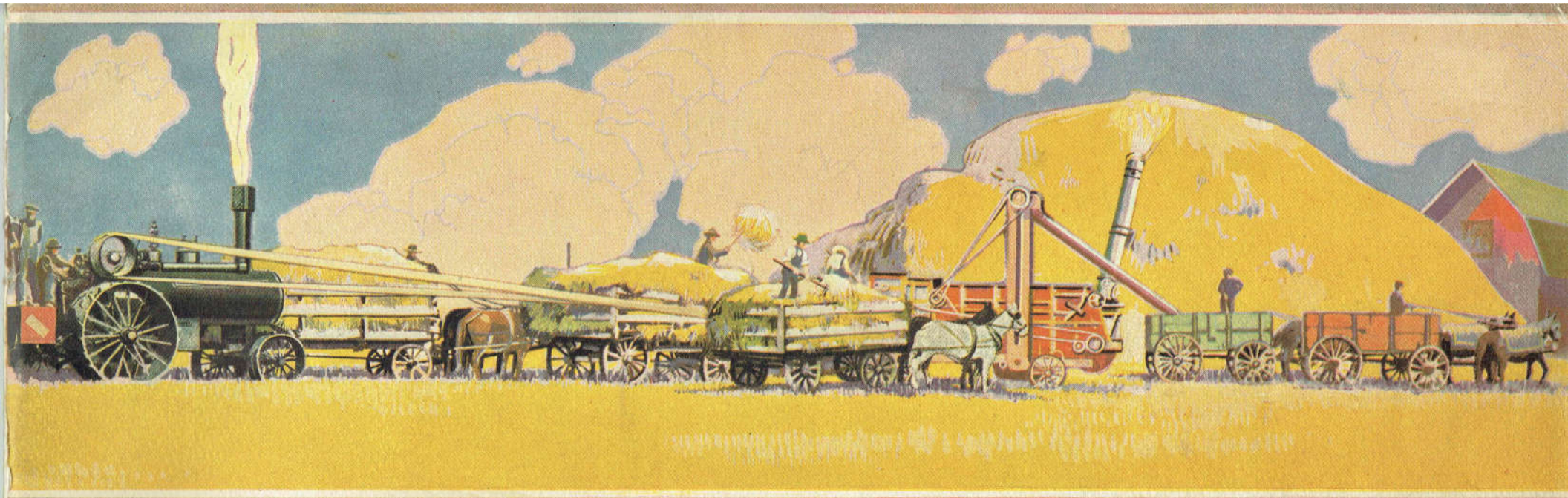


For Bounteous Return 1918

# NICHOLS & SHEPARD

## Threshing Machinery

## MAKES GOOD

It Saves the Farmer's Thresh Bill

In Continuous Business Since 1848

# FACTORIES AT BATTLE CREEK

*In Continuous Business Since 1848*

Branches directly owned and operated by the Nichols & Shepard Company, and their principal agencies, are listed on the title-page of this catalog. Full stocks are carried at all of these distributing centers. Sales agencies in connection with these houses will be found everywhere.

RED RIVER SPECIAL BUSINESS IS IN

## Threshing Machinery Exclusively

IN CONTINUOUS BUSINESS SINCE 1848

# NICHOLS & SHEPARD COMPANY

Builders *EXCLUSIVELY* of

# THRESHING MACHINERY

*In the* Red River Special Line *with the*
Big Cylinder *and* Man Behind the Gun

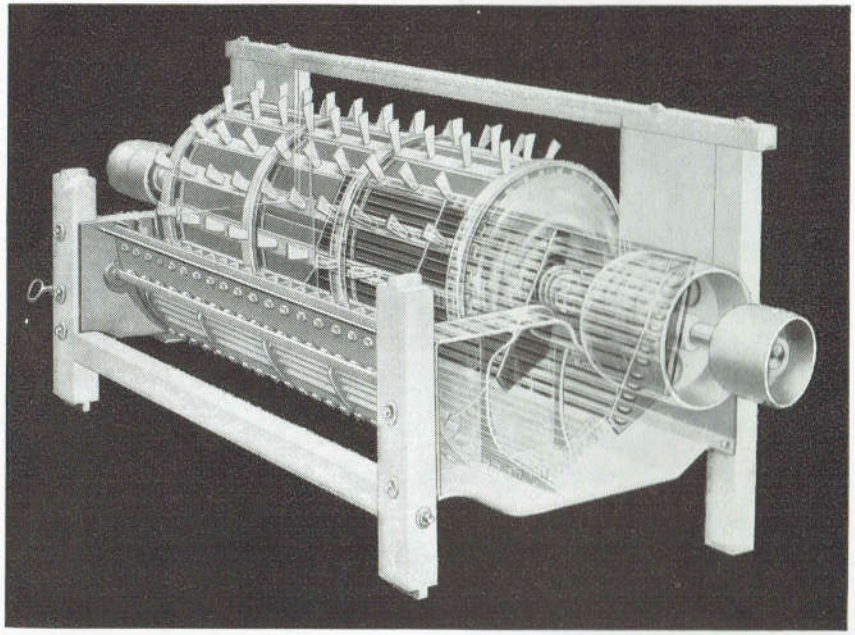
## Battle Creek, Michigan.

BRANCH HOUSES WITH FULL STOCK OF REPAIRS

KANSAS CITY, MO. PEORIA, ILL. FARGO, N. DAK. NASHVILLE, TENN.
BILLINGS, MONT. MINNEAPOLIS, MINN. REGINA, SASK. LINCOLN, NEBR.
DES MOINES, IOWA INDIANAPOLIS, IND. MADISON, WIS. WINNIPEG, MAN.
HOUSTON, TEXAS: R. B. GEORGE SPOKANE, WASH.: GALLAGHER & CO., INC. WATERTOWN, S. DAK.: BASKERVILLE & DAHL
DALLAS, TEXAS: NICHOLS-SHEPARD SALES CO. CALGARY, ALBERTA: H. P. NORTON & CO. BUCYRUS, OHIO: J. H. EATON
SALT LAKE CITY, UTAH: CONSOLIDATED WAGON & MACHINE CO. LONGMONT, COLO.: FARM TRACTOR & MACHINERY CO.

# The "Man Behind the Gun"

## The One and Only Method



## That Gets the Big Results

Size for size, no machine built without this appliance can thresh, clean and deliver the same amount of grain in marketable condition in the same amount of time without increasing its waste to an extent that no competent thresherman or grain raiser will tolerate.

Record-breaking performances are everywhere made by the Man Behind the Gun. It is an invention exclusively controlled by the Nichols & Shepard Company, and it is through this device that the astonishing work of the Red River Special separator is made possible, as it more than doubles the capacity of the cylinder separation that may be done in an ordinary machine. Its work is done without the slightest increase in operating cost; for it is accomplished without motion or power and entirely without waste.

If the Man Behind the Gun is not in the machine that you purchase, or in the machine that does your work, you are not getting an adequate return for the money which you spend. This fact, unequivocally stated, is found in the warranty that accompanies every separator that is made and sold by the Nichols & Shepard Company. No other machine can meet the Red River Special in competitive test without coming out in second place.

# Alert in Its Chosen Field

HALE and hearty at threescore and ten, the Nichols & Shepard Company actively takes up another season of business in the long and unbroken line of continuous operation that covers the seventy years elapsed since its founding, in 1848.

Were its product—THRESHING MACHINERY EXCLUSIVELY—other than the best, its work, with its name, would long ago have disappeared from, instead of dominating, the market, as it does today.

This is the one great thought that the intending purchaser of threshing machinery should let sink deep into his mind. It clearly explains the reason for remarkable longevity.

The survival of the fittest is inexorable law. This company is in no way exempt from its workings.

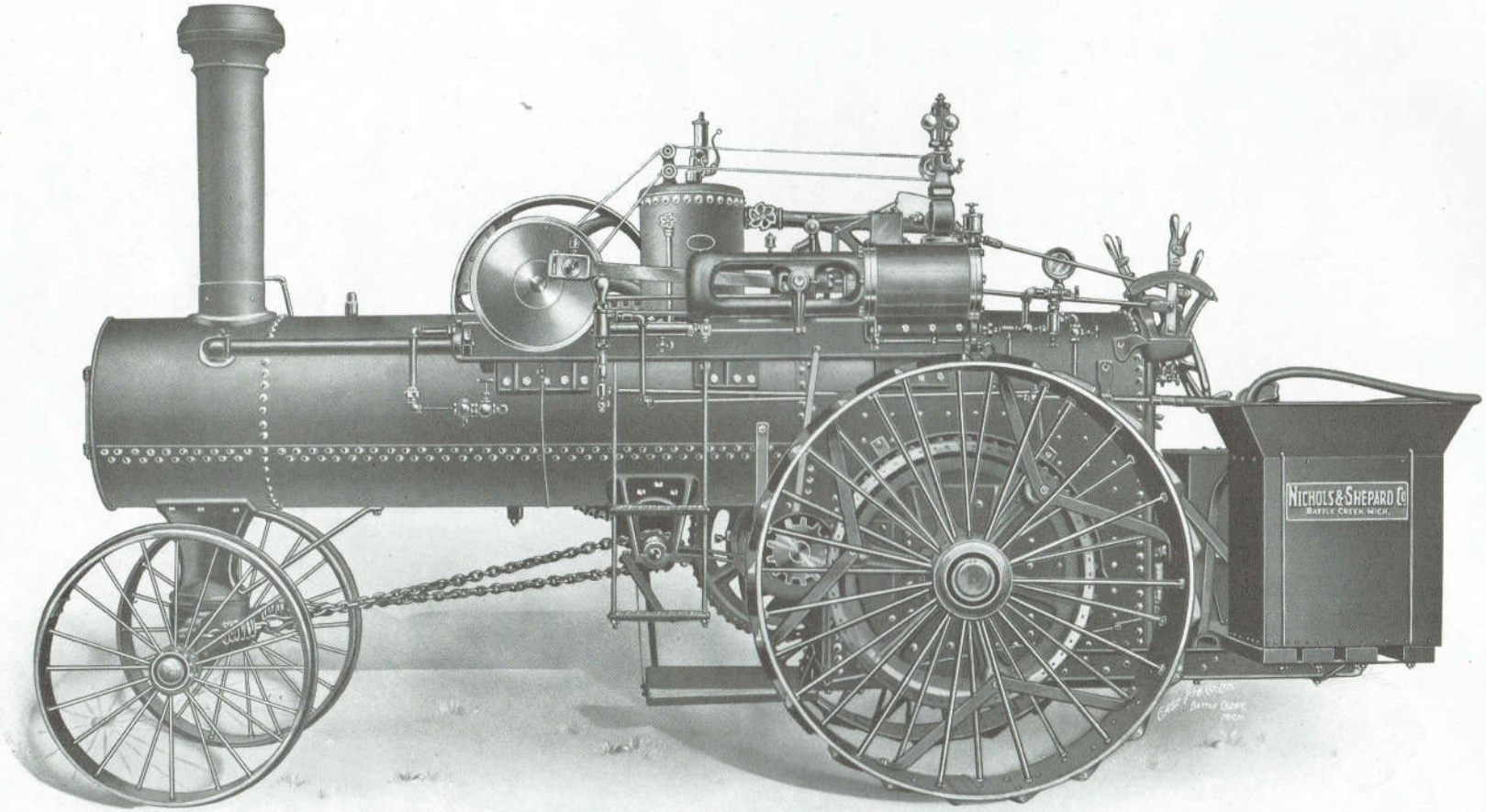
It has kept its place by setting the pace at the head of the procession of progress.

It has guided thousands upon thousands of threshermen and farmers to thrifty prosperity by making and placing in their hands each year dependable machinery that has never yet failed to yield in their service an adequate return for the work which farmers and threshermen do.

It is again prepared to lead them on to greater gains.

Here in your hands is placed the proof.

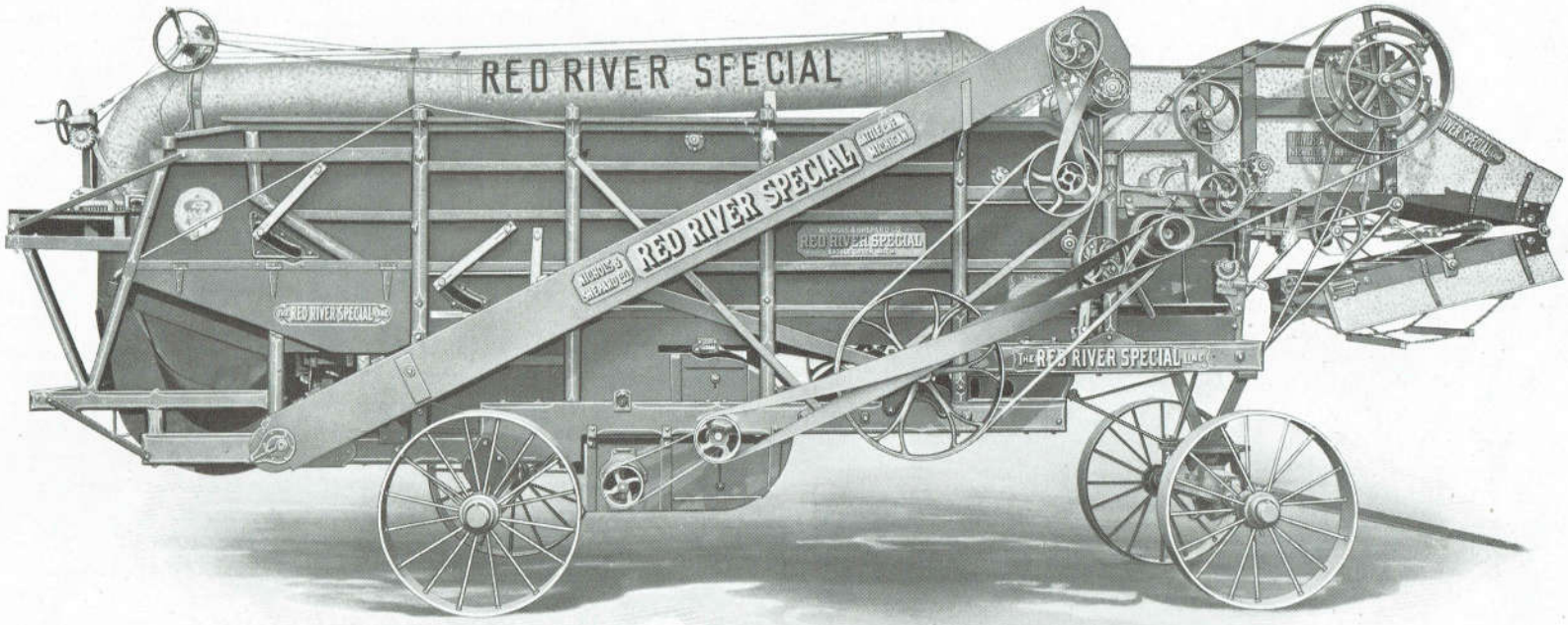
Make it your own. The way is direct and upon an open road.




**NICHOLS-SHEPARD SINGLE-CYLINDER TRACTION ENGINE (Engine Side).**

**Built in Five Sizes: 13-40 H. P., 16-50 H. P., 20-70 H. P., 25-85 H. P. and 30-98 H. P. Adapted to Coal, Wood or Straw. 13-40 H. P. and 16-50 H. P. Not Straw Burners.**

# IT SAVES THE FARMER'S THRESH BILL




**THE RED RIVER SPECIAL.**

**Ready to Travel. Wind Stacker and Self-Feeder Attached.**

**Built in Eight Sizes, viz.: 22 x 36 and 28 x 40 Juniors, and 28 x 40, 30 x 46, 32 x 52, 36 x 56, 40 x 60 and 44 x 64.**

**Extra Sizes, like 28 x 46, 30 x 52, 32 x 56, 36 x 60 and 40 x 64, can be furnished with sufficient notice (Width of Separating Conveyors always governs price).**

# The Mechanics of Good Threshing

It was a great many years after the threshing machine had been invented before the true principle upon which its best work could be done, was discovered and applied in the "Vibrator," as invented and manufactured by the original Nichols & Shepard Company.

Scotland has the honor of producing the machine that made the first successful runs in mechanical threshing, due largely to the application, as far as seemed practical, of the methods employed in hand work. Without the cylinder, which was the chief feature of the new invention, power threshing could not have been accomplished at all, then or now; for this part is the one essential in the work that has remained unchanged from its original application and will probably remain unchanged as long as threshing machinery is built or used.

The extension of the beating principle did not occur to any of the numerous manufacturers who followed the Scotch lead, and the endless apron and raddle persistently appeared in every mechanical device for grain separation for more than a hundred years, and, as a matter of fact, is still used in many machines that can lay no claim to original inventive ability.

The founders of the Nichols & Shepard Company were engaged in an agricultural implement manufacturing business that naturally focused their attention upon problems connected with the farm. The heavy toll of waste in threshing convinced them that there must be a better and more economical way of doing this work, and, with the resourceful courage of the pioneer, they set out to provide the means that would accomplish the end desired. Fortunately for the grain-growing world the inventive faculties that were brought to bear were sufficient to adapt the only really successful part of the threshing apparatus, as then made, and apply the same genius that originally produced it to the reclaiming of the grain after it had been beaten out.

The result was a most radical departure from known methods. The beating principle was everywhere applied. Cylinder separation was increased by more beating than had been done before; shakers were added that still further increased it, and a vibrating motion upon these shakers gave the final agitation that secured more grain than had ever been threshed by any machine before the new "Vibrator."

The "Vibrator" was a great success, because it made possible the application to grain threshing by machine of exactly the same system that was used in hand work, admittedly the best for obtaining the utmost returns from any given crop of grain or seeds.

Were it not for the fact that the demands upon the thresher have enormously increased, the "Vibrator" would still be capable of doing the work today, but in order to keep pace with these demands the Nichols & Shepard Company have year by year improved upon their own best work, and through never-lagging energy and inventive skill kept in the forefront with apparatus that would unfailingly meet every need that might arise in securing a grain crop of any condition or size, wherever it might be grown.

In producing the matchless capacity and speed of the Red River Special, not a single point of economy in operation has been sacrificed. Work without waste was the incentive for the beginning of the company's career, and work without waste is still the distinguishing feature in any comparison of its product that may be made today with other machines that endeavor to rival its performance.

In the following pages the intending purchaser will be given a description of the means by which wasteless threshing may be accomplished. Should he be an expert at the business, he will know that no fact is overstated; for the Red River Special machinery is everywhere able to back up the broadest claims that are made in its favor.

## Getting the Grain

The Red River Special separator is built for no other purpose than that of threshing. It gets on to the job the minute the straw enters the machine and it is not through with it until the straw has been sent to the stack robbed of the last seed that it grew.

The Big Cylinder is the first thing that tackles the work. It is a big cylinder and it does big work. There are more teeth, more bars, more weight and more motion than has ever before been built into a threshing cylinder. This means that it will go right along under conditions that will slug and stop an old-style machine. This big

cylinder is housed and mounted in the strongest possible manner. Its shaft and pulleys are ample enough and strong enough so that it must work when power is applied, and, with good feeding or bad feeding, it can't be stopped and is bound to get results.

Working with it, and with capacity increased in the same manner, are the concaves. There is room provided for ten rows of teeth and every one of these rows can be put in and made to work when it is necessary. Grain in the worst possible condition for handling can be sent through with paying returns when machines without the Red River Special capacity for difficult work must be stopped because of ridiculous waste.

Added to the Big Cylinder with its bigger concave and grate surface is the Man Behind the Gun, an exclusive Nichols & Shepard patented device, that makes the big cylinder do most of the work of separation instantly, where every other machine takes more time and more power to get inferior results inside the machine.

## Better Threshing with Bigger Returns

The whole story of the Red River Special is told in these words. No buyer wants a machine that a rival operator can outclass on every job. No user will knowingly hire an outfit that robs him through waste in performing the work that he must have done.

In buying or hiring the Red River Special there is every safeguard against both evils. In the application of the beating principle, as used by the Nichols & Shepard machine alone, the one method that will thoroughly thresh is at command. It *beats* out the grain at the cylinder; it *beats* it through the separating grate against the check plate; it *beats* it down to the grain pan and right here at the cylinder, before the old-style machine has really begun its work, the task of this *beating* machine is nearly completed. What little grain is left in the straw after passing the big beating cylinder, with its immense concave surface and instantly acting Man Behind the Gun, can be secured with certainty by the beating shakers, that would do the work alone were the better method not provided. Nothing that is grain can escape; nothing that is waste can interfere.

When the methods of other makes, with their attempts to secure the grain by gravity, by gentle agitation, by traps and pitfalls in imitation of the Man Behind the Gun, are compared with the Red River Special system, the real effectiveness of the beating force that is continuously applied by the Red River Special will be fully appreciated.

Grain once separated is separated for good in the Red River Special. It is not knocked out by the cylinder and thrown back with the straw to be separated again. The Man Behind the Gun is there to prevent this and to save the power that is required to do the same work twice. The greatest work is done at the cylinder, but in no other machine aside from the Nichols & Shepard is there mechanical provision that will take advantage of the ease with which cylinder separation may be accomplished. Every other make must get the bulk of its work done inside of the machine, and use the extra power required to do it. The Man Behind the Gun does more than any of them, without the use of an inch of motion or an ounce of power. The Nichols & Shepard beating grates would by themselves thresh more grain than any rival machine, but they are not called upon to do it, as the Big Cylinder and Man Behind the Gun have most of the grain out of the straw before it gets past the cylinder.

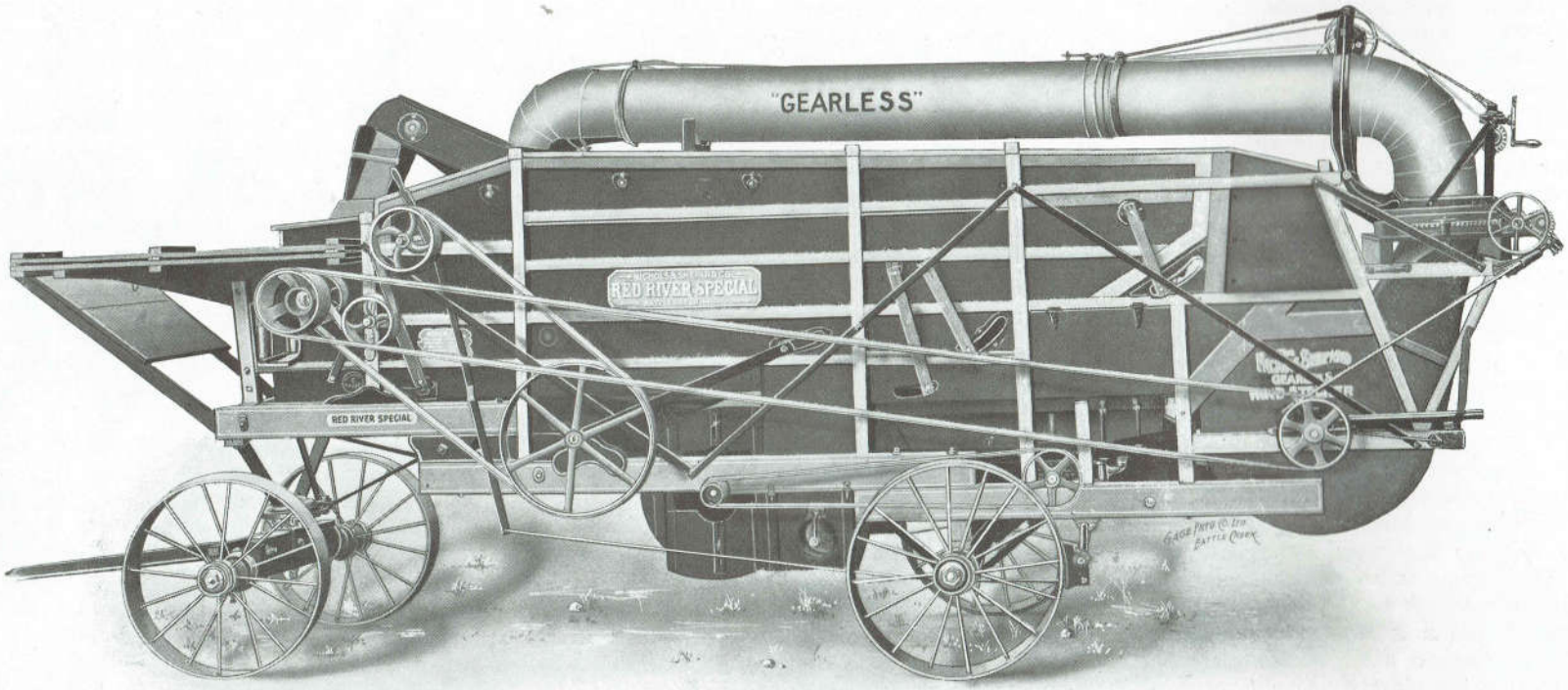
## Speed in the Work

There is no money in slow work. A big day's run at small expense must be secured if money is to be made with a separator. No fact is better known to the builders of the Red River Special and no appliance that will hasten perfect work is omitted from the machine. Threshermen are all good fellows, but few of the farmers that employ them wish to pay for any more of their company than necessary. The grower demands speed in getting his grain, but he will not tolerate waste with haste. He wants all that is coming to him and he wants a machine that will produce it with certainty as well as speed.

Every part of a Red River Special, from the Big Cylinder to the hood at the end of the wind stacker, is designed and built to do the most that can be done in the shortest possible time. Good material, well wrought, good planning and assembling, good provision in power transmission are all combined in the Red River Special, to the end that good work and fast work may be done.

High speed under other conditions means wear and waste. The thoroughness of shop tests and shop methods in the Nichols & Shepard factory have reduced wear to the least possible amount, while producing a machine that makes waste a thing of the past.

# IT SAVES THE FARMER'S THRESH BILL




**THE RED RIVER SPECIAL.**

**Drive Belt Side. Hand Feed. Gearless Wind Stacker.**

**Built in Eight Sizes, viz.: 22 x 36 and 28 x 40 Juniors, and 28 x 40, 30 x 46, 32 x 52, 36 x 56, 40 x 60 and 44 x 64.**

**Extra Sizes, like 28 x 46, 30 x 52, 32 x 56, 36 x 60 and 40 x 64, can be furnished with sufficient notice (Width of Separating Conveyors always governs price).**

## How Wear and Waste Are Avoided

No material that will not pass the most rigid quality tests is allowed to enter into the construction of the Red River Special separator. Frames are built from air-seasoned lumber, trussed and braced at every point of strain. Flawless iron is used in every place where iron should be employed. Steel is substituted where iron lacks strength. Steel truck wheels take the place of wooden ones, and these are made with extra wide and extra heavy tires that no road work can break down. Men who have grown from boyhood in the employ of this one concern know every need that can arise in the making of a perfect separator, and know as well that the rigid policy of perfection in workmanship is the standard that must be followed here. Pride in upholding this standard puts into every detail of construction the elements that defeat wear and waste and prolong life and service.

More money can be made with this class of machinery than with any other, for the reason that no item is neglected that can in any way better the work that it will be called upon to do.

It is known before the first timber is set in position that the finished machine must be able to stand crowding to its full capacity without breakdown or waste. It is known that the finished machine will be sold under a warranty that no other machine of like size can do more or better work under the same conditions. It is known that fast threshing and good threshing is to finally determine the real worth of the machine to the owner or user, and every precaution is taken to make this worth so apparent that it will speak for itself.

## Clean Work as Well as Fast

The problems of threshing are so great in machines that do not use the beating principle that scant attention is given to the work of cleaning the grain for market. The actual separation of the grain from the straw is so quickly and easily done in the Red River Special that much more space and time may be given to its cleaning by the mill, with the result that little or no re-cleaning is ever required, while its product invariably commands the highest market price, with little docking at the elevator. This item alone makes its work more than ordinarily profitable to the growers.

An ample mill will do good work. The one in the Red River Special has all needed capacity and every controlling device that can in any way assist its work.

When grain is heavily mixed on the grain pan with short straw and chaff, the opening in the graduated chaffer can be increased so that just the right blast from the mill will pass through to loosen the mass. This graduated chaffer is attached to the end of the grain pan, where it will give the operator absolute control of the flow of grain to the sieves, and he is never bothered by clogging or interruption of the supply.

Two wind-boards can be set to direct the blast to the exact point where it will do the best work, and the wind is evenly distributed the entire length of the shoe. The blast may be regulated from full force to none at all.

Chaffer, end shake shoe, sieves and mill—all have adjustments that can be set to clean grain in any condition that it is possible to handle in the greatest quantity that the machine will separate. Six-thousand-bushel runs are by no means uncommon in the grain-growing region of the Northwest—with every bushel clean, marketable grain direct from the machine.

The sieve equipment that is furnished with the Red River Special is perfectly interchangeable. The operator does not have to climb on or into the machine when a change is to be made. The proper sieve is slipped into place from the ground, an automatic lock that never lets go, holds it when crowded down, and the run may be started without waste of time. The sieve opening is at the side of the machine and within handy reaching distance, as is shown in the description of the shoe, further along in this catalogue.

There is scarcely a business known in which equipment plays a more important part than in the business of threshing. The intending purchaser of an outfit will therefore best serve himself by a thorough understanding of the elements and the mechanism that have everywhere proved the Red River Special line the best for the purpose.

They are clearly set forth in this catalogue, to which the reader's best attention is invited. There are no overstatements regarding the machine or the work that it will do.

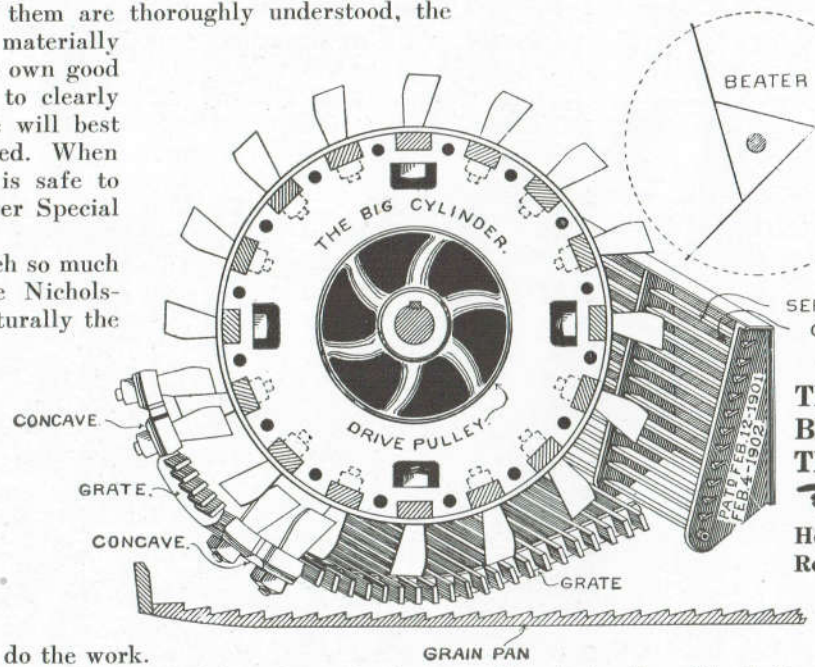
The closest possible comparison with other makes and methods is requested. *Where a choice is made upon merit alone, the Red River Special never loses a sale.*

# The Big Cylinder and "Man Behind the Gun"

While the reader has been informed in a general way as to the vital differences between the Red River Special separator and other makes, it will be well to take up, one by one, the superior features that the Nichols & Shepard Company provide to give to it its real efficiency. When this is done and all of them are thoroughly understood, the buyer's choice of a machine is materially simplified. Point by point, his own good judgment may be relied upon to clearly indicate to him which machine will best serve him for every threshing need. When such a decision is reached, it is safe to predict that one more Red River Special may then be booked as sold.

The Big Cylinder, with which so much of the marvelous work of the Nichols-Shepard machine is done, is naturally the first part to engage attention.

Other makers have attempted to use the Big Cylinder, but without the Nichols & Shepard Company's patented construction to make it effective, have merely succeeded in increasing the trouble and the waste which overcrowding will produce in any type of machine for threshing where gravity instead of beating must do the work.




**THE "MAN BEHIND THE GUN."**

**Here Alone the Record is Made.**

An immense amount of grain may be threshed by a big cylinder in any machine, but, unless it is immediately saved and taken out of the straw, overcapacity at the cylinder soon clogs inadequate separating devices at the rear. The Man Behind the Gun is the only device that can hold this balance right. Ninety per cent of the grain is threshed out at the cylinder in the Red River Special and is well on its way to its cleaning mill before other makes can begin their work of getting it out of the straw.

The Big Cylinder is thus made an important item in increasing the amount of grain that can be threshed with rapidity and ease in a Red River Special machine, where every part is designed to do the greatest possible service. The cylinder teeth are of special shape and thickness, so heavy and strong that they seldom break. They are also heavily grooved, which still further increases their threshing capacity. The bars in which they are set are double the ordinary weight and strength. The shaft is of extra large diameter and is run in extra long boxes, thoroughly lubricated, to prevent heating or getting out of line. The momentum of this massive construction keeps motion steady under the worst possible conditions of grain or feeding.

There is so much strength in the shaft that no yoke is required outside of the drive pulley. This cuts out all loss of time in getting the main belt on or off. It can be done instantly. The belt reel enables the operator to quickly roll his belt and keep it where it is needed for use.

Big pulleys and wide belts transmit ample power to the cylinder, and a proportionate increase of belt surface is made throughout the machine. With belt slippage reduced to the least possible amount, the working capacity of the machine is everywhere increased. It does more work because lost motion is practically done away with. It works to the limit in every part while the machine is on the job.

The Big Cylinder permits the use of more concave surface. In bad conditions six, eight, or ten rows of concave teeth can be used. This means that the Red River Special can be kept at work when other machines must shut down and wait. This is important when threshing must be done quickly to take advantage of high prices. Ability to run at critical times will often more than pay the thresherman's bill in the extra profit that can be secured. An idle machine on a falling market means a loss that may never be regained.

The Red River Special separates most of the grain at the cylinder. There is no bother at the rear when bad conditions must be met. The Big Cylinder, together with the Man Behind the Gun, disposes of the bulk of the grain so quickly that it is almost impossible to overtax the rest of the machine.

This means constant and profitable work. Beater and shaker motion can be kept up to the speed needed to get the grain out and get the straw through to the stacker after it has been threshed clean. No part is strained and no power is wasted. The Big Cylinder is important, but it is not the whole thing. It is merely a dependable portion of a complete mechanism that is designed throughout to thresh fast and thresh clean. The capacity of the cylinder has been wonderfully increased, but all capacities have been increased to keep up with the work that it can do. Balance has been maintained. From feeder to stacker every part will do its proper share and no part is overstrained.

This perfect balance of mechanical parts gives unusually long life to the machine as a whole. The absolute harmony maintained throughout is such that no portion of the mechanism must be called upon for double duty, with its necessary increase of friction and wear.

Hundreds of Red River Special separators that have been in active service for ten years or more are holding their own against new machines of other makes, and doing their work in such an acceptable manner that competition is out of the question.

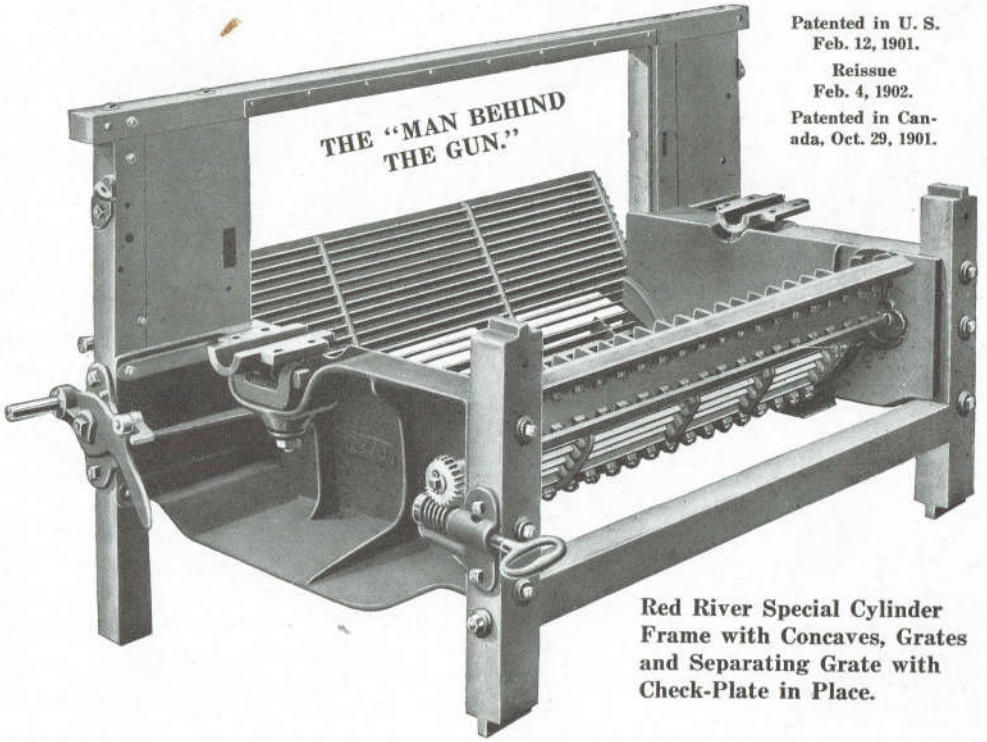
**For Threshing with Profit. Preparedness is Here.**

**Nichols and Shepard's Separating Grate and Check-Plate.**

**Patented in U. S. Feb. 12, 1901.**

**Reissue Feb. 4, 1902.**

**Patented in Canada, Oct. 29, 1901.**



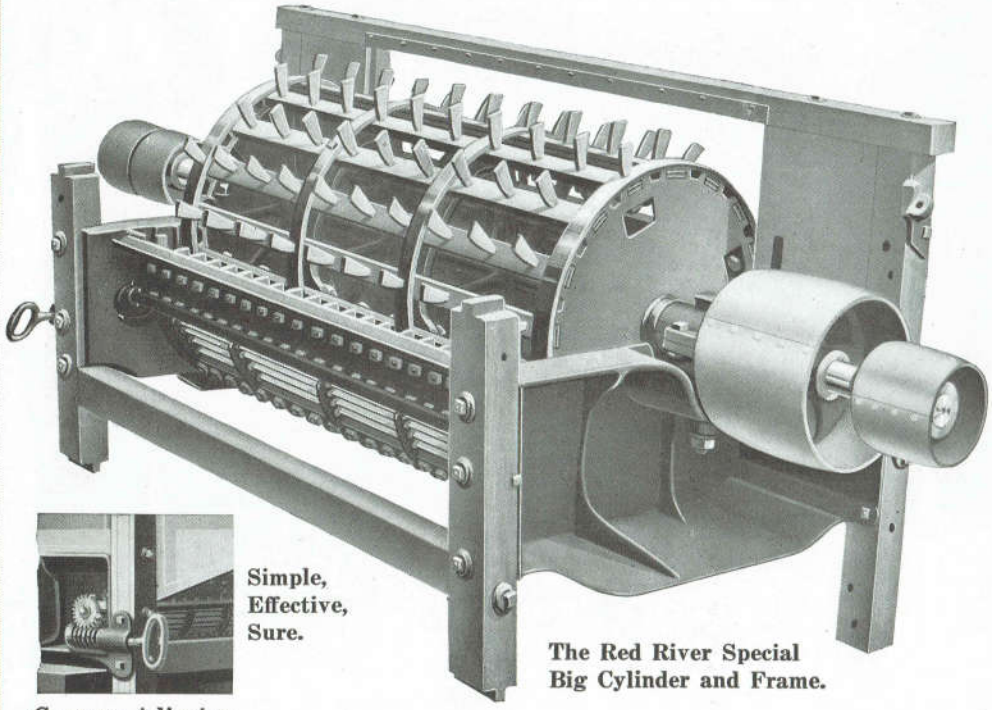

**Red River Special Cylinder Frame with Concaves, Grates and Separating Grate with Check-Plate in Place.**

# The Man Behind the Gun

Were it not that it is strongly protected by international patents, owned by the Nichols & Shepard Company, every threshing machine would soon have a "Man Behind the Gun."

A Big Cylinder, equipped with this single piece of apparatus, will thresh and save more grain than many an old-style machine can do with its complete outfit of beaters, forks, pickers, shakers, raddles, and contrivances without name, which are used to get the grain out of the straw.

Clumsy imitations of the Man Behind the Gun have also been tried and have failed, because its work can be well done by no method aside from the one which the Nichols-Shepard patents control.



**The Red River Special Big Cylinder and Frame.**



**Concave Adjuster.**

**Simple, Effective, Sure.**

It is a simple part, but it marks the greatest advance in threshing machine efficiency which has been invented since the Nichols & Shepard "Vibrator" separator made the first change for the better in the old endless apron machine.

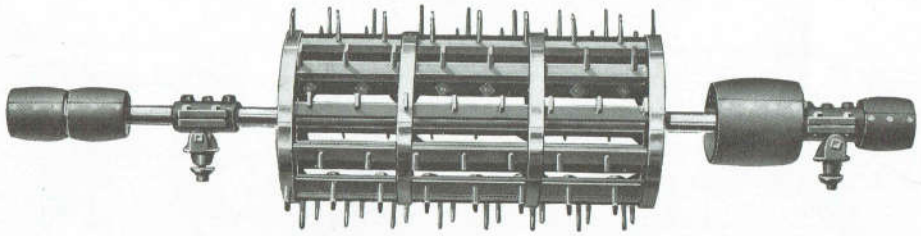
Its invention and application by this company is but another of the many improvements in threshing operations which have resulted from the development of its one great principle of beating out the grain.

The Big Cylinder, with its enormous increase of capacity, cannot be used to advantage without the Separating Grate and Check-Plate, the Man Behind the Gun, to supplement its work. With this device in place a cylinder of any size and capacity may well be used, for, no matter what amount of grain the cylinder is able to separate, the Man Behind the Gun will save the last kernel that is beaten against its face.

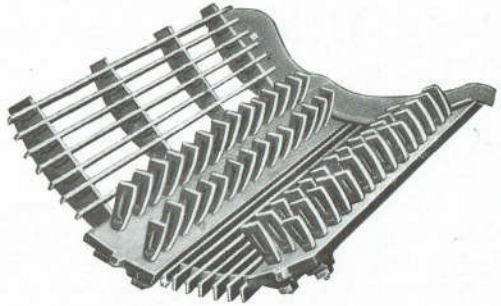
It is this, and this alone, that makes it possible in the Red River Special to separate fully ninety per cent of the grain the moment the straw enters the machine. The regular grates connected with the concaves take a portion of this, the same as in any machine, but without the Separating Grate and Check-Plate much of the flying grain would pass on with the straw.

A study of the various diagrams will show how easily this quick separation is accomplished. The Separating Grate, with the Check-Plate behind, stands close in the rear of the Big Cylinder, so that nearly one-half of its diameter is covered by concaves and grate surface combined, but the major portion of the work of separation is done by beating force instead of by gravity, as in all other separation.

Grain thrown back by the high speed at which the Big Cylinder is driven, is flung through the slats of the Separating Grate, to strike the Check-Plate and fall to the grain pan beneath. The revolving beater also beats out much of the loosened grain just as the straw is passing to the first shaker, which still further increases the separation at this point, where it is most easily taken care of in the Red River machine. Fast, thorough and clean threshing is done this way; there is no other just as good, so why should time and money be wasted in producing inferior work?



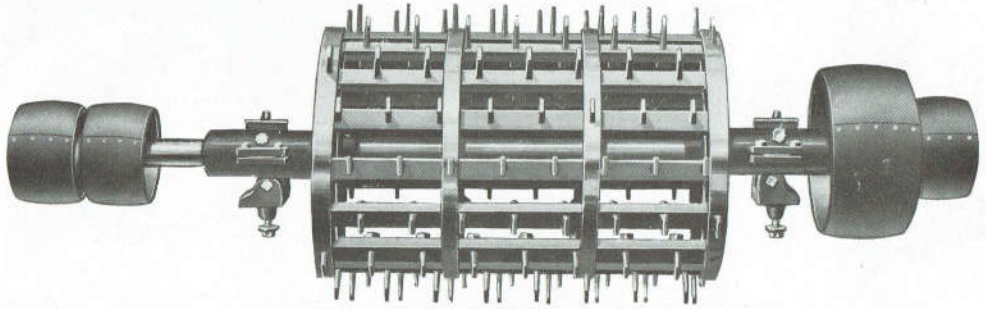
THE USUAL TWELVE-BAR CYLINDER
Seen in Other Makes.



CONCAVES AND GRATES IN SMALL CYLINDER THRESHERS.

# Cylinder Separation is Effective Separation

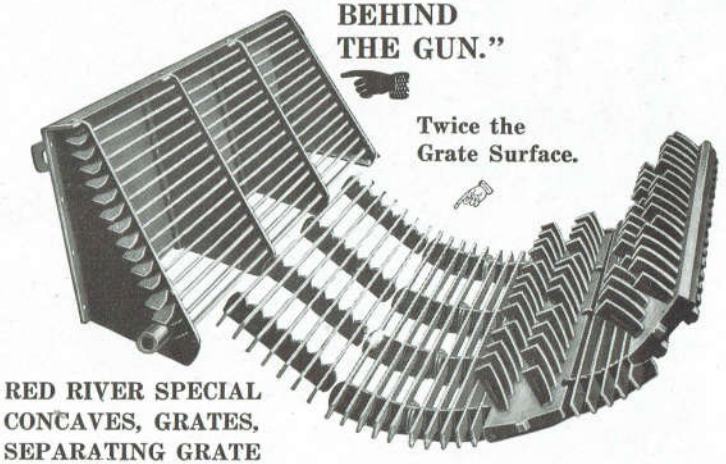
## But It Must Be Done Without Waste



THE NICHOLS-SHEPARD BIG CYLINDER.
Note the Large Cylinder Boxes and the Big Pulleys.

THE "MAN BEHIND THE GUN."

Twice the Grate Surface.



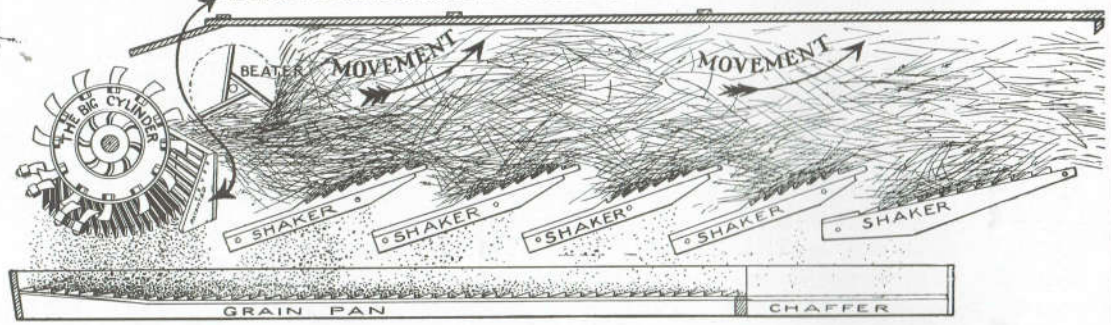
RED RIVER SPECIAL CONCAVES, GRATES, SEPARATING GRATE and CHECK-PLATE.

Patented in U. S., Feb. 12, 1901, and Feb. 4, 1902.
Patented in Canada, Oct. 29, 1901.

**This is the Whole Story of Modern, Clean and Successful Threshing.**

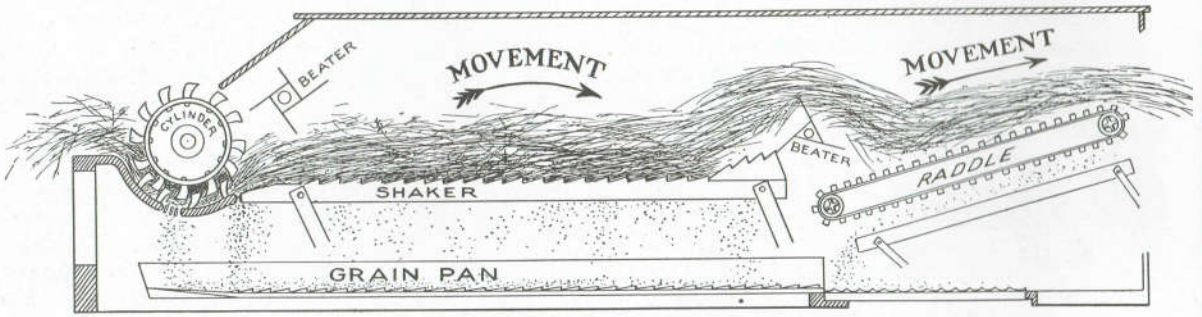
*This is the way to Separate by hand with a pitchfork*

*THE MAN BEHIND THE GUN* PATENTED IN U.S. FEB. 12 - 1901 PATENTED IN CANADA OCT. 29-1901




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

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




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

**BEAT OUT THE GRAIN, or You'll Find It in the Stack. It Won't Fall Out When You Thresh.**

# Proving the Red River Special Way

The difference between persuasion and force can nowhere be better illustrated than in the threshing of grain. With everything running smoothly and conditions just right, many of the old-style machines are able to make a showing that is ordinarily considered good.

But the buyer of a threshing outfit well knows that conditions are seldom exactly right. If he is to get a profit from his work he must have a machine that will get paying results under the worst conditions as well as the best. Coaxing the grain into the bag is all very well when it is almost ready to go of its own accord, but when he is up against a wet season with every kernel glued in tight, he will be glad to own an outfit that will get results by force.

The Red River Special will get these results when threshing can be done at all. As conditions improve, it will thresh more grain. When other makes are going to capacity, it begins to break their records, and all because it is alone in its method of beating out the grain. It is a simple matter to prove why beating is the best. That fact can be firmly fixed before you invest a cent in any kind of threshing machine.

Scatter a bundle of intermingled straw, chaff and grain upon the barn floor and try by hand all of the methods that are in use. You will need a pitchfork to do the work. Try the old-style methods first, because they are all of the persuasive kind, as opposed to force.

Stick your fork in the straw and draw it across the floor, with as much straw as you can make it hold. This is the way that a well-behaved raddle machine goes about its business. The straw moves along quietly, and the grain falls out. You don't see much grain? Well, try again. That is the way your work is going to be done with that type of machine.

You don't think much of that style? Here's another: Collect the straw, give it a few more thumps, and pitch it across the floor, well up in the air. The grain is heavy, it is loosened by your thumping, and it is going to fall out before it strikes the floor. Let us see. Yes, here's quite a little scattered along the path of your straw. This pitching scheme is certainly all right. Many of the well-known machines have a lot of forks right behind the cylinder to do this kind of work and use plenty of power to drive them.

Too much grain left in the straw, you say. You must be wrong. That straw has been twice threshed by dragging and pitching combined. All machines, except the Red River Special, work with one or both of these methods, which are gentle and kind and do not beat the straw.

You wish to try the Red River way? All right; but remember that it is rather rough with the straw. However, you are the one who is buying the machine and perhaps you are looking for all the grain. Take off your coat, roll up your sleeves, and go to it!

Here is your straw. Take a large forkful, beat it up thoroughly, like a Big Cylinder, toss it up in the air and strike it four or five times on the under side with the tines before it again touches the floor. This striking is to imitate the work of the Beating Shakers that constantly strike the straw. The grain showers through your fork and collects in a heap, because you are now applying a beating force to separate it from the straw.

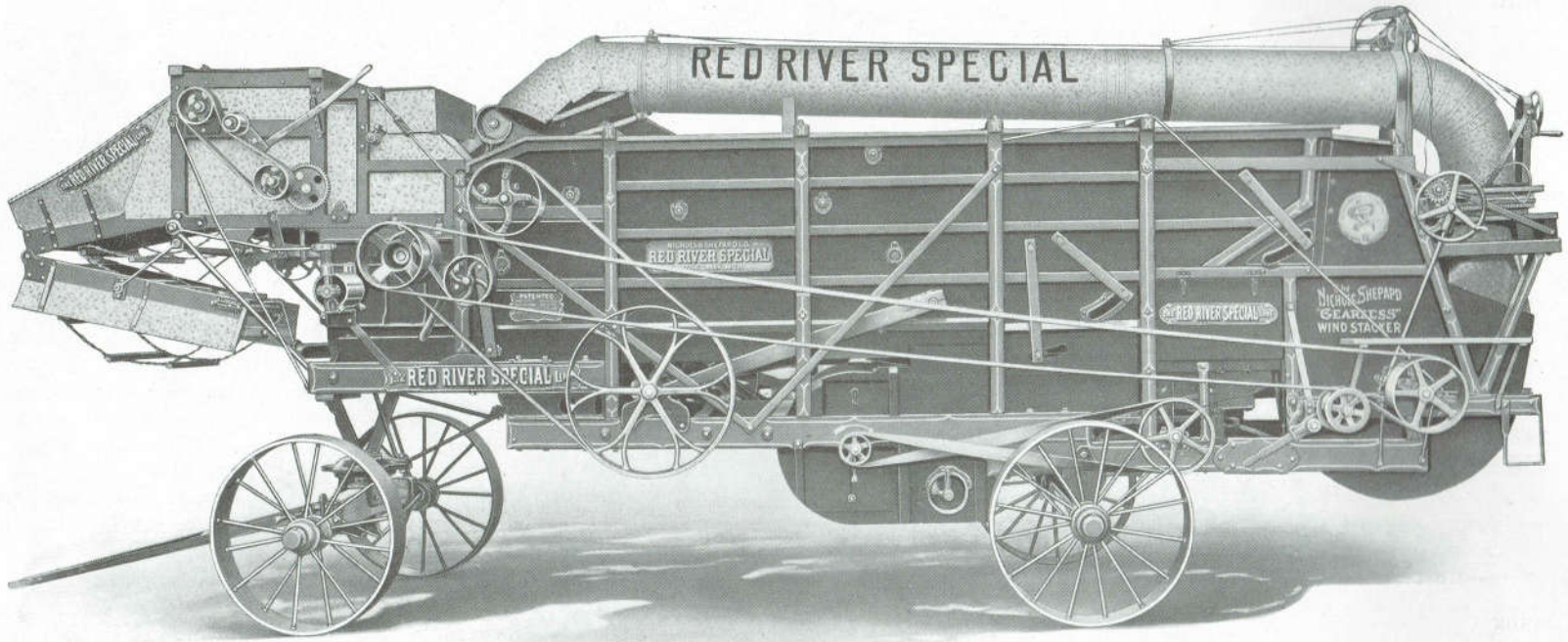
By this method, coupled with vigorous work, you are able to secure the last kernel that there is and the straw may now be thrown aside. The grain is all beaten out, but it is still mixed with the chaff, which the fanning mill will remove to make it perfectly clean.

This illustrates the Red River Special system. You have had to work, and work lively, but results are sure and count for something when done.

*You have proved that beating is the only true way to separate the grain.* The harder it is applied, the quicker the work is done. A machine can generate more force than can be developed by hand, and speed will increase the amount of work that can be done in a given time. Momentum and velocity both play an important part when the Red River Special gets under way.

The straw and grain are beaten by the Big Cylinder and hurled back into the machine with a thousand times the force and speed that you are able to give by hand with your fork, but the action is exactly the same. A thousand times as much grain is loosened and secured in less time than you tossed your bunch of straw. The open grate of the Man Behind the Gun is the pitchfork of the machine and it

# IT SAVES THE FARMER'S THRESH BILL




**DRIVE BELT SIDE. View with Gearless Wind Stacker and Self-Feeder Loaded for Travel.**

**Built in Eight Sizes, viz.: 22 x 36 and 28 x 40 Juniors, and 28 x 40, 30 x 46, 32 x 52, 36 x 56, 40 x 60 and 44 x 64.**

**Extra Sizes, like 28 x 46, 30 x 52, 32 x 56, 36 x 60 and 40 x 64, can be furnished with sufficient notice (Width of Separating Conveyors always governs price).**

does the same effective work. The grain goes through a thousand times as fast, but it has got to go and cannot escape if it is loosened from the head at all. Nine-tenths of it *is* separated by the first action of the machine, and nine-tenths of the work is done right at the cylinder. It will not have to be done a second time, because the grain is already on its way to be cleaned and sacked.

The work of the shakers is lessened, for, with the high percentage of cylinder separation, they have but a tenth of the grain to secure. That none may escape, the full separating capacity of an ordinary machine is provided to do this work. The beating action, the same that you used with your fork, is everywhere applied. The shakers, each a separate unit, are operated with a violent beating motion. The commonly used rocking, which the outside arc of the pitman gives, is not employed. The inside arc of the same device tosses the straw up and beats it instead of throwing it back through the machine. The beating is applied beneath the flow of straw and the weight of the grain causes it to fly out when the fall of the straw is stopped, just as it would be done by hand.

There are no attachments for coaxing the straw out of the machine. No pickers, forks, raddles or aprons are used. The straw does not bunch or clog and does not need to be hurried out of the way. Plenty of time is given to make the separation thorough and complete. The Red River Special *beats out the grain.* The straw will take care of itself.

No other separator is made that will remove the grain by force in every operation that it performs. In every other threshing device the grain must fall out behind the cylinder while the straw is being pitched or dragged. Your work with the pitchfork has shown that both of these methods are wasteful. Too much grain goes out with the straw.

*To get all of the grain you must beat it out.* The Red River Special is the only machine that consistently does this from beginning to end. That is why it leads the world. The thresherman is paid for the results that he produces. The largest income can be made from the best machine. Profit and permanent customers are both obtained and the satisfaction that follows work well done is left behind to constantly advertise the fact that no machine can separate more grain or deliver it in better condition for market than this one time-tried and dependable *beating* separator.

It makes no difference in the effectiveness of the beating plan what the size of the separator may be. Eight sizes are regularly built in the Red River line with capacity for clean work in exact proportion to the dimensions which are used. The great success of the Man Behind the Gun in the smaller size of the Red River Special has brought into the market many little machines which try to make a virtue of diminutive size. Lacking the patented cylinder separation which does the greater portion of the grain saving in all of the Red River Specials, the tendency to waste is greatly increased because of the inability of other makers to concentrate good separation into the shortened area which reduction of space makes necessary.

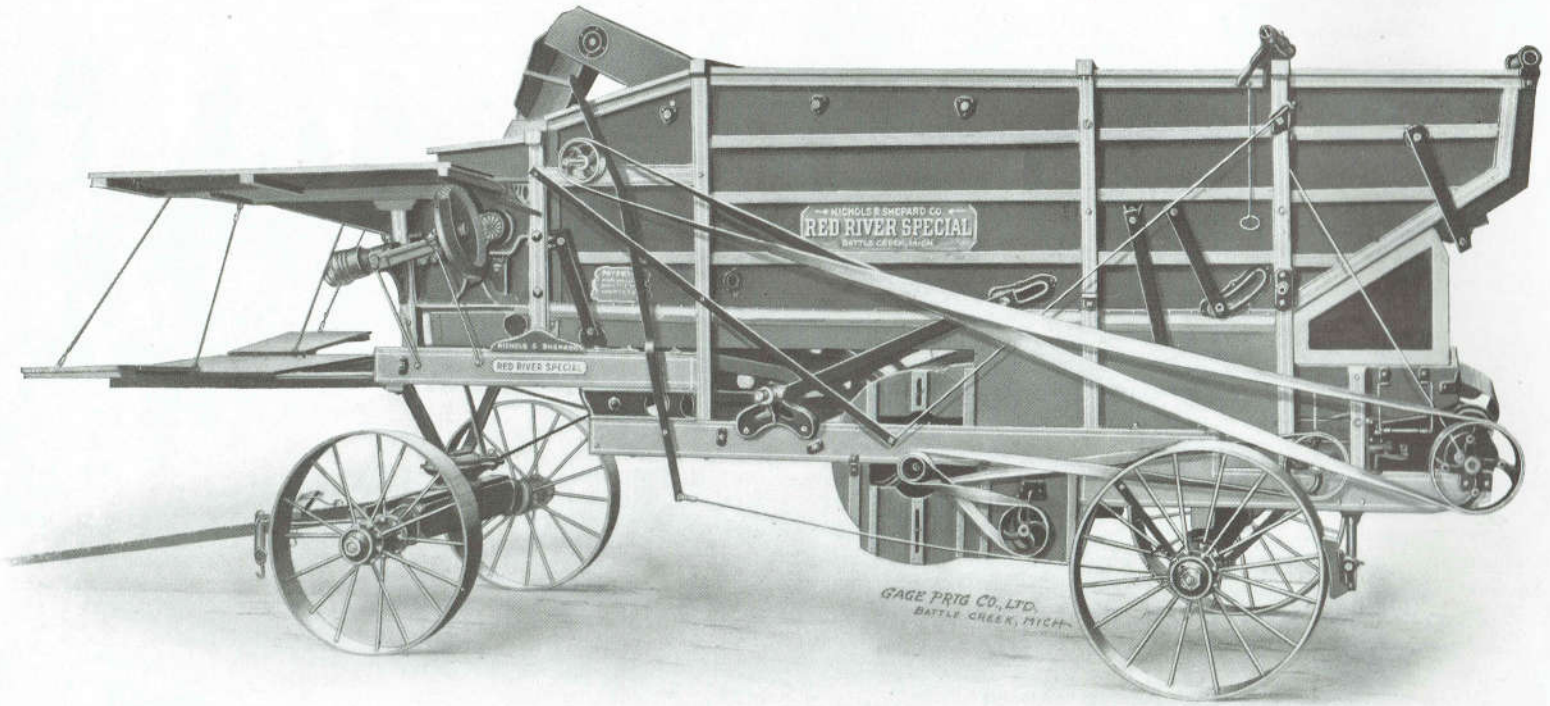
In all sizes of the Nichols & Shepard threshing machines the grain taken out at the cylinder never goes into the straw again. So that, little or big, the capacity of this machine for thorough work is maintained. In other machines, small ones particularly, where the cylinder is merely loosening and not separating the grain, the lessening of the space allowed for separation must, on account of the limited area in which grain can be reclaimed, produce more waste. In most kinds of separators which lack beating mechanism there is not room enough to keep the grain out of the stack in the largest sizes that are built.

No arguments can be advanced that will down these facts. No grain separator that employs other methods than beating can produce Red River Special results in machines of equal size and rating. No man who buys a threshing outfit buys it to waste space, power, effort or grain.

If every one of these items can be conserved to the buyer or user of the Red River Special, what can be gained by the purchase or operation of a second-rate machine?

## Red River Results "Ring up the Cash"

# IT SAVES THE FARMER'S THRESH BILL




**THE RED RIVER SPECIAL.**

**Geared for Horse-Power. View of Gear Side.**

**Built in Four Sizes, viz.: 22 x 36 and 28 x 40 Juniors, and 28 x 40 and 30 x 46.**

# The Small or Junior Red River Special

There are plenty of farmers who grow enough grain to make it pay to own a threshing machine. Not a big 44 x 64, of course, but a small outfit that can show from 700 to 1,000 bushels, well threshed and cleaned, for a day's run.

The Junior Red River Special was built to meet this demand, and its success has been of the same wonderful character that has made the larger Nichols & Shepard machines world-famous.

Other manufacturers have attempted to build small machines in competition, but have found it necessary to make such radical changes in construction that their capacity has been reduced out of all proportion to their size.

No such changes are required in the Red River Special plan of beating out the grain. Nothing need be changed in making the machine more compact except the size of the various parts. The working principle is exactly the same as in the largest separator of the line.

The cylinder has twelve instead of sixteen bars, but it is built upon the same large lines as used in the big machine.

The Man Behind the Gun is proportionately reduced in size, but it still is able to separate its 90 per cent of the grain at the cylinder.

The Beating Shakers are just the same in action, but are smaller in size to fit the smaller space in which they must do their work of saving all the grain.

Grain pan, chaffer, shoe and mill are all of the exact pattern that does more but no better work in the big machine. Up to its full capacity the Junior delivers its product equally well cleaned.

Most farmers now own a general purpose power plant that will easily drive the Junior machine. Only 12-horse is required for the 22 x 36 size, with hand-feed attachments and common stacker, and it may be anything that is regularly used on the farm—gasoline, steam, or horse-power.

A small crew is ample to get the full amount of work out of the Junior Red River, so that it is not necessary to provide a gang of extra helpers to get through the threshing season. This makes the expense of securing the grain crop exceedingly small.

In commercial work for profit it can always make a fine showing where big machines are outclassed. It will move more easily over bad roads or through hilly country to clean up the work of out-of-the-way farms that owners of larger machines do not like to tackle. It can travel faster, set quicker and work better, permitting its owner to make money where rival outfits would fall down on getting to the job.

The absence of waste makes the best showing possible when crops are poor. Like any Red River Special, it will get all of the grain that is grown.

In reducing to the Junior size no item of strength or long life is sacrificed. The same care is exercised in the selection of material and the same excellent workmanship is employed in its manufacture. The frame is made in proportionate strength, thoroughly and fully braced. Shafts are heavy and belts are wide, just as in the largest size. It will easily do the work of many makes which have a much larger rated capacity but do not beat out the grain.

Two sizes are made in the Junior style, the smaller with a 22-inch cylinder and a 36-inch rear, and the larger with a 28-inch cylinder and a 40-inch rear.

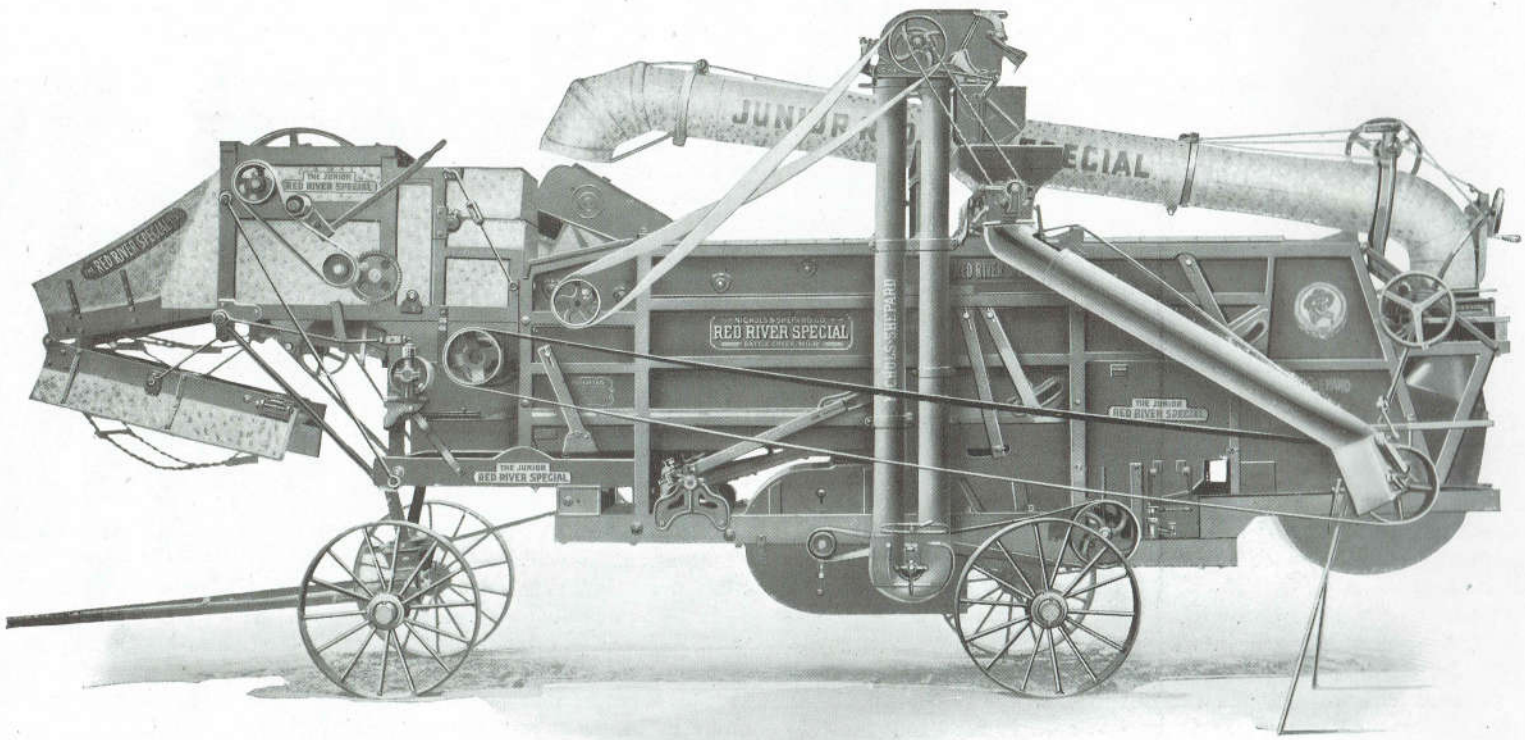
Any good-sized barn will take the Junior in to work, which is a great advantage when the weather is bad. The length over all is a little over thirteen feet and the center of the cylinder is but five feet from the ground.

The little machine goes out with the same big warranty that is given to full-sized namesakes; that is, that "with proper management it is capable of doing more and better work than any other separator made of like size and proportions, working under the same conditions and on the same job."

It lives right up to this confident assertion without effort, and can often stretch a point and get away with the work of a much larger rival machine.

It is principle, rather than proportion, that makes the Red River Special what it is. Results are the same in every size that is built and are in exact ratio to the dimensions which are used.

# The Junior Red River Special—A Little Thresher Which Does Big Work

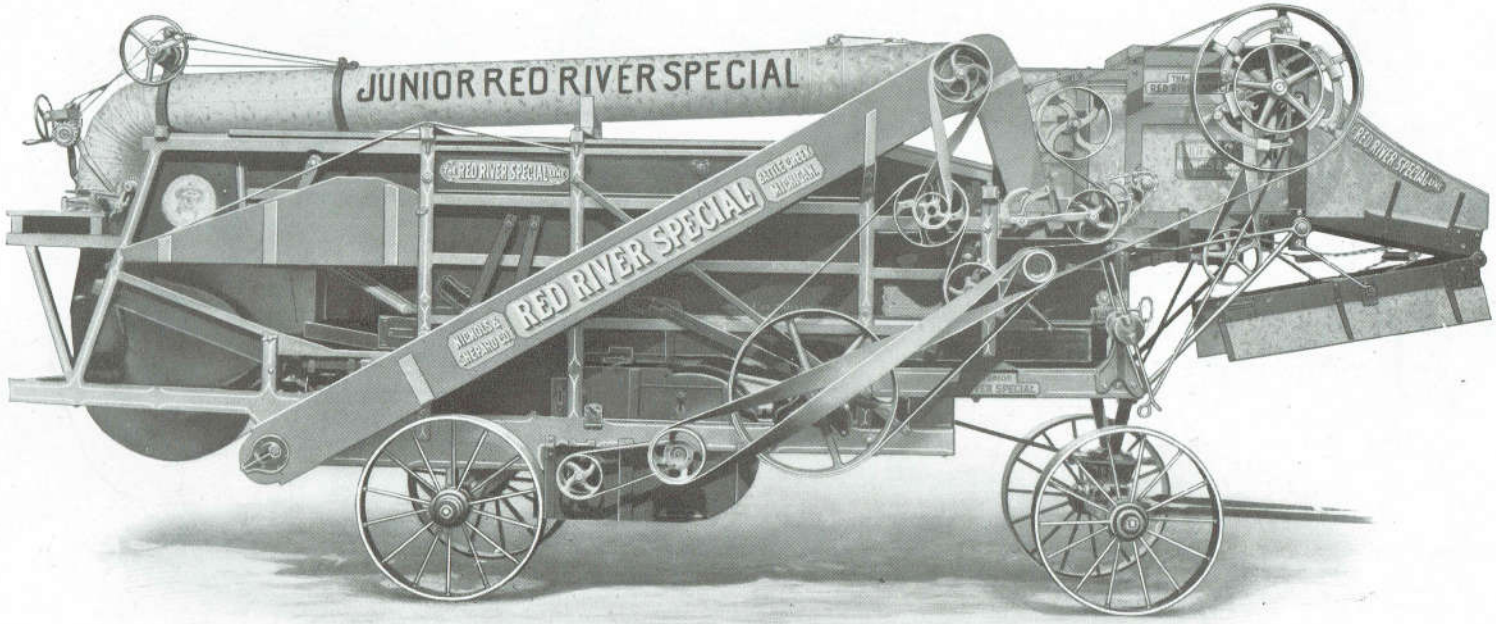



**DRIVE-BELT SIDE OF FULLY EQUIPPED MACHINE.**

**Without Question the Best Thresher Ever Built for a Gas Engine.**

**Built in Two Sizes, viz. : 22 x 36 and 28 x 40. Can be Furnished with Wind Stacker and Self-Feeder.**

# IT SAVES THE FARMER'S THRESH BILL

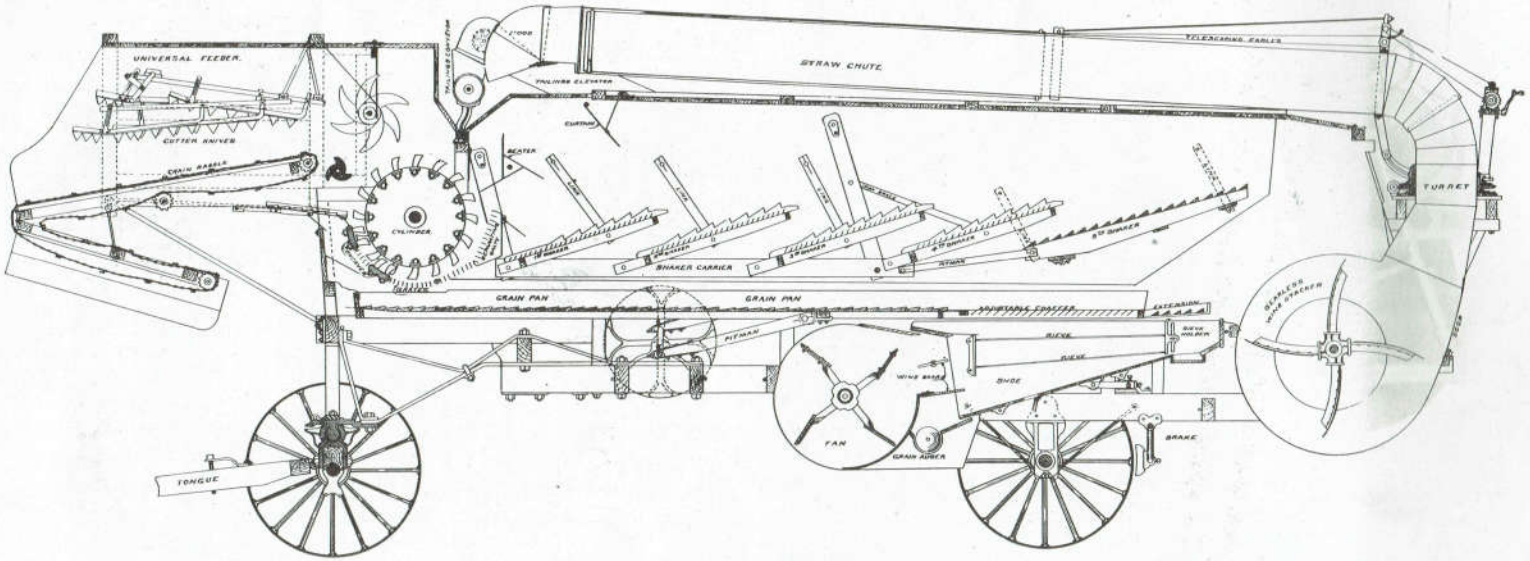



**THE JUNIOR RED RIVER SPECIAL.**

**With Wind Stacker and Self-Feeder Attached. View of Elevator Side.**

**Buiit in Two Sizes, viz.: 22 x 36 and 28 x 40.**

# IT SAVES THE FARMER'S THRESH BILL




**THE RED RIVER SPECIAL.**

**(Sectional View.)**

**Look This Over Carefully. There's More, Faster and Better Grain Separation Done by This Plan Than by Any Other Yet Devised.**


Actual Size.

# Big Teeth

The Big Cylinder requires big teeth. Nothing short of the best material will stand up to the work. Both are provided, and both give the necessary good results.

The Red River Special teeth are made from high-grade steel and are subjected to the most thorough tests for possible flaws before being placed in the machine for use.

This reduces the possibility of breaking to almost none at all. The heavy groove in the side of the tooth, peculiar to the Nichols & Shepard pattern, doubles the threshing capacity. The thick shank, heavy threading and spring-locked nut keep the teeth in place when once properly set.

Concave teeth are equally large and strong, and equally well secured. Working together with the Big Tooth of the cylinder they thresh more and thresh better than any other kind.

The illustration shows the actual size and shape.

**Thick, Heavy and**

**Strong**

**Breakage Almost Unknown**

Actual Size.

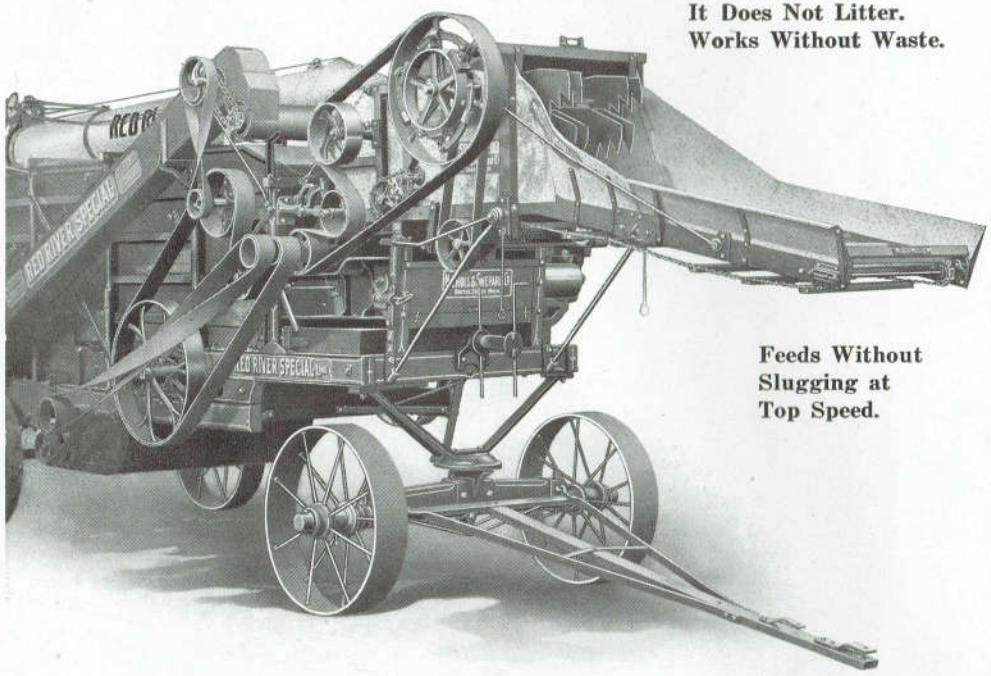
# The Universal Self-Feeder

Many an expert thresherman will give you an offhand opinion that all self-feeders are "no good." He had probably had experiences with them that make him feel that it is so. There is, perhaps, no other attachment to the modern threshing outfit that has caused the usual kindly disposition of the man who runs the outfit to become so thoroughly soured.

In past years, when the self-feeding idea was new, there may have been some justification for the complaints regarding feeders, which seemed to be designed solely to show how much they could not and would not do in lightening the work of the ambitious owner of a machine. But they contained the germ of an idea for faster and more economical threshing and the makers of the Red River Special were among those who were first to recognize this fact. With their characteristic inventive genius and energy, new ideas were advanced and worked out to make the feeder an absolutely reliable part of the mechanism for doing more and better work.

The Nichols-Shepard Universal Self-Feeder, as improved and built by this company, cannot be equaled by any other device or any other method for getting the grain to the separator. The feeder is firmly attached to the machine, supporting legs being entirely unnecessary and therefore dispensed with. The cylinder can be so easily reached by tilting it out of the way that this important feature is practically no different than when feeding by hand.

The Universal can handle more grain without slugging than any other feeder that has yet been made. Headed and bundled grain is properly fed with no loss of speed. A strong carrier of endless links, with slats attached, runs over sprocket wheels at each end of the feeder. Bundles are forcefully and steadily carried forward to the band-cutter knives, the retarder and the cylinder. Two styles of knives, rotary and reciprocating, permit no bundles to pass without the bands being cut and the grain evenly spread.




**It Does Not Litter. Works Without Waste.**

**Feeds Without Slugging at Top Speed.**

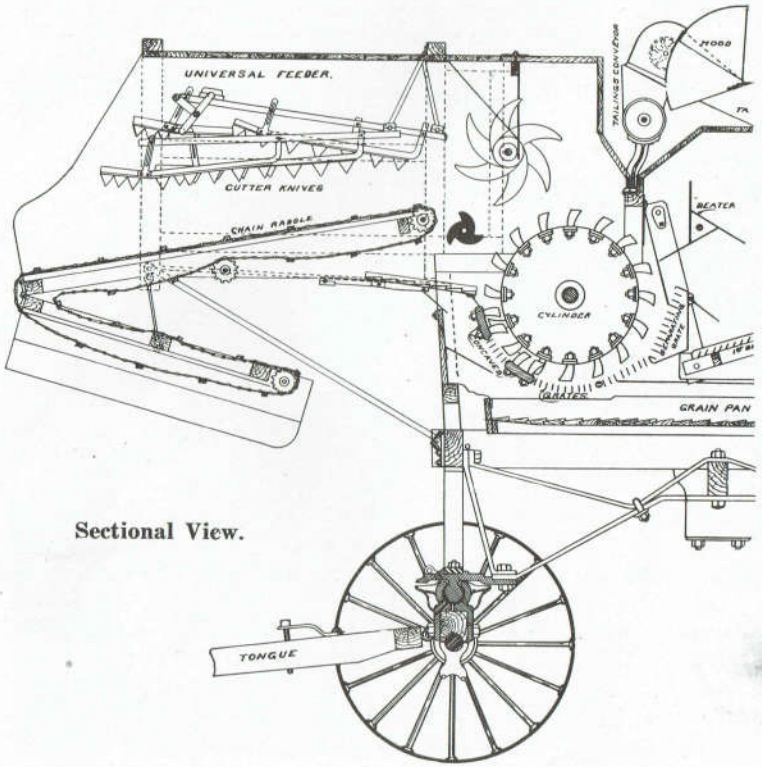
There is a dividing board in the large sizes which helps in fast work when bundled grain is thrown on to full capacity. It can be easily taken out when not needed.

The grain must pass under both sets of knives before it gets to the cylinder. These, with the feeding arms, thoroughly straighten tangled and matted straw, while the retarder, over which it next passes, holds the bottom of the bundle and sends it in top first, as is always done by the experienced hand-feeder. There is no bunching, the governor being so sensitive that motion is steady and feeding is always even with pitching fast or slow.

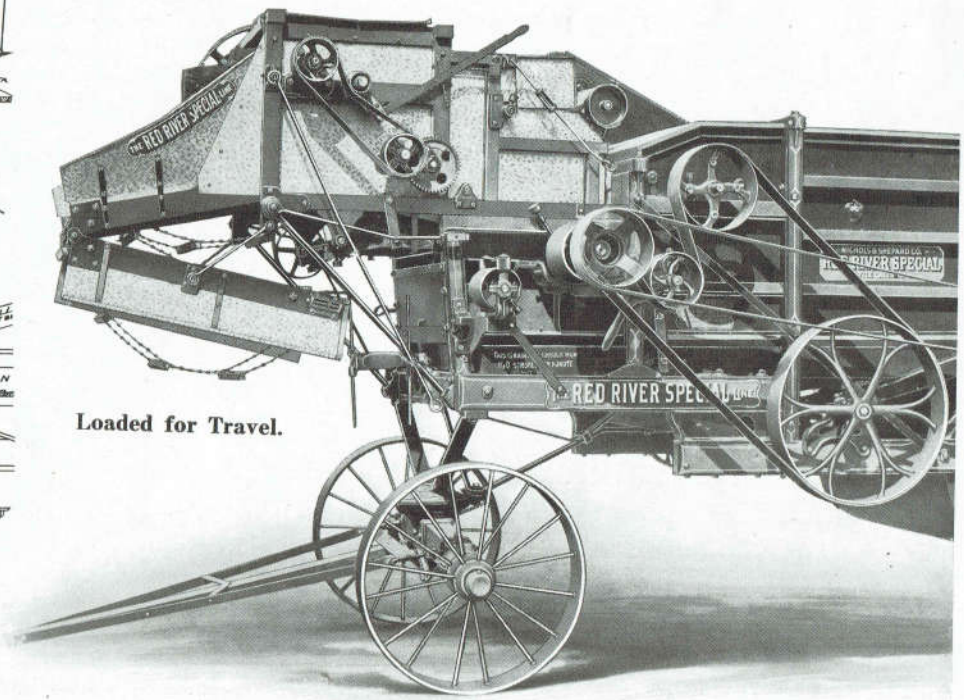
Construction is of the standard Nichols-Shepard type, strength and quality guaranteed. Bearings are large for crank-shaft and arms; moving parts work smoothly and in line. A steel oscillating pan with fish-back risers extends from carrier to cylinder. There is no scattering of loose grain, straw and chaff, which always means waste. Everything must go to the cylinder, to be separated and disposed of in the regular way that the Red River provides for getting all of the grain.

The Universal Self-Feeder is found on no other machine but the Red River Special. It is a properly designed and highly improved part of this wonderfully effective system. Thoroughly tested under every condition of threshing and in comparison with every known feeding device, the Universal has proved itself to be the best yet invented and a most dependable item in saving the farmer's thresh bill. In fact, it comes the nearest to using human intelligence of any feeding device.

When not in use it can be folded for travel by removing the side rods and folding the carrier under. The business end is left attached to the separator proper, of which it becomes a part.




**Sectional View.**




**Loaded for Travel.**

**The Universal Feeder—Inside or Outside—Right All Through.**

An extension, described further on, is of great assistance in handling headed grain. It is an extra attachment that many experienced threshers consider necessary when doing difficult work.

## Universal Feeder Extension

It is very difficult with wet or badly headed grain to keep a uniform supply at the cylinder in proper condition to thresh. Unless some means is provided to have at all times the right amount of grain on the feeder, uneven feeding is bound to occur, which will decrease the threshing capacity.

The extension to the feeder is therefore of value in keeping up a sufficient and steady supply. It gives ample space for handling the quantity needed to keep well spread straw constantly at the cylinder and permits threshing to go ahead rapidly when little work would be possible with any other machine.

The carrier extension is adjusted and speeded in exact time with the Universal Self-Feeder attached to the separator and requires no special attention to keep it at work.

It soon pays for itself when threshing must be done under bad conditions, and is another one of the tested exact attachments that do so much to make the Red River Special go right along when other makes stand still.

It may be purchased as a part of a complete outfit, or it may be added at any time the thresherman desires to ease up on the hard and trying work which a bad season does so much to increase.

## Clover-Hulling Attachment

The beating system of the Red River Special will hull clover in a manner that is practically equal to the work of a special clover-hulling machine.

An extra set of concaves, fitted with corrugated teeth of a special pattern, is the important part of this extra outfit. The sieves which are designed for clover seed make separation and cleaning fast and sure.

It is not claimed that the Red River Special possesses all of the features of a regular clover huller, even when specially equipped, but it will do the occasional job without the expense of an additional machine and will do it well and thoroughly. The small cost of the extra attachments is next to nothing in comparison with the purchase price of a hulling machine that is built to do this work alone.

With the clover-hulling attachment as part of his outfit, the thresherman can go out in competition with special machinery and do profitable work for himself and the farmer as well.

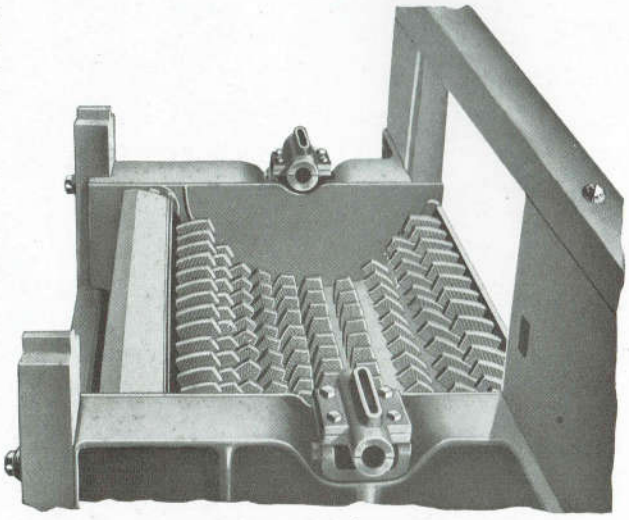
The great capacity of the Red River Special enables it to do much more work in a given time than any regular clover huller, and the use of the attachment is becoming very general.

Terms of purchase are so liberal that owners find in its use a profitable means of increasing their revenue from the separator, and are ordering and applying more of them each year.

That it is in every way practical is a fact that goes without saying. It is a popular part of a Red River Special equipment for increasing the amount of paying work that can be done by the possessor of the only beating machine.

Small seeds of every kind may be rapidly separated and cleaned, oftentimes in a much better manner than the same work can be done by expensive apparatus that will do nothing else.

The company is always ready to consider any unusual problem in the securing of special seed crops. An inquiry will bring the information desired as to the necessary attachments for doing this class of threshing.



**Clover Huller Concave.**

# The End Shake Shoe

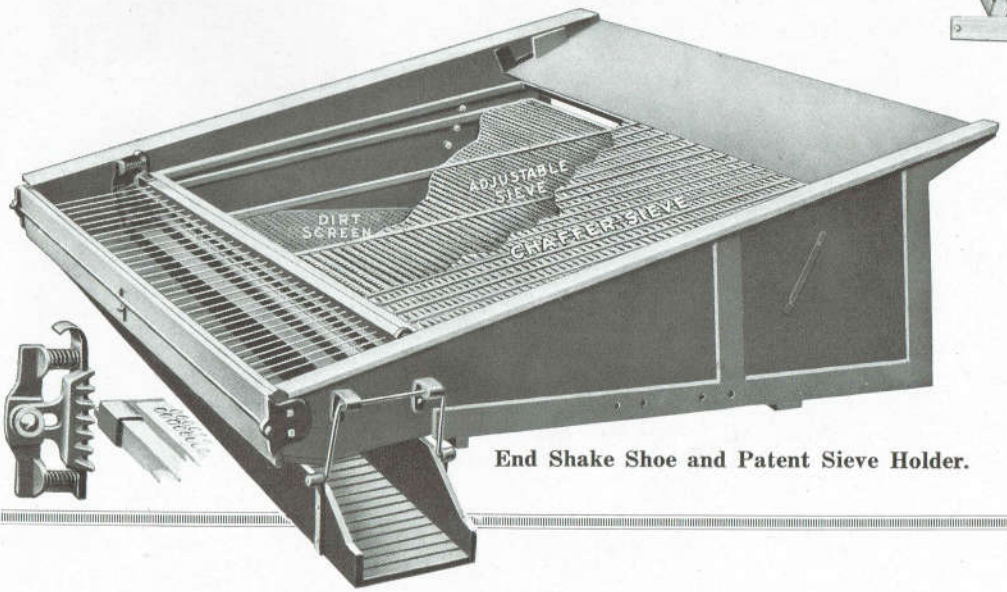
By the time that an ordinary separator is lazily stirring up the straw for the last time, in the hope that a little more grain may fall through the raddle before it escapes to the stack, the Red River Special has beaten the straw innumerable times over shakers where violent agitation has been repeatedly applied to thresh out all of the grain. This process gets results. There is nothing left to be done but to clear away the short straw and chaff.

As the mass of grain and waste reaches the end of the grain pan it passes to the chaffer, where a regulated blast from the fan quickly disposes of the light chaff and refuse. The slats in the chaffer being graduated and adjustable, the grain is dropped to the sieves with just the right distribution to clean it perfectly. A full set of sieves is furnished to meet every condition. The grain can be so thoroughly cleaned that far less docking is given it than to the product which comes from any other machine.

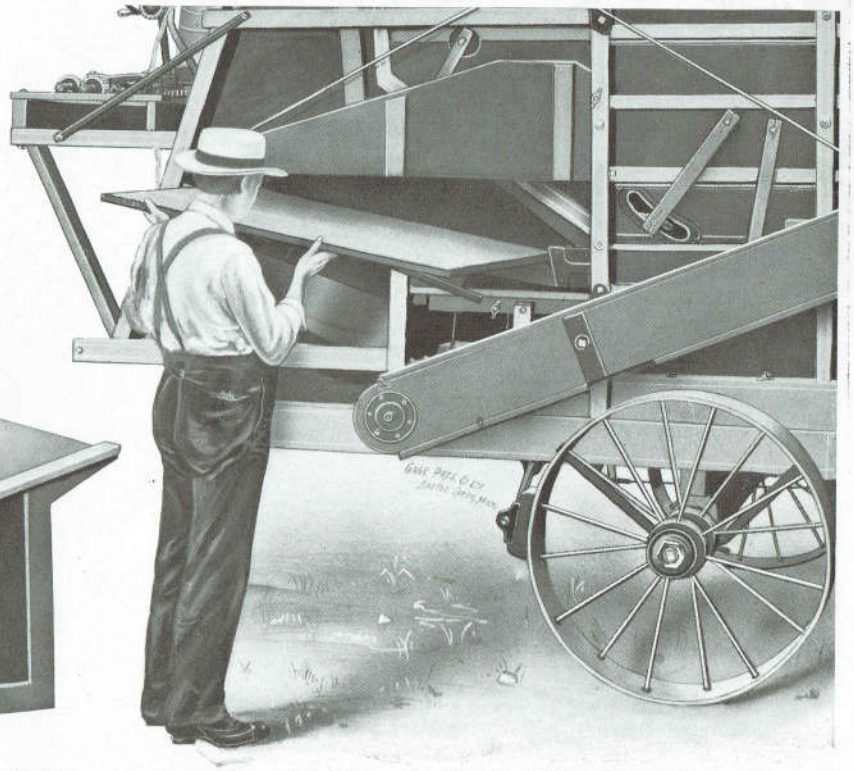
Sieves are interchangeable. No trouble is encountered in placing or removing them when a change is to be made. An automatic lock holds them securely in the shoe.

Two wind-boards are provided with which the blast to the shoe may be regulated to suit conditions. Much or little wind may be evenly distributed across its entire length. When needed to improve results it may also be directed to any part of the sieve.

Sufficient shake is given to keep the grain at all times moving in the shoe. Bad weather or good, there is no clogging here. Cleaning, in common with every other operation which the Red River Special performs, is well and thoroughly done without stoppage or waste.

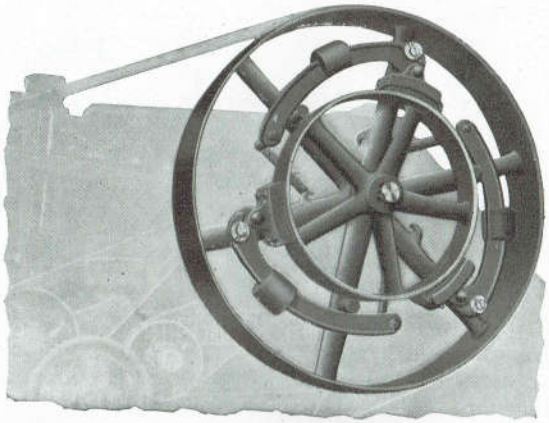



End Shake Shoe and Patent Sieve Holder.

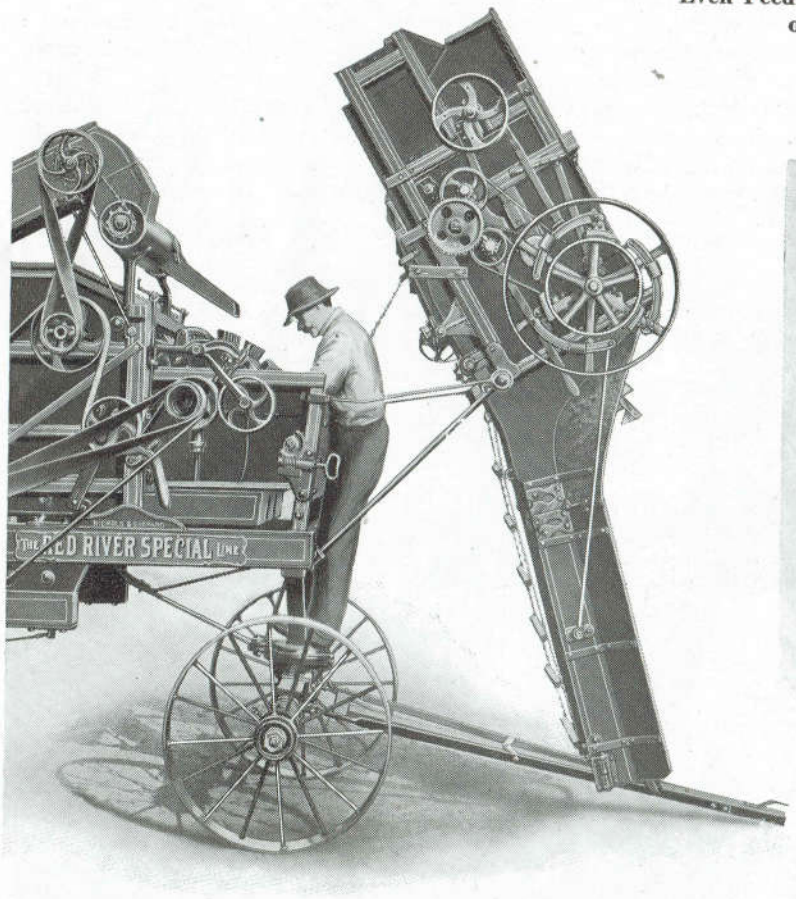


Changing Sieves in the Red River Special.

The Governor is Sensitive and Maintains an Even Feed without Slugging or Stops.



Universal Feeder Governor.




The Universal Self-Feeder Raised to Gain Access to Cylinder and Concaves.

Universal Feeder Extension for Headed Grain. An Extra That Helps in Bad Conditions.

# The Adjustable Graduated Chaffer

Well-cleaned grain has much to do with the profit that is made by the farmer. When heavily docked by elevator or warehouse for re-cleaning, there is more than enough loss in this item to pay for the first-class threshing and cleaning which may always be depended upon from the Red River Special machine.

Good cleaning is as much a matter of well-designed apparatus as any other part of the work. With so much of the separation accomplished at the cylinder, greater attention can be given in the Nichols-Shepard machine to making this cleaning thorough.

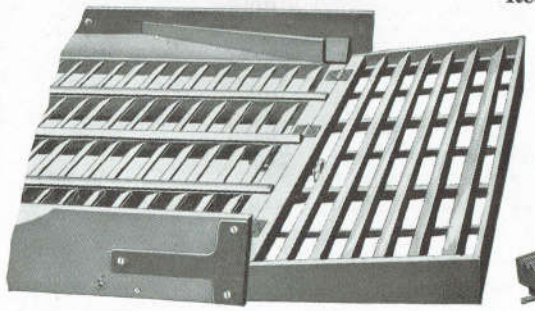
On the back of the grain pan is placed an Adjustable Chaffer, with graduated openings, which is so constructed that it will give to the operator perfect control of the flow of grain to the sieves. A single lever will open or close a series of movable slats so that the grain is distributed exactly right for the mill. When these slats are properly set, just enough of the blast comes through to loosen up the short straw and chaff, at the same time allowing the grain to fall properly distributed to the sieves, where it is finally cleaned. A folding extension upon the end of the grain pan secures all of the grain that other machines so often lose to the stack.

The grain pan is easily accessible. When the deck is raised and the shakers disconnected and turned back, its whole length can be reached. This convenience will appeal to any operator who has tried to get at this pan in other machines.

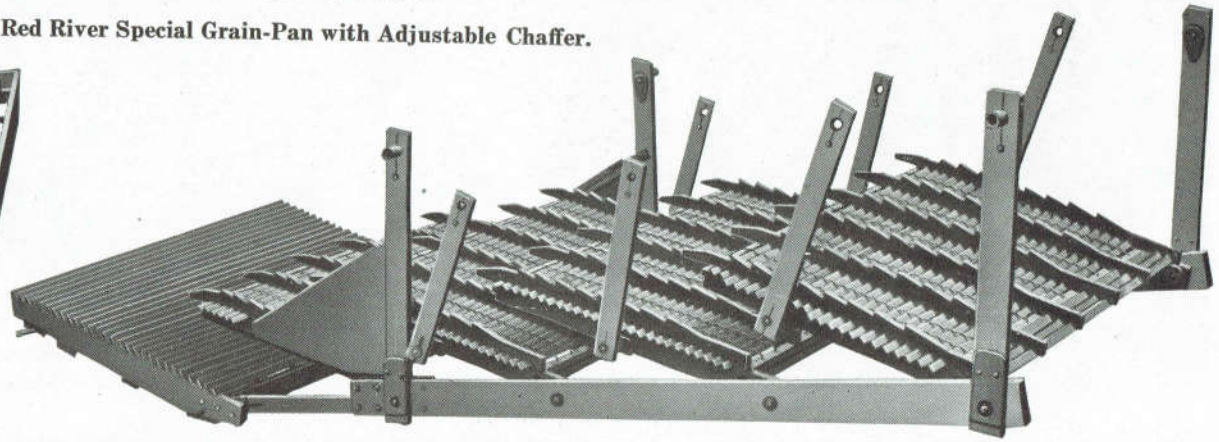
As less than ten per cent of the grain is taken from the straw in the machine, but reaches the mill directly from the Big Cylinder and Man Behind the Gun, it follows that there is ample capacity for decidedly better work in cleaning than in a machine where threshing and cleaning must both be done in the limited space at the rear. The Red River Special cleans as it threshes, with methods that are beyond criticism, and it Saves the Farmer's Thresh Bill on all grains or seeds.


**The Beating Shakers Catch All the Grain That Escapes "The Man Behind the Gun."**

**Red River Special Grain-Pan with Adjustable Chaffer.**

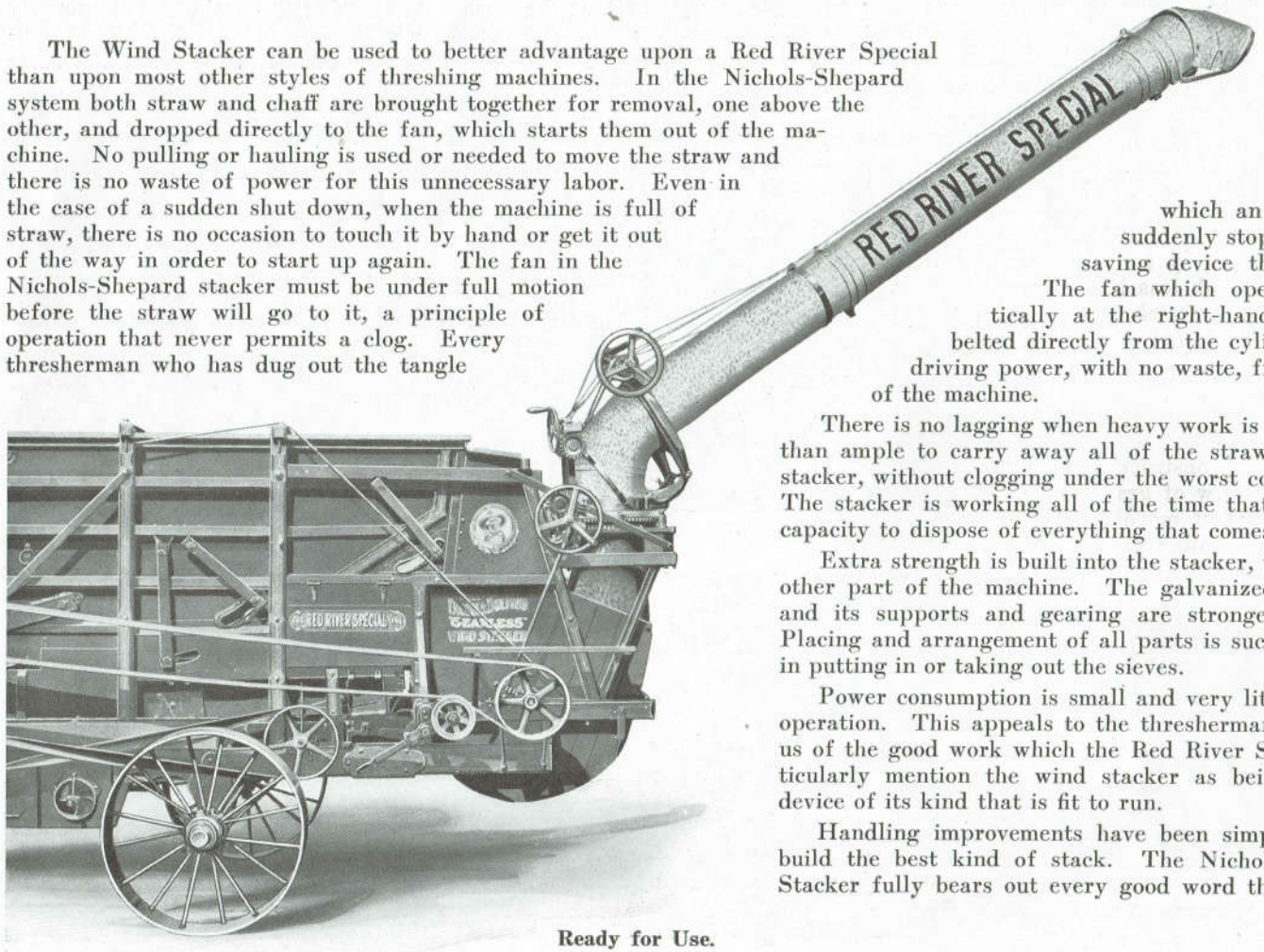


**This Extension to the Grain-Pan Sends the Last Kernel to the Mill.**



# Nichols-Shepard Gearless Wind Stacker

The Wind Stacker can be used to better advantage upon a Red River Special than upon most other styles of threshing machines. In the Nichols-Shepard system both straw and chaff are brought together for removal, one above the other, and dropped directly to the fan, which starts them out of the machine. No pulling or hauling is used or needed to move the straw and there is no waste of power for this unnecessary labor. Even in the case of a sudden shut down, when the machine is full of straw, there is no occasion to touch it by hand or get it out of the way in order to start up again. The fan in the Nichols-Shepard stacker must be under full motion before the straw will go to it, a principle of operation that never permits a clog. Every thresherman who has dug out the tangle which an ordinary stacker makes when suddenly stopped will appreciate this labor-saving device that increases productive time. The fan which operates the stacker stands vertically at the right-hand side of the thresher and is belted directly from the cylinder shaft. This gives ample driving power, with no waste, from one of the strongest parts of the machine.




**Ready for Use.**

There is no lagging when heavy work is to be done. The blast is more than ample to carry away all of the straw that can possibly get to the stacker, without clogging under the worst conditions in which it can come. The stacker is working all of the time that the machine is busy and has capacity to dispose of everything that comes its way.

Extra strength is built into the stacker, the same as it is done in every other part of the machine. The galvanized iron of the chute is heavier and its supports and gearing are stronger than other makes provide. Placing and arrangement of all parts is such that there is no interference in putting in or taking out the sieves.

Power consumption is small and very little noise is made when in full operation. This appeals to the thresherman, and many who write to tell us of the good work which the Red River Special is doing for them, particularly mention the wind stacker as being in their opinion the only device of its kind that is fit to run.

Handling improvements have been simplified until any operator can build the best kind of stack. The Nichols & Shepard Gearless Wind Stacker fully bears out every good word that has been said in its favor.

# Rice Threshing

Rice-growers have always had a serious problem in the threshing of their crop. The ordinary machine has a particularly hard task in the separation of this grain, as the conditions of its growth have a natural tendency to make it unusually difficult to remove from the straw. The hard and brittle kernel is easily cracked when threshed by the swiftly revolving small cylinder of a common separator. The value of the crop is much lessened by this imperfect work.

Special machinery has always been largely used for rice threshing, the work usually requiring several distinct operations to put the crop in marketable condition. With the first trials of the Red River Special it was discovered that all the work could be combined in this one machine and that a perfect method had at last been found to secure and clean the grain at an expense far below the usual cost.

The beating system of separation which is peculiar to the Red River Special is exactly right for rice. The motion of the Big Cylinder can be slowed to give a thorough thresh to the straw, while the easy control of the concaves permits an adjustment that avoids cracking the seed. The Man Behind the Gun will secure the same percentage of the crop at the front of the machine and the Beating Shakers prevent the escape of any that may pass the cylinder in the straw.

The Adjustable Chaffer, which controls the flow of grain to the mill, is particularly useful in the handling of rice, its fine regulation insuring that the cleaning will at all times be thorough and complete. The grading from Red River Special Separators is always much higher than can be had from any other type of machine.

Rice-planters throughout the growing regions of Arkansas, the Carolinas, Louisiana and Texas are now insisting upon the use of the Red River Special in preference to all others, and it bids fair to take the same lead in rice threshing that it has secured in the separation and cleaning of the more ordinary grains and seeds. That its work is of unequaled merit many special testimonials from rice-planters go to show, and it will afford the company pleasure to submit them upon application. They will be found even more enthusiastic in commendation of the Red River Special than the many thousands which voluntarily come each year from the growers of standard grain.

# Threshing Alfalfa and Small Seeds

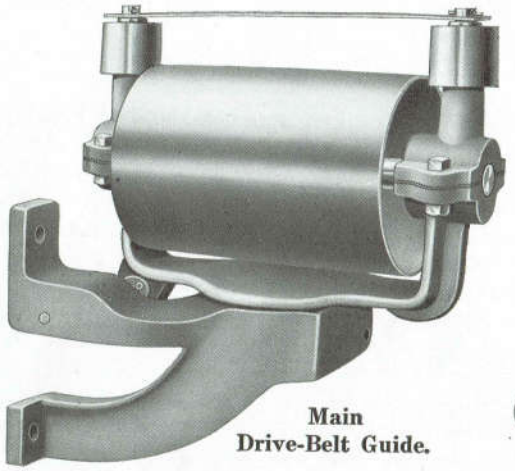
The use of a special huller is easily avoided by the owner or user of a Red River Special. He does not have to invest in an extra outfit to do this class of work.

The Big Cylinder, with its grooved teeth and the unusually large concave area which can be so easily added, makes the threshing and hulling of alfalfa, timothy, orchard grass, millet, red-top, flax, etc., so thorough and complete that a regular huller is a useless expense in regions where this class of work represents but a small portion of the crops which must be threshed.

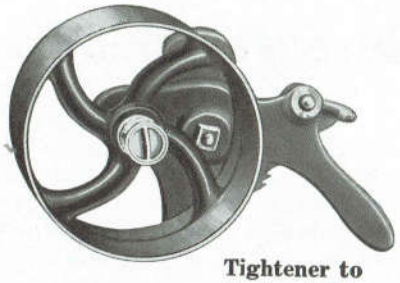
The beating system of separation secures more of the seed than any other known way. The Adjustable Chaffer, with its close control of the blast, will prevent any waste or loss, and the overshot mill will clean all kinds of seeds better than most of the special hullers.

Alfalfa growers everywhere have found that this is so, and many of them prefer the use of a Red River Separator to any other device. The beating principle secures the seeds without the usual large percentage of waste, and the quality of the work is equal to that which is done by hand.

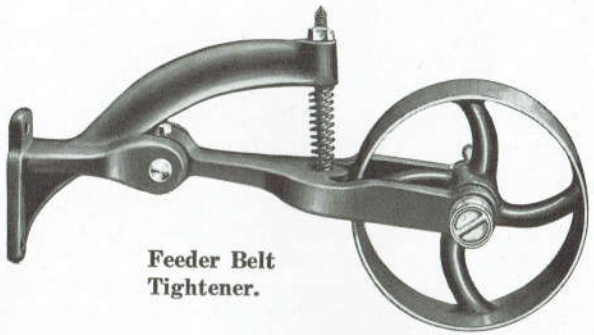
Gravity systems of threshing are more wasteful than ever when applied to light and small seeds. Beating the straw is the only way to get first-class results. The Red River uses no picking or dragging methods, but always beats the straw to release and secure the seeds from any kind of crop. Long experience has proved that beating is the best way to thresh and that nothing is to be gained by attempting to do the work with systems that produce indifferent results in comparison. Attachments for small seed hulling are a paying investment.



Main
Drive-Belt Guide.



Tightener to
Shaker Belt.

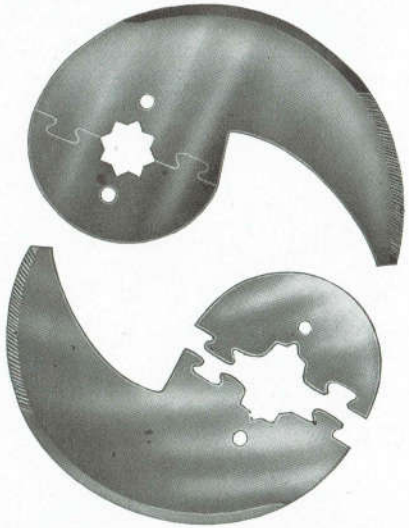


Feeder Belt
Tightener.

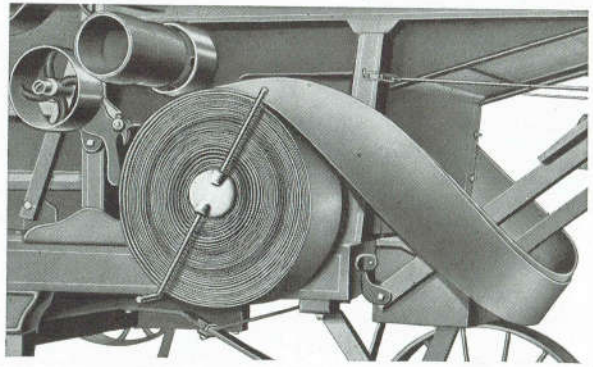
# Conveniences Everywhere

**Time-Savers, Little and Big,
Are Placed Where They Count in Doing
Fast and Perfect Work**

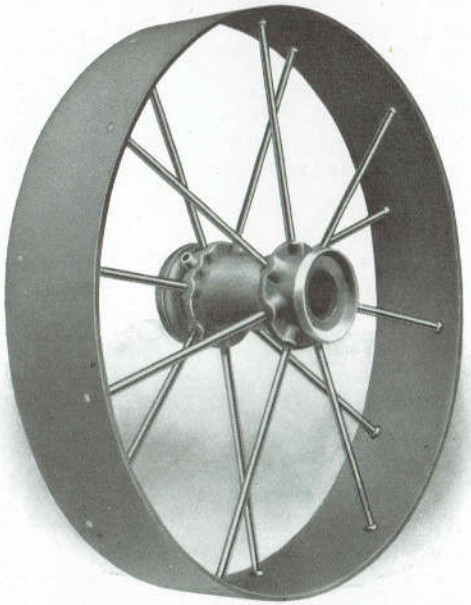
## It Will Pay to Have Them



Interlocking Feeder Knives Quickly
Removed and Returned with-
out Removing Shaft.



This Belt Reel Carries the Main Belt.



Steel Rim Truck-Wheel Doesn't
Break Down on the Road.

# A Highly Specialized Factory

Specializing an industry is now widely heralded as a new and logical process which leads to superiority in the line of mechanical production. Volumes have been prepared by business experts, by "business doctors" and by various "professors of business" of more or less note, calling attention to this fact as if it were a discovery of recent date.

The great growth of a novel and highly specialized industry like that of the automobile, for instance, has done much to focus attention upon this subject. It is probable that no other line has so widely demonstrated the soundness and value of the principle by increasing production, bettering quality and lowering cost to the consumer, or has been given greater publicity as to the good results that may be thus secured for all concerned.

The Nichols & Shepard Company, in the benefits of specialization, as in everything else that makes for the building of the best grain-threshing machinery, are found among the pioneers. They have specialized upon this one line of endeavor since 1848, and are, perhaps, the only great manufacturers who can claim an unbroken record in this class of business. Grain threshing, and the machinery with which it is promoted and accomplished, is now and always has been the one item upon which all of their interest has centered.

Perseverance, courage and skill have each been required and represented in the rounding out of the work that this company has perfected. The Red River Special line does not mark the course of frenzied financial endeavor, nor is it a mushroom growth of a few years of experiment. Rather by slow and steady progress has it reached the height of present achievement. The specialized forces of invention which this organization possesses have never been diverted to other channels and are yet at work to find still higher levels.

A trip through the factory will show that this is so. The prospective customer will everywhere in the vast buildings find equipment that is up to the minute in the progress of manufacture. He will find that new ideas are being developed with the one purpose of giving better and yet better service in the threshing and saving of grain and that no side lines are distracting attention from the main purpose.

He will find a common interest that tends solely to his good. Many of the workmen are stockholders in the company and other proprietors direct their work. An interested owner inspects material and puts it together as well. Under this system no inferiority is or will be tolerated from stock to the finished machine. Each element of manufacture is thus made vital in the production of the best, because the whole system of manufacture is organized to this end.

Sixty-nine years of experience without losing ground have shown that the methods of Nichols & Shepard Company are right. Machines that are different in principle or cheaper in price have come and gone. Threshermen who buy and use the best stay with the Red River Special line. The qualities that attract customers, the qualities that keep customers and the qualities that can be made to serve customers with profit for owner and user together are all found here.

The machine can be sold without effort, soon pays its way and saves the heavy expense that is always present in the marketing of an inferior grade. The cost is as low as the best can be produced under the best of modern factory practises, and is determined from carefully kept data that is fair and just to builder and buyer as well.

The product of this factory is specialized to the last degree. It is made solely to further the work that grows and threshes grain and its purpose is to secure all of the crop.

There are no minor issues to distract attention from the one thing that the factory does well. Maker, owner and user—all progress along the same line, the movement is all together, and always in a forward direction.

New conditions are met with equipment designed to fit with exactness the best and most economical way of doing the thresherman's work.

This study of the thresherman's problems is constant and untiring. The attempt to give him at the least possible cost such machinery as will return to him the increased profit that he must now obtain is the one and only problem upon which this organization for his exclusive benefit centers its efforts.

The thresherman who will take advantage of this specialization will find that it pays him at every turn.

# Threshing as a Business

The money that can be made from operating a threshing machine is in most instances the chief reason which prompts its purchase. To the buyer this is the most important element that enters into the transaction. He must make money if he is to stay in the business, and to stay in the business he must have a money-making threshing outfit.

The same elements govern in this as in any other occupation in which he might engage, and they should be as carefully weighed before a decision to buy is reached. In making this decision the four great points of successful mechanical production should be well considered, as success or failure lies in them as applied to the selection of his machine. These are, the Cost of Production, the Value of the Work Produced, the Loss through Idle Time and the Expense of Depreciation. With these points settled, his choice becomes automatic; he will naturally buy the machinery that will serve him best and for the longest time.

**1. The Cost of Production.**—Low cost is dependent upon continuous operation. The ability of the Red River Special to work under any and all conditions when threshing is possible and to keep at it when bad weather and the state of the crops will shut others down, gives sufficient guaranty that running expenses will be low.

While costs are low it is still possible to do the largest amount of work. The only limit to the season's run is the amount of grain to be threshed. Rain or snow do not stop operations, nor does out-of-season work mean poor work—the Red River Special never wastes—weather good or bad.

It is not a straw-stacker that threshes grain, but a grain-thresher that stacks straw, from which it has beaten out all of the grain. Results are the same at any time or place.

Crowding does not send the grain to the stack, the cost of production does not rise with the speed at which the separator is driven. It is a cost-cutting machine and its running expense is low at all times and at all speeds.

**2. The Value of the Work.**—This is measured by production capacity. It must follow that the Red River Special, doing more work and better work than another in the same or a less amount of time, has a greater earning capacity. This means profit for the thresherman and also enables the farmer quickly to reach his market.

The slow-going outfit is no longer tolerated by the progressive grower of grain. Its work costs too much.

The profit from his crops may lie in his ability to catch a high market. In order to do this he now demands speed. He knows that his grain is safer when threshed and in storage than it is in the field, and that the real value of the threshing is in having it quickly done.

**3. The Cost of Idle Time.**—Every unnecessary shut-down while the season is on increases production cost and decreases the value of the work that is done. No money can be made by loafing on the job or waiting for better conditions. Wage expense and interest on the investment are always with you; income alone can help the balance. The Red River Special saves idle time with its high-grade construction, that does not break down, and its ability to work when others must lie idle.

Fast threshing and good threshing suit everybody concerned.

Grain saved and time saved get the "come again" jobs.

Time is money to thresherman and farmer as well.

**4. The Expense of Depreciation.**—The best machine built can but delay the expense of this item, but there is a great difference between meeting it in a few months or extending it over many years.

The Red River Special fights wear and waste with the Man Behind the Gun, which holds both at bay with hard and lasting service.

The bulk of its work of separation being done by this single part, which has no movement whatever, the wear on working parts is reduced to a degree that is impossible in machines that must be overdriven to produce inferior results.

Brains, more than brawn, build the Red River Special line. They show in everything that it does and in every part of the machines. From the selection of material to the last coat of paint is apparent the superior quality that comes from thought well applied.

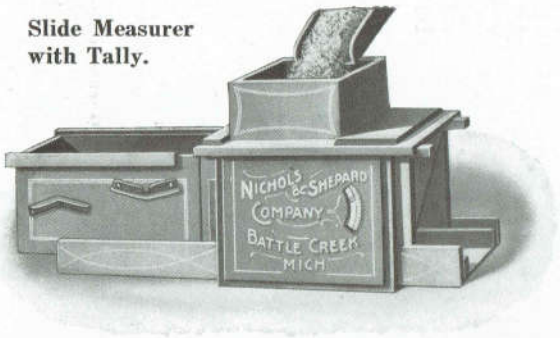
That is the only way that the Nichols & Shepard Company have ever found successful in the making of a long-lived piece of apparatus. Their own records, covering two-thirds of a century, prove that

it is a good way to offset the loss by depreciation and the nearest to a successful way that has so far been discovered.

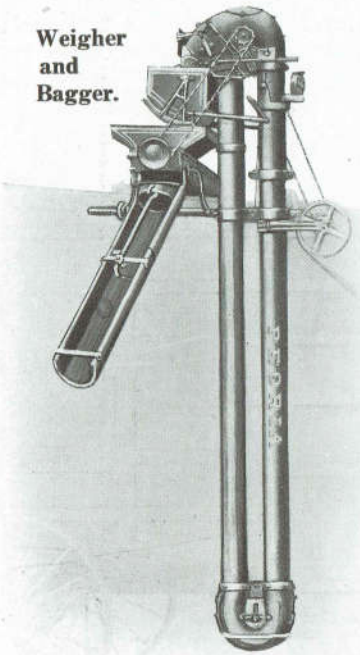
Back of this system is their warranty that "with proper management the Red River Special is capable of doing *more* and *better* work than any other machine made of like size and proportions, working under the same conditions and on the same job."

This fact and this challenge no rival has yet disproved.

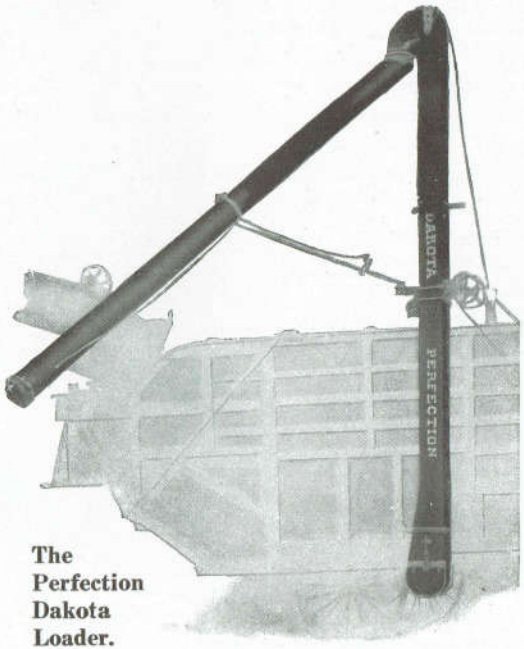
In those few words you will find the real *business end* of buying or hiring a threshing machine.



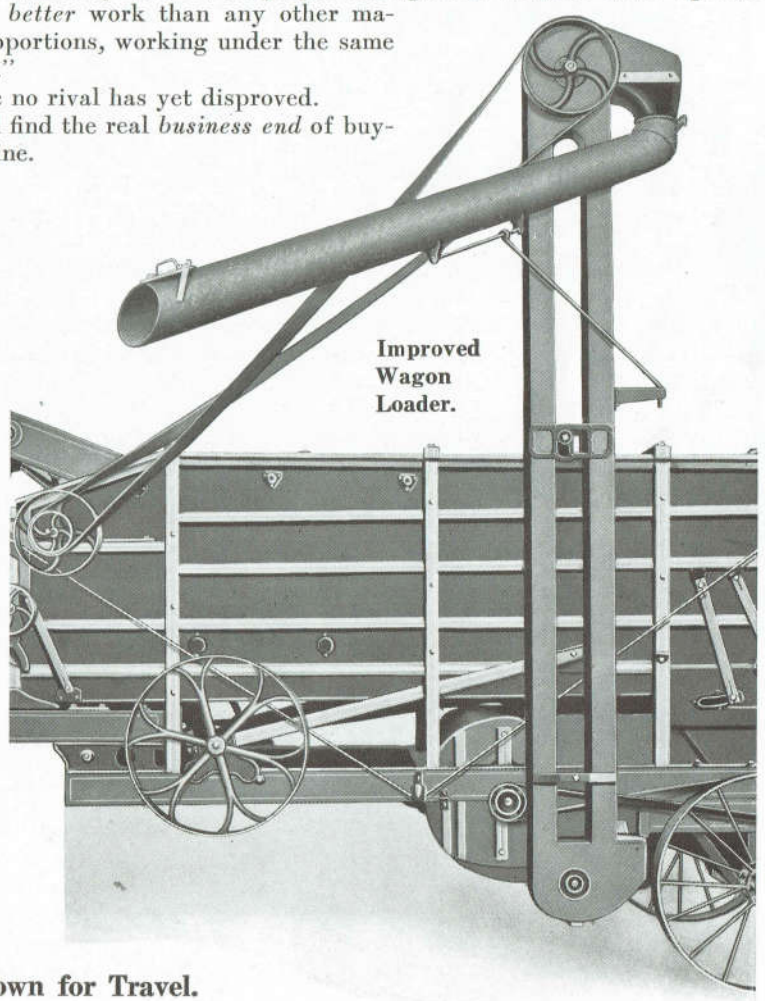

**Slide Measurer with Tally.**



**Weigher and Bagger.**




**The Perfection Dakota Loader.**



**Improved Wagon Loader.**

**All Loaders Can be Folded Down for Travel.**

# Sizes of Nichols-Shepard Separators

**The 44 x 64 Red River Special** has a big cylinder 44 inches long; separating conveyors, with adjustable chaffer, 64 inches wide; has a full set of belts, supplies, tools, wrenches, etc., and includes belt guide, belt reel, tongue, extra concave and teeth, all without extra charge.

**The 40 x 60 Red River Special** has a big cylinder 40 inches long; separating conveyors, with adjustable chaffer, 60 inches wide; has a full set of belts, supplies, tools, wrenches, etc., and includes belt guide, belt reel, tongue, extra concave and teeth, all without extra charge.

**The 36 x 56 Red River Special** has a big cylinder 36 inches long; separating conveyors, with adjustable chaffer, 56 inches wide; has full set of belts, sieves, tools, wrenches, etc., and includes belt guide, belt reel, tongue, extra concave and teeth, all without extra charge.

**The 32 x 52 Red River Special** has a big cylinder 32 inches long; separating conveyors with adjustable chaffer, 52 inches wide; has full set of belts, sieves, tools, wrenches, etc., and includes belt guide, belt reel, tongue, whiffletrees, neckyoke, extra concave and teeth, all without extra charge.

**The 30 x 46 Red River Special** has a big cylinder 30 inches long; separating conveyors, with adjustable chaffer, 46 inches wide; has full set of belts, sieves, tools, wrenches, etc., and includes belt guide, belt reel, tongue, whiffletrees, neckyoke, extra concave and teeth, all without extra charge.

**The 28 x 40 Red River Special** has a big cylinder 28 inches long; separating conveyors, with adjustable chaffer, 40 inches wide; has full set of belts, sieves, tools, wrenches, etc., and includes belt guide, belt reel, tongue, whiffletrees, neckyoke, extra concave and teeth, all without extra charge.

**The 22 x 36 Junior Red River Special** has a 16-inch cylinder 22 inches long; separating conveyors, with adjustable chaffer 36 inches wide; has full set of belts, sieves, tools, wrenches, etc., and includes tongue, whiffletrees, neckyoke, extra concave and teeth, all without extra charge. Belt reel and belt guide free if fitted for steam or gasoline power. This separator has wonderful capacity and is the thresher for light power. Machines of smaller dimensions but unproved worth have been inspired by this successful little hustler.

**The 28 x 40 Junior Red River Special** has a 16-inch cylinder 28 inches long; separating conveyors, with adjustable chaffer, 40 inches wide; has full set of belts, sieves, tools, wrenches, etc., and includes tongue, whiffletrees, neckyoke, extra concave and teeth, all without extra charge.

**Extra Sizes, like 40 x 64, 36 x 60, 32 x 56, 30 x 52 and 28 x 46, can be furnished with sufficient notice.**
**(Width of Separating Conveyors always governs price.)**

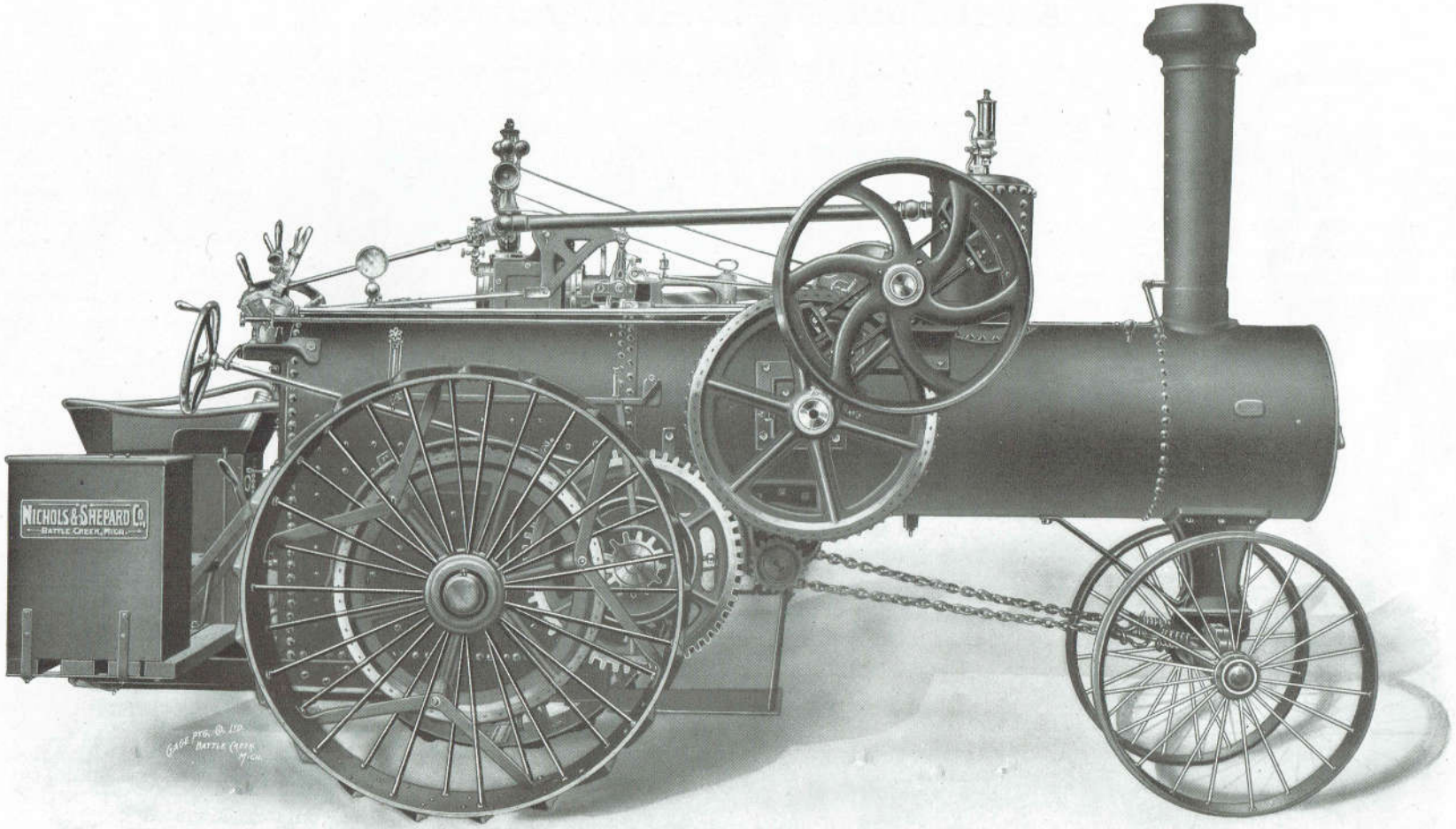
# Extra Attachments

NICHOLS-SHEPARD GEARLESS WIND STACKERS
PERFECTION WEIGHERS, DAKOTA STYLE
GLENDALE WEIGHING AND TALLYING BAGGERS
BRAKES UPON TRUCK WHEELS—ALL SIZES
UNIVERSAL SELF-FEEDERS
HAND-FEED PARTS
N. & S. WAGON LOADERS
CLOVER ATTACHMENTS

FEEDER EXTENSIONS
WAGON TANKS
MOUNTED TANKS
TANK PUMPS AND HOSE

COMMON STACKERS, 18 feet long, with Raddle, Canvas Sides, Rope and Windlass for hoisting.
NICHOLS-SHEPARD WEIGHER, with Double Tube Elevator.

ENGINE TENDERS
DRIVE BELTS
16 x 16 CANVAS COVERS
22 x 34 CANVAS COVERS




**NICHOLS-SHEPARD SINGLE-CYLINDER TRACTION ENGINE (Gear Side).**

**Built in Five Sizes, viz.: 13-40 H. P., 16-50 H. P., 20-70 H. P., 25-85 H. P. and 30-98 H. P.**
**Adapted to Coal, Wood or Straw. 13-40 H. P. and 16-50 H. P. Not Straw Burners.**

# An Absolutely Reliable Engine

## What the Boiler Must Be

The first step in the making of a dependable traction engine is to be sure that the boiler is right. This must be certain or all else will fail—it is the rock foundation upon which a safe structure may be built.

Working, as it must, under conditions that are often hazardous when the slightest factor of safety is omitted, no purchaser of a farm or traction engine should for a moment consider anything but the best that can be produced.

There is but one unfailing way in which this may be secured and that is by buying where nothing but the best has ever been produced or offered for sale.

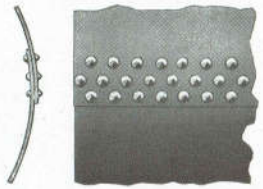
The Nichols & Shepard Company is one of the few manufacturers of traction engines whose boilers have never been questioned. Quality, strength and productive long life are all well known as being the features that distinguish their outfits. Years of good work in performing every possible service for which a traction engine may be used, have shown that they never slight or overlook a single item that will produce the best results in the making or use of steam.

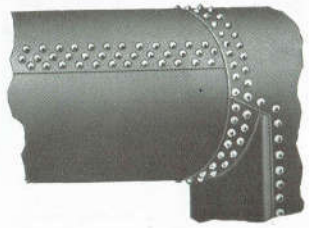
It is easy to understand why this is so. Everything in the boiler, from plate to finish, must meet or surpass the highest standard tests. No doubt is permitted. If material or workmanship fails in any particular, the defect must be removed or the boiler must be discarded from use. It must not possess a single known blemish when it is sold. There is too much dependent upon it to take any chances by slighting the job.

Homogeneous boiler-steel is used for the plates. The flue-sheet is double-thick. Double or triple lines of rivets will be found at every point of greatest strain. The thickness of outside sheets is increased at the fire-box so that brackets can be securely bolted with no chance for a leak. Thick sheets do not spring; more threading can be given to

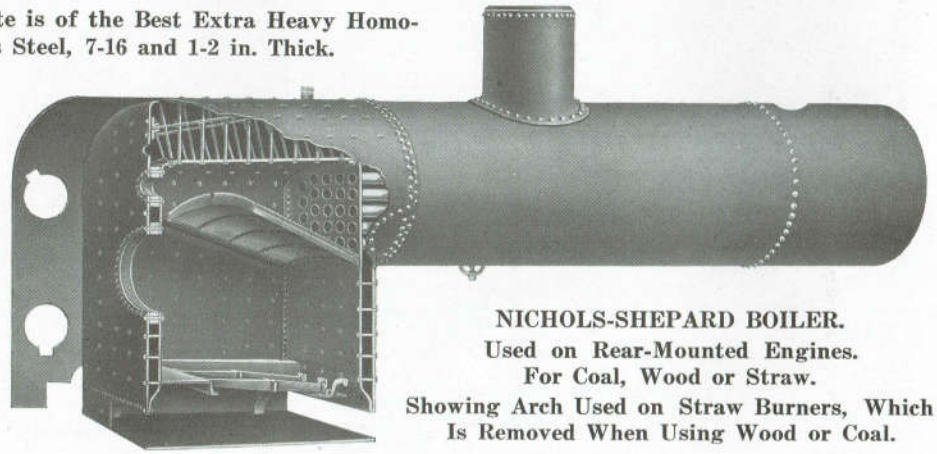
**The Boiler-Plate is of the Best Extra Heavy Homogeneous Steel, 7-16 and 1-2 in. Thick.**


**NICHOLS-SHEPARD FLUE-SHEET.**





**TRIPLE-RIVETED SEAMS.**



**NICHOLS-SHEPARD BOILER.**
**Used on Rear-Mounted Engines.**
**For Coal, Wood or Straw.**
**Showing Arch Used on Straw Burners, Which Is Removed When Using Wood or Coal.**

**Fire-Box Extra Large.**

bolts and a tighter fit given to the engine so that it does not work loose or out of line. Boiler openings are oval in shape and reinforced with heavy wrought-iron rings to prevent the possibility of cracking the sheet which square corners invite. Massive stay-bolts are placed at every point that caution can suggest.

Strength and power are everywhere present in material, while manufacture is guarded by precautions that have never yet been known to fail. Nothing but the best kind of a boiler can result from all of this care, so nothing else is made or used here, thus insuring an engine of unquestionable dependability.

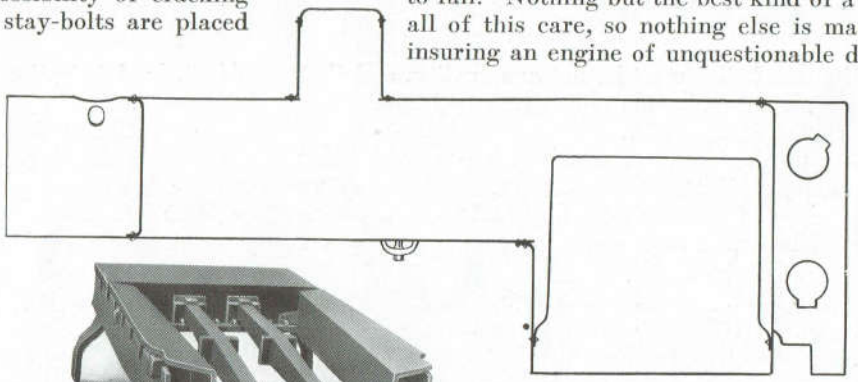
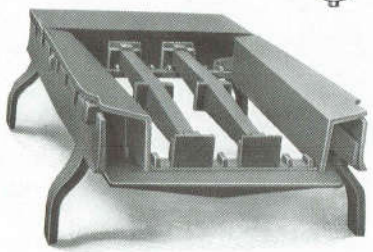
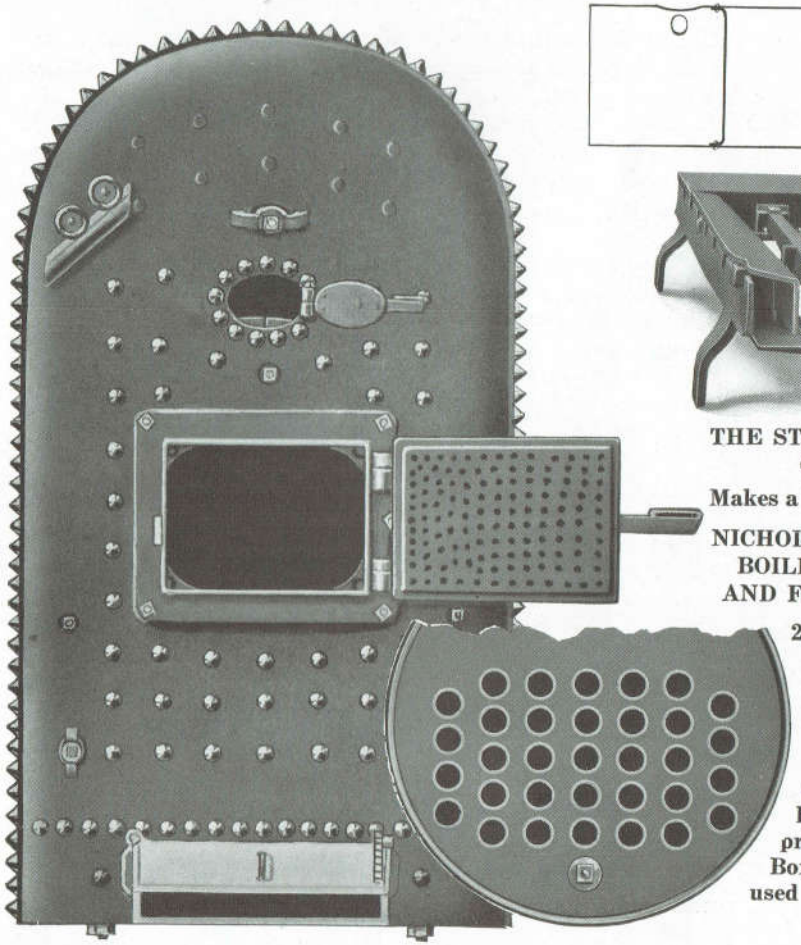


**Diagram Showing Boiler and Fire-Box Construction.**



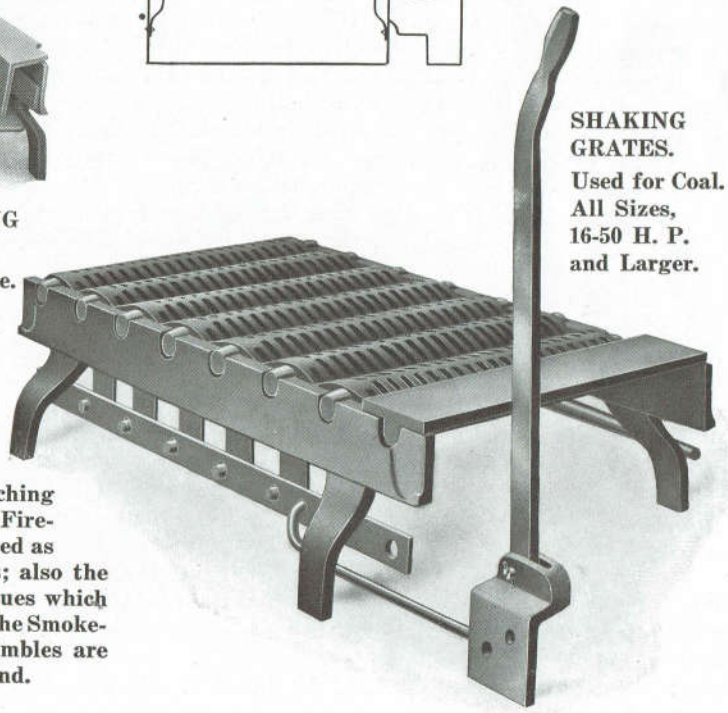
**THE STRAW-BURNING GRATE.**

**Makes a Quick, Hot Fire.**



**NICHOLS-SHEPARD BOILER FRONT AND FLUE ENDS.**

**20-70 H. P. and Larger. Note Clean-Out Door for Reaching the Top of Fire-Brick when used as Straw-Burners; also the heavily rolled flues which prevent leaks in the Smoke-Box. Copper Thimbles are used on Fire-Box end.**



**SHAKING GRATES.**

**Used for Coal. All Sizes, 16-50 H. P. and Larger.**

# The Nichols-Shepard Farm and Traction Engine

It has been shown that the boiler must be but one quality, and that the best, for the engine which the Nichols & Shepard Company build and sell as a part of their threshing outfit.

The engine, if it is to do the work for which it is designed, must be constructed under equally rigid tests. No doubtful material or no poor work must ever be passed, for the engine must be in keeping with the machinery which it is intended to drive, and render many years of hard and faithful service to the purchaser.

These rigid tests are applied. The Nichols & Shepard Company know, and the buyer of their engine will know when his engine goes in service, that no feature that will produce the last rated ounce of power is lacking or is of any other quality than the best that is known for the purpose for which it is intended.

This condition is never found where slipshod methods of construction are tolerated—quality, like character, has a standard, and the standard that Nichols & Shepard and their successors since 1848 have maintained, is the highest type that money and brains can produce. The name of this company in the threshing world has always been better than many a written guaranty from concerns of less repute. The engine that it builds is in every way worthy of its name.

With strength and durability no convenience is neglected. The man upon the platform has control right under his hand. No accident can occur through lack of facilities to prevent it, if the engineer is on the job.

The heavy fire-box is large. It is provided, at no extra cost, with an easily operated shaking grate that keeps the fire clean and lively. Capacity is ample to make steam and plenty of it at all times. There is always enough for emergency calls when overload is necessary for a short time.

Steel of the best quality is everywhere used for each part that is under heavy duty. The wheels are steel; the platform and draw-bar are steel; the main and countershafts are cold-rolled steel of a selected quality that has proved to be better than the varieties ordinarily used. Weight is added, strength is added; boxes are large and perfectly adjusted; lubrication is thorough and automatic at every portion of the main drive.

While the prediction has been made that the introduction of the gas tractor would banish the single-cylinder steam engine from farm work, it has not, as yet, been realized.

This company is yet furnishing hundreds of single engines each year to customers who will consider no other kind. This fact is scarcely remarkable when its long-established reputation for good work is remembered. The N. & S. engine of the single-cylinder variety, as made for the last thirty years, is everywhere known as one that seldom breaks and never wears out when properly cared for. Many of the oldest ones are yet in use and doing dependable and profitable work for the people who own them.

It has made friends who stand by it, and friends who would feel lost were they to try to do business with any of the more modern types. For this reason the old reliable single-cylinder engine is regularly built and furnished in all sizes. It is practically impossible to discontinue it.

The lubricator, the injector and the speeder for the governor can all be reached and operated by the engineer without leaving the platform. The steam-gage and water-gage glasses are so placed as to be plainly visible from the platform or the ground.

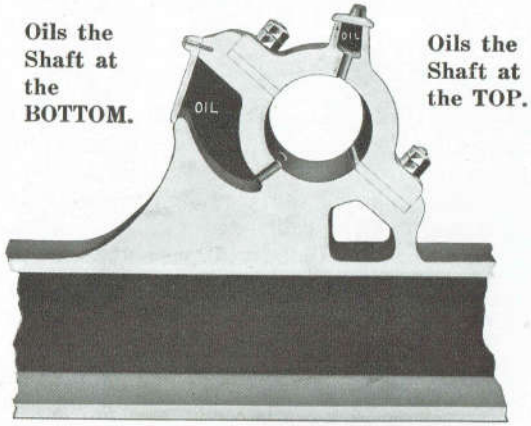
Convenience, with absolute safety, is the main feature of operating control. Nothing that can help secure them has been neglected, cheapened or placed where it is not in reach when needed.

Reserve power on the capacities at which the engines are rated, is always to be had. Three times the nominal power is developed under brake test before the engine is permitted to leave the factory.

Nichols & Shepard Company engines are never stalled by any reasonable demand for work in the field. They are built for service, and will give it when other makes of the same rating will "lay down" on the job.

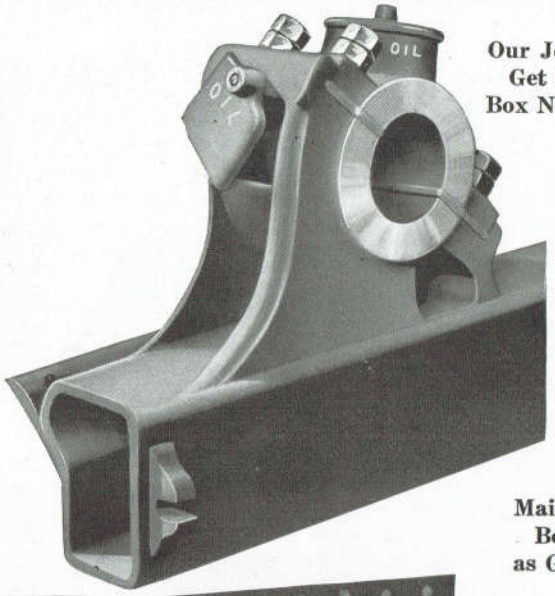
Here you secure the financial value of the real worth that is built into the machine.

Oils the Shaft at the BOTTOM.

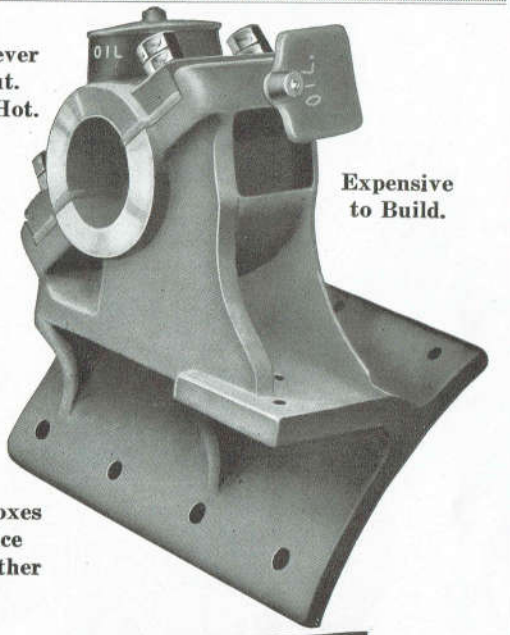



Oils the Shaft at the TOP.

The Massive Main-Shaft Always Runs in Oil.

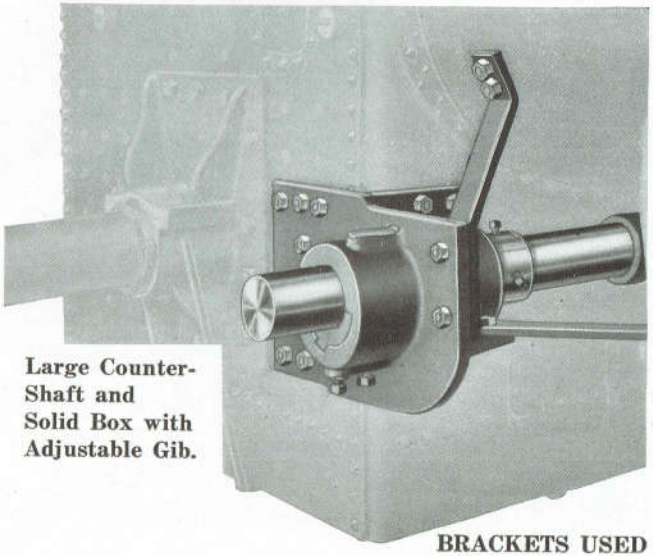



Our Journals Never Get Dry or Cut. Box Never Gets Hot.

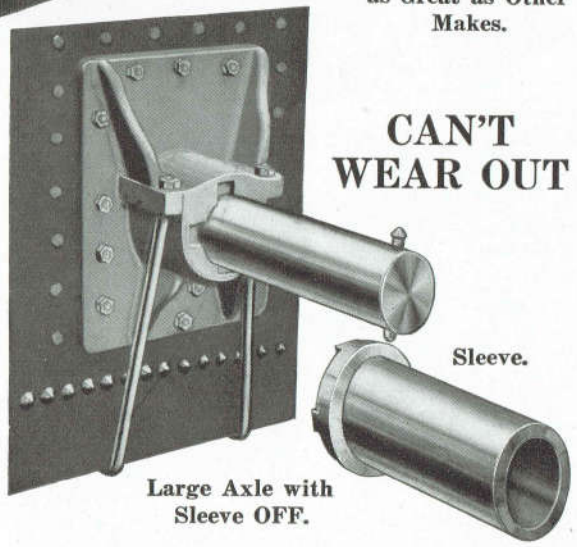



Expensive to Build.

Main-Shaft Boxes Bearing Twice as Great as Other Makes.



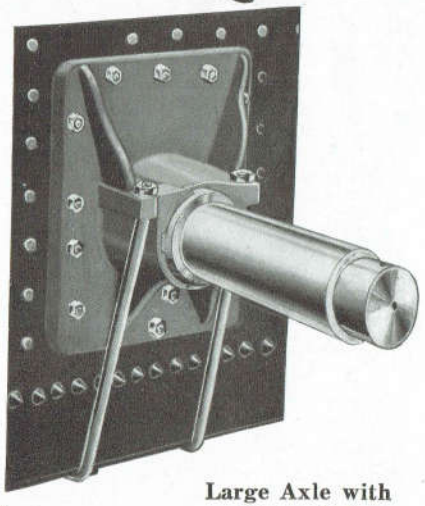
Large Counter-Shaft and Solid Box with Adjustable Gib.



Large Axle with Sleeve OFF.

## CAN'T WEAR OUT

Sleeve.



Large Axle with Sleeve ON.

BRACKETS USED ON NICHOLS-SHEPARD SINGLE-CYLINDER ENGINES.

# The Nichols-Shepard Double-Cylinder Engine

With heavier work to be done, more power must be furnished with which it may be accomplished. The demands for quick plowing, with gang-plows, the moving of thousands of yards of earth upon grades, the hauling of wagon trains, when tons of heavy material must be carried over dirt roads, have all become common problems of modern working conditions which makers of traction engines are called upon to solve.

The double-cylinder engine has been successfully applied by the Nichols & Shepard Company in doing every variety of these classes of work. Without materially increasing the bulk of the engine or in any way adding to its consumption of fuel and water, they have provided, in the large size which they build, one hundred horse-power that can be used for traction purposes, plowing, threshing, or any of the general work to which a portable steam engine may be adapted.

For many of the purposes named the single-cylinder engine is also used, but the double-cylinder has been found, in most of them, to possess many advantages on account of its steadier power and entire absence of dead center. It is cheaper because the same running expense develops greater energy. There is none of the jerky motion which the best single-cylinder engine will give when overloaded.

There is greater wear and longer life in the double-cylinder. The clutch and the main-shaft pinion are made to balance the band-wheel by placing them upon opposite ends of the shaft. This stops one-sided strain or unequal wear. The clutch pulley is faced for belting and may be used for driving slow-speed work.

The double-cylinder engine, in each size in which it is built, has ample boiler capacity to generate an abundance of steam for all working conditions, but handling facilities are as simple and as easily operated by the engineer as in any engine that is made.

Compactness, convenience and perfect control are of the same type that has made the Nichols & Shepard single-cylinder engines the thresherman's favorite. Platform control is retained for the engineer. The same ideas of strength, economy and reliable operation have been worked out to apply to the double-cylinder, and many of them are substantially improved. It is the ideal engine for steam plowing, because no other draw-bar and hitch can equal the one here built.

In their desire for more profit many makers have removed or have never applied the conveniences that are regularly given at no extra expense with a Nichols-Shepard engine. Quick work cannot be done without these conveniences. Liberality on the part of the maker in providing them makes more money for the user. They guard against the little delays so that more work can be done by those who purchase the machine. Shut-downs to tinker the power make no money for anyone concerned. Time is money where an engine is used—this one saves the time.

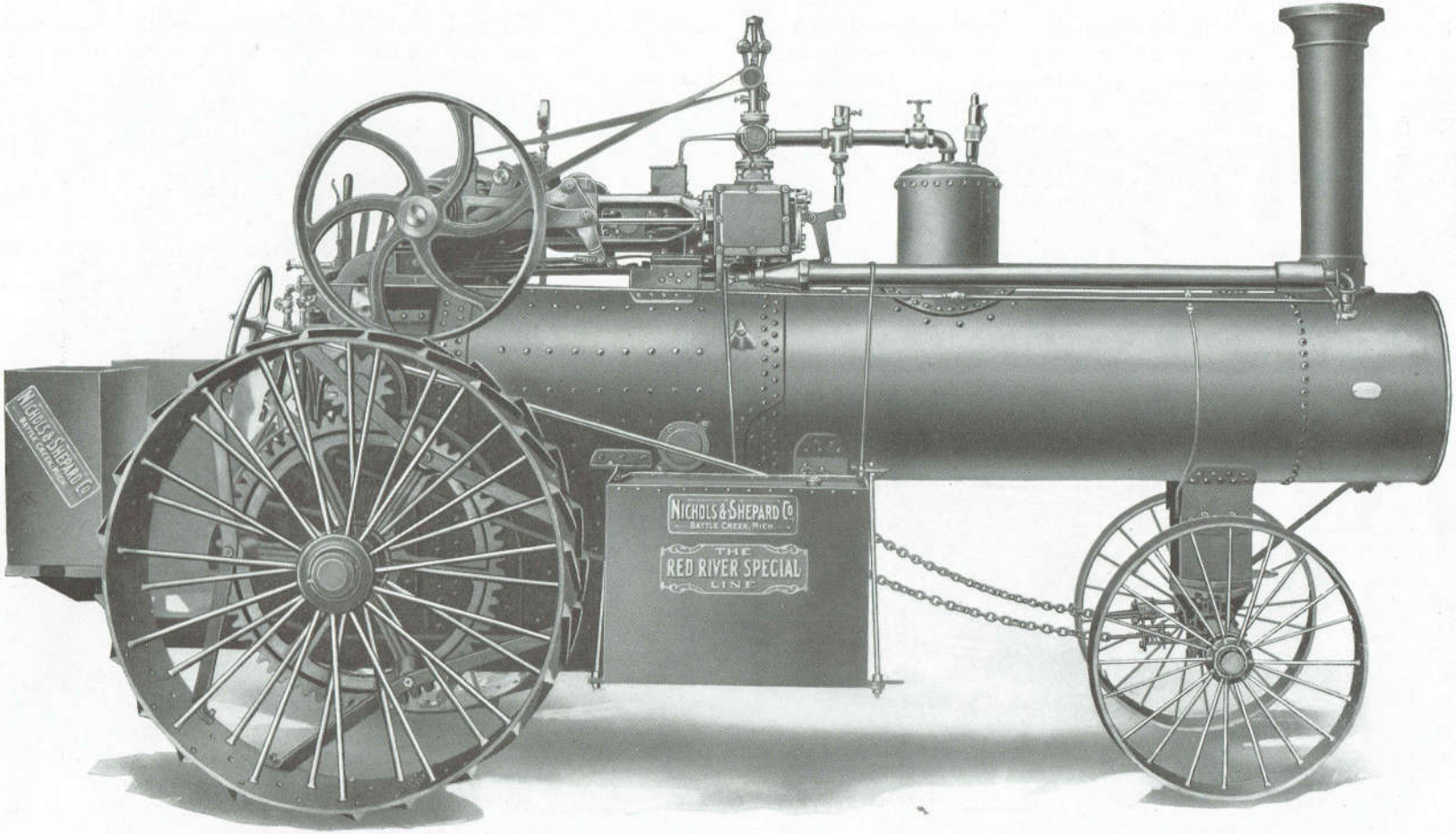
The recently adopted practise of rear mounting all engines of the double-cylinder variety has proved another step toward ideal construction.

Distribution of weight is now placed so that every pound of pulling power can be exerted. The faults of other attempts to get the engine back on the boiler have been studied and avoided. Weight is distributed so that guiding and handling may be done as easily as before, with none of the tendency to "buck" that this form has developed in the hands of less skilled designers. The gear train is direct with the elimination of the extra power required to drive the intermediate; countershaft and driving axle are both of massively heavy, solid steel, and construction as a whole has been improved upon the well-known standards of the Nichols & Shepard Company, long recognized as the best in the field.

The double-cylinder can be had in three sizes: 16-60 H. P., 20-75 H. P. and 25-85 H. P., all of which will burn either coal or wood. Straw-burners are made in 20-75 H. P. and 25-85 H. P., which are the best liked ratings in regions where straw is used for fuel.

It is a thoroughly proved fact that while more parts are employed in a double- than in a single-cylinder engine, the wear is so much more distributed that the same or even less attention is required to keep it in perfect adjustment.

Experienced judgment generally dictates the purchase of this type of engine where heavy work of a miscellaneous character is to be done, and practical use has demonstrated that there is no work where a tractor is employed that this heavy and solid engine cannot readily accomplish.

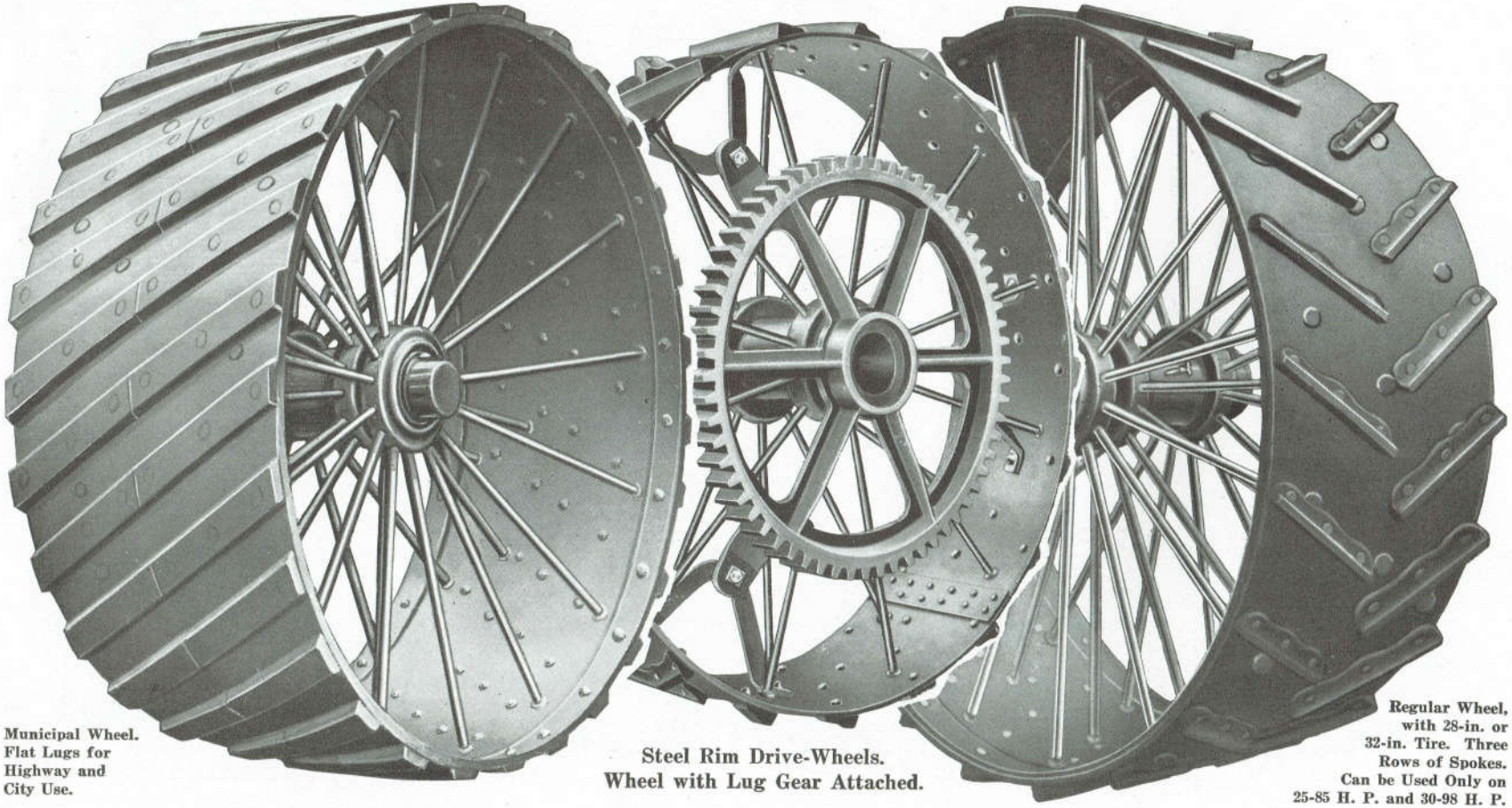



**NICHOLS-SHEPARD REAR-MOUNTED PLOW ENGINE, 16-60 H. P., 20-75 H. P. AND 25-85 H. P. (Fly-Wheel Side).**

**Rear-Mounted Engines Are Fastened to the Boiler by the Use of Heavy Steel Flanges Securely Riveted to the Boiler. No Bolts Go into Steam or Water Space.**

# Steel Rim Drive-Wheels—the Strongest Made

Some makers of traction engines must believe that there is no such thing as a bad road. Some purchasers of light-wheeled engines know better, because they have been stopped in getting to a profitable job which was on a bad road where the cheaply constructed drive-wheels of their engine would not take them when the work was waiting and the customer fretting over delay.



**Municipal Wheel. Flat Lugs for Highway and City Use.**

**Steel Rim Drive-Wheels. Wheel with Lug Gear Attached.**

**Regular Wheel, with 28-in. or 32-in. Tire. Three Rows of Spokes. Can be Used Only on 25-85 H. P. and 30-98 H. P.**

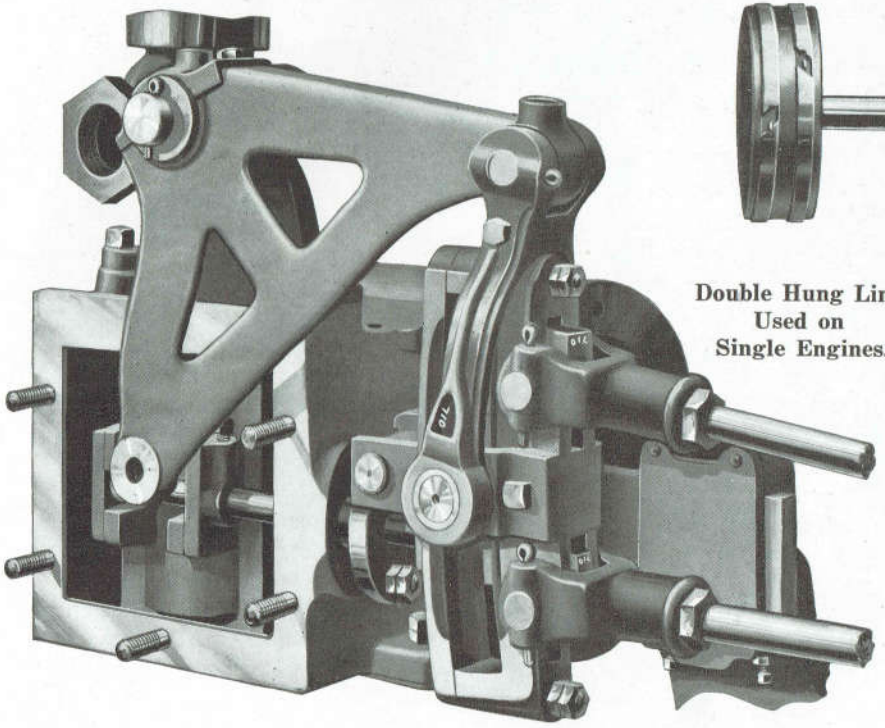
A big threshing outfit on a muddy or sandy road can use up a lot of costly energy when it gets stuck. With the right kind of drive-wheel on the tractor it need not get stuck or stop to dig out. The engine will keep traveling and bring along the rest of the rig.

The Nichols & Shepard Company engines have drive-wheels that are made to do this work on anything that resembles a road. They are wide, high, heavy and strong. Power is applied to the rim through the lug gear instead of to the hub and the wheel has got to move.

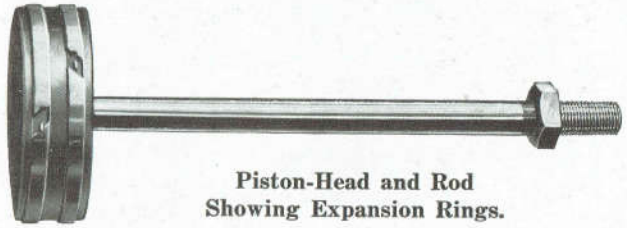
The wide tires are made from steel. The spokes are hot-riveted into the rims and beaded heavily on the outside. An expanded shoulder is brought firmly against the inside of the rim by this operation. The hub is of heavy iron. The spokes with enlarged ends are set in the mold and the hub is cast around them. This welds them to place at the center. They can never come out or push in, even should they be loose.

In comparison with the usually used built-up wheel the Nichols-Shepard wheel will be found indestructible. It is one of the features of construction that never gives trouble; it has the strength necessary to take the engine anywhere that its power can propel it.

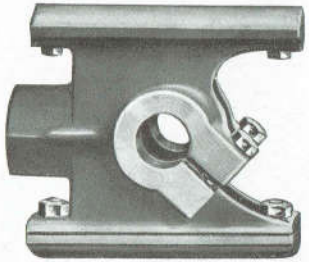
Mud-cleats can be replaced when worn. The rest of the wheel is there to stay until the engine is through working. The axle bearings can't wear out. The axle sleeve is removable and when it begins to show wear can be turned to get a new surface. There are few owners who ever call for renewals.



**Double Hung Link Used on Single Engines.**



**Piston-Head and Rod Showing Expansion Rings.**

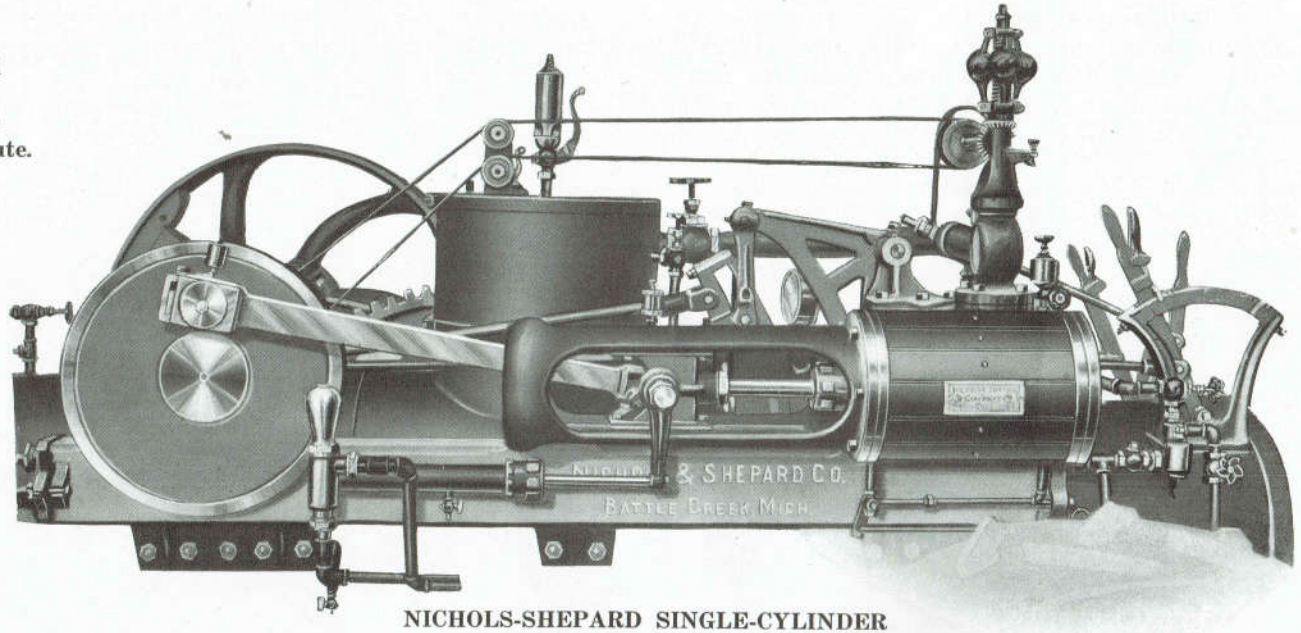


**Cross-Head.**

**Good Material and Most Excellent Construction are Found in Every Part of the Nichols-Shepard Steam Traction Engines.**

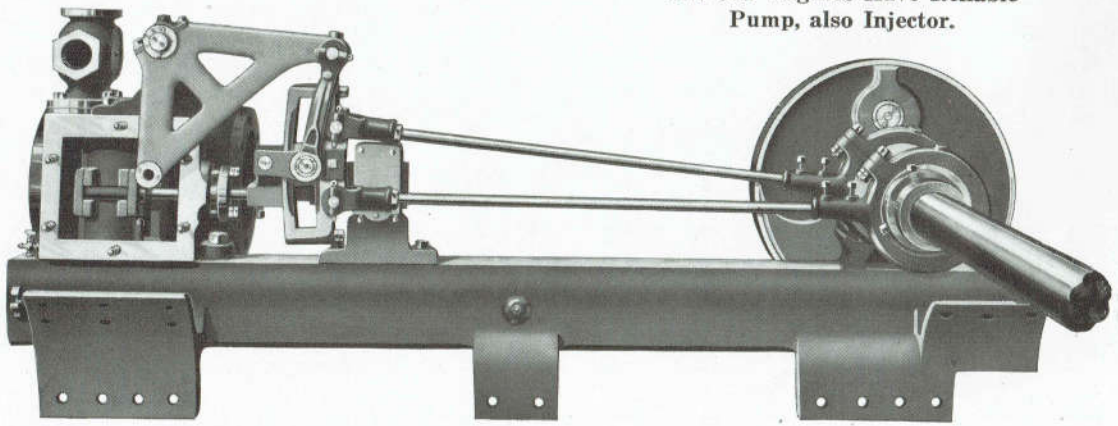
**Connecting Rod.**

**Governor Can be Adjusted to Run Engine 100 to 300 Revolutions per Minute.**




**NICHOLS-SHEPARD SINGLE-CYLINDER ENGINE AND BED.**

**All Our Engines Have Reliable Pump, also Injector.**



**Link and Valve Connection in the Above Engine.**

# The Double Cylinder as a Plow Engine

The double-cylinder engine which is built by this company has no superior as a plow engine. It is planned for this work and it fills the bill.

No heavier duty is known. The engine must be driven over soft ground, where footing is uneven at the best and is often made worse by obstructions which the power must be able to climb over.

No other construction but that which the Nichols & Shepard Company put into everything that they make is equal to the task. No ordinary traction engine can stand the strain. It is here that the extra heavy boiler plates used by the company show their worth. On their plow engines and on all of the smaller sizes the wagon plate and firebox shell are especially thick, which gives extra strength at the points that take the strain. All brackets are mounted upon the heavier parts of these boilers. The warping and twisting which soon kills a light engine, when attached to a gang of plows, is thus done away with.

The double-cylinder engine furnishes steady power. There is none of the jerk which a single-cylinder engine is bound to show when the load is heavy. There being no dead center in the double application of power, there is none of the sudden strain which in single-cylinder engines breaks shafts, strips gears and tears the mechanism apart when it cannot do the work.

The main and countershafts in the double-cylinder engines are made of steel of sufficient size and strength to stand any amount of work that the engine can perform. Solid steel pinions are used on 25- and 30-H. sizes, and semi-steel, the same as in gearing throughout, on all smaller engines. Breakage, except from direct accident, is practically unknown. Bearings and brackets are all big enough and strong enough to keep working parts in line and in first-class running condition. Heavy steel bolts and plenty of them fasten the boxes together and make the brackets secure to the extra-thick outer shell of the boiler. The strain and lurch of plowing cannot work them loose.

All brackets are the largest and heaviest known in traction engine construction. Not a single user of a plow engine has ever reported trouble caused by their coming loose.

The Nichols-Shepard traction wheels are in a class by themselves and are everywhere known as the best and strongest made. They are extra wide for soft-ground travel, and their diameter—much larger than usual—easily carries the engine over obstructions that no small wheel is able to climb.

The weight of the engine is distributed in the best manner possible for the heavy drag which is needed for deep plowing. The engine mounting gives weight enough on the front wheels to hold them down, but its bulk is concentrated upon the driving end, which gives great power to pull.

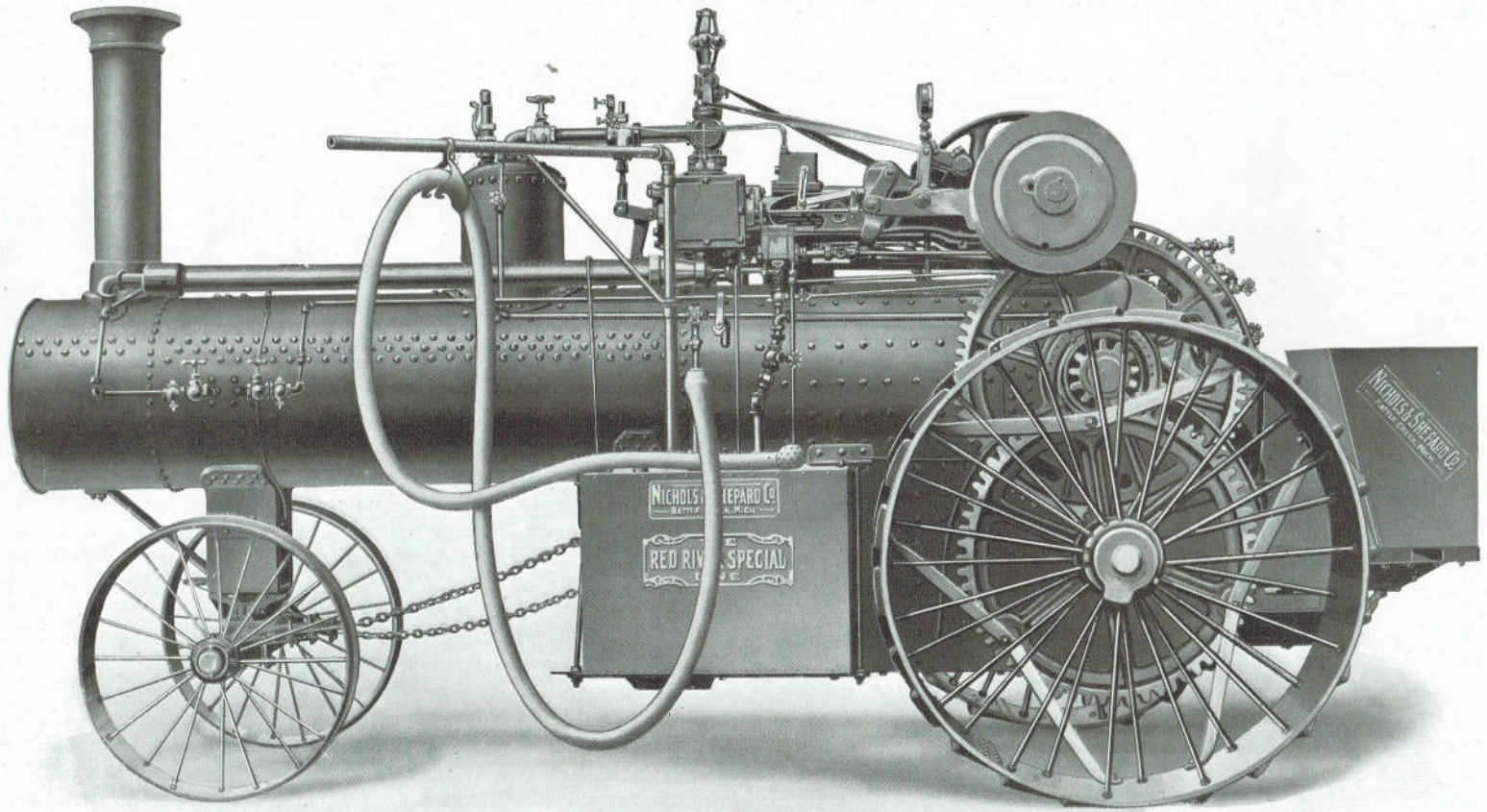
All engines of the double-cylinder type are now built rear mounted. This form, under the plan adopted by the Nichols & Shepard Co. in making an engine for extra heavy municipal duty, such as sewer and street paving contractors find necessary, has been found the best that could be devised for plowing. Like all tested improvements, worth is no sooner proved than it is made a part of the regular equipment.

Balance of parts under the new arrangement has been readjusted to give the utmost traction power. Gear train is shortened and an axle-shaft for the drive takes the place of the long-used side bracket. Strength and rigidity are increased to a point that makes the plow engine practically unbreakable in service.

It has been the intention of the makers to build an engine in which ability to stand up to the work would not be found in any way lacking. Thorough trials upon the heaviest duty possible have proved that the intention has been realized to its fullest extent.

The control of a plow engine, being most important, is given especial attention. The operator need not step from the platform to govern every move that the engine can make. He does not have to scramble for some badly placed control should he need to make a sudden change or stop. The turns can be made in much less ground space than most engines require.

The platform is strong and amply braced so that it will not collapse should the weight of the engine be thrown upon it in traveling over soft ground or in breaking through culverts. Two water tanks,




**NICHOLS-SHEPARD REAR-MOUNTED PLOW ENGINE, 16-60, 20-75 H. P. AND 25-85 H. P. (Gear Side).**

**Every Convenience—Note Arrangement for Taking Water on the Move.**

at the sides, carry sufficient water for long trips. Two coal bunkers, on the platform, carry an ample supply of coal. Water and fuel can be quickly replenished from properly placed supplies. No time is wasted here.

The draw-bar for the plows is attached to and becomes a part of the solid platform. It is made from steel, and nothing short of a calamity can put it out of business. Any make of plow can be used. The special illustrations show the tremendous working strength of the Nichols-Shepard plow hitch.

Travel can be speeded to do the maximum amount of work, as the progress of the engine is steady like that of a locomotive and it can move much faster than an engine that wastes much of its energy in pulling itself by jerks.

Lubrication is well planned and thorough on all working parts. An oil-pump constantly supplies oil to the cylinder and large self-oilers take care of the lubrication on all heavy bearings.

An injector and a boiler-feed pump are both furnished with the engine so that a dependable supply of water is at all times assured to produce the steam required.

The Nichols-Shepard plow engine has proved itself as the best power yet devised for profitable work where steam plowing is done, and many owners of a complete Red River Special outfit make good money in providing for this class of work by the purchase of a double-cylinder plow engine which can be profitably used each season for their own and their neighbors' plowing and such other work as requires strong pulling power.

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# The Steel Platform and Draw-Bar

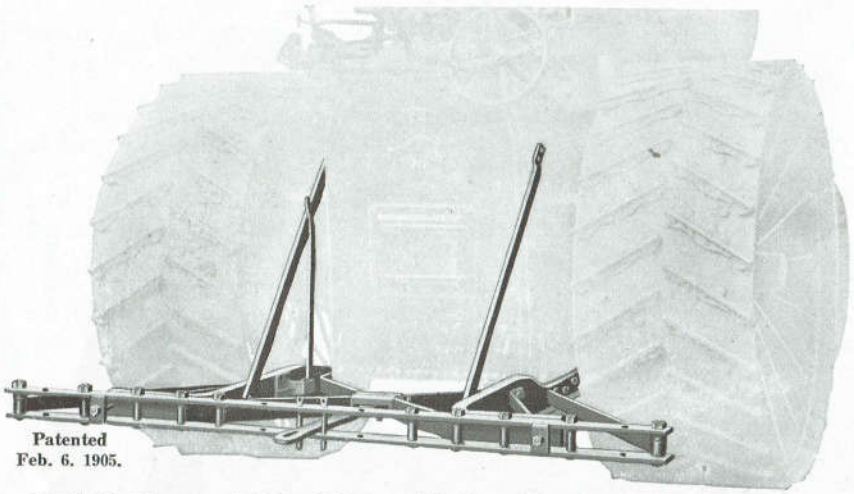
As noted in describing the plow engine, the platform support is made of steel. This steel is of the I-beam or structural type, the strongest and most rigid that is known, and it is used upon every engine that the Nichols & Shepard Company build. Single pieces are bent to shape where practicable and all bolting for attaching is made below the water-line of the boiler. No leaks can come where the platform is fastened to the shell.

Heavy braces keep the platform in position. There is no sagging when tanks and coal bunkers are fully loaded and the engineer is in place to drive.

On double-cylinder engines provided with plow hitch, strength and bracing are both increased. No stronger construction can be devised than that which is here furnished without making it clumsy and unwieldy when the engine is at work.

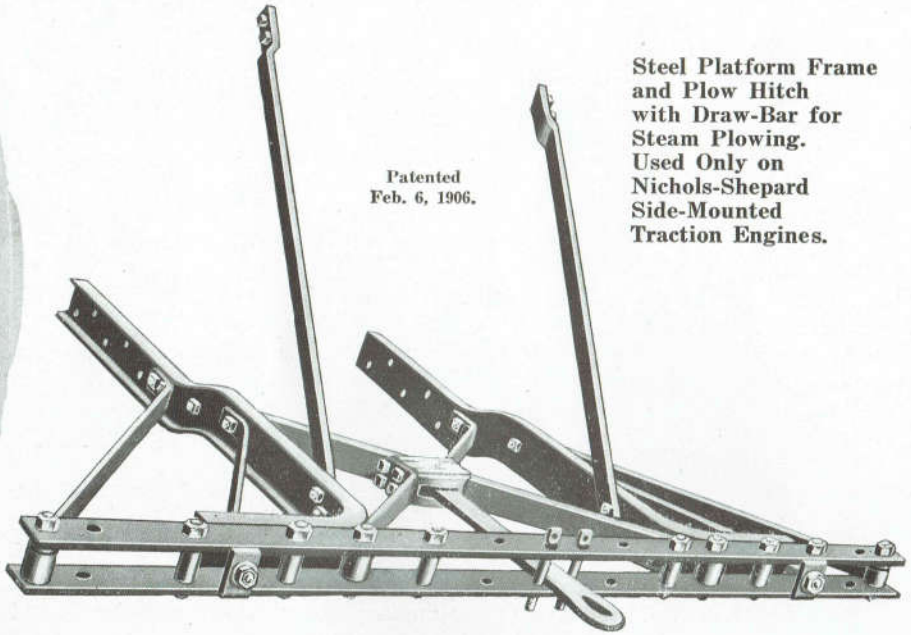
Any number of plows that can be pulled by the engine may be attached and used with no fear of breaking the plow hitch. Soil that is free from rocks or other obstructions that the plows cannot turn can be worked with an economy that no light traction rig can equal. The engine has strength to spare; the plow hitch will not fail when it is desirable to use all of the power that the engine can produce. The modern farmer who wishes to do work on a scale that will yield big returns for his efforts will find that no part of a Nichols & Shepard outfit will ever disappoint him, and that the platform and draw-bar of his engine is one of its best conveniences.

## *Working Ability*
## *Marks All Nichols & Shepard Engines*



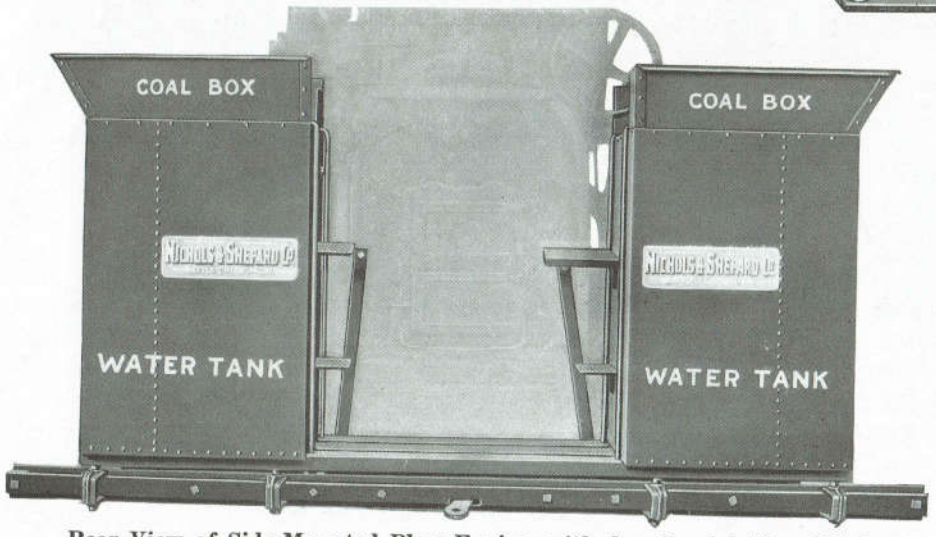
Patented
Feb. 6. 1905.

**Steel Platform and Plow Hitch, with Draw-Bar for Steam Plowing Attached to Nichols-Shepard Side-Mounted Traction Engines.**



Patented
Feb. 6, 1906.

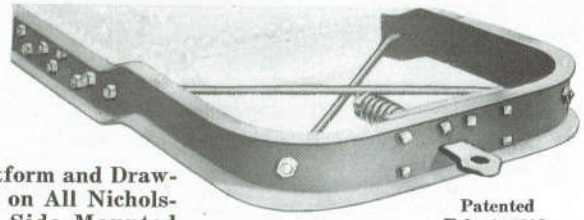
**Steel Platform Frame and Plow Hitch with Draw-Bar for Steam Plowing. Used Only on Nichols-Shepard Side-Mounted Traction Engines.**




**Rear View of Side-Mounted Plow Engine, with Our Special Plow Hitch.**

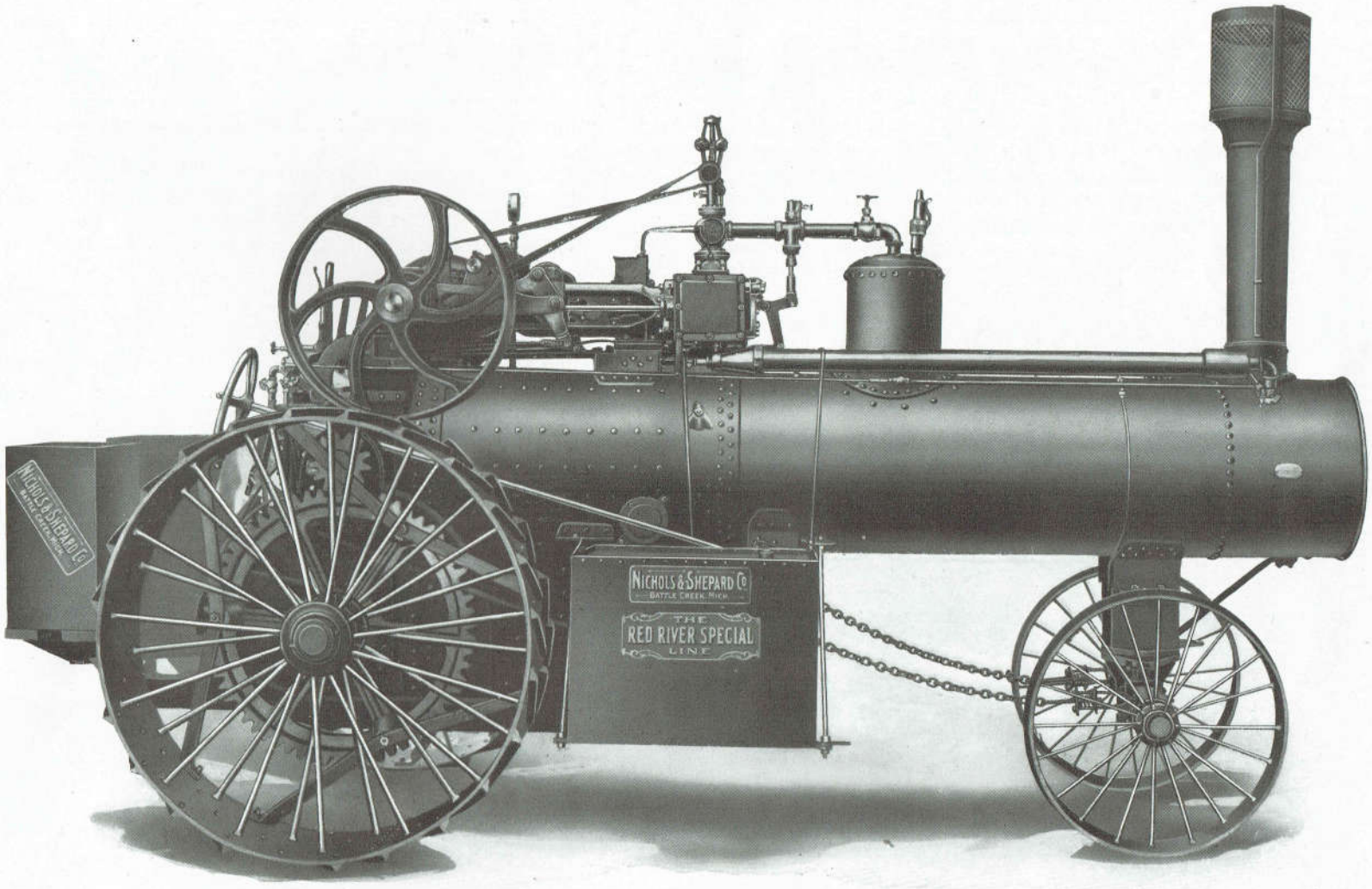
## AMPLE STRENGTH

**Structural steel construction, thoroughly braced and bolted, is used in every engine platform. Draw-bars are unbreakable and directly attached. Fuel and water capacity is large. Note the unusual amount that can be carried on our Special Plow Engine.**



**Steel Platform and Draw-Bar Used on All Nichols-Shepard Side-Mounted Traction Engines.**

Patented
Feb. 6, 1906.




**NICHOLS-SHEPARD REAR-MOUNTED STRAW BURNER, 20-75 H. P. AND 25-85 H. P. (Fly-Wheel Side).**

# The Nichols-Shepard Friction Clutch

As the traction power which the engine develops is transmitted to the work through the medium of the friction clutch, a poor or weak design of this part means constant expense and waste of energy.

The Nichols & Shepard Company have spent much time and thought upon the improvement of the clutch which they use upon their engine and they now believe that they have the safest, strongest and most reliable device that is known for the purpose for which it is intended, and one which possesses every desirable feature that is of use.

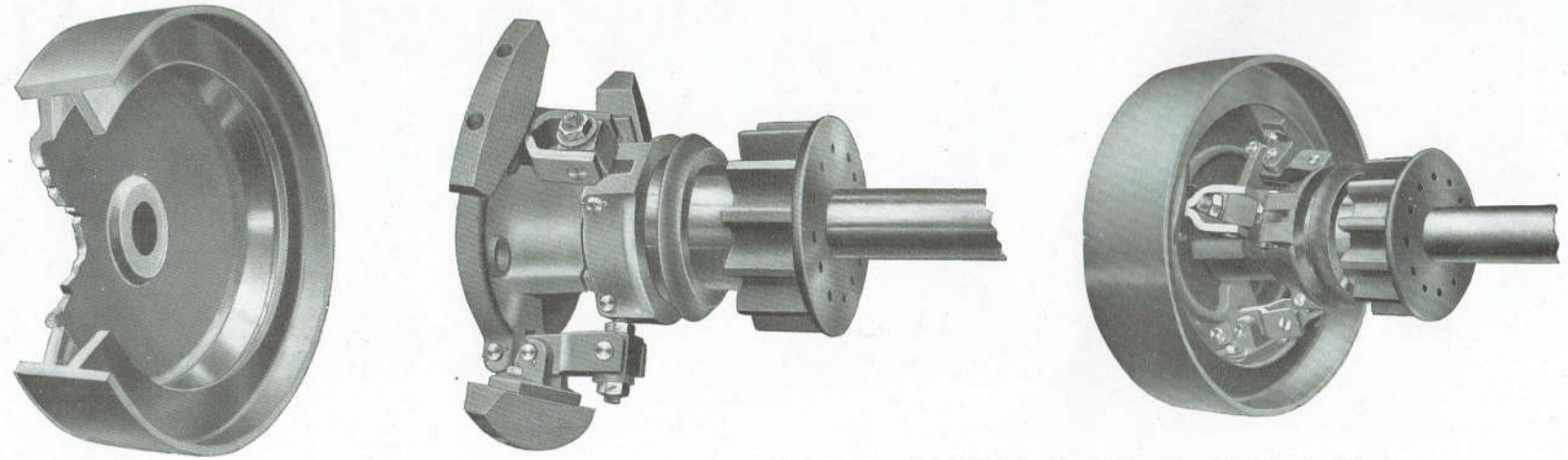
Its grip upon the band-wheel, when fully engaged, is equal to that of a solid connection and it conveys to the gearing all of the power that is produced by the engine.

It is engaged and disengaged with ease and certainty and when kept in proper working condition will not fail in its operation under any condition of work.

As the illustrations show, it is easily accessible for examination or adjustment, a convenience that is appreciated by every user of the engine who makes a point of keeping his power plant at its best. No form of construction that will in any way interfere with doing so is permitted.

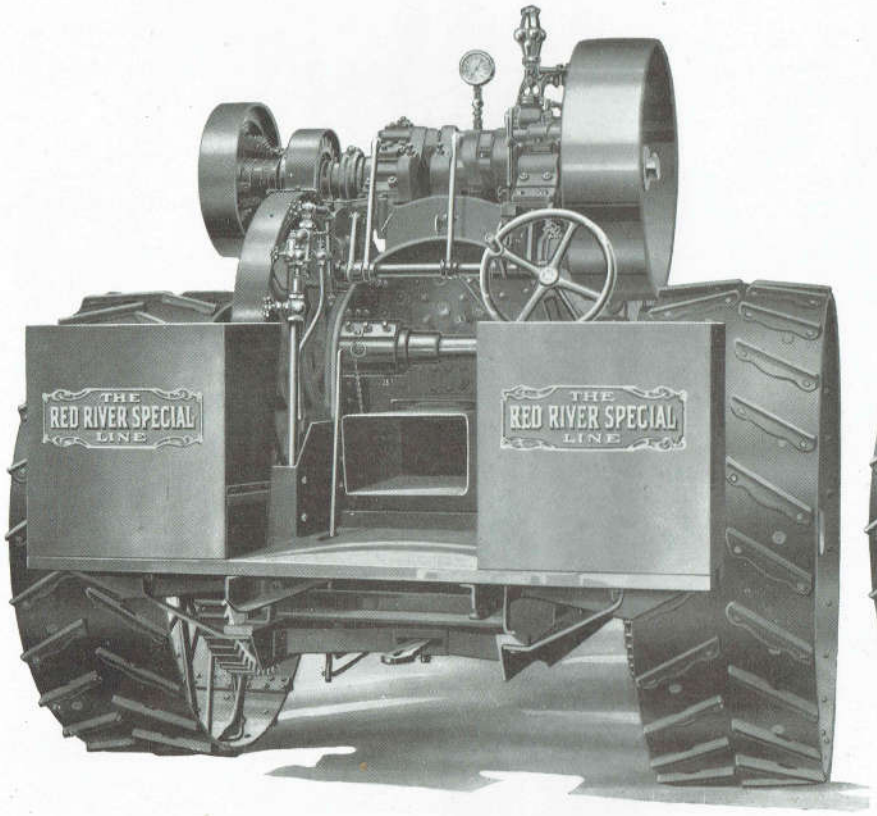
The small clutch pulley, which is used to balance the main-shaft and band-wheel on double-cylinder engines, is faced for carrying a main belt. It makes a fine drive for slow-speed work without in any way changing the adjustments of the engine and does much to reduce unequal wear.

**SAFE.** **DEPENDABLE.** **SURE.**

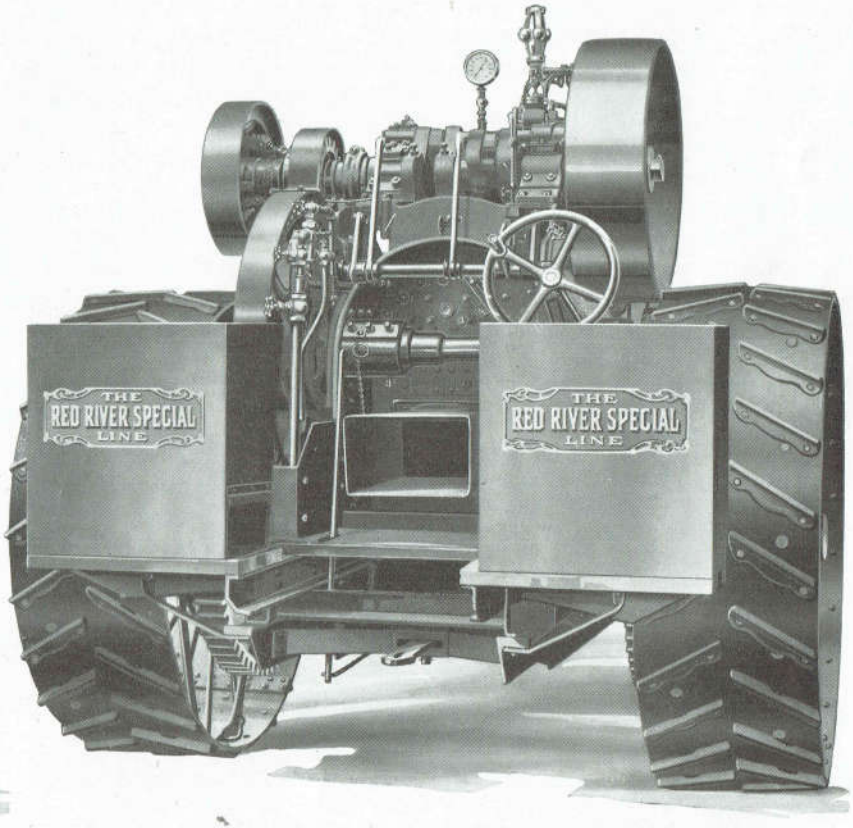


**Nichols-Shepard Friction Clutch for Double-Cylinder Engines.**

# Convenient When Traveling or When Threshing




**Nichols-Shepard Rear-Mounted Engine as Arranged for Travel. Ample Room for the Driver.**




**Nichols-Shepard Rear-Mounted Engine as Arranged for Burning Straw. Part of Platform Removed, to Make the Firing Quick and Convenient.**

# Some of the Advantages of a Nichols-Shepard Engine

That the many advantages secured in the purchase and use of a Nichols-Shepard traction engine may be seen at a glance, they are briefly brought together upon this page.

The real value of an engine lies in the work that it will perform after the newness is gone. You don't buy one every season. You must, if you buy wisely, buy dependable long life. Money saved in the purchase price is soon lost in the upkeep and repairs which a second-rate engine requires.

With this understood, we invite the most careful consideration of the following items, which clearly show the main points of superiority possessed by a Nichols-Shepard engine:

**The Boiler.**—High pressure, homogeneous steel-plate, selected stock, extra thick and extra strong, is employed in every boiler that carries a Nichols & Shepard Co. engine. The safety and working life of the power plant are dependent upon the superior quality of the boiler—a fact never forgotten or overlooked in the construction of any type of engine that is a part of the Red River Special Line.

The flue-sheet is half an inch thick and the fire-box ends of the flues are set with copper ferrules or thimbles. They make a better and more lasting joint.

The flues are seamless steel and extra long.

The fire-box is extra large, insuring easy steaming.

Long smoke-box to aid draft and catch the sparks.

Shaking grates in the fire-box for burning coal.

Double- or triple-riveted seams where the greatest strain comes. Amply stayed by numerous large stay bolts.

Steel-plate on the bottom of the fire-box in place of the pan used on other makes.

**The Engine.**—The link is made with oil boxes which can be filled with cotton waste so the movement of the link does not throw the oil off the bearings.

The principal bearings are bushed so that when worn they can be cheaply replaced.

The eccentric hubs and valve-rods are pinned in their true position, where they cannot get out of place or slip and throw the valve out of position.

The main-shaft in the double engine is forged from high carbon steel, extra strong, with three boxes on the 25-85-H. P. and 30-98-H. P. engines.

The main-shaft in the single engine is extra heavy and strong.

The connecting-rods are of forged high-grade steel.

The engine rests on a substantial bed plate and heater, through which the feed water passes, and is heated hot before it enters the boiler.

Every engine provided with a reliable pump, also injector.

The large main-shaft boxes are oiled at the bottom as well as at the top, insuring perfect lubrication.

Extra strong steel and semi-steel gearing made in such proportions as to give the greatest strength. The teeth are very thick and strong.

Extra heavy and strong brass fittings made from our own special patterns.

Governor arranged so that the engine can be adjusted to run at any speed between 100 and 300 revolutions per minute.

Countershaft boxes extra long and made solid around the shaft with adjustable gib to take up wear or lost motion.

Large axle brackets, with wide bearings, attached to the plate on sides of the boiler of all single-cylinder engines with stud-bolts. Truss-rods extending under the boiler for additional strength.

**The Traction Wheels.**—The wheels have steel tires, with wrought iron spokes riveted while red hot in the tires, and the molten metal in the hub is cast solid on the spokes, making the hub, the spokes and the tires form absolutely the strongest wheel made for its weight of metal.

Lugs riveted on the wheels which can be easily replaced if in the course of long time they should wear out. They are so placed on the wheel that they clean themselves in most soils.

Steel axle with large cast-iron sleeve on small engines, making a journal for the traction wheels that should never wear out. It is reversible if there happens to be wear on the bottom side.

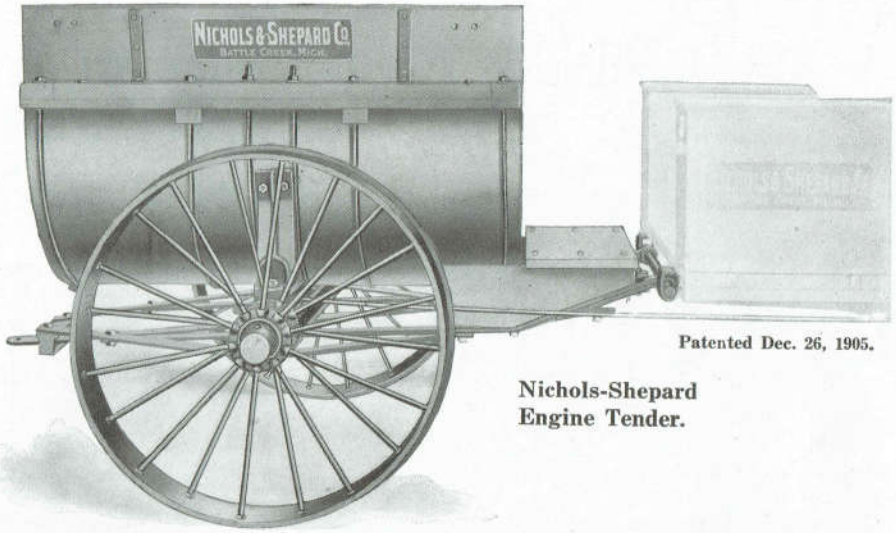
**The Platform.**—Heavy channel iron platform frame bolted to each side of the boiler below the water-line with cross and brace rods, making it extra strong.

Large water-tanks and coal-bunkers furnished with tool-box.

Does any other manufacturer give more?

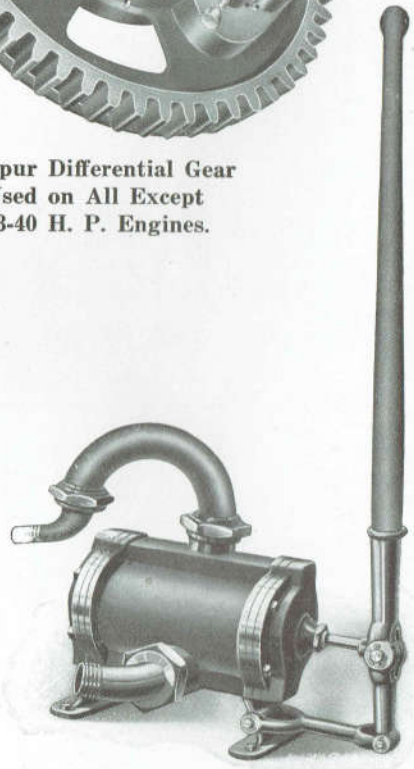
Does any practical buyer of an engine want less?

**Spur Differential Gear Used on All Except 13-40 H. P. Engines.**

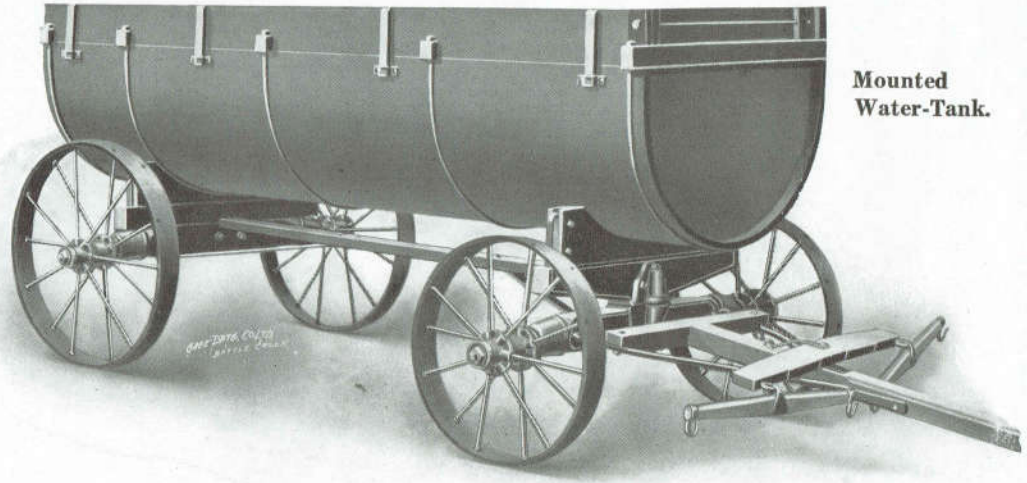



Patented Dec. 26, 1905.

**Nichols-Shepard Engine Tender.**



**Low-Down Tank Pump.**



**Mounted Water-Tank.**

# Dimensions of Nichols-Shepard Traction Engines—in Inches

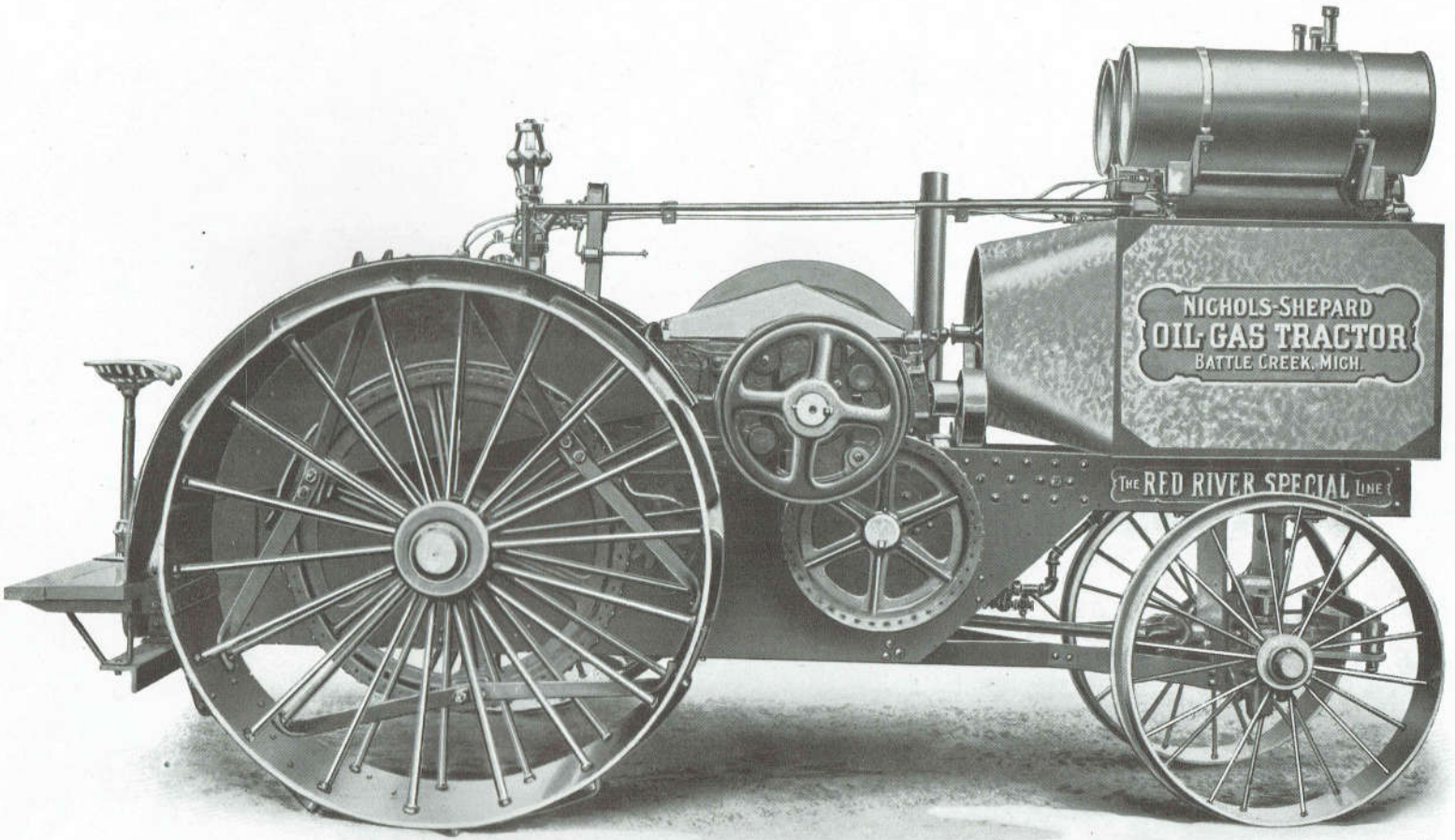
**(Subject to Change without Notice)**

| SIZE | CYLINDER | | BOILER | | FIRE-BOX | | | FLUES | | | SMOKE BOX | FLY-WHEEL | | SPEED | TRACTION WHEELS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Diam. | Length | Diam. | Length | Length | Width | Height | No. | Diam. | Length | Length | Diam. | Face | | Diam. | Face |
| COAL AND WOOD BURNERS | | | | | | | | | | | | | | | | |
| 13- 40H. Single, Side Mounted.... | $7\frac{3}{4}$ | 10 | 28 | 142 | 34 | 24 | 33 | 38 | 2 | 77 | 30 | 36 | 10 | 240 | 58 | 16 |
| 16- 50H. " " " .... | 8 | 12 | 29 | 150 | 40 | 25 | 40 | 40 | 2 | 77 | 30 | 40 | 10 | 225 | 64 | 18 |
| 20- 70H. " " " .... | $8\frac{1}{2}$ | 12 | 32 | 175 | 49 | 27 | 49 | 32 | $2\frac{1}{2}$ | 94 | 30 | 40 | 12 | 225 | 69 | 20 |
| 25- 85H. " " " .... | $9\frac{1}{4}$ | 12 | 36 | 177 | 51 | 31 | 51 | 45 | $2\frac{1}{2}$ | 94 | 30 | 40 | 12 | 225 | 73 | 24 |
| 30- 98H. " " " .... | $9\frac{3}{4}$ | 12 | 39 | 177 | 57 | 34 | 55 | 54 | $2\frac{1}{2}$ | 94 | 30 | 40 | 12 | 225 | 79 | 32 |
| 16- 60H. Double, Rear Mounted... | $6\frac{1}{4}$ / $6\frac{1}{4}$ | 10 / 10 | 29 | 152 | 45 | 25 | 40 | 40 | 2 | 79 | 26 | 40 | 12 | 225 | 64 | 20 |
| 20- 75H. " " " ... | $6\frac{5}{8}$ / $6\frac{5}{8}$ | 10 / 10 | 32 | 171 | 49 | 27 | 49 | 32 | $2\frac{1}{2}$ | 94 | 26 | 40 | 12 | 225 | 71 | 24 |
| 25- 85H. " " " ... | 7 / 7 | 10 / 10 | 36 | 173 | 51 | 31 | 51 | 45 | $2\frac{1}{2}$ | 94 | 26 | 40 | 12 | 225 | 73 | 28 |
| STRAW BURNERS | | | | | | | | | | | | | | | | |
| 20- 70H. Single, Side Mounted.... | $8\frac{1}{2}$ | 12 | 32 | 175 | 49 | 27 | 49 | 32 | $2\frac{1}{2}$ | 94 | 30 | 40 | 12 | 225 | 69 | 20 |
| 25- 85H. " " " .... | $9\frac{1}{4}$ | 12 | 36 | 177 | 51 | 31 | 51 | 45 | $2\frac{1}{2}$ | 94 | 30 | 40 | 12 | 225 | 73 | 24 |
| 30- 98H. " " " .... | $9\frac{3}{4}$ | 12 | 39 | 177 | 57 | 34 | 55 | 54 | $2\frac{1}{2}$ | 94 | 30 | 40 | 12 | 225 | 79 | 32 |
| 20- 75H. Double, Rear Mounted... | $6\frac{5}{8}$ / $6\frac{5}{8}$ | 10 / 10 | 32 | 171 | 49 | 27 | 49 | 32 | $2\frac{1}{2}$ | 94 | 26 | 40 | 12 | 225 | 71 | 24 |
| 25- 85H. " " " ... | 7 / 7 | 10 / 10 | 36 | 173 | 51 | 31 | 51 | 45 | $2\frac{1}{2}$ | 94 | 26 | 40 | 12 | 225 | 73 | 28 |

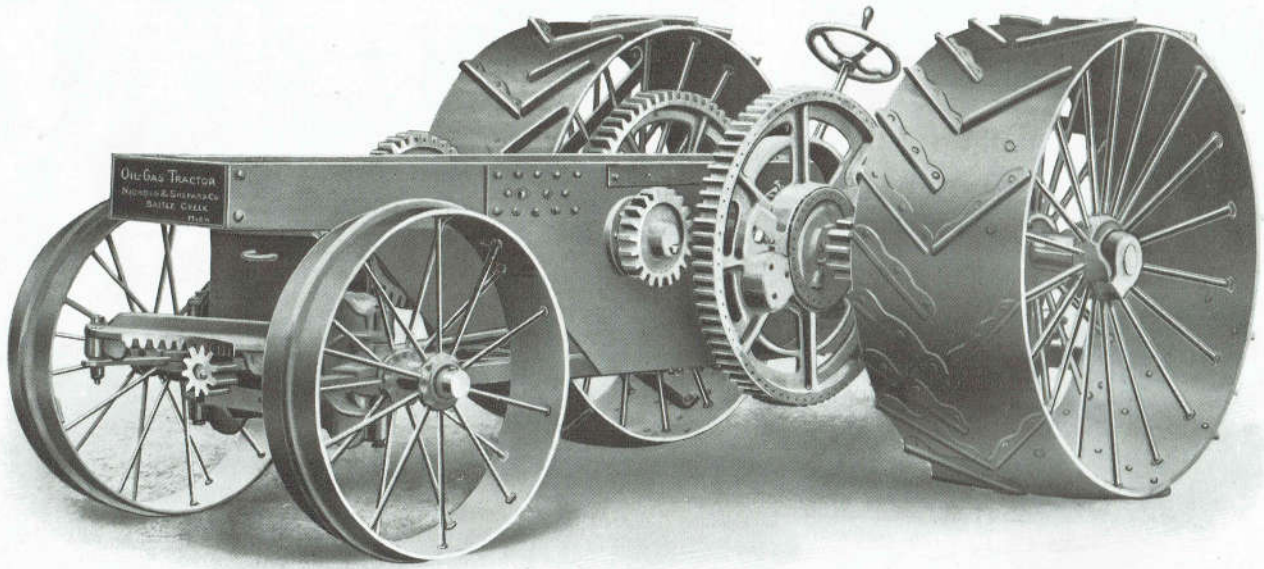
**Special Note.**—The 16-60 Double Rear-Mounted Engine may be furnished equipped as a straw-burning engine when so desired. Can furnish Traction Wheels with 4 inch wider tire than above, except 30-H. We can also furnish 8-inch wide extension tire to traction wheels at small additional cost.

## Main Drive Belts, Extra

140 feet long, 6 inches wide, 4-ply Canvas ..... For 22 x 36, 28 x 40 and 30 x 46 Red River Specials
140 feet long, 7 inches wide, 4-ply Canvas ..... For 32 x 52 Red River Specials
150 feet long, 8 inches wide, 4-ply Canvas }
150 feet long, 8 inches wide, 4-ply Rubber } ..... For 36 x 56 and 40 x 60 Red River Specials




**NICHOLS-SHEPARD OIL-GAS TRACTOR.**
**Built in Two Sizes—25-50 H. P. and 35-70 H. P.**




**FRAME AND GEAR OF THE OIL-GAS TRACTOR.**

**Strength and Simplicity Make It Effective. This Construction Is Used on All Sizes.**

# Nichols-Shepard Oil-Gas Tractor

That the Red River Special Line may lack nothing that will enable its user to secure the greatest possible returns on his investment, we build and furnish a thoroughly dependable tractor of the oil-gas type.

It burns kerosene, gasoline, naphtha or distillate at all loads and is guaranteed to develop more than its rated horse-power.

It is built in two sizes, 25-50 H. P. and 35-70 H. P.

It is of the twin-cylinder, four-cycle, throttling governor type, with jump spark ignition, an igniter which has but two wires, one leading to each of the two spark plugs. This igniter is all contained within a dust-proof and water-proof metal case. It has but one moving part and requires but little attention. The igniter is used for both starting and running. This use of the single unit igniter allows us to dispense with batteries, coils, timer and magneto.

It has the fewest possible number of gears, the power is not transmitted through any bevel-gears, either to the road wheels or the belt, and no non-working gears are in motion while running ahead on the road. The engine is built for plowing, heavy hauling and threshing.

A carburetor of standard automombile design is used in connection with a Pickering governor, and this combination insures a speed regulation which closely approximates that of the best steam engines, and makes it a good engine for driving threshing machinery.

There is no device that is new, untried or experimental in its entire design.

Every feature has been thoroughly tried out and demonstrated to be thoroughly practical in every way.

Both sizes have been used in plowing, hauling and threshing until it has been proved that there are no weak or inefficient parts to make trouble and expense for the user.

It is equipped with our own non-reversible steering gear. This makes the tractor much more easily handled either in the field or on the road, for the reason that there is an entire absence of jerk, which all chain-guided engines have. It steers like an automobile. It guides as easily while plowing as when on the road.

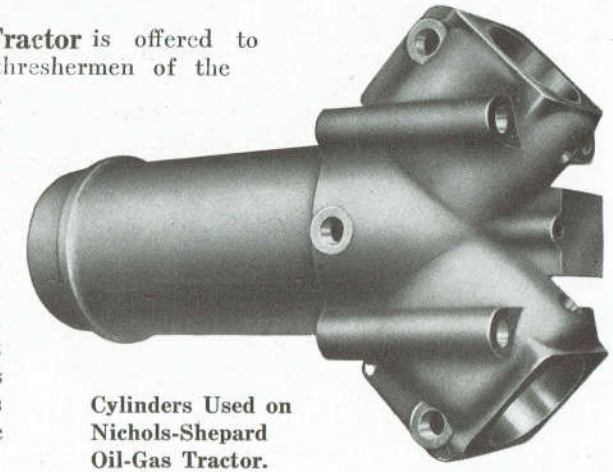
It has our own special radiator. Easily repaired if it should happen to leak, and regularly equipped so that it can be oil-cooled for cold climates instead of water cooled.

It is well to bear in mind that great caution should be used in the selection and purchase of a gas tractor. Over-confidence in untried models has shown that their greatest power may be exerted in the direction of ruin for both maker and user. No impractical machine has ever gone out under the Nichols & Shepard Company's name, and none is allowed to go now.

Investigation is requested, as only by comparison can its merits be learned. It will be found more practical and more durable than any other built.

Before a gas engine of any kind is put in service, the work that is expected from it should be well considered. If heavy duty is required, the light tractor cannot be made to give long, continued service, no matter how efficient it seems in a short trial. "Stunt" exhibitions often induce the buyer to invest in an engine that will "lay down" from overwork on an apparently easy job.

**The Oil-Gas Tractor** is offered to the farmers and threshermen of the country as a fit and creditable addition to the machinery which comprises the thoroughly dependable Red River Special Line, and those desiring a gas tractor of unquestioned strength and merit are assured by its builders that it has no superior in the market.



**Cylinders Used on Nichols-Shepard Oil-Gas Tractor.**

## The Man Who Buys a Nichols-Shepard Oil-Gas Tractor, Buys

A steady, smooth power for threshing equal to that of the best steam engines.

The most powerful plowing engine built for its rating.

The best kerosene burner made.

Freedom from petty troubles and annoyances.

The heaviest gearing put upon a gas tractor.

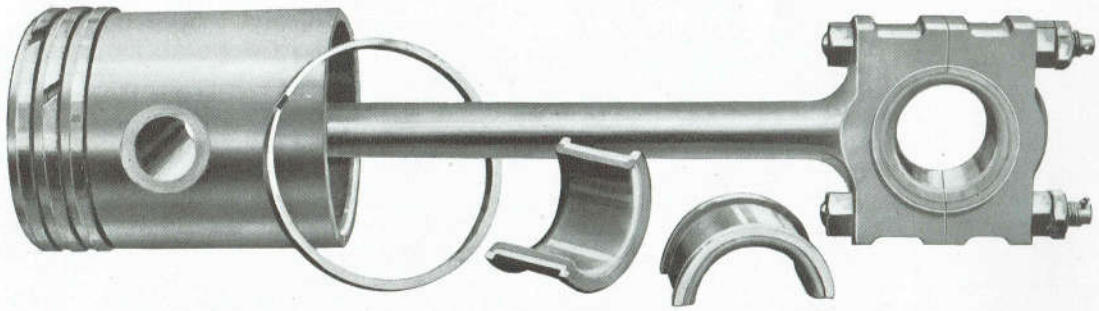
The largest shafts and longest bearings.

The simplest and most convenient gas tractor now being marketed.

The best cooling system known. Water or Oil.

The best service that can be rendered to customers.

An engine without a gasket which comes in contact with anything but the weight of the water or oil in the cooling system.



**Piston and Connecting-Rod Complete, Nichols-Shepard Oil-Gas Tractor.**

Extra wide and high drive wheels.

An engine that can be guided across a field in a straight line.

The fewest gear reductions possible.

An engine with no non-working traction gearing ever in motion.

A Gas Tractor, the manufacturers of which have never been called upon to furnish a new crankshaft, countershaft or rear axle from any cause.

The man who buys a Nichols-Shepard Oil-Gas Tractor buys SATISFACTION, and gets a dollar's worth of engine for every dollar he pays for it. He buys it from a company which has been building nothing but threshing machinery and traction engines since 1848 and whose effort is not scattered over other lines—a company whose one effort is and has always been to build the best machinery in its line that can possibly be built.

## The Man Who Buys Other Makes of Gas Tractors Too Often Buys

An experiment—something to be demonstrated and tried out at his expense.

An engine which is not strong or dependable.

An engine too light to do the work expected of it.

An engine made for automobiles instead of tractors.

Too light gearing.

Too small shafts and too short bearings.

An engine which runs so fast it soon wears itself out.

A fast running engine which cannot be made to burn kerosene successfully.

An engine which will not furnish smooth, dependable power for threshing.

An engine the maker of which demands cash for it because it will not last long enough to earn the money to pay for itself.

An engine so closely built and with so many pieces that there is no room to use a wrench on it.

An engine with gaskets which are constantly leaking.

A mixer instead of a carburetor, because a carburetor costs too much.

An engine without a governor which will properly control its speed, or one with such poor regulation that none at all would be a distinct improvement.

An engine which never gives satisfaction, is never dependable,

which is a continual source of worry and expense and which was not sold by a company with a record of years of successful and square dealing back of it.

When the qualifications possessed by the Nichols-Shepard Oil-Gas Tractor are slighted in any particular, it is a certainty that some, if not all, of the troubles listed will develop.

The user of the best combustion engine yet devised will admit that it has its "peculiarities." Lack of properly designed arrangements for overcoming these "peculiarities" soon makes of them chronic diseases impossible of cure.

No buyer of a gas engine will knowingly purchase an outfit that will give him constant trouble. The small amount that may possibly be saved in buying an experimental or undeveloped model is so soon lost in wasted time and delayed work that nothing but tested and proved machines should be considered.

The Nichols-Shepard Oil-Gas Tractor will be found to be one of the best of this kind. The most cautious buyer could require no more exacting trials of fitness for the work to be performed than this company regularly applies as a matter of course in determining that each individual part, as well as the tractor complete, is in every way adapted to the duty it must accomplish in making good under its broad and explicit guaranty.

The reputation of this company has been built up by work well performed. It has climbed to the top in its chosen field by doing the things that it attempts to do a little better than they have ever been done before, and then seeking to improve upon its own standards.

In the manufacture of the Oil-Gas Tractor it has made no change in this policy. Not one penny of the buyer's money has ever been taken unless he was given in exchange its full value in the machine which was sold to him, be it a spark-plug or a complete Gas-Tractor engine.

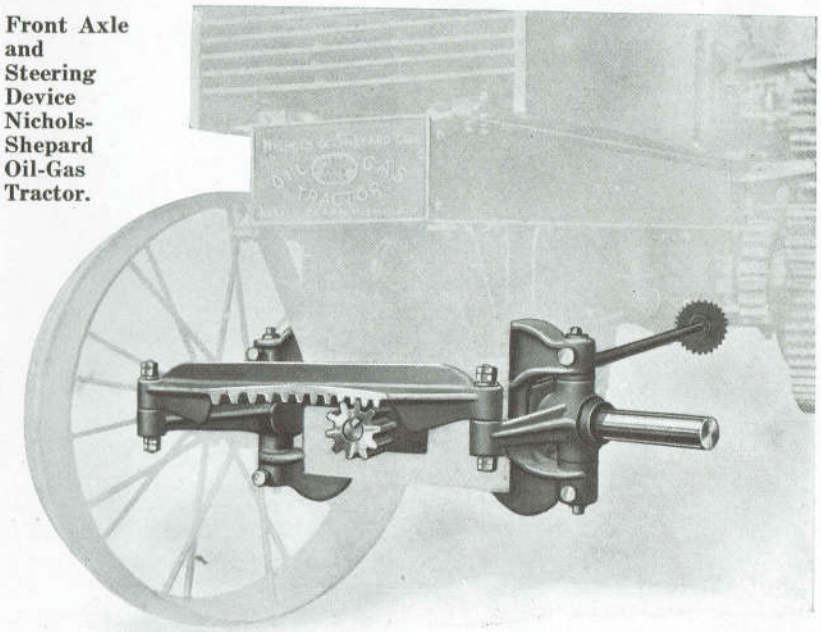
In contrast with history of bitter memory in which half-baked appliances that converted good kerosene and gasoline into a blight upon the entire combustion engine industry, as applied to agriculture, while taking millions of the farmers' money for nothing, the lesson that we point is an obvious one.

*Buy your Gas Tractor from a concern that has nothing to sell but Oil-Gas Tractors that will WORK.*

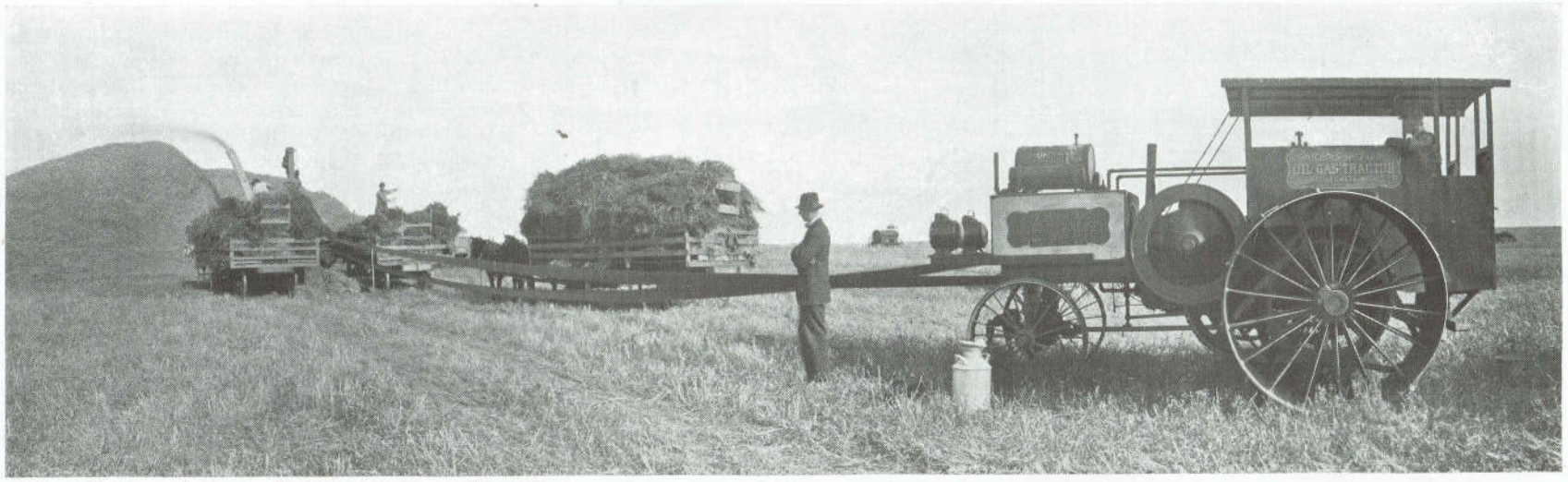
You will be satisfied, your work will be well done and your profits from that work will so quickly take care of the cost of the engine that years of service may be had in which upkeep alone is to be considered.

The experience of users is year by year showing that the cost of upkeep is small, even where the engine is used upon the hardest kind of work. Records in which better than fifty bushels of wheat have been threshed with a gallon of coal oil or an acre of ground double disced, seeded and harrowed with the same amount of fuel are common in the letters which come in from satisfied owners of this capable power producer. That breakage is rare and the repair account exceedingly small is also a well-established fact.

Special details and dimensions, with prices and terms on a *working Gas Tractor,* can be had from the Nichols & Shepard Company. They make no cat-power machines.



**Front Axle and Steering Device Nichols-Shepard Oil-Gas Tractor.**



**A Nichols-Shepard Oil-Gas Tractor at Work in the Great Grain Fields of the Northwest.**

# Why This Tractor Does Not Fail

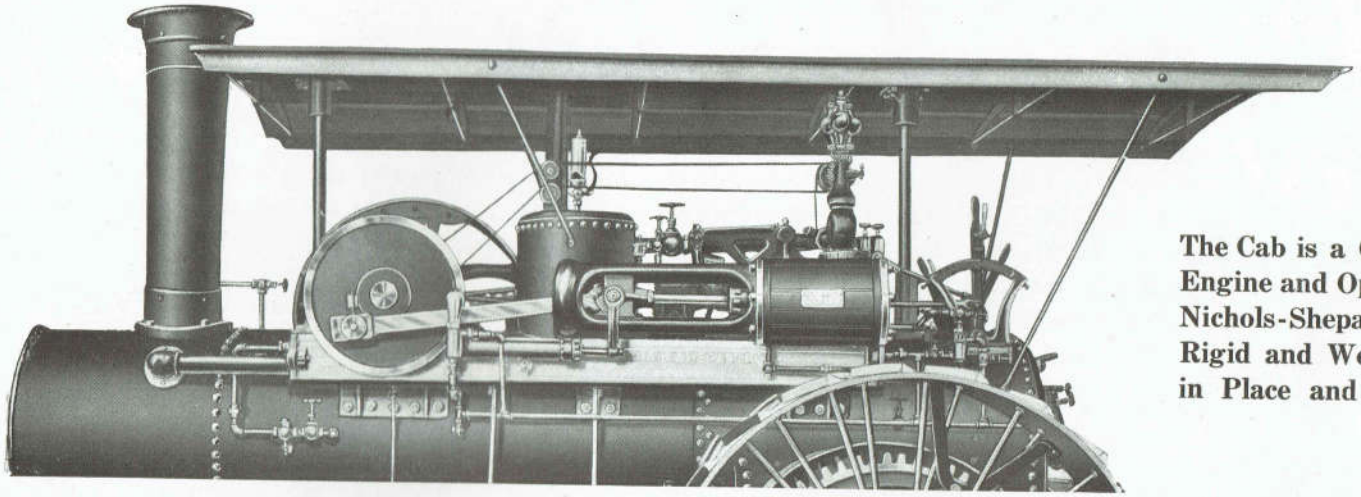
Reserve power is the keynote of success with any driving mechanism that produces power for use in performing any kind of task. This is especially so in the operation of a threshing machine. Motion must be even, steady and strong, or else bad separation is the unfailing result.

That is why the veteran thresherman depends upon steam. He knows that the "peak load" will be automatically taken care of by the sensitive governor of his engine, which will draw upon reserve power to do it.

There is no reserve power in the majority of the gas tractor toy outfits constantly being manufactured and sold to the thresherman and the farmer. They can scarcely do the work for which they are recommended, and fail miserably when attached to drive a threshing machine. For this reason the light tractor has never been made in the Red River Special line.

The slow motion developed by the Nichols-Shepard twin-cylinder oil-gas tractor has big reserves from which to draw. The first lies in the fuel mixture, which may be closely regulated by a carburetor of the best type, and the second lies in the heavy and powerful fly-wheel, in which latent energy is stored. The two combined, in the hands of an operator who knows his machine, permit of applying this oil-gas engine with success to the difficult work of driving a threshing rig.

That this is profitably done, a glance at the illustration will show. Here is a picture of work well done and lots of it—just the kind of work you will want to do yourself when employing similar means. To do it you must have the weight, strength and steady power that oil-gas will give by the Nichols-Shepard system. No fast-running, light-weight engine of the automobile type will deliver the goods. *The reserve power is not there, as IT IS in our Oil-Gas Tractor.*



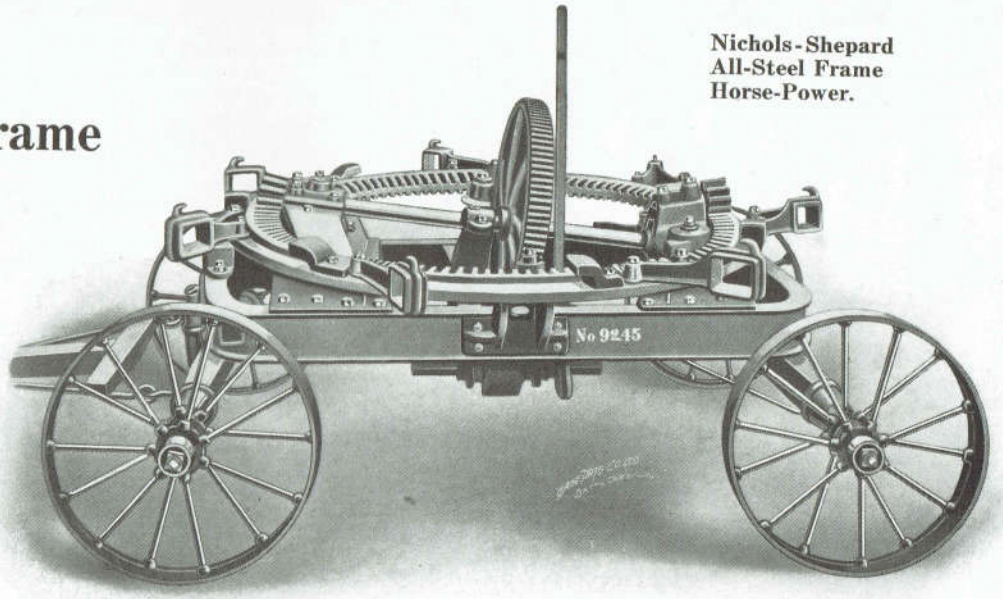
**The Cab is a Great Protection to Engine and Operator Alike. The Nichols-Shepard Cab is Strong, Rigid and Well Built. It Keeps in Place and Holds Its Shape.**

# Nichols-Shepard All-Steel Frame Horse-Power

The same heavy steel I-beam construction is used in the frame of a Nichols-Shepard Horse-Power that is used with so much efficiency in the platforms of their heaviest traction engines.

It cannot warp, twist, or get out of line. Weather has no effect upon it, neither has severe strain or misuse. When the shafting is set in line and the gear is put in mesh, it is there to stay. The frame or body will not change, pinch or drag. Its perfect work makes it easy for the horses.

Built in 10-, 12- and 14-H. P. sizes.




**Nichols-Shepard All-Steel Frame Horse-Power.**

# What Is Given After the Sale

In conclusion it may be well to note the intangible things that this company has always sold with its product.

First and foremost is the item of service; not the service that delivers your purchase, takes your money and forgets you, but the friendly interest in your welfare that gives you the help so often necessary in making a successful start with the machinery that you have bought. This saves the buyer far more in actual money than the apparent difference between Nichols & Shepard standard prices and those which are made by cheap competitors upon inferior machines.

The buyer of experience always figures this item of service as a real asset rather than an expense. He is glad to pay the price of a Nichols & Shepard outfit, because he knows that every dollar that he invests will be made to yield him a proper return if anything that lies within the power of the seller is able to make it do so.

The company service in the starting and operating of its machinery is invaluable to the novice. It brings to bear in this work a knowledge that is born of more years of experience than has fallen to the lot of any concern in the exclusive making of threshing machinery. This experience and this knowledge is a part of every sale that is made by the Nichols & Shepard Company, and the sharing of it with the buyer of a Red River Special outfit will be found fully equal in value to the cost of the purchase.

A repair department that can take care of every need with a promptness that counts when repairs are a necessity is maintained at every branch. Day or night orders are instantly filled during the busy portion of the threshing season by branch houses in every section of the country.

Northwest territory is served from an immense warehouse at the Minnesota transfer, between St. Paul and Minneapolis, Minn., where everything made or sold by the company is kept ready for rush shipment. Factory advantages are thus brought within reach of the great grain-growing regions with the saving of a full two weeks in time.

The reputation which the Red River Special line and its makers enjoy has been built up and is maintained through a service and satisfaction to its customers that can nowhere else be duplicated.

This service consists in selling the best machinery that is made for the purpose, in keeping the purchaser advised as to the best way to get paying results with it and in making sure that everyone interested, operator or customer, shall get more for the money that he invests than can be elsewhere obtained in the threshing of grain.

Every buyer or user is invited to make known to the company any plan that he can suggest to better this service that we render. Our interests are identical with those of the thresherman, wherever he may be, and any real need that he discovers is also our own.

## NICHOLS & SHEPARD COMPANY, Battle Creek, Michigan

**(In Continuous Business Since 1848)**

**Builders EXCLUSIVELY of Threshing Machinery**

**Red River Special Threshers, Feeders, Wind Stackers, Steam and Oil-Gas Traction Engines**

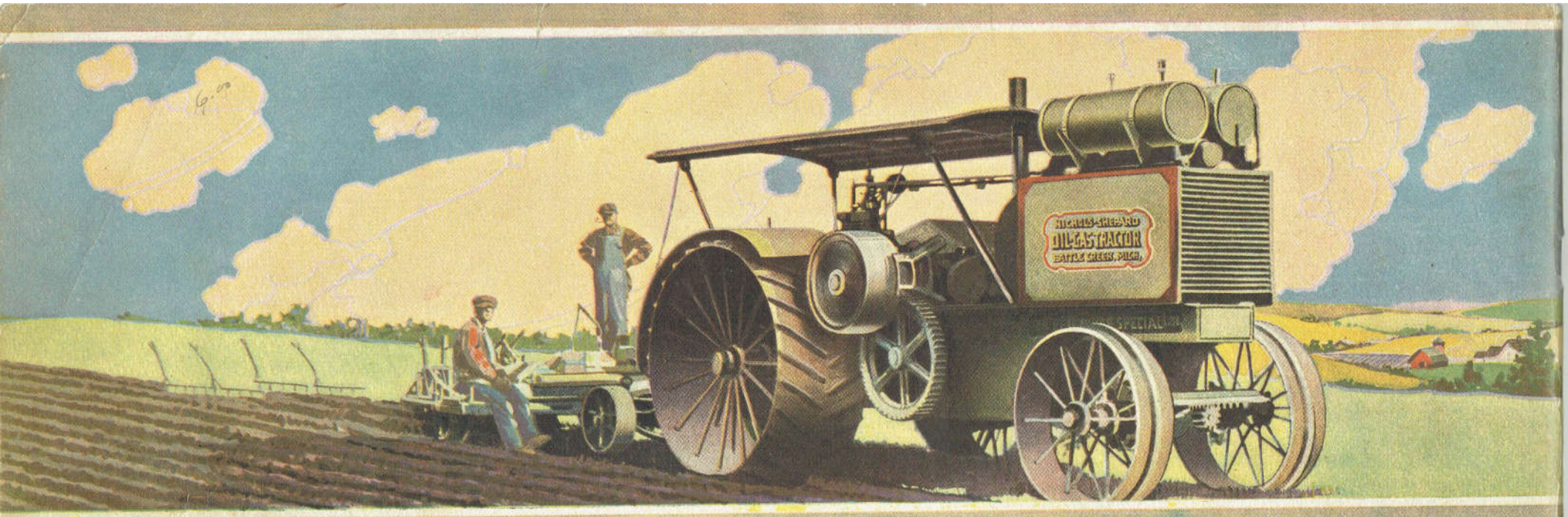


GAGE SERVICE, BATTLE CREEK, MICH.

# SOUND BUSINESS JUDGMENT

*The Kind that Buys*
*The Best Appliances Known*
*for the Purpose*

# SHOULD GOVERN YOUR CHOICE




*For Breaking the Way*

# The Red River Special Line

## *Knows No Rival*

## Wastes Not — Wants Not

*Ask For the Record's Made*