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The CANADIAN THRESHERMAN AND FARMER

WINNIPEG CANADA
FEBRUARY
NINETEEN NINETEEN



PREPARING FOR THE SEED CONTEST

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

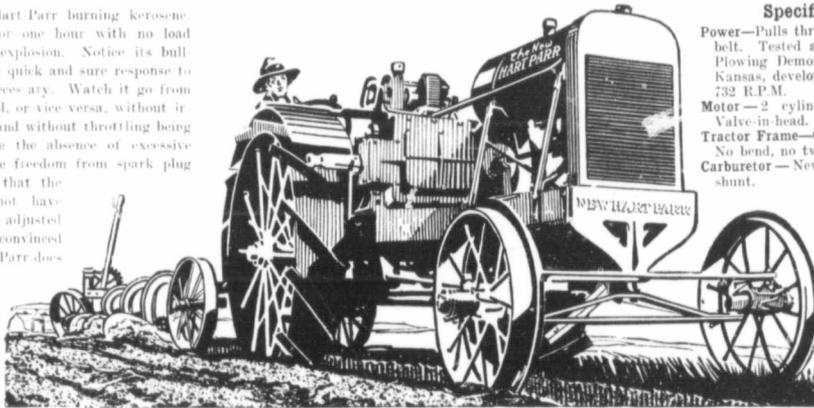
The New

HART-PARR

is the last word in gas tractor engineering. It is the triumph of many years of experience on the part of one of the oldest successful gas tractor firms, who have always kept abreast of the times, both as to the farmers' needs, and engineering skill.

THE NEW HART-PARR MEANS KEROSENE SUPREMACY

Watch a new Hart-Parr burning kerosene. Run one minute or one hour with no load without irregular explosion. Notice its bull-dog tenacity where quick and sure response to varying loads is necessary. Watch it go from no load to full load, or vice versa, without irregular misfirings and without throttling being necessary. Notice the absence of excessive carbon deposit—the freedom from spark plug troubles. Notice that the carburetor does not have to be delicately adjusted. Then you will be convinced that the new Hart-Parr does everything that is claimed for it, and exactly what you want your tractor to do on kerosene.



Specifications:

Power—Pulls three plows—30 H.P. on belt. Tested at the last National Plowing Demonstration at Salina, Kansas, developed over 31 H.P. at 732 R.P.M.

Motor—2 cylinder twin, 4 cycle. Valve-in head. 750 R.P.M.

Tractor Frame—Cast steel, one piece. No bend, no twist.

Carburetor—New Dray kerosene shunt.

Bearings—S.K.F. and Hyatt.

Speeds—Two forward; one reverse.

Transmission—Selective sliding gear.

Cooling Device—Honeycomb radiator—shaft driven pump and fan.

Lubrication—Force feed.

When we say that the new Hart-Parr burns kerosene as well as any gasoline engine burns gasoline, we say a great deal, and because the Hart-Parr Co. proves it with every new Hart-Parr they build, it means a greater deal to you as a farmer.

It does these things because it is equipped with the **Dray Kerosene Shunt**. The Hart-Parr Company originated kerosene-burning tractors. There never has been a tractor that surpassed theirs in handling kerosene. Their long experience in building kerosene-burning tractors is summed up in the new Hart-Parr, which burns kerosene even better than the old Hart-Parr, so famous for years.

In addition to this kerosene-burning feature, the new Hart-Parr is of sane, sensible design. It is simple. Its parts are easily accessible. There can be no misalignment of gears—there is no bend, no twist to its one-piece cast steel engine bed.

Can You Afford to Farm Only the Top of Your Land?

You start out to plow deep, but — the horses get sore and lame; the ground dries out; the sun grows hot; it is time to plant. What can you do but set the clovis lower or raise the plow lever, notch by notch, as the planting season fairly rushes upon you?

Think what two inches deeper would give you. Just 40 per cent more plowed soil. "Ah, but," you say, "not 40 per cent more acreage." No, but you are not paying anything more for the 40 per cent that you have by plowing deeper with a tractor than with horses. You get more for the same amount of time and labor. That extra 40 per cent of plowed soil is what a new Hart-Parr tractor will give you, and it will give it to you

when you want it at the right planting season. Right planting is crop insurance.

The new Hart-Parr will turn **Three Furrows in Any Soil**, and one man can run the plowing outfit. The Hart-Parr cannot get tired or overheated. No day is too hot or too long—no noon too short.

The new Hart-Parr is of accepted standard design. It has a sure two-wheel drive, and stands firmly on four wheels. It guides easily. All parts are easily accessible. You will find the new Hart-Parr tractor maximum value for the price, not only in power and efficiency, but also in simplicity, saneness of design, dependability and durability.

We would strongly advise that you hitch your Hart-Parr to a "Little Genius" P. & O. tractor plow. P. & O. plows work equally well with any tractor. There is a P. & O. made to meet every condition and size of farm, with 76 years of "knowing how" hammered into every one of them. We carry a full and complete line of repairs.

Hart-Parr of Canada, Limited

MAIN OFFICE: 612 McINTYRE BLOCK

Manitoba Agents for:
AULTMAN & TAYLOR
Tractors and Separators

Warehouse and Sales Room:
47 HIGGINS AVENUE (formerly SPRAGUE LUMBER CO. OFFICES)

Branches and Service Stations:
WINNIPEG REGINA SASKATOON CALGARY EDMONTON

Steady Power---

Dependable for Threshing

The old reliable steam engine has never been equaled in power for threshing. It is steady, which is always necessary to insure good results. It's the power that most people know how to operate. Its troubles are easily discovered and remedied. If it gets weak, it does not stop dead.

Almost anything that can burn can be used for fuel.

The NICHOLS-SHEPARD STEAM ENGINE represents the best that can be produced in steam engine construction. It is durable and has lots of power. It is easily handled. Almost anyone can keep it running.

Buy a Nichols-Shepard Steam Traction Engine, and a Red River Special Separator. You know then that you will get the biggest jobs and the longest runs. There will be no waiting because of breakdowns. You can thresh and make money when conditions are so bad that other outfits have to stand idle.

It saves the farmers' time and grain. Sooner or later you will have to buy a Red River Special outfit. Buy it this year, because it will mean more money in your pocket.

It Saves the Farmers' Thresh Bill

NICHOLS & SHEPARD COMPANY

(In Continuous Business since 1848)

Builders Exclusively of RED RIVER SPECIAL THRESHERS
Wind Stackers, Feeders, Steam and Oil-Gas Traction Engines

BATTLE CREEK, Michigan

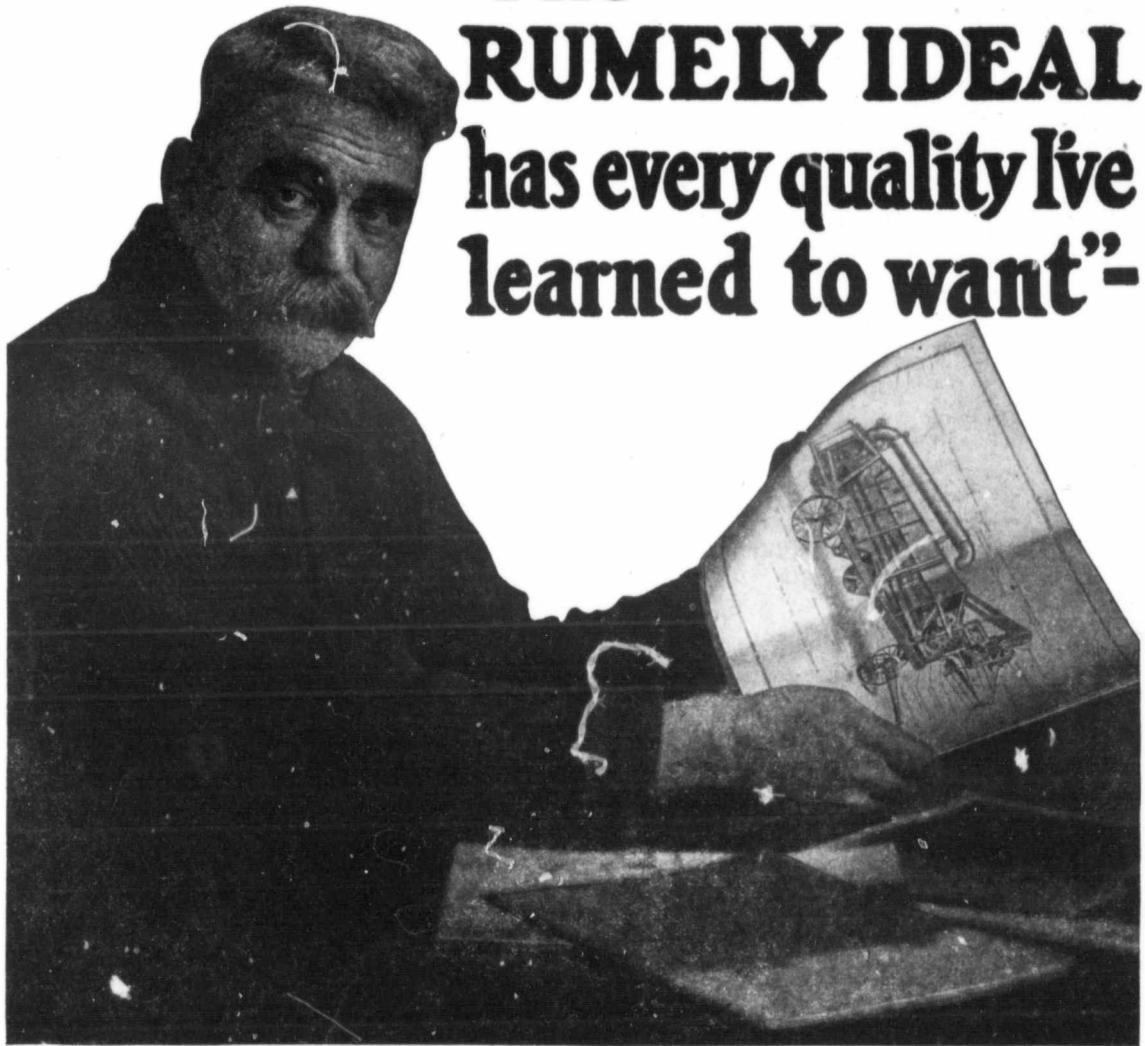
BRANCH HOUSES

REGINA, Saskatchewan

H. P. NORTON COMPANY, CALGARY, Alberta

WINNIPEG, Manitoba

**“The
RUMELY IDEAL
has every quality I’ve
learned to want”-**



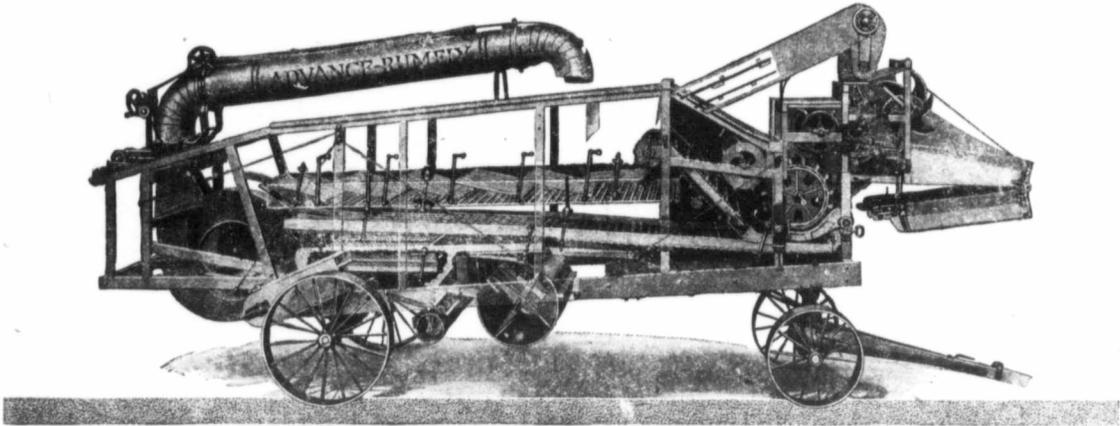
I’VE been threshing twenty-five years. Now I need another rig to handle all my business.

“In twenty-five years I’ve learned a good deal about threshing—and I’ve learned what to want in a separator.

“Looking for another machine I’ve combed the separator field—I’ve sized up all of them according to what I’ve learned to want. This Rumely Ideal looks best to me.

“From the way it’s built, I know enough about separators to know it’s a fast thresher. I know it saves the grain. I know it will run smoothly and lightly without knocks—even when it gets to be an old machine. I can tell these things just by studying its design.”

ADVANCE-RUMELY



Experience has built the RUMELY IDEAL—and proved it

Study the Rumely Ideal and you'll realize quickly *how* experience has built it.

Every part in it has a story of new and better developments to tell—a story that dates back over eighty years and includes all the improvements in separator design since the time separators were first made.

Follow the construction in the Ideal—the big cylinder—the arrangement of the concaves—the traveling chain rake over the open grate—the beaters—the straw rack with its lifting fingers—the extra chaffer area. They all stand for the fundamental principles of separation—the very things without which good, clean, fast threshing can't be done.

Take the position of the open grate, right behind and beneath the cylinder—the traveling slatted chain rake that takes the straw as fast as it comes from the cylinder—carries it in a *steady, even stream* to the straw rack—meanwhile passing two beaters that level off the bunches and tear the straw apart. Not only does this give the Ideal the largest grate surface of any

separator built—but this combination of Ideal features forms *the greatest grain separating device ever invented.*

Then comes the extra long straw rack with its lifting fingers. Not only does the Ideal rack agitate the straw—these lifting fingers tear it apart—rake it—beat it from beneath—*compelling* all the grain to fall through to the grain pan.

So you could go on—the extra large chaffer and sieve area—the perfect control of the wind blast—the one piece construction of sills, posts and deck rails—the ease of access to all working parts by having all hangers, bearings, adjustments, oil holes and grease cups on the outside.

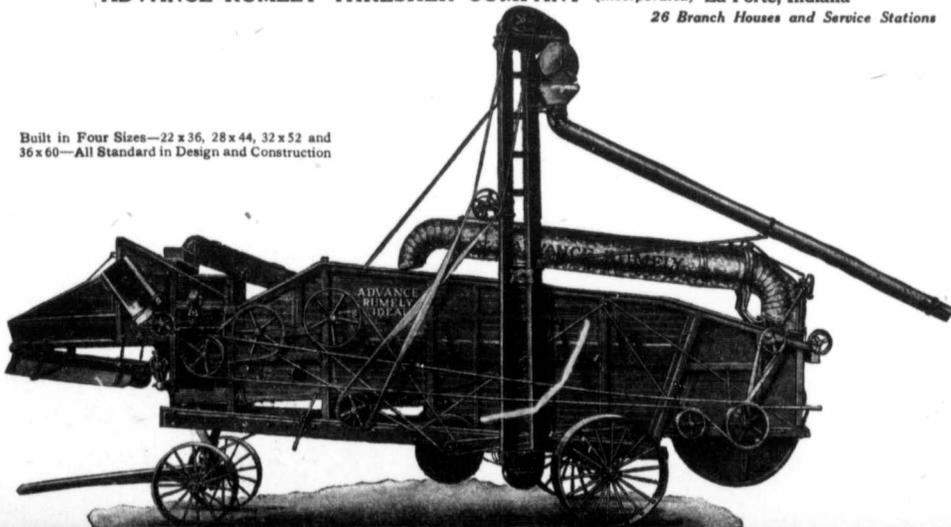
Such features as these show what experience, covering over three quarters of a century, have built into the Ideal.

The real test of any separator, of course—the *real proof*—is found in the experience that threshermen and farmers have had with it. That's why we say experience has *proved* the Rumely Ideal. Ask any owner.

ADVANCE-RUMELY THRESHER COMPANY (Incorporated) La Porte, Indiana

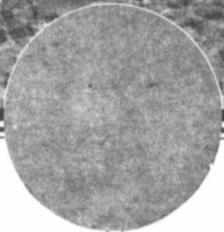
26 Branch Houses and Service Stations

Built in Four Sizes—22 x 36, 28 x 44, 32 x 52 and
36 x 60—All Standard in Design and Construction

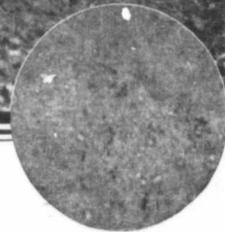




Drop of fresh oil as seen through the microscope—photograph by Crowder and Klapha.



Rumely Oil-Pull Tractor, made by Advance-Rumely Thresher Co., equipped with Madison-Kipp Fresh Oil System.



Drop of oil, from a crank case, as seen through the microscope—photograph by Crowder and Klapha.

What the Microscope Tells About Lubrication

A drop of fresh oil when photographed through a microscope looks absolutely clear and smooth.

A drop of used oil from a tractor's crank case, similarly photographed, is shown to be full of sharp sediment and grit.

That is why good tractor manufacturers provide fresh-oil lubrication—Madison-Kipp lubrication—for their tractors.

Tractors Kipp-Equipt last longer, show lower repair costs, and use less oil than those that attempt lubrication by using oil over and over again.

A 10 to 40% Saving of Oil

Tractors Kipp-Equipt for fresh oil lubrication use their oil so effi-

ciently that savings of from 10 to 40% are common.

The waste due to frequent draining away of sediment-laden oil is done away with.

The expense of frequent repairs due to the grinding action of used oil is also cut out.

And because fresh oil forms a perfect seal and protects the cylinder walls from wear, you continue to get the rated horse-power from your tractor.

Protect Yourself

There is a good deal of confusion right now in the names used to describe tractor lubricating systems.

There are only two kinds: those using oil over and over again and those which use fresh oil only.

The first kind is described by many names—such as circulating force-pump, splash, crank-case system and the like—but they all mean that the oil is used over and over.

The fresh oil kind is commonly described in specifications by naming the lubricator used—and the great majority of tractors now built specify Madison-Kipp Lubricators.

Note that generally the manufacturers who have made good tractors for a term of years use Madison-Kipp Lubricators to provide fresh oil lubrication.

Note also that their Kipp-Equipt tractors cost you no more and are worth much more.

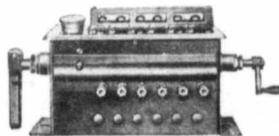
The Madison-Kipp Corporation
Madison, Wisconsin

The Products of These Tractor Builders Are Kipp-Equipt

On All Sizes of Tractors

Advance-Rumely Thresher Co.
B. F. Avery & Sons
Bates Tractor Co.
Eagle Manufacturing Co.
Gile Tractor and Engine Co.
Hart-Parr Company
International Harvester Co.
Titan Mogul
International
Klumb Engine & Machine Co.

La Crosse Tractor Co.
Happy Farmer Tractors
Nichols & Shepard Co.
The Ohio Manufacturing Co.
Whitney Tractors
Southern Corn Belt Tractor Co.
Townsend Manufacturing Co.
Townsend Tractors
Western Tractor Co.
Wichita Tractor Co.



Six-Feed Madison-Kipp Lubricator

On Some Sizes of Tractors

J. I. Case Threshing Mach. Co.
Case Tractors—12-25, 26-60
Holt Mig. Co., Peoria
Caterpillar Tractors
25-45, 50-75, 60-120
Monarch Tractor Co.
Newellip Tractors—26-12
The Russell & Co.
Russell Tractors—30-60

Madison-Kipp Lubricators

FRESH OIL SYSTEMS



Vol. XXIV

WINNIPEG, CANADA, FEBRUARY, 1919

No. 2

IN this new year of the world's life, the case for the farm tractor will be heard again in the court of public opinion, backed by a cloud of witnesses, who will bring an experience and facts that had never been available in pre-war days.

These witnesses will present testimony of a character and weight which is not likely to suffer from any "rebutting evidence" that may be brought in. Crowded into the short period of four years, they have seen things that at any former period of their life they would have considered unbelievable because impossible.

They have passed through hundreds of square miles of what was once splendidly cultivated agricultural lands, shorn in a night's time, not only of everything that lived and grew upon it, but deprived of all powers of reproduction—it is said—for the next decade.

Many thousands of these men represent the best agricultural blood-stock of Western Canada. They had come into the world with the farming instinct born in them, into a birthright of freedom that knew no limits short of license. They were bathed in this atmosphere of liberty from the day they first saw the light, right up to manhood, and when the time came when it had to be fought for, they gave an account of themselves that has made all the world ring with their praises.

In speaking as we have done to a few score of these indomitable boys on their homeward trek, there are several striking experiences they have met with which appear to have been common to the lot and which have everything to do with their future in the part they will take in the work of the farm.

One of these is explained by the oft-repeated saying: "This war has been largely won on gasoline."

Men with the kindest of hearts, their feelings have been bled white again and again (particularly those of the cavalry units or in the horse transport service) as they have seen the suffering and

indescribable sacrifice of horse flesh. Not to resurrect any of the horrors of those four years, let it be said that had the forces of freedom been at all dependent for transport on the horse, humanly

From beginning to end, it was mechanical power—gas power—that performed the work and won the day. Motor busses from the streets of London, trucks, lorries, taxicabs and automobiles from everywhere, gas and steam tract-

percentage of the work depended on the horse.

In the end, very many thousands of men who previously had not so much as steered a jitney on the open prairie developed quickly into first class gas engineers. The nature of the case "dragged them into fame"; not only could they operate any engine that came in their way, but they could doctor it, if human skill could do it, when any calamity overtook the show.

One can visualize an incident of the kind at some shell-torn roadside on a dark night. No convenient "garage" in sight with a capable and obliging jack-of-all-jobs ready to fix up any mess. It was a case for "initiative" and gumption if ever there was one, and we have it on unimpeachable authority from many sources that the Canadian boys rose to the occasion every time in a way that first astounded, then amused, and finally ceased to interest the spectators. It came off as a matter of course. It was in the blood of those bright fellows who had potted around their father's anvil, or took a short course at the college engineering class, or one or other of the tractor schools.

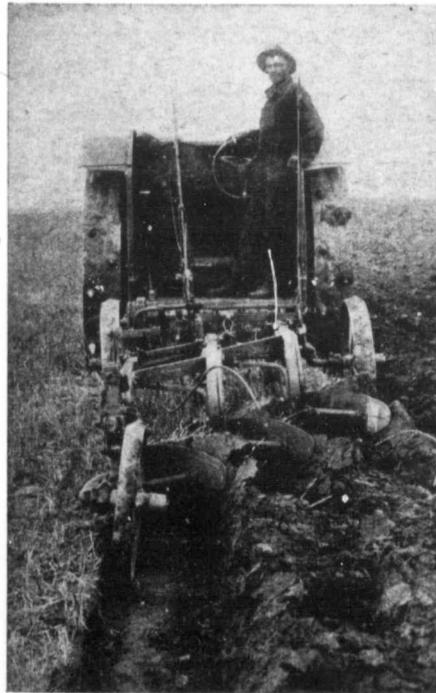
Now it's all over and here they come marching home in their thousands. How are these men going to influence things out West?

First of all, they have had it driven into their souls in a way they never realized before that it doesn't "pay" to use horse flesh in performing certain duties, and in the way they had been accustomed to handle them on the old farm.

Far from having become case-hardened by the cold blooded butcheries of war, their tenderness for their dumb companions has taken on a new refinement as the direct result of witnessing their mutilation and sufferings.

They have acquired a new standard of value as to horse power. They see something in a fine specimen of horse flesh that they never saw before, and just as we adjust ourselves to suddenly discovered new values in any-

Handy Young People with Handy Young Tractors



Need never look behind except to have "his picture took."

speaking the enemy had won the war hands down within a few days of hostilities breaking out.

In any event, even when horses were available in sufficient numbers, the strain was terrific; the attrition from sheer exhaustion made terrible inroads, and the loss from shell fire was appalling.

ors of all sort: of design were pressed into service and worked wonders.

The horse did his part nobly, but the task, alike in its conditions and magnitude would have used up the last four-footed animal in the first weeks of the war had even a comparatively small

thing, these men, no less from humanitarian feeling than from the enhanced money value in the case, are to give the draft horse

One reason for this belief is that when he steps out again into civil life, he is more than likely to find that a very great

Well, this is all changed, and what has been accomplished in the brief interval in producing tractors that are not "white elephants" but really money-making propositions, is scarcely less wonderful than any of the very extraordinary things that have been achieved in the four years of war, by the incidence of war.

Big Surplus of Skilled Operators

In contrast to the scarcity of skilled mechanics five or six years ago and right through the war period, might we venture the opinion that when demobilization has progressed, as the military authorities lead us to hope at the date of writing, the supply of thoroughly efficient gas engineers will exceed the number of tractors "waiting the human touch."

Let it also be borne in mind that during the last two years of the war, especially, a very large number of young people, mere boys and girls some of them, have graduated from the courses in gas engineering held at many points throughout the West. Others have taken the job "like ducks to water," and having been well drilled by the old man on the



Grant Closson, Kenaston, Sask., with three plows at six inches deep.

farm, it is proving one of the most powerful magnets in drawing and "holding the boy to the farm."

Not only the boy, but the girl of the farm, is finding an incentive to remain on the farm in the ever-widening scope she sees for her activities out of doors. This has been brought home in the most remarkable manner—especially during the last two winters—through the operations of the local "short courses" carried out



C. E. Carson, of Loughheed, Alta.

a place in their farm economy somewhat different from that which it has held in the past.

So also will they approach the tractor and mechanical power supply, generally, as a factor in the business end of farming that they had never really exploited or even granted the favor of a fair hearing.

Sees Things He Hadn't Seen

Whether he has actually been engaged in handling mechanical transport or merely a common soldier of the line who has seen and participated in those wonderful troop movements effected by thousands of motor vehicles, the returned soldier has got a vision that is still denied to the longshoreman or those whose part it has been to stay at home and do the chores.

For purposes of heavy traction, for humane, efficient and rapid transport, his concept of the horse has dropped to a very low point while his estimate of the internal combustion engine has correspondingly taken a jump upwards. Without losing a particle of his old-time regard for the

progressive stride has been made towards mechanical perfection, and in the adaptability of the tractor to every requirement on the Western farm during the period of his absence, and that his old neighbors have become scarcely less enthusiastic tractor-owners than he is himself.

There can be no doubt that the ancient prejudice against the tractor is fast dying out, if it has not entirely disappeared. That prejudice had everything to feed upon a few years ago when there was nothing in sight but the "jumbo" type of engine that packed the land and generally miscondacted itself when it was taken out for an airing, and when the men who had the brains and experience to handle them properly were as scarce as "snowballs in Hades."

That was the day when every second man one met who had bought a tractor was cursing the day he committed the foolish act; when college professors, leading farmers, bankers, merchants and the wives of the victims declared with one voice that the



Fred Cashmore, Maple Creek, Alta.

farm, have made splendid records in plowing and in belt work. In fact, the "fashion" has set in so strong—"everybody's doing it."

Throughout the summer of 1918 one could not visit a plowing match or harvesting outfit at work without being struck with the number of young people taking part and handling their machines with the assurance and no less skill than many of the old hands who had been operating for years. One or two incidents of this kind are reproduced in connection with this article.

These are multiplying all the time and will continue to multiply. Wherever you see a boy excited and making good at anything of the kind, the gang is quickly infected.

There are few things around the farm homes to-day that are exciting greater interest among the young folks—girls no less than boys—than the gas tractor. Wherever there is one, or an en-

by the Agricultural College Extension Department, as well as the various schools promulgated by the tractor manufacturers, etc.

We have been told by more than one of the men who went through Manitoba lecturing and demonstrating on the farm tractor or that at several points the most keenly interested and apt pupils were the girls and the young women.

On the opposite page are three pictures to which the reader's attention is particularly directed. On top right-hand corner are the portraits of two young Manitobans, Miss Brenda E. Quelch and Miss Anita E. Weineke.

Miss Weineke is the daughter of one of the most respected farm homes in the province, that of the celebrated breeder of Poland Chinas in Rockwood Municipal-ity, near Stoney Mountain, and Miss Quelch has spent several of the best years of her life as a



R. P. Bradshaw, Roland, Man.

horse, he regards the gas engine with feelings of marked enthusiasm which to all appearance is likely to be maintained.

gas tractor manufacturers and dealers were the worst robbers the Western farmer ever had to deal with!



Grant Closson breaking prairie with kerosene tractor, six inches deep.

member of the same household. She is seen in one picture plowing with a "Case" tractor, and in the bottom corner she is seen as the sole "navigating officer" of the binder, while her chum, Miss Weineke, operates the tractor.

In course of the whole outdoor working periods of 1917 and 1918, it is only the plain fact that these two girls did mens' work on this farm with the tractor and field equipment second probably to nothing else of the kind in mens'



"Brenda" in full control and needing no tips.

work whether it is measured in quantity or quality.

Apart from the actual operations on the farm, their road-dragging record is something of which the municipality is justly proud, and has no doubt recognized as it ought to be treated. There are no better examples of grade roads in Manitoba than are to be found in the Weineke district.

Miss Quelch has a record in other respects which we give briefly because it so effectively "points a moral and adorns a tale" in the sphere and development of the young woman of the farm. We give it for one reason only, viz. because of the belief in our heart that it will bring cheer and inspiration to other girls who hold no better "endowments" than Brenda does, but, so far, the fear of "I couldn't do it" has kept them from making any attempt.

She has supported herself since

she was 12 years of age, at which point she left school. After 4 years she returned and that year passed in the 8th grade. The following year she took the combined course that enabled her to pass both the 9th and 10th grade, and had the honor to carry the highest marks given to any public school pupil in Manitoba in that year.

She and her friend, Miss Weineke, are now attending St. John's Technical College, Winnipeg, but when the breath of spring starts things afresh on the farm, they will be at it again with the teams and the tractor they can handle with all, if not more, than the facility and understanding of the man who is rearing the "Poland Chinas."

One tip they would drop in passing to the other girls who are handling tractors is that in this work they should see that they are properly attired for it. There are various "styles," but the selection must rest with the individual taste. Or no account, however, should a girl work around a tractor with loose skirts.

Well, there's nothing wonderful

about all this. It is but a plain tale of plain application to a species of employment than which there are none more ennobling and satisfying—at least in a country that boasts of its great "basic industry of agriculture."

What economic or common-sense place does the mere flapper of tight skirts and ruinous millinery fill in Western Canadian life? These girls we write about are no precocious "janes" or "wilted wall flowers." When the time is ripe for skylarking (as it often is in their bright young lives) they are in it to the legitimate limit. They are, however, "whole women to one thing at a time." When the kitchen, or the cook house calls, they can think of nothing else, and "the proof of their pudding is the tasting o't." When field work claims all hands on deck, they are the best "men" on the farm. They have had the

benefit of sound advice and a solid example in all around them; they have elected to take and reproduce it—and there you are!

of summer-fallow being what I could not finish with horses and 45 acres of fall plowing.

In fall plowing I pulled a 3-disk



Miss Brenda E. Quelch (left), Miss Anita E. Weineke (right).

WOULD NOT AGAIN START IN WITHOUT A SMALL TFACTOR

Drumheller, Alta.,
March 2nd, 1918.

Dear Sir:—

I own and operate a 10-20 tractor, with which I pull a two 14-inch breaker bottom P & O Genius (power lift).

My soil is of gumbo nature with considerable turtle back, and when breaking with horses I use five to six 1400 horses on a sulky plow and then do not plow more than 4 inches deep, and 2½ acres per day and the ground must be in the best of condition to do that whereas when I was plowing with the tractor engine it was exceedingly dry and hot, so dry that I could not finish summer-fallowing with the horses.

I did not keep account of the oil I used except for the first 106 acres I broke, which is as follows:

Kerosene, 10 drums, 450 gallons,	
at 2½ cents	\$110.25
Lubricating oil, 20 gallons, at	
6½ cents	12.40
Lard oil, 3 pounds, at 25 cents ..	.75

Hamilton Disk plow, travelling on high speed and doing 10 acres in about 15-hour day, and used about three gallons of kerosene per acre.

I threshed this fall running a 20-36 Sawyer-Massey separator fully equipped which the Titan handled with ease, and threshed from 800 to 1,000 bushels of wheat per day on about 20 gallons of kerosene.

I operated both ends of the outfit myself most of the time. I never before operated either engine or separator, and my total repair bills on the engine did not amount to (\$10.00) ten dollars.

I have plowed some in light soil, chocolate loam, where I could travel on high speed and could break about seven acres in 11 hours.

I am at present working on a two drill hitch for the engine which I intend using in the spring with which I expect to sow from 50 to 60 acres per day.

I feel that the small tractor is the solution to the labor question for the man farming a section of



Two farm home girls who can replace two men any day in farming operations.

Gas for starting, about 4 gallons,	
at 50 cents	4.00
Total cost for 406 acres breaking	\$125.40
In all I broke 260 acres, 30 acres	

land and for my part I must say I would not again start farming without a small tractor.

Yours truly, S. N. Noble.

THE CANADIAN THRESHERMAN AND FARMER

CANADA'S LEADING AGRICULTURAL MONTHLY



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

Feb.

Johnny Canuck's "Initiative"

1919

OUR GUARANTEE

No advertisement is allowed in our Columns until we are satisfied that the advertiser is absolutely reliable and that any subscriber can safely do business with him. If any subscriber is defrauded, E. H. Heath Co., Ltd., will make good the loss resulting therefrom, if the event takes place within 30 days of date advertisement appeared, and complaint be made to us in writing with proofs, not later than ten days after its occurring, and provided, also, the subscriber in writing to the advertiser, stated that his advertisement was seen in "The Canadian Thresherman and Farmer." Be careful when writing an advertiser to say that you saw the advertisement in "The Canadian Thresherman and Farmer."

WOULD any reader of this magazine care to prescribe a standard of value to the services of the returned soldier in civil affairs? We ask the question because a certain "authority" has recently given wide publicity to the opinion that the man who has been in the army, especially the private soldier, has depreciated greatly by reason of his "loss of initiative." In the nature of things, while he has been under military discipline, he has had to do what he was told, without reasoning, to the end that in-so-far as fitting himself again into the machinery of industrial or business life is concerned he has got an obvious leeway to overhaul. So reasons this "Authority."

That cannot be the considered opinion of anyone who knows anything of the character of the rank and file of the British or the American army, least of all that portion of the grand alliance known to all the world by that imperishable title: "The Canadians." But the most ardent admirer of that magnificent fighting unit will acknowledge that even in the Canadian army there

have appeared outcroppings of bums and misfits. These, however, were misfits and bums before they enlisted or were drafted into the army. The real men, the fellows who had initiative and demonstrated it before they went overseas, will come out of it with that great quality intensified, not impaired; and we make no distinction here between the volunteer and the drafted man.

This of course refers to the men who have not been disabled by wounds or shell shock. As to these, no one will dare to generalise. There can be no two opinions here. Every individual case of the kind must be handled according to its special needs, with infinite patience, at whatever cost to the State, until that man is in a position to help himself. He is no object of charity. This much is due to him from the public treasury for services rendered just as surely as the weekly pay of any public servant is due to him on pay-day. But this is not the category we have under review. The men whose value in civil life is being depreciated are the men who in the Providence of God have passed unscathed through the awful ordeal.

Surely the pragmatist is confounding our "Contemptibles" with those goose-stepping marionettes who had their last memory of initiative whipped out of them by the Prussian junkers long before they could draw the trigger of a rifle.

As to these he might be right, but of the great mass of our Canadian boys, a thousand times no! The very reverse is the fact, and when the men do come home and start in, there will have to be "another guess." On what evidence can any one size up and arbitrarily dispose of these men in this wholesale fashion?

The physically fit Canadian army is still in France or somewhere else on its way home, so it hasn't been seen or heard from yet, far less tried out in civil life. When it or any man of it reaches his home town, is there the Hun amongst us who would introduce the lad to his old machine tool on the very day he steps into the arms of his family and friends? Not on your life! No regular subscriber to this paper needs coaching as to what is due to these men on their arrival and forever afterwards. Initiative! In all its splendid work, if there is one thing more than another that has accounted for the amazing success of the Canadian army, it was the outstanding initiative of the non-coms and the men.

When the leadership has been good, the private who did what he was told had a wonderful example of what could be done with brains and courage. When the leadership was bad or indifferent, the men, if they dared not act on the initiative, got it in their heads all the same and carried away for further use as a tragic lesson in "how not to do it." An experience of that kind is often of far greater value than if the man had really acted on the impulse with complete success. Then what of those thousands of recorded not to speak of many more thousands of unrecorded instances in this war in which the leaders have been shot down at a critical moment?

There are two words which have lost much of their hypnotic influence on the Canadian soldier since he came to close quarters with the Hun. These are "Efficiency" and "Initiative." The Hun's efficiency had been the world's nightmare for a quarter of a century, and to-day or in all history, is there a more sorry looking scare-crow than the Hun and his "efficiency?" And Johnny Canuck says that the fellow who is everlastingly talking about "taking the initiative" is rarely equal to the business of following it up or taking anything else. So till J. C. gets home, we prefer to continue to regard him as of the salt of the soil; to see him actually "on the job" before we dock one dime's worth from his efficiency or make him second fiddle to any initiative on earth.

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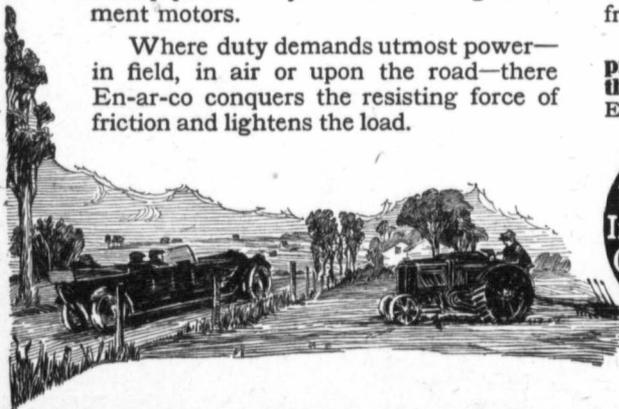
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My Name is
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A TRACTOR is rated as an 8-16, meaning that it has a drawbar pull of 8 horsepower. The main difference between the eight horses and the tractor is that the horses can exert a pull of eight horsepower for 10 hours and more for short periods as when they come to a tough spot in plowing or a grade on the road, while the tractor can develop 8 horsepower for 24 hours a day and 6 days a week but has very little reserve for the tough spots and the grades. They are rated very close to their capacity. Steam engines used to be underrated and consequently

Draw Bar Horsepower— What It Means

By J. MACGREGOR SMITH, Saskatchewan University

a dynamometer (a strong spring balance), see Figure 8, which shows one type. You may see this device in use at some demonstration and we want you to go right up and read the pull and by finding the speed, at which the engine is travelling, you can immediately determine the drawbar horsepower. On the other hand if a salesman comes to you

It may be working in light sandy soil or heavy clay. It may be in a level country or a hilly country. All factors must be considered.

For example, let us suppose we have an engine rated at 30 H. P. at the drawbar, we want to know how many plows it could pull at two miles per hour? We will assume each plow takes 750 pounds of a pull. Since 1 horsepower equals 33,000 foot pounds of work per minute, 25 horsepower must equal $33,000 \times 25$ or 825,000 foot pounds of work per minute available at the drawbar. Now 2 miles per hour equals 176 feet per minute, so that each plow will require $750 \times 176 = 132,000$ foot pounds of work per minute. So if we divide 825,000 into 132,000 our answer will be the approximate number of plows, which in this case is 6. This is not a panacea for all plow and tractor troubles but it very clearly shows what factors decide how many plows an engine can pull. The kind of soil and speed each enter into the final result.

We also show a cut of a small dynamometer, see Figure 7, suitable for horse-drawn implements such as plows, etc. We have found in summerfallowing good loam soil with a 14 inch gang plow, plowing 8 inches deep, that a pull of 1000 to 1100 pounds was exerted. Five large horses were used which means a pull of 200 pounds per horse, about 1/8 of

can readily see that the term—HORSEPOWER—is a very practical one.

How can these things be demonstrated in the most practical way? The best opportunity at present is to make them a feature of a plowing match or an agricultural fair in your county. A dynamometer will show exactly what pull is required by any plow at any depth. This is worth knowing. If a man was thinking of buying a tractor and he knew how much was required to pull a plow in his vicinity, it would help him to choose the proper plow for a tractor of a known drawbar horsepower. In connection with the plowing match one or more tractors might be demonstrated and the drawbar pull of each ascertained. It offers a splendid field for the right kind of man to demonstrate something of real value to the farmer, who should know how much power is required to pull his different implements. It will help in the arrangement of his farm work. It will also decide many problems that are now engaging the attention of practical men.

That Settled It

Some years ago, Dr. Jas. B. Angell, at that time president of Michigan University, while traveling through a prosperous farming community in western Ohio, was attracted by a square brick building set solidly on a hilltop and surmounted by an aggressive cupola.

Drawing rein at a neighboring farm house, he inquired what the building might be.

"That there building," drowled

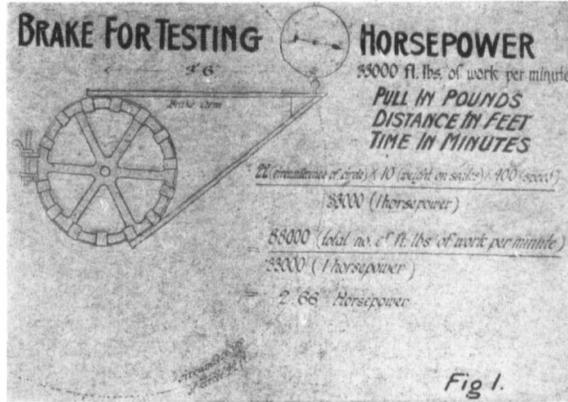


Fig. 1.

were seldom lacking in power. A tractor must be used reasonably and not solely with the idea of sticking it, as many operators try to do. Overloading means a short lived machine. Remember that fact. If an engine is guaranteed to pull a two furrow plow, don't put on a third plow if it means working the engine very hard all the time. With the two it will have enough reserve for the tough places. An engine is rated as a 15-30 H.P., meaning it has 15 horsepower at the drawbar and 30 horsepower at the belt pulley. If the tractor had only a 15 horsepower motor and it required 15 horsepower to move the machine along the ground you can readily see that none will be available at the drawbar for plowing or other work.

To tell how many horsepower an engine is developing we must know the number of pounds it is pulling and the speed at which it is travelling in feet per minute. The number of plows tells us very little. We have seen a 30 horsepower tractor pulling 8 plows and within a short distance the same size of an engine could only pull 4 plows. The difference was mostly due to the soil, which in the first case was light and in the second a heavy gumbo. The setting and condition of the plows has also something to do with it.

The pull is tested by means of

and says: "I will guarantee my tractor to pull 2000 pounds at a speed of 2 3/4 miles per hour," you can now readily figure out the drawbar horsepower. The distance in feet per minute will equal:

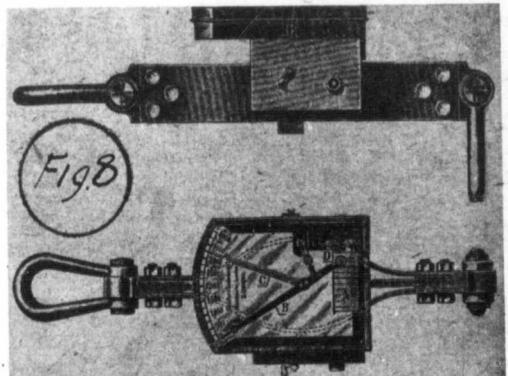
$$\begin{aligned} & 5280 \times 11 \\ & \quad \quad \quad = 242. \\ & 60 \times 4 \\ & \text{then} \\ & 2000 \text{ lbs.} \times 242 \text{ (ft.} \\ & \quad \quad \quad \text{per minute)} \\ & \quad \quad \quad = 14 \frac{2}{3} \text{ H. P.} \end{aligned}$$

33,000 (one h. p.) or another tractor is guaranteed to pull 1800 pounds at 2 3/4 miles per hour. What drawbar horsepower is developed?

We will work this problem in one step instead of two:

$$\begin{aligned} & 1800 \text{ lbs.} \times 5,280 \\ & \text{(ft. in a mile)} \times 11 \\ & \quad \quad \quad \text{(miles per hour)} \\ & \quad \quad \quad = 13 \frac{1}{5} \text{ H. P.} \\ & 33,000 \text{ (1 h.p.)} \times 60 \\ & \text{(mi. in one hour)} \\ & \quad \quad \quad \times 4 \end{aligned}$$

It is practically impossible to tell how many plows a tractor can pull, but any reliable manufacturer will guarantee a definite drawbar pull at a certain speed, and what more can you ask? Nothing. But it is up to you to understand the relationship between the pull, the speed, and the rated horsepower of the tractor and the work which you may expect it to do.



its weight. Let us suppose that they travelled 2 miles per hour then:—

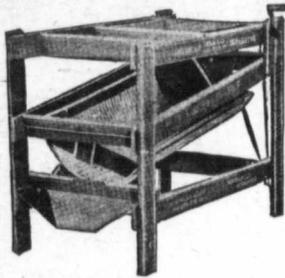
$$\begin{aligned} & 1000 \text{ (lbs.)} \times 176 \text{ (ft.} \\ & \quad \quad \quad \text{per minute)} \\ & \quad \quad \quad = 5 \frac{1}{3} \text{ H. P.} \\ & 33,000 \text{ (ft. pounds} \\ & \text{per min. in 1 h.p.)} \end{aligned}$$

The problem is the same with either tractor or horse and you

the farmer, "is Highgate University."

"Impossible!" exclaimed Doctor Angell. "You must be mistaken; that surely cannot be a university!"

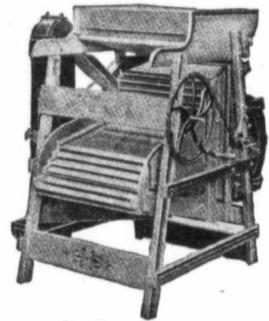
"Yes, it can," asserted the Buckeye calmly. "I know it is, because I am one of its alma maters."



CUSHMAN

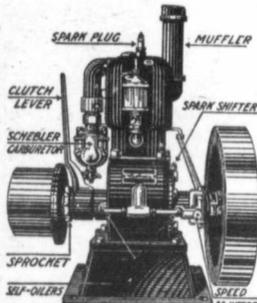
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Made in Sizes:
From 4 to 20 H.P.

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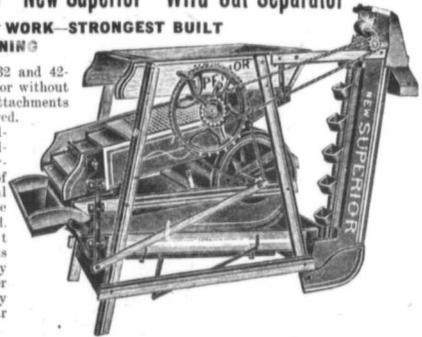
4 H. P. Cushman. Weighs only 190 Lbs.

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IT DOES THE WORK—STRONGEST BUILT EASIEST RUNNING

Made in 24, 32 and 42-inch sizes, with or without bagger. Power attachments supplied if desired.

Patented adjustable wind-boards give perfect control of blast; our special sieves eradicate all wild oat seed. Strongly built and bolted; has greater capacity and does better work than any mills of similar sizes.



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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. The most efficient automatic pickler on the market. Ask us about it.

Ask for full particulars of our improved 1919 Model



The LINCOLN 24x46 Separator

The Perfect Thresher for use with Small Tractor

The Cushman 24x46 Thresher is an ideal machine for the owner of a Standard 10-20 or 12-24 Tractor. It can be furnished with Hand Feed and Windstacker or with full equipment, as illustrated. Very strongly built; exceptional capacity. Cleans the grain fit for market.

Lincoln Smut Cleaners

Ensure Clean Seed and Big Yields

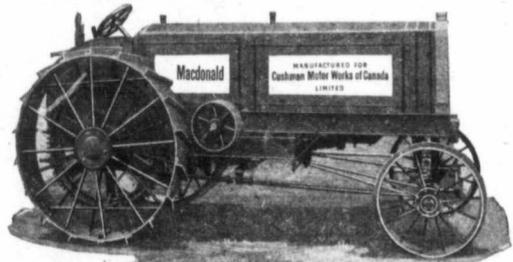
Sold on a positive guarantee to prevent smut. No. 3 handles 30-50 bus. per hour; No. 4, 50-75 bus. The Lincoln separates smut balls, wild oats, king heads, and all light seed from wheat, also wild oats and all light seed from barley. Grain is thoroughly pickled, dried and elevated to wagon box. Automatic skimmer an exclusive feature. Strong, heavy construction. Large, rustless solution tanks.

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Write for Prices and Full Particulars

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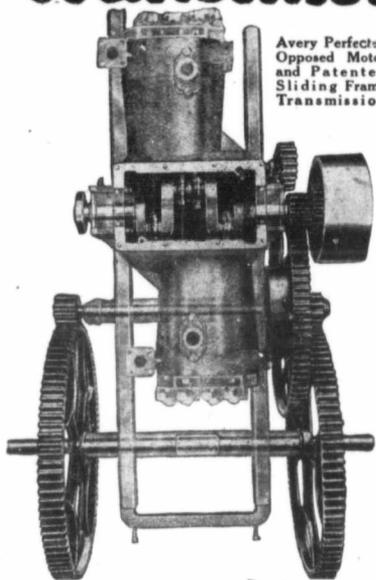
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The Most Efficient Tractor Transmission System Built



Avery Perfected Opposed Motor and Patented Sliding Frame Transmission

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It is simple; it stands up under heavy-duty tractor work and delivers the power to the belt wheel and drawbar with the least possible loss.

It is the only tractor transmission system built that makes possible a direct drive in either high, low or reverse gear, or in the belt. And what's more, it requires only one clutch—only three shafts—only three gear contacts and only eight gears between the motor and the drawbar. All intermediate gearing, shafting and bearings are eliminated. All gears are straight spur gears, which years of steam tractor experience have proven to be the most successful for heavy-duty traction work. All gears are open and located outside the frame, where they are easily accessible yet are well protected.

All are made of steel and semi-steel, which means that they are able to stand up under hard strains that tractor gears must meet.

The belt pulley is mounted directly on the end of the crankshaft. There are no bevel gears between it and

the motor and no extra crankshaft bearing on the frame of the tractor.

All of the power of the motor is delivered directly to the belt. None is lost through extra bearings, or by turning corners through bevel gears. Because the Avery perfected opposed motor runs at low speeds, we are also able to use a large belt pulley, which grips the belt better and insures better running of the machinery.

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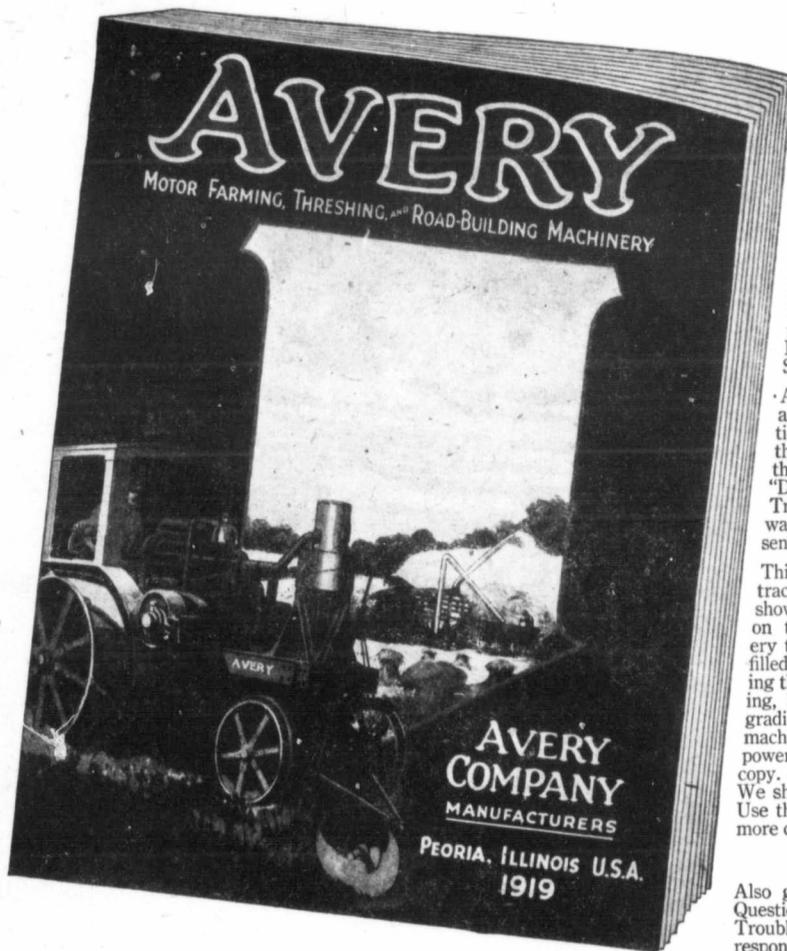


Avery Patented Sliding Frame Transmission The "Direct Drive Transmission"

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| <input type="checkbox"/> I am in the market now | |

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BELT LACING

A Practical Thresherman's Experience

(We commend the following article to the careful perusal of all readers interested in Belt work. It is contributed by James M. Dill of Herschel, Sask., who has been moved to write it by Professor Macgregor Smith's observations in the August issue—Ed.)

MANY articles have been published from time to time dealing with different methods of belt lacing and much discussion has taken place as to the several merits of patent fasteners versus lacing, but it seems hard to get any standard writings on the subject. Yet it is one of the small things that count for efficiency in the field and in the shop.

In the writer's opinion, for small belts such as 1½ or 2 inch

shown in Figs. 1 and 2 for belts of 5 inch or over), I have found superior to any method that I have run across to date. I have

Having cut the laces, join the two thick ends (the neck ends) of the laces by cutting a slot about ¼ inch long about 2½ inch from the end of each, pass no. one through the slot in no. 2 and the long end of no. 2 through the slot in no. 1 (fig. 5.) Pull tight. Be sure and leave ends long enough so they may be tacked in in finishing, and also see that slots are cut in the exact centre of lace.

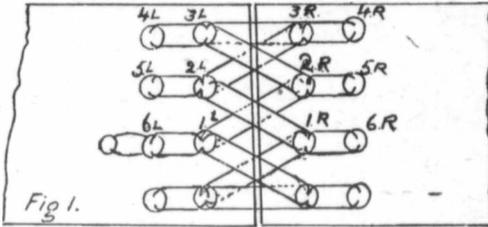
Next stretch the lace by passing one end around something handy and solid, usually

in lace on side of belt away from pulley. Referring to (fig. 1) put first end of lace down through hole 1 R, then up through hole 1 L, then

" 2 R, " " " " 2 L, "
" 3 R, " " " " 3 L, "
" 4 R, " " " " 4 L, "
" 5 R, " " " " 5 L, "
" 6 R, " " " " 6 L, "
" 1 R, " " " " 1 L, "
" 2 R, " " " " 2 L, "
" 3 R, " " " " 3 L, "
" 4 R, " " " " 4 L, "
" 5 R, " " " " 5 L, "
" 6 R, " " " " 6 L, "

The other half is done in exactly the same manner, so needs no explanation. Lace is shown here starting from third hole instead of second to give three sets of holes for explanation.

When you finish with end no. 2 you will come to hole 1 L, again. Put down through 1 L, and up through 6 L, pull both ends tight. Now punch another hole one inch behind 6 L, put the two ends through from their respective

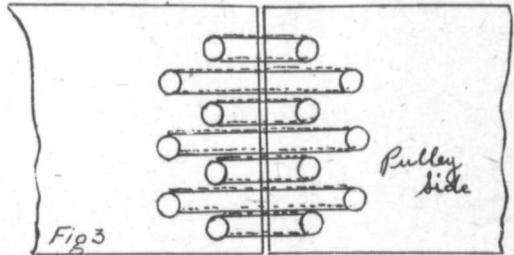


wide, the patent fastener is an ideal method of joining ends and certainly possesses the advantage of being quickly and easily installed.

But for belts of larger calibre than that, there seems to be nothing to oust the old fashioned lacing from its place. Belt lacing is an art and study by itself, almost, and like most other things something can always be learned.

I have read a number of articles dealing with this problem, but few that seem to be authoritative. One of the best I have come across is Prof. J. McGregor Smith's in the August number

used a Gandy belt (8 inch) for two whole seasons threshing with two of these laces in it without replacing. This lace runs very smoothly over the pulley owing to the single lace striking the pulley before the double. Many men think they are putting in this lace when they put in a common double lace, (as in Prof. Smith's article fig. 10) and then lacing the ends alternately through each of the 1st and 2nd rows of holes. This looks similar but has not the strength, as the pull is all on the first row of holes and the second row only tends to weaken the belt. An-

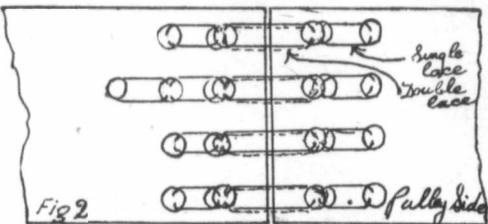


the spoke of a separator wheel and saw back and forth and pulling at the same time. Don't be afraid of breaking it. If you can break it this way, it is of no use in a belt.

Next punch the holes 1¼ inch from end of belt (for a narrower belt 1 inch is sufficient) and 1 inch apart, the first and last holes being ¾ inch in from edge of belt. Punch second row 1 inch immediately behind the first row, being careful to get them in line as you may next time you cut the belt, want them for the first row. Cut first row oval by taking ½ width of punch offside

sides, pulling both in tight at the same time and cut off, leaving about ½ inch. Now tack joined ends of lace down through the nearest holes and cut off.

Care must be taken for instance, as in going from hole 3 L to hole 4 L, to not pull the loop thus formed tight, till lace is passed up through 3 L, the third time; then tighten loop and then pull, pull the end tight, this puts the "cinch" on it, giving it the name of the lock lace. This lacing if properly done will run for a considerable period, even when after several strands are worn through or broken, though it is advisable



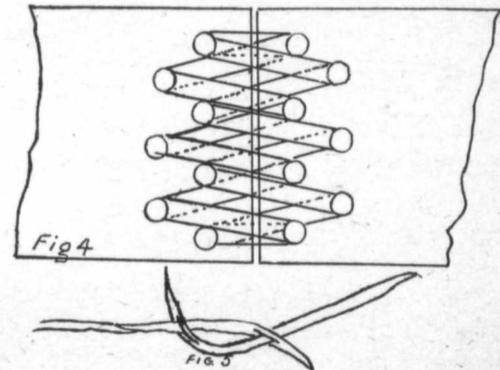
of the "Canadian Thresherman" which I have just been reading (we threshermen don't get much time for reading in threshing season) and as Prof. Smith invites others to air their ideas and experiences, I will endeavor to describe a few methods that I have found good in the field, where it is such small things as these properly done and maintained that keep the wheels turning. If they don't turn, you all know someone is losing dollars: is it you?

Both the methods herein described I have tried out (among many others) and have had excellent satisfaction from them, though some practice is necessary to get exactly the same tension on each and every strand which I may say is the foundation of a good lacing. The lacing

other advantage of this lace is that when it becomes necessary to shorten the belt either one or two rows of holes may be cut off as the second row is immediately behind the first.

To put in this lace, assuming you are lacing an 8 inch Gandy or Rubber belt.

First cut two strips of lace a good full half inch wide and the full length of the hide. (Lace bought by the side is as a rule superior to ready cut, to say nothing of always having the width you want, as the lace should be in proportion to the belt in width.) It is only a second's work to cut it with a lace cutter, bought at most any hardware store for the sum of 50c., and is one of the handiest tools to have in separator tool box. This will cut any width you want.

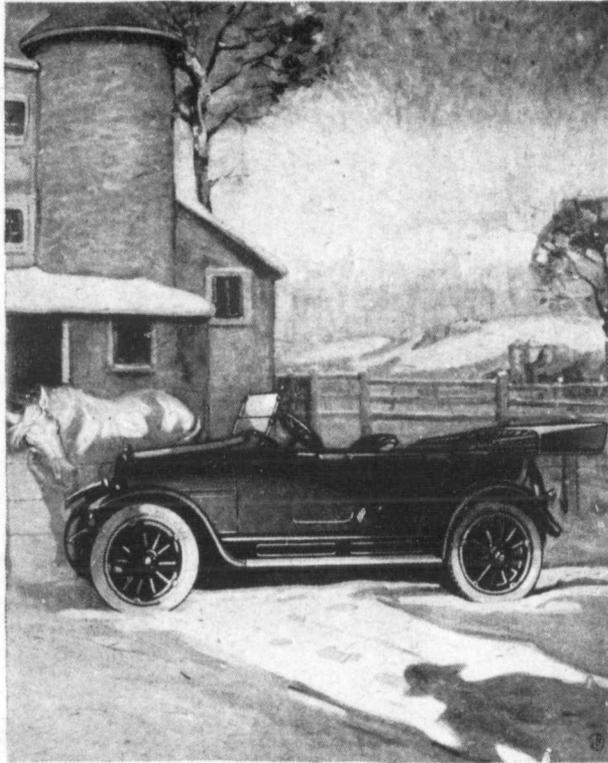


next second row as shown in cut. Now start as you would for an ordinary double lace. Starting in centre of belt and keeping joint

to relace it at the first opportunity after a broken strand is noticed. Do not be afraid to run this lace

Continued on page 48

Overland
TRADE MARK REG.



The New Friend

Overland cars have the reputation of making close friends. In fact, Overland cars are conspicuous everywhere there are up-to-date farms with modern equipment. What stronger recommendation could be asked for, than the fact that thousands of owners vouch for the complete satisfaction of Overland Model 90 cars? The steadily growing public appreciation of Overland is evidenced in the demand of this season. See the Willys-Overland dealer now.

WILLYS-OVERLAND LIMITED

Willys-Knight and Overland Motor Cars and Light Commercial Wagons
Head Office and Works: West Toronto, Ontario
Branches: Montreal, Quebec; Winnipeg, Man., and Regina, Sask.

Model Ninety

Five Passenger Touring Car

VARIOUS "knowing" predictors and recommendors have said and written a whole lot during the past couple of years anent speeding up the farm tractor and incidentally the whole dadgummed farming business. This propensity seems to have developed mostly since automobile manufacturers, engineers and selling agents shoved their respective oars into the more or less placid waters of the tractor industry. A few brisk-paced tractors have followed in their wake.

The automobile, of course, is synonymous of speed. It follows quite naturally, therefore, that anyone connected with the manufacture or sale of this distance-annihilating commodity should become infected with the "speed germ"—a very virulent bug, be it known—and pass it on to the first critter with which they happen to come in contact even though it be the robust, hard-working farm tractor.

Perhaps a little injection of anti-tractor-speed vaccine might help in certain cases. And possibly we can prepare a limited amount of this preventive by mixing together a batch of speed figures and farm machine logic.

The chief trouble with the majority of the legion of "knowing" and entirely well-meaning accelerators of progress referred to in the opening paragraph seems to be that they are "knowing" mostly in one direction. They may have this business of designing and manufacturing tractors down pat from technical and theoretical standpoints—but how do they stand in the vital matter of farm-machine and mathematics? Tractor plowing speeds of six, eight or ten miles an hour sound fine on paper and smack loudly of progress. But there is such a thing as tying a tin can to the tail of progress, thereby creating a temporary acceleration of pace, but with no beneficial results. The contrary perhaps.

Let us mix up that batch of figures and see if we can absorb two or three shots without growing too dizzy:

The first problem is to figure out whether or not there is any particular advantage in having a tractor prance along at speeds of from six to ten miles an hour, taking it for granted that the tractor and co-ordinating farm machines will stand the racket. The average farm horse ambles along at the soothing pace of two miles an hour and the majority of the leading tractor manufacturers have accepted this speed or a slight increase, as the most desirable operating pace. But beyond two or three miles an hour—well, that's where we're going in a jiffy.

First we'll consider the matter

Correct Speed of Farm Tractors

More work may be done at 2.5 and 3 miles an hour than at 6 or 8 miles per hour—a better class of work is possible at the lower speeds.

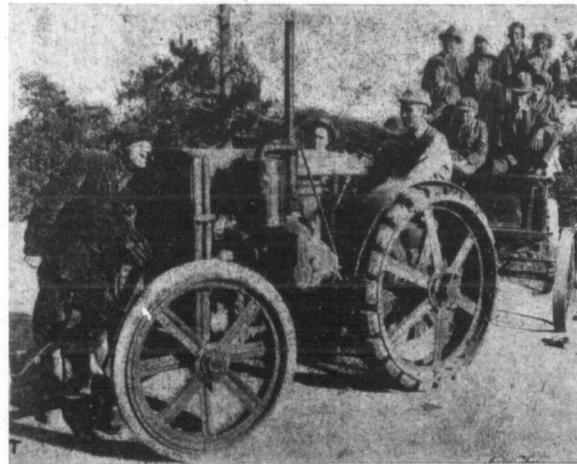
By B. J. PAULSON

of drawbar power at different speeds:

As most of us know, 1 mechanical horsepower equals 33,000 foot-pounds per minute. In order to determine the drawbar draft of a tractor at different speeds it is necessary to multiply the rated drawbar horsepower by the time by 33,000 and divide by the distance of travel in feet, during the specified time. To make the point clear and to facilitate operations and mathematics further along,

Speed	Drawbar Lbs. draft
1.75 miles per hour	2,142
2.00 " " "	1,870
2.25 " " "	1,500
2.75 " " "	1,250
3.00 " " "	1,070
3.50 " " "	940
4.00 " " "	835
4.50 " " "	750
5.00 " " "	625
6.00 " " "	535
7.00 " " "	470
8.00 " " "	417
9.00 " " "	375

Now then, suppose we have a



CLIMBING MOUNT WILSON (CALIFORNIA) WITH A TRACTOR

For the first time, this "stunt" was pulled off by a Case 10-18 on 30th November. The alarmed expression of the mechanic in the foreground means nothing more than that he is merely holding his face to the radiator just as the machine reached the top to show how little heat had been developed. Full particulars of the incident will be found on page 45.

we will commandeer a 10-20 horsepower tractor and demonstrate.

A 10-20 tractor has a drawbar rating of 10 horsepower. At a speed of 1.75 miles an hour the drawbar draft in pounds of this tractor would be as follows: 10x60 (minutes in an hour) gives us 600 which, multiplied by 33,000, according to the most approved rules of mathematics, nets us 19,800,000 which we now proceed to divide by 9,240 (number of feet traveled in an hour), giving us as the final result 2,142. This represents the pounds draft of a 10-20 tractor at a speed of 1.75 miles an hour.

In order to relieve the reader of the tedium of successive identical calculations and to simplify the next problem, we will tabulate the drawbar draft of this same tractor at different speeds. The following table gives the drawbar pounds draft for speeds from 1.75 to 10 miles per hour for this 10-20 demonstration tractor.

field of clover sod to plow and have an assortment of varied-speed 10-20 tractors at our disposal. The average soil resistance per square inch of the furrow slice against the cross section of the plow in this particular ground is 8 pounds. We are going to use fourteen-inch plows and will plow at a uniform depth of six inches.

We will get our slow tractor started first—the fast ones can undoubtedly catch up without any trouble! Now, let us see how many plows we can pull at 1.75 miles an hour:

The cross section of the working surface of one plow will be 14x6 (width of plow multiplied by depth of plowing) or 84 square inches. The soil pressure is 8 pounds per square inch. The draft of one 14-inch plow turning a six-inch furrow will therefore be 84x8 or 672 pounds.

The draft of our tractor at 1.75 miles per hour is 2,142 pounds as will be noted from the foregoing table. This tractor will therefore

pull three 14-inch bottoms easily without overloading, the soil draft being 3x672 or 1,916 pounds, which, deducted from 2,142, leaves a surplus of 226 pounds, or a trifle more than one horsepower in reserve for the hard places. Plowing at the rate of 1.75 miles an hour, each plow will turn .247 acres an hour or .741 acres for the three bottoms. For a 10-hour day this would make a total of 7.41 acres plowed during that time.

We will now start a tractor of the 2.75 miles an hour class. This tractor has a drawbar draft of 1,360 pounds and will therefore pull two 14-inch plows without overloading, leaving a small margin for emergency pulls. Each plow bottom working at 2.75 miles an hour will net .388 acres in that time or .766 for the two plows, making 7.66 acres for a ten-hour day.

All ready for the 6 miles an hour speed king:

Referring again to our table we find that this tractor has a drawbar draft of 625 pounds—and the soil resistance against one 14-inch plow is 672 pounds! But we must hang at least one plow to this tractor—wouldn't look well if we didn't—so we overload it a bit and send it on its merry way with one 14-inch plow. It rambles along at the magnificent rate of six miles an hour, turning .852 acres of ground during each 60-minute interval of time, netting us 8.52 acres for our 10-hour day!

As for the 8 and 10-miles-an-hour tractors—unfortunately we haven't any plows in stock small enough to accommodate these speedsters so they will have to take a vacation until we can find a field of nice, loose, sandy soil in which to put them at work.

No more work can be accomplished at six miles or more an hour than at 1.75, 2 or 2.75 miles an hour, for as the speed of the tractor increases, the drawbar draft decreases in proportion. True, in the examples stated, the tractor plowing at a speed of six miles an hour plowed 8.52 acres in ten hours as compared to 7.41 acres in the case of the tractor creeping along at 1.75 miles an hour with three plows. But in the latter case the tractor had a generous margin of reserve power whereas the fast tractor was overloaded—and nothing affects the life of a tractor more seriously than overloading.

It is apparent, therefore, that there is no advantage to be gained by speeding up a tractor insofar as the amount of work accomplished is concerned. Very well; that disposes of one problem.

The next question is whether or not a better quality of work can be done at increased speeds? I asked a tractor expert this question—a "trouble-shooter" who has had ten years' field experience

4000 Tons Standard Stock Feed for Sale

DURING the War, for the purpose of assisting the farmers, the Department of Agriculture purchased a considerable amount of Standard Stock Feed (Recleaned Elevator Screenings). A large quantity of this valuable feed for hogs, cattle and sheep has been distributed and has given general satisfaction. Owing to the return of peace, and the approach of normal market conditions, the Department has decided to place at the disposal of the farmers its remaining stocks, now in storage at Fort William. The price will be

\$25 Per Ton in Bulk, Unground F.O.B. Fort William

We believe that the feed is excellent value at this price and that it will pay stock feeders at different points throughout the Dominion, to consider the purchase of carlots or more.

What is Standard Stock Feed?

It is known to farmers as Recleaned Screenings, or Grade A Screenings or Buckwheat Screenings. "We found," writes a Carleton County user, "that our live stock took to the screenings quite readily; our experience with it was eminently satisfactory." Many other stock men have given expression to similar opinions.

The Analysis of this feed is as follows:

Chemical	Botanical
Protein . . . 14%	Broken Wheat . . 46.1%
Fat 5%	Oats 1.0%
Fibre 8%	Flax1%
	Wild Oats 10.65%
	Wild Buckwheat 35.15%
	Mustards7%
	Other Seeds65%
	Chaff 5.65%

Note Standard Stock Feed contains a higher percentage of protein and fat than either wheat or domestic buckwheat.

While the botanical composition varies to a slight extent, the percentages of protein, fat and fibre remain almost constant, and, consequently, the feeding value is practically uniform.

Standard Stock Feed has been tested in feeding trials at the Brandon, Lacombe and Ottawa Experimental Farms. For finishing pigs it has been found fully equal to barley. When ground it can be used for all classes of stock with very economical results.

If arrangements can be made to have this mixture ground on arrival at destination it would be well to do so. The vitality of any weed seeds present would thus be practically destroyed. At the same time the feeding value would be increased due to the ground material being more digestible.

Other Feeds

The Department also has corn available at Moose Jaw, Calgary, Saskatoon, and at Tiffin, Ont. besides a quantity of linseed oil-cake meal at Montreal to be sold at market prices. Write for particulars.

Terms: Sight Draft with Bill of Lading attached, payable on arrival of the car. Orders should be sent direct to the Feed Division, Live Stock Branch, Ottawa. Feed may be purchased in car lots only (about 33 tons to car). Get your neighbors to co-operate with you and take advantage of this opportunity.

All orders will be filled strictly in the order they are received, and in view of the possibilities of snow blockades, which may occur at any time now, stock feeders will be well advised to order early.

Freight Rates

Freight Rates per 100 lbs. from Fort William to several representative points are given in order that you may get some idea of the cost delivered at your station. Brandon 17c, Calgary 28c, Edmonton 29c, Moose Jaw 22c, Saskatoon 26c, Toronto 30c, Montreal 30c, St. John, N.B. 44½c, Moncton 44½c, Halifax 45½c.

Write for Pamphlet No. 18 giving full particulars about Standard Stock Feed.

Live Stock Branch (Feed Division)

The Dominion of Canada Department of Agriculture
OTTAWA, CANADA

with tractors and has plowed in all kinds of soil under every conceivable condition and who has operated practically every kind of farm machine in captivity. His answer was emphatic, and though perhaps somewhat exaggerated, carried a few germs of sound logic. He said:

"Hell no! Why, if you sifted along at six or eight miles an hour with a plow, if such a thing was possible, you'd kick the dirt clean over into the next county! Half of your furrow slices would be standing on edge instead of lying on their backs the way they ought to and the other half would turn complete somersaults and flip over with the stubble an' grass makin' faces at you in just the same position as before the plow came along, with the exception of being one furrow further over. And say—when you'd hit a hard piece of pulling or slam into a rock that would throw the plows out of the ground, you'd have to back up a quarter of a mile to pick up your furrow and get started again!

"And when it comes to pulling a mower or grain binder at 6 or 8 miles an hour—boy howdy! as George Pattullo would say, but you'd sure have some burned out bearings! And not only that but every time you'd climb a little knoll where the grain stands short and thin you'd be clean down the other side before you could lower your binder reel and adjust your platform and sickle so as to grab the small stuff. Two and a half or three miles an hour is plenty fast enough for anybody, I'll tell the world!"

There is a lot of substantial food for thought in the foregoing statement. While plows can undoubtedly be designed that will successfully turn a furrow at six miles or more an hour, still, it is doubtful whether the plow manufacturers will undertake to make them—especially when no apparent advantage is to be gained.

And another thing: when working in more or less rough ground at even such nominal speeds as two or two and one-half miles an hour it is necessary to change the plow shares of a tractor plow very frequently—sometimes as often as once a day as the plow shares become dulled and blunted and require constant sharpening. Plowing at increased speeds the friction of the soil would increase and the impact with the roots and rocks would be much more pronounced.

And speaking of rocks, that brings up another very important consideration. Rocks can be mighty shocking things! They carry an awful kick!—even when rammed with a plow. I remember quite distinctly a little contribution of "rock" knowledge of which I was the beneficiary—or "vic-

tim" would perhaps be the better word. I was plodding along between the handles of a walking plow engaged on a little job of summer fallowing. The soil was black, mellow earth quite free from stones and the plow glided along almost without guiding. It was as fine sailing as a full moon riding through starlit space. So I got careless and my hands were barely resting on the plow handles when, all of a sudden, without giving any advance notice whatever, the nose of the plow rammed into a buried boulder and glanced off the top. The next instant I thought I was riding through

starlit space. Just why those plow handles did not cave in four or five of my choicest ribs has always remained more or less of a mystery to me!

But when I think of that incident and then picture a tractor traveling at a speed of six or eight miles an hour pulling two or three plows—it is painful for me to contemplate what would happen to the tractor or plows—or both—if a firmly lodged boulder should decide to contest the right of way! Quite likely the tractor and plows would part company—with mutual regrets and detriment.

Some of the popular makes of

plows are equipped with wood break pins—so designed to overcome destructive plow or tractor breakage even at the low speeds of two or three miles an hour. The purpose of these break pins is to save the plows and tractors when heavy roots or rocks are encountered while plowing. The wooden pin breaks instead of the plow or tractor as it is considered more economical to replace a few wood pins than steel plows or tractor drawbars. A tractor operator handling a six or eight-mile tractor in rough ground would undoubtedly be kept very busy

Massey-Harris



Thorough Preparation of the Soil

QUICK and thorough work is necessary in the Spring to get the seed bed in shape so that the seeding may be done under the most favorable conditions.

Plows which can be depended on to scour under difficult conditions, Disc Harrows, Cultivators, Drag Harrows of the most approved type—these are what you need, and the surest guide to satisfaction is the name Massey-Harris on each and every one.

By the use of these implements you can get your land in the best possible shape for seeding in the shortest possible time and with a minimum of labor, the crop will be sown under proper conditions and will have more than an even chance of maturing and producing abundantly.

Be your farm large or small, we can supply you with just the implements you need—Plows from the small One-Horse Plow to one turning 18 furrows;

Cultivators from 10 to 26 Teeth; Disc Harrows from the small sizes up to the big Tandem Disc for use with Tractor, and Drag Harrows in a big variety of styles and sizes.

And, if you need a Tractor to draw your large implements, get a Massey-Harris—the Tractor built by those who know what the requirements are, and your whole outfit will be covered by the same guarantee—no divided responsibility.

MASSEY-HARRIS CO., LIMITED

Head Offices—Toronto, Ont.

Branches at—

Montreal, Moncton, Winnipeg, Regina, Saskatoon, Swift Current,
Yorkton, Calgary, Edmonton. Transfer Houses—Vancouver and Kamloops.

Agencies Everywhere

backing up to his plows and putting in new break pins.

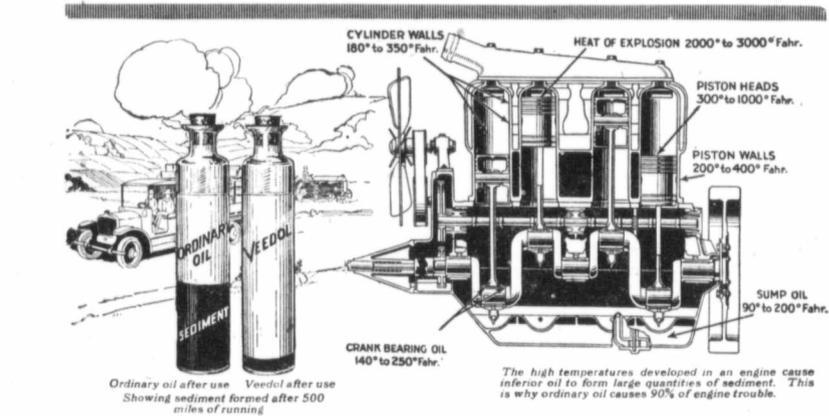
Quite aside from the matter of plowing there is the important problem of general farm machine operation also to be considered. Grain binders, corn binders, mowers and the like all come within the scope of the tractor's activities. But they are not designed for speed—nor can they be made adaptable to high-speed operation and still remain within the purchasing reach of the ordinary farmer. The cost of farm machinery at the present time is almost prohibitive in the cases of thousands of farmers—and if speed refinements should be added, such as finer machining of parts, expensive bearings and speed lubrication—such machines as binders and mowers would soar in price beyond the reach of all but the "gentleman farmer" who farms not for profit or for a living, but merely as an avocation or hobby. The industrial farmer would be completely shut out.

And finally, there is the tractor to be considered. How long will it stand up under the excessive strain of high speed operation? The tractor, it must be remembered, is a heavy-duty machine and as such is required to work at its full rated capacity at practically all times. By increasing the speed of the tractor the manufacturer increases the chances for overloading. The purchaser naturally expects to see the tractor pull as much as the horses it displaces—he does not take into consideration the matter of speed mathematics—so he is liable to make his six-miles-an-hour tractor pull two plows when it should logically be pulling but one. And overloading is one of the shortest and quickest routes to the junk heap and shattered reputations for the tractor and its manufacturer.

However, there are, of course, certain phases of tractor activity where a little speed is both desirable and commendable—long-distance hauling, for instance. On the road the tractor is not working under the severe strain imposed by rough field operation nor is there much danger of six or eight-miles-an-hour speeds proving destructive to the farm wagon. Such farm operations as disking and harrowing could also stand a certain amount of acceleration.

The farmer is beginning to place a fixed value on his time the same as any business man—and he doesn't want to waste more of it than he can help. It is, therefore, up to the manufacturer to save as much of the farmer's time as possible—and to make it a saving that will not prove a false economy.

The apparent solution of the tractor-speed problem undoubtedly lies in building tractors with a flexible speed range—say from



Ordinary oil after use Veedol after use
Showing sediment formed after 500 miles of running

The high temperatures developed in an engine cause inferior oil to form large quantities of sediment. This is why ordinary oil causes 90% of engine trouble.

Will the engine in your car run 50,000 miles?

NINE out of ten cars go to the scrap heap long before they reach the limit of usefulness which the maker built into them. These are the cars which have not been properly lubricated.

Experts say that an automobile engine, even in the least expensive cars, should last for 50,000 miles without excessive repair costs. With proper care and attention, it will give this length of service. How to get such life from your engine and keep it running at minimum cost for upkeep, is mainly a problem of lubrication.

Ordinary oil breaks down

Under the intense heat of the engine—200° F. to 1000° F.—ordinary oil breaks down quickly, forming a large pro-

portion of its bulk in black sediment, which has no lubricating value.

Sediment crowds out the good oil on the metal-to-metal surfaces and prevents it from efficiently lubricating the fast moving parts. Loose bearings are almost always the result of using poor oil. Engine knocks, broken connecting rods, slapping pistons are an inevitable result.

After years of experimentation, Veedol engineers evolved a new method of refining by which a lubricant is produced which resists heat. This—the famous Faulkner process—is used exclusively for the production of Veedol, the lubricant that resists heat.

How Veedol, the scientific lubricant, reduces the formation of sediment by 86% is shown in the two bottles illustrated above.

Buy Veedol today

Your dealer has Veedol or can get it for you. If he cannot supply you, write us for the name of the nearest Veedol dealer. Enclose 10c for copy of the 100-page Veedol book which describes internal combustion engines and their lubrication. It will save you many dollars and help you to keep your car running at minimum cost.

TIDE WATER OIL COMPANY

Veedol Department
454 Gowling Green Building, New York
Branches or distributors in all principal cities in the United States and Canada



two to six miles an hour. The tractor must be adaptable. It must be designed for varied farm operation and at the same time must be built to stand up under the most trying conditions. Flexible speeds with a liberal range, however, will entail patient, systematic education of purchasers by the manufacturers and selling agents, for just as surely as the average farmer finds "speed" at his disposal he is going to abuse it unless unforgettably impressed with the fact that he will be committing mechanical suicide by employing high speeds where low speeds should be used. The purchaser should be given an intensive course in "speed mathematics" with appropriate demonstrations.

Right at present this matter of producing tractor "speedsters" is risky business and the manufacturers would probably do well to wear asbestos-lined gloves while

they are fondling these industrial fire brands. There may be some singed whiskers in evidence within the course of the next few years,

Things Still Left

"You say this world seems drained of all its sweets!

"O, Robert, I don't know what you call sweet. Honey, roses, and violets are yet in the earth. The sun and moon yet reign in Heaven, and the lesser lights keep up their pretty twinklings. Meats and drinks, sweet sights and sweet smells, a country walk, spring and autumn, have all a sweetness by turns.

"Good humor and good nature, friends at home that love you and friends abroad that miss you—you possess all these, and more innumerable, and these are all sweet things."—Charles Lamb to a Friend.



Raw Furs

We have manufacturers waiting for us to ship them all the furs we can get. We give you New York prices here in Winnipeg, and also pay express and mail charges on all shipments. Send us everything you have—Mink, Wolf, Muskrat, etc.

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London Paris Moscow

References: Any Bank or Marine Agency

More Facilities for Travel are Canada's Big Need

Winnipeg Citizen urges road improvement and better Hotels as prime needs of the Reconstruction Period—Freer Contact between Canadians the secret of Nationality

GREATER facilities for intercourse between different parts of Canada—greater transportation facilities of all kinds, better roads, cheaper railway passenger rates, more good hotels—are among the chief requirements of Canada and should have a front place among the works of reconstruction, according to C. W. Rowley, of Winnipeg, as expressed in an interview with a representative of "Canadian Thresherman." Mr. Rowley was emphasizing the need for more personal contact between different elements of the population; not only between the inhabitants of one province and those of another, but between different classes and different interests, and especially between the native or English-speaking Canadian and the foreign immigrant. Good roads and good hotels would, he argued, greatly increase commercial, social and tourist development, and, better

still, interprovincial visiting and the free exchange of interprovincial commodities. One and all should esteem it a privilege and pleasure, as well as a national duty, to improve the community in which they reside, and lend a friendly hand to the newcomers.

Lowering Market Costs

"A general policy of good roads and better travelling facilities generally would not only bring about a closer union between the people of the East and those of the West, but it would very materially lessen the farmer's cost of marketing his wheat. I am given to understand that it now costs the farmer in Western Canada fifty cents per ton per mile to move his grain from his farm to the elevator, whereas it costs him only one-half cent per ton per mile to move it from the elevator to the head of the lakes. Good roads would do much also to improve the farmer's condition, making him and his wife and family more contented, and be a means of reducing the number of lunatics, many cases being reported from the prairie provinces of persons losing their reason as the result of the loneliness that prevails; and would do much not only to draw the East and West together but to draw the people from the cities and towns and these from the country districts closer together.

"Good roads and good hotels should be the means of bringing into Canada during the summer months large numbers of tourists from the United States, and when one realizes what the tourist trade means to Southern California one can easily see that it would be a very large asset to Canada if we could have a stream of motors carrying our brothers-in-arms from the South touring Canada and incidentally spending their money here. This tourist trade would be the means of improving the hotels, and would enable the farmers and market gardeners, etc., to increase and improve their products and to dispose of them on the spot to the highest purchaser, namely, the tourist. I think one is safe in saying that good roads would mean as much in drawing the country closer together to-day and making it more of a united whole, as the building of the Canadian Pacific Railroad from the

A Great Wheat

Thousands of acres Fall plowed, Spring plowed, and Stubble cultivated will be seeded this Spring for Wheat. The question of variety is of great importance.

Dr. Saunders' Early Red Fife

has special claims as it grows a good length of straw and usually gives a higher yield and better sample than Marquis on this kind of cultivation. It is as early as Marquis. Dr. Saunders' Early Red Fife should also be tried on the drier and lighter lands and in districts where the snowfall is light.

It is as early as Marquis

Mr. Charles H. Smith, of Yorkton, Sask., has been growing and testing varieties for some time to find the one most suitable for his district. His report, as published in the Yorkton Times, concludes as follows: "On rubbing out 100 heads of each variety of average length, the heads measuring $3\frac{1}{2}$ inches from the under-side of the lowest kernel to the tip of the head, the product of the Marquis heads weighed $3\frac{1}{2}$ ounces, and the product of the Fife heads weighed 4 $\frac{1}{2}$ ounces. The Fife has much the larger kernel and of true Red Fife form and color."

A customer who recently received a shipment from us, writes, "A most beautiful sample, like the good old wheat we used to grow."

Our stock is the genuine original strain from Dr. Saunders. The berry is the largest and finest known. Sample free on request.

Lot A—Finest sample, pure and clean.

2 bushels \$8.00; 10 bushels \$39.00.

Lot B—Pure, clean and high germination, but sample not as fine as "Lot A."

2 bushels \$7.00; 10 bushels \$34.00.

Brome Grass

There is nothing like Brome to put fibre in the land and prevent soil blowing. Land renewed by drifting has been renewed by Brome and is producing grain to-day equal to the best districts. A splendid hay and pasture plant. Price

Lot A—Lion Brand 20 lbs. \$6.40; 100 lbs. \$31.00.

Lot B—Extra choice selected

20 lbs. \$5.40; 100 lbs. \$26.00.

Bags extra at 75c each. Cotton bags additional at 65c.

Head of Early Red Fife from a photograph kindly sent to Steele, Briggs by Dr. C. E. Saunders, the breeder of this variety.

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Do you know that you can take that steam threshing engine of yours and easily, quickly and cheaply increase and improve its power so that you can thresh from 200 to 300 bushels more per day than you have been getting without adding a dollar to your running expenses? Our free, illustrated book for threshermen tells just how you can do this. Send for it today. A postal will do. Just state the make of your engine, horsepower, whether double or single and say "Send me your free book for threshermen."

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FURS AND HIDES

TO

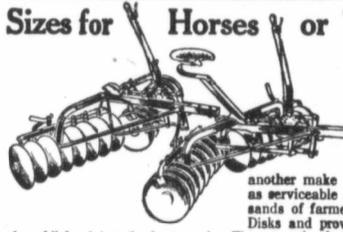
McMILLAN FUR & WOOL CO.

277 RUPERT STREET WINNIPEG MANITOBA

WRITE FOR BROCHURE

DEVELOPERS GUARANTEE TO RETURN YOUR SHIP TO US

Sizes for **Horses or Tractors**



Use the Bissell Double Disk Harrows. They have great capacity for cultivating, and have made a record for working the soil better than other Disks—in fact, you won't be able to find another make of Disk Harrow nearly as serviceable as the Bissell. Thousands of farmers have tested Bissell Disks and proved them to have the "knack" for doing the best work. They are simple in design, durable and Built for Business. Write Dept. L for Booklet. Man'd exclusively by—

T. E. BISSELL COMPANY, Ltd., Elora, Ontario

SOLD BY ALL JOHN DEERE COMPANY DEALERS IN WESTERN CANADA

Horse Shoe Brand



Harness and Collars

A horseshoe is generally considered lucky. There is no "luck" in the value you get from the Horse Shoe Brand Harness and Collars—They are a guaranteed line of harness and collars.

ASK FOR IT FROM YOUR NEAREST DEALER.

TRADE MARK ON THE BELLET OF THE COLLARS SHOWN ON THE FACE & TRACE OF THE HARNESS

Atlantic to the Pacific did thirty years ago; and if this railroad had not been built one questions whether we would have had a united Canada.

Must Know Whole Country

"Then, too, it seems to me that the lawmakers of Canada (this does not mean only the Ministers of the Crown; but all men who sit in Parliament, especially the Federal Parliament) should feel their bounden duty to have a general idea, from personal observations and knowledge, of the whole country, and, while they are at Ottawa to represent a certain constituency, they should realize that they are there in the eyes of the nation and of the world to make the laws for the Dominion of Canada, and that they cannot be wisely and well made unless those who make them know something of this vast country.

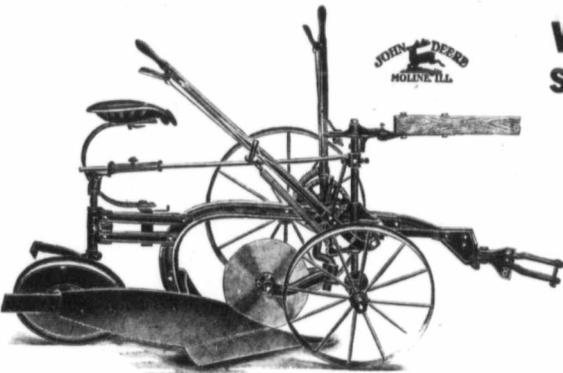
"The universal use of the English language as a means of communication should be one great means of drawing the people of the country closer together. When one considers that there are about one hundred and fifteen million people on this continent, and that, at least, a hundred and five million of them speak the English language, one begins to realize the serious handicap it would be to those who are unable to speak or understand English in taking a place of any importance almost anywhere on the North American continent. The fact that the people of Canada and the United States speak, read and write in the same language has had more to do with demolishing the forts and doing away with warships and keeping peace and harmony between these two countries for over a hundred years than any other one factor.

Best Outlook in the World

"With a united people and with the unlimited, unexploited natural resources that we have, the outlook for Canada in years to come (and some of them in the near future will probably be very trying) is just as bright, if not a little brighter, than it is in any other country in the world; but we must turn our attention to increasing and improving our manufactured goods and to extending our export business.

"Canada's greatest need, more than anything else, is people with strong brains, muscle and energy, and she has work for all and will reward them. Men with money are welcome, and will find plenty to occupy them, but men and women are needed more than the money, and those who come with money and brains should come to manage their own investments, and all should become citizens of the country which shelters, protects and rewards

John Deere Plows are surely the



JOHN DEERE, STAG SULKY—THE STRONGEST MADE

World's Standard

Why Not Buy The Best?

John Deere Stag Sulky and Gang

Genuine John Deere bottoms with Quick Detachable Shares. Simplest plows made—no frame—wheel brackets attach directly to the beam. Unusually strong and light running. Weight perfectly balanced in all wheels—no bottom drag. Extreme clearance. All levers within easy reach. With furrow landing lever, furrows can be straightened and full width of cut can be maintained in guiding around obstructions and on side hills.

Anything you require in a Plow we can furnish

New Deere Sulky and Gang

Genuine John Deere bottoms. Quick Detachable Shares, strong and close-fitting. Loosen one nut to take off the share. Tighten the same nut and the share is on tight. Light draft because wheels carry entire load. No wing bearing under share—no bottom friction. Exceptionally strong frame—these plows stand up under continued hard service and keep on doing good work. Easy to operate—front furrow wheel controlled by lever adjustment. Simple, powerful foot lift. Gang plow has an auxiliary hand lift lever.



John Deere Prairie Breaker



John Deere Brush Breaker

FOR TRACTOR USERS

THE WATERLOO BOY KEROSENE TRACTOR 12-25 (2 Speed)

THE JOHN DEERE PLOWS FOR LIGHT TRACTORS

Write us direct or see our nearest agent. Catalog supplied

John Deere Plow Co. Limited

WINNIPEG REGINA CALGARY SASKATOON EDMONTON

them. Canada needs capital to develop her resources, but would like to see the owners of the capital become resident citizens of the country, and not simply in-

vest their money and carry away the profits.

"If, a few years ago, anyone had told us that Canada would, during the next four years, do

what she has since been able to accomplish, no one would have believed it. For instance, it was with fear and trembling that the United States put on in 1915 their five hundred million dollar Anglo-French loan, and it was with greater fear and trembling that Canada in the same year put on her fifty million dollar loan. The \$500,000,000 loan of the United States was looked upon as a world-wonder in finance, and our friends across the line did a great deal of talking about it. Since then little old Canada has, in one way or another, raised over a billion and a half of dollars in war loans, etc., for herself and Great Britain. This goes to show that there is nothing impossible to a resourceful, resolute, ready, reliable people."



The Little Tractor shows a good example in rapid transport.

It's Tilling That Tells

THE McCormick disk harrow is built to "smoothover" soil difficulties. Racking and twisting strains on stony fields, rough breaking, or cleared brush land are absorbed with ease by the staunchly built machines. Equipped with a depth regulating lever, you can cut deep or shallow, adjusting the gangs instantly.

A good seed bed is the cradle of a good crop. To end well---start right. The McCormick bumper disk harrow insures a mulch that holds your sub-soil moisture tight and fast. This is the reservoir from which your plant

life drinks. Without such a blanket the sun will steal tons of this root beverage, which is like filching dollars from your pocketbook.

Seed time is about here. You are figuring on a bumper crop. The McCormick bumper disk harrow will give you the ground work on which to plant success. See our agent. He will gladly supply all information about disk harrows as well as other tillage implements---cultivators, spring-tooth harrows, peg-tooth harrows, plows, scufflers, tractor plows, tractor disk harrows, and land packers

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.

ARE YOU FAMILIAR WITH THE FEATURES OF FAMOUS PEOPLE?

Interesting Contest Just Started is Test of Your Ability

The announcement of a contest just started by the Continental Publishing Company Limited, of Toronto, Canada, made in this issue, will appeal to a large circle of readers, and it is especially interesting because it is a good test of the knowledge of the average person's familiarity of the features of great men.

This contest consists of diagrams of dots, each dot numbered from 1 to 2 to 3 up to as high as 90, and by tracing these dots consecutively the face of a Great Man is revealed. The object of the contest is to name him correctly.

\$500.00 in cash can be won by the successful contestant, and we believe a great deal of interest is being taken in the contest by our readers.

AFTER FORTY YEARS

The F. E. Myers and Bro. Company started 1919 with their issue of the unique calendar they send to every farm tool and machinery jobbing house and dealer they can reach.

It would be impossible, even

in generous space, to name the multitudinous line they cover in farm equipment, but in the one matter of pumps they probably stand neck and shoulders above the crowd who manufacture anything in the nature of water-lifters.

Forty years under one partnership management is a splendid record, and that is the record of the F. E. Myers and Bros., of Ashland, Ohio. We congratulate them on their long and amazingly successful lease of business life, and have much pleasure in again directing the attention of our readers to their announcement, which is never absent from the pages of "The Canadian Thresherman and Farmer."

An old Scottish farmer was being drilled by a Government official as to what he was to do in the event of a raid by the Germans on the east coast of Scotland.

"An' hiv I reely tae dae this wi' a' ma beasties gin the Germans come?" he asked, anxiously.

"Yes," was the reply; "all live stock of every description must be branded and driven inland."

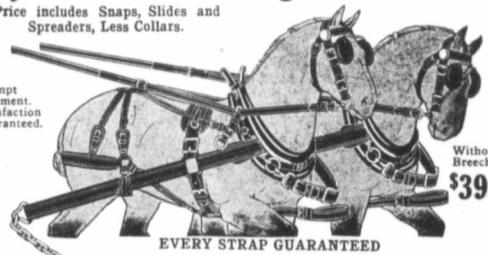
The old fellow looked the picture of despair.

"Dearie me!" he said. "I'm thinkin' I'll hae an awful job wi' ma bees."

Layer Trace Breaching Harness \$51.⁸⁵

Price includes Snaps, Slides and Spreaders, Less Collars.

Prompt Shipment. Satisfaction Guaranteed.



Without Breaching \$39.⁸⁵

EVERY STRAP GUARANTEED

BRIDLES— $\frac{3}{4}$ -inch cheeks, concord blinds, double and stitched bridle fronts and brass rosettes, $\frac{1}{2}$ -inch round winker stays and $\frac{3}{4}$ -inch throat latch. **LINES**—1 inch wide full length. **TRACES**—2-inch back with $\frac{1}{2}$ -inch layer and 2-inch 2-ply hame tug, 6 feet 2 inches long, with 7-link heel chain. Straight through style if desired. **HAMES**—All steel subia finish overtop patterns with adjustable hame strap loops. **BACK PADS**—5-inch harness leather pad with heavy felt lining, $\frac{1}{2}$ -inch double and stitched billets with buckle. **MARTINGALES**— $\frac{1}{2}$ -inch wide, double at loop with ring. **BREAST STRAPS**— $\frac{1}{2}$ -inch wide, double at buckle end. **BELLY BANDS**—2 inch folded and stuffed with $\frac{1}{2}$ -inch buckles. **HAME STRAPS**—1 inch wide, sewn. **SPREADERS**— $\frac{3}{4}$ -inch double strap with duranoid ring. All snaps and slides furnished. **BREACHING**—3-ring style, $\frac{3}{4}$ -inch hip straps and rib straps. 2-inch folded seat with $\frac{1}{2}$ -inch layer, breeching straps 1 inch. **No. 2 N.W. 1361**.—Layer Trace Breaching Harness, complete, less collars.....\$51.85 **No. 2 N.W. 1360**.—Layer Trace Harness, same as above, less breeching.....\$39.85



Send for Our 1919 Catalog NOW READY

Every Farmer should have a copy. Our prices mean a bigger saving to you than ever on

Harness—Collars—Harness Parts—Harness Hardware—Engines—Grinding, Pumping and Washing Outfits—Plow Shares—Roofing—Cream Separators—Churns—Incubators—Biting—Blacksmith's Supplies—Oils and Greases—Agricultural Repairs, and Boots.

MACLEOD'S LIMITED WINNIPEG

149-151 Notre Dame Avenue East



A Sawyer-Massey Kerosene Burning Tractor doing a fine job of plowing.



Another Sawyer-Massey Canadian Built Tractor making good.



Doing the heavy work on the farm with a Sawyer-Massey Kerosene Burning Tractor.



A Sawyer-Massey Heavy Duty Rearmount Steamer doing a good job of breaking.

The Powerful Sawyer-Massey

(CANADIAN BUILT)

Kerosene Burning Tractors

FOR 1919 the Sawyer-Massey line will include the following size Kerosene Burning Tractors: 11-22, 17-34, 20-40 and 25-50. These are standardized Tractors of the same general appearance and design. All have four-cylinder kerosene burning motors, four road wheels with traction drive to both rear wheels, two speeds forward and two reverse, spring mounted radiators with brass tubes, high tension ignition with impulse starter, no batteries. 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.

Rearmounted Heavy Duty Steamers

Big, powerful Engines, mounted on Alberta High Pressure Boilers, carrying 175 lbs. pressure, 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 at Side of Boiler for cleaning off ends of Flues when burning Straw. These Engines have exceptionally strong wide faced gearing, over-size shafting, cannon bearings, wide 30 inches heavy-duty Road Wheels, semi-enclosed gearing. If you are interested in Steam Power for plowing or threshing, the accomplishing of an immense amount of heavy work at low cost in a short time, fill out the coupon below.

We manufacture Grain Threshers in size ranging from 22-inch to 40-inch cylinders and Combination Threshers.

1919 Literature will be ready for distribution at an early date. If you wish copies, fill out the coupon below, or talk with our Local Agent in your Town. Remember in dealing with Sawyer-Massey Company, Limited, 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.

Sawyer-Massey Co., Limited

Head Office and Factory, HAMILTON, ONT.

Branches and Warehouses:

WINNIPEG REGINA SASKATOON CALGARY

Request for Free Information Coupon (Mail to nearest Sawyer-Massey Branch).

Kindly place my name on your mailing list to receive free 1919 Literature just as soon as issued, covering the Machinery which I have marked with an X below.

- 11-22 Kerosene Burning Tractors.
- 17-34 Kerosene Burning Tractors.
- 20-40 and 25-50 Kerosene Burning Tractors.
- Steam Engines.
- Individual Threshers.
- Large Custom Threshers.
- Combination Threshers.
- Road Machinery.

Name

Address

Date

WHY THE FARMERS SHOULD HAVE AN AUTOMOBILE
It Gives Enjoyment and Can be Made Use of to Increase One's Business

By L. A. Pinchon

IT has been said that there is only one salvation for the man who gets the automobile fever. That is freedom from debt and a bank account sufficient to pay for a machine. Otherwise he is gone. I suppose this applies to the farmer the same as any other man, but who is entitled to an auto more

eggs and vegetables, splendid butter, milk and cream, fruits just off the vines with the red juice running out, nuts, etc. He does not have to eat stale stuff, vegetables wrinkled with age and tasteless, cold storage foods years and years old. These he always has had, and these, plus the added comforts of later inventions and the ability to obtain them, places him far above the average human being to-day so far as genteel living goes.

Now, if he wants an automobile, and has the money with



The way to see Greater Canada
 (A Picturesque piece of Roadway on the way to Banff)

than the hard-working farmer and his wife? The farmer feeds the millions. His wife, the most self-sacrificing creature living, works from early morning until late at night.

The average farm to-day is equipped with all modern machinery, such as power plants, water, heat and light systems, telephone service and splendid buildings which often surpass the average city home. With all these improvements he also has the blessing of pure air, sanitary surroundings, and a table loaded with everything conceivable that is good and wholesome to eat. Fresh

which to buy it, no one could have a better right than he. Of course, if he has to mortgage his possessions to get a machine, it would be foolish and an unusual thing as the farmer generally knows just what he is investing in. Occasionally one ventures across the line, when his desire for an auto is so strong, but fortunately this is not common.

The Auto for Pleasure

It costs something to keep a machine after buying it and one must calculate on having a side income above family expenses each year for its upkeep. The family horse is just about as ex-

WALLIS

BUY

 W.S.S.
 WAR-SAVINGS STAMPS

Where does the Power Go?

This is the all-important question in buying a tractor. The best motor built is handicapped if too much of the power is used for propelling the machine itself.

The "Wallis" Motor—valve-in-head type, finished as perfectly as the finest automobile engine—is the best that the foremost engineering skill of America could create.

To get the utmost service from this splendid motor, the "Wallis" is so compactly designed—1,000 to 5,000 pounds being saved in weight—that 75 per cent. of the power can be delivered at the draw-bar for actual pull.

Write for Catalogue telling the complete story of "Wallis" economy.

"See the Wallis first."

**The Canadian
Fairbanks-Morse
Company Limited**

**WINNIPEG
CALGARY
SASKATOON**

**Lowest Plowing Cost
Per Acre.**

pensive to keep, and women must have some way to go. They can drive a modern auto about as easily as they can the old horse, and there is no more danger, if care is taken in the speeding. To own an auto is a pleasure to the farmer and family.

The modern farmer who has a surplus bank account lets it accumulate year after year. His days of hard labor go on, his pleasures are few, those of his wife fewer.

His family will soon be grown and married and gone from his home. He will soon be an old man and his wife perhaps only a few years behind him. His bank account still grows, but is this doing him or his family any good? He must soon leave it all. Why not buy an auto while the family are all at home and can all enjoy it together? It affords pleasures the tired family never dreamed of. It gives opportunities in entering social circles never before known to his family. They can meet with people of refinement and education and thus enjoy a wider sphere of congenial friendships.

There are many ways in which an auto can give service and even make money for the farmer, which places it far above a luxury as most people consider the owning of a machine. The most rigid censorship was given the farmer when he began buying machines, but since time and thought have found ways and means by which the auto can serve the farmer other than pasture, their possession is not considered a mere luxury, but a necessity on the farm.

Hope deferred maketh the wife kick.

Montreal Daily Star.

MONTREAL, WEDNESDAY, OCTOBER 2, 1918

WHAT SOLDIERS WANT.

A suggestion to those who are sending gifts to soldiers overseas comes from Lt. Col. (Canon) Frederick George Scott, Senior Chaplain of the First Division, in a cable received by friends in Montreal. He says "The men want playing cards and chewing tobacco."

CHEW
STAG
TOBACCO

"Ever-lastingly Good"



Europe Wants Our Beef

Supply Her Now—Prepare for the Future

IN Europe 100,000,000 people face either a shortage of food or actual starvation. In many countries the foundation herds and flocks have been sacrificed. It would take many times the total number of cattle, sheep and hogs in Canada to restore Europe's present shortage which amounts to approximately 115,005,000 animals.

Canada's Opportunity

During the war Canada's meat exports grew by leaps and bounds. We have the opportunity of continuing and increasing our war time exports of meats to Great Britain. Our products have become favorably known in France, Italy and Belgium, and it is likely that new trade connections will be formed. But we must have volume and we must have quality. Canada has the opportunity and Canadians can meet it.

But the question is, will the production of meat products continue to be profitable? The Canadian farmer who pinned his faith to live stock during the ups and downs of the past twenty-five years has prospered. This policy has been proved in the United States, Great Britain, Denmark and many other countries.

Canada has the foundation stock and can produce the necessary feed. Considering the present European conditions, should the future hold any fear for us?

Competition from Other Countries

Canada's opportunity is equalled by that of no other country. The United States may be regarded as a strong competitor but it is probable that before long her full production of beef will be required again for home consumption. The beef exports of the United States declined steadily from nearly 1,200,000,000 pounds in 1906 until in 1914 to supply home consumption it became necessary to import 300,000,000 pounds. Although it is true that during the war the United States exported immense quantities of beef, that situation was due, largely, to the saving of meat by American people in order that Europe might be fed rather than to any considerable increase in production.

Canada is nearer to Great Britain than any other great beef producing country. Her superior position offers opportunity for the chilled meat trade.

Develop the Chilled Meat Trade

To realize full market value, chilled meat must be consumed within six weeks of time of killing. If the distance from market be too great, the meat has to be frozen. Frozen meat brings a much lower price than the same quality in a first class chilled condition. Time and distance favor Canada, and these are the deciding factors.

The European situation means that for years there cannot be any danger of over production of beef. Therefore,—

Conserve and build up the herds—improve quality—finish thoroughly.

Beef and Bacon for Canada's Permanent Prosperity.



The above map was prepared by United States Food Administration for the Literary Digest and is reproduced by permission.

Live Stock Branch
Dominion of Canada, Department of Agriculture
OTTAWA, CANADA

From the Boys who are Succeeding

MADE THE PRICE OF HIS TRACTOR IN FIRST WEEK'S WORK

Earl Grey, Sask., Feb. 2nd, 1918.

I PURCHASED my tractor, a 10-20 Titan, in the spring of 1917, and have used it for discing, plowing, harrowing, road grading and chopping. I intended to use it for threshing, but it did not have enough power to run my separator which is a 27-in. Aultman-Taylor. A 24-in. would be large enough I should imagine.

For plowing I used a John Deere plow with three 14-in. bottoms, plowing from five to seven inches deep, and ran practically all the time on high speed (it is geared at about two and a half miles per hour). We plow about ten acres a day, and use a self-steering device which works fine where there are no side hills, and gives the operator a chance to attend to the plows, thereby making a much better job of plowing. I would not like to plow without it now. The engine also has enough power to draw a harrow behind the plows, so as to do the two operations at the same time if needed.

We use from one and a half to two gallons of kerosene an hour. The amount of fuel used depends upon the condition of the soil.

In harrowing we pull a five section drag harrow behind a six section, which is about as much as it can draw on high gear without overloading. We tried the harrowing late this fall, but found that to do good work the rear harrows had to be arranged so as to run level. By hitching direct from the engine the front of the harrows are drawn down too much, also, the chain is in the way when cleaning the front sections. Would like to hear through your columns how other operators overcome this difficulty.

We have done considerable discing, drawing a 16 out-throw with in-throw trailer, which is a light load for it. This was the

first thing we used the tractor for, and I consider I made enough in the first week's work to more than pay for the tractor. I had considerable difficulty in getting a good burn on the stubble, so got a few days behind with the work, and I still had a quarter section of bluff land still unseeded on the 15th of May (the date I try to have all my wheat seeding completed).

We started the engine going with the discs on the 16th of May, and followed behind with two seeders. By working long hours the engine managed to keep ahead and we finished on the 22nd of that month. This crop escaped the late spring frosts, withstood the dry spell (in fact, it never got a set-back), and threshed over twenty bushels per acre. Now if I had not got the engine that field would not have been cultivated, and I am satisfied that the returns would have been entirely different, so I consider I am safe in saying I made the price of my tractor in the first week's work.

I am farming a section and three-quarters at present, so have plenty for a tractor to do, and for three or four outfits of horses as well. I consider anyone farming over three-quarters of a section, could not make a better investment than a 10-20 tractor. When horses only are used, it is almost impossible to get all the work done at the right time, and instead of being all finished plowing summer-fallow by the end of June you are just getting nicely started (and so are the weeds). That means plowing in the hot days of July, generally about four or five inches deep, because the ground is dry, and it is too much for horses to plow seven or eight inches deep. The difference in the returns of about 150 acres would go quite a way in paying for that tractor, it might possibly pay for a threshing machine as well. My advice is, buy a tractor to save



A. C. FULLER'S Combination of Power Supply

The "GRAY" turns Deep, Even Furrows



The advantage of the wide drive drum as used in Gray Tractor is greater traction surface and the elimination of soil packing, the weight being distributed over a large surface. Packers or disks attached to the side arms with a 26-ft. drag, will prepare 60 acres of seed bed in a ten-hour day.

Special Features

Eighteen H.P. at drawbar; 36 H.P. at belt; Waukesha 4-cylinder motor, 4 1/2 x 6 1/2; Hyatt and Timken roller bearings; Bosch magneto with impulse starter; no coils, batteries or switches. Over 3-5 of other tractor troubles are in the differential. The Gray has no differential, no bevel gears. All working parts enclosed and running in oil bath.

Our illustrated booklet explains the Gray in detail. Write for it.

Gray Tractor Co. of Canada

307-9 Electric Railway Chambers
WINNIPEG, MANITOBA

Alberta Representative—M. D. PEEVER, 24 Mason & Risch Block,
8th Avenue West, CALGARY, ALTA.

The Most Successful Men

practically always carry as much Life Insurance as they can afford. They know that a Life Policy gives the only certain provision for an uncertain future.

If wealthy men carry Insurance, how much more is it the duty of those to insure whose families depend entirely upon their weekly or monthly earnings?

The Great-West Life issues Policies on terms most attractive to the wage-earner. Rates are low and profit returns are remarkable. Write for information, stating exact age.

The Great-West Life Assurance Company

Dept. "U"

Head Office: WINNIPEG

BUY WAR SAVINGS STAMPS

Helps Your Horses - Saves You Money

The horse is a vital factor in greater farm production. To realize the best results he must be kept one hundred per cent. fit.

STUFFED COLLAR PADS

Filled with our Special Composite Stuffing are the only guarantee against bruised, galled and chafed shoulders. They are better than other kinds, being soft, springy and absorbent. They also make possible the continued use of a horse collar long after its worn condition would otherwise compel its discontinuance.

NEW PATENTED HOOK ATTACHMENT

(Found Only on Pads Made by Us)
Consists of wire staple with felt washer. It gives hook a firmer hold and prevents pulling off, even though fabric is weakened by long usage. Life of pad is thus materially lengthened. This is the greatest improvement since we invented the hook.

THIRTY-SEVEN YEARS MAKING PADS

Look for the Felt Washer

SOLD BY DEALERS EVERYWHERE

The American Pad & Textile Company, Chatham, Ontario



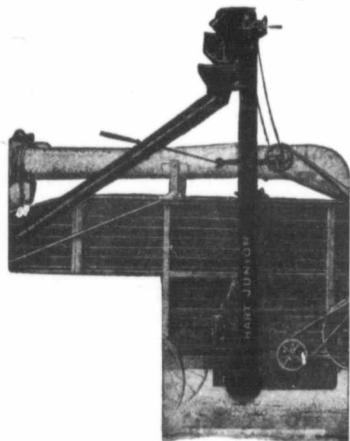
Pat. in U.S. Dec. 1, 1916
Pat. in Can. Apr. 6, 1915



A Good Start

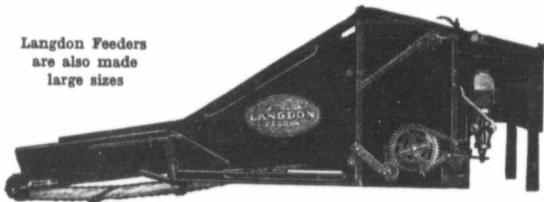
Like the older members of the Hart family, the juniors are a strong, robust lot; always ready to go. They made a Good Start and were a success from the first, as evidenced by the fact that they have been adopted by a majority of the leading makers of Threshers in the United States and Canada.

A Good Start is half the race. See that your separator has a Good Start by being equipped with standard, reliable time-tested attachments.



Hart Junior Automatic Register
14-foot Elevator

AN AUTOMATIC REGISTER
For Every Size
SEPARATOR,
Large or Small,
Old or New.



Langdon Feeders
are also made
large sizes

Langdon Junior Self-Feeder

CATALOGS NOW READY

Hart Grain Weigher Co., Peoria, Illinois

Makers of Hart, Peoria, Hart Belt and Bucket, Simplex, Perfection and Hart Junior Automatic Register; Loaders and Baggers; Langdon Ideal and Langdon Junior Self-Feeders; Hart Wing Feeders and Hart-Brown Wing Carriers.

the horses, and do the work more thoroughly and on time. Put in a big kick about the present duty on tractors, etc., etc., but don't wait too long for them to lift it before getting your order in.—A. C. Fuller.

ANOTHER NOVICE BECOMES AN ENTHUSIAST

Cabri, Sask., Jan. 31st, 1918.

IN the spring of 1917 I placed an order for a 10-20 Titan Kerosene Tractor (2 cylinder), manufactured by the International Harvester Company. Along in May the outfit arrived, and as I was anxious to get to work right away, the local agent unloaded the engine and plows, and started me off towards home. Was a little dubious on how she would behave when left in the care of a greenhorn, but she behaved splendidly all the way. I had only to sit in the seat and endeavor to keep it in the middle of the road.

Next morning I started out to break, and incidentally to learn how to run an engine. During the next two weeks I learned by experience some of the peculiarities of a gasoline engine, and I may add how to overcome them. Generally the trouble started the first thing in the morning; she would refuse to budge, although the

previous night she had been working in first class shape when shut down. After considerable delay I found this could be overcome by pouring about half a cup of gasoline into the cylinders.

The land on which we were working was mostly rolling, with side hills to contend with, and the soil a heavy clay with gumbo in patches.

The engine pulled two 14-in. bottoms (rod breakers), plowing about four inches deep and seemed to have ample power. In fact, I used to think the steeper the incline, the more power she developed at the drawbar. The plow (an Oliver) generally did good work, but on account of its light work was sometimes rather difficult to keep in the ground when shares became dull. In all we plowed about 160 acres this season, mostly breaking and fall plowing.

Regarding fuel consumption. At first we used about eighteen gallons of kerosene per day, but as we got to understand the tractor better we found we could cut this down considerably, and still have as much power. I would judge that two and a half gallons per acre would be a fair average. Lubricating oil one gallon per day, and a gallon of gasoline would generally be sufficient for a barrel of kerosene. Water

Canada's Opportunity On the Highway of Success—What has that to do with GATES? Everything!

PEERLESS LONG SPAN GATES

The gate pictured below is a companion to the Peerless Perfection farm fence; long, strong, durable, with heavy tubular frame, which stiffens it like a steel bridge. It swings free and rigid as an oak door hung by a master mechanic. Lateral and upright wires securely cleated at all intersections and stretched upon a strong rigid frame of tubular steel electrically welded into one solid piece.

It announces a Peerless Gate way. "It can For Looks, Wear and Service guard any barn." For durability it is of heavy open heart steel wire, galvanized and can't rust at any point. For spring it is put together to last a lifetime and is the cheapest best gate made. You will be interested in our Gates. Write Today for Literature describing all our many styles of Gates, all kinds of Farm and Poultry Fencing for farms, ranch, residence, parks, etc. It will pay you well to get acquainted with American Perfection standard construction. Write nearest office today. Do it now.

THE BAWWELL-HOXIE WIRE FENCE CO., Limited
Hamilton, Ont.
Winnipeg, Man.

TRADE MARK

SAWYER

Registered

STITCHED CANVAS BELTING

PLEWES LIMITED Distributors **WINNIPEG**

On sale at your local hardware store.

for cooling, about a barrel per day. This would be greatly reduced on engines with radiator system of cooling, instead of the tank. Owing to the land being stony necessitating delays in stopping to pick stones, and also short rounds, we are unable to give any reliable data on this point.

Our experience in discing with the tractor is limited to one day's run, late in the fall, when we hitched a 16-16 disc with two heavy lever harrows behind her. This she handled easily, and I believe could have pulled another disc if necessary.

In closing I may say that I am well satisfied with the performance of the small tractor, and believe it will yet fill a very important place on the average farm.

To those contemplating buying, I would say: Don't purchase too small an outfit. One that will handle three breakers or four stubble bottoms is about right for the man farming half or three-quarters of a section. Would also strongly advise purchasers to get a self-steering device with engine, as it relieves the operator from sitting all day at the steering wheel, and gives him a chance to adjust the plows when the tractor is travelling. In my opinion this is essential to the success of a complete "one-man outfit."—John Mackie.

There is no question as to the utility of the engine. I consider it takes the place of, and does the work of from nine to ten horses, and it does not require feed when idle. I thoroughly believe that it is the only thing in our present knowledge of these things—practical power, and I would assuredly not be without mine.

It is a great economy—does the work better than horses, and there is no leg tiring. I shall run mine eighteen hours a day this spring, and perhaps the twenty-four, with a headlight—it depends on the season. It is the only thing that I know of, in its class and work. Thirty one of them were sold in this district alone this year, from Fort Saskatchewan, besides other makes, and I have not heard one word detrimental to their usefulness.

—C. W. Wilson, M.D., Bremner, Alta.

I own a 10-20 kerosene tractor and a 24-40 separator, and had lots of power to run it. I threshed three full sections at the rate of from seven to eight hundred bushels of wheat per day and a thousand bushels of oats and barley and did good work. I might say here that I run both ends myself, and I never did anything in this kind of work before, in fact I did not know anything about it when I started, but it is like everything else about the farm, you soon get on to it.

\$5.00
FOR
\$4.00



And every Dollar worth more

Farmers!

The buying power of the dollar today is very low. That is why you obtain such prices for the food you raise.

During the next five years, the buying power of the dollar will rise. Every four "low-powered" dollars you invest in War-Savings Stamps this month will bring you five "high-powered" dollars in 1924, when food will not command present prices.

Invest every dollar you can in W-S.S. which are sold at Money-Order Post Offices, Banks and other places displaying the W-S.S. sign.

THRIFT STAMPS—25 cents each—are sold where W-S.S. are sold and by patriotic storekeepers. Sixteen Thrift Stamps on a Thrift Card represent \$4.00 in buying a W-S.S.

BUY WAR-SAVINGS STAMPS

Next month W-S.S. will cost one cent more—\$4.01.

HIRST'S PAIN EXTERMINATOR

HAVE A BOTTLE READY WHEN NEEDED — and stop the Pain!

When you have an attack of rheumatism, lumbago, neuralgia, or get a lame back, swollen joints, or a sprain—you don't need to suffer. Get the bottle of Hirst's Pain Exterminator and use it according to directions in circular. It stops the pain quickly. Buy a bottle and be ready. Equally effective for relieving earache, toothache, sore throat and other painful ailments. For 40 years it has been a family friend. —all dealers—or write us. HIRST REMEDY COMPANY, HAMILTON, CANADA

Also makers of HIRST'S Family Salve and HIRST'S Fectoral Syrup of Forehound and Elecampane for coughs and colds.

For fuel I used twenty-five gallons of kerosene and two gallons of lubricating oil, using it for the whole outfit.

With regard to the tractor for farm work, I think it is an implement that is going to fill the bill for anything around the farm. I intend to get a three furrow 14-in. gang this spring and use the tractor for anything that comes along.

—Alex Gerrard, Bradwardine, Man.

Yes I believe the oil tractor is here to stay, both on the large farm and the small, where help is scarce—also money. I find that one man can do with a 10-20 what it would take two men and eight or twelve horses to do. But I believe a man should have six work horses instead of four on every farm with a 10-20 engine.

I also believe that any man can run a gas engine who has common horse sense. If he hasn't he had better leave engines alone. A

10-20 will last many years if half taken care of. Be sure to get the oil and don't be afraid of it. Give her enough or a little more than enough. Don't get oil that won't do the work, for it is the lubricating oils that put 90 per cent of our gas engines in the scrap heap, this I can easily prove with what I have seen out here. Almost all of the troubles were due, directly or indirectly, to the lubricating oil.

—Russell Miller, Harnett, Sask.

A MAN WHO KNOWS HIS JOB AND ATTENDS TO IT
Clemens, Alberta.

WITH my 10-20 Tractor, I have done 410 acres of plowing, and have put 225 acres of breaking in shape for the drill by discing, floating and harrowing.

I drew a three-bottom P. & O. Automatic Lift Plow, and have plowed 120 acres of breaking four inches deep, and 290 acres of stubble an average of six inches deep. All done in the summer of 1917.

The soil is a medium light chocolate loam and a heavy clay. I plowed from five to eight acres per day, changing shares every day, as it was so dry last season.

As nearly as I can tell I used an average of three gallons of kerosene per acre, and one quart (perhaps a fraction less) of lubricating oil per acre.

In regard to harrowing, I did not have a load of harrows rigged up so always harrowed behind the disc—a 16-ft. tandem disc. If I did not harrow I had a float loaded with rocks behind the disc, going at slow speed. I prefer slow speed in plowing, and three plows to two plows high. Although I have drawn three plows five inches deep in stubble, plowing as much as nine acres per day, but this is too big a load ordinarily. If it had not been so dry, I would have plowed 200 acres more while waiting for rain.

I have drawn several granaries of sizes, 14x18, 12x14 and 10x12, and the engine seems to handle them with comparative ease.

This is my first experience in running a tractor of any kind, but I would not trade the engine for horses.

I am baching, sharpened my own plowshares and hauled my oil besides laying off my outfit to go threshing. I intend to do all my farming with the engine next summer.

This account of acreage may not look very big, but if one considers the time I could not plow, five weeks straight, and threshing out besides being a novice at that

kind of work, I think it would have taken quite a number of horses to do the same work, and a lot of feed, as they consider it takes four strong horses to pull one plow any place that I have plowed under the same conditions. Then again this work was done in from ten, twenty, thirty and fifty acres apiece over the prairie.

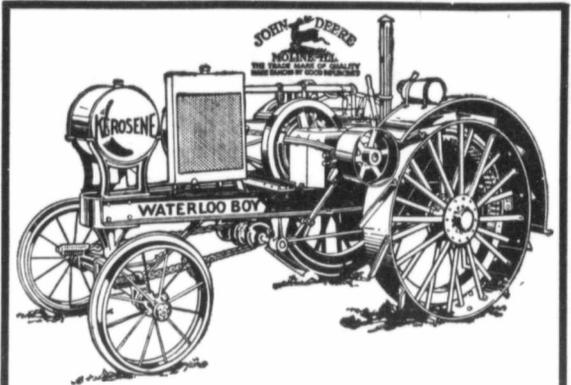
Some are afraid of repairs on the tractor. It costs me as much for plow as engine repairs.—George S. Marr.

DID AWAY WITH EIGHT HORSES

It is a useful engine in threshing, as it will drive a 22-in. Nicholas & Shepard separator to a finish, and is a one man machine. I did away with eight horses, and as oats are almost a dollar a bushel, it is impossible to do the work with horses, when with a little care and forethought you can do anything with a small tractor that you can with the horse drawn rig. I consider the day of the small tractor has arrived, as a man can do practically all his own work. And with men so scarce, you can thresh 2000 bushels of oats per day with four men besides the man to look after the rig.

I run this outfit myself, and I am no expert. I have had a few minor troubles, but no breaks. I don't allow the engine to race. This is one of the worst things a man can do. I intend to drill with it this spring and harrow at the same time, but it does not pay to overload the engine, nor yet to underload. Give the tractor a chance and she will hold her own. Abuse her and she will certainly abuse you. My repairs up to date are nil, and I plowed 250 acres, cultivated 300, harrowed 200, threshed 1500 bushels of grain besides other work.

I have hauled a road grader with my engine, and can grade a mile a day with it. I am councillor for this municipality. This is the best rig you can get for grading. I saved the ratepayers money, as the average day work is a mile a day. We pull an 8-ft. grader with engine attachments. —Joseph G. Slater, Lemberg, Sask.



WATERLOO BOY
12-25 Kerosene Tractor—Two Speed
JOHN DEERE QUALITY

- Pulls three-bottom plow at full plowing depth in ordinary soil.
- Pulls double action disc harrow and culti-packer, completing seed bed-making in one operation.
- Pulls two 8-foot binders.
- Pulls two Van Brunt Drills (any size).

Operates 24 and 26 inch separators.
Adapted for other drawbar and belt work in like proportion.
And remember the Waterloo Boy does this work at lower fuel cost because its patented kerosene manifold turns every drop of low-priced fuel into pure gas.

John Deere Plow Co. Limited
WINNIPEG REGINA CALGARY SASKATOON EDMONTON



Best ANTI-FRICTION BABBITS
ON THE MARKET

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

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

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

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

Nickel Genuine	Frost King
Less than 25 lbs. \$1.25 per lb.	Less than 30 lbs.40 per lb.
30 lb. box 1.10 per lb.	30 lb. box37 per lb.
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Delivered to your nearest express or post office station.

Hoyt Metal Co. EASTERN AVE. and Toronto
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FACTORIES—London, Eng.; Toronto, New York and St. Louis.

Steam or Gas Tractors



Equipped with
"THE GOVERNOR WITHOUT JOINTS"
PICKERING

give greatest efficiency
FITTED TO EVERY BUILD OF ENGINE
Patent Ball Ranger Speed Changer Supplied on all Genuine Pickering Governors.

Will increase speed 50% or more.

THE PICKERING GOVERNOR CO.

PORTLAND

CONN, U.S.A.



GEO. S. MARR. "Wouldn't trade it for horses"

— If re n t i t p h l e i k.

They Are Coming Home

The war-worn farmer boys who have given Canada a place in the world's esteem it never enjoyed before, are now homeward bound. Their absence created a void in the field and home life of the Western Prairies which will soon be filled by these same lads, returning with an experience that few have the means to realize at this stage. Every wheel that can turn will soon hum with a new life, and when you give them **transmission equipment**, let it be the **Best**—the



LION BRAND
Rubber Belt
 and the
YELLOW
FELLOW
ENDLESS THRESHER BELT



They are unbeaten in the field of grain production.

and are 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

WINNIPEG FORT WILLIAM REGINA SASKATOON CALGARY LETHBRIDGE EDMONTON

Makers should instruct buyers as to function of Light Weight Tractors.

I believe the gas tractor is an economical source of power for the farm, if a competent man operates it, but if an inexperienced or careless operator uses a light weight engine and tries doing heavy work with it for instance such work as breaking scrub land, for which kind of work he should have an engine of more power and heavier construction) he is almost certain to have serious breaks, then the engine is said to be no good. Whereas if it had been used for the work it was designed for, it would have been a success.

I am of the opinion that manufacturers of light weight engines

should explain to the purchasers that light weight engines are not built to withstand heavy work on the draw-bar. Therefore, a man should study the design and construction of the different tractors before he purchases. There are sufficient number of tractors of good design and construction for a man to be able to choose an engine suitable for any particular kind of work.

After a man has purchased a tractor suitable for work he has to do, if he will give it good care and careful usage, I believe it to be as great a saving as the other labor saving machinery that is in use on the farm. Otherwise, if a tractor is not given reasonable care and is abused it will be a loss.

—Wm N. Chant, Camrose, Alta.

Much under-rated as to Power.

I have used my engine one season and consider that it very decidedly has a place on nearly every prairie farm. It enables one man to do much more work, as with my machine, in plowing it does the work of from eight to twelve horses and the care of it takes less time than four horses. It is far ahead of horses for plowing and discing and is about as good for most other work.

Of course horses must be kept, but for the lighter work and churning. For many little jobs of just a few minutes I start my engine, as it is much quicker and easier than hitching up the horses. After I learned to run my engine I have never had any trouble starting it in any weather. I al-

ways start my engine direct on kerosene using about a teacup full of gas a day for priming.

I prefer a 10-20 for the average half section farm and up, as the 8-16 is a little too small, but is much better than anything larger than a 12-25. The larger machines are stopped too easily by wet weather. With my 8-16 I have crossed a running creek with mud bottom, time after time with no trouble.

My experience is that these light machines are under-rated as to power very much. Mine is rated as 8 h.p. on the draw bar and I usually pull what we use 12 horses to do. The soil in our district is a clay loam. We use from 4 to 5 horses on a 14-inch sulky plow, and I pull three 14-inch plows just as fast as the horses, and as many hours a day as I wish.

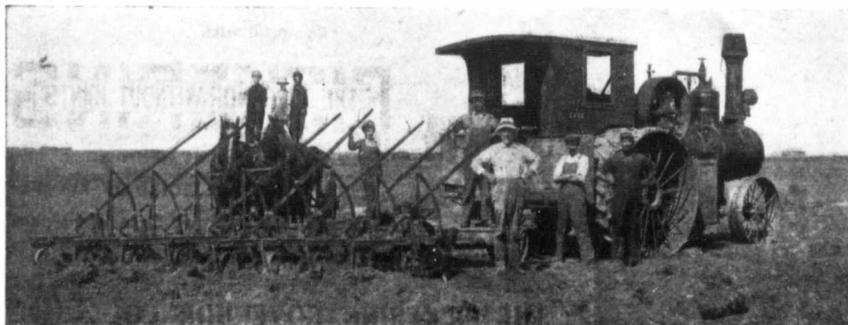
For economy figure it out for yourselves. I use practically no gasoline, one and a quarter gallons of cylinder oil in ten hours, and from 1½ to 3 gallons of kerosene per acre depending upon the kind and condition of land to be plowed.

—Chester H. Jinks.

His Decision

"Which," we sternly asked, "have you decided to do—work or fight?"

"Both—as usual," answered the hopeless-looking man. "I am married."



A Man with a fine record in steam plowing, NORMAN GROSE, Cromer, Man.

A good tip in relative value of Horse and Tractor.

As regards future work, I don't see what is to hinder anyone with a small tractor of 10 h.p. or thereabouts now that they are listing a power lift grain drill, with extension boxes, drilling and harrowing in one operation. Three sections will cover a 10-ft. drill, and three miles per hour is moving some. I only figure to stop for oiling purposes once every two rounds on the mile which would also be necessary to refill the drill. Some may fancy packing as well. Well, they can please themselves but it does not pay under any circumstances to put on the little bit extra. Enough is plenty. Get the grain in and harrowed. Four horses can pack 300-ft. a day easy. I really think, a tractor's economical value ceases here. Outside of plowing horses can handle cultivator and harrows. They have to be kept and the work is not of a rush nature.

As for odd jobs, granary hauling, stone pulling, etc., the small tractor is certainly all there,—at least mine is, and in belt work, others of the same make and size as mine about here are certainly well up to the mark, and there are six within a radius of two and a half miles.

Taking it altogether, as I see it, a small tractor is necessary unless one intends to keep a pile of extra horses just for rush work. (with the necessary hired help if it can be got) which have to be kept whether working or idle, either eating their heads off or demanding a fair share of the farm for pasture purposes, whereas, the tractor when finished with is shunted off to wherever you keep it and ready when wanted.

Re consumption of fuel. A good working average is two and a half gallons of kerosene and a pint of cylinder oil per hour.

—T. E. Holloway, Sandford Dene, Sask.

We estimate that it would cost us less than \$1.50 per acre for kerosene and oils.

We plowed about 325 acres, and have used the engine to move granaries and a well drilling outfit. It will move a 12 x 16 granary with ease.

Now we believe that had we bought horses and equipment to break this amount of land our expenses would have been almost double.

We believe the horse is a necessity on every farm, but we also believe that under present conditions the tractor is a godsend to the western farmer.

The tractor will become more valuable as the men that operate them become more efficient in their work. Most of the trouble to-day is caused by some men trying to operate them that don't know the first principals of gas engineering.

—W. H. & C. N. Harris, Makepeace, Alta.

RELIABLE

TRADE MARK

Canadian Products

HANDY SAFE LIGHT

When you go into the dark cellar or unlighted garage or outbuilding, light your way with the brilliant rays of a Reliable Flashlight. It gives piercing, concentrated light exactly where you want it.

You will find countless uses for Reliable Flashlights around the home. Their safety, convenience and perfect lighting qualities make them a necessity in every household, a joy to every user.

Reliable Flashlights give more hours of light than any other. Tubular Searchlights beautifully enamelled in red, brown, blue and green, and all standard styles and sizes of metal and fibre flashlights.

Use Reliable Dry Batteries for your motor car and motor boat; for telephones and all household uses. They are packed with energy and are made to give longer service than any other batteries necessary.

Dealers throughout Canada sell Reliable products.

"Lively and Lasting"

DOMINION BATTERY COMPANY Limited
TORONTO
CANADA



I have not the slightest doubt, but that the tractor is here to stay. A person farming to any extent should not be without one any longer than they are in a position to buy one, and it is too bad that the government cannot realize how much they are holding back the development of the country by taxing tractors so heavily. If they would subsidize tractors instead of putting a heavy duty on them it would be in my estimation much more beneficial to the country as a whole.
—John McAlister, Gopher Head, Alta.

The soil here is a sticky clay and very hard to plow. I find that six horses on a two disc plow, if kept at it every day, will average about 3 acres a day plowing about 6 to 7 inches in depth. So I consider my little engine more economical than horses for this work. One man with the engine by putting in a few more hours a day can plow as much as three men and three six-horse outfits. Of course a lot depends on the operator, as the engine has to be kept in good shape and no time lost during the working hours.
I do not intend to use my 10-20

for threshing as I consider it too small except on a small farm and besides it can be used to good advantage for fall plowing. So I have secured a half interest in steam threshing outfit.
—Geo. Duguid, Shackleton, Sask.

Unfortunately Put

"It's so good of you, doctor, to have come this far to see my husband."

"Not at all, madam, not at all. I have a patient next door, and I thought I'd kill two birds with one stone."

The Case 20-40 Kerosene Tractor

For the larger ranch or farm, this Case tractor has proven its superiority. We have been building it for 9 years, and thousands are in use all over the world.

If you are farming on a large scale, you are bound to agree with other owners of this tractor, that it has no equal.

While this tractor has been on the market for years its general construction is very similar to the first machines built. This indicates that this Case Tractor was a real success from the start. During the past few years we have, however, added many improvements to add refinement, economy, and durability.

This 20-40 is a particular favorite among threshermen. It has ample power and great reserve, sufficient for driving a 32 x 54 Case Thresher equipped with wind stacker and feeder.

It can pull a 5 or 6 bottom plow, turning over about 18 acres in 10 hours, and it will do the work at a remarkably low cost.

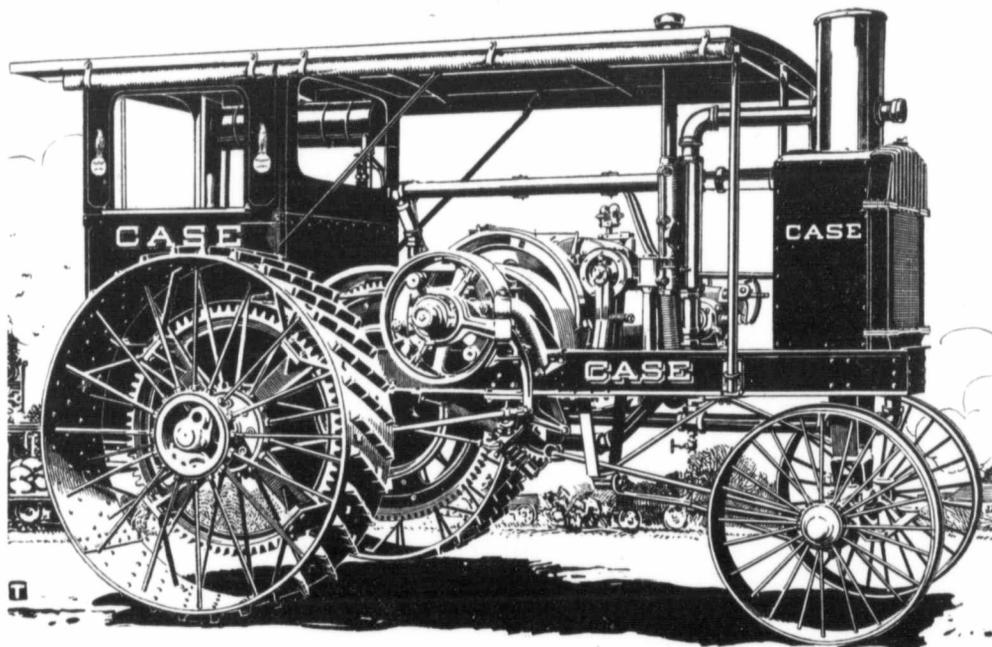
In every particular—as you study this tried and proven tractor—you will find it the leader for both belt and draw-bar work.

Complete information of this and other Case Kerosene Tractors, including pictures and specifications, will be sent gladly upon request.

J. I. Case Threshing Machine Company, Inc.

Founded 1842

1681 Erie Street, Racine, Wis., U. S. A.



Time Tested—A General Favorite

High-grade materials, liberal proportion of parts and extreme simplicity—these are responsible for the famed durability of the Case 20-40 Kerosene Tractor.

We picture below a plan view, showing the design.

The frame is built of steel channel sections and all connections are hot riveted.

The drawbar on this tractor is so located that the draft is just below the countershaft. This prevents straining or twisting of any part of the frame, as the pull is evenly divided. This tractor will not "rear up" on maximum loads.

The power plant of this tractor is a two-cylinder 8 3-4 x 9 opposed valve-in-head engine, our own make, one which has done so much to popularize this tractor because of its dependable power.

The transmission is all spur gear and all gears are of semi-steel. Cut steel pinions make up the two speed, sliding gears for transmission. The shifting of a lever changes speed from 2 to 3 miles per hour.

The crank case is of grey iron, a one-piece casting, so designed that the cover can be removed, giving access to the inside of the crank case without disturbing other parts. This is a special Case feature. Similar accessibility is found throughout.

The cooling is accomplished by means of a copper tube and fin radiator. The core is non-clogging and supported by a 4-piece cast frame. Large capacity prevents water from boiling, under any condition. Cooling is augmented by Thermo-Syphon water circulation.

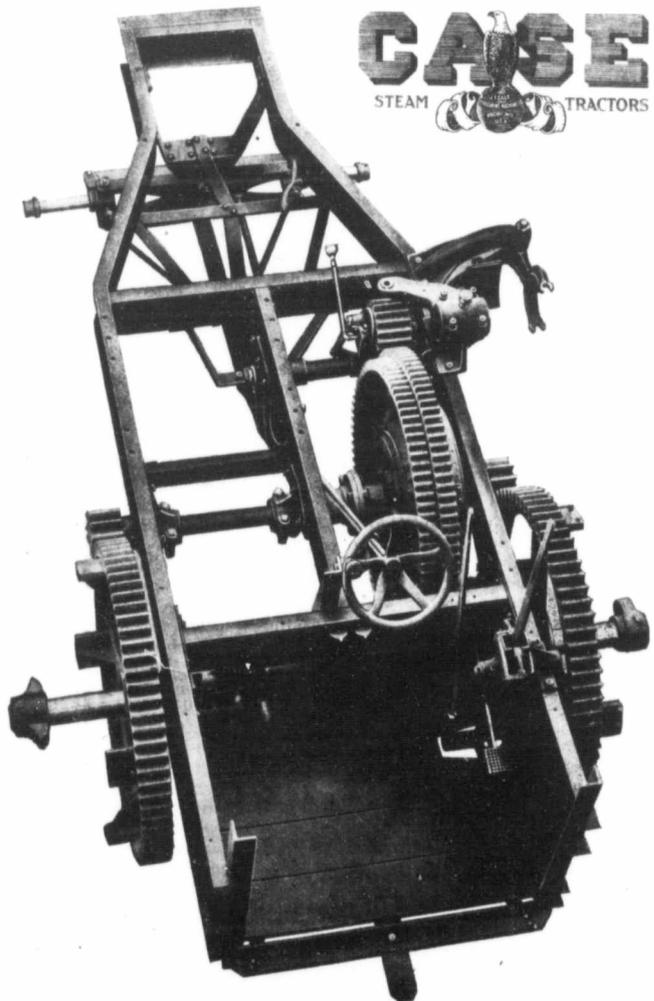
We have mentioned above only a few of the many items which will interest you when you study this Case 20-40 and begin to make comparisons.

Upon request, we will send gladly complete specifications and descriptions of this 20-40 and other Case Kerosene Tractors. Write to-day.

J. I. Case Threshing Machine Company, Inc.

Founded 1842

1681 Erie Street, Racine, Wis., U.S.A.





EUROPE WANTS MEAT
Canada now has the opportunity to make her export position permanent

THE war stimulated the export trade in Canadian live stock products to a degree deemed well nigh impossible five years ago. Exports of beef increased 6795 per cent., of bacon and pork products 571 per cent. Total exports of live stock products in the fiscal year ending March 31st, 1918, were valued at \$172,743,081 as compared to \$53,349,119 in 1914.

Canada has opportunity of holding this trade and increasing it, for our meat products won a splendid reputation in Europe during the war, and Canada is in the position of the favored nation.

The price of feed has been high, and the cost of producing live stock has been correspondingly high. But the market price of finished animals has also been high. The price may decline gradually, but the price of feed will decline also, and the percentage of profit to the farmer should thus remain about the same. Indeed if the cost of feed declines first, the profit to the farmer will be increased.

J. E. Brethour of Burford, Ont., who won the first prize for export bacon hogs at the Winter Fair at Guelph, says that with the relative prices of feed and bacon then pertaining there was a good profit.

"With standard feed at \$57 a ton and hogs at \$16 live weight, I make a profit of over 20 per cent," said Mr. Brethour. "It is the profit that counts, not the selling price, and profit depends upon the relation of the price of feed to the market price of the finished animal."

Mr. Herbert Hoover, Chief of the United States Food Administration, who is at present in Europe, investigating conditions at first hand cables as follows:

"Every pound of pork products we can export before next July Europe will need, and as soon as the initial chaos of the sudden economic change from war to armistice can be overcome there will be over-demands."

Authorities say that this demand in the case of beef, even more than that of pork, will be abnormal for many years owing to the fact that Europe is estimated to be short of over

115,000,000 head of live stock, of which 28,000,000 represent cattle irreplaceable in less than five years.

MANITOBA FARM CONGRESS

AN unusually strong line-up of speakers is announced for the various conventions to be held during "Farmers' Week" in Winnipeg, February 18 to 21.

Among the speakers expected from outside the province are the following:

Field Husbandry and Agricultural Society Work:—Dr. C. E. Saunders, Dominion Cerealists, Ottawa; Geo. A. Putnam, Supt. of Institutes for Ontario; Prof. John Bracken, Saskatoon; Prof. S. Greenway, Director of Agricultural Extension; J. B. Spencer, Editor-in-Chief, Publications, (Saskatoon) Branch, Ottawa.

Home Economics and Sociology:—Rev. Hugh Dobson, Social Service Council, Regina; Miss Mary MacIsaacs, Director Women's Institutes, Alberta; Mrs. Adeine Blackwood, Wileman, Pres. Women's Institutes for British Columbia; Miss De Lury, Saskatoon; Miss Hazel Winter, Fredericton, New Brunswick.

Dairying:—Geo. H. Barr, Chief Dairy Division, Ottawa; C. Marker, Dairy Commissioner for Alberta; Prof. K. G. Mackay, University of Minnesota; Prof. R. M. Washburn, University of Minnesota; Prof. Hugh Van Pelt, Editor Gimball's Dairy Farmer, Waterloo, Iowa.

Horticulture:—J. J. Logsdail, Staff of Dominion Horticulturist, Ottawa; Norman M. Ross, Supt. Tree Planting, Indian Head, Sask.; Max Pfaender, Horticulturist, Trial Station, Mandan, N. D.

Bee-keeping:—F. W. L. Sladen, Dominion Apiarist, Ottawa.

The Manitoba Farm Congress is made up of the following organizations, all of which will hold their annual conventions on the dates given below.

Agricultural Societies, Feb. 18th to 21st; Home Economics Societies, Feb. 18th to 21st; Canadian Seed Growers' Assoc., Feb. 18th.; Manitoba Dairy Assoc., Feb. 19th and 20th; Manitoba Horticultural and Forestry Assoc., Feb. 20th and 21st; Manitoba Bee-Keepers' Assoc., Feb. 19th; Manitoba Boys' and Girls'

LABOR is SAVED and MONEY is COINED



by the farmer who handles his dairy product with the "Magnet" Cream Separator. Many thousands of hard headed business farmers are delighted to testify to this fact. It is the product of practical dairy men and engineering experts whose foundation belief is that real genius, like the handwork of Nature, is magnificently simple. You never handled anything in dairy equipment so simple and so satisfying in its efficiency as the

"MAGNET"

Cream Separator—

the greatest labor-saving and food-conserving machine ever introduced into Dairy Farming and they will give it you.

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.

MAGNET ALWAYS SKIMS CLEAN

After nearly 18 years' constant use on Canadian farms the "Magnet" has established beyond the shadow of a doubt that its square gear drive and ball-bearing adjustments is unequalled as an effective piece of dairy mechanics and has nothing in front of it in lasting quality.

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 chiefs that winna ding, and canna be disputed."

The Petrie Mfg. Co. Ltd.

Head Office and Factory: Hamilton, Ont.

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

Thoroughbred!



it pays to buy thoroughbred cattle—and if pays to buy thoroughbred clothes—

OVERALLS, WORK SHIRTS etc of

Stifel's Indigo Cloth
Standard for over 75 years.

Are every inch thoroughbred. Firm, strongly woven cloth, that resists wear and weather. Color that lasts as long as the cloth.

You can tell the genuine STIFEL'S INDIGO by this little mark stamped on the back of the cloth inside the garment.

Look for it—and you'll never be disappointed in the wear of your working clothes—for it's the CLOTH in the garment that gives the wear.

Cloth Manufactured by

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Indigo Dyers and Printers

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Baltimore Coca-Cola Bldg.
St. Louis 212 Victoria Bldg.
St. Paul 218 Endicott Bldg.
Toronto 14 Manchester Bldg.
Winnipeg 500 Hammond Bldg.
Montreal Room 540, 439 St. Paul St.

New York 266-262 Church St.
Philadelphia 324 Market St.
Boston 31 Bedford St.
Chicago 223 W. Jackson Blvd.
San Francisco Postal Tel. Bldg.
St. Joseph, Mo. Saxton Bank Bldg.

Clubs, Feb. 21st; M. A. C. Old Boys' Reunion, Feb. 21st; Schoolmasters' Club, Feb. 21st.

BOOSTING HOG PRODUCTION AT THE MANITOBA AGRICULTURAL COLLEGE

Professor G. W. Wood.

THREE breeds of pure bred swine are now being kept at the Manitoba Agricultural College: Yorkshire, Berkshire and Poland China. The start in Yorkshires was secured from A. D. McDonald and Son, of Napinka. Later two choice gilts were secured from Philip Leach, of Baring, Saskatchewan. The start in pure bred Berkshires was made by securing two good animals from C. Weaver, of Deloraine. In 1917 two splendid gilts were purchased from the Iowa Agricultural College, and during the past year a boar was secured from Macdonald College, of Quebec. This boar took first and received the reserve championship at the Brandon fair. In Poland Chinas the foundation animals were secured from F. W. Wieneke, of Stony Mountain, and from the Iowa State Agricultural College primarily for instruction work and to supply the dormitory with pork, over 70 breeding sows are on hand and a few of the choicest are being reserved this year for the Brandon sale in March.

AGRICULTURAL EXTENSION SCHOOLS

THE Agricultural Extension Service have shipped out four big automobile cars for the four schools which are to be held in the province as under. A staff of six instructors will be present at each of these schools, and lectures will be given each day for two weeks on gas engines, live stock, field crops, farm book-keeping, cement construction and

home economics. These are the beginning of 24 similar schools, which will be held at various places in the Province.

In addition to these, there will be three other series of Short Courses, each of one week, devoted mainly to dairying, poultry raising and bee keeping, and to each of which a staff of three lecturers will be sent. Unless health conditions prevent these seven circuits will be in operation until the end of March and between 25 and 30 instructors will be constantly employed.

The places and dates are as follows:

February 4 to 14: Benito, Binscarth, Elkhorn, Cartwright.

February 18 to 28: Swan River, Gladstone, Lenore, St. Agathe.

March 4 to 14: Roblin, Beausejour, Brookdale, Langruth.

March 18 to 28: Ste. Rose, Emerson Oakville.

The places at which four day Short Course Schools will be held are:

Camper, Fisher Branch, Moosehorn, Stuartburn, Elphinstone, Baldur, Glenboro, Melita, Bruxelles, Grahamdale, Inwood, Spear Hill, Ridgeville, Chatfield, Belmont, Holland, Mariapolis, Laurier, Gypsumville, Arborg, South Junction, Erickson, Cypress River, Waskada, St. Alphonse.

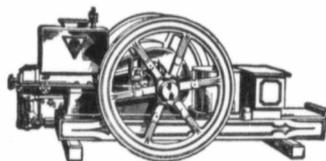
After church parade the padre said, "I wish to speak to those of you who have not been confirmed. Will the men divide themselves into two parties, please? Those who have, fall out on the right, and those who have not on the left."

Most fell out on the right. In the schuffle this remark was heard, "You been confirmed, Bill?"

"Bet yer life. Got the marks on me arm yet."



Raised from good seed in a small Manitoba garden.



Thousands of Canadian Engine Owners "Swear by" the ALPHA—

WHY?

BECAUSE IT'S DEPENDABLE

The Alpha runs right along, day after day, and does not get out of order. It's an engine you never have to "fuss" with. It's always ready.

BECAUSE IT'S SIMPLE

The Alpha has no delicate electric batteries or fragile or complicated attachments. It starts and runs on a simple, low-speed magneto guaranteed for the life of the engine.

BECAUSE IT'S A FUEL SAVER

The Alpha is most economical in the consumption of fuel, and it uses either gasoline or kerosene.

Go in and see the local Alpha agent. Let him show you the many different uses to which you can put the Alpha—how it will save time and work and make money for you. If you don't know who handles the Alpha in your vicinity, write us for his name.

THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA.

Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns and Butterworkers. Catalogues of any of our lines mailed upon request.

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

The Farmer's Need

of Life Insurance is probably greater than that of any other business men. In the early stages of his career he is often struggling with a mortgage, and as he progresses he puts back what he earns into equipment in order to increase his production. Should anything happen, and he is not insured, the savings of years would be lost. Life Insurance is always the first asset realized on, and this provides funds to immediately retire all outstanding obligations. On the other hand, if you survive the investment period, the proceeds provide a competence for your declining years.



The Manufacturers Life Insurance Company

HEAD OFFICE - TORONTO, CANADA

Kindly complete and mail to the address above:

Without obligation, will you kindly furnish me with full particulars of your Guaranteed Policies. I am.....years of age and am (married / single)

Name

Address.

Advice on Plant Diseases

(Experimental Farm Note)

IN view of the present vital need for increased production, the Central Experimental Farm urges every farmer to look well into the question of crop diseases, for the losses which these diseases cause each year in orchard, field and garden, are, in the aggregate, simply appalling.

The U.S. Department of Agriculture estimates that the smutted wheat grown in that country in 1917 would fill a line of freight cars reaching from New York to Cleveland (600 miles). In 1916, in Canada, the loss from rust on grain amounted to \$50,000,000, while the Canadian potato crop in 1915 was almost cut in two by the ravages of blight and rot. Each year about one-quarter of the Ontario apple crop is lost from apple scab, and the loss in the plum crop from brown rot is at least as high.

These are only a few common examples of the numerous diseases which yearly take heavy toll of our crops everywhere. Indeed it has been said that the dollars annually lost from crop diseases on the average farm would pay the hired man's wages.

A great number of these diseases can be prevented by well tried and simple measures, and since we are now in the midst of the greatest food crisis the world has ever seen, every bit of food saved from the wastage of disease becomes not only profit for the grower, but an asset to our country and a boon to starving humanity.

In order to make it easy for everyone to get in touch with all the available help on plant diseases the following sources of information are given:—

Identification of Diseases and Advice Regarding Treatment

(1) The agricultural representative in your county, if there is one; phone or write him or get him to call.

(2) The Agricultural College in your province. Each college makes it a part of its policy to answer all such inquiries.

(3) The Central Experimental Farm at Ottawa maintains a well-equipped plant disease service which everyone is invited to make use of. Address, Division of Botany, C.E.F., Ottawa, Ontario.

(4) The Central Experimental Farm has also branch stations for the study of plant diseases, any of which will be glad to give every assistance on request. Address, Field Laboratory of Plant Pathology (Charlottetown, P.E. I.), (Fredericton, N.B.), (St. Catharines, Ont.), or (Brandon, Man.).

In writing, do not worry about

the exact address. Your letter will reach the proper place if it goes to any government department. Give as full and clear a description of the trouble as you can, and send specimens where possible. Several specimens are better than one. They should be typical of the trouble and should be packed so as to arrive in good condition. When addressed to (3) above, no postage is required on letters, or on packages of specimens not exceeding 12 oz. in weight.

Bulletins

Bulletins give in condensed form all the important information about diseases and their control. If well studied they give a clear understanding of the trouble, and if kept for reference they save burdening the memory with many details of methods. They are sent free of charge.

Requests sent to any of the addresses given above will bring bulletins on plant diseases. Write for either, (a) a list of those published from which you can make your own selection, (b) those bulletins dealing with the disease of some particular crop, as potatoes, or (c) a bulletin on a certain disease, as smut in oats.

Cut this out and put away for further reference.

Advantages of the Silo on the Farm

1.—The silo provides a means of saving a larger percentage of the nutriment in the corn crop, especially in case of drouth, early frost, or failure to mature.

2.—The silo conserves the nutrients of the entire corn plant in a palatable form.

3.—Silage is succulent and provides conditions in winter similar to summer pasture.

4.—The silo insures a saving of time and labor in winter feeding. The farmer does not have to wade through snow or mud to haul feed from the fields in stormy weather.

5.—Silage furnishes a uniform quality and puts bloom and good coat on livestock in winter.

6.—More feed can be stored in the form of silage than in the form of fodder or hay.

7.—Acre for acre silage is more efficient as a feed than fodder.

8.—Silage can be used profitably as a supplement to pastures in summer.

9.—Silage properly made is a good feed for horses, cattle and sheep. It increases the flow of milk in winter when prices are highest, thus lowering the cost of production, and increasing the profits.



Gophers Obey
No Food Regu-
lations—They
Take Big Toll of
the Crop—

**Kill 'Em
Quick!**

For a Bumper Crop

To get a bumper crop you must protect it from gophers, from seed time to harvest. That will increase any normal crop from 1 to 5 bushels per acre and often much more! *And it's easy to do!*

THE
TIME-TESTED
GUARANTEE

Kill-Em-Quick

GOPHER
POISON

will keep your land free from gophers, will increase your crop and your profits. Use it often from early Spring until Fall—it pays.

Kill-Em-Quick as shown by government test is the strongest gopher poison, so strong that even the tiniest particle instantly kills any gopher that picks it up. Because of its odor gophers always find and eat it if it's where they can get to it. They'll follow the odor for rods.

The Manitoba Agricultural College recommends Kill-Em-Quick as "the most effective gopher poison"—they tested poisons and know!

Better be safe than sorry. Get Kill-Em-Quick and be protected by our Money-Back Guarantee.

40 acre size, 60c; 100 acre size, \$1.20. Buy Kill-Em-Quick through your local Association and get wholesale prices.

Kill-Em-Quick Co., Ltd.

Dept. C Regina Canada



Every farmer who continually poisons Gophers Spring, Summer and Fall serves his country well for he increases crops.



OXY-
ACETYLENE

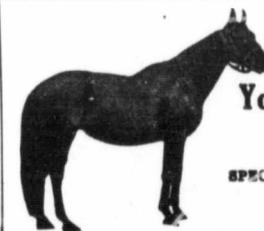
WELDING

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

Nothing too large or too small

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WINNIPEG

General Agents

**Yorkshire Fire Insurance
Co. of England**

LIVE STOCK DEPARTMENT
SPECIAL FARMERS' ACCIDENT POLICY
FIRE INSURANCE
AGENTS WANTED



Anton Mickelson

Positively States That for fifteen years he has devoted his studies to the destruction of gophers; that to the best of his knowledge

"My Own Gopher Poison"

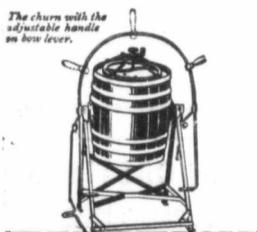
is the deadliest and most economical preparation of its kind; that the quality has not, and WILL NOT be lowered because of the high cost of raw materials; and that imitations purporting to be made on the Mickelson formula are deceptive and worthless.

BE SURE that when you ask for "My Own Gopher Poison" Anton Mickelson's photo and signature are on the package—that's the only way

MY OWN Gopher Poison
KILL THEM QUICK
GUARANTEED
SEND TO SEE PRICE IN BOTTLE

Prairie Chemical Co., Canada Limited
ANTON MICKELSON, Manager.
Winnipeg Canada

15 **Make your own Stock Food of one quarter the cost by using Anton Mickelson's "Donator".**



THE BOW LEVER is just one of the exclusive features of the Maxwell "Favorite" churn. No other churn has it. You can adjust the handle to centre, right or left which ever is easiest for driving.

It makes churning a pleasure. It's so easy to drive—requires so little effort to produce the butter

Maxwell
FAVORITE CHURN
is used in all the great butter making countries of the world.
Maxwell Ltd. - Dept. A St. Mary's, Ont.

IF ISAIAH HAD HAD A PRINTING PRESS!

GERALD STANLEY LEE, in his provocative book "We" (Allen and Unwin, 6s.), draws this picture of what would have happened if Isaiah had had the help of a printing press.

"If Isaiah, the supreme master of expression among his people, were living to-day, he would be in a position, owing to the invention of advertising, to do what he tried to do. All that Isaiah's power of expression needed was capitalising, to have saved his nation from destruction, from being scattered over the face of the earth, from living two thousand years in the despised quarters of other people's great cities, and from cringing about in the moral backyards of other nations. Capitalising Isaiah's power of expression, printing what he had to say so that it could be read aloud to the people in the streets, read over and over to the people in the great houses, in the little huts, in the tents, and in the fields, would have turned the whole course of history.

"History turned as on a pivot for a little while there in Judea, on the power of a man named Isaiah to use words. But without capital to buy and engage millions of little beginning wedges of attention with, and without a printing press to carry his voice to thousands who were not there, Isaiah had the usual tritely discouraged respectable fate of all prophets of not being heard by his own people, of speaking on paper after he was dead—the fate of being mere literature, a mighty resounding voice through all nations, through all times, of a nation that might have been.

"In America we will not do this. We will write the literature of a nation that shall be.

"If Isaiah were in America today and one single one of our seven thousand armoured millionaires were to step out from the other six thousand nine hundred and ninety-nine, hand him twenty million dollars' worth of attention-space in this country—hand him as it were a sky to write on, hand him a great landscape of men and women from the Atlantic to the Pacific, and all the hills, mighty valleys, mountain tops of attention—he would write on the earth as with an iron pen, as in the blood of great cities the Word of God. Then the other six thousand nine hundred and ninety-nine millionaires, before the Word and in the presence of the will of the people, would do what Isaiah said."

THE FAMOUS Garden City Feeder

Has done more to take the hardship out of threshing and make it a PLEASURE than any piece of machinery on the farm.

BECAUSE it feeds a threshing machine as it should be fed regardless of the antics of ignorant or mean pitchers. No more swearing at them. Let them pile the sheaves on any way they please, and as fast as they want to; the Garden City Feeder will deliver the grain end first to the cylinder, in an even flow of uniform depth. No more broken spikes or slugged cylinder, no more overloaded straw racks or sieves; no clogged blower; no broken or burned belts; no wasted grain; no long waits for repairs. Just a steady run all day, every day, season after season. It's fun to thresh that way, and profitable too. Don't take our word for it, ask any user, or let us prove it to you.

WRITE TO-DAY FOR FREE CATALOGUE

The Garden City Feeder Co., Limited REGINA, SASK.

BRUCE DAVISON CO. Brandon, Man. W. S. MUNROE CO., Calgary, Alta.
A. E. GARDINER Saskatoon, Sask. MART McMAHON, Lethbridge, Alta.

Remember we are sole agents for the CASWELL BELT GUIDE SATISFACTION GUARANTEED



Tractor Tillage Implements



A P&O Little Genius Three-Furrow, turning over an acre an hour—ten acres in a ten-hour day. This man can plant at the right time because he will have his plowing done in season. If necessary, he can operate his outfit 24 hours (24 acres) a day. Last year in the corn belt the earlier corn survived and matured under conditions that resulted in a mighty small yield from the late corn. Time is an extremely important factor in farming operations, and the owner of a P&O Little Genius and any good tractor has it under his control.

We are Tillage Tool Specialists. If you are interested in tractor tools, let us send you our catalog "P&O Tractor Plows."

Made By PARLIN & ORENDOFF CO. Canton, Ill., U.S.A.

Hart-Parr of Canada, Ltd. Sales Agents for Canada
WINNIPEG REGINA SASKATOON CALGARY

How Market Officials Help

By JOHN PAWTUCKAWAY

Official government agencies to aid producers, few are accomplishing more good at the present time than the market experts. These men are stationed at principal markets and make it their business to keep close tab on daily produce arrivals, to note condition, quantity, and price at which sold. They supply growers with up-to-the-minute market information of incalculable value in dollars and cents. And the service these representatives, developing new methods in a hitherto largely unworked field, perform, annually grows better. In the United States the Bureau of Markets is now organized as a national system, with the consequence that elaborate, vital information, formerly possessed only by the wholesale produce trade, and by them in somewhat fragmentary form, is now at the service of producers, who need seldom sell "in the dark."

Canada will eventually witness extensive exploitation of the same principle. British Columbia in a provincial way has already built up a highly valuable market service. The movement began with the appointment of a fruit markets commissioner for work in the prairie provinces. The demand was from the Okanagan Valley principally, which was suffering in selling vegetables and fruits from lack of reliable market information. The first commissioner sailed on largely unchartered seas, but his regular market letters accomplished so much good, as reflecting accurately prairie markets from the producer's standpoint, that in a twinkling the market commissioner had become an established permanent institution.

Experts Cover Coast and Prairie Markets

On the prairies, Commissioner Smith was succeeded by W. E. McTaggart, who in turn was followed by J. C. Grant, the present commissioner. All these have been popular, efficient officials.

For British Columbia fruit growers the important markets are east of the Rockies. To the lower mainland, however, rolls much fruit valley produce, and for most wet belt farmers it is the main market. To cover the Coast market, when prairie commissioners had been so successful, R. C. Abbott was appointed, with an office in Vancouver. R. C. Abbott is still very much on the job. Like the prairie officials, Mr. Abbott's value to the agricultural industry cannot be calculated. It is certainly many times his salary.

The British Columbia market commissioner covering prairie markets submits weekly reports through the shipping season, which begins in late spring, and ends, except for a small volume, in late fall. The Coast commissioner issues weekly reports the year round. These reports receive extensive circulation through the newspaper press and otherwise. As general aids, they are of tremendous importance to individual farmers. When they do not answer the special marketing question which has arisen in some farm business, the farmer is free to consult in person the market commissioner.

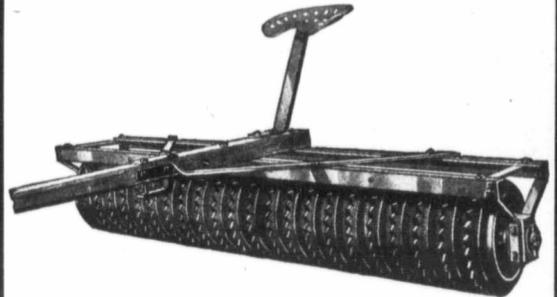
As originally conceived, the market commissioner was expected to function as the reporter of market prices and crop movements. He was expected, as the servant of the producing interests, to supply market information fitting the needs of his constituents. A valuable service of this kind materialized, but it is not by long odds the measurement of the market commissioner as an institution.

As commentators on shipping practices, the British Columbia commissioners are unanticipated powers for better profits. Western Canada is a new country where thousands are "learning how" from actual experience. Some of them, notably the fruit growers, are called upon to ship great distances products of an extremely perishable nature. Others whose experience is confined to the shipping point end, and who never see how their produce appears when unloaded, or how it is handled en route, make costly mistakes in shipping a product so rough-and-ready even as the lowly but indispensable spud. Carloads improperly packed, wrong containers used for express shipments, fruit picked on the wrong side, all these are points on which the great army of shippers has shown itself in need of expert guidance.

A Personal, Independent Service

It is here we note a difference between the labors of American bureau of markets officials and the two British Columbia men performing in a similar field. Certainly in British Columbia the market representatives have been allowed to develop individual initiative and independence far in excess of that found in the United States. In one of the intermountain cities a market man started to supply a newspaper with daily signed articles containing suggestions both for consumers and producers. It was an excellent idea, but it had altogether too personal a flavor, apparently, for

Western Pulverizer, Packer and Mulcher



The Western Pulverizer, Packer and Mulcher pulverizes and packs down the soil and puts it in perfect condition for seeding in one operation, either a stubble ground or sod ground. It will not clog. Provides a granular mulch to the land which stops evaporation and preserves moisture.

Write for our full descriptive catalogue which gives in detail the many full, practical results obtained on the land when the "Western" is used in farming operations.

CUSHMAN MOTOR WORKS OF CANADA, LIMITED

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Send Your Name For Our New Catalog

SHOWING A COMPLETE LINE OF IMPLEMENT REPAIRS, PLOW SHARES, HARNESS, ETC.

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DO NOT SCRAP BROKEN CASTINGS

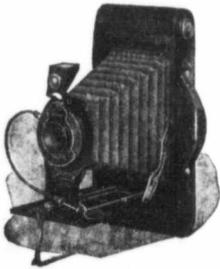
We make them equal to new at low price. Cylinders, Engine Bases, Gear Wheels, Steam Boilers, in fact any broken or cracked parts, welded and guaranteed by us. Scored or worn cylinders re-bored. Please write for our circular and estimates. We were the first to operate the OXY-ACETYLENE WELDING PROCESS in the West. Established since 1911.

MANITOBA WELDING & MFG. CO.

56 and 58 Princess Street, WINNIPEG, Manitoba

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

MADE IN CANADA



Price, with Single Lens, \$12.50

Price, with Double Lens, \$15.00

3A Folding Autographic Brownie

Pictures Post Card Size

Made where the Kodaks are, the Folding Brownie will do what the Kodaks do—make good pictures. It is a camera in which simplicity of construction has been emphasized so that simplicity of operation might be assured. The result is an easily worked, common sense, reliable picture-maker. And it is autographic—providing for the date and title on the film at the time the exposure is made.

CANADIAN KODAK CO., Limited
Toronto, Canada

LUMBER

DIRECT FROM OUR MILLS AT WHOLESALE MILL PRICES

You cannot afford to buy LUMBER without knowing our prices. We will quote you the LOWEST WHOLESALe MILL PRICES on Dimensions, Boards, Shiplap, Flooring, Ceiling, Siding, Mouldings, Shingles, Windows and Doors; in fact, everything in lumber you require. Prices are FREIGHT PAID to your station.

Write for our complete price list or send your bill for special quotations. CLUB ORDERS will be loaded and invoiced separately. Get our prices on straight carloads of SPLIT CEDAR FENCE POSTS

CONSUMERS LUMBER CO.
Vancouver, B.C.

Raw Furs

Trappers, Traders, Farmers

We have a large order for MUSKRAT, SKUNK and WOLF, and are prepared to pay top prices for such skins. Ship all your furs to us immediately. It will pay you to write for our Free Price List.

A. & E. PIERCE & CO.
The Largest Raw Fur Merchants in Canada
211 PACIFIC AVE., WINNIPEG, Man.

the bureau of markets, for the official with ideas was quickly suppressed in favor of a stereotyped report going out under the name of the organization.

British Columbia weekly market reports minus the names of the commissioners, would lose three-fourths their value. These men impart a personal "punch" to their reports, which certainly, if it does nothing else, keeps awake all readers. As from long, intimate contact, they learned their field, they doffed their gloves, and spoke right out in meeting, condemning right and left practices which were hurting farmer-shippers. Here was a case where hard words would please producers much more than soft, honeyed phrases, when, as they did, they indicated the road to better profits.

Those growers who were needlessly wrapping tomatoes in paper wrappers; those others whose potatoes, poorly packed, right out of the field, were arriving in a damaged condition—there were no hurt feelings, only gratitude, when the misguided ones were told the facts.

We quote from Commissioner R. C. Abbott's report under November date in some valuable advice dealing with the condition in which branded farm produce was arriving. Brands for co-operative associations and communities are most valuable, ordinarily, when crop production is extremely heavy and it is necessary to emphasize quality in order to sell to advantage. It was under such conditions that practically every producer's fruit and vegetable brand in use to-day was adopted.

Something Wrong With Branded Goods

"What is a brand name?" asked Commissioner Abbott in a recent public report. "Shippers who have adopted the use of a registered brand for apples and potatoes, appear to have lost sight of what a brand name really means, not only to themselves, but to the consuming public.

"Where a brand name has become known to mean quality, consumers will invariably ask for that brand, and even after the quality of the brand has fallen off, the consumers will still take a chance for some time, with the hope that the original quality has been restored. After a time the consumers will become prejudiced against the brand, and even though the shipper gets the quality back, he will find he has to go all through the work again of advertising his brand and probably change the name altogether.

"Why are the special brands adopted by our shippers in B.C. not being kept up to standard? Is it the psychological instinct which appears to be prominent in human beings that, when the sell-



STOP SMUT

A treatment with Standard Formaldehyde for the seed costs very little. Then you are safe. But let Smut get a hold on your crop and you will share in the annual loss of millions of dollars by Smut!

STANDARD FORMALDEHYDE

Guaranteed Full Strength, perfectly safe to use as directed on the label. Treat your seed with Standard brand and rest easy.

Get your order in to your dealer's early so that he will be SURE to supply you with the genuine STANDARD Formaldehyde.

Standard Formaldehyde is unexcelled for treating seed potatoes against scab!

Sold in sealed 2-lb., 5-lb., 10-lb. jugs—also in bulk.

Formaldehyde bearing Standard Label, is manufactured, jugged and sealed by



STANDARD CHEMICAL

Iron & Lumber Co. of Canada, Limited,
WINNIPEG
MONTREAL, TORONTO.

UNION BANK OF CANADA

Loans for Livestock

TO Good Farmers living in the vicinity of its rural Branches, the Union Bank is prepared to make loans on reasonable terms for the purpose of purchasing Cattle for feeding or breeding purposes.

Consult the Local Manager for particulars

Paid-Up Capital \$5,000,000.00
Total Assets, over \$153,000,000.00



Head Office: Winnipeg
Total Assets over \$153,000,000
Deposits over \$110,000,000

THE PIONEER BANK OF WESTERN CANADA

NORTHWESTERN LIFE POLICIES

Head Office: WINNIPEG

"NONE OTHER SO GOOD"

ing prices are high, there is the wanton tendency to ship in as great a quantity as possible, taking chances on the results of the grades, with the hope of making a little clean-up? Is it because labor is scarce, and what we have are not sufficiently trained? Is it because the superintendents are unskilled and cannot handle the packers? Is it because the packers are making high wages and the human instinct to make a little more has got the best of them and they have run to speed instead of quality?

"Whatever may be the reason there is no doubt but what some of our shippers, who have an established brand, will find that a little more careful attention given to maintaining the quality of these brands would work out to their benefit.

"A car of apples shipped to the H. O. Kirkham Groceteria, City Market Building, from the Okanagan Valley, is indeed no credit to the Okanagan. This car is, without exception, in our opinion, of the poorest quality of any car examined by us during the last four years. Although it is shipped under the Popular brand, it has become very unpopular, and will do a great deal toward hurting our Okanagan apples. Certain cars of potatoes shipped in under the brand of "Genuine Ashcroft Potatoes," are far from being a credit to the district or to the shipper."

Prairie Commissioner Grant, in one of his last 1918 reports, asked: Shall we ship in seasons or spasms? The Okanagan practice has been to get the year's apple production out of the Valley just as quickly as the Canadian Pacific could move it. This liquidates a year's production in cash in minimum time, but Commissioner Grant declares it does not market the crop to the best advantage. Those prairie country districts which must lay in a winter's supply before serious frost should be served, and winter varieties then stored in Okanagan storage warehouses and fed to the market as it is ready for them. The selling season, the commissioner says, would be lengthened, and better prices obtained.

Market officials have amply demonstrated their value in British Columbia, and future changes in the service will surely be in the way of extensions.

"The one thing that gits me," remarked Colonel Smith of Hilldale Dairy, "is the fool notion some folks on a farm have that any feed makes milk. It all gets back to the ancient superstition that if you want a hen to lay bricks all you got to do is feed 'em red clay. It's not how much you feed your herd, it's what you feed 'em."

HAVE ANIMALS COLOR SENSE?

("The Sun," New York.)

DO animals see colors as human beings do? Does the grass look green and the sky blue to a bird, for example?

It is well known that not all human beings see colors in the same way. Some are blind to red and green; that is, they see grey instead of those colors, and a few persons are totally color blind, that is, they see everything as it looks in a photograph, without color.

How can it be learned whether animals can distinguish colors? It is not enough, of course, to offer the animal a choice between two colors and see which one it will prefer. It may be able to distinguish them, but have no preference in the matter. The most thorough investigation so far made of the color sense of any animal was that conducted by Prof. Yerkes, of Harvard, with Japanese dancing mice.

A box was constructed with two compartments, one illuminated with light of one color, the other with light of another color. If a mouse entered one compartment, the red one, for example, it was allowed to run through and escape into a large space; if it entered the green one it got a mild electric shock from wires on the floor. The lights could be changed so that the red compartment was now on the right side, now on the left.

The mice soon learned to choose the red compartment, on whatever side it was. But did this show that the mice saw red as red and green as green? It was found that when, after being trained in this way they were offered a choice between compartments that were not lighted by colors, but were merely one light and the other dark, they chose the dark compartment at once. That suggested the possibility that they might have been seeing both red and green as two shades of grey, of which red was the darker.

Later tests made this very probable, for the mice proved quite unable to distinguish a red compartment from a compartment that was wholly unlighted; that is, from black.

It is not enough, then, to show that an animal can distinguish between two lights that are of different colors to a normal human eye, for the animal may see them as two different and distinguishable shades of grey. It is known that a color blind person sees colors in this way. The best method by which to prove that animals see a color as a color is by teaching it to pick out the color from a whole

The Farmer-Banker Alliance

You go to your lawyer for legal advice; to the doctor for medical advice; why not to The Merchants Bank for financial advice?

If you want a loan to buy cattle, hogs or equipment—if you want information as to how to invest money—come to those who make a business of financial matters, and are in a position to give you sound and impartial advice.

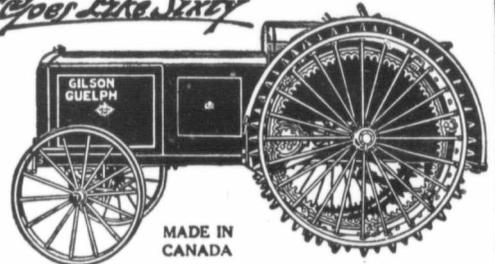


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with its 19 Branches in Manitoba, 21 Branches in Saskatchewan, 53 Branches in Alberta, 8 Branches in British Columbia, 103 Branches in Ontario and 22 Branches in Quebec serves Rural Canada most effectively.
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MADE IN CANADA

THE 100% Service Tractor that does all the things you want a tractor to do. Great power, compact construction,—extra strong and durable, but light and handy. It has great drawbar pull and economy,—and for belt work it is unsurpassed. Built of the finest materials,—Hyatt Roller bearings.

—Alloy steel,—Dust proof transmission, etc.—and all so simple and easy to operate that a small boy can do it easily.

The Gilson Standardized Tractor meets perfectly the demand for a high class, serviceable tractor to increase production, and is a money-maker for its owners. Sizes 10-20, 19-25 and 15-30 h.p. Write to day for full particulars.

GILSON MFG. CO., Ltd., Dept. R. WINNIPEG, MAN.,

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Seed Oats Special Sale

We have excellent stocks of Selected Seed Oats—specially cleaned, sacked and prepared to meet the extreme shortage. ALSO

In Car Loads

We specialize in sales of carload quantities to farmers or municipalities wanted in bulk.

WRITE TO-DAY

Ask for Special Seed Grain Catalog

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Sarnia Woven Wire Fence

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SARNIA FENCE COMPANY, Ltd.
Winnipeg, Manitoba
Sarnia, Ontario.




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GILSON



Just try a Gilson Grinding Outfit on our new free trial plan, and you will wonder how you ever got along without it. Your farm is not complete without this outfit. You'll be surprised how quickly a Gilson outfit on your farm will pay for itself.

The simple, powerful Gilson Engine—dominant in quality and service, is made in Canada, and distributed direct by the manufacturer. 25% to 50% surplus power rating. Made in all sizes for all purposes.

Write us TO-DAY for particulars of this "Help the Allies" Grinding Outfit and special proposition.

GILSON MFG. CO. LTD.
WINNIPEG, MAN.

326-ACRE FARM FOR SALE in the wonderful Dauphin Valley; 250 acres summer allowed and ready for wheat next spring. Has frame house, one log granary, one from granary and log stable; all fenced; flowing well, good water. Price, \$11,000.00. Apply Owens, Sutherland & Stelck, Hardware Merchants, Dauphin, Man.

series of greys, ranging from black to white.

Hardly any animals have yet been satisfactorily tested for color sense, but a number of experimenters have the matter still under investigation. It seems probable that the color sense of many animals will prove to be quite unlike that of human beings.

Red has been called the king of color. The bull is not the only creature that resents red; the elephant, the horse, the dog, the cock, are all alike in this respect.

It is sufficient, for example, to cover the doors and skylights of a kennel with red material to cause incessant barking and commotion among the dogs confined therein. A spider and a wasp confined in a glass case, are reported to have dwelt happily together until a red cloth was placed against the sides, when the insects tackled each other at once and a fight to the death ensued.

Of all bright colors red is the favorite among all primitive peoples. It excites to violence in flags and uniforms. Red is the emblem of domination in politics and religion. The cardinal and the doctor of divinity have their red robes.

On the other hand, red has replaced green in one respect as a restful color. At great state functions out-of-doors in India, such as a durbar, red umbrellas are preferred to green as an effective sunshade.

Blue has a minor influence. Curiously enough, it appears only to affect the cat in the same way that red affects other animals. Humanity has a respect for blue, which is the cloak of heaven. In legends and fairy tales it is the good little boy, destined to achieve success in life and marry a princess, who is described as clothed in blue, while a red blouse serves for the bad boy.

Violet is held to be a depressing color. To live continually in a room papered and upholstered in violet is sufficient, it is asserted, to induce mild insanity. Edward VII of England, had a passion for dark blue, and always contended that his mental outlook was much improved by hangings of this color.

BELT LACING

Continued from page 16

over tighter or belt guide; it will surprise you, the wearing quality and strength of it if you take pains putting it in.

This lace is particularly adapted to wide or heavy belts. A good stout lacing is necessary for putting it in. The tighter your laces fit the holes, the tighter it will lock. You will notice I have advised punching the holes in Gandy or rubber belting which many experts tell us

Why We Should Bathe Internally

ADDS MANY YEARS TO AVERAGE LIFE

By R. W. Beal

Much has been said and volumes have been written describing at length the many kinds of baths civilized man has indulged in from time to time. Every possible resource of the human mind has been brought into play to fashion new methods of bathing, but strange as it may seem, the most important as well as the most beneficial of all baths, the "Internal Bath," has been given little thought. The reason for this is probably due to the fact that few people seem to realize the tremendous part that internal bathing plays in the acquiring and maintaining of health.

If you were to ask a dozen people to define an internal bath, you would have as many different definitions, and the probability is that not one of them would be correct. To avoid any misconceptions as to what constitutes an internal bath, let it be said that a hot water enema is no more an internal bath than a bill of fare is a dinner.

If it were possible and agreeable to take the great mass of thinking people to witness an average post-mortem, the sights they would see and the things they would learn would prove of such lasting benefit, and impress them so profoundly, that further argument in favor of internal bathing would be unnecessary to convince them. Unfortunately, however, it is not possible to do this, profitable as such an experience would doubtless prove to be. There is, then, only one other way to get this information into their hands, and that is by acquainting them with such knowledge as will enable them to appreciate the value of this long-sought-for health-producing necessity.

Few people realize what a very little thing is necessary sometimes to improve their physical condition. Also they have almost no conception of how little carelessness, indifference or neglect can be the fundamental cause of the most virulent disease. For instance, that universal disorder from which almost all humanity is suffering, known as "constipation," "auto-intoxication," "auto-infection," and a multitude of other terms, is not only curable, but preventable, through the consistent practice of internal bathing.

How many people realize that normal functioning of the bowels and a clean intestinal tract make it impossible to become sick? "Man of to-day" is only fifty per cent efficient? Reduced to simple English this means that most men are trying to do a man's portion of work on half a man's power. This applies equally to women.

That it is impossible to continue to do this indefinitely must be apparent to all. Nature never intended the "delicate organism to be operated on a hundred per cent overload. A machine could not stand this and not break down, and the body certainly cannot do more than a machine. There is entirely too much unnecessary and avoidable sickness in the world.

How many people can you name, including yourself, who are physically vigorous, healthy and strong? The number is appallingly small.

It is not a complex matter to keep in condition; but it takes a little time, and in these strenuous days people have time to do everything else necessary for the

attainment of happiness, but the most essential thing of all, that of giving their bodies their proper care.

Would you believe that five or ten minutes of time devoted to systematic internal bathing can make you healthy and maintain your physical efficiency indefinitely? Granting that such a simple procedure as this will do what is claimed for it, is it not worth while to learn more about that which will accomplish this end? Internal Bathing will do this, and it will do it for people of all ages and in all conditions of health and disease.

People don't seem to realize, strange to say, how important it is to keep the body free from accumulated body-waste (poisons). Their doing so would prevent the absorption into the blood of the poisonous excretions of the body, and health would be the inevitable result.

If you would keep your blood pure, your heart normal, your eyes clear, your complexion clean, your head keen, your blood pressure normal, your nerves relaxed, and be able to enjoy the vigor of youth in your declining years, practise internal bathing, and begin to-day.

Now that your attention has been called to the importance of internal bathing, it may be that a number of questions will suggest themselves to your mind. You will probably want to know WHAT an Internal Bath is. WHY people should take them, and the WAY to take them. These and countless other questions are all answered in a booklet entitled "THE WHAT, THE WHY and THE WAY OF INTERNAL BATHING," written by Doctor Chas. A. Tyrrell, the inventor of the "J.B.L. Cascade," whose life-long study and research along this line make him the pre-eminent authority on this subject. Not only has internal bathing saved and prolonged Dr. Tyrrell's own life, but the lives of multitudes of individuals have been equally spared and prolonged. No other book has ever been written containing such a vast amount of practical information to the business man, the worker and the housewife. All that is necessary to secure this book is to write to Dr. Tyrrell at Room 1215, 163 College Street, Toronto, and mention having read this article in the Canadian Thresherman and Farmer, and same will be immediately mailed to you free of all cost or obligation.

Perhaps you realize now more than ever, the truth of these statements, and if the reading of this article will result in a proper appreciation on your part of the value of internal bathing, it will have served its purposes. What you will want to do now is to avail yourself of the opportunity for learning more about the subject, and your writing for this book will give you that information. Do not put off doing this, but send for the book now, while the matter is fresh in your mind.

"Procrastination is the thief of time." A thief is one who steals something. Don't allow procrastination to cheat you out of your opportunity to get this valuable information, which is free for the asking. If you would be natural, be healthy. It is unnatural to be sick. Why be unnatural, when it is such a simple thing to be well? —Adv't.

is wrong, but after trying it both ways I find for this lace the punch is best, not only as regards wear, but also in the time taken in doing it.

Figures 3 and 4 show what is simply a common double lace with the difference that 2 rows of holes are used. This lace also gives good results where there

are no idlers to run over.

In lacing a double lace I have always found on the side away from pulley where the laces cross that running the second lace under the first makes a much neater and stronger job.

Have never had any experience with bootlegging lace, but do not doubt for a minute that it is all

Prof. Smith claims for it and "then some." In my opinion it would be an ideal rig for keeping business up to par—at the hospital. I will gladly answer any correspondent re these or any other laces as I am able. Have any other readers anything new in this line? Prof. Smith says: "Have a definite system." System is right.

Some don'ts to Remember

Don't cut your belt without a square.

Don't punch holes larger than necessary.

Don't punch holes so that they won't work in next time it is necessary to shorten belt.

Don't use too wide or too narrow lace.

Don't use a lace without stretching and testing it.

Don't use a lace that has been used before.

Don't have one strand tighter than another.

Don't cross lace on pulley side of belt.

Don't use haphazard methods.

James M. Dill,

Herschel, Sask.

CORRESPONDENCE COURSES AT THE MANITOBA AGRICULTURAL COLLEGE

THE Manitoba Agricultural College is now offering correspondence courses. Inquiries for home-work in agriculture has led the college to believe that it can be of greater service to the public in this way. The agricultural extension schools are already using the correspondence course in soil management as a text.

The courses now ready are:—

1. Poultry Husbandry; by Professor M. C. Herner. Selection of breeds, feeding and raising chicks, production and marketing of eggs, and similar topics are studied.

2. Drawing — Building Construction; by Professor L. J. Smith. This course includes exercises in lettering, tracing and making working drawings for farm buildings and equipment.

3. Soil Management; by Professor T. J. Harrison. Some of the topics covered are tillage implements and their effect upon the soil, preparing virgin soils for crop production, summer-fallowing, preparing suitable land for crops, commercial fertilizers, green manures, farmyard manures, crop rotation, weed control, alkali, peat and muck soils.

4. Dairy Husbandry; by Professor R. W. Brown. This course takes up the subject from the point of view of raising and feeding dairy cattle, the production of milk and the manufacture of dairy products.

5. Farm Records and Accounts; by Professor A. H. Benton. Both

farm book-keeping and cost accounting methods are studied. A farm account book and cost production forms are furnished for actual use on the farm.

6. Manitoba Weeds; by Professor V. W. Jackson. This course is primarily prepared for weed inspectors, but is suitable for farmers and others who wish to get better acquainted with Manitoba weeds.

7. Botany and Nature-Study; by Professor V. W. Jackson. This course is of particular interest to school teachers. Loans of slides, pictures and other material will

be made to those taking the course.

There are also in preparation, Course 8, Horticulture, including small fruits, farm gardens and tree planting; and Course 9, Home Nursing. The correspondence courses are open to all, and information may be secured by writing to the Manitoba Agricultural College.

He: Do you study economics?
She: Yes.

He: Do you want protection?
She: Oh, Gerald, this is so sudden.

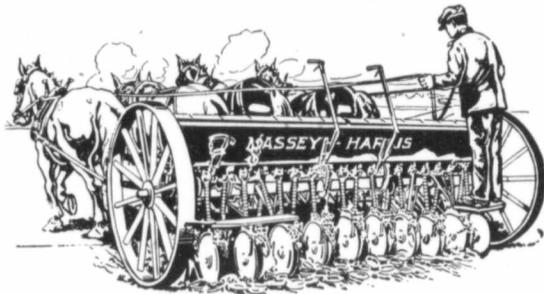
Well Educated?

A noted agriculturist was traveling through one of the southern states on a lecture tour. One evening, after delivering his lecture, he approached a grizzled farmer with the intention of starting a conversation on the betterment of crop conditions.

"Good evening, sir," said the agriculturist.

The farmer regarded him doubtfully for a moment and then said abruptly, "You can't learn me nothin'. I've done 'wore out' two farms already."

Massey-Harris



A Good Start is Half the Battle

Seed time is approaching—are you ready? Sowing your grain with a MASSEY-HARRIS DRILL is a big factor in securing a "Good Start" of the grain and a bountiful harvest.

Your choice of Furrow Openers—Shoes, Hoes, Single Discs or Double Discs—controlled by Pressure Springs, enabling you to open just the right furrow for the seed.

The Feed Rolls or Barrels have deep Flutes which are milled to a perfect fit with the Steel Cut-Off Washer, so there is no leakage of small seed. The Feed is uniform and there is no crushing or bruising of the seed,

Covering Chains cover the seed at a uniform depth.

A substantial Steel Frame—I Beam and Angle Steel—holds all working parts in proper relation; High, Broad-Faced Wheels set with just the right pitch and with Self-Aligning Bearings ensure light draft; the Grain Box is Steel and larger than on any other Drill, saving time and inconvenience of frequent re-filling.

Made in Five Sizes: 14, 16, 20, 22 or 24 Runs.

Grass Seed Boxes if wanted.

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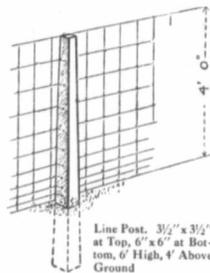
By ALFRED BOYD

A FENCE of heavy woven wire, four feet high, with concrete posts reinforced with smooth galvanized iron wire, solved the problem of one builder who desired attractiveness and at the same time did not wish to incur too great expense. Three kinds of posts were used—line posts, corner posts and gate posts.

In mixing the concrete one part of cement, two and a half parts of sand and four parts of broken stone were used. The stone, a fine material usually known as chats, can best be measured by means of a square box, without top or bottom, holding one cubic foot. A mixing board seven feet square permitted the mixing of enough material for three posts, thus reducing the cost of forms.

The line posts were made six inches square at the bottom, three and a half inches square at the top, and six feet long. They were

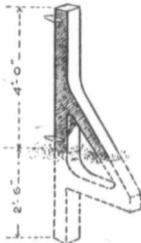
were twisted to loosen them and were removed with pliers. The fence was fastened to the posts by means of wire passed through these holes and twisted round the fence wire on each side of the post.



At the top of the post a staple of heavy galvanized wire was placed when the concrete was poured so the topmost fence wire passed just above it.

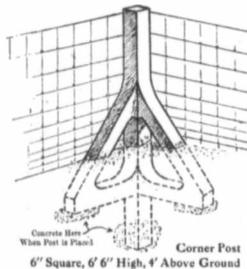
Braced Corner Posts

Whether a fence sags or not depends mostly upon the corner posts. These were made six inches square, without tapering, and six feet six inches long. They were also reinforced with four number six wires, one in each corner, cut seven feet long in this case to allow the ends to be hooked over. This was done to prevent any tendency of the wires to slip through the concrete when the strain came on the post. In addition to these four wires running the full length of the post, four pieces of wire three feet long, also bent into a hook at the ends, were placed at the point where the brace joins the main post—at this point the greatest strain comes when the wire is stretched. The brace, which forms a part of the



set into the ground two feet. This may not seem deep enough to those who live in the northern part of the country, but was considered sufficiently so in a section where the frost line seldom goes below eighteen inches. The corner posts were set two feet six inches into the ground. The line posts were reinforced with four number six wires—about one-quarter inch in diameter—cut to a length of five feet ten inches.

In constructing the forms for the line posts, two side boards were cut from a one-by-six plank six feet long. They were tapered from six inches at one end to three and a half inches at the other. The ends were also made of pieces of six-inch plank. Good material was used so that both sides and ends could be removed after twenty-four hours and used several times over. Holes were bored in a line down the centre of the side pieces so as to come opposite the wires in the fence. Through these holes were inserted pieces of one-quarter-inch rod about seven inches long. After the concrete had been in the forms two or three hours these rods



post, was also reinforced with four wires bent to the proper shape and extended into the post about a foot beyond the end of the brace. The main post and one brace were molded at one time, with the wires for the other brace in place. When the post was ten days old it was carefully turned through a quarter turn, the forms

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This delicious beverage will refresh you—make you feel like enjoying an evening's jolly entertainment.

Whenever you are hot, thirsty or tired, open a bottle of this pure drink.

Get it from your dealer by the case, so you will always have it on hand, and serve it in its sterilized bottle.

The Coca-Cola Company
WINNEPEG

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IN SUNNY ALBERTA AND

GET A CROP EVERY YEAR

The most important factor in the growth of large crops in Western Canada is moisture. Given plenty of moisture at the right time big crops are assured. This is what the farmer on irrigated land can have every year. In Southern Alberta such varied crops as wheat, oats, flax, barley, rye, alfalfa, timothy, brome grass and all kinds of fodder, tomatoes, beets, potatoes, roots, vegetables are grown profitably on irrigated land. Ideal mixed farming proposition. First class land \$50 acre, including water rights. Easy terms, only one tenth cash and twenty years to pay. \$2,000 loan for buildings, etc. A splendid chance to become independent.

READ WHAT F. J. MEECH DID

"This year—(1918)—owing to the war I grew a considerable acreage of wheat and my crop on this eighty acres of land was about 1,500 bushels of wheat; 250 bushels of oats; 6 tons of oat hay; 25 tons of potatoes, and from a tract about one acre set aside for garden and small produce I have sold about \$75.00 worth of vegetables in addition to having sufficient for my own use till my next crop comes."

"I have also commenced a small dairy, having five cows which are yielding at the rate of \$90 per month."

"My land is in a district where alfalfa is an established crop, and two or three cuttings can be taken off in a season."

Mr. Meech purchased eighty acres of irrigable land near Lethbridge, Alberta, from the C.P.R. towards the end of 1916.

Write now for free booklet containing full information to

ALLAN CAMERON
General Superintendent of Lands, C.P.R.

912 1st St. East
CALGARY

were placed, and the other brace was molded. In molding the gate post the six-inch strap hinges were placed in position on the forms and held by nails. Carriage bolts, one-quarter inch by four inches, were inserted in the holes and the concrete was then poured and tamped round the bolts.

In mixing the concrete for three line posts two cubic feet of sand were measured by means of the bottomless box holding just one cubic foot. The sand was then spread evenly over the board so as to form a square five feet by five feet. On top of this was placed three-fourths of a sack of cement, also spread out evenly. The sand and cement were mixed thoroughly by turning over with a shovel until the mixture had a uniform dark gray color without streaks of sand or cement. Then it was spread out evenly, three cubic feet of stone were measured out, and the whole was turned until thoroughly mixed.

Fifty Cents a Post

The mass was again spread out and a depression formed in the centre into which water was poured. Dry material was drawn to the centre and the mixing continued, more water being added as needed until every part was wet. The concrete should flow easily without being mushy, and care should be taken that the surplus water is not allowed to wash away the cement.

The forms were oiled before using and were so placed that the material could be shoveled into them from the mixing board. Enough concrete was placed in the forms to cover the bottom one inch thick. Two of the long wires were then placed in position so as to be one inch from each face. The quarter-inch rods were then placed through the holes in the side boards, the forms were filled within an inch of the top, and the concrete was tamped until the water flushed to the surface. The other two wires and the staple for the top wire were then placed, the form was filled to the top, tamped and smoothed with the trowel.

After about two hours the rods which forms the holes were removed. The following day the side and end pieces were removed. The posts were left on the bottom boards until ten days old and were then moved by turning them over very carefully. They were not placed in the fence until a month after making.

Concrete should not be mixed during freezing weather, though a slight freeze does not result in any serious damage if the concrete has been in the forms for an hour or two before it is subjected to a freezing temperature.

On one occasion several of the posts were made late in the afternoon. By eight o'clock that eve-

ning the thermometer had fallen to fifteen degrees below freezing. The only noticeable result was a thin surface scale which could be brushed off and left no trace.

CLIMBING MOUNT WILSON WITH A TRACTOR

ON page 18 is a reproduction of a photo taken on the peak of Mt. Wilson, California, on 30th November last. This was a somewhat noteworthy test case carried out by a Case 10-18 pulling a heavy load, and setting the record, as nothing of the kind had ever before been attempted. From start to finish it was a complete success.

The stunt was pulled off by the A. F. George Company, Case tractor dealers at Los Angeles, California. The machine used was a stock 10-18 tractor, equip-

MAXIMUM ROOF PROTECTION

The "Brownie" shingle men from the Red Cedar forests of British Columbia bring maximum roof protection to the home in all elements.

This perfect, non-conducting, weather-resisting roofing material—roofing that takes years of growth to produce—and when properly laid will outlast the structure's foundation—this is nature's roofing—not made by man. There are many imitations of

BRITISH COLUMBIA

Red Cedar

SHINGLES

(Trademarked)

but nothing has ever touched them for appearance, service, and all-round satisfaction — they give

100 per cent. roofing efficiency at a low cost

If you are building, or planning to build, our booklet, "Roofing Helps"—sent free on request—tells all about Red Cedar Shingles—facts you should know. Drop a card for it today.

Published by the Publicity Section of

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and
Produce the Best**

Sold Everywhere
Write to-day for Catalogue—Now Ready

THE WILLIAM RENNIE COMPANY LIMITED
394 PORTAGE Ave., WINNIPEG, Man.

ALSO AT TORONTO

MONTREAL

VANCOUVER



Land and Loans—To Help Soldiers Become Farmers

The Government has been developing a programme that includes the provision of land, the granting of loans, and the training and supervision of those inexperienced in farming.

The Present Plan.

Under the Soldier Settlement Act, 1917, an eligible returned soldier is entitled, in addition to his ordinary homestead right, to a free grant of one quarter-section of Dominion Lands on homestead conditions.

For this purpose the Government has suspended homestead entry by others than soldiers on all remaining homestead lands in the Western provinces within fifteen miles of railway transportation, pending enquiry into their suitability.

As soon as a soldier goes on the land, the Board has power to grant him a loan up to the maximum of \$2,500.

This loan is granted to settlers to help them acquire land for farming, discharge incumbrances, undertake improvements, erect buildings and secure necessary livestock, machinery and equipment.

The New Proposal.

The Government have found it necessary to broaden these original plans for the following reasons: (a) It has been found that only a limited amount of suitable homestead land is available for soldier settlement; (b) Some Crown lands are held by the Provinces; (c) Homesteading may not suit all the returned soldiers.

It is now proposed that the Provincial Governments co-operate with the Soldier Settlement Board in acquiring suitable lands at present held uncultivated by private owners. The Dominion Government has announced its intention of introducing necessary legislation along these lines at the opening of the next Session.

The lands so bought will be resold to the soldier at cost price. It is suggested that the purchaser be required to make a cash payment of one-tenth of the purchase price. The balance will be payable in equal annual instalments extended over twenty years or longer.

The amount of the loan purchased by this plan, if it is approved by Parliament, will be limited in value to \$5,000. Interest will be charged at a low rate of five per cent.

When these new proposals for land purchase become effective the Board will be able to loan the soldier settler up to a total of \$1,500 for the purchase of livestock and equipment in addition to the loan for the purchase of his land. It will be granted on practically the same terms as the loans now allowed.

As the soldier improves his farm the Board may advance him a further \$1,000.

Who May Apply.

The Act applies to any one who has

served with an honourable record in the Canadian or Imperial forces in the present war, or to any Canadian who was on active service with the Allied forces, or the widow of any such person who died on active service.

The Board will loan money only to those who have had sufficient experience or training in farming. Each applicant may be required to appear in person before the Qualification Committee in his district.

Training.

Those soldiers who have insufficient experience in farming will be helped by the Board to secure the necessary training to qualify them for the loans.

Special instructional courses are being arranged with the agricultural schools and experimental farms.

Farmers will be asked to co-operate in giving the soldier practical training and knowledge.

Results.

Loans, amounting to over 1¼ million dollars, have already been granted to over one thousand returned soldiers.

Since the regulations were compiled last July, over eight hundred soldiers have made entries on Dominion Crown Lands under the Soldier Settlement Act.



Offices of the Soldier Settlement Board are located as follows; Post Office Bldg., EDMONTON, Alta.; Post Office Bldg., WINNIPEG, Man.; Pemberton Bldg., VICTORIA, B.C.; McCallum Hill Bldg., REGINA, SASK.; 32 Adelaide St. E., TORONTO, Ont.; Drummond Bldg., MONTREAL, Que. In New Brunswick the Board is temporarily represented by the Secretary of the Provincial Farm Settlement Board, St. John; in Nova Scotia, by the Secretary of the Soldiers' Aid Commission, Halifax, N.S.; and in Prince Edward Island by the Minister of Agriculture, Charlottetown.

The Repatriation Committee OTTAWA

ped with solid rubber tires. The start was made at 11.14 a.m. from the Mt. Wilson toll house. The tractor pulled a farm wagon loaded with nine persons. The wagon and the human freight weighed 3,063 pounds.

The tractor proceeded on high gear all the way up, with but one stop of two minutes to allow an

automobile to pass in a tight place. The outfit arrived at Mt. Wilson Hotel, nine and one-quarter miles from the toll house, at 1.55 p.m., the elapsed time being two hours and forty-one minutes, an average of nearly three and a half miles per hour. The time going down was two hours and twenty minutes. At no time

during the ascent did the water in the radiator boil. About one pint of water was consumed on the trip. The steepest grade was 10 per cent.

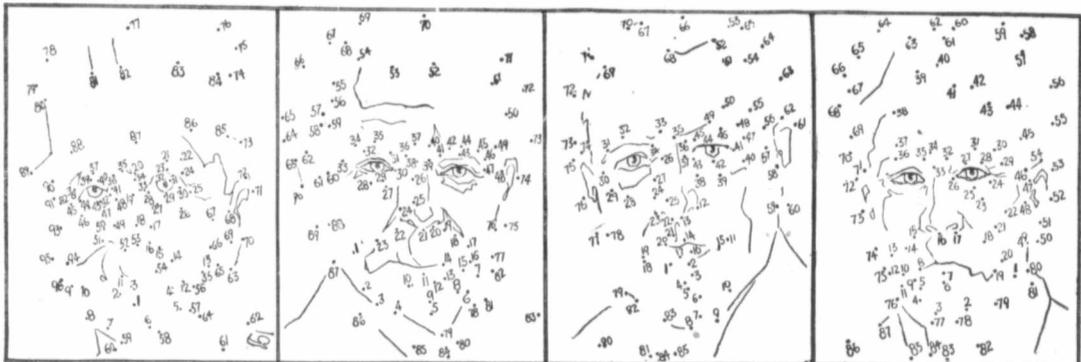
Distillate was used as fuel, although the 10-18, like the rest of Case tractors, generally uses kerosene. Five and one-eighth gallons of distillate were used on

the trip, and four and a half gallons going down. The clutch brake on the belt pulley held the machine in good shape when necessary on the down hill trip. The tractor used only three quarts of oil on the entire trip.

This unique demonstration was valuable in that it showed the reliability, safety and cooling ca-

FAMOUS FOLKS IN FIGURES

\$500.00 in Cash for Best Solutions



LASH OF CHARM (trace from 1 to 96)

GO VALID GLORY DEED (trace from 1 to 90)

ROOL WIDOW SNOW (trace from 1 to 85)

DONT BE SORE RIBRR (trace from 1 to 87)

How Familiar Are You With the Features of the Great Men of To-Day? Here is a Real Test.

THE above four diagrams represent incomplete pictures of four of the world's greatest men—men you read and hear about every day of your life. Complete the four pictures by tracing from number 1 to 2 to 3 to 4, and so on until the pictures are finished and the faces of these great living men will be revealed to you so that you should quickly recognize them. Can you make them out?

Below each picture in jumbled letters is the correct name of the great man represented in the diagram above it. Unscramble the letters of his name so that you can correctly name him. In the far column will be found a list of a few of the world's outstanding great men. This list may prove of service to you.

The best completed pictures with the names correct can win \$500.00 in cash. The completed pictures must be clipped from this paper and attached to a separate sheet containing the names of the great men represented by the diagrams, together with complete name and address of contestant in the upper right-hand corner of paper. Complete list of grand prizes to be awarded is shown in the next column.

This Great Contest Is Absolutely Free of Expense—Send Your Answers To-Day!

This great contest is being conducted by the Continental Publishing Company, Limited, one of the largest and best-known publishing houses in Canada. That is your guarantee that the prizes will be awarded with absolute fairness and accuracy to you and every other contestant. Frankly, it is intended to further introduce EVERYWOMAN'S WORLD, Canada's Greatest Magazine. You may enter and win the best of prizes whether you are a subscriber to EVERYWOMAN'S WORLD or not—and moreover, you will neither be asked nor expected to take the magazine or spend a single penny of your money in order to compete.

HERE IS THE IDEA.—EVERYWOMAN'S WORLD is so popular everywhere that it now has the vast circulation of over 100,000 copies a month. But our motto is "EVERYWOMAN'S WORLD in every woman's home." We want more Canadian

magazine readers to become acquainted with this famous publication. Therefore, when we acknowledge your entry to the contest and you know your standing for the prizes, we shall send you, without cost, a copy of the very latest issue and a review of many of the fine features soon to appear. Then, in order to qualify your entry to be sent on for the judging and awarding

CASH	
1st Prize,	\$200.00
2nd "	100.00
3rd "	50.00
4th "	25.00
5th "	15.00
6th "	10.00
7th to 26th, each	5.00

PRIZES GUARANTEED

of the grand prizes, you will be asked to assist us in carrying on this big introductory plan by showing your copy to just three friends or neighbours, who will appreciate this really worth-while All-Canadian magazine and want it to come to them every month. You will easily fulfill this simple condition in a few minutes of your spare time, and we will even send copies for each of your friends, if you wish.

How To Send Your Solutions.

Use only one side of the paper that contains names of the great men represented by the pictures, and put your name and address (stating Mr., Mrs. or Miss) in the upper right-hand corner. If you wish to write anything but your answers, use a separate sheet of paper. Attach this to your completed pictures clipped from this paper.

Three independent judges, having no connection whatever with this firm, will award the prizes, and the answers gaining 300 points will take the First Prize. You will get 25 points for every picture completed correctly and 25 points for every name solved correctly. 15 points will be awarded for general neatness, style, spelling, punctuation, etc., 10 points for hand-writing, and 75 points for fulfilling the conditions of the contest. Contestants must agree to abide by the decision of the judges.

The contest will close at 5 p.m. on Thursday, July 31st, 1919, immediately after which answers will be judged and the Prizes awarded. Address your answers to-day—

A FEW NAMES OF GREAT MEN LIVING TO-DAY

- Lord Reading
- Marshall Foch
- Andrew Bonar-Law
- Herbert C. Hoover
- G. H. Roberts
- H. G. Wells
- Woodrow Wilson
- Georges Clemenceau
- Raymond Poincare
- Stephen Pichon
- David Lloyd George
- Samuel Gompers
- Lord Robert Cecil
- Sir Eric Geddes
- Sir Robert Borden
- Thomas Alva Edison
- Vittorio Orlando
- Sir David Beatty
- Col. William Avery Bishop
- Ignace Paderewski
- General Jan C. Smuts
- General Louis Botha
- E. K. Venizelos
- General Sir Arthur Currie

FAMOUS FOLKS COMPETITION,
Continental Publishing Company, Limited
226 Continental Building TORONTO, ONT.

capacity of the modern farm tractor. The grade, the soft spots in the road and difficulty in turning with a heavy wagon on the "hair-pin curves" all contributed to demonstrate the versatile capabilities of the "Case Iron Horse."

Neither the carburetor nor governor were changed during the trip. No parts needed adjusting.

CAN WORK LONGER HOURS WITH LESS MAN POWER

Fort Saskatchewan, Alta.,
January 21st, 1918.

Dear Sir:—

In reply to your letter of the 18th instant I may say:

1. My tractor is a 10-20 Titan (I.H.C.).
2. (a) I broke 70 acres of brush land with a 20-inch breaking plow. (b) I pulled a big home-made root harrow over this breaking which pulled out most of the roots. (c) I disced this land four times and harrowed it twice. (d) I back set 60 acres with a 3-bottom gang. I at first used rolling colters, but had to

change to fine coulters on account of roots. (e) I double disced and harrowed this backsetting.

3. In breaking I used a 20-inch Oliver, breaking plow with truck and plowed from 6 to 8 inches deep. The soil was black loam. I averaged nearly three acres per day. It cost me \$1.68 per acre for kerosene and lubricating oil. In back-setting I used a three-bottom gang (each 12-inch) and plowed about 6 inches deep. Soil a loose black loam. I plowed only about 5 acres per day on account of roots. It cost me about \$1.00 per acre for kerosene and lubricating oil (kerosene at 23c. and lubricating at 60c.).

4. All my discing and harrowing was done with a tandem disc 8-ft. wide, the first disc throwing out, and the rear disc throwing in. Behind these discs were attached three sections of ordinary drag harrow. She pulled this easily, making from 15 to 20 acres per day, and doing good work.

5. I have portable granaries which require eight horses to haul them. I hauled these around the field with ease with my tractor.

The above is all I have done so far with it. It was all done by one man. I got the tractor mainly because I had 70 acres ready to break and I could not get anyone to do it. I thought if I could get it done and a crop of wheat off it in 1918 this crop would pay me the price of two or three tractors, in addition to all expenses. The main advantage of it is that one can work long hours and with less

man-power than is the case with horses.

Yours truly,
G. H. T.

"Oh!" said Mrs. Gushy, pleased with the luncheon, "this cheese is heavenly."
"Huh, huh," assented that idiot Jenkins. "Made from the milky whey."

There is BIG MONEY

IN TRAPPING

RAW FURS

to John Hallam Limited

709 HALLAM BUILDING, TORONTO.

FREE

Hallam's Trappers' Guide—66 pages; illustrated; English or French; tells how and where to trap; what bait and traps to use; is full of useful information.

Hallam's Trappers' Supply Catalog—36 pages; illustrated; rifles, traps, animal bait, headlights, fish nets, and all necessary trappers' and sportsmen's supplies at low prices.

Hallam's Raw Fur News—Gives latest prices and advance information on the raw fur market.

Write to-day. Address giving number as below.

The Unboasting British

(From the Philadelphia "Public Ledger")

"Isn't it a fine thing to claim kindred with a crowd like this?—Ed.

WE must not let our delight in the astonishing achievements of our boys, bearing themselves like veterans on the bloodiest battlefields in history, and against the most intensively trained troops ever sent into action, blind us to the other "big things" that have been and are being done in this tremendous tournament of the nations. Even in our appraisal of the great deeds of our Allies, we have naturally dwelt chiefly upon the unexpected and the gloriously bizarre—the slaying of the Goliaths by the daring Davids. We have not stopped to comment on the solidity of Mont Blanc.

But it is after all on the solidity of the Mont Blancs that we build. We don't know the stuff of which Old England was made. What she has done in this war—quietly, unboastfully as is her wont—has surprised no one who knew British character, British stamina and British history. Imaginative writers have mentioned various moments at which the blundering bully of Berlin lost the war and his chance to conquer and enslave the world; but those who take long views of things and recognize the primal forces which have shaped the destiny of nations since the disintegration of the Roman empire will agree that the doom of Germany's despotic ambition was sealed on the day that Britain's councillors wheeled that nation into line with the forces of freedom.

If the Kaiser possessed presence or had read his history, he must have shivered—a tradition says we do if someone steps on our grave—when he knew for certain that his spies had lied and that the stubborn, stick-to-it, bulldog British had decided to live or die with the French. The

British have a bad record for an ambitious despot to face. They brought Philip of Spain to his knees—they curbed the power of Louis the Great of France—they grappled with the mighty Napoleon and never let go.

So they entered upon the task of bringing down—to paraphrase Kipling—the Beast that walked like a Man. They were under obligations to send some eighty thousand soldiers to help the French. The Kaiser, measuring their honor by his own, thought they would perfunctorily and literally redeem this pledge, and let go at that. Hence his remark about their "contemptible little army." The fact is that Great Britain alone has sent on land and sea a total of six and a quarter millions. Her empire has added two and a quarter millions more to this. Over eight millions, instead of eighty thousand—a hundred in place of one. That is the British way. When we send fifteen million we will have done as well—but not till then.

England was no more a military nation than America when the war began. She learned to fight by fighting—and dying. We are profiting to-day by her tragic experiences. Thousands of American lads will come home to us alive and whole because thousands of our blood-brothers from the British Isles have been killed and mutilated—and have taught us how to escape. Britain made her armies while France and her own navy held the gap, and then she poured them into France and Flanders by the million to fight back the eruption of Cave Men that threatened to submerge civilization.

What the British have done in this war is too recent to need recapitulation. They gradually took over greater and greater sec-



Showing the Centre Section of our Mulcher attached to an Engine Plow

Mulcher Packer and Pulveriser

This machine is used and endorsed by the leading grain growers of Western Canada, as the best for the purpose. It conserves the moisture, prevents soil blowing and gives unequalled results in retaining moisture in standing grain and summer fallow.

Built for Horse or Engine Power

In sizes from 11 ft. up these implements are equipped with pulley hitches and adjustable poles. An ever-lubricated sleeve axle (Christiansen Patent) reduces practically all of the forward draft and saves horse or engine power. For double packing the end sections can be changed over to follow directly behind the main section or used as Plow Packers for 3 furrow plows. We also make 2 furrow plow packers and harrows.

WRITE US FOR ILLUSTRATED CATALOGUE OR SEE YOUR DEALER FOR FULL INFORMATION.

Christiansen Implements Limited

FACTORY: OWENA ST.

WINNIPEG, MAN.



"It raises the dough"

Gold Standard

Baking Powder is uniform in strength and quality, it is specially prepared to give the best results with Canadian hard wheat flour. It is also the most economical because of the popular price combined with exceptional merit.

Gold Standard Mfg. Co.
Winnipeg, Man.

License No. 6-436



Hard-tolling British Tommy refreshing himself at a Y.M.C.A. front line "restaurant."

tions of the front. They first fought defensive actions with all the dogged courage for which the British are famous—then they created that early turn in the tide which released the series of Allied offensives that finally sent the Germans back to the Hindenburg line—and beyond. They rose to the rank of a full military partner of France—and there is no higher rank.

For all this they paid. There is hardly a home in Great Britain which does not have its unvisited grave in France or Belgium—not a street on which the permanently maimed do not limp to unaccustomed tasks. And the figures show that the percentage from the overseas dominions, thus disposing of one of the vilest, meanest, most dastardly lies of the whole satanic German propaganda which charged that the English were putting their colonials and their Allies in the forefront of the battle. Lord Northcliffe estimated their killed alone at 900,000!

England's contribution outside the western front have been worthy of a great nation, even if they stood alone. Her navy has kept the seas free for the commerce and the troop transports of the Allied world. It has bottled up the German navy from the first. Her ships have coaled, fed and munitioned the Italians—for a time fed and munitioned the French—brought legions and food supplies from the Seven Seas. We are proud of our own swift shipment of troops in the firing line during the days of the soul-shaking danger this last summer; but well over half of them went in British bottoms convoyed by British warships.

Then where have not the British fought? The Suez was in danger; it was the British that protected it. There were German naval stations in the Pacific; the British mopped them up. Russia asked help by way of the Dardanelles; the British tried to give it. Intervention was needed on the Tigris; the British supplied

it. The British were at Salonica. British ships were in the Adriatic. The British colonial troops freed Africa from the Germans. British diplomacy steadied the Moslem world when the Turkish Sultan and his Sheik-ul-Islam proclaimed a holy war. The British to-day are moving south from Archangel and are at Vladivostok.

Britain financed the Allied nations till we came in to share the titanic task. Her industries have clothed, munitioned and supplied them in various vital ways. The Germans say that she has "prolonged the war." By that they mean she has kept up the fighting spirit of the Allies and supported their morale. The Briton is a dour fighter, and knows no end to a struggle save victory or death. He never fights a limited liability war—he goes in with his whole soul. The day that British khaki appeared upon the battlefields of France it was decreed that there could be but one of two ends 'o this conflict—the collapse of the British Empire or the final failure of Germany's dream of world conquest.

But no one save the German Intelligence Department has known or ever will know half of what Britain has done. When it comes to self-laudation the British are the poorest advertisers the world has ever seen.

Historically True to Form

Noah had just reached the dairy animals, during the loading of the Ark.

"Shem," he remarked, "a word to the wise is sufficient, put the milk cows in last and not far from th' dinin' salon. I want cream with my coffee mornings."

"All right, Captain," answered Shem, as he continued with polishing the new separator.

FOR SALE—One 32 H.P. Cross Compound Reeves Engine and one 44x66 Reeves Separator. Both in good shape. An up-to-date outfit for threshing and plowing. Apply Young Bros., Wainwright, Alta.

FOR SALE—A 3-plow tractor, slightly used. Cheap for cash. L. C., Box 3164, Winnipeg.



Not "palatial," but eminently efficient Y.M.C.A. coffee palace on the British front.

Do You Give Your Stock a Chance?

Is the barn in which you confine your stock fit for them to live in? Is sufficient air properly admitted to the stables? If not, can you expect the best results from your expenditure on feed and care?

Pure Air Means Healthy Animals

Times without number it has been proven that cattle cannot thrive in ill-ventilated, stuffy, steamy stables. The water which is expelled with the foul breath of the animals saturates the air and creates a first class condition for the breeding of all manner of disease germs.

Draughts Cause Colds

Haphazard ventilation is almost as bad as none. The climate of Western Canada is too severe for door and window methods. The Townsley system brings the fresh air in at the ceiling and draws the foul air out eighteen inches above the floor. Each system must be specially designed and constructed for the barn to which it is applied.

If you are not certain that your stock is getting a proper chance, write us and send a plan of your barn, or ask for our special plan sheets. We will give you an estimate and full information without any obligation on your part.

Also manufacturers of the best Lightning Rod System in Western Canada

Canadian Lightning Arrester & Electrical Co. Ltd.

BRANDON, MAN.

Barn of John T. Kane
"Townsley Equipped"
St. Jean Man.

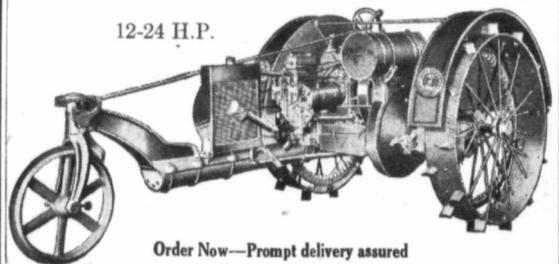


Happy Farmer Tractor

Guaranteed
Drawbar Pull
2000 lbs.

Pulls 3 Plows

12-24 H.P.



Order Now—Prompt delivery assured

Winnipeg Boy Kerosene and Gasoline Engines. The satisfactory line.

Beeman Garden Tractor cuts a day's work into hours.

Get facts and prices on these.

Run it single-handed—it is the real one-man tractor. Self-guiding in the furrow—makes a 9-foot turn—every working part of the engine reached from the drivers' seat. A perfect kerosene burner—built to give full power from every drop of fuel.

Don't take a chance on several weeks' delay in the spring.

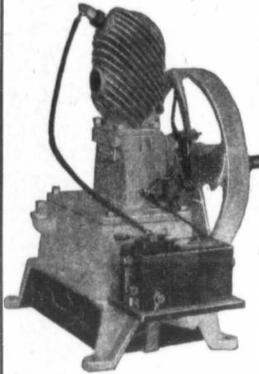
Write us NOW for full information and prices.

Gasoline Engine and Tractor Company, Ltd.
WINNIPEG, MAN.

The MAYTAG

One-Horse Gasoline Engine

This is not only the lightest and simplest Gasoline Engine on the market, but at the same time the most powerful.

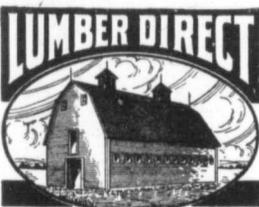


We furnish the engine, which is an air-cooled, two cycle, a set of sealed batteries, a coil, one gallon of Maytag special lubricating oil, every-\$55.00 thing, ready to go, for a special price of.....

WARRANTED IN EVERY PARTICULAR

For pumping, running fanning mill, separators and other light work, it has no equal. No trouble to pick it up and carry it from place to place

The Maytag Company Limited
WINNIPEG MANITOBA



SAVED \$300.00 ON THIS BARN

Read what the owner, Mr. J. S. Warner, Brownlee, Sask., writes us:

"In regard to the car of lumber, I must say it is of very good grade and I am well satisfied. Several of my neighbors looked over it and say the lumber is all O.K. I saved about \$300.00 on my bill by buying direct from you."

WE SHIP DIRECT FROM THE MILL

Lumber, shingles, lath, mouldings, doors, windows, etc. to your nearest station. Our price includes freight. Club orders a specialty. Examination allowed before payment. We save you one-third and give better quality.

Write for our complete price list, or send your lumber bill for our delivered price.
P. 2.

F.M.T.C. LUMBER COMPANY
STANDARD BANK BUILDING,
VANCOUVER, B.C.
FROM MILL TO CONSUMER

BEARINGS IMPORTANT PARTS

WHEAT harvesting season is always thought of in connection with that one word, "rush." You rush from the first morning you wade into the wheat throwing bundles over into the fence row until the last toot of the engineer's whistle as he pulls out of the neighborhood. At this particular time of the year old Sol beams down upon you with all his splendor and power. Since you get warm under the collar and the horses get warm under their collars, then why shouldn't you expect the bearings of the machinery to get hot? True it is, everyone is in a mad rush to get through, and it is aggravating to have to stop on account of a hot box.

It is better to keep your bearings from getting hot than to stop and cool down after they have become hot. The remedies for keeping bearings from heating are simple. The heating of a bearing is due to—

1. Insufficient lubrication, due to insufficient amount of oil, wrong kind of oil, or lack of proper means to distribute the oil about the bearings.
2. The presence of dirt in the bearings.
3. Bearings out of alignment.
4. Bearings improperly adjusted; they may be either too tight or too loose.
5. Operation in a place where the temperature is excessive.

All bearings in places where the load is heavy and where the speed is excessive should be adjustable for wear by means of wedges and set screws fastened by lock-nuts. Such bearings as the main bearings on the binder and tractor.

When the main bearings on the tractor become so hot that it is necessary to shut down, it is better to shut off the load and allow the engine to run slowly until the bearings become cool. This is especially true in the case of babitted bearings. If the engine is shut off entirely and if the bearing is allowed to stand without attention, the soft metal of the boxes will tend to braze with the harder metal of the shaft.

Every bearing is made with the intention of keeping friction at its minimum. Roller bearings, ball bearings and other kinds have been perfected to keep down friction, and are successful. All bearings where the load is heavy should be of this character.

Knew it Already

"I haven't paid a penny for repairs on my machine in all the ten months I've had it!" said the motorist.

"So the man who repaired it told me!" said a friend in corroboration.

McKenzie Seeds

represent the utmost value obtainable in Seeds at any price. There are other Seeds at other prices but none superior to McKenzie's.

Grow Your Own Vegetables

It pays to money, health and pleasure. We have the best of everything for your garden. Beans, Cabbage, Carrot, Cauliflower, Celery, Sweet Corn, Cucumber, Lettuce, Onion, Peas, Radish, Tomato.

Seed Out Special!

Stock No.	General Crop Seed	
	Price per Bushel	Brand
K62—OATS—American Banner	\$1.45	Calgary
K63—American Banner	1.40	1.43
K52—Abundance	1.40	1.43
K53—Abundance	1.35	1.38
K72—Garton's 22	1.40	1.42
K81—Victory	1.45	1.48
K41—BARLEY—Six Rowed	1.60	1.65
K31—WHEAT—Marquis	2.75	2.75

Prices are for quantities of 25 bushels or more—add 5c per bushel for smaller quantities. Use stock numbers when ordering. Add 25c for Jute Sacks (Oats 2 1/2 bushels, Barley and Wheat 2 bushels). Ask for Seed Grain Catalog and Special Quotation on Carloads.

A. E. McKenzie Co., Ltd.
BRANDON, MAN. CALGARY, ALTA.
Western Canada's Greatest Seed House



Snowball Cauliflower

CATALOG

Do not place your Seed Order before reading our 1919 Annual—It's free and tells all about our pedigreed and other varieties of Field Grain, Grasses, Vegetable and Flower Seeds. WRITE TO-DAY.

THE LISTER DISPLAY

In the Industrial Bureau
Will be of value and interest to

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AND

Dairy Convention Visitors

LISTER LINES

"Lister" and "Canuck" Gasoline and Kerosene Engines—Grain Grinders and Crushers—Milk-Making Machines—Cream Separators—Churns—Erasers—Cutters—Saws—Sawing Outfits—Pumps—Pump Jacks—Power Pumping Outfits.

An acquaintance with Lister Products has meant much to many Westerners. Let us get acquainted.

R. A. LISTER & CO.
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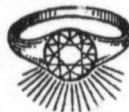
Tractor Owners



Bring your tractor up to date. Exchange that unreliable magneto for the latest K.W. high tension with impulse starter, which is now standard equipment on 83 models of tractors built by 40 manufacturers. No batteries required. Satisfaction guaranteed. Write for particulars.

ALL MAKES MAGNETOS AND COILS REPAIRED.
TRACTOR LIGHTING PLANTS

Acme Magneto Works, 276 FORT ST WINNIPEG



RAW FURS

HIDES, WOOL
SENECA ROOT

Ship all yours to us. You can depend on honest grading, top prices and prompt payment.

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GENUINE DIAMONDS

CASH OR CREDIT
Write for catalogue to-day
We trust any honest person

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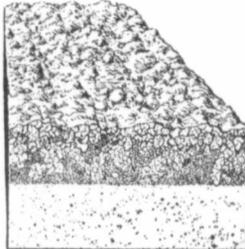
CONSERVING MOISTURE

IT has been demonstrated time and again that the farmer who has taken pains to disk the stubble immediately behind the binder has been able to plow when his neighbors who did not disk their stubble could not plow because the ground was too hard. The action of the disk harrow in breaking up the capillarity with the surface permitted the moisture that was in the ground to come to the surface and moisten the upper sub-soil so that the

hard, baked surfaces will not soak in rain water as rapidly as the plowed or soft surfaces. This is such a common fact that there is no necessity for any argument to prove its truthfulness, yet farmers will complacently observe the water from these heavy rains running off their fields as though it were a physical impossibility for them to help retain the water. Disking the stubble immediately following the binder breaks up the hard surface of the ground,



Undisked stubble plowed. Observe that the ground is turned up in lumps, that there are open spaces at the bottom of the furrow which prevent the close compactness of the lower portion of the turned furrow with the soil beneath.



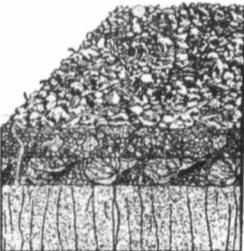
Disked stubble plowed. The mulch formed by the disk harrow fills up the open spaces at the bottom of the furrow, thereby forming a close connection with the sub-surface.

plowing was easy. In view of the fact that there is almost always abundant moisture in Canada, due to the deep winter freezing, the farmer is doubly assured, if he follows the binder with the disk harrow, of having no difficulty in plowing, and having moisture in the ground for the sowing of fall wheat. Another benefit derived from following the binder with the harrow is that the mulch of dirt which is formed by the harrow when turned over fills in all the air spaces in the sub-furrow,

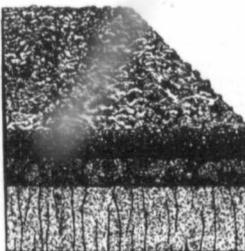
leaving it porous and in the proper condition for the soil to retain the utmost amount of the water. Disking old stubble ground early in the spring after a dry winter is one of the best things a farmer can do, because it holds what moisture there is in the soil from evaporating before plowing can be done, and leaves a mulch which compacts quickly with the use of the land packer.

Pulverize Clods

Clods are usually the result of plowing at the wrong time. It's



Plowed stubble, disked and harrowed. There is a deeper seed bed on the surface, but many hard clods and air spaces are in the bottom of the furrow.



Disked stubble plowed and disked before harrowing. Observe the compact condition of the soil, that the air spaces are completely filled and that the ground is in first-class condition.

so that the soil can be compacted very much more readily and easily than when the stubble is turned over without previous disking. The land packer has much less work to do to perfect the seed bed when the stubble plowed has been previously disked.

Soft Surface Absorbs Rain

It is a matter of common experience among all farmers that

a poor proposition to attempt to sow grain on a cloddy field. The action of the disks upon the ground tends to break up and pulverize these clods, thus eliminating to a large extent the overabundance of air space, giving the earth a better opportunity to compact itself. It is always better to use a disk harrow on a cloddy field before attempting to use the

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"What a Fine Stand of Grain"

IT was as pretty a field of wheat as one would see on many a day's journey. But the farmer would not admit that it "just happened." His thoughts, travelled back to seed-time. He told us about his seed bed preparation and how his Deering grain drill planted the seed accurately and covered it uniformly. There was strength and durability built into the drill, with its hickory and oak and steel. He spoke of its light draft and how easily it moved on its way, dropping and covering with the regularity of clock-work, saving labor and doing such good work that his bumper crop was a natural result.

So there was no surprise on his face. He remembered seed-time and the dependable drill

that insured for him his bountiful yield. Canadian hills and valleys at harvest-time tell their own story of the Deering grain drill and tell it far better than voice or pen could ever do.

That is why progressive Canadian farmers are using the Deering grain drill to-day. They want results.

Made in 14, 16, 20 and 22 marker sizes with 6-inch spacing—single disks, double disks, shoes and hoes are interchangeable.

Call on our agent and he will show you how it works and why it means bumper grain crops. Or write us for full information.

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.

packer, because the packer, while breaking up a great many clods, presses many more of them into the earth, where they are ruinous and absolutely prevent a good

seed bed being made, but if they are thoroughly disked first and then packed, the farmer has a much better assurance of raising a crop.

should, if possible, be not later than February 15. This will give some idea of the quantity necessary to be shipped from the East and South. In consideration of the large territory to be supplied with seed oats this season, it is not possible for the commission to give even a near estimate of requirements without the most hearty co-operation and assistance of all who are in need of a supply. Further, if an early disposition is received for carloads shipped from the East and South, it would save the extra cost of stop-over, unloading, re-loading, switching charges, etc., at the interior elevators.

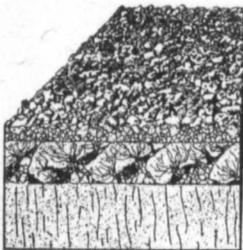
Results Count

The American: "What happened to you?"

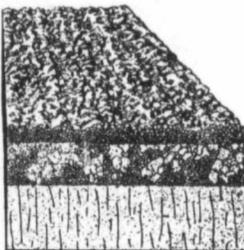
The Tommy: "To tell you the truth, I ain't quite certain. About ten minutes ago I was 'avin' a tete-a-tete with a German sapper. He was a nice-lookin' boy—'ad a face like a murderer. We was crawlin' on our stummocks, when we come face to face. He says somethin' to me in German, an' I answers him in just as bad language."

"What happened then?"

"Well, I 'ates to brag; but I'm 'ere an' 'e hain't!"



This illustration represent a plowed stubble field, harrowed with a peg-tooth harrow. The air spaces are still at the bottom of the furrow.



This illustration represents a disked stubble field treated with a peg-tooth harrow after plowing. The surface is in comparatively good condition, and the bottom compact.

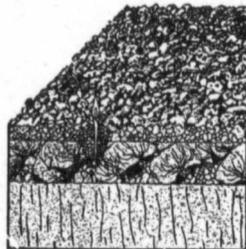
CANADIAN GOVERNMENT SEED PURCHASING COMMISSION, REGINA

Warning to Farmers to Notify the Commission at an Early Date of Seed Oat Requirements

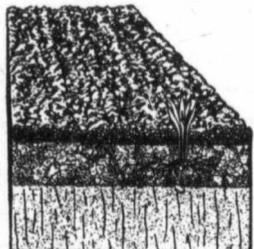
THE Seed Purchasing Commission has a limited supply of seed oats at the interior terminal elevators, Calgary, Moose Jaw, Saskatoon and the C.P.R. elevator, Transcona, and are collecting oats for seed purposes from Ontario, Quebec and the Maritime Provinces, which will be shipped to the Canadian

Government elevator, Port Arthur, for official weights and cleaned to seed standards; and from the South oats will be cleaned and inspected in Minneapolis. These oats will come forward only upon applications received in excess of the supply available at the interior terminal elevators.

While there is no time limit for receiving applications for seed grain, the commission request all municipalities, farmers' organizations and individual farmers who are depending on this source for a supply of good oats, to notify them at an early date, which



A plowed and harrowed field with wheat planted upon it, assuming that a drill was used. The seed was deposited in the hard clod without any chance of moist earth surrounding it to help germination and give plant food to the young plant. This sort of seed bed accounts very largely for the unevenness of the stand of all kinds of crops, and also explains why plants will grow and prosper for awhile, then suddenly become weak.



This illustration represents a field showing that in a properly prepared seed bed the farmer can regulate his seeding machine to a certain depth and feel assured that the grain is being deposited at that depth. The wheat is planted where he wants it, and the soil is compact and fine, so that the rootlets can reach out and assimilate the necessary amount of plant food, thus insuring a vigorous, healthy growth.

THE VALUE OF RE-CLEANED SCREENINGS

IN order to further test out the feeding value of re-cleaned elevator screenings, a pig feeding trial has been carried on at Brandon Experimental Farm. These screenings are now graded as "standard stock food" and were formerly known as "Grade A" screenings. They consist chiefly of broken and shrunken wheat and wild buckwheat with smaller percentages of wild oats, tame oats, flax and other edible seeds, and only a very small percentage of chaff and small weed seeds. In the re-cleaning process practically all the objectionable small seeds have been taken out. This feed was bought at Port Arthur at \$35 per ton; freight, hauling and grinding raised the cost of it, ground and delivered at the farm, to approximately \$42 per ton.

In the test just completed, these screenings were tested against good barley chop. Both these feeds were fed alone, and also with shorts and with feed flour. Twelve lots of pigs were used, two lots on barley, two lots on screenings, two lots on barley 3 parts and feed flour 1 part, two lots on screenings 3 parts and feed flour 1 part, and two lots on screenings 3 parts and shorts 1 part. All lots got a small amount of digester tankage, and also a little slack coal. The pigs decided for themselves the quantities of feed consumed. They were fed by hand, but the quantities were very carefully regulated so as to give them exactly what they could clean up. Some lots ate more than others. The pigs were very uniform and highly suitable for experimental purposes. They were about half Yorkshires and half Berkshires. As far as possible both breeds were equally represented on each feed combination.

The results obtained are reported in tabular form herewith:

Number of Lot	1 & 12	2 & 11	3 & 10	4 & 9	5 & 8	6 & 7
Feed Used	Barley	Screenings	Barley & Feed Flour	Barley & Shorts	Screenings & Feed Flour	Screenings & Shorts
Number of pigs in lot	10	10	10	10	10	10
Weight at beginning of experiment, Dec. 3rd, 1918	1272 lbs.	1250 lbs.	1246 lbs.	1272 lbs.	1285 lbs.	1298 lbs.
Weight at end of experiment, Jan. 21st, 1919 (49 days)	1990 lbs.	1992 lbs.	2021 lbs.	2006 lbs.	2042 lbs.	2067 lbs.
Total gain	718 lbs.	742 lbs.	775 lbs.	734 lbs.	757 lbs.	769 lbs.
Daily average gain per pig	1.46 lbs.	1.51 lbs.	1.58 lbs.	1.49 lbs.	1.54 lbs.	1.56 lbs.
Total cost of feed	\$77.29	\$75.13	\$83.38	\$77.23	\$81.50	\$78.90
Cost of 100 lbs. gain	\$10.76	\$10.12	\$10.75	\$10.52	\$10.76	\$10.14
Lbs. of feed for 100 lbs. gain	453 lbs.	443 lbs.	432 lbs.	454 lbs.	451 lbs.	490 lbs.
Amounts of feed used—						
Barley at \$45 per ton	3112 lbs.		2403 1/2 lbs.	2386 1/2 lbs.		
Screenings at \$42 per ton		3248 lbs.			2464 1/2 lbs.	2388 lbs.
Feed Flour at \$55 per ton			802 1/2 lbs.		821 1/2 lbs.	
Shorts at \$38 per ton				708 1/2 lbs.		868 lbs.
Tankage at \$90 per ton	144 lbs.	144 lbs.	144 lbs.	144 lbs.	144 lbs.	144 lbs.

The average results from Lots 2, 11, 5, 8, 6 and 7, for which screenings were the main feed, are:

- Average daily gain per pig, 1.54 lbs.
- Pounds of grain to 100 lbs. gain of pork, 453 lbs.
- Cost of 100 lbs. gain, \$10.34.

The average results from Lots 1, 12, 3, 10, 4 and 9 for which barley was the main feed, are:

- Average daily gain per pig, 1.5 lbs.
- Pounds of grain to 100 lbs. gain of pork, 446 lbs.
- Cost of 100 lbs. gain, \$10.68.
- The lots on screenings ate more

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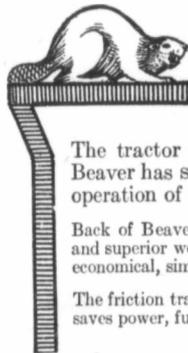
Every dealer will gladly stand back of any product bearing this name. He has the assurance of the manufacturer that only the best materials are used in their construction and that the most modern machinery and skilled workmen are used in their production. Insist on securing *Westwo* products.

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SEVEN SPEED FRICTION TRANSMISSION

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Brandon, Portage la Prairie, Regina, Calgary

than those on barley, showing that the feed was palatable. They made slightly larger gains, but used slightly more feed to do it. The cost of gains was practically identical.

From this test and a previous one in which similar results were obtained, the conclusion is reached that for finishing pigs, screenings of the type described are fully equal to barley.

"I see they've invented another machine that takes the place of a man," remarked Mrs. McGinnis, "but they can't invent one to take the place of a woman."

"H'm, what about the phonograph?" inquired her brute of a husband.

SCREENINGS STANDARD STOCK FOOD

STANDARD stock food is only from 10 per cent to 12 per cent of the original screenings, or the screenings minus the weed seeds. The supply is therefore limited. The price has just been reduced to \$25 per ton in car lots f.o.b. Fort William, and with the shortage of grain feeds this year it is well worthy of a try-out by our Western farmers and feeders. Standard stock food is for sale only through the Provincial Departments of Agriculture, or the Feed Division, Live Stock Branch, Ottawa. There is now about 4,000 tons on hand at Fort William and orders will be filled promptly.

Screenings have been selling at \$36 per ton, and selling fairly readily, as since June 1, 1918, something over 140 cars have been shipped. At the new price this should be one of the cheapest feeds on the market, and it is hoped our Western farmers will take hold of it and stop not only this feed, but the live stock to which this material will be fed, going to the United States.

THE SEED OAT SITUATION IN THE PRAIRIE PROVINCES

OWING to the destruction to a large extent through drought there is a scarcity of oats and a large demand for seed in Southern Alberta and parts of Saskatchewan and South-western Manitoba. It is estimated that the Canadian Government Seed Purchasing Commission has to provide approximately three million bushels of seed oats. About one-third of this quantity will be acquired locally, or through the ordinary channels of trade by municipalities, farmers' organizations and individual farmers. A few hundred thousand bushels are also available from Ontario of early maturing varieties. There is also a supply from Prince Edward Island, but on account of weather conditions these oats are dull in color and may not be so acceptable to the Western grower as the local grown oats. Investigations into the seed supply in the states of North Dakota and Minnesota would indicate the possibility of also procuring a few hundred thousand bushels from this source.

Oats procured in Western Canada will be cleaned and inspected into interior terminal elevators at Calgary, Saskatoon and Moose Jaw; oats from Eastern Canada will be cleaned and inspected into Canadian Government terminal elevator, Port Arthur, while oats from the South will be cleaned and inspected at the Northrup King Seed House, Minneapolis, and others.

A large proportion of the oats available for export are from districts where wild oats are prevalent which very materially cuts down the supply of suitable seed. The seed inspection records at the interior terminal elevators and the Grain Inspection Office, Winnipeg, show that a very large proportion of the oats passing through these points contain too many wild oats to be accepted into the seed class.

The areas requiring seed oats consist largely of new and cleaned lands. The Western districts from which oats are available have been under cultivation for longer periods and unfortunately have become polluted to some extent with wild oats, and within these northern areas it will be

difficult to procure a quantity of seed oats that will be free from noxious impurities as well as oats free from frost injury.

From September 1 to December 31, three thousand, three hundred and twenty oat samples were tested at the Dominion Seed Laboratories, Calgary and Winnipeg, consisting largely of farmers' samples. The average germination of these oats is from 80 per cent to 85 per cent. About 20 per cent of the samples received may be said to be of good, strong vitality, while an additional 50 per cent will make fairly good seed if well cleaned. About 30 per cent are too low in vitality to be depended on to produce good crops.

In order that the Seed Purchasing Commission may fill the orders received for seed oats, it is absolutely essential that orders

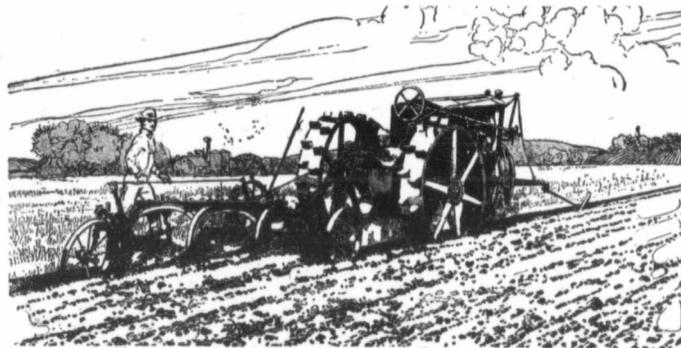
for seed grain through municipalities, farmers' organizations and individual farmers, be placed at the earliest possible date. It is also important that farmers having surplus oats suitable for seed communicate immediately with the Canadian Government Seed Purchasing Commission, Regina, Sask., with a view to selling at the premiums offered, as shipments of seed oats have already started from Eastern Canada and the United States to fill the orders from the Western provinces.

"You there in overalls" shouted the angry lawyer; "how much are you paid for telling untruths?"

"Not as much as you are" retorted the witness, "or you would be in overalls too."

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Handles easily from tractor seat. Has simple, sturdy power-lift. Plow bottoms enter and leave the ground point first, like a walking plow.

An implement that will give service from the first day. This plow bears the J. I. Case trade mark—the strongest guaranty of quality ever placed on any implement.

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Any notice by another concern regarding CASE plows is given because of this Supreme Court order that our rights and the rights of the public may be protected.



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DAILY TONIC FOR THE TIRED

(Paste these above your kitchen table. They will help you and the children).

February 20

Hewing wood and drawing water, splitting stones and cleaving sod. All the dusty ranks of labor in the regiment of God March together toward His triumph, do the tasks His hands prepare— Honest toil is holy service, faithful work is praise and prayer.

February 21

A song across the sunlight for the boy in khaki clad, And a prayer above the waters for the gallant navy lad; A hymn for every mother from whose heart dear lads like these Have gone to fight our battles, and to save our liberties.

February 22

There's much to do the whole way through, And little use complaining; For the darkest night will turn to light, And the blackest cloud quit raining.

February 23

'Tis not the acres one may own, 'Tis not the gold he may possess, But 'tis the good he does alone That wins the prize of happiness.

February 24

Happiness is not a monopoly. No one can "corner" it. It is for sale in the market place of life for everybody who is willing to pay the price, and that is one all can pay. As we give, we get.

February 25

Give the world a thought of cheer; Do your best and never fear!

February 26

When things go wrong, as they sometimes will, With the work you have in hand, Just whistle a song of cheer until You can see the goal you've planned; And do your best, however men sneer, And all will be right in the end, my dear.

February 27

Kind words are the brightest flowers of earth's existence; they make a very paradise of the humblest home the world can show.

February 28

Every day's a song to me— A song of praise to God For the glory of His Fatherhood, The power of His word. Every day's a song to me, A song of praise to God.

March 1

The one who cultivates and lives always in the optimistic, cheerful, hopeful, helpful habit of mind and heart can never fail.

March 2

Lift up your heart, and your lips, and your eyes; Trust, and be valiant, and never despair As long as God dwells in the midst of the skies, And the strength of His infinite justice is there.

March 3

Get up right in the morning. Go to bed right at night. Start with joy in your heart, hope in the future, kindness in your purse. Let your last thought on dropping off to sleep be one of good will. Try this for a month and note results.

March 4

In the solemn silence God hears thy call, So let thy spirit hush itself in prayer; He knows each need of thine and asks but for thy faith.

To cure thine every ill, and lift from thee all care.

March 5

Lift up your heart and go on with the things Duty and service have brought you to do— The soul is the strongest that whistles and sings When life looks most shadowed and dreary and blue.

March 6

It is in loving, not in being loved, the heart is blest; It is in giving, not in seeking gifts, we find our quest. If thou art hungry, lacking heavenly food, give hope and cheer; If thou art sad and wouldst be comforted, stay sorrow's tear. Whatever be thy longing or thy need, that do thou give; So shall thy soul be fed, and thou indeed shalt truly live.

March 11

There's a heap of satisfaction in a trouble if you grin, Difficulties have attraction if you keep a lifted chin, And the harder that your fight is, then the greater is your fun, And the finer your delight is as you view the things you've done.

March 12

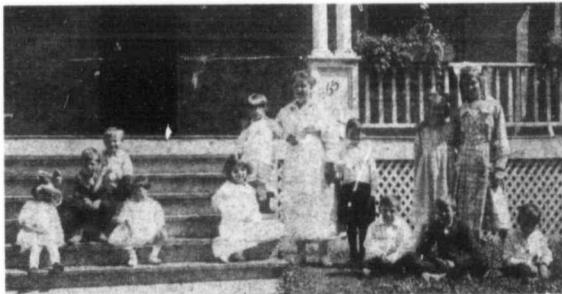
There was never a night without a day, Or an evening without a morning; And the darkest hour, so the proverb goes, Is the hour before the dawning.

March 13

Life's battles don't always go To the stronger or faster man; But soon or late the man who wins Is the one who thinks he can.

March 14

With each strong thought, with every earnest longing For aught thou deemest needful to thy soul, Invisible vast forces are set thronging 'Between thee and that goal.



Matron and a few of her little charges—Children's Khaki Club, Winnipeg

March 7

Oh, the ceaseless prayer of a soul is heeded, When the prayer asks only for light and faith, And the faith and the light and the knowledge needed.

Shall gild with glory the path to death, O heart of the world, by sorrow shaken! Hear ye the message I have to give: The seal from the lips of the dead is taken, And they have said to us: "Lo! we live!"

March 8

There's a little splash of sunshine and a little spot of shade Always somewhere near; The wise bask in the sunshine but the foolish choose the shade, The wise are gay and happy; on the foolish sorrow's laid, And the fault's their own, I fear.

March 9

Cheerfulness is "catching," for which let us be thankful. A sunny disposition provides one with an armor that not the most desperate grouch can pierce. And the sunny disposition is ours for the cultivation.

March 10

In Thee I have no pain, no sorrow, No anxious thought, no load of care; Thou art the same to-day, tomorrow; Thy love and truth are everywhere.

March 15

When the hour seems darkest then is the time to show forth courage and hope in word and deed. There can be but one ultimate issue. Humanity is not on the down grade. Righteousness, justice and mercy have always won in the long run, and they are winning now.

March 16

The sun shines on in spite of clouds And never seems to mind them; When clouds of trouble cover us Let's smile right on behind them!

March 17

What one lives in his invisible thought world he is continually actualizing in his visible material world. If he would have any conditions different in the latter he must make the necessary change in the former.

March 18

Invisible support is mightier far With noble aims, than walls of granite are; And simple consciousness of justice gives Strength to a purpose while that purpose lives.

March 19

If you want it done, don't send a committee, go yourself.

March 20

Song is a scaffold for cares and fears.

DEAR MOTHERS:—

THE interest that has been aroused among our readers in the recent Baby Contest proves conclusively that what our readers desire most is information on the care and welfare of children, so we have decided to emphasize this feature in our department. Ours will be the special department for mothers and all others who regard the care and welfare of children as our most important patriotic work. Our new Baby Contest will continue until the first of October. If our mothers respond as they did in the last we shall give the whole department of certain issues over to the mothers' letters. I am sure all of our readers were interested in the Xmas cover of our magazine, for those were the babies of our contest—all expect two—one little girl and my own little girl in the centre. I trust the photographs will be clear. Many mothers are writing me about the great help the letters have been. The winner of the first prize, Mrs. Masterton, of Emerson, says in a letter acknowledging the receipt of the twenty-five dollars: "There must be many other mothers who have been just as successful as I have if they would only tell about it. The letter writing contest appealed to me immensely, and the letter that came out the first month was so good it inspired me, because there was one suggestion that helped me."

Think of it, mothers: one of your suggestions might save the life of a dear little babe. And now I want to see babies' faces in every mail. Remember, the contest offers twenty-five dollars for first, ten dollars for second, and five dollars for third prize to the mother who sends in the most helpful letter on the care of her child or children, with the photograph of the child or children. Send all communications to Pearl Richmond Hamilton, 983 Grosvenor Ave., Winnipeg, Can.

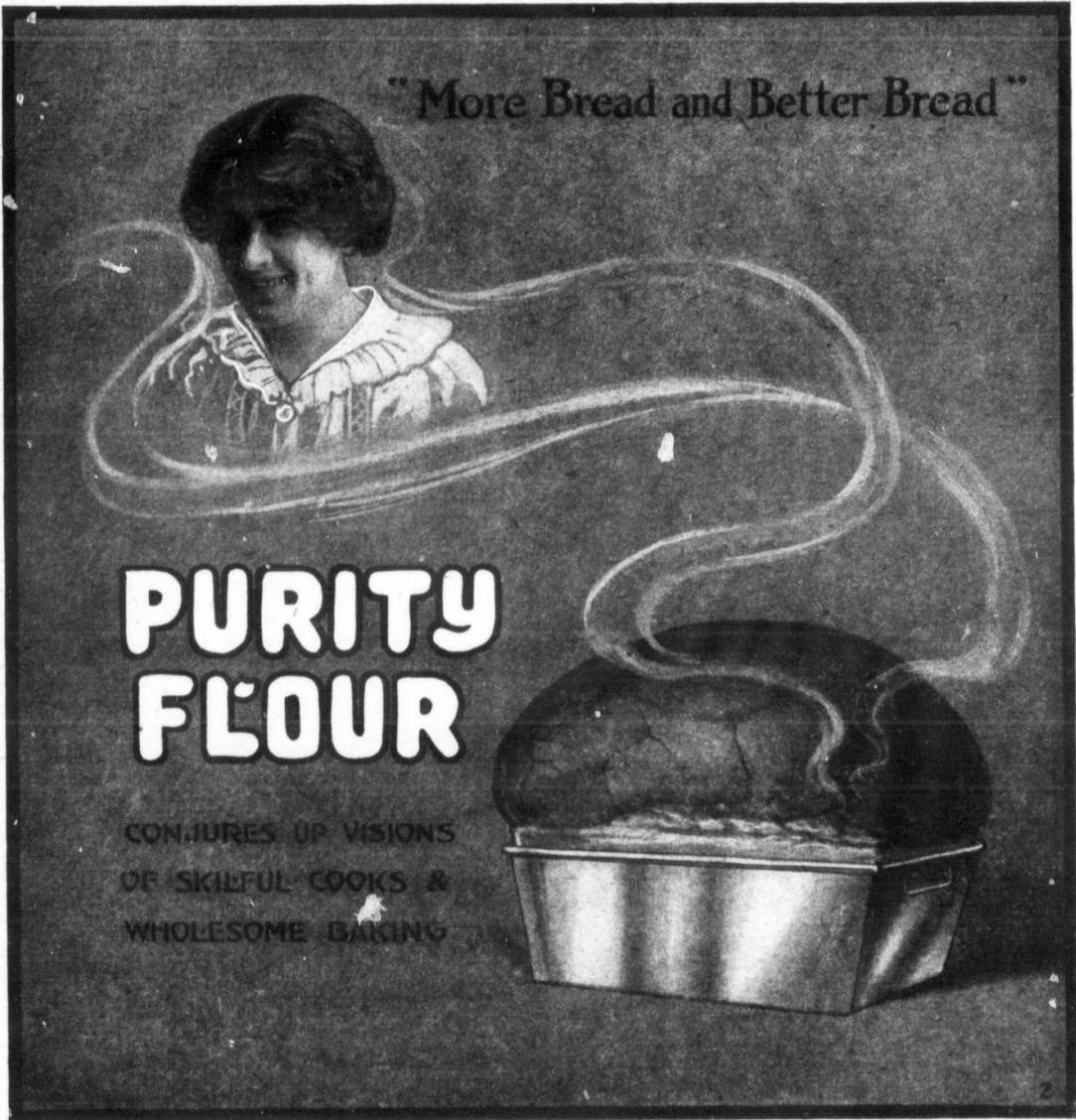
We hope to have the pictures of a hundred babies for this department. Do you want to see your baby's face in our department? You will help other mothers by sending us your experience on the care of children. We believe we have the most helpful mother's department in Western Canada because the information is practical, it comes from the hearts of mothers.

Your particular letter may save the life of a little one. Is that not worth while? Send us, then, the photo of your little one with a description of your care of the child. Give weight, height, chest measurement and general condition. Every photo will have a place in our department. We all want to see the picture of your little one on our page.

With best wishes for the welfare of our children and their mothers, I am,
Sincerely, P.R.H.

CHILDREN'S KHAKI CLUB

SINCE this department is featuring the care and welfare of children, our interest must not be centered on our own children only, but on others who need attention—particularly the children of our heroes. There is a little home in Winnipeg mothered by the Brock Centennial Chapter of the I.O.D.E. that, according to some of our most prominent men and women, is an example of the very finest work women are accomplishing. The Brock Chapter rented a house and procured the services of a motherly woman as matron to care for twenty little children, whose fathers have sacrificed so much for us. The aim of the women is to keep the atmosphere of the home free from the chill of institutional life. It is as near like a real home as can possibly be attained. The cottage plan is certainly



the ideal. In some cases the fathers are not living, in other cases the mother has passed into the Great Beyond, but all are children of soldiers who need mothering. The women who launched this little Children's Khaki Club were courageous, but they have been most successful. The matron is a real mother, with a mother's love. When she leaves for an hour or two the children run with kisses and then anxiously await her return.

The home has been so successful that other soldiers are anxious for their motherless children to be taken into the home, but there is no room. The Brock Chapter would rent and furnish other homes if they had the means, for the need is great. Perhaps our women's organizations would assist by turning part of their work in this direction. Showers of linen, clothes, groceries, farm provisions, and of course money, would make the establishing of more cottage homes possible. These children are entitled to the atmosphere of real home life. The flu has robbed many little children of mothers, while the fathers are overseas. I feel the Home Economics societies, the Home Makers, the Women's Section of the Grain Growers, the United Farm Women—in fact all women's organizations—will be glad to help these women in their noble work. I

believe the Miami H.E.S. has already helped very liberally. I have asked Mrs. J. H. Stanley for a description of their work as she has been very active on the board of management since shortly after the club was inaugurated.

P.R.H.

THE CHILDREN'S KHAKI CLUB
(By Mrs. J. H. Stanley)

A YOUNG MOTHER, little more than a girl, was taken ill suddenly with diphtheria. In the terror of the dread disease and the confusion of removing to the Isolation Hospital, provision had to be made for the 14-months' old baby boy, whose father had been nearly two years in France. A neighbor woman volunteered to look after the child, and the mother was taken away much more anxious about his welfare than her own. In the height of her very severe illness the neighbor tired of her task, so that the district nurse who was supervising the case, had to rescue the baby from his uncongenial surroundings.

A soldier, on returning home wounded from overseas, found that his wife had been unfaithful and although he was willing to forgive for the sake of their four children, she not only refused to

return to him, but told him to take the children away. Broken in health, with no home and no friends with whom he could place them, he was confronted with a problem.

Again, a naval reservist on his return from a cruise of several months, on landing at an Atlantic port, was greeted with the news that his wife had just died suddenly in Winnipeg. He was granted a furlough to come home, settle his affairs and arrange for his two children, a boy of six and a girl of eight, to be cared for. Neither he nor his wife had any relatives in Canada.

These are just a few cases where the answer to the problem has been "The Children's Khaki Club," and it is the purpose of this article to give a short history of the Club and its mission among the children of our soldiers overseas.

Nearly two years ago, members of the Brock Centennial Chapter, in work throughout the city came across several cases similar to the above (which are actual instances of circumstances under which children have been admitted). Families of soldiers' children were in need of a home and good care. Often it was felt that the provision made by the city for such a case did not just meet the special requirements, so it was decided that

though they might be able to care for only a limited number it was well worth while at least making an attempt to meet the need, feeling sure that a way would open up.

Through interested friends, sufficient funds to partially furnish a home were secured, and in May, 1917, a comfortable house was rented in a nice residential district, 65 Furby street. A good matron was secured, and it was found immediately that "The Children's Khaki Club," as the home was named, had many needy little claimants.

In eighteen months, 74 children have been cared for. Upon admission they are medically examined, doctors having volunteered their services. They are supplied with new clothing, free dental treatment, another voluntary service given by leading dentists. Those of school age are entered in our nearest public school.

A small Victrola, with a supply of good records, has been donated by a group of gentlemen much interested in the Children's Club.

The children attend Sunday School in the church of the denomination of which the parents were members.

About 20 children can be accommodated in the home. We aim to make the life they lead there as much like that of a

large family as it is possible. The older children are taught to help the younger. We like to keep families together so as to maintain their interest in one another. The hygiene of the home is well looked after. We hope the conditions under which they live now will efface entirely memories of former privations and sufferings, and bring back the natural joyousness of childhood.

We co-operate with the Battalion Auxiliaries, the Central Auxiliary, the Returned Soldiers Association and the Great War Veterans. They place children in our care from time to time, and contribute to their support when they can. Parents, too, are allowed to help support their children if they are able. The status of the child is not in the least affected, if this is not done, none but the Executive of the Chapter being cognizant of the fact.

When we opened this house we could not see clearly how it could be maintained and we had many anxious hours, but we had every faith in the sympathy of our people for any effort on behalf of our soldiers' children. Up to the present we have been able to "carry on," but Christmas is coming, food is expensive, coal is required, warm clothing needed and we herewith make an appeal to the Chapters and to individual Daughters of the Empire and friends to help maintain this work, knowing that apart from the outlook upon life we are able to give these children, we are helping materially in keeping up the morale of our soldiers—the fathers of these children, for returned men tell us that nothing so demoralizes the soldier in the trenches as the knowledge that all is not well at home.

Anyone who wishes to obtain fuller information regarding this work may do so by visiting "The Children's Khaki Club" at 65 Furby street, or by communicating with the Regent of Brock Centennial Chapter, Mrs. W. H. Macpherson, 75 Balmoral Place, Winnipeg.

"TRAVEL AROUND A BIT"

Contributed by a busy Woman of the farm home—one of the most capable and energetic members of our H.E.S.

MAY it not be possible that a great many people fail in business because they "stick to it" too close? They do not travel around enough. Many times I have wondered whether success was the result of vacation or vacation the result of success. The most successful men I happen to know are those who take the most vacations. I used to think they had vacations because they were successful and could afford them. I have come more and more to think that they are successful because they have vacations. That the success is the reward of vacations, not vacations the reward of success.

Their work is forever new to them, always they attack its problems with refreshed minds. This vacation referred to is not the neighborly visit, or occasional visit to town. Let us save our money, work hard, then spend it seeing and doing something entirely new. The greater the contrast to our home surroundings the better.

Our temptation is to settle down inside our little restricted circles, and like the

Pharisee, thank God we are not as other men. It's easy for us to be thankful we are not as wicked as the city man, and easy for the city man to feel superior to us, who in his estimation can talk nothing but wheat and cattle. We have all met the people who pride themselves they have never been to a theatre or baseball game. There is a very comfortable self righteousness, but are we not all by nature more or less like them?

We are all glad Britain does not want to annex more territory. We already have more than we can possibly use or love, unless we make a real effort to enlarge our sympathies—unless we travel enough to see other people's point of view and their interests. Viewed from this standpoint, travel becomes a patriotic duty, for there never was a time we needed to think more of the future interests of the country than right now.

By travel I do not mean getting on a train. There are men who have travelled round the world many times, who never really travelled at all. They remember different places by incidents that happened to them personally. One must leave his mind free from business and hold it open for new impressions.

If you are a real traveller, you will find more good people in the world than you had any idea of, and that there are other ways of doing things besides yours. You will come back refreshed and eager for your job that has somehow become better the further you got away from it.

Plan to take in the conventions you are interested in this winter. No matter if you are not acquainted, no matter if your coat or hat is old. Look for the real people; you will probably know them by their thread-bare coats. The beauty of character is much more to be sought after, you can see that in the face not on the clothes. One is sure to meet someone who also is alone. The visits into the homes of those we meet adds much to the pleasure of our visits.

So many things at our Home Economic Convention last winter was planned for our entertainment that our concern was not what shall we do, but rather which shall we choose. To me it is always a time of "upbuilding," leaving me so fit to take up the home duties, glad of a chance to work in conjunction with such a noble body of women. It is impossible to feel lonely when one knows they are part of such a large whole, and to have the feeling that in all probability we shall meet again the following winter. And meeting such people helps us to recognize in each other the fragments of the greater whole. —J.M.H.

The Very Thing
(From Woman's Century)

Anything and everything a woman could wish to know regarding Canadian Government may be found in a concise book, "Our Government," by Mabel McLuhan Stevenson. It is the very thing we have been wanting.

In simple language it answers such questions as:

How are nominations and elections conducted?

How, and for how long, are members elected to the Provincial and Dominion Legislative bodies?

February Clearing

FINE FURS

At Unequalled Prices to be sold irrespective of Cost

Every fur coat, piece and set, has been further reduced for the February Clearing—many of them at fractional prices.

BONSPIEL VISITORS will be accorded the usual welcome to visit our store and to personally participate in these wonderful fur bargains. For those who cannot come to Winnipeg, we promise that mail orders will be promptly and carefully filled the day received.

LADIES' FUR COATS

LADIES' MUSKRAT COATS, 45 inches long, large storm collar and deep cuffs, lined with guaranteed lining. Regular \$145.00, for **\$110.75**

LADIES' NATURAL SILVER RACCOON COATS, 48 inches long, dark, well-matched, heavy-furred, soft, pliable skins, large square storm collar, and deep cuffs, best quality Skinner's satin lining. Regular \$275.00, for **\$206.25**

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LADIES' SOUTH AMERICAN HAIR BEAVER COATS, 45 inches long, loose box back, with Russian Otter large shawl collar, deep cuffs, guaranteed lining. Regular \$145.00, for **\$110.75**

MEN'S FUR COATS

MEN'S HEAVY FUR RACCOON COATS, 50 inches long, large shawl collar, lined with extra heavy quilted Farmer's satin. Regular \$150.00, for **\$113.50**

MEN'S SILVER WOMBAT COATS, 48 inches long, with extra large storm collar, strongly stayed at all joinings, lined with best quality quilted Farmer's satin. Regular \$90.00, for **\$ 71.50**

MEN'S BLACK DOG DRIVING COATS, 50 inches long, extra deep storm shawl collar, heavy quilted Farmer's satin lining, buttons and fastenings securely stayed with leather and rivets. Regular \$45.00, for **\$ 35.50**

MEN'S HEAVY GREY GOAT DRIVING COATS, 50 inches long, with extra large roll collar, lined with heavy quilted satin, all loops and buttons strongly secured with leather and rivets. Regular \$45.00, for **\$ 35.50**

MEN'S HEAVY OXFORD GREY IMPORTED MELTON OVERCOATS, chamoi lined throughout, with fine Dark Canadian Otter shawl collar. Regular \$175.00, for **\$131.25**

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A TERROR OF THE HIGH C'S

Director of the Show (introducing bluejacket who fancies himself as a basso)—"Mr. Teks will now oblige with several blasts on 'is fog-orn, entitled, 'O Rudder than the Cherry.'"

How are our laws made and how enforced?

How is our revenue raised?

What are the laws relating to food inspection and public health?

What are Canada's relations to foreign countries?

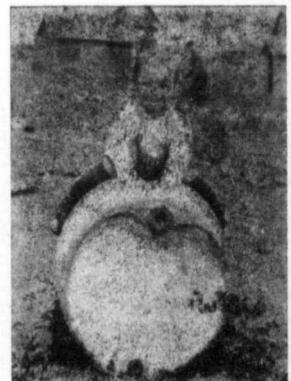
What is our system of Education?

A special chapter on How to Conduct a Meeting, gives short and concise "Rules of Order."

This book is published by George J. McLeod, Limited, Toronto.

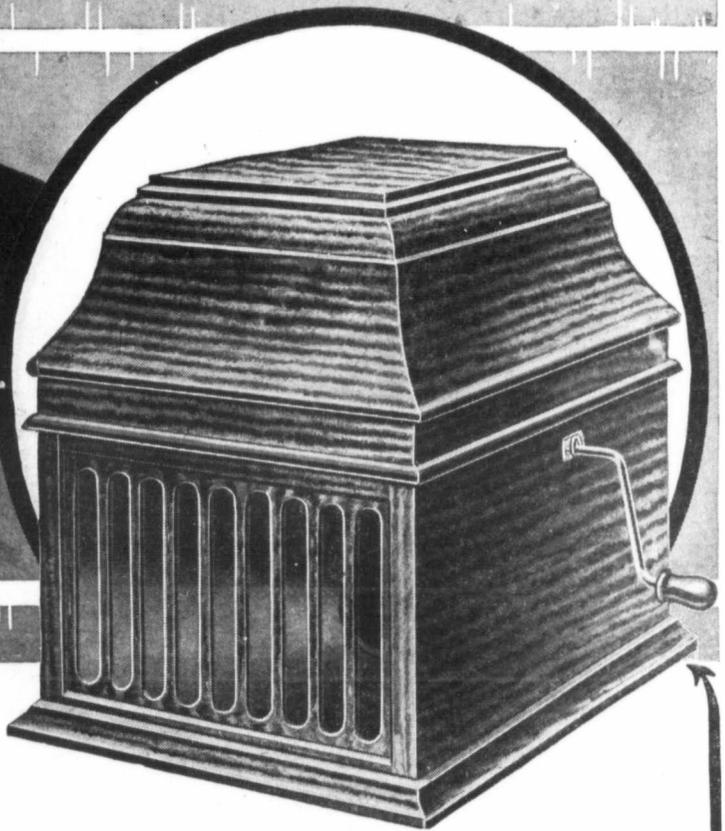
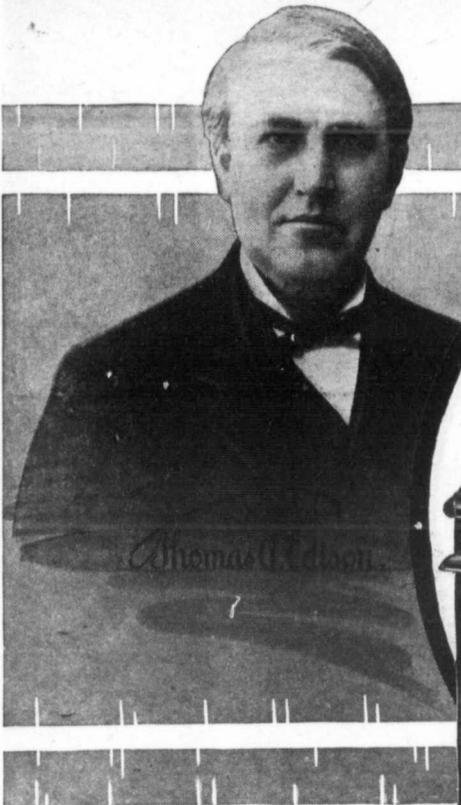
"A happy mind, when ills would blight, Is like a lantern in the night, No path there is, however long, But will be shortened by a song."

"Sing! for the morning breaks Rosy, and clear, and bright; A glory touches the sleeping lakes, The valleys are bathed in light. The great world stirs at last, Putting its bonds away; Out of the shadowy ages past Cometh a Golden Day!"



Bruce Fraser and his own "Mount"

Mr. Edison's Wonderful New Amberola



**Only
\$1.00**

For years, the world's greatest inventor worked night and day to make the music of the phonograph true to life. At last he has succeeded. Now that you can get THE BEST on the wonderful offer below, you need no longer be satisfied with anything less than Mr. Edison's great instrument. Read below how easily you may have the genuine New Edison Amberola in your home.

and after trial!

Yes, we will send you the New Edison Amberola, the product of the world's greatest inventor's genius, the phonograph with the wonderful diamond stylus reproducer and your choice of latest Diamond Amberol Records on *free trial without a penny down*. On this offer, you can now have the genuine Edison Amberola, the instrument which gives you real, life-like music, the finest and best of all phonographs at a small fraction of the price asked for imitations of Mr. Edison's great instrument.

A Happy Home

Happiness is life—and real happiness is found only in a real home. And by a real home I do not mean a house with a yard or farm around it. Oh, no! A real home is the place where the happy, united family gather together for mutual enjoyment and recreation. And the Edison Amberola makes this possible, for it stands supreme as the greatest home entertainer. It will mean more than amusement and merriment, more than an hour of amusement, yes, it will mean genuine pleasure of the lasting sort—helpful entertainment and culture of the most beneficial kind. It will mean the family united—a new home.

Rock-Bottom Direct Offer—

If, after the free trial, you decide to keep Mr. Edison's superb new instrument, send us only \$1.00. Pay the balance on easiest kind of monthly payments. Think of it! A \$1.00 payment, and a few dollars a month to get this wonderful new style outfit—Mr. Edison's great phonograph with the Diamond Stylus reproducer, all the musical results of the highest price outfits—the same Diamond Amberol Records—yes, the greatest value for \$1.00 down, balance on easiest monthly terms. Convince yourself—free trial first. No money down, no C. O. D., not one cent to pay unless you choose to keep the instrument. Send coupon!



Entertain Your Friends

Get the New Edison Amberola in your home on free trial. Entertain your family and friends with the latest up-to-date song hits of the big cities. Laugh until your sides ache at the funniest of funny musical shows. Hear the grand old church hymns. Hear the crashing brass bands, the waltzes, the two-steps, the solos, the duets and quartets. You will sit awe-stricken at the wonderful grand operas as sung by the world's greatest singers. You will be moved by the tender, sweet harmony of quartets singing those old melodies that you have heard all your life. Take your choice of any kind of entertainment. All on free trial. Then, after the trial, send the outfit back at our expense if you choose. Or keep it on our great rock-bottom offer. Send the coupon today!

COUPON

F. K. BABSON, Edison Phonograph Distributors,
355 Portage Ave., Dept. 372, Winnipeg, Man.

Gentlemen:—Please send me your New Edison Catalog and full particulars of your free trial offer on the new model Edison Amberola.

Name.....

Address.....

Our NEW Edison Catalog Sent Free

Your name and address on a postal or in a letter (or just the coupon) is enough. No obligation in asking for the catalog. Get this offer—while this offer lasts!

F. K. BABSON, Edison Phonograph Dist's.
355 Portage Ave., Dept. 372, WINNIPEG, MAN.
U. S. OFFICE: Edison Block, Chicago, Illinois

The Business of Being a Mother

I recently made a visit with my two boys, aged two and four, to an old friend whose family of six were all grown up. I always looked upon her as being an ideal mother, but I was more than convinced of it from a little remark she made at this time. She was reminding me that this was the happiest time of my motherhood, and referring to her own experience she said: "How I used to love a rainy day! They couldn't go to school, and I had them all around me, cutting pictures, you know, and all that sort of thing." It fell on my ears as a rebuke, and has come home to me—her tone of voice and smile—as a lesson more far-reaching than any treatise I ever read on child culture.

Yes, and they are "all around" her yet (except for two boys given cheerfully to the army). When most of her children were in their teens the father was taken away by death, and the home was bereft the family facing a hard world. Two of the boys were studying law, the girls preparing for a higher education. Immediately long-cherished ambitions were sacrificed, one boy went as a traveller for a firm, the other into a bank, the girls all took business courses, and are now occupying positions of trust, and all rally round the home, "Mother" is the first consideration. If it is more convenient for mother to live in a flat, to a flat they go; if more homelike in a house it's a house they have, with a maid, till now they have a home of comfort and taste, with chance of a "good time" for mother, (whose only good time is cheer for the children). I always like to drop in for luncheon when they come rollicking home at the noon hour. Such jolly times!

At any rate I soon had an opportunity to put the "rainy day" theory into practice. My children had been playing outdoors all summer and this day dawned grey, drizzling and dreary. After breakfast four-year-old (whom I shall call Tommy) jumped on the bed, followed, of course, by two-year-old (say Teddy) and had slid in between bed and wall for a chimney. After dragging them from this trap with strong abjurations, Tommy proceeded to creep along the buffet on the bottom drawer to the detriment of my best linen runner just freshly put on, while Teddy was perched against said buffet on daddy's armchair (a perilous position for Teddy and silver and glass). More scolding. The next stunt was Tommy reaching for a drink and using a basket of clean clothes as a stepping stone. All this in ten minutes. This called down a spanking in good earnest, and as he lifted his tear stained face I thought he couldn't be greatly blamed for using the basket for the chair that was usually there—and I saw a smile and heard a voice which said, "How I used to love a rainy day," and I began right there to remodel my day. First, I got the "funny pictures" from the Saturday paper and spread them on the floor preparatory to cutting. But a good ten minutes was spent by four-year-old finding the different doggies and bears and kitties for two-year-old. (What hideous caricatures of

animal life to present to a child. A kitten is a soft fluffy little thing that a child just loves; a dog always elicits admiration and affection. My children recognized a true picture of a dog or cat at one year, but it is only lately my four-year-old recognizes the "funny page.")

Then about an hour was spent cutting pictures. A box was asked for and the animals went in one by one, Teddy feeling very proud when he extricated a snip of paper with dull pointed scissors. Then followed sailing boats in the wash tub. They were dismantled relics of beach days. The tub was high enough up to prevent splashing, and they steered the boats with slender sticks. Mother found a split tin baby, half for each boat, which very frequently got drowned, and "poor baby" had to be rescued frequently. Another hour gone. Then followed picking up scraps of paper cutting which I allowed them to throw in the stove.

Then when the after-dinner work was finished we all lay down, and with one on each arm I mumbled a drowsy story, and for about fifteen minutes we dalled on the borders of bye-lo-land. This rest gave us a fresh start, and my next inspiration was an old discarded under-waist with numerous buttons. These buttons were cut off by Tommy, after a little initiation with the promise they could be used for money to play store. A little lesson on the number "three" came in here, and with such capital he was ready to start business, while Teddy, with a discarded hand-bag over his arm, made frequent trips around the block to the corner grocery. A little romp brought us to supper time, and a few gymnastics after tea, brought us to an early bed-time. "The end of a perfect day." At least there were no frayed nerves or tired, excited babies or memories of "dont's" or scoldings and mayhap spankings. It may have required a little more thinking and planning, but it really saved time and energy.

After doing up the dishes I crept back and saw two rosy faces with a smile of pleasant dreams reflected from a quiet busy day.

Many of us, especially in small country homes, with the inconvenience which winter brings, dread the cold shut-in mouths with the children. But it is at least an opportunity to train our children in the quiet and gentle virtues of industry and perseverance, consideration and co-operation, and the time to cherish that companionship which the fleeting years too quickly rend from us, as well as a field for the winning of self-control.

One Mother.

Lord Northcliffe paid a strong tribute to the manner in which the women responded to their first opportunity to vote. "Some election indeed, was ours last week," is a statement from Northcliffe carried in a cable dispatch to the New York World. "It seemed as though every woman elector in Great Britain was determined to show her delight in her new acquisition."



SOMEWHERE IN FRANCE

"Oh, where did you get all those helmets?"
"Presented to me by the owners, lassie."

Do You Suffer From SOIL DRIFTING?

Has the Dry, Windy Summer of 1918 Taught us Anything?

Why do we continue sowing seed on land exposed to every wind that blows and drifting soil that cuts the young, tender plants, making our crops so late that it is difficult to get fall work done before the winter season.

This can be changed by the planting of more trees to provide the needed shelter and windbreaks to protect our growing crops and stock.

With fuel scarce and costly and with wood costing \$8 and 9 dollars per cord, is what the only crop that pays? We have cut cordwood 12 to 15 inches through, grown from trees planted 15 years only, and a few acres would grow a good many cords.

Trees can be cheaply and profitably grown if the work is done right. They can be provided and planted at from 10 to 15 dollars a mile, according to size of plants used.



A windbreak of Cottonwood trees, taken October 10th, 1918. We do not know of any tree which will give quicker and better growth than these.

Now the war is over and the men come back, what work can you do which would be more profitable or of greater value to your farm? But if you cannot do it right and make a success, do not try to plant trees, because failure is not only discouraging to you, but discourages others, and is a waste of good material and labor.

The hardy, quick-growing Russian Willows, Poplars and Cottonwoods are the cheapest and most profitable trees. They are easily planted and grow very quickly. They are the best for windbreaks, and profitable for the fuel and wood which can be obtained from them after a few years' growth.

Send to-day for our price list and full cultural directions.

THE LARGEST AND BEST GROWN STOCK IN WESTERN CANADA TO SELECT FROM.

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Manitoba Winter Fair and Fat Stock Show

Provincial Poultry Show

BRANDON, MARCH 3, 4, 5, 6, 7, 1919

\$16,000.00 In Prizes for Horses, Cattle \$16,000.00
Sheep, Swine and Poultry

\$1,600.00 is offered for the Boys' Fat Calf Show

AUCTION SALES under the auspices of the different Breeders' Associations, **CATTLE SALES**—Annual Sale of Pure-Bred Bulls and Females. Entries close February 1st.

HORSE SALE—Registered Stallions and Mares. Entries limited to Horses exhibited at the Winter Fair. Entries close February 20th.

GRADE HORSES—Mares or Geldings, 2 years and over. Entries close March 1st.

SWINE SALE—Pure-Bred Sows guaranteed in pig. Entries limited to Manitoba Breeders. Entries close February 20th.

ENTRIES FOR THE WINTER FAIR CLOSE FEBRUARY 20th.

WRITE FOR PRIZE LIST.

Reduced Rates on All Railways.

J. D. MCGREGOR, President.

W. I. SMALE, Secretary.

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HONEST DEALINGS BEST GRADING PROMPT RETURNS

EATON'S
Spring and Summer
CATALOGUE
IS BEING DISTRIBUTED
IF YOU HAVE NOT RECEIVED
A COPY, SEND FOR ONE NOW

THE T. EATON CO. LIMITED
WINNIPEG CANADA

Rockhaven, Sask., December 26, 1918
 Dear Mrs. Hamilton:—

I am a mother of three children, one girl and two boys. They are very healthy children. I am going to tell you how I keep them so. I think children should have plenty of fresh air and beware of drafts and to keep their feet warm and to clothe them according to the atmosphere, lightly and warmly. My children were very good-natured except when teething and I gave them Steedman's teething powders, only, be sure and get Steedman's with two e's and castor oil for their bowels. I never gave my children patent medicine. I give them a little peppermint in hot water for colic, not too much. I nursed my babies. I think it the best if you can as it is more for their comfort and yours too, especially in summer-time, most bottle-fed babies are cross then and some breast-fed babies too, if mother isn't careful.

A helpful hint for mother who raises her baby on cow's milk—do not give your baby milk that has been corked any length of time or your child may be subject to rickets, diarrhoea and other complaints. To destroy any germs that might be in the cow's milk put a pint or as much as needed of new milk in a pitcher and place this in a saucepan containing hot water and let the water boil for about 20 minutes, and then remove your pitcher of milk and place it in a dish containing cold water. By doing this your milk will be thoroughly sterilized. Do not allow it to boil. Cover milk with a clean cloth.

Do not give baby meat. Chicken is all right and broth with mashed potato. Too much broth gave my children diarrhoea. Feed moderately, not new bread and not too much sweet stuff and avoid cheap candies. I sometimes make my candy which I think is the purest. Let a child drink all the water he wants, that is if it agrees with him. When baby has a cough or a cold give him Pinex. If baby has diarrhoea give a little corn starch mixed in milk. If your baby should ever get slightly poisoned give a

teaspoonful of salt in a cup of warm water, following with an injection.

For dandruff in baby's head, render a little lard and rub on with the finger tips very lightly and comb with fine comb. Let baby have plenty of sleep and regular hours and not disturb him. Teach him to give, to be tidy and to love one another. The next thing is cleanliness and pure soap for their skin. I use Woodbury's Facial soap for my children. They never had skin troubles; they were never lard sick—a cold off and on, but they all had the "flu." Do not let your baby lay in one position too long. This often makes so many little babies weak and backward.

I should like to tell you a whole lot more but think that I have said enough for the present. Mother must not forget to take good care of herself also.

Hoping this letter will be useful to mothers.
 Mrs. Mabelle Hardy.

FARM CONGRESS

THE Manitoba Farm Congress to be held soon, will prove a great treat for women.

"The Conservation of Our Human Resources," by Rev. Hugh Dobson, of Regina; "Women's Organizations and Their Relation to the Agricultural Society" by George A. Putnam, of Ontario, and other addresses, will be most helpful. Miss Mary MacIsaac, director of women's institutes of Alberta; Mrs. Adeline Blackwood-Wileman, president of women's institutes, of British Columbia, Miss DeLury, of Saskatoon, and other prominent women will speak.

The Manitoba Farm Congress is made up of the following organizations, all of which will hold their annual conventions on the dates given below:

- Agricultural Societies, February 18 to 21; Home Economics Societies, February 18 to 21; Canadian Seed Growers' Association, February 18; Manitoba Dairy Association, February 19 and 20; Horticultural and Forestry Association, February 20 and 21; Manitoba Bee-Keepers' Association, February 19; Manitoba Boys' and



THE SOLDIER SETTLEMENT BOARD
 CANADA

A New Hand Book

GIVING INFORMATION REGARDING

LAND, LOANS and AGRICULTURAL TRAINING for RETURNED SOLDIERS

AND OUTLINING THE PROCEDURE FOR MAKING APPLICATION FOR THE BENEFITS TO BE DERIVED UNDER

The Soldier Settlement Act

IS NOW AVAILABLE FOR DISTRIBUTION.

Prospective soldier settlers may obtain copies of the same upon application to the **PROVINCIAL SUPERVISOR OR THE SOLDIER SETTLEMENT BOARD, OTTAWA.**

PROVINCIAL SUPERVISORS.

- | | |
|--|--|
| D. W. Campbell, The Soldier Settlement Board, Post Office Building, Winnipeg, Man. | J. J. Threlkeld, The Soldier Settlement Board, Pemberton Building Victoria, B.C. |
| S. F. Dunlop, The Soldier Settlement Board, McCallum Hill Building, Regina, Sask. | B. F. Campbell, The Soldier Settlement Board, Drummond Building, Montreal, Que. |
| F. W. W. Fane, The Soldier Settlement Board, Post Office Building, Edmonton, Alta. | The Hon. Murdoch McKinnon, Minister of Agriculture, Charlottetown, P.E.I. |
| W. M. Jones, The Soldier Settlement Board, 32 Adelaide St. E., Toronto, Ont. | W. B. McCoy, Secretary, The Soldiers Aid Commission, Halifax, N.S. |
| | William Kerr, Secretary, Farm Settlement Board, St. John, N.B. |

Girls' Clubs, February 21; M.A.C. Old Boys' Reunion, February 21; Schoolmasters' Club, February 21.
The conference of women to be held by the women of Manitoba this spring will work on the following suggested program:

- Conference of Women**
Suggested Programme
General Subject—Women's Citizenship
1. In the Community
 2. In the Home
 3. In the Nation
- First Day
Afternoon—
Reception and Registering of Delegates
Evening—
Addresses of Welcome and Programme of Music
- Second Day
General Subject—1. Woman, the Citizen in the Community
Morning—
Address—How Best to Work
In the Spirit of Co-operation
Through Existing Agencies
In What Way Can the Churches Help
The Man and Woman Viewpoint
Discussion
Address—Recreation
Community Movies
Community Singing
Community Dancing
Organized Play
Discussion
Afternoon—
Address—Juvenile Court
Children's Aid
Feeble-Minded Children
Discussion
Address—Sex Education
Address—Better Health
Community Nursing
Nursing, a National Service
Discussion
Evening—
Social Evening
- Third Day
General Subject—2. Woman, the Citizen in the Home
Morning—
Address—The Home on a War Basis
Food and Frills
Eliminating the Non-Essentials
Discussion
Address—The Guardianship of Children
Discussion
Address—Woman's Share in the Home
Property Rights
Afternoon—
Discussion—Property Rights
General Subject—3. Woman, the Citizen in the Nation
Address—The Criminal Code in Relation to Women
The Age of Consent
Better Protection for Women and Children in Court Rooms
Women Jurors
Evening—
Address—Woman, a Member of the Electorate
A Women's Party
Co-Citizenship
Discussion
Address—Who Are the Electorate

Under the patronage of the Home Economics Society, a branch of McGill University Library has been opened in Virden in connection with the permanent library already started.
Virden, Manitoba, Home Economics Society has given an organ for the use of the primary department of the public school.

Virden, Manitoba

THE undersigned members of the Executive of the National Council of Women, resident in Manitoba, after consultation, have thought it advisable to call a conference of all the women of the province in order that they may consult together over several problems of interest to women in the light of their new citizenship, and of conditions contingent upon the war.

In planning for the conference the committee has steadfastly kept in mind the importance of making it possible for every woman's society in the province to have representation. We are now appealing to you as an officer of a women's society to give us your help by enlisting the co-operation of the members of your society in this endeavor to get together the women of the province.

It has been decided to pool the railway fares among all the delegates. This will reduce the cost of the trip to those who live at a distance. Those near at hand who, under this arrangement, will pay a little more than ordinary fare, will, we are confident, agree to do this since it will make it easier for those from more distant parts of the province to attend. It is estimated that this pooling arrangement will make the cost to all about five dollars. There is, of course, nothing certain about this amount; it depends on the number who attend.

As for numbers, any society may send just as many representatives as it wishes, provided they all will enter into this pooling arrangement and all bring a letter of credentials from their secretary. Every delegate doing this will be entitled to take part in all discussions and voting. Since the fares are being pooled, it has been decided not to attempt the billeting of delegates, but reasonable rates are being secured from the hotels, and will be sent to all who are interested.

Accompanying this letter is a draft of the program as drawn up by the committee after consultation with the provincial presidents of the various organizations. In addition to the addresses and discussions here provided for, there are being arranged attractive social events of which you will hear more as the time comes nearer.

Will you help us to make a success of this first general meeting of the women of Manitoba since they were enfranchised, by putting this letter and the proposed program prominently before the women of your society? We shall be so pleased to hear, as soon as you can conveniently let us know, whether we may hope to have a delegate from your organization. If it does not seem possible to have one from each society in your community, perhaps the various organizations could unite, so that your town may be at least represented.

Our men have been away, many of them now for four years, fighting for our freedom quite as much as for the freedom of France and Belgium. The news of the last few weeks seems to make it possible to look forward to the time when they will return to us as no longer very distant. Should we not get together and find what are the things in which we can all join to make this country a better place for our soldiers to come home to—a better place for our children to grow up in.

Yours sincerely,

- Signed on behalf of:
Lady Atkins, Vice-President,
National Council of Women.
Lady Taylor, Vice-President,
National Council of Women.
Mrs. H. W. Dayton,
Provincial Vice-President, National Council of Women; Provincial President, Home Economics Society.
Mrs. J. S. Wood,
Provincial President Women's Section, Grain Growers' Association.
Mrs. J. E. Clements,
Brandon Local Council.
Mrs. Riddell, Dauphin,
Local Council
Mrs. Kenneth Gair,
Portage la Prairie Local Council.
Mrs. R. F. McWilliams,
Winnipeg Local Council.
Mrs. H. H. Goulter,
Virden Local Council.
Mrs. T. R. Deacon,
Convener of National Committee.
Mrs. Charles Robson,
Convener of National Committee.
Miss E. L. Jones,
Convener of National Committee.
REBECCA DAYTON,
Chairman of Committee.
JENNIE GOULTER,
Secretary of Committee.

Among the questions to be settled at the peace table, the fate of Armenia should excite the poignant interest of women throughout the world. There is no other example in modern history of the womanhood of a whole nation deliberately given over to outrage—and outrage by an inferior race. And, in addition to the multitudes who have perished, there are other multitudes of Christian women and girls who are still held in Turkish harems, in captivity worse than death. Shall they be rescued, or shall they be left there?

BLUE RIBBON TEA

There are enough worries in the world without having to drink poor tea—may as well have the best.

Try BLUE RIBBON

One Man Alone Pulls Big Stumps



With the Mighty

Kirstin
ONE-MAN Stump Puller

Here's the Puller that you and thousands of others have long been waiting for. Ten thousand now in use. Letters from everywhere tell of sensational results. Pronounced a big success by Government Officials, University Experts and Land Clearing Contractors. Pulls ordinary run-of-stumps or trees out of the soil so easy—it's almost play.

One man can clear an acre a day—costs about 4c a stump. Think of clearing land so cheaply. Think of pulling all your stumps by hand—and alone—no horses or extra help required—a stump every three or four minutes. It's true, every word of it.

The Kirstin is

The Quick, Cheap, Easy Way to Clear Your Land

No other stump puller is so economical to buy or so easy to operate. Just a few pounds pull on the handle means tons on the stump. When stump starts, throw machine into high speed and out comes the biggest stump, roots and all.

The Kirstin Pullers are remarkably easy to get into the field and easy to handle among the stumps, too. They do the work—where horses can't go. They do it cheap and stand up under hard usage, under all conditions.

Get all the FACTS. Learn about our Liberal Offer—our Actual 30 Days' Free Trial—3 Years' Guarantee, etc.

30 Days' Free Trial

We call this an Actual 30 Days' Free Trial, because no matter when you order or when your Puller arrives, you can actually use it for 30 days before you decide to keep it.

If the Puller doesn't please you in every way—it doesn't do the work satisfactorily and economically—it can be returned at our expense and every cent of your money will be refunded. In addition to this wonderful free trial offer we give you

4 Easy Ways to Pay

If you like you can order on a No-Money-in-Advance-Plan—Pay Cash and get discount—\$10.00 Deposit Plan—or on the Installment Plan, which gives you 6 months TO PAY. No other offers so liberal.

Now send for Free Book and read about the wonderful KIRSTIN Puller with the Stumps, Double, Triple Power Features. Any man would

rather have a KIRSTIN with its money-saving and time-saving superiorities, than an ordinary puller. Get our Special Low Prices, T.O.M.S., etc., without delay.

3 Years' Guarantee Flaw or No Flaw

We guarantee perfect satisfaction or money will be refunded, according to our 30 Day Free Trial Offer. We further guarantee to replace free of charge any casting that may break—flaw or no flaw—within 3 years. The big, stir-up Kirstin organization is behind the guarantee. Send for copy.

Get This Book FREE

Read how farmers make \$240.00 net profits on one acre, the first year. How others make from \$300 to \$500 from a few acres of newly cleared land. Increases of 50 to 100 per cent. land valuation are not unusual. The book is filled with letters telling all about it.

Book also gives full particulars of Kirstin Free Land Clearing Service worth many dollars to any farmer. Contains pictures and describes all sizes and types of Kirstin Pullers—One-Man and Horse-Power Pullers—from \$50.00 and up. Get it NOW. Send letter or postal. 134-19



A. J. KIRSTIN CANADIAN COMPANY, 1208 Dennis Street, Sault Ste. Marie, Ont.

Have you any "kicks" with regard to the contents of this Magazine? If you have—don't spare us.

FORD PRICES

The policy of the Ford Motor Company of Canada, Limited, to sell its cars for the lowest possible price consistent with dependable quality is too well known to require comment. Therefore, because of present conditions, there can be no change in the price of Ford Cars.



Runabout	\$ 660
Touring	690
Coupe	875
Sedan	1075
Standard Chassis	625
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*All prices subject to war tax charges,
except truck and chassis.*

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NORTH STAR BATTERIES

Topmost in Quality
Utmost in Durability

FOR FARM ENGINES, TRACTORS, AUTOMOBILES, TELEPHONE SYSTEMS, HAND LANTERNS, ETC. CAREFULLY INSPECTED AND TESTED.

ORDER FROM YOUR DEALER

I have found this an excellent remedy in a great many cases of coughing, and colds. Cold-sores may be speedily gotten rid of by moistening the spot with soft water and covering it thickly with common baking soda; repeat the treatment until the swelling and throbbing cease.

Persons inclined to bowel trouble would find great relief by wearing an abdominal bandage of flannel. Equal parts of cold, boiled water and white of egg will be perfectly safe, and furnish nutriment when no other foods are allowable, in ailments of the bowels.

Some Good Home Remedies

Dear Editor:—I enclose a few home remedies and health notes. I have often found them useful in my family because we live a long distance from a doctor. I hope the sister readers will be helped by them. Will some sister write her experience on caring for a good garden?

Headache almost always yields to the simultaneous application of hot water to the feet and back of the neck. A towel folded, dipped in hot water, wrung out quickly and applied over the stomach acts like magic in cases of colic. A towel folded several times and dipped in hot water, quickly wrung out and applied over the seat of pain, will in most cases promptly relieve toothache and neuralgia. A strip of flannel or towel, folded several times lengthwise and dipped in hot water, then slightly wrung out and applied about the neck of a child suffering with an acute attack of croup, will usually relieve it.

Old England Keeps Her Head

DETAILED reports from London regarding the great new Education Act which Parliament has passed, remodelling from the ground up England's entire educational system, show one striking omission.

The Act contains no provision whatsoever for compulsory military training.

From one point of view it is a magnificent tribute to the sound English spirit. Even in the midst of war, with Germany a stone's throw away, England can study her educational problems coolly and decide quietly to keep her schools as training centres for individualism plus service, rather than, in a panic, to sacrifice them to the Prussian system of military drill.

And it is all the more striking because England has had various stuporous organizations dedicated to the job of fastening military training upon the school system. They have been well financed and have held meetings and distributed literature showing the horrors of life without military training; they have had questions "put" in the House and, in general, have betrayed a fine zeal on behalf of their propaganda. But H. A. L. Fisher, the Minister of Education, told a delegation from the Miners' Federation some months ago, that the Government had canvassed the question of compulsory drill for the secondary schools and had decided that the innovation had neither educational nor military value and would not be adopted.

Mr. Fisher has proved as good as his word. The Education Act, which sweeps out of existence eleven Educational Acts and repeals parts of eleven others, provides for compulsory education up to fourteen years. Between the ages of fourteen and eighteen all English boys and girls must attend either the regular schools or, if they are obliged to work, then they must attend continuation schools and their employers must help to make that school attendance possible. Physical training is provided without stint but of military training there is not to be a trace.

England certainly has a quality all her own!—From Child Welfare Magazine.

Taking a Nation's Foster Children Into the Family

NATIONALITY experts under the direction of the Y.W. in the U.S. are giving practical lessons to foreigners in citizenship. On the executive of the organization is a leader of every nationality in the community. The leader understands the customs, aims and ideals of her own people and stands ready to point the way to a better understanding of citizenship in the land of their adoption.

Attractive gathering places for girls and women of every nationality are provided. This means for them—protection,



ROYAL YEAST

The reason for changing the shape of Royal Yeast Cakes is that it is easier to wrap square cakes by machinery than round cakes. Each package will contain five cakes instead of six but the quality and quantity of yeast will be the same as formerly.

E. W. GILLET COMPANY LIMITED
WINNIPEG TORONTO, CANADA MONTREAL

Peanut Butter Loaf
1 cupful peanut butter, 4 slices stale bread, 1 egg, ½ teaspoonful salt. Soak the bread in water until soft, then wring

dry. Mix all the ingredients together and bake in a small pan for 20 minutes. This is an excellent meat substitute. Serve with a cream sauce.

No More Dread

OF THE DENTIST'S CHAIR

Every modern scientific equipment is in this modern establishment in the hands of skilled dentists—makes the work painless.

Our work is incomparable in finish and appearance. Have you been dreading to have your dentist work done? No need of it; we have scores of satisfied patients who will tell you we "DIDN'T HURT A BIT."

Are you dissatisfied with the fit of your artificial teeth? If so, try our Patent Double Suction

- Whalbone Vulcanite Plates, set \$10.00
- Expression Plates, from.... 15.00
- Gold Crowns, 22 kar. gold.. 7.00
- Gold Bridge work, per tooth 7.00
- Porcelain Crowns 7.00
- Porcelain Bridge work, tooth 7.00

Painless extracting of teeth. Gold Fillings. Porcelain Fillings. Silver and Alloy Fillings.

Every bit of dental work carries the Robinson stamp. When you get tired experimenting with unskilled dentists, give me a trial. Hundreds upon hundreds of testimonials from patients. I have no other office in Western Canada. Do not be deceived by unscrupulous dentists who try to make you believe they have my system. Remember the location.

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Reduce the High Cost of Working

You can't beat Master Mechanic Overalls for economy, comfort and convenience.

Made from the highest quality materials by most skillful labor.

There is a positive guarantee in the hip pocket of every garment.

LOOK FOR IT!

WESTERN KING
Manufacturing Co. Limited

FOR SALE—One 37 h.p. Sawyer-Massey engine, run about 90 days, in first class condition; one 24-inch Aultman-Taylor separator, almost new. For particulars, write V. C. McCurdy, Meesomin, Sask.

WANTED, PERSONS TO GROW MUSHROOMS for us at home; from \$15 per week upwards can be made by using spare space in Cellars, Empty Rooms, Root Houses, etc. (start now); illustrated booklet sent free. Address Montreal Supply Company, Montreal.



FREE PUZZLE PRIZE \$4500.00

In Cash has been Given Away FREE also hundreds of Merchandise Prizes \$200.00 more IN CASH will be Given Away as follows

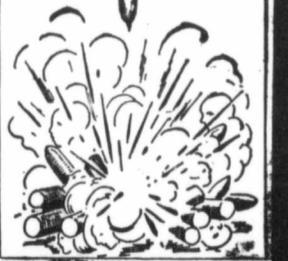
- 1st Prize, \$50.00 in Cash.
- 2nd Prize, \$40.00 in Cash
- 3rd Prize, \$35.00 in Cash.
- 4th Prize, \$25.00 in Cash
- 5th to 9th Prizes—Each \$10.00 in Cash.

TOGETHER WITH MANY MERCHANDISE PRIZES

Herewith will be found the picture of an Aviator who has just dropped a bomb on a pile of Shells. At first glance the Aviator and the Explosion appear to be all there is in the picture, but by careful study the faces of several soldiers will be found. There are 7 of them in all. Can you find them? It is a noteworthy task but patience and endurance can be accomplished.



You may win a cash prize by doing so. Many have done this so will be shown by the names and addresses which we will send you. If you find the faces mark each one with an X, cut out the picture and send it to the publisher with a slip of paper on which you have written the words "I have found all the faces and marked them." We will then send you a cash prize and neatly, so in each of five, both writing and names are considered factors in this contest.



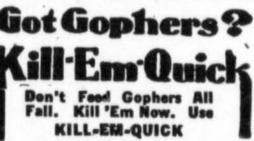
This may take up a little of your time but as TWO HUNDRED POUNDS IN CASH and many merchandise prizes are given away, this is a good time to give a little to the publisher. Remember all you have to do is to mark the faces, cut out the picture and send on a separate piece of paper the words "I have found all the faces and marked them."

WE DO NOT ASK YOU TO SPEND ONE CENT BY YOUR MONEY IN ORDER TO ENTER THIS CONTEST

Send your names at once we will reply by Letter Mail telling you what your answer is. Complete details will be sent you a complete set of rules together with the names and addresses of all those who have won. Hundreds of prizes will be given away and our prizes are of the highest quality. We will send you a copy of the rules and a list of names of those who have won. The Contest will close on the 1st of June. We have no other prizes to give. We will have no other prizes to give.

Prizes will be sent as fast as possible. If you reply we will send a complete set of rules and a list of names of those who have won. We will send you a copy of the rules and a list of names of those who have won. We will send you a copy of the rules and a list of names of those who have won.

Send Your Reply Directly to
GOOD HOPE MANUFACTURING COMPANY
48 ST. ALEXANDER STREET, MONTREAL, CAN.



Got Gophers? Kill 'Em Quick

Don't Feed Gophers All Fall. Kill 'Em Now. Use KILL-EM-QUICK

DYKE'S AUTOMOBILE AND GASOLINE ENGINE ENCYCLOPEDIA—a standard text of over 900 pages adopted by the United States Government. Money refunded if dissatisfied. Every Automobile and Tractor owner should have one. Send \$1.50 for post-paid copy to Dept. 7, Dominion Text Book Company, Calgary, Alberta.

WANTED to hear from owner of good farm for sale. State cash price, full particulars. D. F. Bush, Minneapolis, Minn.

LADIES Send us your Combing, not less than three ounces. We make them up 50c. an ounce.

All kinds of Switches kept in stock. Write us for prices.

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The air of perfect happiness and contentment of babies brought up on Savory & Moore's Food is constantly a subject of remark. This is simply because it is so easily digested, so nourishing and satisfying, in fact an ideal food for babies in every way.

Get a tin of Savory & Moore's Food to-day from your Stores, and note how eagerly baby will take it, and what marked improvement and steady progress will follow its use.

MOTHER'S GUIDE FREE

Savory & Moore's little Book "The Baby," is full of useful and reliable information on Infant Management. It is just what a young mother requires, and will prove invaluable in the home. A Free Copy may be obtained on application to Savory & Moore, P.O. Box 1601, Montreal.

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Of all Druggists and Stores

WOMEN'S WINNINGS

A recent appointment has been made that places an unusually gifted woman in a position that will be most helpful. Mrs. Chas. Robson, of Winnipeg, has been appointed as convener of a committee to look after the protection of the families of soldiers in their home-coming. She sees that conditions are right at St. Johns and Halifax for the reception of women and children as they come off the ship, and with the help of the Red Cross and Y.W.C.A. they are protected and cared for to their destination.

The municipal election in Boston on December 17, was featured by the reelection of Miss Frances G. Curtis, Public School Association candidate for School Committee.

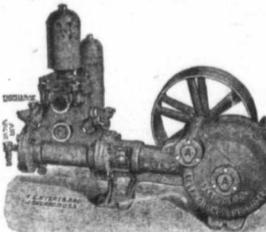
Miss Curtis ran on a "keep-the-schools-out-of-politics" platform, receiving a plurality of 4,452 votes over her nearest opponents.

The increasingly important part of the women of India are beginning to play in the political life is indicated by the fact that Mrs. Sarojini Naidu, a leading suffragist of India, presided at a recent meeting of the Madras Provincial Conference. "New India," in referring to the event, declares that it marks "the coming of a great force into modern Indian political life—the Indian woman." Mrs. Naidu sponsored a resolution urging the granting of the franchise to women at the same time as men, at a meeting of the Bombay Provincial Conference. The resolution was supported by 100 prominent women of Bombay.

The Women's Political Association of Australia is asking the government to raise the age of consent to 21 years and to extend this provision to cover boys as well as girls.

The right to become lawyers and assistants to notaries has been granted to Portuguese women by a government decree. The women must hold certificates showing that they possess a thorough knowledge of law.

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Standardised, Simplified, Dependable. For home and farm service. Operation by gasoline engine, motor or other power. Styles and sizes to meet all requirements. Ask your dealer. Catalog gladly mailed.

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FOR SALE—Case Steel Separator, 35x35, and 25 H.P. American Abell engine. Box 189, Russell.

FOR SALE—Small threshing outfit, complete, in good running order. Sykes, Russell, Man.

education and recreation. It means good listeners. There is home visiting in every community by the women who speak their own language. The "Nationality Experts" act as interpreters in court and aid in securing medical aid—in fact they stand for service in any emergency. The Institute helps to educate the mother. It holds international parties and plans vacation trips. It is continually surveying new communities, opening new centres and recruiting and training workers of all nationalities. It maintains a bureau of research and statistics; it conducts experiments to prove the value of trained foreign language experts in every phase of social and civic work for every people. By these means it is breaking down the barriers between the foreigners themselves as well as between them and the Americans; barriers built of mutual ignorance of language, psychology, geography, politics, customs and religion.

RECIPES

"Dear Joe,—Come home. Forgive and forget. I have destroyed the book of war recipes.—Violet." (The Veteran).

Simple all but the name and a splendid dish.

Chartreuse à la Surprise

Butter or oil a plain pudding mold very thoroughly, and line it throughout with mashed potato, seasoned as for the table, keeping the potato rather dry. Fill the centre with flaked (cooked) fish, mixed with just enough thick sauce (drawn butter) to hold it together; cover with potato. Let it steam about half an hour; unmold on a hot serving dish. Serve with plenty of drawn butter sauce, canned peas or string beans, and either lettuce or cabbage with French dressing. If two narrow strips of parchment paper be fitted into the mold, at right angles one to the other, and greased thoroughly, they will aid in unmolding the dish.

Drawn Butter Sauce for Chartreuse

Fish left over, when a whole fish, as fresh haddock or cod, has been cooked, is suitable for a chartreuse. The water in which the fish was boiled should be used for sauce. To make a pint of sauce cook one-fourth a cup of flour and half a teaspoonful, each, of salt and black pepper in one-fourth a cup of vegetable oil made hot; add half a cup of cold water and a cup and a half of the hot fish broth and stir until boiling. Add the cold water first, or if the fish broth be cold use two cups of broth and no cold water. Just before serving the sauce, beat into it two tablespoonfuls of butter, a little at a time.

Canned Corn Custard
(To serve 8)

Heat 2 tablespoonfuls of butter substitute, in it cook a slice of onion and half to a whole green pepper, shredded very fine, stirring constantly, until yellowed and softened. Add 2 cupfuls, or a pint can of corn, a teaspoonful of salt, 1/2 teaspoonful of paprika, 3 eggs, beaten light, and 2 cupfuls of milk. Mix all together, thoroughly, and turn into a buttered baking dish. Bake in a pan of boiling water until firm in the center. Serve hot or cold, as the main dish at luncheon or supper, or serve as an entree at dinner.

Hot Apple Dessert Dish

Pare, quarter, core and slice 5 or 6 apples. Put these in a serving dish suitable for the oven in layers with seeded raisins and 1 cupful of sugar, cover and let bake until the apple is tender. Remove the cover and set marshmallows over the top of the apples, using as many or as few as desired; return the dish to the oven, for a moment only, to heat the marshmallows and brown them slightly; serve hot with or without cream. The dish must be watched closely after the marshmallows are added, as they melt and color at a very low heat.

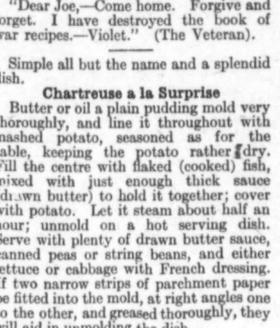


ON THE HOME HIKE

First Contemplative: "D'you remember halting here on the retreat, George?"

Second D'to: "Can't call it to mind, somehow. Was it that little village in the wood there down by the river, or was it that place with the cathedral and all them factories?"

FREE



Big Doll and Doll Carriage, Birthday Pendant and Ring.

GIRLS—Here is the greatest prize offer ever made in Canada. This Big Doll is simply exquisite. She is 18 inches tall and has beautiful curly hair and lovely clothes imaginable. She is fully jointed so that she can sit down or move around in almost any position. The Big handsome Co. Car is lovely enough for a real baby. It has genuine rubber tired steel wheels, a folding hood to protect doll from sun and heat of all. It can be folded right up tight when you are using it.

You and all your friends will just be delighted with the beautiful and shining Birthday Pendant and Chain and the lovely ring we send you. The pendant is the newest style, handsomely engraved, set with sparkling birthstone jewel with a nice faceted drop and if you will tell us the month of your birth your pendant will have your own birthstone in it. The ring is genuine gold filled and is set with five lovely sparkling manufactured jewels that gladden the diamonds.

Girls we offer these beautiful presents in order to obtain agents to help us quickly introduce "Dainties" our delightful new Whipped Cream Candy Coated Birthstones. Write us to-day and we will send you FREE a big 10 cent package of "Dainties" for try yourself, and just 25 large handsome packages to introduce among your friends. You'll sell them instantly by opening your sample package and asking your friends to try them. Everyone will buy a package or two because they cannot resist the delicious flavor. Two or three little "Dainties" will perfume the breath, cleanse the mouth and leave a lasting fragrance.

Return our \$2.50 when the "Dainties" are sold and we'll promptly send you all charges prepaid the beautiful birthstone pendant and ring just as represented, and the lovely doll with her fine good toys and earn our five premiums as you did.

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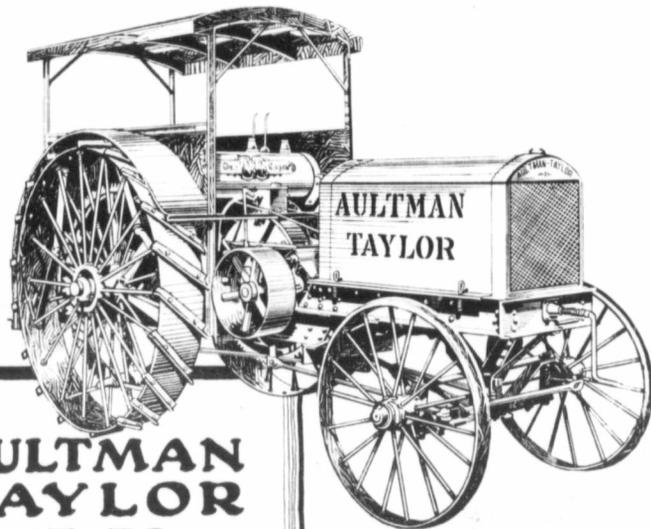
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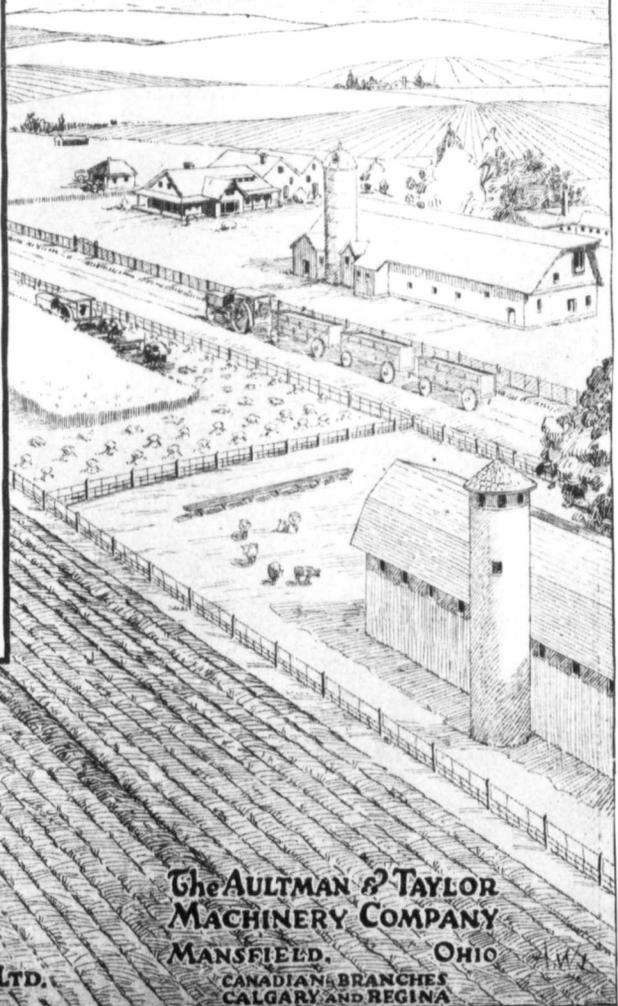
Your tractor must have Quality, Big Power, and Proper Design. These three factors—QUALITY, POWER and DESIGN, absolutely measure your tractor success.

Our meaning of QUALITY is—good materials, and careful workmanship of all parts. This applies to parts you cannot see, as well as those you can see—quality through and through.

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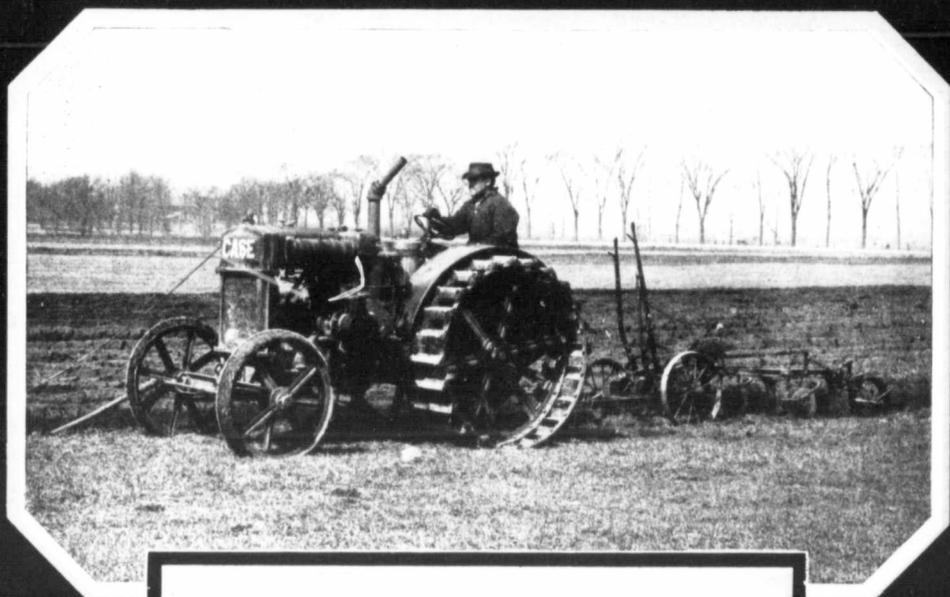
Our meaning of DESIGN is simply this—good, sound construction—construction that keeps the tractor in good working order year after year; all parts must be simple and accessible; all features of a freakish or impractical nature eliminated. A tractor must have four wheels, as this type is most practical. A few years ago the rage was two and three-wheeled types of tractors, but the tide has turned—and why has it turned?—simply because the four-wheeled machine has proven itself far more practical.

Aultman-Taylor never has fooled the farmers by offering them tractors of freakish or impractical design, so if you want a tractor that has the quality, the power and the design to give you a new, high character of service at a new, low operating cost, go see Aultman-Taylor, or write for 1919 catalog.



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