight	400 lb	s. Price \$28-50
97F376-Frame	and	24-inch	saw.	Price35-00
97F377—Frame	and	26-inch	saw.	Price 36-00
97F378-Frame	and	28-inch	saw.	Price37-25
97F379-Frame	and	30-inch	saw.	Price 38-25

Takes Second Class Freight Rate. Order from Winnipeg.

WINNIPEG - CANADA

Bargains in Used Tractors, Flour Mills, Oil Engines and Farm Machinery.

We have the following second hand machinery in stock at the present time, the prices are very low and all are exceptional bargains at the prices named, if you are interested drop us a line and ask for further particulars of the machinery you are interested in.

The British-Canadian Agricultural Tractors
Ontario Avenue, P.O. Box 685
Saskatoon, Sask.

WE have a nice assortment of Brockville Cutters and Jumpers, with and without fore doors and tops, also two and three beam bobs for use with your Democrat box, and our prices are right.



Brockville Cutters

set the standard for quality and style, are well proportioned and have that appearance of style and comfort so much sought after by other makers.

CARRY A FULL LINE OF AGRICULTURAL IMPLEMENTS

THE REINDEER (Registered) FARM SLEIGH Guaranteed BUILT good oak OF timber OAK only used

Quality and good workmanship is quite as necessary in a Farm Sleigh as in a wagon. We know that in our "Registered" Sleigh we are offering you the best value obtainable this season. Sleigh we are offering you the best value obtainable this season. WE HAVE A SLEIGH THAT WILL PLEASE YOU.

SEE OUR NEAREST AGENT OR WRITE US DIRECT FOR PRICES, ETC.

JOHN DEERE PLOW CO. LIMITED

REGINA

SASKATOON CALGARY

We have observed that breeders of draft horses have not been in the habit of working their stallions as have the breeders of the trotting bred horses. All trotting-bred horses are broke to harness work and they are worked constantly during the time they are making their stud.

Whenever the stallion is made to work every day in harness, his bodily functions must necessarily attain their highest efficiency. No one can make out a good case of letting any horse be idle when the object is to fit him for work. The feeding of an idle horse is quite a problem. Feeding a horse that works every day is not so much of a problem.

WINTERING IDLE FARM HORSES ON THE PRAIRIE

With the advent of the winter and the completion of the season's work farmers are considering the best methods of wintering their idle farm horses. For years the general practice throughout the Indian Head district and in other parts of the prairie provinces has been to turn idle horses loose to rustle as best they may on the open prairie, around straw stacks. and, quite frequently, around a neighbour's granary, resulting in serious losses to farmers. How-

practice of working the stallions. ever, before adopting this as the most economical practice, farmers interested in the future of the horse industry should consider the efficiency of their horse power in the spring after being wintered under such conditions; their growth and development, especially of the colts, and the loss through abortion and other unnatural conditions.

> On the other hand, the pampering of idle horses, and especially of brood mares, is detrimental to their condition for spring work

and also to strength of foals. For the past few years experiments have been conducted at the Indian Head Experimental Farm relative to the different methods of wintering idle horses. The work horses were divided into three lots of four each. The experiment lasted 90 days. Horses were weighed before and after the experiment.

Lot 1 were kept on light work, such as hauling feed, straw, manure, etc. Their daily ration consisted of one pound oat chop to

every 100 pounds live weight with the addition of one pound bran per horse per day and all the good hay they would eat. The average gain per head during the experiment was 31 pounds and the average feed cost was 29.8 cents per day.

Lot 2 consisted largely of brood mares in foal and were allowed sufficient exercise to keep in good shape. Their daily ration consisted of four pounds oat chop, two pounds bran, eight pounds hay and all the good oat straw they would clean up. The average gain in weight was 80 pounds per head and the average feed cost was 12.9 cents per head per day.

Lot 3 were turned out daily and allowed the freedom of a straw stack and stabled at night. Their daily ration consisted of five pounds oat chop. One pound bran and all the oat straw they would eat up clean. The average gain during the experiment was 2 pounds per head and the average feed cost per day was 9.85 cents per head.

From the foregoing results it will be noted that Lot 1 made an average daily gain of approximately 1-3 pound per head; lot 2 made an average daily gain of .88 pound per head; (of course, this is only to be expected with mares in foal). Lot 3 remained practically the same.



HOW THE MESSAGE WAS RECEIVED AT THE END OF THE LINE

"Pass the word along, ser-geant-major, for the men to keep down—I am going to send up a flare."

"You blokes 'ave got to kneel down—the captain's going to send up a prayer!"





Pictures from Home

Over there, with thousands of miles of sea and land between them and home, are Our Boys, smiling and fighting—fighting with bullets, against a dogged foe; with smiles, fighting homesickness and dread monotony.

It's a part of the nation's job to-day to keep those boys cheerful, to hold fast the bonds between camp and home, to make light hearts and smiling faces—and these things pictures can help to do—pictures of the home folks and the home doings, pictures of the neighbors, pictures that will enliven their memories of the days before the war—simple Kodak pictures, such as you can make. These can help.

Kodak cataiogue, free at your dealer's or by mail

CANADIAN KODAK CO., Limited, Toronto, Canada

Patmore's Reliable Seeds, Trees, Shrubs and Plants



With us a plot of Superb planted in the first week of May commenced to ripen fruit in late June, and we picked ripe fruit every day until hard frost came in the middle of September. These plants flower and fruit continuously as long as the weather remains warm. They winter well and are safer to ship and transplant than are the ordinary varieties, owing to their continuous producing habits. They do not make many new plants and consequently are higher in price.

Superb.—Yield a heavy crop of large berries of splendid flavor, from June to September; plants are strong and

Progressive.—On this variety the foliage is vigorous and plentiful, protecting the flower and fruit in the late

Both varieties (Postpaid).

Per doz., \$1.00 Per 100, \$7.00

HARDY FRUITS

Crabapples, Plums, Currants, Rasp-berry and Strawberry Plants

NURSERY ESTABLISHED 1883

THE PATMORE NURSERY CO.

SASKATOON

CLEARING LAND

By Gustav Delberner

LEARING land of stumps, stones, poplar bushes and willows until within recent years was done wholly by hand. The pioneer farmer, equipped with mattock, shovel, crowbar and axe, undertook to clear and put under cultivation the raw

Something wonderful has been done, however, in the nature of inventions to lighten the task of clearing forests and turn them into gold-producing lands. The late Dr. Inman said in regard to forests:-"No matter where you locate, pick land with plenty of good big trees upon it, for it is certain that if God cannot raise good crops on a piece of land you will not succeed." But the cost of clearing and the slow methods have kept many away from good bush lands. Blasting powder and dynamite have been known for years, but they are costly and more or less dangerous. It usually requires an expert to handle these explosives to give results. With the invention of one-man stump pullers, and especially of the "drum" type, those machines make clearing of stump lands easier. For the benefit of those who do not possess a stump-puller and who cannot get one, the following may be useful:

The standing trees and bush are slashed, generally during the summer months; then in the fall

A PARCEL WORTH HOLDING

ON FOR



Old Bill—"If you'll just 'old that blinkin' ladder tight a bit longer, mate, I'll 'ave the big 'un for you!"

after the first rainfall, or when there is no danger to neighboring improvements or timber, a fire is started and allowed to burn over the entire slashing. When most of the brush and small logs are burned completely, the remaining logs are sawed into convenient lengths, piled and

After the rains have softened the ground sufficiently, the smaller stumps and roots are grubbed and pulled out. Where the stumps are full of rosin they are dug around. Two holes bored in the middle of the stump about two inches in diameter, and a fire set to them, either by dropping red hot coals or a red hot iron bar, or sash-cord fastened to a wire and let into the bottom of the holes.

After the upper part of the stump has been burned away, the fire is kept up by throwing in the bark and litter that are always to be found nearby. By this means the main part of the stump is burned away, leaving only the larger stringers with their small roots; these are pulled out by a team, and if too large the earth is dug away all round, and fire set to them again by rolling a small log alongside the root.

This leaves only but a few small roots to be grubbed out by hand, and a man could clear about one acre a week by this method. Today, powerful one-man stump pullers are on the market, with a pulling power of 48 tons or more on the stump. This usually

Continued on page 56

Why Experiment with Untried Engines?

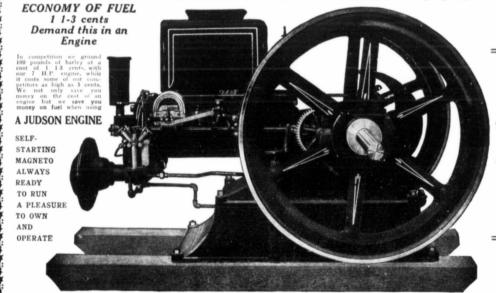
Here is the Proof that the Judson is the Engine You Want

An Engine that is good enough to win a World's Competition on Fuel Economy. Accessibility, Durability, Ease of Operation, Simplicity in Design and Surplus H.P. above rating is the Engine you want.



Used and Endorsed by progressive farmers throughout the West. Men who appreciate a quality article at the right price.

PERFORMANCE THAT COUNTS



THROTTLE GOVERNED THE ONLY ENGINE THAT WILL OPERATE SATISFAC-TORILY ON KEROSENE AS WELL AS ON GASOLINE

WHAT WE SELL

GRINDERS WOOD SAWS HARNESS HARDWARE WIRE FENCING IMPLEMENTS SUPPLIES and EOUIPMENT ALL KINDS r the FARM ANY SIZE FROM 1 h.p. to 30 h.p.

The every-day users of Judson Engines will tell you in plain language what our engine has done for them. Let us send you this Booklet and you can read for yourself.

The Only Condition under which you can Buy an Engine or other Farm Equipment from us.

OUR ENGINE AND IMPLEMENT GUARANTEE

WE HAVE PROVED BEYOND DOUBT THAT WE SELL THE HIGHEST GRADE MERCHANDISE THAT MONEY CAN BUY

C. S. JUDSON CO. LTD.

FROM FACTORY TO FARM

Send Us This Cou

pon To-day. It Will Bring Our Cata-logue That Will

Save You Money.

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Seager Wheeler's Prize Wheat

For FREE Distribution

EAGER WHEELER is the World's Champion Grain Grower. He has won more prizes for growing grain than any man in North America. His 1017 crop was the best he has had in twenty-one years, and The Grain Growers' Guide has purchased all of it, including the following grains:

RED BOBS WHEAT KITCHENER WHEAT REGISTERED MARQUIS WHEAT REGISTERED VICTORY OATS REGISTERED CANADIAN THORPE BARLEY

All of this seed is of prize-winning strains, and is being donated free to farmers, farmers' wives, sons and daughters in the prairie provinces in return for the very small service of introducing The Guide to their neighbors. This seed

will help to increase the yield and the quality of the grain on every farm, and add hundreds of dollars to the farmer's income every year.

A full description of the seed and the details of The Guide's exceptional offer are contained in our "Better Seed Book," a beautifully illustrated booklet, which will be mailed free to any person who will give their name and address on the attached coupon and mail it at once.



BETTER SEED BOOK
THE GRAIN GROWERS' GUIDE Winnipeg Man.
Please forward me your Better Seed Book, as advertised in The Canadian Thresherman and Farmer.
Name
Post Office
Province C.T.F.

brings out fir stumps as large as 5 feet in diameter, roots and all, without the use of blasting pow-

Powder, however, is used more or less on very large oak stumps, or where the ground is hard to dislodge from the roots of the stump. Using dynamite exclusively requires an expert, to know where to place the charge and the number of cartridges necessary to lift out the stump.

To a beginner this may prove an expensive and perhaps dangerous proposition. The one-man stump puller is about the cheapest method of clearing lands of stumps and big trees, and with a little blasting powder on very large stumps as explained above to loosen the stump, a man can clear an acre in from one to two

Poplar bushes are about the easiest to clear, but usually where they grow are stones, so you have to be careful with sharp axes. The method I employed was by hitching a logging chain (I think a wire cable would be better, and not apt to get twisted and break), eight to fifteen feet from the ground to the poplar, care being taken not to hitch too high on a thin one so as to bend or break it, or too low on a thick poplar to lose leverage power.

This is the most important

point. I used a pulley arrangement and a 134 inch rope in the pulley. One end was fastened to a thick poplar for anchor and run to pulley No. 1, and pulley No. 2 had a hook for the logging chain which was fastened to the tree. The rope used was 100 feet, but it could be longer.

It would save frequent change of anchor to have a medium-sized team and one man with a sharp axe at the tree to help along. I have pulled out poplars up to 8 inches in diameter with roots and all. If you have poplar stumps, do not attempt to pull them out with a stump puller by hitching on the top of the stump, because the top will break off and leave the roots in the ground. You are then worse off than be-

The best implement to get a hold of these is with the root hook (easily obtainable) or have two steel plow beams bolted together and spread apart about twelve to fourteen inches, where the curve starts, having them pointed where they are bolted to the land side on the plow. can fasten handles and use it also as a root cutter by attaching straight coulters to the beams.

Fasten clevis on the bolted ends and you have a root hook as strong as money can buy. This hook on the roots, a good anchor, and a stump puller or a good team with the blocks on the other end, you have a good strong steady pull, which will bring the stump and roots out.

Willows are the most difficult to combat on account of their long root system, and especially when they have been burned off on the top or dry. The larger the willows the better they are to pull by slinging a logging chain or cable as low on the bottom as possible around the bunch. If the bunches are not large, you can sling your chain around the next bunch up to six, or as long as your chain or cable is, always leaving a little slack in your chain so that the horses will not have to pull all the bunches at once, but one after the other. Pulleys and anchor are also to be used for heavy work. For burnt off or dry willows use root hook as described for poplar stumps.

Talking about stones, I am blessed with these "critters," large and small. I save them all except the large ones, which I bury. The time will come yet when every stone will be hunted up for making roads. A stone as large as a piano box can be buried in about half a day, and is commenced by digging a trench around to find out the size and nature of his bed.

Sometimes you can undermine

one end, prop it with a wooden post, then dig out the soil beneath the other end, undermining alternately off opposite sides will let the stone down to a depth of at least four or six inches deeper than you expect to plow. If the stone is on the surface, it is best to dig a hole alongside of it, and tip the stone in the hole. But be careful not to dig too close to the stone, that it should slide on top of you. It's better to do a little lifting with a crowbar and coax the stone into the hole than to run chances. It's always safer when two men work together.

A stone not suited for internment, or one that may be useful, can be attacked with a crowbar. sledge hammer, weighing about ten pounds and wedges. Before attempting to slam the rock, dig first around, prop him up and put stones underneath, then look for the grain of the stone. Most of them have a grain like wood, and if you hit it on the right spot it will break.

Never hammer a stone when on ground for the earth gives it a splendid cushion against your blows, and, moreover, hides its vulnerable parts. Don't lose patience, for if you do the rock will get the best of you. It may resist stubbornly, but will yield suddenly, just when you perhaps are ready to quit. The stone feels 17

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the same way, and a close study of your stone will save you a lot of hammering without results.

There are three other ways to get even with stones. First, drilling a hole 1 inch in diameter, 6 or 8 inches deep. Put a little water in the bottom of it, cut a soft wood plug to fit tight in the hole, wet it and drive it down. Give the plug plenty of time to soak up the water in the bottom of the hole, which will swell it up and make a still tighter fit. Now drive into the centre a round tapered steel wedge, the point of which is sharp. The wood plug will prevent the wedge from slipping back, and driving the wedge from the top with a heavy sledge hammer will split a rock of quite large size.

The second is to drill a hole as before, but a little deeper. Pour water in hole in the fall, plug tight, and the expansion of the water freezing will usually split the stone.

The third, where plenty of bush wood is around, firing has been very effective on rocks. Dig a trench all round the stone, in which build a hut fire covering up with an old sheet iron to keep the heat in.

After the fire has been going about three or four hours (according to the size of the rock) dash a couple of pailfuls of cold water on the stone. You will hear it crack, fragments fall off, and with the top of a crowbar you can reduce the size considerably. Look for the grain, as it may run right through a big stone, and with a flat wedge driving in you may split it in two. Tough stones may require two or three firings before they give up.

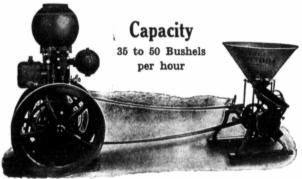
Now when you've go't your stones out, place them on the farm, where they will never be in the way or have to be moved again. Dynamite, of course, is the quickest and easiest way to get rid of stones, but it costs money and is always a dangerous agent to work with.

CARE OF AUTO TIRES

The tread of a tire is one of its most important parts. Its purpose is to protect the carcass from the wear and tear of road travel and from deteriorating influences, such as moisture and dirt. If it becomes cut or torn the tread does not have a fair chance to protect the carcass.

Ordinary tread cuts are noticed and vulcanized by many motorists. But the little cuts, caused by nails, broken glass, etc.-these are the ones which cause so much trouble. These little cuts suck in dirt and moisture which work into the cotton fabric. The union between the rubber of the tread and the fabric of the carcass is soon destroyed. Sometimes a

H.P. Manitoba Crushing Outfit



Outfit Complete

As Illustrated

H.P. Manitoba Engine, 30 ft. 5 inch, 4-ply rubber belt, 8 inch Manitoba reversible conical plate, ball bearing screen shake feed crusher. Price 8200-Extra set of plates furnished. If 10 inch is preferred in place of 8 inch, add \$10 to

Same engine equipped with two roller 12 inch crusher, Price \$230. With three roller 12 inch crusher, Price \$250.

This outfit will crush more feed for the investment and the cost of operating same than any outfit you can buy. Simple, reliable, and durable. Takes up very little space as compared with horizontal outfits of the same horse power; and can be operated in the coldest weather as well as in the summer time. Fitted with self-starting magneto. Requires no batteries.



This is our 12 inch Crusher

GUARANTEE

Thirty days' trial. If outfit is not as represented and Initry days' trial. If outht is not as represented and proves unsatisfactory, at the expiration of this time same may be returned in same condition as received outside of natural wear, and your money with all freights will be refunded.

TERMS

Cash with order, or sight draft against Bill of Lading.



Saw Mandrels

with balance wheels, inch shaft, 6 x 6 pulley babbited boxings for inch saw. Price \$ Same shaft without ba wheel but otherwise plete, Price \$10.00.

Phone Manitoba Engines Limited BRANDON, 367 MAN.

Office and Factory, foot of 8th Street and Overhead Bridge



Farmer Edward Crane, of Kinburn, Ont., writes:—"I was driving three horses on a discharrow when the harness broke, and while fixing it, one of the horses kicked me against the sharp edges of the harrow. I sustained a nasty cut on my elbow and wrist, and as I could not leave work to get the wounds dressed, dirt got lato them and my arm became very painful. It looked for some time as if I were going to have some very bad sores, but I was advised to try Zam-Buk. I did, and in a few days my arm was much better—less painful, and the stiffness less troublesome. I continued using Zam-Buk

freely and in a short time the wounds were entirely healed. I believe Zam-Buk to be the best ointment obtainable. It should always be

best olintment obtainable. It should always be at Mand ready for emergencies."

Mothers and fathers should bear this in mind. In the home, on the playground, at school, or in the workshop accidents will happen, and Zam-Buk is the best "first aid." It is strongly antiseptic—kills the germs which cause inflammation, festering and blood-poison. The rich herbal essences of which Zam-Buk is composed, soothe pain and quickly heal any injury. Zam-Buk is also a sure cure for eczema, ulcers, abscesses, piles, blood-poisoning and all skin diseases. Soc. box, all druggists and stores or post free from Zam-Buk Co., Toronto, for price. Refuse substitutes.



tread that has been cut badly on stony roads will separate all the way around the tire as the result of a single rainy day's driving. A little time and care expended in filling these little cuts with tire putty is amply rewarded by additional mileage. It is just like the care bestowed on the grease cups It pays.

A good many people could say about their prematurely deceased tires what a young Irishman remarked when after a short illness he was told he could not live. His laconic reply was, "Well, I expected this but not quite so soon." Every one realizes that tires must wear out some day. But no one expects them to give out as soon as some do. No matter how many thousands of miles the tire has travelled, the blow-out always comes as a shock of disappointment-and in many instances the tire's life could have been prolonged immeasurably through a little care and time taken to fill the minute tread cuts which seemed so unimportant.

In order to get satisfactory service from a pneumatic tire, the condition of the tread must be watched constantly.

R. S. Wilson.

"KNOWLEDGE" AND "EDUCATION"

By W. N. Hull, A.M.

HE word education is derived from the Latin, e, out, and duco, ducere, to draw or to lead. To draw out what? To draw out the powers or qualities of the body, mind and soul -of the body, health, strength, endurance, speed, dexterity, skill, poise, beauty and other qualities; of the mind, memory, imagination, reason, judgment, tact, order, culture and other attributes; and of the soul, love, faith, hope, earnestness, cheerfulness, honesty, courage, kindness and loyalty.

To develop these and bring them to their highest state of perfection is education.

Education is not knowledge.

Knowledge is not education. Education comes from the use

of knowledge.

Education is synonymous with development.

A man with learning is like a chest full of gold, but education puts the gold into circulation.

Education is the fruit of knowledge.
Education is stimulated by the

innate activity of knowledge.
Education pushes knowledge

into action.
Wisdom guides both Know-ledge and Education into success-

ful issues.

"Show me," says Knowledge.
"I will," replies Education.

It takes a life-time to learn how

to live but Education moulds and shapes a little every day.

Knowledge says, "See how much I know." Education replies, "See what I can do."

Knowledge may be mere bookishness, but Education is the product of the mill, the shop, the office, the road, the farm, the kitchen.

Much of the world's knowledge is owned by the Professor, but every young man and every young woman may dig out his own education, in his life work, like gold from a mine.

Education would plow, and sow, and reap, but Knowledge would sit in the shade.

Knowledge tells how a thing should be done, Education does it.

Knowledge is on dress parade, Education always on the firing line.

Knowledge may be proud, arrogant, Education silently enters the contest with his sling and stone.

Education rises early in the morning and calls loudly for Knowledge to get up.

No matter how small the fund of learning, Education begins at once to build.

Knowledge is the inert water, Education is the fire that converts that water into steam.

Knowledge acquires but does not use, Education uses and "grows by what it feeds on."

An education that will not bring in dollars is as useless as an autocar that will not run.

Knowledge rests in bowered gardens and in perfumed halls; Education is turning the soil, training the vines, studying the stars and reaching after God.

Knowledge soothes and comforts, Education strips for the

Knowledge ensconces himself behind mahogany pulpits and burnished railings; Education walks up and down the aisles, shakes hands with men and says, "God bless you."

Knowledge is inclined to sleep after each accumulation, and necessity or the Will whips it into the next activity, but Education is the exuberant child, the restive horse, sleepless, tireless, unbounded and unmeasured.

Education drives the nail; pushes the saw; works the plane; spreads the mortar and lays the brick; deftly handles the bow upon the violin; touches the keys of the piano; bats or kicks the ball; strikes the blow at his opponent; guides the plow; picks, wraps and boxes the fruit; sows the grain; swings or rocks the cradle; faces the ocean wave; stands under the North Star; while Knowledge sleeps, but looks up for a moment to feebly exclaim, "It is well."



Excursions

DECEMBER, 1917

Via Canadian Northern All The Way

VERY LOW FARES

FIRST-CLASS TICKETS LIBERAL STOP-OVERS

DECEMBER 1 to 31, 1917

Good to Return Any Time Within Three Months.

Excellent Service Through Tourist Cars

From
EDMONTON
CALGARY
SASKATOON
PRINCE ALBERT
REGINA
BRANDON
WINNIPEG

To TORONTO and Other Eastern Points

ELECTRIC LIGHTED

NEW, with all THE LATEST IMPROVE-MENTS, STAN-DARD ELECTRIC LIGHTED TRAINS

The Best of STANDARD SLEEPERS

Compartment Observation Cars

The Canadian Northern will offer many privileges in connection with these December excursions that it is possible to procure only during the festive season. Every allowance is made for the past long absence from the family and friends, and everything possible is done to make up an atmosphere to correspond with the big holiday spirit.

Ask any Agent for 1917 Eastern Canada Pamphlet

For Information about Train Service and Fares write

R. CREELMAN, General Passenger Agent, Winnipeg

A. BROSTEDT, D. F. & P. A., Canadian Northern Railway, Vancouver, B.C.

J. MADILL, D. P. A., Canadian Northern Railway, Edmonton, Alta.

W. STAPLETON, D. A., Canadian Northern Railway, Saskatoon, Sask.

VOTE FOR UNION

FOR CANADA=FOR THE UNION JACK

AGRICULTURE .-- Canada's Prime Industry --- Must Carry-on Unchecked By The Draft

THE purpose and intent of The Military Service Act, working through the Selective Draft, safeguarded by Tribunals and Boards of Appeal, is that the necessary number of men, shall be taken without injury to Canada's prime war industries, of which agriculture stands first. Where Tribunals make mistakes, there is an appeal; where the appeal fails, the Minister of Militia declares he will set free from Military Service the men needed.

Farmers' Sons Needed on the Land

This is General Mewburn's explicit statement in regard to the sons of farmers needed on the home farm:

> "I will see to it that if any farmer's son, honestly working on the farm for the production of food, is drafted, he will be discharged from the Canadian Expeditionary Force if he goes back to the farm."

Necessity of Selective Draft

The need for the selective draft dated from the time that sufficient reinforcements were not forthcoming voluntarily to maintain our army at the front. But it is hedged about with safe-guards to prevent men from being taken who are of more essential service at home.

Sir Robert Borden's Guarantee Sir Robert Borden says this:

"As for the farmer, the Government is fully aware of the necessity of maintaining the supply of food stuffs. The Minister of Militia has given this subject his careful consideration, with a view to further declarations to tribunals and appeal tribunals, in order that full justice to national interest may be done in that regard, and that the food production of our country, which is essential for the purpose of the war and for our financial stability, may be maintained until the end."-Sir Robert Borden at Oshawa, Ont.

Class "A" Men to Suffice

General Mewburn considers Class "A" men will suffice, and Class "A" men will be placed where they can give most value to Canada and the causewhether in the ranks, on the land, or in the factory.

Haphazard Methods Mean Defeat

The haphazard methods of the past brought us face to face with defeat. Canada is now organized intelligently and scientifically to the great purpose of winning the war. It is a business plan for a business people.

Vote for UNION GOVERNMENT

Back the Boys in the Trenches

All this time, Mr. Findley had been steadily progressing in the firm, and making his weight felt in every department he touched. Chief accountant in 1895, assistant to the president in 1902, assistant general manager in 1907, a director of the firm in 1909 and vicepresident in 1912.

Meanwhile the Massey-Harris Company had expanded enormously until it had become the second largest industry of its kind in the world with immense factories in Toronto, Brantford and Woodstock, employing seven thousand five hundred persons, a paid-up capital of fifteen million dollars, and having warehouses, branch factories and representatives all over the world.

Massey-Harris goods were soon civilized globe where crops were at once commanded and continues

The pioneers in Canada of the being sown and reaped. In all industry in mowers, harvesters, this development, Mr. Findley had reapers and self - binders, the a great part. His personality, a composite of kindness, cool preto be found at every point of the cision and wonderful foresight-



The Johnston Harvester Company

to hold the loyalty and the last ounce of interested service on the part of the entire staff.

The heads of the company trusted him; his common-sense "views" and sound judgment were to them as much a matter of course as his fidelity to the ordinary affairs of the countinghouse, and it was, therefore, no surprise to anyone (except, perhaps, himself), when he was appointed president and general manager on the death of Sir Lyman Jones in the present year.

We have only a brief space left to refer to the magnificent convalescent home which has been equipped in England by the Massey-Harris Company for the reception of Canadian soldiers during their period of conva-

Largely through the importunity of Mr. Findley, this home was leased for the humane purpose to which it is now devoted for the period of the war and so long afterwards as may be neces-sary." It is one of the many im-It is one of the many imposing residences, built in modern times on the old Elizabethan or "baronial" style by one of the merchant princes of London.

"Kingswood" (the Massey-Harris home) is situated in magnificent park-like grounds of about 30 acres at Dulwich-a south-eastern suburb of the big metropolis. Here may hundreds of brave lads who have been "hit out" in the great game have been quickly restored to health, and there is probably not a unit of our splendid citizen army that is not ringing with the praises of "Kingswood" and the tenderness of its matron and staff.

At home the boys and womenfolk of the big army of employees are doing their part nobly. The recent "Victory Loan" received a royal contribution in the accumulated savings of the "hands" of the Massey-Harris Company. They are a provident bunch, and it was in every instance a case of cheerful giving with a kindly invitation to the collector to "call again" when he needed more.

CUSHMAN MOTOR WORKS TAKE ON NEW LINE

The Cushman Motor Works of Canada, Limited, have just completed arrangements whereby they have added to their line the Shinn Flat-Cable Lightning

This product is not new to the farmers of Western Canada, having been sold here for several years as well as having enjoyed a large and extensive patronage from the farmers of the United States

This product, coupled with the magnificent sales organization of the Cushman Motor Works, and under the leadership and supervision of A. E. Donovan, Canadian manager of the company, should prove to be a very happy combina-



What Did Little Mary Plant?



NO MONEY REQUIRED TO

JOU do not have to pay a ceut, or buy anything, to enter this interesting contest, and to qualify for one of the Big Frizes. All you have to do is to send in your abovers. Then to do is to send in your abovers. The whole of the prizes of th Women, "the new magazine for women, and will be asked to show your copy to some of your rural friends or neigh-bours, to make them acquainted with it and interested in it.

it and interested in it.
The Prises will be awarded to the diry qualifield contestants whose entries have the
field contestants whose entries have the
greatest number of correct or easily correct,
names, which are considered by the judges to
the Competion, etc.
The Competion is open to all persons over lot
The Competion is open to all persons over lot
graves of age mere and women, boys and griss,
para of age mere and women, boys and griss,
para of age mere and women, boys and griss,
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The Contest Editor, RURAL CANADA

TELL US AND Win a Motor Car, Piano, Pony Bicycle, Phonograph

Range, Watch, Sewing Machine Etc., Etc., Etc., Etc.



had her own garden. What did she plant in it? The pictures tell you! Put your wits to work, and make out the secrets of the pictures! Those who send uscorrect or near correct, answers qualify for these

BIG PRIZES

oth prize—Singer Sewing Machine (or cash)
7th prize—Standard Cream Separator.
8th prize—Hoosier Beauty Kitchen Cabinet (or cash)
9th prize—High Grade Blcycle (or cash)



Big Complete Prize List Sent Free

Address Solutions to

- 226 Continental Building, Toronto

YOU WILL BE PAID A RE WARD OR CASH WARD OR CASH

2 VRRY qualified contestant will receive surely a valuable reward, or cash, as may be preferred (send for list) for introducing the new magasine, Rural Canasid for Women, to some of your friends and neighbors. These Big Prizes which may action to the Big Prizes which may action to the Soberjus right now to solve the pursuing pictures. Tell us what Little Mary planted in her garden. To bein you get rightly started. Pictorially produced to the pursuing picture. No. 8 is Beets (Bee Rais. So you see how to study the pictures. Can you get them all right? Try!

RULES

ANNUAL MEETINGS OF THE SASKATCHEWAN LIVESTOCK ASSOCIATIONS

At a joint executive meeting held in Regina on November 16th it was decided to have the annual meetings of the associations take place in Regina on January 3rd and 4th next. While those present agreed that the College of Agriculture at Saskatoon offered superior facilities for the holding of the meetings, it was generally admitted that, due to conditions arising from the war, such as labor shortage which would make it difficult for farmers to be away from home for any length of time, only business meetings should be held and for this year, at least, demonstrations and lectures dispensed with.

These meetings will include the Saskatchewan Cattle, Horse, Sheep, Swine, and Poultry Breeders' Associations. A programme is now being prepared and free return fares on the standard certificate plan will be arranged for.

A Poor Example

Little Ernest looked up from the book he was reading.

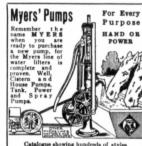
"Father," he asked, "what are ancestors?"

"Well," replied his parent, "I'm one of yours, and your grand-papa's another."

There was silence for a few moments while Ernest thought hard. Then he looked up again and said brightly: "But, father, why should people boast about them?"

PATENTS: CANADIAN, FOREIGN-Egerton R. Case, Patent Solicitor, Temp Building, Toronto. Valuable booklets free.

FOR SALE—25-50 Avery Gas Tractor, juipped with extension rims and in best of ordition. Also six-furrow Cockshutt Plow. equipped with extension rims and in condition. Also six-furrow Cockshutt A. L. Bates, 496 Telfer St., Winnipeg.



Catalogue showing hundreds of style F. E. Myers & Bro., Ashland, Ohio

The TOWNSLEY SYSTEMS of Ventilation

and Lightning Protection

have proved the most effective means ever introduced into Western Canada for the safeguarding valuable livestock and buildings from the vicious effects of foul air and the destruction of electric storms.

Made in Canada

It pays to patronize Home Industries when Materials are always guaranteed.

Ventilation

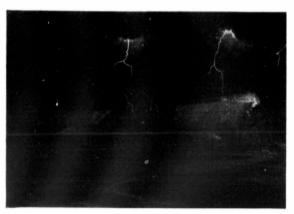
Lightning Protection

guarantee against lightning known to science to-day, but the man whose buildings have been rodded by this system will SAVE MONEY IN REDUCTION OF HIS INSURANCE RATES that will guidely pay cost of installation.

BARNS, CREAMERIES, CHURCHES, SCHOOLS

guaranteed against disaster at a very small cost and the appearance of buildings greatly improved.

Dealers! There's a great business for you in this. Write for our SPECIAL 1918 PROPOSITION.



Ganadian Lightning Arrester and Electric Co., Ltd. BRANDON, Man.

A GREAT HOME INDUSTRY

Continued from page 24

tions, and which is now sold to the public as the unchallenged two-dollar "Knock-Out" glove. For the season of 1918 they are working out a splendid "Northland" two-dollar working mitt which, as experts in their own line, they know will "lick creation" and will bear the company's absolute guarantee.

Seven commercial travelers are at this date covering the western territory representing the Northland company who hold large sample-room premises in Vancouver, Edmonton, Regina and Saskatoon

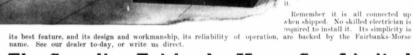
To cut down waste in working expenses to the last vanishing fraction, a system is being carefully worked out by which it is expected that the whole factory by the end of the present year will be run (if not on a "peace footing") at least on a piece-work To do this, particularly plan. with knitted goods, will require some delicate handling, but the management feel confident that it can be brought to a successful issue.

Finally, owing to the rapid pace at which this manufacturing house. has continued to push ahead, it has been found necessary to engage the services of an experienMillions Enjoy This---Do You?

Have you deprived yourself of what millions enjoy-the comforts of clean, bright light, that makes their homes cleaner, brighter, and more cheerful?

more cheerful?

No longer do you have to think of spending a huge sum of money in order to install an up-to-the-minute Electric Lighting plant. We have built this "Mor-Lite" Plant for you. It's simple, compact, self contained and semi-automatic, and a big feature not to be overlooked, is it's moderate price. It's self starting with push button, self stopping when batteries are full, and self running. Simply pushing the button starts the engine. Your lights are run from a storage battery in which electricity is storage up so that you can use it just as you draw water from a tank. The battery is charged, or the electricity is stored up by a simple, self contained plant that almost runs itself. A unique feature is the meter lial that shows at all times the amount of electricity in the battery. Ask us for prices and let us tell you all about it.



The Canadian Fairbanks-Morse Co., Limited

ced factory superintendent whose sole business will be to watch, check and superintend production and also to effect improvements in the conditions of the employees where anything of the kind can be carried out.

The Best of Answers

Field-Marshal Joffre-Joffre the Taciturn-is, like other taciturn great men, epigrammatic.

In his youth, at the military school of St. Cyr, he was once asked the question:

"Suppose you commanded a town that was invested by the enemy, and this town was threatened with starvation. How would you get provisions?"

"I'd get them from the enemy," the young man answered.

NO LIMIT TO CENTRAL ALBERTA

country to farm in; a good place to do business in; and a mighty pleasant place to live in. It is an attractive, pleasant, homelike country; a country that newcomers at once take to and to which they become quickly attached. The women like it; the children like it."

So runs the opening paragraph of a new publication issued by the Edmonton Board of Trade which has just come into our hands. It has been specially prepared for the information of folks in search of the best they can find in those conditions and pursuits which they look upon as their natural environment.

Without prejudice to any contemporary production or anything of the kind that has gone before it, we can say that it is the smartest piece of typographical art we have seen in many a day. The illustrations are superb and the whole thing has been done in the city of Edmonton; the printing by the Edmonton Printing and Publishing Company, Limited, and the illustrations by the McDermid Engraving Company, Limited.

Best of all, the literary matter is on the face of it a simple, straightforward statement of facts. Some of these are very remarkable, but we have not read a line in the book, the substance of which we could not corroborate from some independent information in our own possession in Winnipeg.

One rather striking instance of the kind was furnished us the other day by a friend in writing us about recent developments. He referred particularly to an American acquaintance who has come to the Northwest, lured by what he has heard of what could be done there. We quote from our friend's letter and are happy

ENTRAL Alberta is a good to reproduce on this page a photograph of the Mr. Williams he Northwest country, where feed speaks of, together with his celebrated Hereford:

> "Mr. Williams is a Pennsylvanian and had no former experience in farming when he located on the line of the Grand Trunk Pacific near Edmonton three years ago. His wheat this year is grading forty bushels to the acre (and although I have not seen any threshing reports)

the cattle and hogs are developing.

are certainly wonderful in that

can be grown so reasonably on the

virgin soil where no fertilizer is

"Our trouble in the eastern por-

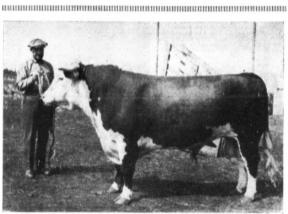
tion of the United States, on the

part of the farmers, in trying to

produce meat product, lies in the

difficulty found in growing feed to supply the needs cheaply while

needed, and at so little cost.



A great sire for Central Alberta and the man who owns him

if it is like most of the wheat along our line this year, it is grading No. 1 Northern; but still more interesting is the fact that Mr. Williams has taken a lead in stock raising in his district, to

the extent, as indicated, of own-

ing a bull valued at \$7,500. Mr. Williams was located by the New York representative of a large land company, who in writing to the Grand Trunk Pacific includes the following re-

"The opportunities in the line of cattle and hog production

marks in his letter:

"There are millions of tons of grasses in Alberta, not used, and hundreds of thousands of acres of rich, fertile soil at such low cost waiting for the plow, that those of us who are acquainted with conditions wonder that the farmers of the east do not more generally take advantage of this splendid country of the Northwest."

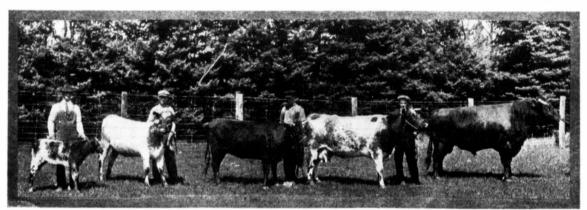
Mr. Williams is having immense success through using a little good judgment, backed up by the richness and productivity of the soil of Alberta.

Though referred to as Central

Alberta, the district lies almost entirely in the southern half of the province, a line dividing the province equally passing just south of the town of Athabasca, and about 90 miles to the north of Edmon-

In this great area of some 50,000 square miles, approximately equal in area to such states as Alabama, Arkansas, Illinois, Iowa, Louisiana, Michigan or New York, and about the size of England, there is, of course, considerable local variation as to soil, conformation, and appearance of the country. But speaking in a general way, the country is gently undulating, a succession of ridges alternating with slight depressions, and is freely interspersed with creeks, streams, ponds and lakes; and there is everywhere sufficient timber to give the landscape a pleasing appearance.

The summer climatic conditions in Central Alberta are ideal for rapid growth of vegetation, and a strong, heavy growth, whether of the various grain crops, roots, garden truck, fodder crops, or cultivated or wild pasture may be looked for with certainty any and every season. Similarly, damage from too much rain is unknown. While the annual rainfall is comparatively light, averaging only 21 inches for the six years ending in 1916, it is subject to very little variation, and may be depended upon with certainty. A very important factor is that the precipitation for the year nearly all comes during the growing season when it is most needed. When it is further considered that the clay subsoil is retentive of moisture, and there is a total absence of hot parching winds, it will be readily understood why this comparatively light rainfall combined with the wonderful richness of soil produces such luxuriant vegetation.



Things like these are as common as sparrows in Central Alberta

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$A\ Christmas\ Surprise!$

TO ALL OUR READERS—SPECIAL WHIRLWIND OFFER to our PRESENT SUBSCRIBERS and also to NEW READERS. Your LAST CHANCE TO RENEW at the OLD SUBSCRIPTION PRICE

\$4-50 Value for \$2.00 The Canadian Thresherman and Farmer For 3 Years **\$2.00** DON'T PUT IT OFF. DO IT NOW WHILE YOU ARE THINKING ABOUT IT.

Be Quick

To take either of these Offers

At Once!

\$3.00 Value for \$1.50 The Canadian Thresherman and Farmer

For 2 Years \$1.50

How and Why You Gain by Subscribing for Three Years Ahead:

Thought This

The first time you were asked to subscribe for "The Canadian Thresherman and Farmer" or some other paper, three years in advance, likely you thought "How risky! I will certainly not do anything of the sort. One year is plenty long enough."

Everybody

That is the way it strikes everybody the first time they here of a three years' subscription. This is a new idea and is an idea of which the drawbacks show on the surface right out first, whereas the advantages do not appear till you have studied it awhile.

Roth Sides First let us tell you why you should NOT subscribe for three years. Then we will show you why you SHOULD subscribe. Then we will leave it to you to judge which side has the strongest reasons and decide what you are going to do yourself.

OBJECTION No. 1—THE REGULAR SUBSCRIPTION TERM IS ONE YEAR. ALL PAPERS TAKE ONE YEAR SUBSCRIPTIONS. IT IS NOT NATURAL TO SUBSCRIBE SO FAR AHEAD.

Twelve Months Not Sacred

OUR ANSWER—All farm papers now take one year subscriptions, many take five years; quite a number ten years. They will all be taking three-year orders in time. Where did you get the idea that a twelve months' subscription is the natural one? We have never been able to find anything about it in the Canadian Law, or the Scriptures, or "Pilgrim's Progress," or anywhere else. It looks to us as if it just happened that way; for our part we do not see anything more sacred about 12 months than 36.

OBJECTION No. 2-I DON'T KNOW YOU, AND I DON'T WANT TO TRUST MY MONEY TO YOU.

Trust the Trustworthy OUR ANSWER—Quite natural and quite right. So please go to your bank or your postmaster and find out all you can about us. Ask these men what they know about the E. H. Heath Co., Limited, Publishers, Winnipeg, Manitoba. If you can find some of our subscribers (they are everywhere talk to out how long we have published "The Canadian Thresherman and Farmer" (it is about fifteen years now); ind out whether we pay our debts; find out if we keep our promises, and find out whether we have a good reputation for telling the truth, but when the control of the contr

OBJECTION No. 3-I MAY NOT LIKE THE "CANA-DIAN THRESHERMAN AND FARMER."

Money Back Any Time OUR ANSWER—That is so, we cannot be sure the paper will suit you. We never guarantee a pig's tail to curl in any particular direction, we would therefore ask you to read all about our guarantee to subscribers which appears on this page. We have made this guarantee exclusively for your protection.

OBJECTION No. 4—YOU HAVE THE USE OF MY TWO DOLLARS FOR THREE YEARS. I WOULD RATHER KEEP IT AND PAY YOU A YEAR AT A TIME.

The Low Price MAIHER KEEP IT AND PAY YOU A YEAR AT A TIME.

OUR ANSWER—Of course you would. But—if we took one year subscriptions all the time you could not buy "The Canadian Thresherman and Farmer" at anything like the price you do now; further, our subscription rates will be advanced to \$1.50 per year, commencing January, 1918. When you subscription twice—postage, paper, envelopes, con his acrecipts, clerk hire and twenty other expenses that would not occur to you. You can get three years for two dollars, where a one year subscription would cost you at least \$1.50. You save your own time, too, and two stamps, two envelopes, two money order fees and bother and time worth at least one dollar by itself.

There are three reasons, all good ones, why you should pay for three years in advance. First—it saves our morey and time. Second—this enables you to save your money, giving you \$4.59 worth of our paper for \$2.00. Third—it relieves you of all trouble and bother for the next three years. This closes the case: we will leave the decision to your good sense. We are sure you are why we are offering you a three years' subscription at a reduction your are subscribing. Our policy naturally shuts out many short sighted, obstinate people who will not allow themselves to be convinced by logic, who close their minds to every new idea, or to whom a dime in the front of the eye looks better than a dollar on the mantelpiece. We do not believe that Thanking you for patiently reading through this argument, and hoping to hear from you. That's

E. H. HEATH CO., LIMITED.



E. H. HEATH CO., Ltd., Winnipeg, Man.
Please send me "The Canadian Thresherman and Farmer" for years,
for which I enclose

Your renewal sent in now will enable you to save one-third of the subscription price, because "The Canadian Thresherman and Farmer" will cost you \$1.50 per year, commencing 1st January, 1918.



CUT IT OUT!

Owing to war conditions and the increased cost of production we will be obliged to advance the subscription price of "The Canadian Thresherman and Farmer" after 1st of January, 1918, from \$1.00 per year to \$1.00. That is why we are year to \$1.00. That is why we are nity to renew at the old rate at this time.
Your order in advance now will help us to lay our plans for the future. Don't wait until the last Send \$2.00 now and we will renew your subscription for three years.

Guarantee to Subscribers

Guarantee to Subscribers
Realizing that persons unacquainted with
"The Canadian Thresherman and Farmer"
may hesistate to pay for three years in
advance, we guarantee:

(1) That within three months after paying for "The Canadian Thresherman and
the paper, and the full amount paid for the
subscription will be refunded.

(2) That after three months any subscriber
may order the paper discontinued for any
reason, or or NO reason, and the unused
proportion of the amount paid for the subscription will be refunded.

E. H. Heath Co. Limited, WINNIPEG

HEAR

PANTAPHONE

QUALITY

INSTRUMENT

Maytag Multi-Motor Washer



What the Maytag Multi-Motor Washer Will Do

It operates the washer and wringer. It will operate the sewing machine, churn. cream separator or any other small machine that does not require more than 1/2 H.P.

This washer will not injure the daintiest is, or the most delicate laces—and it handle heavier blankets — doing the twice as well and in less than half time required by the old-fashioned ter or back-breaking, knuckle-skinning





The Maytag "Multi-Motor' Engine

The Lightest, Most Powerful One-horse Engine ever built.

- 1 Set of Columbia Sealed Batteries. 1 Lemke Coil.

1 Gallon Maytag Multi-Motor Special Oil.

The Maytag Company Limited

CHANGES IN PERSONNEL OF JOHN DEERE PLOW CO.

On January 27th, 1908, there arrived in Winnipeg from Minneapolis, a gentleman in the person of Mr. David Drehmer, who assumed the position of assistant manager of the John Deere Plow Co., Ltd.

At that time Deere and Co. were just branching out in the Canadian West on their own behalf, although goods had been sold in Western Canada for a number of years through the old Fairchild Co.



DAVID DREHMER. Vice-President John Deere Plow Co., Winnipeg

During the succeeding nine vears Mr. Drehmer has been connected with the John Deere Plow Co., holding position of assistant manager up to January 1st, 1915, when he became manager, secretary and treasurer of John Deere Plow Co., Ltd., Winnipeg, the business of the John Deere Plow Co. having been split up into the John Deere Plow Co., Ltd., Winnipeg, the John Deer Plow Co., Ltd., Regina, and the John Deere Plow Co., Ltd., Calgary.

This position Mr. Drehmer held until recently when a further promotion came his way in the form of the vice-presidency of John Deere Plow Co., Ltd., Winnipeg, succeeding Mr. H. W. Hutchinson who resigned and has severed his connection with the company.

Mr. Drehmer still retains his position as manager and secretary, the position of treasurer now being held by Mr. Burton F. Peek

Mr. Drehmer began his implement career at the tender age of sixteen when he entered the employ of a retail implement dealer in Geneseo, Ill., a position which



Leads them all in Beauty, uslity, Tone, Size, Value. Prices \$22.50 to \$90.00 FREE Illustrated Catalogues of Pantaphones and Records mailed upon request.

Dealers ! SPLENDID PROPOSITION
TO DEALERS in unrepresented towns. Write for details.

PAR-O-KET

QUALITY RECORDS

Size 71/4 in.



The Canadian Phonograph & Sapphire Disc Co., Limited 98 Builders Exchange Bldg. (4th Floor) WINNIPEG, Manitoba 408 Builders Exchange Bldg. (4th Floor)

\$100 in Christmas Prizes

WHAT PRESENTS ARE IN THE CARS FOR BOYS AND GIRLS \$100 IN CASH PRIZES FOR





SO that we may become acquainted with more young people this Christmas, we are giving you this train loaded down with Christmas presents. Each car contains one presents. Each car contains one kind of present and the name is on each car but the man who painted the name got the letters all jumbled. Worse still, the man who coupled the cars got them in the wrong order. Now, can you straighten things out and re-arrange the letters in the names of the presents in each car and put the cars in their right order behind the locomotive?

Order Defining the locomotive?

Car No. 6, DOES ILL, contains "Dollies." The
other cars may contain gloves, candy, baseballs
and the cars may contain gloves, skipping ropes
nine pins, engines, skates, Noah's Ark, perfume
lanterns, tools, footballs, games, or something else
It is for you to find out.

Should you get the cars behind the locomotive in their right order, you will find that the first letter of the correct name of each Christmas present in each car when these first letters are all put together will spell out the name of a great Nation in Europe, one of the Allies—a Nation whose Navy controls the Oceans.

the Oceans.

On Christmas Day, Uncle Peter, who edits the Bunny Page in EVERVWOMAN'S WORLD, will judge the answers and award the following big cash prizes to young people under seventeen years or age complying with the conditions of the contest, whose answers are all correct or nearest correct, neatest and best written. So get busy and send in an answer to-day, and this Christmas Season may be the happlest you have ever had.

The Big Cash Prizes

\$25.00 Cash to the Boy or Girl who sends us the best reply. \$15.00 Cash to the Boy or Girl sending the second best reply. \$10.00 Cash to the Boy or Girl sending the second best reply. \$10.00 Cash to the Boy or Girl sending the second best reply. DOLLAR BILLS. Fifty bright, new, crips \$1.00 bills to the fifty next Boys and Girls with the \$0 next best replies. If you are bright and quick you will also have the opportunity of winning a Shetland Pony and Cart of the proper contest even more interesting these in a pleasant contest even more interesting the second with the proper contest even more interesting the proper part of each sheet.

用用我并用我的现在 LEARN NT **国民农产品及民民** SIN IN PEN 0 0 No.3 0 0 SAM LINA 0-0 No. 4 0-0 **** GENNIE DOES ILL SOAK HARN

Send Your Answer This Very Evening!

THERE are 51 Cash Prises and in addition other fine awards for every young person who qualifies his or her entry in this fascinating contest. Each boy or girl desiring his or her entry in this fascinating contest. Each boy or girl desiring his or her entry to compete for one of the fine prizes will be required to perform a small service for Everyowana's World for what and the fine prizes will go to our young frends and we would his you like \$25.00 Cash? Wouldn't you have a Shetchard Pony and Cart or Bicycle? These fine prizes will go to our young frends and we would like you need to the fine many control of the co

FURS Trappers, Traders and Farmers

A. & E. PIERCE & CO.

(The Largest Raw Fur Merchants in Canada) 213A PACIFIC AVENUE, WINNIPEG, Manitob
WE ARE PAYING THE HIGHEST MARKET PRICES FOR FURS

Turn to our Startling Contest on Page 63

he continued to hold for eight years. In 1887 he was elected manager and treasurer for the Geneseo Stove Co., holding that position for two years. In 1889 he accepted an offer from Deere & Co., Minneapolis, and moved to that place. His first position was as traveler, which he held for thirteen years, at the end of which time he was promoted to the position of sales manager, which he held up to the time of his coming to Winnipeg. It can thus be said that Mr. Drehmer has been connected with the Deere Co. for twenty-eight years, a period of service that speaks for business ability, confidence of both company and employees, and the stick-to-itiveness that can carry a business through all times and all conditions.

ba

Mr. Drehmer's present position is a merited one, and carries with it the confidence of the entire Deere organization.

The present officers of John Deere Plow Co. Ltd., Winnipeg, are: President, Wm. Butterworth; vice - president, David Drehmer; vice-president, C. D. Velie; treasurer, Burton F. Peek; manager and secretary, David Drehmer; assistant secretary, B. F. Dixon.

John Deere Plow Co., Ltd., Regina, recently held its annual meeting at which the same officers were elected for 1918 as held during 1917. N. O. Bervie is the manager, secretary and treasurer of this company.

John Deere Plow Co., Ltd., Calgary, at its annual meeting elected same officers for 1918 as held during 1917, with the exception that Mr. W. E. Underwood is manager, secretary and treasurer, in place of Mr. C. G. Wuthrich, who has resigned on account of illhealth.

DISTRIBUTION OF SEED AND GRAIN POTATOES

By instruction of the Hon. Minister of Agriculture a free distribution of superior sorts of grain and potatoes will be made during the coming winter and spring to Canadian farmers.

The samples of grain for distribution will consist of spring wheat (about 5 lbs.), white oats (about 4 lbs.), barley (about 5 lbs.), and field peas (about 5 lbs.). These will be sent out from the Central Experimental Farm, Ottawa, by the Dominion Cerealist, who will furnish the necessary application forms.

A distribution of potatoes in samples of about 3 lbs. will be carried on from most of the Experimental Farms, the Central Farm supplying only the province of

by mail. Only one sample of over six per cent, but on enquiry

Preserves getting low? Tide over the winter with

CROWN BRAND

Everybody likes this delicious Table Syrup—and it's much less expensive than butter for the children to eat

At all Grocers-2, 5, 10 and 20 lb. tins- 3 lb. Glass Jars. Write for free Cook Book.

THE CANADA STARCH CO. LIMITED, - MONTREAL.

Buy HALLAM'S Guaranteed

FURS

BY MAIL Direct from TRAPPER to YOU

No matter where you live, you can obtain the latest styles and the highest quality in Fur sets or garments from Hallam's by mail. All Hallam garments are high quality Furs—yet can be obtained by you direct by mail at lower prices than elsewhere for the same quality—every Hallam garment is guaranteed.

Why We Can Sell at Scuck Low Prices state and the Tapper, and sell at seven the Tapper, and sell at seven the Tapper, and sell select to you for cash, saving you a great share of the middlemen's profits—high arises the articles in your own home and can examine them without interference if the goods do not please YOU in any way—you can simply send them back AT OUR EXPENSE, and we will cheeffully return your money—you are not out have goods returned. The articles illustrated in this advertisement are fair samples of Hallam's grate Value and will be ent promptly on receipt of price.

of Hallam's great values and will be set 1506. Driving Coat of Fine Muskrat. 45 inch length, beautifully designed. Skins are of time quality even, disc standard of the quality even, disc manship is faultless. Lined with heavy guaranteed brown satin—n-w syle collar, which can be worn as a high Chin-chin or flat as in small illustra-tion. Fluinbed at waist line with half belt. In sizes 32 to 42, bust. 457.00, delivered to you. 1508. Muff 25.00, delivered to you. 1509. That to match, silk lined. 47.50, delivered to you.

1866. Handsome Manchurian Wolf Set. Newest design, made from fine, et black silky skins. The large stole is in two skin style, wide across the back and shoulders—trimmed with heads, tails and paws. Muff is large and comfortable, made over soit down bed—has wrist cord and is trimmed and bed—has wrist cord and is trimmed and silk polin. Exceptional value.

205 Hallam Building TORONTO



HALLAM'S 1917-18

FUR STYLE BOOK

grain (and one of potatoes) can be it was found that a new hand on sent to each applicant. As the supply of seed is limited, farmers are advised to apply very early.

TESTING

Your herd test at the factory runs perhaps 3.9 or 3.5 as a rule, but supposing you took a sample from one or two cows separately. would you be surprised to find one milk testing 2.6 and another testing 4.3? Some samples of milk from three individual cows that had been sent in for a special test All samples will be sent free at one factory ran up last month

the farm had not understood it is necessary to get a representative sample of all the milk, not the

strippings only.

To get results that will be of benefit, the person who takes the samples should be careful to get an accurate sample of the whole milk. Don't "monkey" with the test. Information that is of vital importance to the man intent on building up a good herd, cows giving an abundance of milk of good quality, is obtained from careful sampling and accurate testing.

Of course, milk varies in composition, the dairy cow is of a

nervous temperament; if it did not vary there would be little need to test. But the very fact that the test may be up one day and down another, within certain reasonable limitations, makes it advisable to test composite samples occasionally. Your testing can be done by yourself or at the factory by joining a cow testing association. Composite samples of each cow's milk may be tested monthly free of charge. If there is no association in your locality persuade some neighbors to join with you and write to the Dairy Division, Ottawa, for milk record forms.

Our Coming Engineers

Down in southern Manitoba there is in operation a side line in education of which very little is heard outside of the which very little is heard outside of the four or five points covered by the experiment. We have said "experiment" but it has long since got beyond that stage. It might be said that it reached maturity within a few days of its birth. There was so much of the common-sense about the idea, and so much of the "love at first sight" in its working details, it started well and its cumulative success is little short of marvellous.

We refer to the work of the Manual

We refer to the work of the Manual Training Circuit which is being superin-tended and conducted by Mr. M. F. Pringle, of Killarney. Some time ago the writer followed with intense interest a demonstration given by this gentleman at a Teachers' Convention held in Crystal at a Teachers' Convention held in Crystal City. The demonstration was a direct appeal through the sense of sight. Very little had to be said. The exhibition of handicraft executed by the pupils spoke more effectively than words and the few modest statements Mr. Pringle did make unconsciously revealed the man's inher-ent fitness and his enthusiasm in the fine scheme for the training of the young people.

The "circuit" was brought into exist-The "circuit" was brought into exist-ence by the co-operative efforts of In-spectors Parr and Gordon, the boards of the several districts all working under the wing of the Department of Educa-tion. The following brief details will give a rough idea of what is included in the programme of this special work.

A workshop is equipped with the necessary tools in each place at Killarney, Crystal City, Pilot Mound, Manitou, and the Manitou Normal School. Mr. Pringle is in charge and spends one day at each of the above points each week.

each of the above points each week.

The classes in each of the schools come
in regular order every week. About
an hour is spent in the manual training
room, and instruction is given in the use
of tools, sharpening tools, making useful
articles on forge and work bench. In
beginning the work the pupils make
the work benches, bench stops, bench
hooks, saw horses, the necessary tool
cases and shelving.

the work benches, bench stops, bench hooks, saw horses, the necessary tool cases and shelving.

The Department of Education pays for half of the equipment, and provides a substantial grant towards the teachers

substantial grants alary.

After one year's work has been done, retrospective view of the work is taken with the idea of formulating a regular course. At the date of writing the following conclusions have been arrived at:

1. That the course should be taken up

in three of the school years at least; in

grades seven, eight and nine.

2. That a course should be arranged that will be largely selective on the part of the pupil. With this in view, the following has been arranged for this

year: I.—The first five subjects are necessary—three more to be selected to complete lat year's work. Window prop, plant stand, broom holder, trinket box, match safe, teapot stand, necktie rack, towel rack, talnet, nail box, milk stool, wheelbarrow, wagon box, grain pickler.



M. F. PRINGLE. Instructor Manual Training Circuit, Southern Manitoba

The last three are to be made by boys

The last three are to be made by boys devoting special time to the work.

Year II.—Five models selected. Stationery box, work basket, hall tree, clothes horse, medicine case, book rack, sled, ironing board, caned stool, bench.

Year III.—Four models selected. Clock shelf, bookcase, music cabinet, umbrella stand, study table, Morris chair, step ladder, piano bench.

At the forge, the boys make S links, staples, open links, four kinds of hooks, weld links, rings, clevises, bolts, punches, center punches, cold chisels and hammers.

mers.

They make drawing boards, T squares, triangles, and with this outfit take one year of mechanical drawing or what is equal to one year's work in a technical

school. Considerable repair work is done in one way and another.

During that season of the year in which boys' and girls' clubs are active, the manual training instructor takes an active part in assisting the several clubs in his circuit. This year plans are in progress whereby he shall give demonstrations on soil culture and seed planting with kindred subjects previous to strations on soil culture and seed planting with kindred subjects previous to the pupils taking up home garden work. He also acts as one of the judges in the home garden contests.

We hope to return to this subject later on. We cannot extend our space in this issue but close with an expression of the hope that what has been said will stimulate interest in other districts of Mania.

nope that what has been said will stimulate interest in other districts of Manitoba in a class of work which, on its moral side alone is worth all the time money and thought, which can be given to it by those men who have the interest of the young peop! o so much at heart.

FISHING FOR MINES IN THE NORTH SEA

An American correspondent, having been granted a pass by the British Admiralty to spend a week with a mine-sweeper on the North Sea, has related his experiences. "We plowed along," he says, "very slowly—keeping abreast of the other vessel, and with nothing to show

says, "very slowly—keeping abreast of the other vessel, and with nothing to show that we were connected except a few feet of cable where it ran down the side into the apparatus which keeps it below the surface. It was quite monotonous, and a bit dreamy, this crawling along over the North Sea with nothing happening.

"And that is what we did most of the time I was aboard that vessel. Shooting at ducks and bits of driftwood with a Winchester rifle was the most pleasing diversion. It was late in the afternoon that we made our first eatch. A sudden tightening of the cable made it clear that we had hit an obstruction. There was just a slight trenor all through the boat. Everyoody stepped to the rail and gazed intently into the water.

The Winchester Puncture

"That'll be one, said the commander, as the cable relaxed. Sure enough, it was 'one.' The Boche mine broke the surface of the water and floated free, her mooring of one-inch steel cut off as cleanly as if with a mighty pair of shears.

"The boat manoeuvred until the mine hay about 80 varies to starboard. Four

pair of shears.

"The boat manoeuvred until the mine lay about 80 yards to starboard. Four of the men lined up at the rail, as many Winchester rifles spoke. Then the men bent eagerly forward to see what would be the effect of the volley. Luck was theirs that time. The steel bullets had punctured the air-chamber of the mine, and slowly, almost reluctantly, it seemed, the ugly thing sank from sight. The young commander smiled as he directed the renewal of operations. There goes two hundred pounds of good German T.N.T.' he chuckled."



BUY LUMBER FROM US

SAVE 20 TO 40 PER CENT.
The Grain Growers' Guide says that in 1914 it took 18,9 bushels of wheat to buy 1000 feet of lumber. Today it, abushels, the difference—7,3 bushels of the took 18,0 bushels

els. The difference—3 uniner thousand feet. Put the Middlemen's Profits in Your Own Pocket.

We suil direct to you everything you need for a house, hear or outlinding—tumber. It is, window, doors, etc., at less than relative to the profit of the total the state of th

your states. What Customers Say:
(We have bundreds of such letters.)
(John A. Thompson, Macklin, Sask, writes.)
Answ received the car of lumber you shipd, and am very well satisfied with it. in
c, the carpositers say the finishing lumber
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for success."

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Rev. Father Unberberg. Claybank. Sask... "Rev. Father Unberberg. Claybank. Sask... "Rev. Father Unberberg. Claybank. Sask... "Anaking the United States of Unite

other gaper."

PERFECT CO-OPERATION.

R. Johnson. Sec.-Treas. Primate wers' Assa., Primate, Sask., writes: ". 109598 arrived O.K. and has give of satisfaction. Everything was in the parties who ordered are more shed. I am pleased to recommen ber our Association received from your order. Association received grades, and better d from other compa

The F.M.T.C. LUMBER C



A Corner in the Manual Training Room, Killarney, Man

THE-C. P. R. GIVES-YOU TWENTY YEARS TO PAY

An immense area of the most fertile land in Western Canada for sale at low prices and easy terms ranging from \$11 to \$30 for farm lands with from \$11 to \$30 for farm lands with ample rainfall—irrigated lands up to \$30. One-tenth down, balance if you wish within twenty years. In certain areas, land for eale without settlement conditions. In irrigation districts, loan for farm buildings, etc. up to \$2000, also repayable in twenty years—interest only 6 per cent. Here is your opportunity to increase your farm holdings by getting adjoining land, or to secure your friends as meighbors. For literature and particulars apply to Allan Canceron, General Superintendent of Lands, Department of Natural Resources, 913 Parts Street East, Calgary, Alta. JS ...

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Farm Help Will Not Be Drafted

Food Production Vital

"I will see to it that if any farmer's son, honestly working on a farm for the production of food, is drafted, he will be discharged from The Canadian Expeditionary Forces, if he goes back to the farm."

> -Gen. Mewburn, Minister of Militia, Dundas, Nov. 24th, 1917.

"In the general policy of the law and instructions issued to the tribunals, the farming industry is certainly recognized as one of the utmost importance to the national interest and therefore it is the duty of the tribunals, in the proper execution of the responsible duty with which they are charged to see that effect is given to farmers' claims in proper cases."—E. L. Newcombe, President Military Service Council, Ottawa, Nov. 26th, 1917.

ENTITLED TO EXEMPTION—"Men who are habitually and effectively engaged in the growth of agricultural products and whose labor cannot be diverted from that occupation without substantially diminishing the necessary supply are, in the view of the Military Service Council to be entitled to exemption, so long as they continue to be usefully employed in farming. It is assumed that the tribunals will realize that the farming industry should compete successfully with military service in those cases where it is established that the withdrawal from the former occupation of men qualified for the latter service, will materially diminish the output or production necessary for the maintenance or efficiency of the expeditionary forces or the support of the people at home."—Military Service Council, Ottawa, Nov. 26th, 1917.

The country relies on the farmer, not only for food, but for striking a sane balance on political matters. Free from the turmoil of city life, he has a sane, clear view of large affairs.

In the present crisis he recognizes clearly that the real political leaders of both parties have cast aside party allegiance and have joined together for the winning of the war. This is the one great issue and to see it accomplished requires the whole-hearted support of every patriotic Canadian.

Support Union Government

Quebec, which has not done its duty in this war to its mother country, France, to the protector of its liberties, Great Britain, or to its native land, is solidly lined up against Union Government with the determination, rabid in its intensity, to bend the rest of Canada to its will. By appealing to the slacker it hopes for Victory.

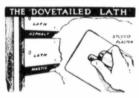
Unionist Party Publicity Committee

Have You thought of STUCCO

as a finish for your new house—as a renovator for your old one—as a sub-stantial, permanent, yet moderate priced material for the walls of barn, garage or granary? It looks fine—costs nothing for paint or upkeep—and when applied on a foundation of

BISHOPRIC STUCCO BOARD

it never cracks or comes off.



BISHOPRIC STUCCO BOARD

is made of tough, heavy sheets of Asphalt Mastic, surfaced on one side with sulphite fibre board and reinforced on the other with No. 1 kiln-dried, beveledged lath. It is nailed direct, lath side out, to the studding or on the siding of an old building. The stucco is clinched in the dovetailed spaces between the lath, and is there to stay!

Bishopric Stucco Board thus takes the place—does the work—and saves the cost—of lath, furring strips, building paper and sheathing lumber, at but little over half the total cost.

Write for sample and descriptive Booklet, showing houses built the econ-omical Bishopric way.

Bishopric Wall Board Co. Limited 529D, Bank Street, Ottawa, Ontario

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SENECA ROOT

Ship all yours to us. You can depend on honest grading, top prices and prompt payment.

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Snot Cash for Raw Furs

Why sell for less money than y? Get our offer before you se of a single skin.

BACH FUR COMPANY
Dept. 178 Chicago, III

WANTED—Farm Manager, capable of assuming entire charge of large grain farm in Southern Alberta, Canada. Must be fully experienced and have good record. Agricultural college training. State full qualifications in first letter.—B. J., Box 3184, Winnipeg

FOR SALE—Or would exchange for a good portable of 20 or 25 h.p., a Rumely oil pull tractor, 25-45 h.p., complete with extension rims and self steerer. Been run two seasons. Good reason for selling. W. Garnet Leffar, Dropmore, Man.

BTEAM TRACTORS—One 38 h.p. double ylinder Geiser (rebuilt), just like new, runs ike a watch, \$2,000.00 cash; one 36 h.p. double, orth West, single cylinder, rebuilt, \$1,000.00 ash; one 30 h.p. Nichols & Shephard, good order, \$500.00 cash. Apply P.O. Box 178,

BIG TRACTOR RECLAIMS A MARSH

C. A. Koontz

Y tractor experience began in the winter of 1912. A friend and I took up a correspondence course with Company and later attended their practice school. In May, 1912, I was called to Emmetsburg, Iowa. I landed there the latter part of the month and went to work for a real estate company on reclamation work. The engine was a 30-60 -- and was three years old. It had been run the two seasons before by inexperienced operators and was not in the best of shape but, after a few adjustments, we got started and broke about two hundred acres which were afterwards sown to flax. After it was too late to sow flax we kept plowing until seeding time in the fall. Then we disced and harrowed about one hundred and seventyfive acres which was sown in rye, after which we started back setting some of the early summer plowing. This work was all done on a section and a half and under most severe conditions as the place was full of sloughs and ponds which had always stood full of water. As soon as we could get the water off of a few acres and get the ditches filled, we would start plowing. The ditches usually were not filled very well and the wet dirt left on the banks would fill the lugs on the wheels until we would have to unhitch the plow and get out and use a longer hitch to pull the plow across the ditch. And many times the foreman would ask us to plow through a pond where the water had been off the ground only a few days and we would mire. We always expected this and had provided a team and other means of getting out. put in two seasons with this company at this kind of work. I don't know what the work cost them per acre, but they told me it was much cheaper than with horses as they had used both. didn't plow more than twelve to fifteen acres per day as I only worked ten hours in the field. You can imagine about what we had to contend with as there were seventy-five hundred rods of tile put in on this place and in the spring when the banks were a little wet we had to unhitch from the plow and get the engine across the ditch, then pull the plow across with a longer chain, then unhitch and back up again

to a short hitch. As far as motor trouble was concerned we had very little and only a few short delays and we would get our repairs from the factory in from six to 'twelve

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DREADNAUGHT Built like a bat-tleship—for heavy duty under all conditions. More

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Let us build you a rugged, practical combination Tractor and Truck, that will give you 100 pc. service pulling a will you have the property of the p

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ADVISE

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Head Office: REGINA Commission Dept.
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WINNIPEG

YOMEN FOLK

CONDUCTED BY
PEARL RICHMOND HAMILTON





A few years ago the following poem was published in the American Thresherman. It was composed by a talented woman with a Christian heart, Mrs. Jeannette Storms Goodwin. The poem has helped me so much that I want to share it with our readers. I feel we all shall want to breathe a prayer of gratitude to the composer.—P. R. H.

The Birds of the Air Have Nests

"The birds of the air have nests, The foxes have holes," He said; But the babe that was born on Christmas

Day Had not where to lay His head.

The clangor of war is heard.
Discordant the ways men tread,
But the peace that came on Christmas Shall spread through the world, He said.

Grim sorrow has entered your life, And all that you love is dead, But the joy that came on Christmas Day Shall flood your heart, He said.

But how can these things be! Peace is gone and love lies dead! Oh, open the door to your struggling life, And the Christ shall come in, He said.

CHRISTMAS LANDMARKS

Back to the days of my childhood I go to the first Christmas that I remember. There was very little in the home. We lived in three rooms. There was an attie but the ratters were low and the seed corn lured the mice there, and we children were afraid to go up the stairs. Even now I can hear the ears of corn make strange noises in the night as the mice ran over them. It was Christmas Eve and we were ordered to bed early, for Santa Claus must find all children sleeping. We went to bed but we did not go to sleep. We lay whispering about Santa and wondering how he looked. So we determined to peck through the keyhole when he would come. The minutes grew longer and the eyes wider till we heard a noise near the stockings. We both crept quietly out of bed and listened and pecked. We saw "Santa Claus" and mother and we heard what they said. Then we sneaked back into bed.

The next morning we went to our

bed. The next morning we went to our stockings in a half-hearted way for some-how Christmas had lost its charm. I remember the contents of my stocking as distinctly as if I emptied it this minute. A little round gum candy in the toe and a

A little round gum candy in the toe and a Christmas card with fringe around.
One time in my college days our English teacher said that our earliest memory was usually an unpleasant one, that it had been proven so by psychologists. Why do I remember that Christmas so vividly? Was it because I disobeyed my parents by deceiving them?

The next Christmas I remember was when a satin book mark came through the mail from New York. It came from a cousin, and it was made of red ribbon fringed at both ends. My cousin had painted little yellow flowers on it and a verse from the Bible. I have the book mark yet, have kept it since my seventh Christmas.

Then there was the "Red Plush Album Christmas." I shall never forget that. We were at grandfather's home, my mother, aunt and children. Father and uncle each bought a red plush album for mother and my aunt. They were just alike and were treasured in our home many years. I can see now the pleasure in my mother's face when father gave her that album, and my aunt was

acres of land but he did not believe in Christmas. I do not know what kind of a fairy crept into grandfather's heart that night but the next week he gave grandmother a gold watch. Years passed till the Christmas in my

teens when I saw the tree in the church loaded with family gifts from the entire community. After the usual long pro-gramme when every mother's child in-

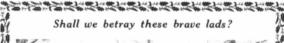
able one for the farmers had harvested good crops. Little plush boxes containing gold watches, smaller ones with "set" rings and big celluloid affairs lined with yellow satin and filled with toilet articles were distributed to the daughters of generous parents. I waited and waited till the last box was safely handed to a young girl, and my name was not called. The girls all about me had their laps piled high with packages. Something big and hot choked me so I could not sing the closing doxology. My checks burned hot and fierce. It took all the will I could muster to keep my eyes clear of tears. After I reached home I went to my room and—well my pillow was wet with tears that Christmas.

I climbed more "teens" till finally I climbed more "teens" till finally a sweetheart came into my life. The usual tree in the little church was loaded in the usual way and well do I remember the thrill that carried me to heavenly heights when I opened a box containing a bottle of perfumery and a card bearing "his" name. Just between you and me that bottle lies in the bottom of my treasure chest to-day. Call it sentiment if you will, it's there.

My happiest Christmas was the year I bought father a fur coat with the money I had earned teaching. His old coat was ragged and worn and every time he came into the house he seemed so cold. One day I thought of a Christmas coat and I could hardly wait till the end of the month for my pay. I asked one of my father's friends to try the coat on, and I bought him a good warm fur coat and a pair of mittens. I simply could not wait for the three days to pass before Christmas so that very night I put the big package at his plate. I shall never forget the expression on his face when he opened the package. After supper he hurried to town to show it to grandfather. I was so proud of him when he went My happiest Christmas was the year I was so proud of him when he went out of the door. He looked so com-fortable in his new coat. Grandfather, praised me and said it was the best thing I ever did. That was my happiest Christmas.

Christmas. It was the first Christmas after my marriage. Though I lived many miles from my girlhood home I spent that Christmas with my parents. Two of us were married and the rest were past twenty. We were all at the old home. That was our last Christmas together. One of us thought of a tree. We had never had one at home, and we wanted one. There were no children or grandchildren then. We were all "big folks," but we began to plan for the tree. The decorations and other preparations made us very happy. Father smiled and mother seemed to think it was foolish, but we four were happy. Father smiled and mother seemed to think it was foolish, but we four were children again for a night. Every one was excited when the tree was ready. was excited when the tree was ready.
Father came in and mother, too. The
big brother distributed the gifts, and
there was a genuine Christmas atmosphere that we had never experienced
before. I am sure father and mother
were extremely happy. Somehow father
was deeply touched. After all was over
there was a tenseness in the room, we elt in the atmosphere a deep regret that our childhood days had passed without a Christmas tree in the home. One can make a family Christmas tree out of any tree or bush on a farm, all it needs is a little decoration and a great deal of love. That was our first Christmas tree and the last in the old home for the family has scattered since then.

There are Christmas landmarks every life. Christmas is for childred let us all be children on His birthday.





SAVED FROM WORSE THAN DEATH

Many moving incidents occurred when the British troops were speeding through the village of Loos, and were clearing every nook and cranny of German troops. In spite of the intense bombardment which had played around the village, some of the inhabitants were still living in their shattered houses. The stalwart High-lander succeeded in rescuing a little French girl from a position of great danger, and carried her in a fainting condition to a place of comparative safety. The women of the village received the soldiers of the Allied armies with intense enthusiasm lander succeeded in rescuing a little French girl room a position or great campe, and carried her in a fainting condition to a place of comparative safety. The women of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the Allied armies with intense enthusiasm of the village received the soldiers of the village received the village received

ast as pleased. We were all happy, uddenly grandmother left the room, followed her for I loved my grand-nother as most children love their mother. I followed her for I loved my grandmother as most children love their mother.
When grandmother reached the back
kitchen she burst out crying, grandfather
had not given her a Christmas present.
She wanted an album, grandfather had
not given her a Christmas present because
he did not believe in Christmas. I called
father out and begged him to buy grandmother an album, a great big beautiful
album, nicer than mother's and my aunt's.
Father went over to the store and bought
the nicest one they had, a long blue plush
affair. I think he said it cost twice as
much as the red albums. Mother was
pleased, my aunt was glad, and I danced
around the red hot cook stove and clapped
my hands. To this day I can see the
tears in grandmother's eyes change to
glistening tears of joy. Grandfather had

flicted his elocutionary efforts on a weary audience. The superintendent chose the boys and girls to distribute presents. He called out the names one by one, and how eagerly I waited for mine. I sang in the choir. I could not sing but they filled the choir with any one who was willing to act. I was proud of my position. The matter of a few flats or sharps did not bother us, some of us sang in sharps while others sang in flats, that didn't matter.

I remember one mother's warning to her daughter every time before she went to church was, "Now don't sing too loud, Mary." There were times when Mary sang so loud that every one in the church turned their eyes in disapproval at her, but now as I think back I believe Mary was the only one in the church who really was the only one in the church who really flicted his elocutionary efforts on a weary

was the only one in the church who really

This particular Christmas was a memor-

he Kitchen must help as well as the workshop and the trenches in Lloyd George

Che thrifty housewife saves in all her sabaking by using

PURITY FLOUR

More Bread and Better Bread

le extend to all:

a hearty

Thristmas

greeting

WESTERN CANADA FLOUR MILLS CO., LIMIT Millers to the People WINNIPEG BRANDON CALGARY GODERICH



PURITY FLOUR

PURITY

Master Mechanic OVERALLS * BEST OF THE *

Are the greatest protective garments made in Canada or imported from any factory the world over. They are the product of CANADIAN BRAINS, made by CANADIAN ARTIZANS in our own CANADIAN FACTORY in WINNIPEG.

THEIR CHARACTER

They are the ideal "Jeans" for Western conditions in barn, field, factory or workshop in Western Canada. Strong, roomy and everything that can be desired in pockets.

Rivetted Buttons, Double Sewn Seams, Dust and Cinderproof Collars and Cuffs, Special Safety Combination Watch and Pencil Pockets, Patent Rivetted Unbreakable Brace Loops. Cut full and roomy all over. Made from Stifel's heavy weight Pure Indigo Drills, also Plain Blue and Black Denims, and each garment undergoes three separate examinations before leaving the factory.

Master Mechanic IS BACKED BY OUR MONEY BACK GUARANTEE

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\$4.25 for REPAIRS IN ONE YEAR!

"I was just looking over my repair account, and find it to be \$4.25 for this year;" writes E. J. Terril, of Regina, "I have plowed between 225 and 250 acres, and disced about 100 acres. I have plowed, disced, pulled two binders, and drawn grain with the Waterloo Boy and find it very satisfactory at anything you want to hitch it to. I understand there is someone telling that the Waterloo Boy won't stand up under heavy work. I would like for that gentleman to see my engine which has run every day the weather was fit since June 17th, 1916."

"I am burning about two gallons of Kerosene per acre, and am plowing land that is very soddy."

Waterloo Boy

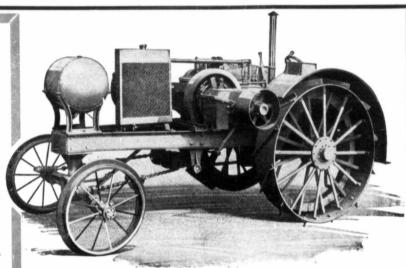
One Man

Tractor

Waterloo Boy Tractors are in actual use the country over. They are increasing farm production and lowering the cost. They are offsetting the existing lack of labor. They are returning their owners a profit.

Developing 12 H.P. at its drawbar and 25 H.P. at its pulley, the Waterloo Boy has ample capacity for every power requirement of the farm.

You need a Waterloo Boy and you need it NOW. Let us send you full particulars.



For Economic Operation, for Greater Power, Endurance and Reliability You Need This Tractor

Built for all around farm work in any season of the year. Powerful for heavy work; strong to endure continual strain. Reliable because of its perfect scientific construction; and economical because it does more work in less time, at less expense, and with less hired help.

It burns KEROSENFE—the cheapest fuel. Kerosene gives more power than gasoline—while the price of gasoline is going higher and higher. You'll make no mistake if you invest in a Waterloo Boy Tractor. It is the greatest power plant of them all—power for all farm jobs at the lowest cost.

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The New **IGHTERDAY**

High Oven Coal Range



OAL or wood was never known to produce heat at such low cost as in this marvellous Range, and you know what saving that means this year. The Oven is ready for baking in a few minutes after the few minutes after the fire is started.

It's a Beautiful, Useful Range - This New Lighterday

Cooking top is wide and deep-built, highly burnished and requires no blackleading. A shelf in front of the oven allows dishes to be drawn out for basting or testing, and you can see everything cooking through the clear glass door. Fire box is lined with ordinary fire bricks-you can buy them for a few cents anywhere if they burn out. Flues can't rust out—they're built of porcelain enamel. If you like your oven on the left rather than on the right side, you can have it so. A damp cloth will clean any part of this range perfectly.

We Guarantee Every Range

In the 59 years we have been making Ranges, we have never expected a woman to keep one that did not give perfect satisfaction. We guarantee the new Lighterday High Oven Range uncondition-

CLARE BROS. WESTERN LIMITED

Makers of "Hecla" Furnaces

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photographs every labor saving device of this marvel Range.

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Please send me-FREE-your photo story of the New Lighterday Range.



10 to 15 acres a day on Coal Oil!

Don't buy gasoline to do your plowing—use cheap coal oil—the difference in cost will make your tractor pay big dividends. This all steel, light-weight Tractor will make big profits for even a quarter-section farmer.

24 h.p. on belt

"Happy Farmer" Tractor handling 3 bottom 14 in. Plows, backsetting Timothy Sod at a depth of 8 inches on the farm of Sir Rodmond Roblin, Carman.

Well named because its size, weight, construc-tion and ease of handling all prove to the farmer that here at last is a tractor built to make farmers happy.

It's first reasonable cost is kept at a low point through its economical upkeep and fuel costs. Let us explain the big points about the "Happy Farmer" motor which has earned the name of "the perfect kerosene burner."

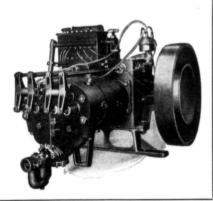
BRANDON DEMONSTRATION

has proved to Western Canada that the "Happy Farmer" is the coming machine for both small and big farms. We'll send you the official records of that demon-stration free.

Buy Now! Delivery when you like

Have us reserve a machine for you now so you will be sure of it when you're ready. The terms—half down—half next fall—or 5 per cent discount for all cash—make buying easy. Get fullest particulars about the "Happy Farmer" by writing to-night.

J. D. ADSHEAD CO. LTD., WINNIPEG





Last Chance

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Genuine New Edison

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HERE'S your chance, as prices positively will be increased Jan. 1. The very last announcement that will be made in this paper before big increase in price of the New Edison.

Orders for the increase have come from Mr. Edison himself. High cost of materials and labor have made it necessary. Mr. Edison regrets the necessity of this price raise but conditions make it essential. So, if you want a New Edison now is the time to get it. Don't put it off.

Hurry or You'll BeToo Late

Thousands of people are going to lose out on this offer unless you hurry—hurry. Don't fail to let me send you the Edison Catalog giving you all the details of the big price increase. You will have just time now, and no more than time, to let me tell about the big opportunity you have and get your order in. So "make hay while the sun shines" and rush in the coupon. There is absolutely no reason why you shouldn't save this money. You will always blame yourself if you do not. So, mail the coupon now. This isn't a matter which can be put off. Remember, now or never.

If you wish to keep Mr. Edison's superb new instrument after the free trial, send us only \$1. Pay the balance for the complete outfit in small monthly payments. (See terms in coupon on the opposite page.)

Think of it—a \$1 payment, and a few dollars a month to get an outfit of Mr. Edison's new phonograph with the Diamond Stylus reproducer, the life-like music—the wonderful Blue Amberol Records. The finest, the best that money can buy at very much less than the price at which imitations of the Genuine New Edison are offered. Get the New Edison on free trial. Just send the coupon on the opposite page. Send no noney.

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Remarkable Special Offer On This Great Outfit 03

Outfit No. 62 New Model Instrument cabinet complete—two pieces. An entire phenograph or ifft, just like the very highest priced instruments and at one-#fft the priced instrument. Capacity so records. Height of outfit complete, with 13th inches, length 17 inches. Price, complete, with 17 like herbor (Records, width, 13th inches, length 17 inches. Price, complete, with 17 like Ambero (Records, and possible pages.)



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fraction of the price asked for imitations of Mr. Edison's great new instrument. Seize this

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to come in at the old price. But those who

(See terms in coupon below).

F. K. Babson, Edison Phonograph Dists., Dept. 379, 355 Portage Ave., Winnipeg, Man.
United States Office: Edison Block, Chicago, U. S. A.

No obligation to buy in sending this coupon; this is just an application for a Free Trial
F. K. BABSON, Edison Phonograph Dists., Dept 379 , 355 Portage Ave., Winnipeg, Man.
Dear Mr. Babson:—As per your offer, I should like to hear Mr. Edison's wonderful new style phonograph with the new Diamond Stylus reproducer in my own home on free trial. Send me the outfit which I have checked below, including the twelve Blue Amberol Records. If I decide to keep the outfit, I will have the privilege of the rock-bottom price direct from you on your special terms. I agree merely to take the outfit promptly from the depot, pay the small freight or express charges, and if I do not find it thoroughly satisfactory, I reserve the right to return the outfit at once at your expense. Otherwise, I will send the first payment of \$1.00 within forty-eight hours after the free trial or as soon as possible, in no case exceeding one weeks, and will make monthly payments thereafter of (cheek the square below to the left of the outfit studies you exched to take the safety).
Outfit No. 48 \$4.50 for 10 months and \$2.40 outfit No. 62 \$6.00 for 10 months and \$1.00 for the 11th month. Complete price, with 12 records, \$48.40. Outfit No. 62 \$6.00 for 10 months and \$1.00 for the 11th month. Complete price, with 12 records, \$65.00. See the 11th month. Complete price, with 12 records, \$65.00. See the 11th month. Complete price, with 12 records, \$65.00. See the 11th month. Complete price, with 12 records, \$65.00. See the 11th month. Complete price, with 12 records, \$65.00. See the 11th month. Complete price, with 12 records, \$65.00. See the 11th month. Complete price, with 12 records, \$65.00. See the 11th month. Complete price, with 12 records, \$65.00. See the 11th month. See the 11th month. Complete price, with 12 records, \$65.00. See the 11th month. See
My name
StateShipping pointShip byExpress. Occupation
AgeMarried or Single
How long a resident in your neighborhood and your vicinity?

OSTERMOOR « OSTERMOOR » OSTERMOOR » OSTERMOOR » OSTERMOOR »

THE GOLDEN THREAD OF CHRIST-MAS LOVE

By P. R. H.

iby P. R. H.

There is a young girl in Solomon's Song and I have been greatly helped by her. She lived in a tiny country town and worked in the fields. A beautiful love story runs through her life. I think it is the most beautiful love story in all history. One day this young girl was carried off to the harem of a king's wonderful palace and was promised all kinds of jewelry and fine clothes, but nothing tenpted her. She longed always to go back to the country and marry her country lover. Purity and sincerity triumphed over painted faces and deception. Constancy and truth conquered the will of a powerful man, and she was allowed to return to her sweetheart in the country. What a fine type of girl for one to knowl the country. Wi

««•»» OSTERMOOR ««•»» OSTERMOOR ««•»» OSTERMOOR

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»» OSTERMOOR

*****OSTERMOOR**

The little captive maid, too, teaches me a beautiful lesson. No study of womanhood is complete without the sweet friendship of young girls, for in girlhood we see the beautiful materials that develop into womanliness. This par-ticular little maid was taken away from ticular little maid was taken away from her home into strange surroundings where she became a menial servant, but she dignified her position. She did not fret and worry but kept her heart unselfish in the midst of her sufferings. She must have won a place of unusual confidence in this home for the master of the house acted on her suggestion. One writer in referring to the life of the little captive maid says: "A Christian novelist should write stories of women who are not married, who, in the balance and beauty of their inner gifts, work out the healing of the world. Any writer may make a romance out of a love story, but a Christian writer may make a romance out of a romance out of a love story, but a Christian writer may make a romance out of a girlhood and womanhood which, for one reason or another, neither knows nor seeks marriage. It is women of this sort who are always ministering to souls and bodies diseased, the nurses, the district visitors, the daughters who drag out their lives and pass their youth on aged parents, the sisters, aunts and cousins who make the joy of houses not their own."

God leads the souls that He loves

God leads the souls that He loves through trouble to peace. In the weary ways of life we have losses, but after the mystery of loss there comes a time of the rapture of recovery.

'Gather up the sunbeams all along life's

ways; Bid the clouds and shadows all depart, Make a bit of heaven out of every day, Keep a glad song ringing in your heart, Share the joys of living with a comrade

worn
With her toiling in the busy mart;
Carry rays of sunlight into lives forlorn, Keep a glad song ringing in your heart.

If you lose the pathway to life's sunny height,

Take new courage for another start, If the Father leads you it will all come

Keep a glad song ringing in your heart."

You know when the heart is filled with You know when the heart is filled with love it breaks out in the expression of song. In our club of girls the passage of Scripture I have read most is that wonderful lesson in Matthew where God looked on the low estate of a handmaiden and gave her the most exalted place in history, and that is the story of Christ-mas. The honor which any prucess in the king's count would covet beyond all things was given to a lowly maid from a Galllean peasant's cottage. Galilean peasant's cottage

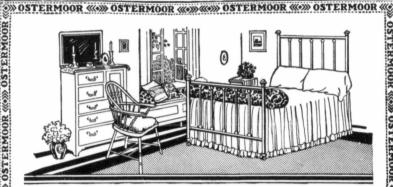
Because we cannot be An over-hanging bow



Give "Pop" a Surprise this Xmas!

UNITED MANUFAC-TURERS, Gait Bidg. WINNIPEC

THE CANADIAN THRESHERMAN AND FARMER



The Happiness and Healthfulness of Cheery Bedrooms

Good taste counts for far more than ostentatious wealth in furnishing the bedroom of today. No longer is it just a place to sleep in-nor is it heavy and depressing with hangings, furniture and carpets.

On the contrary, the modern bedroom is bright and cheery, and is usually the daintiest and most attractive room in the house.

For such a bedroom, the ideal combination of luxury and economy is the

This famous mattress—built of the finest cotton felt—gives 25 years of ideal service for \$25. That's a dollar a year—less than 2 cents a week for restful, healthful sleep. There are plenty of "OSTERMOORS" that have been in nightly use for 25, 30, 40 and even 50 years—and are good mattresses today. This is the practical economy of the "Ostermoor,"

You'll know the "Ostermoor" among a thousand by the name woven in the binding. Look for it. Ask your dealer or write us for the name of our nearest agent.

THE ALASKA BEDDING CO. LIMITED

Makers of Bedsteads and Bedding

WINNIPEG Calgary

GUARANTEE MASK BEDDIN

High Grade Every Particle."

"The Mark that Guards a Nation's Sleep



Whose promise all the world can see,

Why are we grieving so? A dewdrop holds the seven colors too; Can we not be a perfect drop of dew?"

As we draw nearer in our circle of love at this Christmas season let us feel that wonderful peace that comes from a life of loving service. It does not matter what we accomplished last year, it is what we are doing now. Many have been spurred on to high achievements by the spurred on to high achievements by the pangs of a great sorrow. They have been cloud solace in work. They have tried to banish the thoughts of the past by increasing efforts. Brigadier Potter, of the Salvation Army, told me the other day that this carried her over the crisis of sorrow when her husband and only child went down in the Empress of Ireland, and the work that comes from a great faith like her faith has helped our splendid women whose loved ones have given their lives for our safety in this great fight of to-day. Let every effort count for advancements, and let us remember that through all the gloom and sorrow of to-day that we as women must "shine with a clear pure light, like a lighted candle burning in the night." "Shining in the morning by the Master's

power, is own light adorning every wayside flower; This our glad endeavor, spreading round

us ever; From above bright rays shall ever shine. Making home more cheery, love, the blessed light,

Makes our lives, once dreary, beautiful and bright; Christ our ways dir ting, we His life

reflecting, Words and deeds shall sow the seeds of



A CANADIAN MOTHER

Five years ago this past summer I spent a day at the home of a woman whose mind was stored with such rich gems of verse that the memory of that

of those rare oasis in life's journey. Often I think back on that day when I saw that mother with her four lovely children, two young girls and two sons. They were brought up in the atmosphere of literary beauty and the impression of a mother like that must have developed ideals of pure womanhood and courageous manhood in the minds of those children. I have never met this woman since, but I found the following poem written by her, in an old copy of the Free Press. She has given in this poem a very realistic picture of the Christmas story, the reader icels that the poem comes straight from the heart of a mother.

The Christmas Story

The sinking sun crimponed the western sky, And swiftly the shadows of night drew

When weary and way-worn, in anxious

quest
Of a quiet room, two travellers pressed
Through the crowded village of Bethlehem
And there was no room at the inn for them

Continued on page 75

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If Flour Was \$6.75 Would You Pay \$11.0

IF YOU could buy as good or better flour direct from the mill, and save the middlemen's profit, and other heavy expenses, would you buy direct and pocket the difference?

That's just the proposition we have to make you. Here we offer you this wonderful phonograph direct from the factory, of which \$42.50 of the purchase price you are putting in your own pocket in place of the agent's.

Direct from Factory to Home Was \$110.00 Now \$67.50

By discontinuing our expensive selling force of salesmen and agents-by cutting down our big overhead expenses-high rentals in costly stores, etc., and by eliminating long credit plans, we are enabled to reduce the price of the Veolian from \$110.00 to \$67.50.

In future, you will be our agent or salesman. You know the original price of the Veolian, you know that formerly hundreds have been sold at \$110.00—well, this is the identical

machine-it embodies every improvement and superior features contained in any phonograph—yes, and also a great many patented exclusive features not to be had in other machines. Read the detailed specifications and guar-You will be interested in reading all about the Veolian.

How to Order Send Us by Return Mail Only \$10.00

State finish you prefer and we will send to your nearest railroad station, all express charges paid, this beautiful VEOLIAN PHONOGRAPH exactly as balance to be paid upon receipt of the machine. After ten days' trial, if you do not find it exactly as represented, return to us and we will cheerfully refund you the full purchase price. Give it a trial in your home—play your favorite safections all Charles of your favorite pieces—the symphony orchestra, the gay Scotch laddie's comic songs, the patriotic selections of Sousa, etc.

Write or wire at our expense for your Name.

FREE with each machine, 12 selections (6 records) one package of needles and one jewel point for playing Edison records.

We refer you to the Bank of Hamilton, Winnipeg.

The VEOLIAN

42 ins. High 18 ins. Wide 201/2 ins. Deep

Made of genuine quarter-cut oak, fumed finish, selected mahogany or walnutall four sides are finished alike, a feature not to be found in many instruments up to \$200.00. Note the beauty of design, its silk-lined Grille Front, its large record compartment, every detail perfect. An automatic cover support, tone control and an all wood sound chamber. The universal tone arm enables you to play all makes of disc records, Victor, Columbia, Edison, Pathe, etc., without any extra attachments. Jewel Point for playing Edison records supplied free with each instrument. A powerful but simple double spring, silent running worm-geared, constant speed motor of exceptional quality construction, ensures a lifetime of wear.



Trial and Guarantee

Order the Veolian and play it in your home, the only place to get a real test. Our guarantee is as strong as it is short—satisfaction or money refunded. The risk is ours. We guarantee the Veolian to be The risk is ours. We guarantee the veolan to be constructed of the finest quarter cut oak, or real rich mahogany or walnut—to be equal in appearance, musical quality, richness of tone, and volume of sound to any instrument selling to-day up to \$150.00.

We refer you to the Bank of Hamilton, Winnipeg.

VEOLIAN PHONOGRAPH

Address all correspondence to our Western Office, Paris Building, Winnipeg



GET YOUR ORDER IN EARLY

ERVICE is a watchword with this house and we are jealously guarding the reputation we have worked up along these lines; striving day by day, not only to maintain the present standard of **EATON** service, but also to effect improvements where it is possible to do so.

Your Satisfaction—Our Success

There is no merchandising season in the year which taxes the efficiency, reliability and service of an Institution such as this, like the Christmas Season does. There is no season in the year when we would rather give the most efficient of service than at this time when so much responsibility is placed upon us BUT we need your co-operation to be successful. Success from our standpoint means complete satisfaction on your part, and to be completely satisfied with your holiday selections you must

Do Your Christmas Buying Early

The above phrase has been a slogan for many holiday seasons, but never has its importance been more significant than this year. Not only have prices been affected under the conditions now existing, but it has been impossible for us to get the usual enormous quantities in some lines which have always proven so popular with EATON customers. For this reason we advise you not to delay but to send in a complete order covering your Christmas wants as soon as it is convenient to do so.

T. EATON COMITTEE CANADA

The camels lifted their raucous cry, As the haughty soldiers of Rome rode by, And the hurrying crowds that thronged the way
Had never a thought for the woman, grey

With weariness, and the numbing fear Of one that knows that her hour is near

To many a door with beseechings vain And frantic pleadings he came again; And with proffered silver he sought to

shelter for her in humanity's name But the shades of even crept over them And they found no lodging in Bethlehem

No room at the inn! He swiftly strode To the fainting woman beside the road, And tenderly guided the lagging feet Away from the dust of the village street To a quiet cave in a hillside near, And the night came down and the moon shone clear.

And a soft wind wafted past leaf and vine, The fragrant breath of the wondering kine To the quiet watcher whose questing eyes Looked prayerfully to the Syrian skies; And a myriad stars shone clear and cold O'er a crowded hamlet and quiet wold.

And the shepherds that watch their flock

by night
See round about them a wondrous light,
And out of the glory a voice of cheer
Brings peace to their hearts all shaken by

fear, And with awe and rapture they hear the

song Which the mighty hosts from Heaven pro-

"Glory to God in the highest," they sing, And louder and clearer their voices ring, "Peace on the Earth and good will to men. And lo! they are gone into Heaven again, And the wondering shepherds gazed after

Then turned their faces to Bethlehem

They found the new-born babe where he

lay, All cradled soft in the fragrant hay, And the pale young mother who was at

One arm curved over his little nest. Then back they went with their souls all

To talk of the things they had seen and

O, sister woman, this Christmastide, Let us ope the doors of our hearts full wide

And make His birthday a blessed thing For the poor, the lonely, the sorrowing, Inasmuch as our love to these we bring We are giving it unto the Christ our King. —Helen Cawston Taylor, Winnipeg.

A Christ in Every Little Child "Heaven lies about us in our infancy," came from the pen of an inspired heart. When I look into the depths of the eyes of my little one it seems like looking straight into Heaven. How can I enteriam any other than high ideals when God speaks to me through baby's eyes?

O daughter mine, whose future is my

prayer, May thou be richly blessed, with just of

care Sufficient to ennoble and refine

Sumeeux to ennote and renne
The character, the sweetness that is thine
May purity and love in thee abide,
Patience and gentleness, whate'er betide
That, tho' thy path may lead through
woo or weal
The children or lead to

woe or wear Thy children can look up to thee and feel Thou hast been ever noble, just and good \ perfect flower of glorious womanhood.

Billy Sunday's Mother

Billy Sunday's Mother
Billy Sunday has said many times that
he owes all he is to his mother, whom he
buried recently. Her prayers and her
tove followed him through the years of his
young manhood and brought him to Christ. Young mannood and brought him to Christ.
In a sermon in Kansas city he told how his mother taught him to say: "Now I lay me down to sleep," and of how she prayed the whole night through before she sent him and his brother to the home for soldiers' orphans. He told the story of his conversion. of his conversion:

or ms conversion:
"I stretched the elastic bands of my
mother's love until I thought they would
break. I went far into the dark and the
wrong until I ceased to hear her prayers
where placetime." I forcet her forey or her pleadings. I forgot her face, and one more step and the elastic bands of her

love would break and I would be lost. But, thank God, I never took that last step. Little by little I yielded to the tender memories and recollections of my mother; little by little I was drawn away from the yawning abyse until at last I groped my way out of darkness into the arms of Jesus Christ."

And so, it may be truly said that the half million men and women who have been

And so, it may be truly said that the half million men and women who have been converted in the Billy Sunday meetings owe it to the fact that he had a godly, praying mother.

The Methodist Church is an answer to the prayers of Susanna Wesley.

Heaven is filled with men and women who are there because the prayers of their mothers were answered. Fortunate is

the man who had a praying mother. Those prayers will follow him the whole world through.

HOME ECONOMICS

HOME ECONOMICS

To the H.E.S.

We publish all reports that we receive.
Will you kindly send all communications to my private address, 983 Grosvenor Ave., Winnipeg.

Ave., Winnipeg.

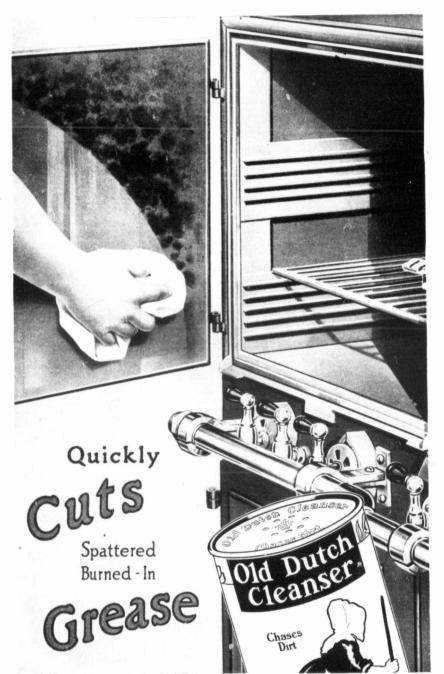
We are anxious to publish helpful papers

and invite all We are anxious to puons in neiphui papers read at the meetings, and invite all societies to use this department, as the reports encourage sister societies. Let us know about the great patriotic work you are doing. Let us have reports of your Christmas work for publication in our January number. Wishing every member

of the H.E.S. a Christmas full of love I am, sincerely, Pearl Richgreatitude.—I a mond Hamilton.

Is There a Library in Your

Mrs. Watt's paper, published in the November number of our magazine, has aroused a great deal of interest among our readers. I sometimes wonder if older people realize the value of good reading in the development of our boys and girls. A year or two ago in the Union Station here a girl lost her ticket and money. The girl in her distress appealed to the Travellers' Aid agent. "I presume you were reading a trashy novel at the time," the woman said to the girl. True! In



her left hand a sentimental novel bore evidence of the cause of her trouble. A girl who indulges in such weak stuff has not the ability to take care of herself.

evidence of the cause of her trouble. A girl who indulges in such weak stuff has not the ability to take care of herself. I remember a case of a young man who was being tried for murder. They found in one corner of his room a pile of common books, among which was a story of a crime very much like the one he committed. There is no investment as necessary to the development of our boys and girls as good reading.

We are pleased to publish the following letter from the president of the Home Economies Societies of Manitoba. Mrs. Dayton is one of Manitoba's great women, a woman whose first interest is the welfare of others. Her understanding of the home life in the country has made her sympathetic with our needs. She has that unusual combination, splendid executive ability combined with a tender sympathetic heatt. She is genuine, and as long as Mrs. Dayton is the president of the Home Economic Societies, the women will have a champion for their interests. We are pleased to publish this letter from her regarding libraries.

Dear Mrs. Hamilton,—Will you kindly allow me space in your valuable pages to explain to the H.E.S. or other organizations interested, how they may obtain free travelling libraries suitable for all ages and tastes, but I hear some one saying, "We are too busy in times like these to read." Tis true we are busy as perhaps never before, and we all realize that the winning of the war is our first business, but we must also remember that while doing this we must keep the "Home fires burning," and make our provine a better place not only for the boys coming back to us but make and keep our hone conditions such that our growing boys and girls will be worthy to take the pla we of our splendid men who never will return. This is pre-eminently the work of the H.E.S. In this connection who can estimate the value of good reading, to cheer, comfort and inspire and help keep conditions normal by losing ourselves and our griefs in the pages of an interesting boys and girls will be worthy to take the pla we of our

McGill University is willing to a us by sending any number of travelling libraries to the West on the following conditions: First, there must be a guarantee of \$50.00, not to be paid out guarantee of \$50.00, not to be paid to but guaranteed by some responsible person. Then for every library of 40 books we are asked to pay \$3.00. Three or four of these libraries would only cost a small sum, and would be a great soldition to our winter reading. These

cost a small sum, and would be a great addition to our winter reading. These libraries may be kept six months, may then be returned and replaced by others. Preight charges are all prepaid.

Lists are sent out from which to choose, and everything from the newest war books to standard authors. Technical, domestic science and children's libraries may be had. If other books outside of those contained in the lists are wished for, every effort will be made to supply them. For any further information write to. For any further information write to Miss Hall, Librarian Trav. Lib., McGill

versity.
t seems to me that when there are so many demands on us that at present we are not able to buy the books we wish, that this is a great opportunity. If we already have our libraries started this we already have our libraries started this offer may be of great value in extending a wider taste for good reading, and may be of great benefit to us until such times as our own province sees its way clear to assist in the matter of establishing libraries. With each library there is a copy of a good picture by a first class artist sent for use in the schools.

Thanking you for valuable successful.

use in the schools.

Thanking you for valuable space which has always been so freely given for the passing on of good things to the H.E.S. and all other women's organizations.—I am, very sincerely yours, Rebecca Dayton

Hartney
Dear Mrs. Harilton,—It is some time
since Hartney H.E.S. has reported through
your paper, so I am now enclosing an item
for insertion. It is some time since the
Hartney H.E.S. has reported through
your columns. Last summer the members of our society thought best not to

hold meetings in July and August, but this summer we met every month and had a fair attendance at each meeting. Great interest has been shown and members have been freer to take part. We have had a number of demonstrations by the members of the society.

by the members of the society.

An interesting, helpful paper was given by Mrs. Muir entitled "The Care of the Sick Room and Bed-making." The style of room, position in the house—facing the south so as to allow full entrance of the sunshine, coloring and type of paper on the wall, simple furniture and oilcloth for floor covering, were points evaluated. for floor covering, were points explained. The paper closed with the quotation: paper closed with the quotation: re the sun does not enter the doctor

"Where the sun does!"
Miss Flora Bennett rendered a piano solo, and the meeting adjourned for a half hour's social intercourse and re-freshments.

At the Sentember meeting the members, Religi

freshments.

At the September meeting the members decided to take over the French Relief sewing which had been in the hands of the Red Cross Society. The members of the Red Cross wished to devote all their time to Red Cross work. The com-

of the Red Cross wished to devote all their time to Red Cross work. The committee appointed for this relief work is arranging to re-model good second-hand clothing as well as make the new garments. Mrs. J. Callendar and Mrs. A. McDowell demonstrated using gasoline irons. Two styles of irons were used, and the members were much pleased with the demonstrations, and decided it was just such meetings that are profitable and useful. La'or-saving suggestions were given by different members. Much time could be saved when canning peaches by patting the peaches into the boiling syrup and then the skins will fall off and can be removed, and if there is much rich syrup adheres to the skins they can have hot water poured over them and this can be added to the boiling peaches, and not have any waste of time or sugar. A tube attached to the washing mechine to carry away the wash water was thought to be a very helpful surgestion. Many other away the wash water was thought to be a very helpful suggestion. Many other helpful hints were given.—O. M. H.

La Riviere
During the year we have made and sent 15 day shirts and 9 pairs pyjamas for the French Red Cross, 15 trench caps for St. John's Ambulance, also 6 pairs socks, 21 pairs socks sent to the La Riviere soldiers, and 29 cakes and 15 magazines to St. John's Ambulance. We have also sent \$10.00 to the Serbian Relief, \$25.00 to the Women's Tribute Fund and \$15.00 for Christmas socks for the hospitals.

sent \$10.00 to the Serbian Relief, \$25.00 for the Women's Tribute Fund and \$15.00 for Christmas socks for the hospitals. The filling and postage of the socks sent to our own boys amounted to \$16.10. We had a week's demonstration on dressmaking by Miss McConnell in March, of which 13 women took advantage. Miss Atkinson demonstrated on "canning" on August, 29 women being present. We found this demonstration very helpful. We had five vegetables, three fruits and meat demonstrated on. We also had two demonstrations by our members at the monthly meetings. Sunshine cake by Miss L. Keating and cornsalad by Mrs. T. Dunlop. We have some knitting on hand and we hope to do more patriotic work this year than we have been doing.

Officers for this year are: President, Mrs. Wn. Wightman; 1st vice-president, Mrs. G. Sutherland; secretary, Mrs. A. Henderson; treasurer, Mrs. T. Dunlop; directors, Miss McIntyre, Miss Stuart, Mrs. Durham, Mrs. Newcombe.

During the year I have sent in two reports but I have not seen either in print. However, I hope this one will reach you safely.—Miss Leva Wightman.

Charleswood

We had a very useful meeting on September 18th when we decided to pay into the Red Cross a further sum of 89.00 for the Christmas stockings for our bovs in hospital. We all felt that it is both a pleasure and duty to do what we can to help the Red Cross on in their

can to help the Red Cross on in their noble work, and are willing to do whatever we can. Then we had two very interesting papers read by Mrs. Browning and Miss Lucy Corbutt on suggestions for Christmas presents.

At our October monthly meeting we arranged to begin our whist drives for the winter, as they were so successful last winter. We decided to start with a matinee whist drive to be held in the Charleswood School on Friday, November 30th, after the business of the meeting

PLAYS ALL **RECORDS**

Get this fact clearly into your mind - the Brunswick Phonograph plays ALL records -bar none. There isn't a known make of record that cannot be played with absolute perfection on



unswi ALL PHONOGRAPHS IN ONE

The makers of this wonderful instrument have been making the highest grade cabinet work for 78 years. They own their own forests and saw mills, and acres of space are covered with their workshops.

are covered with their workshops.

For many years they have been making phonograph cabinets for others. And now they make a Phonograph of their yery own—the Brunswick. And into this "final Phonograph" they put the very best that is in them.

Until the advent of the Brunswick each maker of a phonograph has limited his machine to a certain

type of records. One machine was limited to needle records—another to a jewel point—and the records—another to a jewel point—and all excluded the marvellous Pathe and Brunswick Records.

But the Brunswick is now here to play all these records. Its sound chamber—to avoid all harsh metallic sounds—is huilt, like a violin, entirely of the choicest long-seasoned the provided without extra cost for the Brunswick Records. And, also without extra cost, are provided various needles to accommodate any and every make of record.

Mail the Coupon

We want to send you full particulars of the Brunswick—particulars that every person who contemplates purchasing ANY phonograph should have before deciding.

MUSICAL	MERCHANDISE	SALES	CO.

204-206 Excelsior Life Bldg., Toronto, Ont.

Street or R.R. Province

Union Banik

Loans for Livestock



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

PAID-UP CAPITAL - - \$ 5,000,000.00 TOTAL ASSETS EXCEED 130,000,000.00

Assets over 10.000,000 o over 510,000,000 The Pioneer Bank of Western Canada

TURN TO Startling Contest PAGE 63

There's a New Ford Car in it for YOU



Raw Furs Beef Hides

shipments and will pay you as follows for No. 1 stock.

Wolf Skins \$12.00 down to \$ 4.50 Red Fox .\$30.00 down to \$15.00 Mink\$ 7.50 down to \$ 4.00 Lynx..... \$20.00 down to \$ 9.00 Skunk\$ 3.00 down to \$ 2.00 Muskrats50 down to .25 Weasels....\$1.50 down to Beef Hides21 down to

All No. 2 or lower grades proportion-Ship to us and you will be ately.

Northwest Hide & Fur Co. Ltd. WINNIPEG 278 Rupert Ave.



was through. Mrs. Turnbull gave us a demonstration on killing and plucking two chickens, which was greatly ap-preciated by the members.—Mrs. H. Brown, secretary-treasurer.

HYDE PARK HOMEMAKERS' CLUB

HYDE PARK HOMEMAKERS' CLUB

The Hyde Park Homemakers met for their monthly meeting at the home of Mrs. A. C. W. Dodd on October 11th. There were nine members and three visitors present. As the secretary was absent Miss Moore kindly undertook her duties. The chief business of this meeting was to elect a president in place of Mrs. Elisworth, who has left the country. Mrs. Parkhouse was elected until the next annual meeting. Mrs. Parkhouse then gave a recitation which was followed by an interesting address. It was decided to have a Magic Lantern Social on October 22nd to raise funds for fencing the burial ground; several ladies have also undertaken to collect subscriptions for the same purpose. Mrs. A. Marsh then spoke on "Prairie Fires," and it was decided to send a petition to the Council re the prevention of fires. All members then enjoyed a social hour, and refreshments served by their hostess.

(Mrs.) A. C. W. Dodd.

(Mrs.) A. C. W. Dodd.

Hints on Christmas Presents

Paper read to the Charleswood H.E.S. by Miss Lucy Carbutt
In the making of useful Christmas presents we all like to make nice ones, yet those which are inexpensive and do not require a long time to make. The following may be found very useful for a colding the control of the colding to the control of the colding the control of the colding the coldina the colding the coldina the colding the coldina t

sol.lier.

A very useful and compact little case can be easily made at home and will hold a number of articles. It is carried out in art linen and lined with soft silk, and the sides are stiffened with thin cards cut to fit, and sewn in between the linen and the line

the sales are such that the control of the control tape are slipped in.

upon either side of the envelopes pieces of tape are slipped in.

The case when closed is fastened with a loop of broad clastic sewn on the back. When the case is complete it makes a useful present for the soldier.

Another useful and sensible present for Christmas is a blotting-pad. It may be made in cream colored satin and lined with thin pale silk. The sides of the cover are stiffened with two pieces of cardboard sewn in between the satin and the lining, and the book is edged with a scarlet silk cord, arranged in loops turned inwards at each corner. On the front of the book a wreath of holly leaves and berries may be emporiedred, the leaves and berries being worked in their natural colors, and within the wreath Christmas 1917 is embroidered in gold silk. Sheets of blotting paper are cut to fit across the inside of the book and are fastened in place by a gold silk cord run through the centre and hid in a bow at the back of the book. The ends of the cord are knotted and frayed out into tassels. The size of the book is eight inches by ten.

A present I have found yery useful

ends of the cora are known and they out into tassels. The size of the book is eight inches by ten.

A present I have found very useful and nice is a crocheted bag. Half a yard of silk ribbon may be purchased for only fifteen cents and two balls of silks orochet cotton can be bought for twelve cents, the total being about thirty cents. First I seamed up the side with a french seam. Then I crocheted around the top making it any depth desired. After this was finished I crocheted a kind of frill to make the top look nice after the cord or ribbon was put in. The bottom was crocheted together with a plain crochet of two chain and two treble. I did enough of this to look nice and then finished it with a fringe. off with a fringe.

off with a tringe.

When making Christmas presents which
have the date upon them they will
naturally be preserved as momentoes



The Dingwall Catalogue Has a Solution for Your Every Christmas Problem

There's a copy waiting for your address Write for it to-day.



ID you ever sit up half the night worrying over Christmas Gift problems? Wondering what you would buy-where you would buy-what you would have to pay-how the gifts would be sent-whether they would get broken-

whether they would arrive on time-how they would look when they got there.

Why not shift all this work to someone else? With a Dingwall catalogue, half an hour's thought will be more effective than half a night's worry. You will find that everything is made so easy for you-just jot down the numbers and prices on an order sheet—tell us to whom you want the different things sent send us your cards-leaving the boxing, wrapping and mailing, assuring safe delivery, and all of that to us.

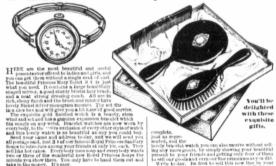
We have been doing such things for thirty-five years. We absolutely guarantee the satisfaction of our service. We exchange anything you want to send back. We take all chance of loss or breakage. All you need do in fact is make your selection and send us the order. That form of shopping is ideal. Just send a

D. R. Dingwall, Limited

Diamond Merchants, Jewellers, Silversmiths MAIN AND LOGAN PORTAGE AND MAIN

WINNIPEG

Princess Mary Toilet Set and Exquisite Bracelet Watch



Address: GOLD DOLLAR MANUFACTURING COMPANY, Dept. T, 21

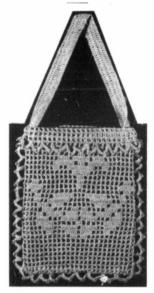
of the year, of the great war, and, therefore, when preparing any little gifts for Christmas this year when possible it would be as well to work the date upon

A pretty and useful gift is a handkerchief sachet made in cream colored silk
and lined with soft white silk. Upon the
front is embroidered a wreath of holly
leaves intermingled with berries and
inside the wreath the word Xmas and the
date, 1917, is made. The sachet is edged
with a red, white and blue striped ribbon,
strings are provided to secure the sachet
when closed. In the upper half there is a
small pocket in which a paper seent
sachet may find a place, and upon the
lower part ribbon strings are sewn on
cither side for tying over the handkerchiefs. If preferred in place of the
pocket the sachet can be given an interlining of swansdown flannelette, plentifully
sprinkled with some sweet swelling
sachet powder.

The following suggestions are also A pretty and useful gift is a handker-

The following suggestions are also suitable:

Handkerchiefs with crocheted edgings, needle case, cushion tops, fancy arron and many other dainty things which would take up too much space and time to explain here.



DIRECTIONS FOR WORKING BAG

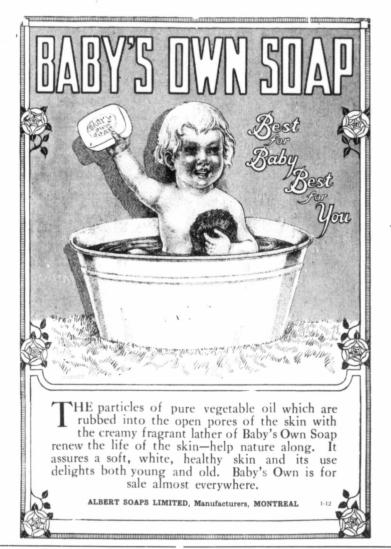
Materials—2 balls Peri-Lusta crochet cotton No. 5, ½ of yard feather-bone and 3 dome fasteners for top, ½ yard of ribbon 5 or 6 inches wide, the width depends on how loose or how tight you crochet. The bag shown on this page measures 5½ inches across and 8 inches deep.

measures 5½ inches across and 8 inches deep.

Ist row—Make a chain of 78 stitches, turn, treble into 8th stitch from hook, repeat 10 end of chain. There should be 25 meshes. Make 8 rows of meshes, you can easily follow the pattern by counting the meshes and trebles. When you have finished working pattern make 9 rows of meshes; you can make both sides of bag alike or use your initial on the other side. Be sure and do both sides of bag alike or use your initial on the other side. Be sure and do both sides alike. Sew together firmly with needle and thread, then start and go around edge; make 10 chain and eatch into every third mesh, slip stitch, repeat around bag, then work 5 double crochets chain four and make 5 double rochets; catch into next loop and repeat. To finish top of bag turn back 3 rows and sew around with needle and thread. Make lining exact size, put feather-bone in top of lining and sew neatly down, slip it inside bag and sew your dome fasteners firmly on, one at each side and one in centre.

To make handle make chain 12 inches borg and work a trable into each chain.

To make handle make chain 12 inches long and work a treble into each chain, repeat for three rows and sew firmly to each side of bag.



Steele, Briggs' Seed Catalogue

Ready January, 1918. Send your name. We are buyers of Timothy, Brome, Western Rye, Seed Oats and Seed Barley. Send Samples.

Steele, Briggs Seed Co. WINNIPEG, Canada





A Ton of Sand and a Piano

MAGINE, if you can, a world with-out music. What would the wed-ding party, the Christmas party, what would even the funeral party without music?

A friend told the writer just when he was getting interested in the real business of rearing children that the finest thing he ever did for them was to give

ness of rearing children that the finest thing he ever did for them was to give them a ton of clean sand for out-doors and a piano for indoors.

That chap gave us the best tip we have ever received that had anything to do with the home or social life. We were the proud possessors of a pigeon pair when we bought our ton of sand and the piano and "here's to the same thing over again" if we had two or twenty children to rear.

The ton of sand was dumped at the flar end of the garden, divided from the flower-bed or decorative end of the quarter aree by a hedge-screen of privet. The kiddies were told that that was their "royal borough"—or burrow. They could do what they liked there, bring in as many playmates as they cared to, mess up all the garments they could wear out so long as they stuck to their end and did not poach among the flower beds.

That ton of sand was the cheapest

That ton of sand was the cheapest and the healthiest "toy" our nippers ever had, and they valued it above all the spotted horses, jumping jacks, dolls and pistols they owned—and their numbers were legion. As soon as their little fingers could spread over three notes of a piano, we got them one—not an expensive full grand, or merely what is sold as a "practice piano," but a real good instrument that kept in tune a reasonable time, and which would not occasion our musical friends of the profession any uneasiness when they came to see us and uneasiness when they came to see us and

sing for us.

Well our pigeon pair banged away at that piano to the full content of their souls. We got them a teacher as soon they could be taught, and it was wonderful how soon the banging gave place to the "touch" that told us that the soul of music lived in the small tabernacles of that boy and girl.

Now they are well into manhood and womanhood. The boy at the moment of writing has been "at the front" for two years and a half, has put in six months of that period right in the firing line, and we think we can speak for him when we say that his ability to "do any-thirs" in reson" with a ninno has been when we say that his ability to "do any-thing in reason" with a piano has been the very life of the outfit at the base and has turned his own nerves to the point that carries a man through any "hell" and makes him proof against all calamity and temptation.

calamity and temptation.

The girl can use her voice to something more than the average purpose both at home and in public. She misses the piano accompaniments of her brave brother, but she can play her own although that is a severe handicap to the soulful songeter.

soulful songster.
After the most satisfactory experience souliul songster.

After the most satisfactory experience of the up-bringing of young people that any creature could hope to have; after a long and varied experience of the elements that enter into a many-sided social life, we say most emphatically that of all the fine things that heaven has provided for the delectation of man and beast, there is nothing in recreative joy to beat the function of music. A piano in the home that has children growing up in it is almost on a par with the family altar.

Still more necessary is an instrument of some kind to the home that is not blessed with the music of the little ones. There is no longer any reason why the fact that neither party to that small home circle can play should deprive it of its instrument. There are the player pianos and the wonderful gramophone developments which need no explaining. Who does not know that the "mental"

pianos and the wonderful gramophone developments which need no explaining. Who does not know that the "mental mood" means everything to life. Mental woman of the prairie or city home needs to be told that life means to her just what is the prevailing mood of her daily life. Music is not a thing of the earth. What we know of music here is but the reflex of the trained choristers of heaven. Our belief is that heaven is here within so ri ti snowhere. Anyhow it was no us or it is nowhere. Anyhow it was no "fallen angel" who introduced the spirit of music into this round world.



ONE OF OUR OLDEST "PIANOS" Could any of our musical readers tell us the story of this ancient piece of furniture. We gave the account of it some years ago.



Deafness



Wilson Common-Sense Ear Drums WILSON EAR DRUM CO., Incorporated
248 Later-Southern Bidg. LOUISVILLE, KE

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We would be glad to send you our booklets, prices and particulars of any of the undermentioned goods, if you will kindly place an X against any you are interested in We know we can sell you these Articles at a less price and give you better quality, and at the same time give you more money for your HIDES and FURS than any bouse in Canada

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Tanning Hides and Furs for Robes.
Coats, Rugs, or Lace Leather

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Direct from our own nets to blrect from our own nets to the consumer. Our Booklet of Prices and Recipes is ready, it tells what the fish costs at your station. We prepay all Freight charges.

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FRANK MASSIN, Brandon, Man. Write for Prices and Shipping Tags



Boys' and Girls' Club News

Here are a few iten's worth reading from the recent Boys' and Girls' Contest at Stoney Mountain

WHAT IT MEANS TO BE A CANADIAN

(Prize Speech)

(Priz Speech)

Ladies and gentlemen: In dealing with
the sul ject selected for discussion, "What
it Means to Be a Canadian," we must
consider this under three headings:
First, what it means to be a Canadian
under the British flag; secondly, under
any other flag, and thirdly, as an independent nation.

The latter case as we can readily see is
altogether impracticable for what can we
do without a navy, without an army, and

The latter case as we can readily see altogether impracticable for what can we do without a navy, without an army, and with a population of only eight millions of people?

With regard to the second case, history tells us of the endless difficulties which arose between England and France before Canada was conquered, and history would repeat itself.

We know what it really means to be a Canadian under the British flag.

First, we are protected by the world's most famous and most powerful navy; secondly, we enjoy the progress of the age with the rest of the British Empire; and thirdly, we enjoy the blessings which flow from democracy in its fullest sense.

These, and many other local reasons too numerous to mention, make me proud to claim Canada as my home.

Another Two Canadian

Another True Canadian

Another True Canadian
Canada is a vast country, a land of
immense forests, of tremendous stretching
lakes, and far-extending plains. We hold
the northern half of a continent, and we
must hold it for the people that are sure
to come to us from older lands.
Whether Canada is the land of one's
birth or one's land by adoption, a true
Canadian is glad when he thinks of his

magnificent country stretching from ocean

ocean.
It has been said that "eternal vigilance It has been said that "eternal vigilance is the price of liberty." To keep this great country free, to make it a good place to live in, a true Canadian must be brave and firm and just. He should not only be proud of his great country but he himself should do something to make it great. He should know how his country is governed, and should always be ready to do his share.

We all know part of what it has cost.

to do his share.

We all know part of what it has cost
the Belgians to stand together against the
oncoming Germans. To be a Belgian at
this time is to suffer, and a true Canadian

oncoming Germans. To be a beggan at the Canadian whether his country is at war or at peace, must do something, and give up something for his homeland.

Many men have gone to the front, and have been killed. They can do no more. Of those who are left behind many have given up comfort and the happy times of days gone by, in order that Canada might be tree.

A true Canadian should know the history of his country. He should learn as much as he can about the other races that come into Canada. He should be a brother to all. But he should remember both for himself and for them, that he is not a Canadian who does not cast in his lot with the people of this country, or who does not thrill when he says:

"O, Canada our home and native land, True patriot love in all thy son's command:

With allowing boarts, we see thee rise.

mand:

With glowing hearts we see thee rise, With glowing hearts we see thee rise, Thou true north strong and free, And stand on guard, O Canada, We stand on guard for thee." Jean Campbell, Balmoral.

TRANSMIGRATION

One morning Jenkins looked over his garden wall and said to his neighbour: "Hey, what are you burying in that

hole?"
"Oh," he said, "I'm just replanting some of my seeds; that's all."
"Seeds!" shouted Jenkins angrily, "It looks more like one of my hens."
"That's all right. The seeds are inside."



Pumpkin Spawn

Winnipeg

ALUM

For the spawn, pare, slice and stew enough pumpkin to make one quart when strained. Add to this a pinch of

salt, $\frac{1}{2}$ cupful of sugar and $\frac{1}{2}$ cupful of flour. Boil together, stirring constantly until smooth and very stiff. Set aside to cool, and eat with cream and sugar.

Montreal

IN

CANADA

December, 17



TORONTO, CANADA



BOYS—not think of coming a complete bockey outlit. Concessing of a pair of spinneds, astrong, polithed step theory against all sines, with pass drop, agood investigation and a strong, well music rock-win bockey sites and a dardy particularly and the strong, well music rock-win bockey sites and a dardy particularly and the strong, well music rock-win bockey sites and a dardy particular site of the strong sites of the strong protected by packets over-yellow spills, of a standy pair of bockey boots, extra-well stitched and reinforced. With this application control stitched and reinforced. With the bock equal paper of packets of the complete as well such as a second strong site of the complete as well such as a second strong and the and by preturn and the same particular strong and the same particul

the complete set without a cent of cost.

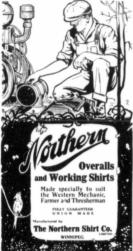
Just write us at once, a post, and will do, and by return
mail we will send you a big free ten cent package of
"Daintees" our new whipped-cream, candy-coated, breath

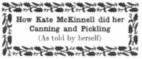
and latting flavor. They are irresultations. Just was eva-aled not in an hour.

1, 30 when the "Inhibited" are soled and we will promptly send you the fine quality hockey stakes, rabler park and honey's stick and the dandy hockey, leves of hockey hocks you can also receive without selling, any and getting only four of them to sell our goods and earn our premiums as you did.

1, Turry to bey. Write to day before you forget the sel-ration of the selling of the selling the selling the selling the outsite right to your door under our reimbursement system.

will send you a up tree very cardy-coated, breath our fremium as yould be up to the property of the property o



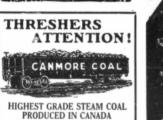


When our Boys' and Girls' Club had When our Bovs' and Girls' Club had their annual meeting in February, among some of the contests I entered on, was the canning contest. Last year I tried canning raspherries, peas and one or two other things, but my vegetables did not turn out very well and I was rather discouraged. However, there was so much talk about canning last winter, that I decided to try again.

Just after Faster, Miss Atkinson, from the Extension Department of the Agri-

Just after Faster, Miss Atkinson, from the Extension Department of the Agri-cultural College came to Teulon for a week, and demonstrated canning and cooking to the girls of our club and the Home Economics Society. Her dem-onstrations were so simple and she was so nice to us, that when she left I felt I could received and the provider. go ahead and can anything.





Canadian Coal for Canadian Farmers

Birnie Lumber & Coal Co., Ltd.

iy

General Sales Agents
CALGARY
CANADA



A Splendid Result from a very young

Something else that helped me a whole lot Something else that helped me a whole lot was a time-table on canning from the Massachusetts Agricultural College, given in the Canning Lessons, in the Woman's Home Companion for August. My mother got this magazine in July and as the time-table was on the Cold Pack Method, I always had it by me when canning. It gave the article, how long to blanch and how long to sterilize.

I used the sealer called the "Perfect Seal," as I was given to understand that this was the best sealer for canning. I washed and sterilized every sealer before

washed and sterilized every sealer before

using it.

In doing my small fruits, like cherries, In doing my small truits, like cherries, raspherries and saskatoons, I made a syrup of 2 parts sugar and 1 part water. I then filled my sealers full with fruit, after which I poured the boiling syrup over it until a little ran over, then with clamp up plunged it into the boiling sterilizing bath.

I used a large aluminum pot with a wire net nic plate set in the bottom to

I used a large aluminum pot with a wire net pie plate set in the bottom to rest the scalers on, so that the boiling water could surround them entirely. I had the water an inch or two above the scalers, also a good fitting cover and kept it boiling hard for ten to twelve minutes. To lift the scalers out I used a long iron buttonhook, then I clamped them down at once, and turned them upside down to cool.

My large fruits like pears, peaches, apples, apricots and plums, I blanched from I to 2 minutes, then plunged them

My large fruits like pears, peaches, apples, apricots and plums, I blanched from 1 to 2 minutes, then plunged them into ice cold water, after which I filled my jars with the plums and apricots, while the peaches, pears and apples I had to skin before filling the jars. I made a syrup as for the small fruits and poured over and proceeded to sterilize fifteen minutes, taking out and finishing as I did the small fruits.

I preserved my goose' erries and strawberries I put them in an open kettle and used three parts sugar to four parts fruit.



Because it is healthy, soft, comfortable, durable, absorbs moisture and perspiration quickly thus preventing colds. It is the only natural covering for the little one's body. For the children there is underwear, stock-there is underwear, stock-shirts, pyjamas, slippers, dressing gowns, etc.

For sale at Stores and throughout the Agencie the Do

A fully illustrated catalogue free on application.

DR. JAEGER Sanitary Woollen CO. LIMITED
Toronto Montreal Winnings British "founded 1883".

Got Gophers? Kill[·]Em[·]Quicl

Buy the Gophers a Christ-mas present — Kill-em-quick — plenty of it! Do your Christmas buying



Do you dread going out of doors-facing the keen sharpness of our Western winters? haps your blood is thin. Drink



daily. This delicious, non-intoxicating beverage is brewed from caramelized malt, is somewhat heavier, and, therefore, more blood making than the Maltum.

Just the thing to tone up your system, enrich your blood and help you resist the cold.

Put up in quarts, pints, half-pints or in

Order from your grocer, druggist, confectioner, or direct from

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FOR A SHORT TIME Send Samples of Your Hair 15c. Postage LADIES! Send us your combings, not less than three ounces. We make them up, 50c. oz. Will add new hair from \$2.00 worth up.

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The Baby

SAVORY& MOORE'S BOOK

Messrs, Savory & Moore, Chemists to The King, and makers of the well-known Infants' Food, issue a little Book entitled "The Baby," which gives a great deal of useful information on the Care and Management of Infants.

A USEFUL GUIDE

A USEFUL GUIDE

The book contains hints on Feeding, Teething, Development, Infant Ailments, and such matters as Sleep, Exercise and Fresh Air, which are so important for baby's well-being. It also contains a chart for recording baby's weight, a dietary for older children, and recipes for simple nourishing dishes. It forms, in fact, a useful mother's guide, which should find a place in every home. It is not intended to take the place of medical advice, when such is needed, but it will often serve to allay needless anxiety, and indicate the right course to be pursued.

FREE TO MOTHERS.

FREE TO MOTHERS



PATENTS TRADE MARKS AND DESIGNS

LLENGE

Write for booklet, circulars, terms, etc. FETHERSTONHAUGH & CO. FRED. B. FETHERSTONHAUGH, K. C. M. E. GERALD S. ROXBURGH, B. A. Sc. 36-37 Canada Life Bldg, WINNIPEG I put no water on my strawberries but stirred them gently with the sugar till the sugar became wet with the juice. I then let them boil up enough to take the scum off, which took about five minutes

scum off, which took about five minutes and then sealed away boiling hot. In the gooseberries I added water. These took a little longer to cook. I cooked them until they looked clear. To hurry these I put a cover over the pre-serving kettle.

houry these I put a cover over the preserving kettle.

I also made red currant, crab apple and cranberry jelly. I put the fruit in a pan then added water until I could see it through the fruit, then boiled it hard until the fruit got pulpy, after which I drained into a crock through cheesecloth. I then counted the number of cupfuls of juice as I put it into the preserving kettle to boil and boiled this juice for twenty minutes, then added as many cupfuls of sugar as I had juice at first and boiled the mixture five minutes more, then poured it in the jars but did not seal until cool. Sometimes I heated the sugar in the oven to hurry the cooking. I made all our

to hurry the cooking. I made all our jelly this summer. In doing the vegetables, I took them ielly this summer. In doing the vegetables, I took them fresh from the garden, cleaned and then blanched them the required lengths of time which varied, of course. Beans, corn and vegetable-marrow I blanched 15 minutes, cold dipped and packed in scalers, adding boiling water until full, and half a teaspoonful of salt to every pint. With clamp up I sterilized thesebeans 2 hours, corn 3 hours and vegetable-marrow 1½ hours. I then took them out, turned upside down until cool. The peas, cauliflower, carrots and tomatoes I blanched 3 minutes, excepting tomatoes which were one minute, then proceeded as with the other vegetables, except with different lengths of time for sterilizing. My chicken I parboiled for twenty minutes when the meat was then easy to remove from the bones. I filled my scalers, then poured the juice that the chicken boiled in over the meat until full and added half teaspoonful of salt, then sterilized four hours, after which I took out, clamped down and turned upside down until cool.

One thing I canned that I was a little

down until cool.

down until cool.

One thing I canned that I was a little
dubious about was mushrooms. I could
not find out how long to sterilize them
but thought I would try them like chicken,
except that I blanched them 5 minutes.
They are keeping well.

I made onion, mixed, gherkin and beet

They are keeping well. I made onion, mixed, gherkin and beet pickles. I put my cucumbers in a strong brine for four or five days before I pickled them. The cauliflower I put in boiling brine, the next day I poured off the brine and boiled it again, after which I poured over my cauliflower a second time. I did this three times.

To prepare the vinegar, I took one quart of vinegar and added two cups of sugar, then tied some whole spice in cheese-loth and put it in the vinegar. Then boiled the mixture and poured over the vegetables in the jars while boiling. I then sealed these away. We canned over one hundred and lifty jars of vegetables alone this year, practically all out of our own garden, and none have gone wrong. At the Central Fair at Stony Mountain I showed a collection of thirty different kinds of canning, pickling, preserving and jelly and obtained five firsts and one either of six exhibits. I was also in the sewing contest, cooking contest and weed

kinds of cambridge in the property of the prop Fair in cosmology to the form of the form

THE PHONOGRAPH

THE PHONOGRAPH

Do you know anything in sound production and reproduction that is so won-derful as the phonograph? This wonderful "tank" of ready-made music is found all over the world, not only in its civilized corners but right into the heart of the African forest and the bush country of Australia where the Aborigines still hall it as a thing of the gods and not a creature of earth at all. earth at all.

Under whatever technical name it is known, the main idea is the same, but within the past year or two it has undergone changes so great in its sound repro-ducing quality that it may be said to be practically an entirely different instrument from what we were accustomed to in the

early days.

We don't want to recall these exasperating experiences. They were as much torture to our nervous system as the tone quality of the modern production is now one of the very best restoratives for nerves that have been strained to the breaking point

If you are in a quandary as to what you ought to do for your home folks and the circle of your visiting friends at this circle of your visiting friends at this happiest of all the joyous seasons of the year—get a phonograph and a few of the splendid and inexpensive records you can procure so easily now-a-days—by mail if you are far from an enterprising music

house.

There is no limit to the range of music now on the "shelves"—from Harry Lauder's first attempt to the latest achievement of our greatest artistes either in voice or on instrument. What a wonderful thing to listen to Harry in the prairie "shack" and hear him just as clearly as he can be heard in the grand opera house—and all for a few cents for the record!

FORTY HEROIC ENGLISH WOMEN

The tragedy of the Serbian retreat has not yet been fully told. Glimpses of the shrunken, starving, dying soldiers and peasants, with the unconquered and unconquerable King Peter have been given from pany near

given from many pens.

But the studious seeker after facts is beginning to unfold the stern truth. Of such a student is Fortier Jones, who, in a description of Serbia that has just

in a description of Serbia that has just been given to the public, outlines the following incident in the army retreat: "Forty Englishwomen were among those who made the march. They made it without food and drink; most of them made it on foot and in clothing intended only for Balkan summer. I think it can be said that the party of Englishwomen stood it better than the Serbian refugees and fully as well as the Serbian army girls who entered the march mere girls came out in the evening old

mere girls came out in the evening old in experience. They saw the things that generations of their sisters at home live and die without the slightest knowledge of, the madness of starvation, the passion to live at all cost, the swift decay of all civilized characteristics in freezing, starving men. They understand now better ing men. They understand now better than any biologist, any economist, could have taught them the struggle for existence and the survival of the fittest.

"At the end they smiled, made tea, slept forty in a Turkish harem, and next day marched their thirty kilometers."

INCRIMINATING

Willie—"I guess my dad must have been a pretty bad boy." Tomnie—"What makes you think Tommie-that?" Willie—"

-"Because he knows what questions to ask me when he wants to know what I have been doing."



A CONVINCING ARGUMENT
Tommy: "No, sir; I don't say nothing against conferences or arbitration, or anything like that, but what I do say is, when it comes to argyfying with a "Un a Mill's No. 5 (bomb) "elps!"

Mother Hubbard Padded Shoe



t. Fits any Child. Suitable for Baby Buggy, Sleigh, Automobile, etc. le in Black Rubber. \$5.00 Blanket. \$6.50 \$5.00 \$6.50 \$7.50

J. PICKLES, Manufacturer 147 PORTAGE AVENUE WINNIPEG



Synopsis of Canadian Northwest Land Regulations.

THE sole head of a family, or any male over 18 years old, who was at the commencement of the present war, and has since continued to be, a British subject or a subject of an allied or neutral country, may homestead in Manitoba, Saskatchewan or Alberta. Applicant must appear in person at Dominion Lands Agency or Sub-Agency for District. Entry by proxy may be made on certain considerable and cultivation of land months residence upon and cultivation of land months.

and cuttivation of land in each of three yes In certain districts a homesteader n secure an adjoining quarter-section as permition. Price \$3.00 per acre. Dutie Reside six months in each of three years al acres extra. May obtain pre-emption pair as soon as homestead patent on certain con-tions.

A settler after obtaining homestead patent, if he cannot secure a pre-emption, may take a purchased homestead in certain districts. Price \$3.00 per acre. Must reside six months in each of three years, cultivate \$0 acres and erect a house worth \$300.00.

Holders of entries may count time of employment as farm laborers in Canada during 1917, as residence duties under certain condi-

When Dominion Lands are advertised or posted for entry, returned soldiers who have served overseas and have been honorably discharged, receive one day priority in applying for entry at local Agent's Office (but not Sub-Agency). Discharge papers must be presented to Agent.

W. W. CORY.

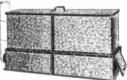
W. W. CORY, w. W. CORY,
Deputy Minister of the Interior.
N.B.—Unauthorized publication of this ad
rtisement will not be paid for.

Water Your Stock With a New Improved Straw Burning

Snow Melter

and Feed Cooker

WE PAY FREIGHT



Boiler, 28 ins. x 18 ins. x 6 ft., Fire Box, 28 ins. x 24 ins. x \$30.25 Boiler, 28 ins. x 18 ins. x 8 ft., Fire Box, 28 ins. x 24 ins. x \$37.75 An Unconditional Guarantee with Every Cooker.

SEND FOR CATALOG Freeland Steel Tank Co. HALBRITE, SASK.

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HIGH

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ONE FARMER WRITES:

"Some engines take a team of horses an owbar to get them on the job. A Cushi the same horse power will do the st ork and a 14-year-old boy will move it."

ANOTHER FARMER WRITES:

"This winter am using the 4 H.P. Cushman to pull a 32-inch circular wood saw. Have sawed logs 16 to 18 inches in diameter and it cuts better than a regular 10 H.P. big engine because of its speed.

ANOTHER FARMER WRITES:

Engines, 4 to 20 H.P. Cushman Light Weight

Cushman Engines weigh only one-fifth as much Cusman Engines weigh only offerint as much per horse power as ordinary farm engines, but are so well designed and built, so carefully balanced, so accurately governed, that they work more steadily and quietly than any other engine. The Cushman is the modern farm engine.

Built Light-Built Right

The 4 h.p. Cushman weighs only 190 lbs., the 8 h.p. only 320 lbs., the 15 h.p. only 780 lbs., and the 20 h.p. only 1,200 lbs. Cushman engines are used on the famous Cushman combination threshing outfits. They are equipped with Throttle ing outfits. They are equipped with Throttle Governor and Schebler Carburetor; 4-cycle, water cooled, with friction clutch pulley. The farmer wants an engine he can move around easily and put to work anywhere. Cushman Engines are built to do many jobs in many places. They operate grain binders, potato diggers, manure spreaders, etc. The 4 h.p. Cushman saves a team on the binder and does all ordinary work.

The One Perfect Binder Engine

For heavy grinding, driving small separators, etc., or for any power from 3 to 9 h.p., the 8 h.p. Cushman especially appeals to the farmer. Very economical, for Cushman engines receive just enough fuel to take care of the load at that modern the control of the control of the load at that modern the control of the load at that modern the control of the load at that modern the control of the load at the modern that the control of the load at the modern that the load at the control of the load at the modern that the load at the control of the load at the control of the load at t ment on the engine. Result is uniform speed and maximum power. Not cheap engines, but cheap-est in the end.



The Automatic

The only machine of its kind in use. Handles grain at the rate of 135 bus. per hour. Light in weight; strongly built; perfect in action; low in price. Fully guaranteed. Weight of grain operates the machine. The kernels are thoroughly soaked, turned over and treated

Smut

Sold on a positive guarantee to prevent smut. No. 3 handles 30-50 bus. per hour; No. 4, 50-75 bus. The Lincoln separates smut bails, wild oats, king heads, and all light seed from wheat, also wild oats seed from wheat, also wild oats and all light seed from barley. Grain is thoroughly pickled, dried and elevated to wagon box. Auto-matic skimmer an exclusive fea-ture. Strong, heavy construction. Large, rustless solution tanks.



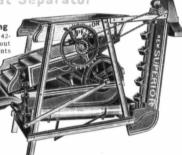
Write for Prices and Full Particulars



Strongest Built Easiest Running

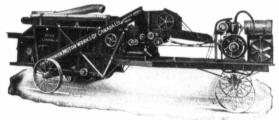
Made in 24, 32 and 42-inch sizes, with or without bagger. Power attachments

supplied if desired. Patented adjusta b l e windboards a b l e windboards give perfect con-trol of blast; our special sieves erad-icate all wild oat s e e d . Strongly built and bolted; has greater capacity and does better work than any mills of similar



Shinn-Flat System of Lightning Protection

the modern and scientific method of protecting buildings from lightning. It your home or barns are not protected, write us for full information concerning Shinn-Flat.



The Light-Weight Cushman Engine mounted on same truck with the Lincoln Separator completes the perfect COMBINATION THRESHER, in which is embodied light weight, simplicity in operation and strength. Made in three sizes, with hand-feed and straw carrier, with hand-feed and windstacker, and our largest size complete with full equipment of self-feeder and windstacker.

One customer writes—"The Heavy Duty Ball Bearing Outfit I purchased from you is entirely satisfactory and will do good work. I am very pleased with the outfit, all the more so, not having any experience I was able to run entire outfit after two hours' teaching."

Cushman Motor Works of Canada, Limited

Dept. C.T.
WHYTE AVENUE
and VINE STREET,

WINNIPEG

BUILDERS OF HIGH GRADE, LIGHT WEIGHT, HIGH POWER ENGINES FOR GENERAL PURPOSE FARM WORK Exclusive Selling Agents for: Combination Threshing Outfits -Langdon Ideal Self-Feeders-Fanning Mills-Smut and Pickling Machines-Vacuum Washing Machines
Lincoln Grinders-Lincoln Saws-Incubators-Portable Grain Elevators-Wagner Hardware Specialties-Shinn-Flat Lightning Rod.



GREETINGS

Seventy-five Yule-tide seasons have been observed since Case built the first threshing machine. In all these years our extensive dealings have been with farmers everywhere. During these many years we have come to know farm folks pretty well. And they likewise have come to know us. So it has been a long friendship. The nice thing about it is, that each year thousands emphasize their friendship by further dealings with CASE for which we are thankful. We appreciate the opportunity to serve our old friends as well as the many new ones.

We cannot think of the glad Yule-tide season without expressing to many thousands of friends our Christmas greetings, so folks just consider this message the same as tho we mailed you a Christmas card. We wish you and the family a good old Merry Christmas and a Happy Prosperous New Year. Let us look forward to world peace and greater happiness.

J. I. CASE T. M. COMPANY, Inc.

RACINE, WIS.