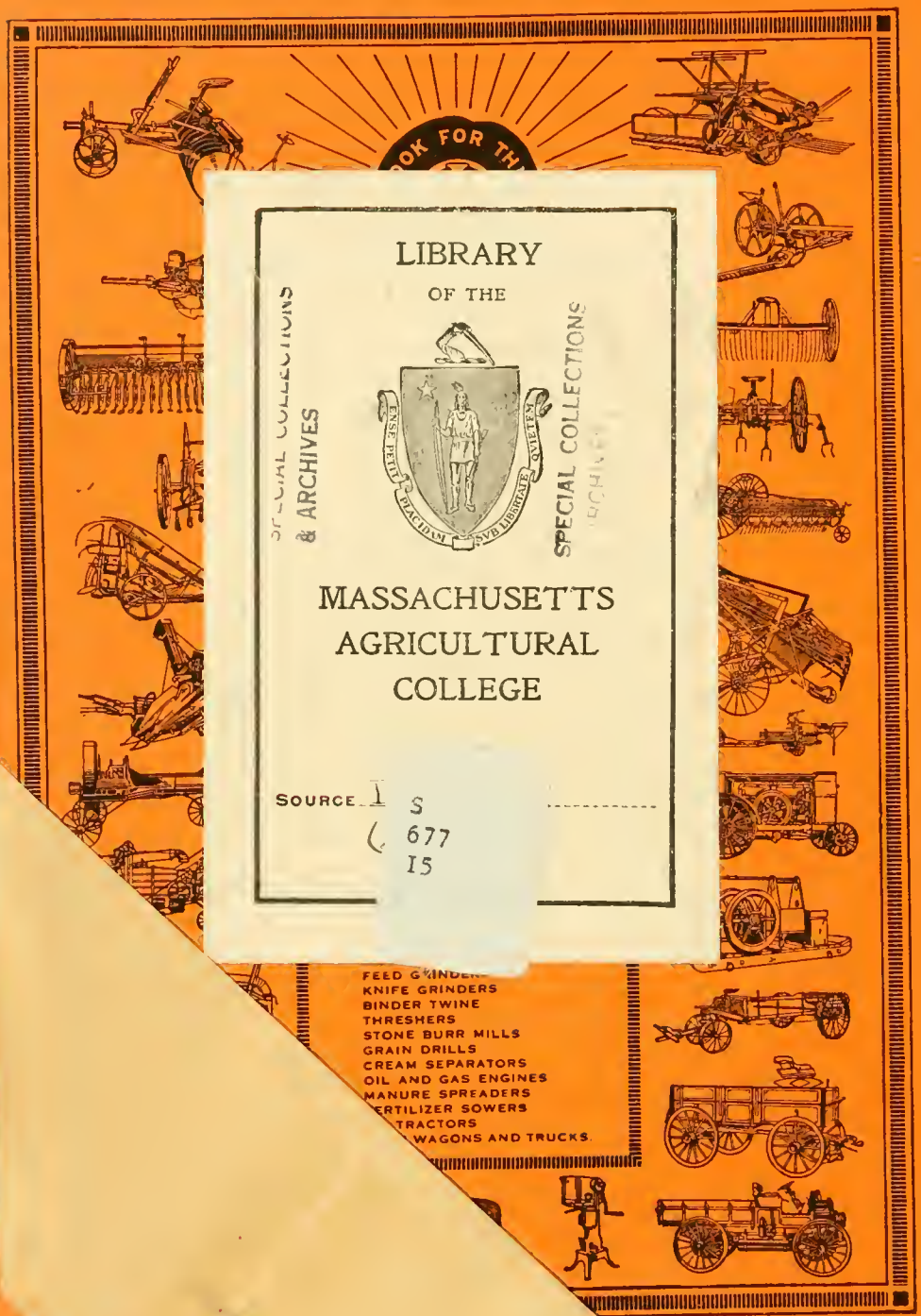
INTERNATIONAL HARVESTER

TRADE MARK

CATALOGUES



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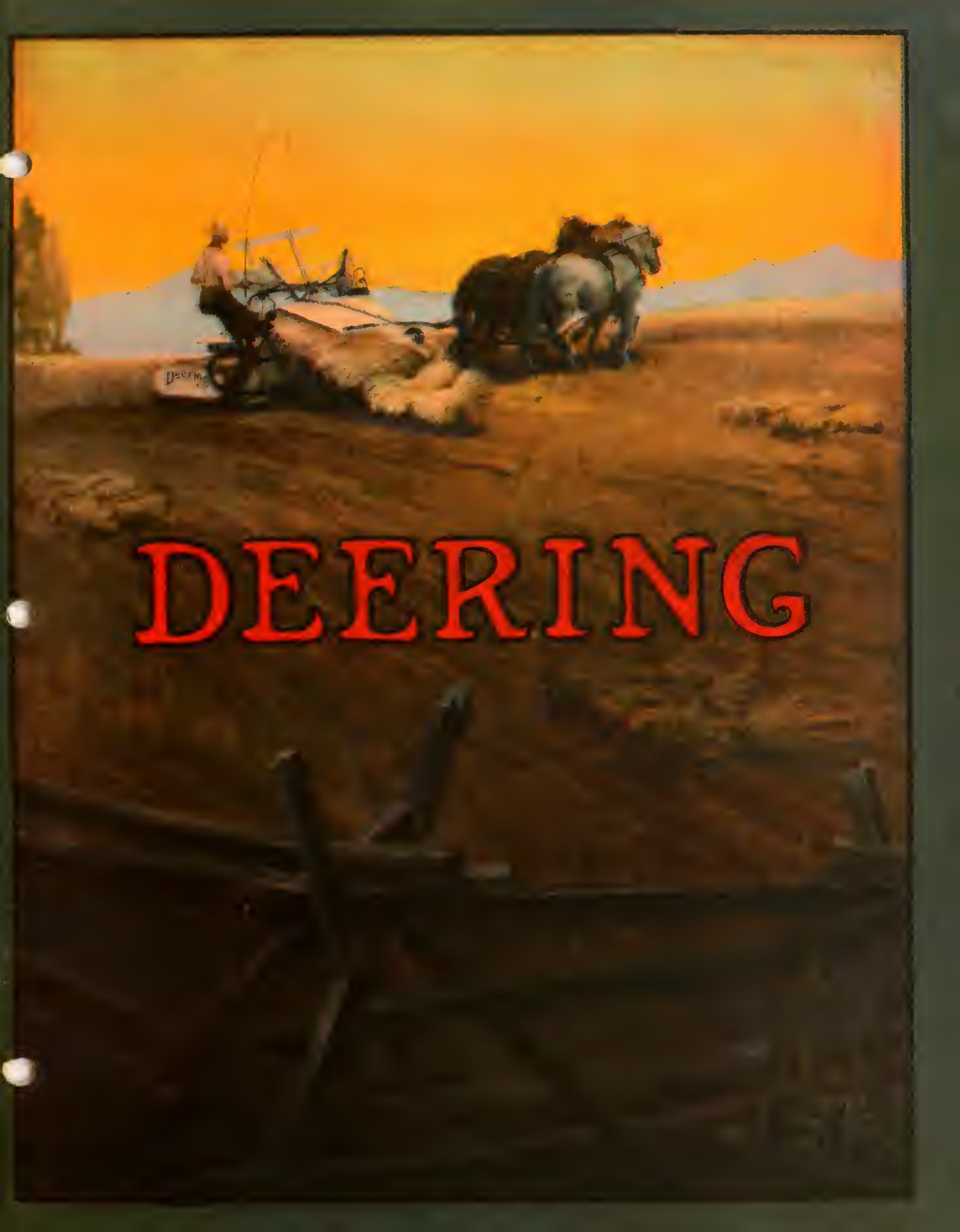
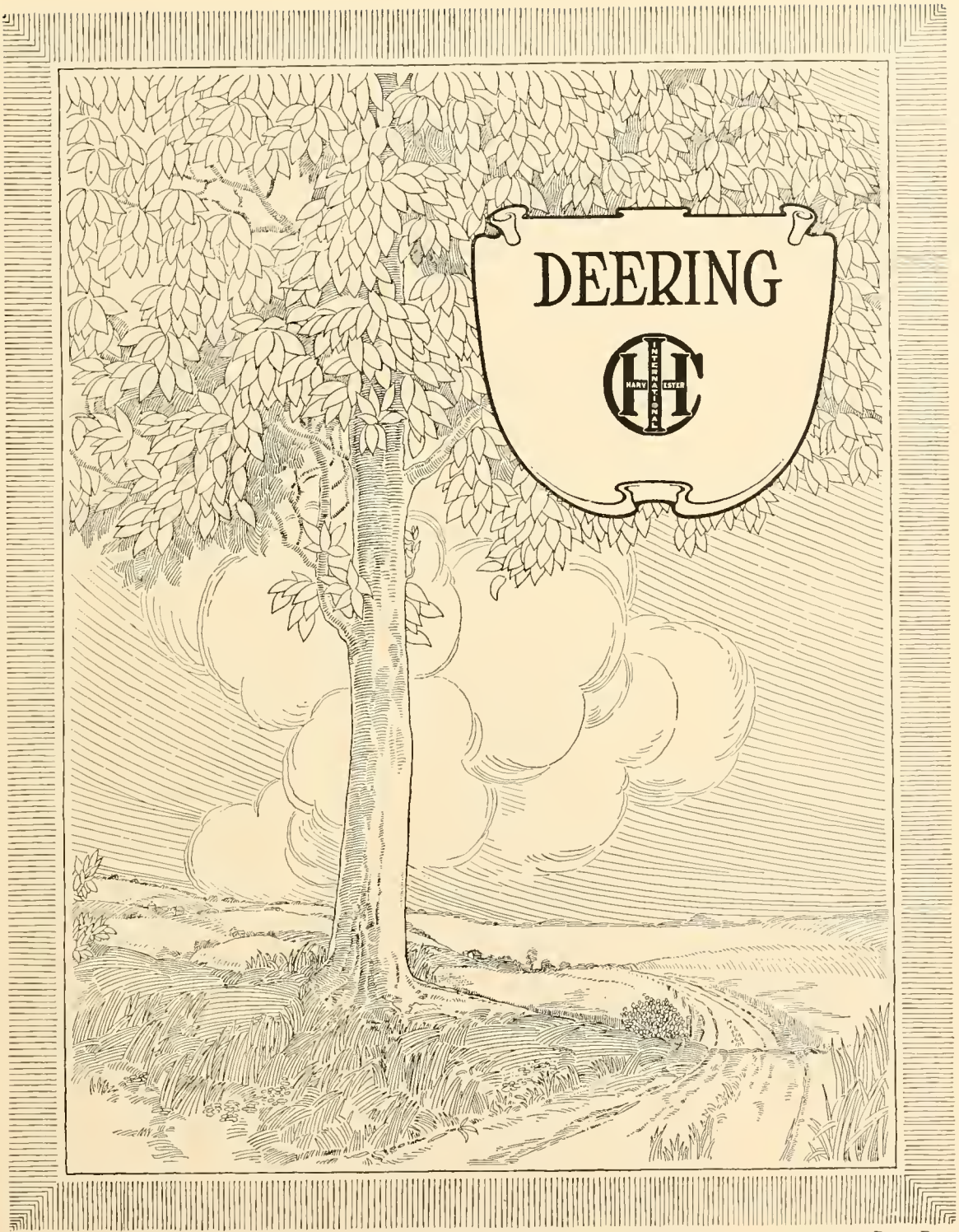

DEERING



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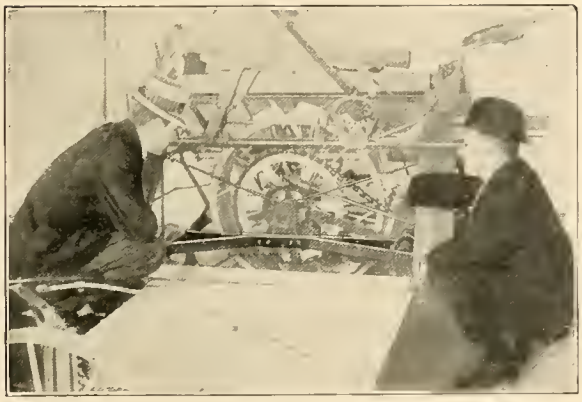
INTERNATIONAL HARVESTER COMPANY OF AMERICA
(INCORPORATED)
CHICAGO U S A


Deering

Deering New Ideal Grain Binder



The famous K-brace prevents torsional strains from springing the main frame out of shape

A Survivor of the Early Self-Binder Days: The Deering is one of the few binders which has survived from the pioneer self-binder days. It has come through the test of the years, good seasons and bad, with honor, and is today known wherever grain is grown as one of the premier grain binders on the market in regard to excellence of construction, durability, and quality of work in the harvest field irrespective of conditions.

Several Outstanding Reasons Why: The first binder to be equipped with ball and roller bearings was the Deering—a quarter of a century ago. This will explain why the reputation of the Deering binder for light draft and smoothness of operation has been consistent and increased with the years.

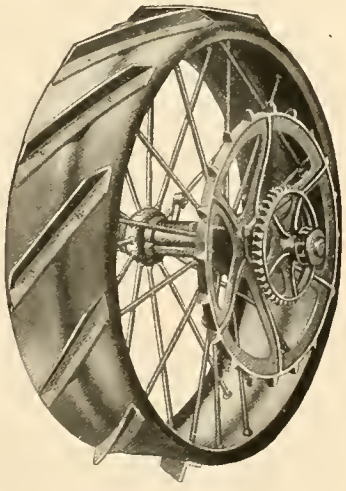
Its great range of reel adjustment, forward, backward, up and down, is another secret of its wide popularity. The facilities for picking up down and tangled grain have been developed to a fine point on the Deering—a feature best appreciated by those who have been saved from loss by this efficient machine.

To the famous Deering knotter—used without change for over a quarter of a century—a large measure of the continuous success of the Deering binder can be credited. If the twine tension is kept right the Deering knotter will rarely slip. A dependable knotter prevents loss of time during harvest.

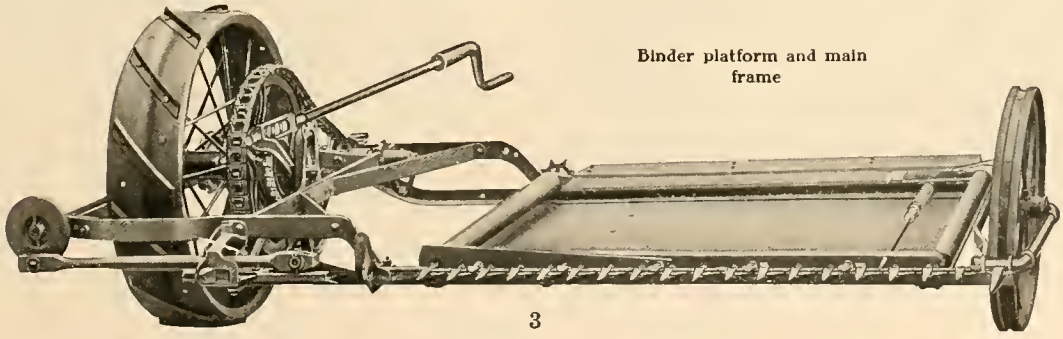
Main Frame is Practically One Piece: The main frame is made of steel bars hot-riveted together, which makes practically a one-piece frame. The cutting, elevating and binding mechanisms are therefore always held in proper alignment. The main frame is reinforced by a steel, hot-riveted K-bar brace.

Platform is Durable: The binder platform is durable, and all parts rigidly joined. There are no bolts or nuts to work loose. Strains cannot twist it out of shape, and the cutter bar is therefore held in proper alignment.

Main Wheel is Strong: The steel main wheel has steel spokes riveted to the malleable hub and through the steel angle lugs on the rim. The rim is flanged inwardly, which keeps sand and trash away from the driving chain. A groove in the center of the tire prevents twisting strains. On the grain wheel a chain is provided so that the platform can be quickly raised or lowered on the grain wheel axle.



Powerful main wheel

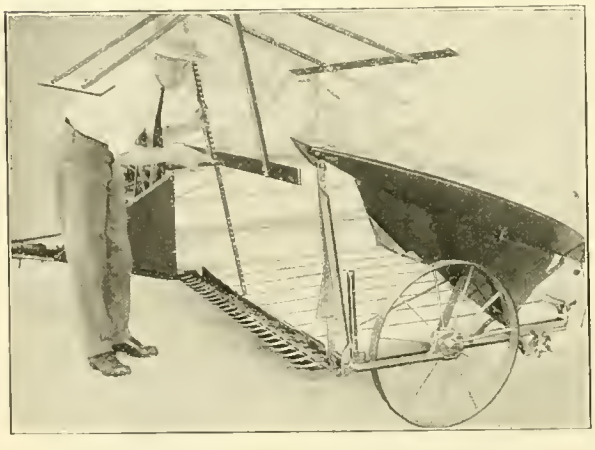


Binder platform and main frame

The Reel has a Wide Range of Adjustment: The Deering binder reel has a wide range of adjustment up or down, forward or back, or in a direct line. No matter in what position the reel may be placed by the action of the spring, a perfect balance is assured at all times.

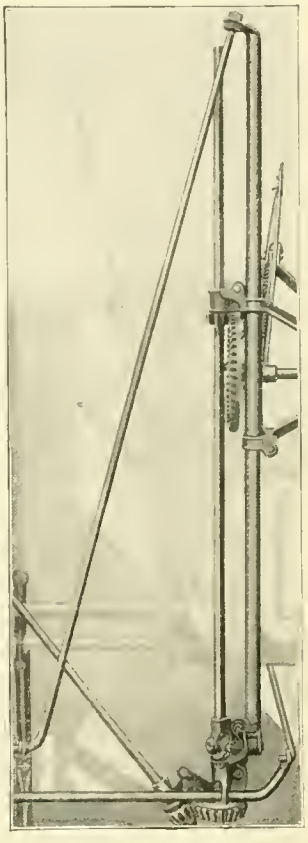
Reel can be Adapted to Many Different Conditions: By means of two levers the New Ideal reel can be put down quickly to push very short grain and green undergrowth from the guards to the platform canvas. This saves the operator many unnecessary steps and the trouble of cleaning trash from the guards. If long, tangled grain catches on the outside divider, the operator can shift the reel quickly and pull the grain to the platform canvas. All these adjustments can be quickly and easily made by the operator.

The reel can be lowered close to the knife



Reel raised for tall grain. The yard stick shows almost 25 inches

The Square Driving Shaft is Operated by a Single Gear: The reel is equipped with a square driving shaft driven by a single gear at the base. Running parallel to the driving shaft is a straight 1½-inch tube which forms a support of the casting that supports the reel-driving shaft.



Reel drive and supporting brace

Adjustable Reel Brace Holds Reel Level with the Knife: The heavy brace rod attached to the upper end of the tube is still another reinforcement. This rod can be adjusted at the top to hold the reel in a horizontal position and prevent it from sagging. By means of this supporting brace the reel can always be held parallel to the cutter-bar.

Rollers on Reel Standard Allow Quick Adjustments: The reel standard is equipped with rollers, which insure a free up-and-down movement of the reel, thus making it exceedingly easy to adjust. These rollers do away with unnecessary wear and save the strength of the driver. In connection with this feature, there is a spring which counterbalances the weight of the reel and adds to its ease of adjustment.

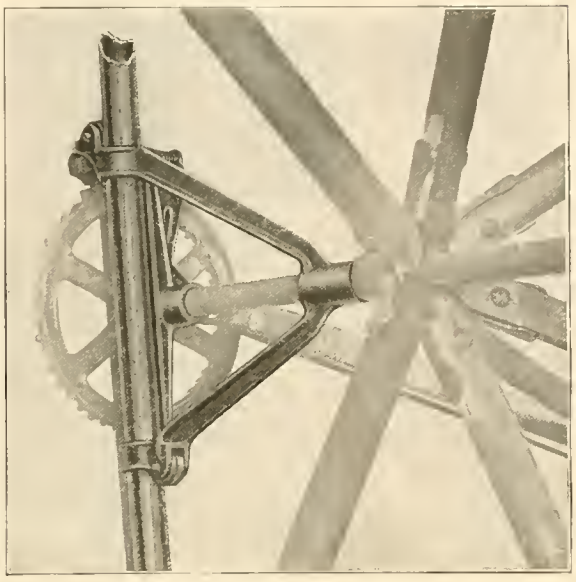
An Extra Long Upper Elevator: The upper elevator is made extra long to bring grain to the binding deck. An extra roller at the top of the binding deck also makes easier the flow of grain to the binding mechanism. The elevating capacity is increased by driving the upper canvas from the upper roller instead of the lower roller. This method of driving tightens the canvas next to the grain and insures a positive elevation.

Elevators Easily Handle Heavy Grain: Elevators are open and have ample clearance to handle the heaviest grain and deliver it in good shape to the binding attachment.

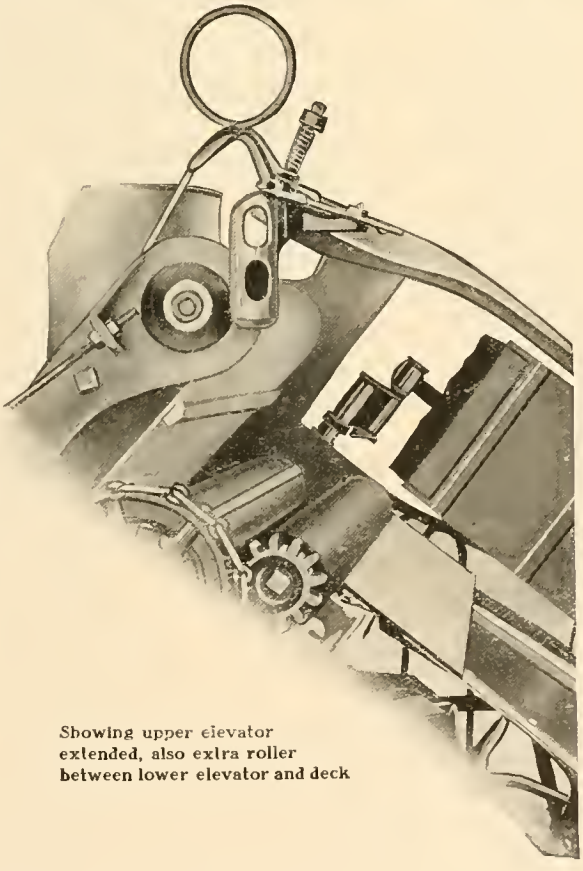
Speed of Elevator Canvases: The upper and lower elevator canvases are speeded exactly alike, thus grain is delivered uniformly to the binding attachment.

How Elevators are Kept in Alignment: The elevators can be aligned and made to run true by means of two braces which are attached to the front and back of the elevator and main hanger.

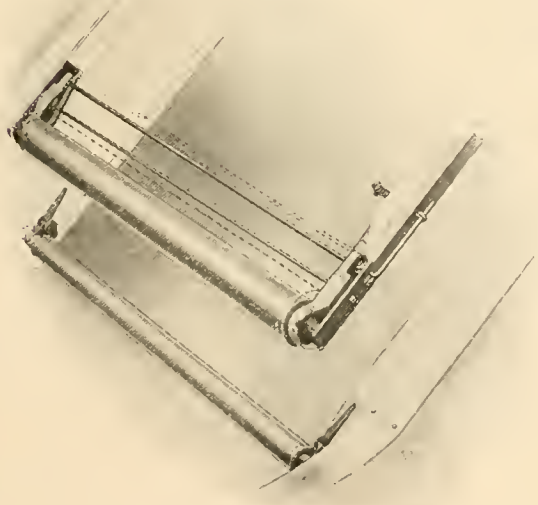
Elevator Canvas Adjusting Device: On the lower roller for the upper elevator canvas there is a very simple device which has proved of great practical value. This device is used to tighten the canvas when the binder is to be used and to slacken the canvas when the machine is idle.



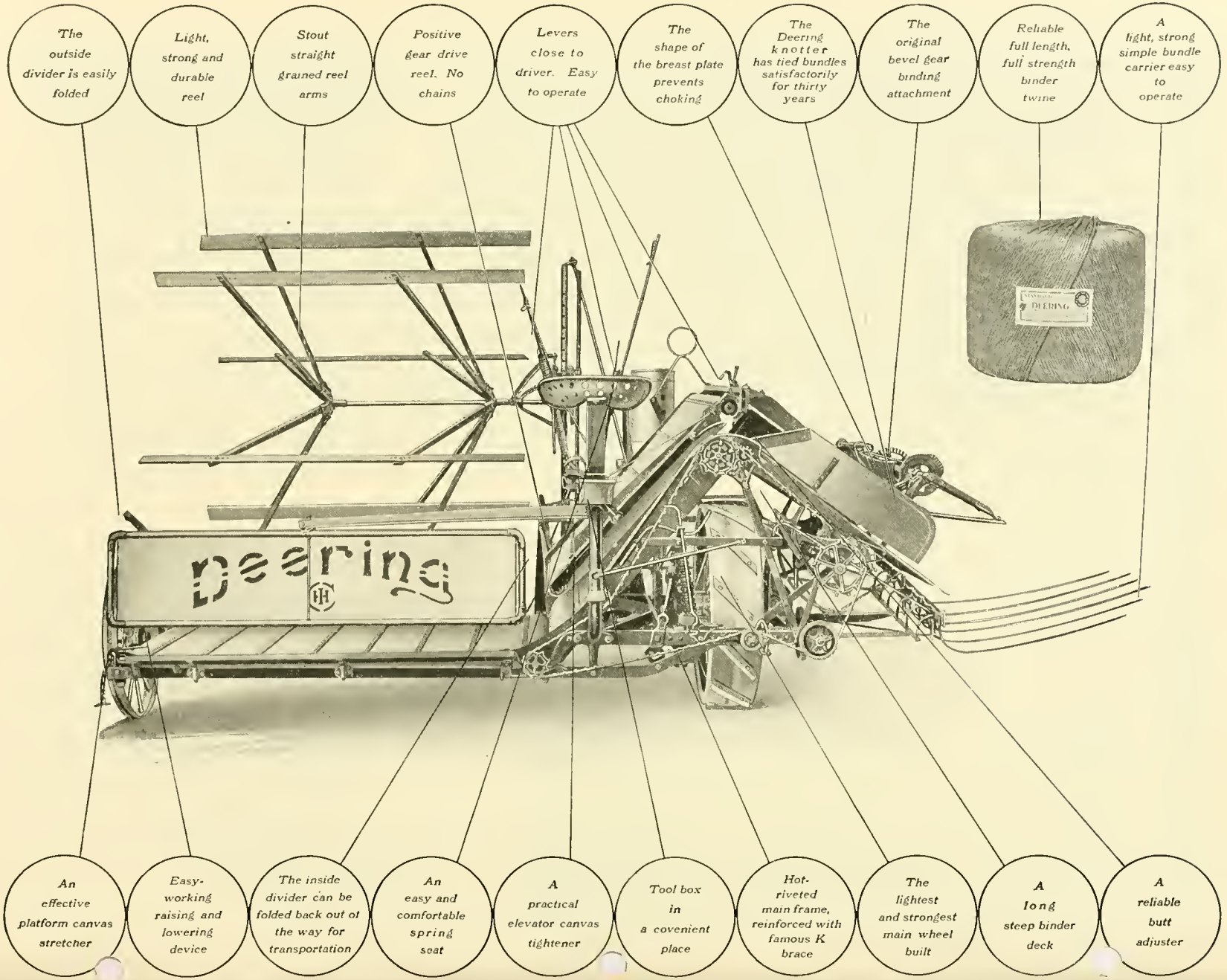
Showing rollers on reel standard



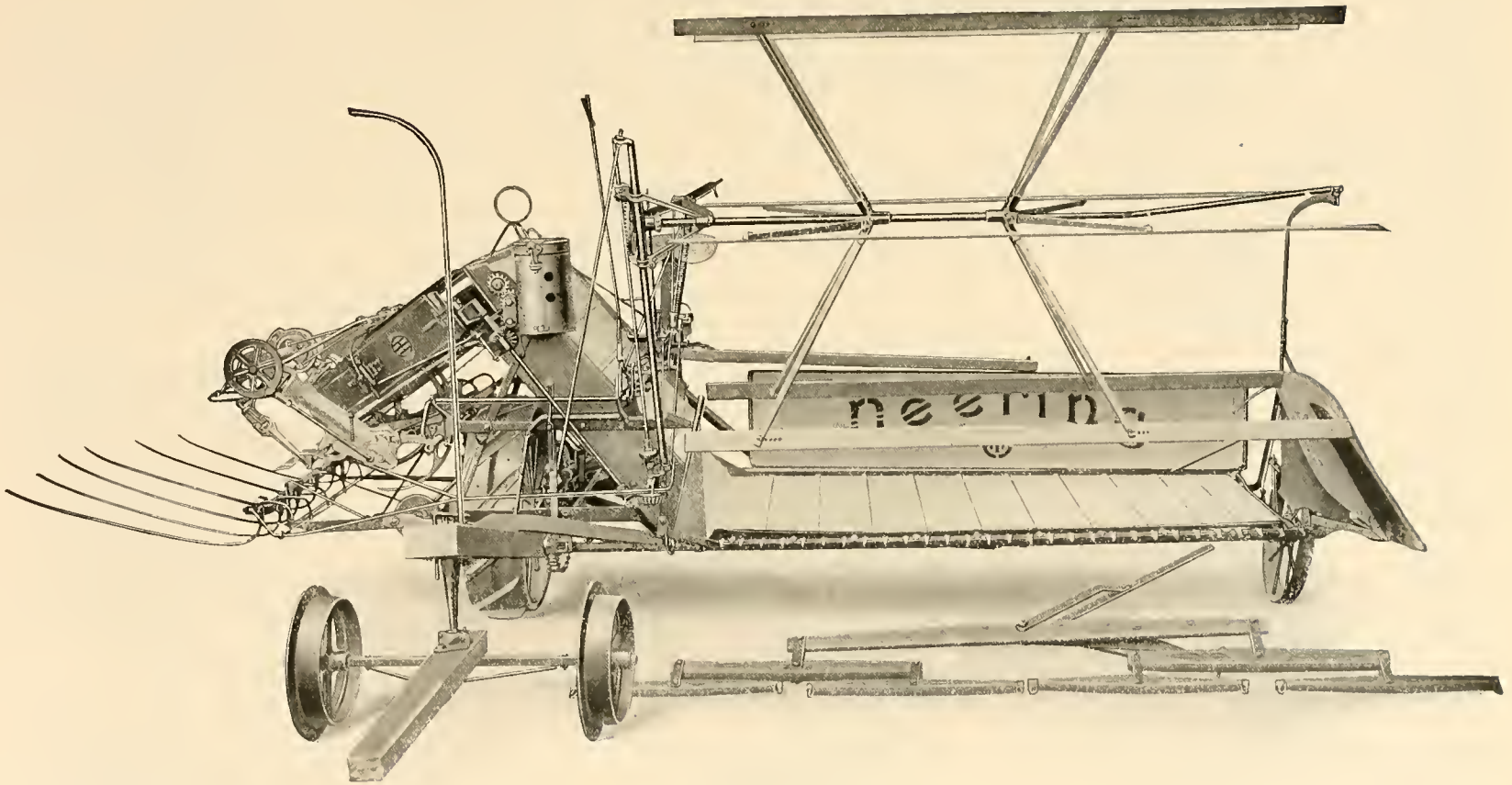
Showing upper elevator extended, also extra roller between lower elevator and deck



Canvas tigbtening and loosening device


The outside divider is easily folded
Light, strong and durable reel
Stout straight grained reel arms
Positive gear drive reel. No chains
Levers close to driver. Easy to operate
The shape of the breast plate prevents choking
The Deering knotter has tied bundles satisfactorily for thirty years
The original bevel gear binding attachment
Reliable full length, full strength binder twine
A light, strong simple bundle carrier easy to operate
deering
An effective platform canvas stretcher
Easy-working raising and lowering device
The inside divider can be folded back out of the way for transportation
An easy and comfortable spring seat
A practical elevator canvas tightener
Tool box in a covenient place
Hot-riveted main frame, reinforced with famous K brace
The lightest and strongest main wheel built
A long steep binder deck
A reliable butt adjuster

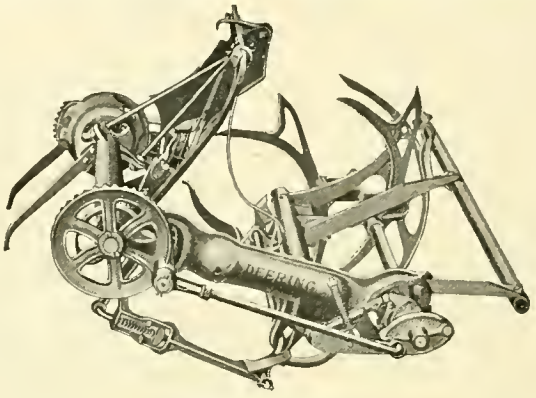
The 8-foot Binder is a Big Time Saver



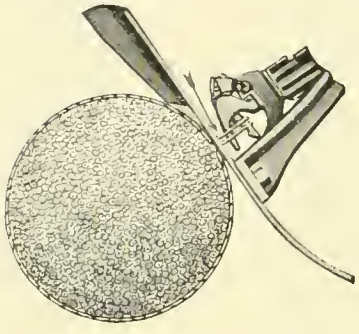
Front view of Deering New Ideal binder, 8-foot cut. Note the powerful inside steel brace for the reel, the outside steel reel support and strong forecarriage. The entire mechanism on the Deering New Ideal 8-foot binder is speeded faster than on the smaller machine so that the binder will cut through heavy grain at ordinary speed. The main wheel tire is wider to insure better traction. The elevators have ample capacity. The canvases deliver grain to the packers faster, which prevents grain from clogging the platform or elevators. Note that the reel can always be held level with the cutter-bar by means of the outside steel reel support. In fact, everything possible has been done to give the 8-foot binder the highest efficiency in the field.

The 7-foot binder is also equipped with an outside steel reel support but is not furnished with a tongue truck except on special order.

Shape of needle and breastplate forces the straw away from the breastplate, preventing clogging at this point



Binding attachment



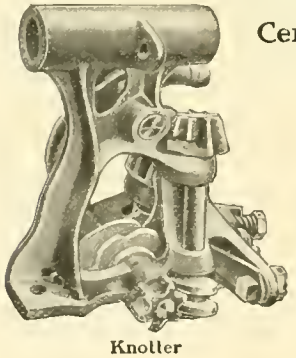
Showing closeness of breastplate to the knotter

The Shape of the Breastplate an Advantage: On the Deering New Ideal binder there is abundant room to prevent choking at the top of the elevator. The shape of the breastplate and needle is such that the straw is forced away from the breastplate. This prevents the straw from being pulled on to the bill hook or wedged between the needle and breastplate when cutting in damp grain. When cutting long and tangled grain, the volume of straw is much greater than that of standing grain; consequently it is absolutely necessary to have abundant room to overcome choking in the throat of the binder.

Butt Adjuster Delivers Grain to Knotter Uniformly: The butt adjuster on the Deering binder works in unison with the packers so that the grain is delivered to the knotter uniformly. This adjustment has an extension which assists in the making of squarely butted sheaves.

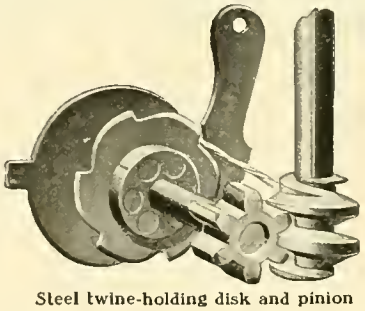
The Binding Attachment Range of Shift is Ample for any Length of Straw: The range of shift on the binding attachment is so great that any length of grain can be bound around the middle. By making proper adjustments, a perfect sheaf can be made, irrespective of whether the grain is long or short.

Compressor Trip Prevents the Making of "Baby" Bundles: The compressor trip operates so that uniform bundles are always made regardless of adjustment for large or small bundles. The compressor moves a short distance beyond the locking point, and when the compressor trip has reached this point, it drops home, making a positive lock, so that it is absolutely impossible to trip before the required amount of weight is placed against it. This action prevents the making of "baby" bundles.



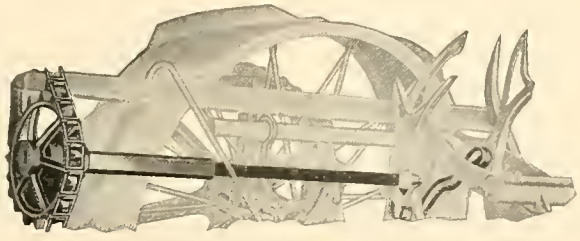
Knotter

The Deering Knotter has been Used Over a Quarter of a Century Without Change: A serviceable knotter—one that will do the same satisfactory work every day at busy harvest time—is the want of every farmer who has had trouble with mechanically wrong knotters in the past. The ideal knotter—the Deering was evolved over a quarter of a century ago. Every farmer who has ever used a Deering binder knows that the Deering knotter is the most perfect knotter for its purpose today.



Steel twine-holding disk and pinion

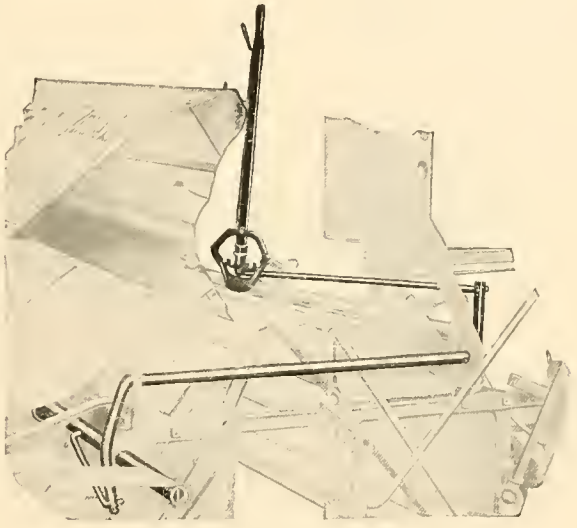
The Packer Shaft is of Steel: A strong feature on the Deering New Ideal binding attachment is a steel packer shaft. It is practically unbreakable. No other material from which a packer shaft can be made serves the purpose as well as steel. Packers have a great deal of work to do, and are constantly undergoing heavy strains. They are subject to sudden jars, and steel is the only material which will successfully withstand the strain.



The packer shaft is of steel

Seventh Roller is Important: The seventh roller passes the grain from the elevator to the packers, and prevents straw from dropping down on the main wheel.

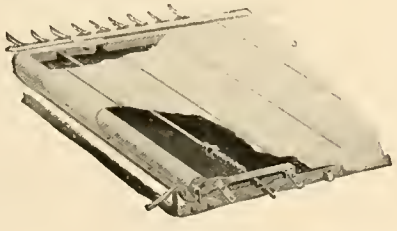
All Levers Within Easy Reach: Levers on the Deering binder are conveniently located, permitting quick adjustments to be made with a minimum of effort. The binder shifter lever is placed close to the driver which gives the advantage of great leverage.



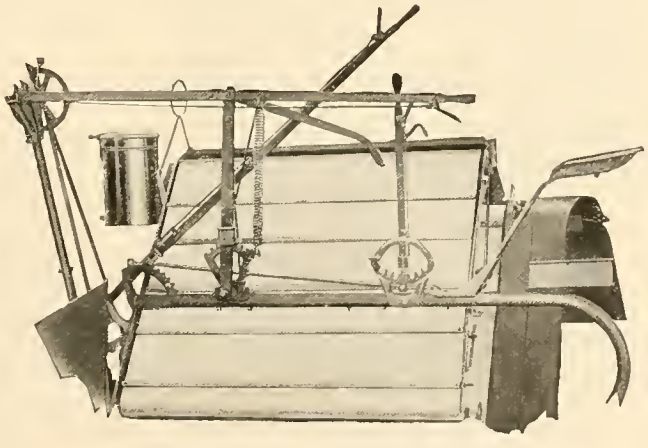
The binder shifter lever is easy to operate

Inside and Outside Dividers can be Folded Back: An advantage of the inside and outside dividers is that they can be folded back out of the way when storing the binder in the barn or during transport through narrow gates or barns. This prevents catching on obstructions and resulting breakages.

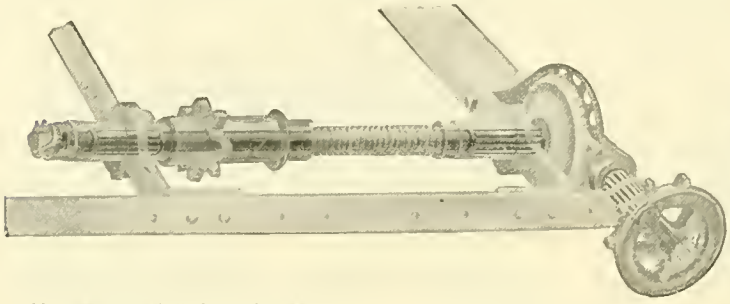
The Platform Canvas Tightener Saves Canvas: As shown in the illustration below there is a handy device on the platform to tighten or slacken the canvas. This device prevents straining of the canvas, and adds to its life. The platform canvas tightener does not need springs so commonly used in the outer end. Springs in this place stretch the canvas unnecessarily, and make it wear out quickly, while at the same time increasing the draft.



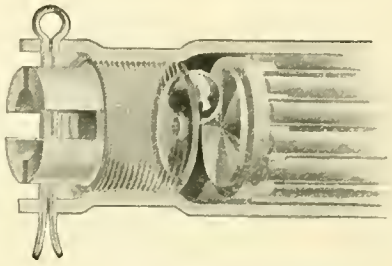
Device to tighten the platform canvas



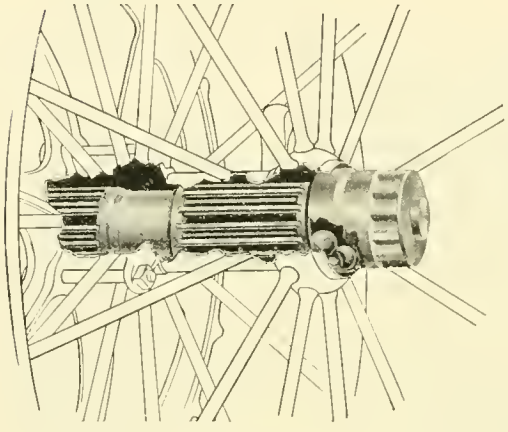
Convenient levers within easy reach



Main gear shaft and crank shaft with frictionless ball and roller bearings



Ball bearing on end of crank shaft



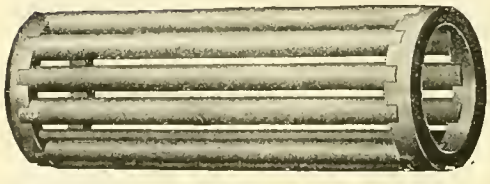
Note ball and roller bearings on main axle

Ball and Roller Bearings Used Continuously on Deering Binders for Almost a Quarter of a Century: To special quality steel ball and roller bearings producing a smooth, rolling, almost frictionless contact is due, to a large extent, the reputation of the Deering binder for light draft. A pioneer in their use, the Deering has always been a leader and is frequently termed "the lightest draft binder on the market."

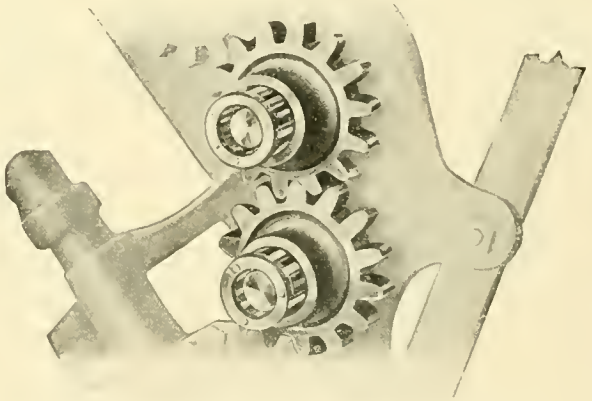
The point of greatest friction on a binder is the main axle. On the Deering the axle is surrounded by two cages of large roller bearings, which fill snugly all the space between the journal and the journal box. At each end of the shaft, ball bearings instead of washers are used, which eliminates end friction when cutting on hillsides and rough ground.

The gear shaft also works on roller bearings at both points of contact with the frame. This reduces the draft considerably because the main shaft revolves so much more rapidly than the main axle. At the end of the gear shaft is a ball bearing which takes up end thrust.

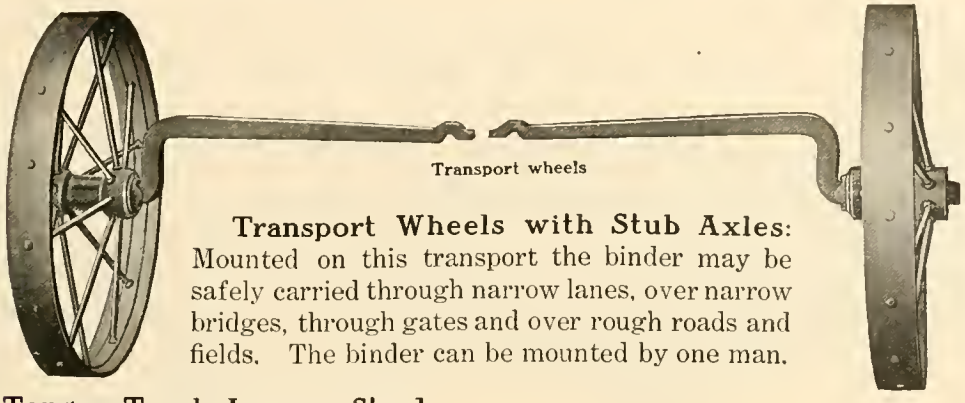
The elevator rollers also have self-aligning roller bearings which insure smooth running elevators.



Ball and roller bearings used on Deering New Ideal binders



Elevator bearings partly exposed to show rollers



Transport wheels

Transport Wheels with Stub Axles: Mounted on this transport the binder may be safely carried through narrow lanes, over narrow bridges, through gates and over rough roads and fields. The binder can be mounted by one man.

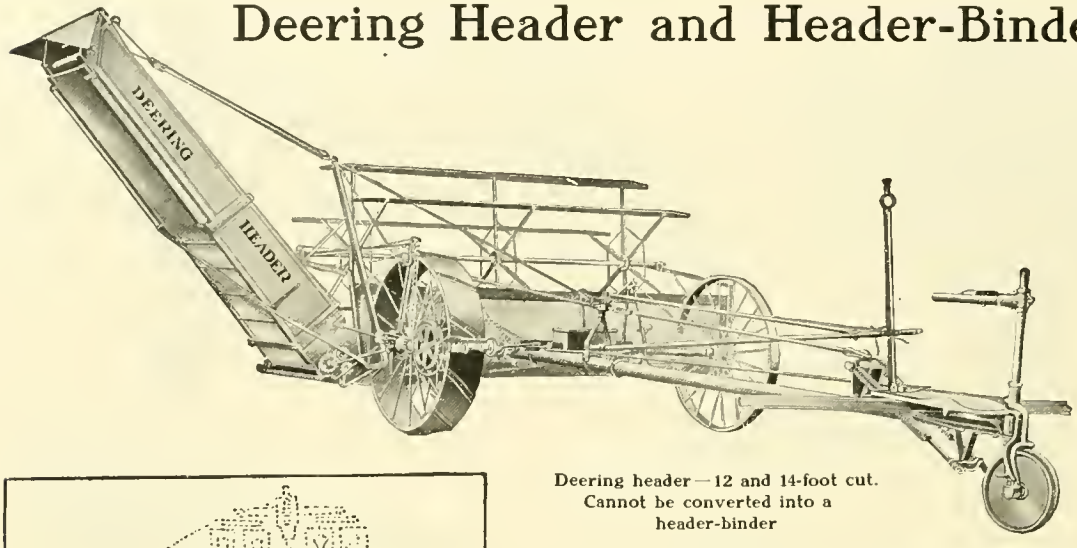
The Tongue Truck Insures Steadiness: A tongue truck is furnished regularly with the Deering New Ideal 8-foot binder, but is special with other sizes. It causes the machine to run steadily and without jerking or jarring. It lengthens the life of the binder, relieves the team of neck weight, reduces side draft and prevents thrashing of the tongue.

Deering tongue truck arranged for four horses

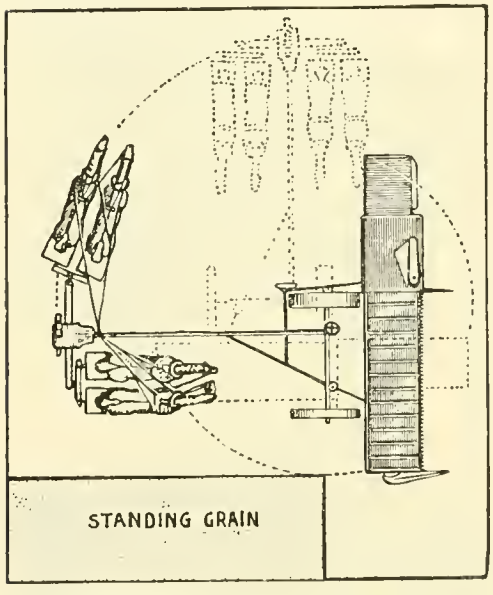
Steel Support for Outer End of Reel on 7 and 8-Foot Binder: The 7 and 8-foot binders are equipped with outside steel reel supports which keep the reel from sagging or twisting when cutting on uneven ground. The outer ends of the reel slats are also prevented from whipping down and striking the guards. The slats are kept parallel to the guards at all times insuring even delivery of grain to the platform.

Deering 8-foot binder in heavy down and tangled grain

Deering Header and Header-Binder



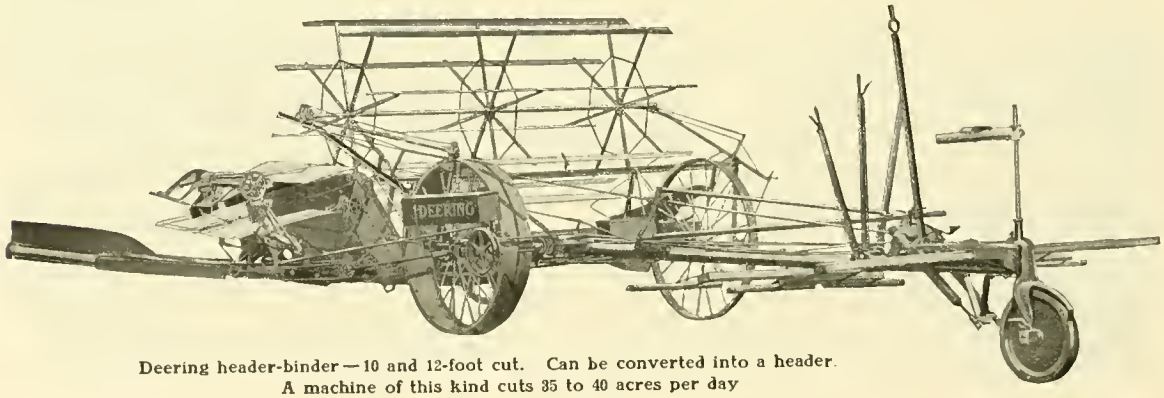
Deering header—12 and 14-foot cut.
Cannot be converted into a
header-binder



Making a turn with a header-binder

One of the great problems which annually confront our large Western grain growers is how to harvest their grain in the quickest way at the least expense for help and machines. Those who know the merits of Deering headers and header-binders have found this problem simplified. Where formerly a large number of binders were at work, Deering headers and header-binders cutting 10, 12, and 14 feet will be found, each machine requiring only one man and proportionately no more horses than the regular side-cut binder.

These machines have practically an all-steel construction. They are durable, and have a very light draft, due to the generous equipment of steel ball and roller bearings. These machines will cut a full swath on a steep hillside without danger of upsetting.



Deering header-binder—10 and 12-foot cut. Can be converted into a header.
A machine of this kind cuts 35 to 40 acres per day

A Deering header in the field

The scarcity of help during the harvest season has had much to do with popularizing Deering headers and header-binders, as fewer harvest hands are required, due to the great capacity of the machines.

By removing the binder attachment, attaching an elevator with the necessary parts, the header-binder can be used as a header.

Common Features: Strong, high-carbon steel axle, reinforced by truss rods.

54-inch main wheel with 9-inch face, heavily lugged, on the header.

54-inch main wheel with 11-inch face, heavily lugged, on the header-binder.

Equipped with ball and roller bearings.

Hand wheels and screws for leveling platform.

Adjustable reel spider—six or eight reel fans.

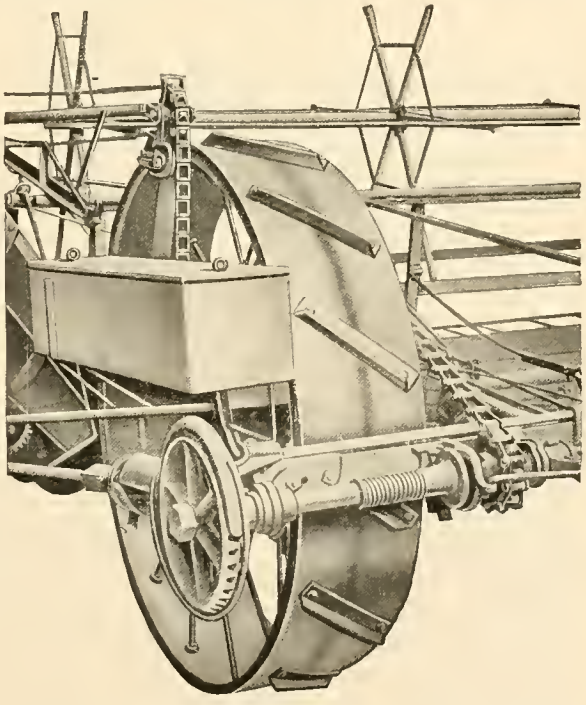
Pitman driven by elevator roller; direct positive drive; no gears; no crank shaft.

Guards have tempered steel ledger plates.

Steel canvas guide.

Angle iron brace to hold elevator rigid in any position.

Elevator canvases come close to the elevator sides to prevent accumulation of trash.



Main wheel and main gear on header-binder

The Deering header-binder is a big time saver

Deering Binder Twine

What has been your experience with twines in the past? Good twine is a prime necessity at harvest time, and the vital need of a careful selection of this commodity to provide against loss in the field cannot be too strongly emphasized. Poor twine means many breakages and consequently loss of valuable time during the busiest season of the year. It frequently means the loss of many bushels of grain. Another thing—poor twine is not the best remedy for an uncertain temper.

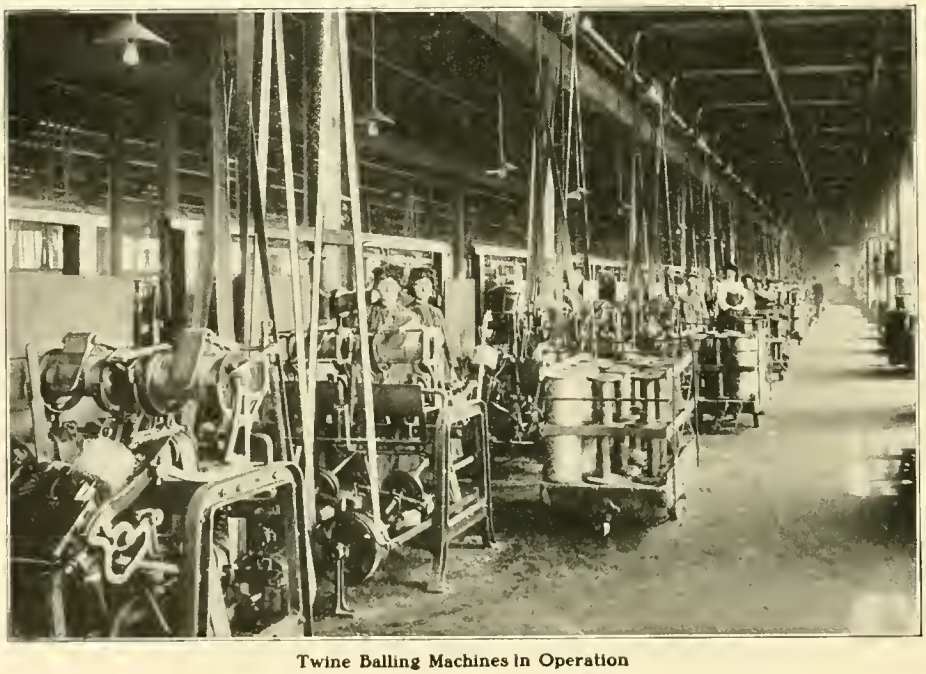
Deering twine once used will always be in demand. Try it.

Rigid System of Inspection: The system of inspection which is maintained throughout the entire process of buying fibre and manufacturing the finished product is a great factor having much to do with the quality of Deering twines. From the time the bales of raw material are broken open until the balls are wound, sacked, and stored away in the warehouse ready for shipment, a most rigid system of inspection is maintained.

Fibre Carefully Selected: When the bales of raw material are opened, the fibre is carefully selected and that which is not good is thrown out. Throughout the process of preparation any inferior material that escapes first inspection is promptly discarded. The spinning is very carefully watched.

Balling is Carefully Watched: Balling is done under very close surveillance and anything indicating inferior quality is eliminated.

Result Cannot be Surpassed: The farmer who uses Deering twine at harvest time is certain of having the very best possible twine for his needs—twine that is dependable, reliable, smooth, and even, each ball solidly wrapped and standing up in the can until the last strand is used. Everything considered, Deering twine cannot be surpassed for its purpose.



Twine Balling Machines in Operation

Deering binder twines are made in the following fibres and lengths:

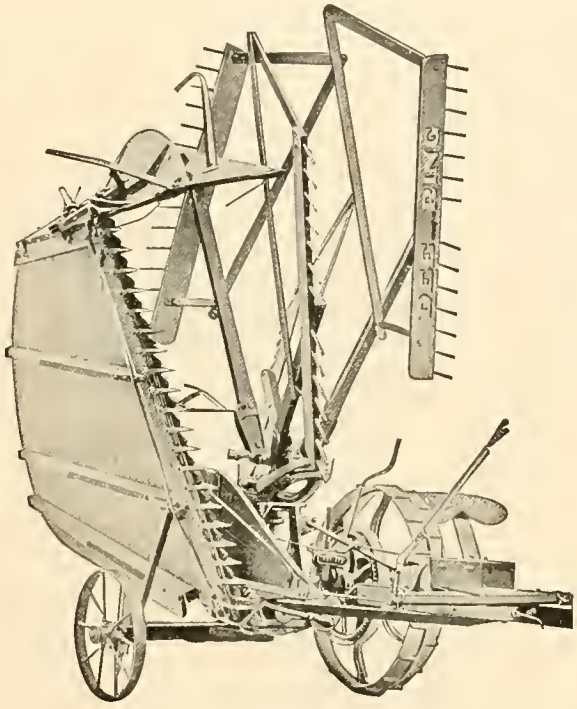
Sisal	500 feet
Standard Sisal	500 feet
Extra Manila	550 feet
Manila	600 feet
Pure Manila	650 feet

Deering New Ideal Reaper

The Deering New Ideal reaper very conveniently meets the requirements of such farmers as prefer to harvest small grain with a reaper instead of a binder, leaving the gavels on the ground until the grain is thoroughly cured and dried. It is equally well adapted for wheat, oats, flax, clover, buckwheat, rye, barley, and other small grains.

The heavy frame on the reaper permits a great deal of hard work to be done by the machine without wrenching it or putting it out of order. At the same time the draft is very light.

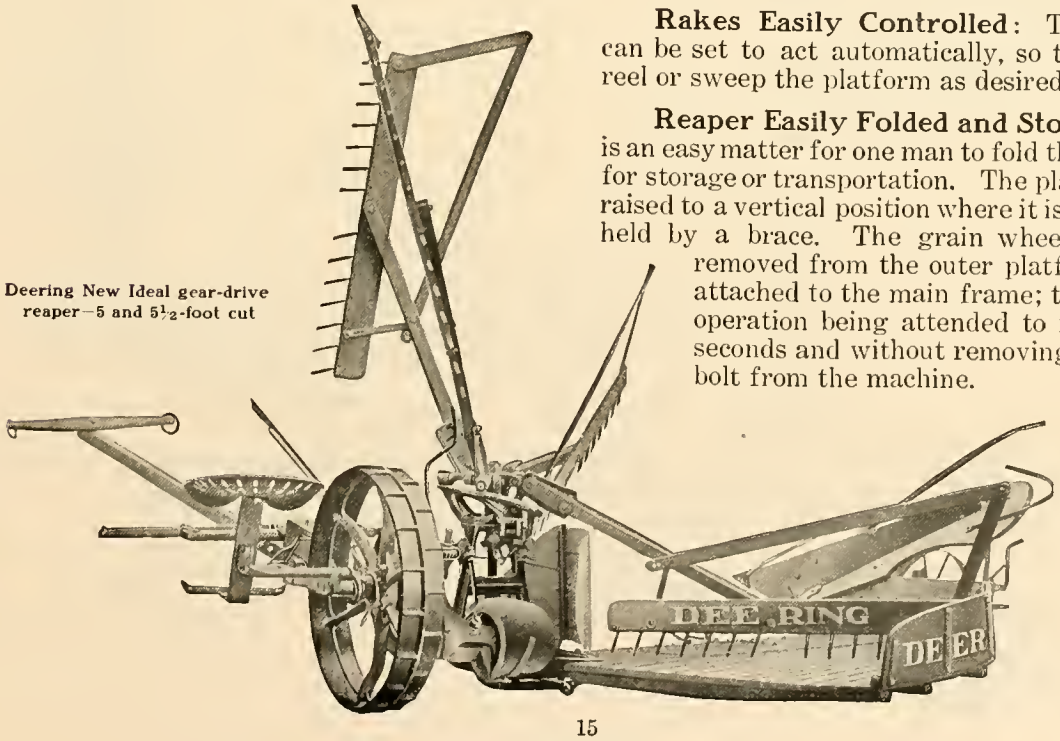
The Gears are Well Protected: The gears are guarded and well protected by a sheet steel shield, which prevents straw, trash, and wheat from coming in contact with and clogging them. Breakage is also prevented by this device.



Folded for transportation or storing

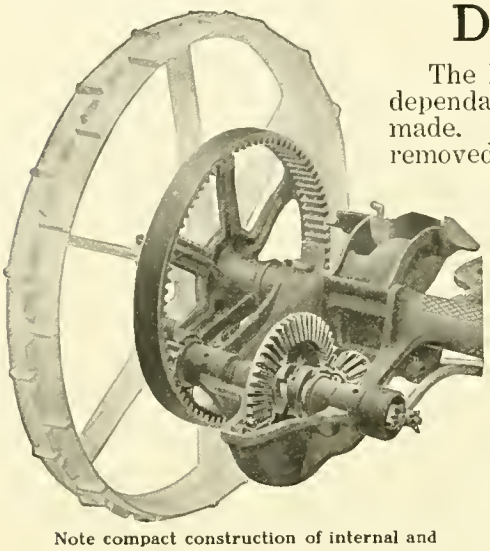
Rakes Easily Controlled: The rakes can be set to act automatically, so that they reel or sweep the platform as desired.

Reaper Easily Folded and Stored: It is an easy matter for one man to fold the reaper for storage or transportation. The platform is raised to a vertical position where it is securely held by a brace. The grain wheel is then removed from the outer platform and attached to the main frame; the entire operation being attended to in a few seconds and without removing a single bolt from the machine.



Deering New Ideal gear-drive reaper—5 and 5½-foot cut

Deering New Ideal Mowers



Note compact construction of internal and bevel gears

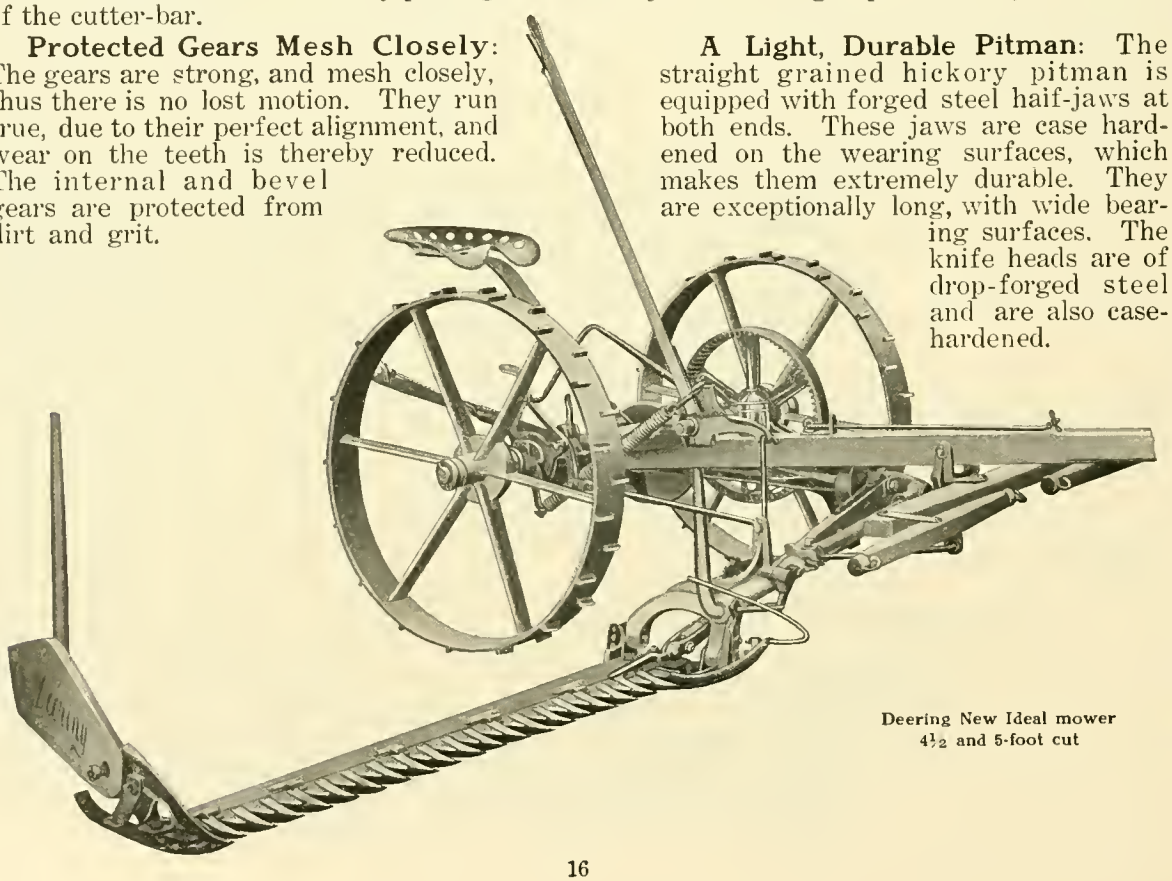
The Deering mower has long been known as a thoroughly dependable mower, in fact—it is one of the best mowers made. The one piece main frame, covered gears, and easily removed tongue, the flexible movement of the cutter bar in rough cutting, the continuous drag bar construction, and the equipment of special quality steel ball and roller bearings are only a few of the features which have made the Deering a leader in the hay field. A close inspection of the Deering mower in all its details will reveal many features of more than common merit and interest. Deering mowers are durable and with proper care will last through many haying seasons.

All Holes on Main Frame are Drilled at the Same Time: The frame is of light construction, but strong enough to permit the mower to do only the best work. The frame is cast in one piece, and as all holes are drilled at the same time, the bearings are held square to their work and in perfect alignment at all times.

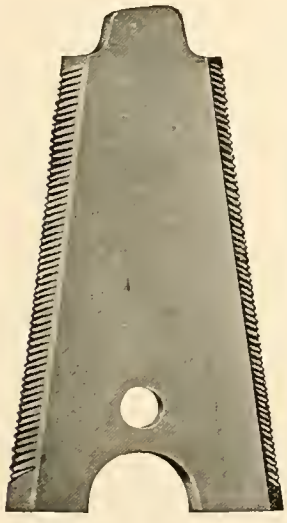
Strong, Well-Lugged Wheels: The wheels are strong, high, wide, and well lugged. Side draft has been overcome by putting the wheels just far enough apart to carry the length of the cutter-bar.

Protected Gears Mesh Closely: The gears are strong, and mesh closely, thus there is no lost motion. They run true, due to their perfect alignment, and wear on the teeth is thereby reduced. The internal and bevel gears are protected from dirt and grit.

A Light, Durable Pitman: The straight grained hickory pitman is equipped with forged steel half-jaws at both ends. These jaws are case hardened on the wearing surfaces, which makes them extremely durable. They are exceptionally long, with wide bearing surfaces. The knife heads are of drop-forged steel and are also case-hardened.



Deering New Ideal mower
4½ and 5-foot cut

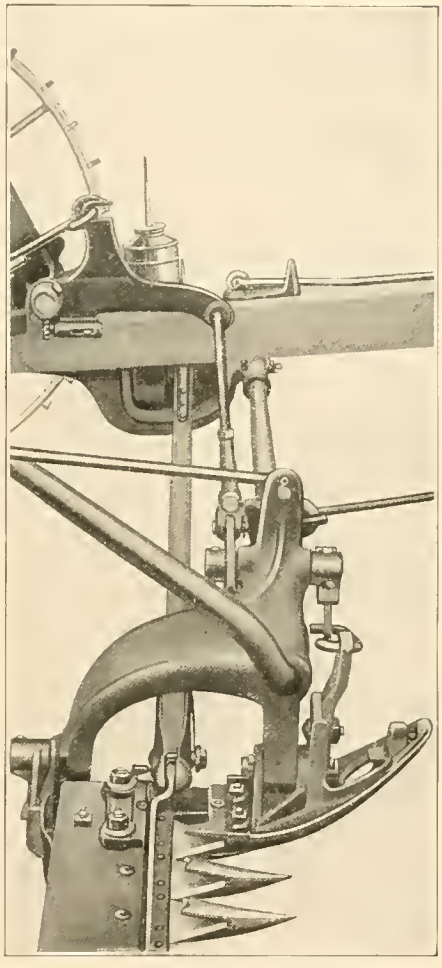


The ledger plate has serrated cutting edges

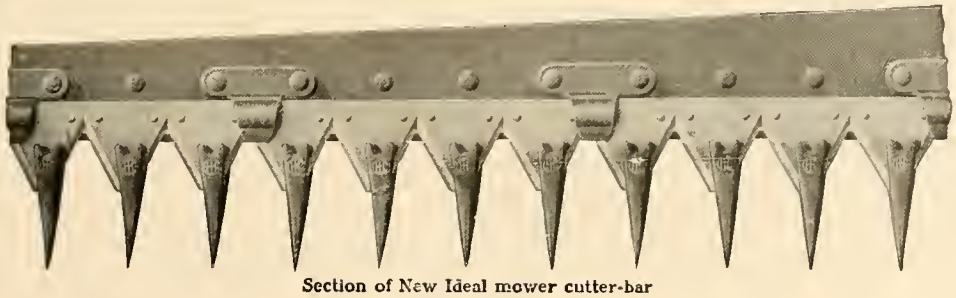
A Wide Hinge Coupling Gives Steadiness to the Cutter-Bar: A wide hinge coupling and cutter-bar connection on a mower give steadiness to the cutter-bar, and the cutter-bar on the Deering mower has unusual stability on this account. It is held in position by two heavy, removable steel pins at the front and rear of the coupling. The big leverage acquired by means of the wide connection serves to hold the cutter-bar in line with the pitman at all times.

The Cutter-Bar Has a Flexible Movement in Rough Cutting: The Deering mower cuts the grass as satisfactorily on irregular as on level ground, due to the very flexible movement of the cutter-bar. An adjustable spring permits the right amount of pressure, so that the cutter-bar will float over the ground with just enough weight to keep it cutting close without clogging the inner shoe. The cutter-bar is equipped with wearing plates, which insure extreme durability. All knife sections are of high grade steel. One of the strong points in favor of the Deering mower is that the ledger plate extends the full length of the cutting surface of the guard, giving the advantage of a complete shear cut whether the knife section is old and worn or new. The Deering mower, therefore, operates satisfactorily in all conditions where the grass has a tendency to clog between the knife section and the rear end of the ledger plate. The rivet and lug in the center are in the right position to allow the ledger plate to successfully resist the severest strains during operation.

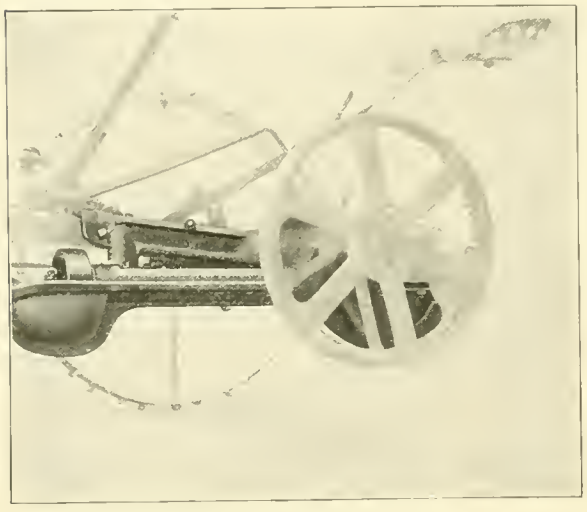
Note that the ledger plate extends back of the finger bar



A wide hinge coupling is a great advantage as it gives this cutter-bar great steadiness. The cutter-bar is connected to the hinge coupling by means of two heavy removable steel pins

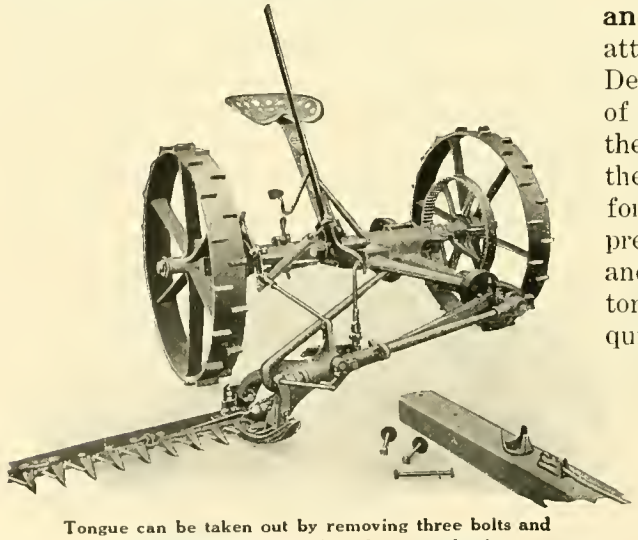


Section of New Ideal mower cutter-bar



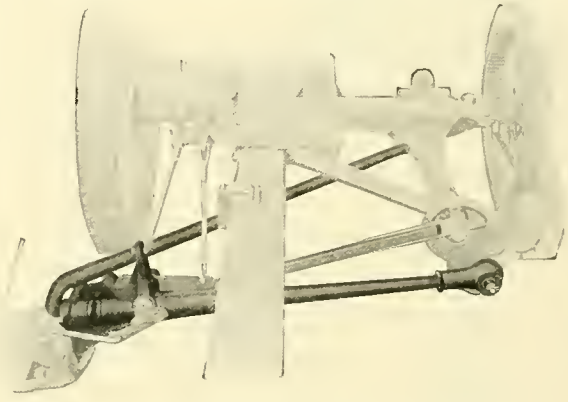
The crank shaft is parallel to the ground

Inner Wheel is Held on the Ground by a Continuous Dragbar Construction: The dragbar is made of high carbon steel and has a continuous bar construction. It screws into the dragbar socket and passes through the swivel hinge, doubles back, and is joined to the main frame underneath the main axle near the bevel gears. A more rigid brace and support cannot be devised. The great advantage of this construction is that no matter what conditions are encountered in the field, the inner wheel will always be on the ground.



Tongue can be taken out by removing three bolts and without disturbing the lifting lever mechanism

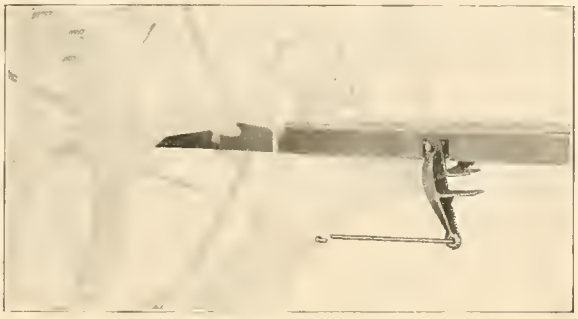
A Crank Shaft Parallel to the Ground Permits a More Direct Pitman Drive: The crank shaft on the Deering mower is parallel to the ground, which insures that the knife will be driven with the least wear on the wrist pin and knife head, and also that the drive will be more direct. This gives the advantage of more power and the least possible friction. The pitman travels in a direct line without cramping or binding, no matter in what position the cutter-bar may be tilted.



The manner of joining the dragbar to the main frame insures that the inner wheel will stay on the ground at all times thus securing good traction in tough cutting

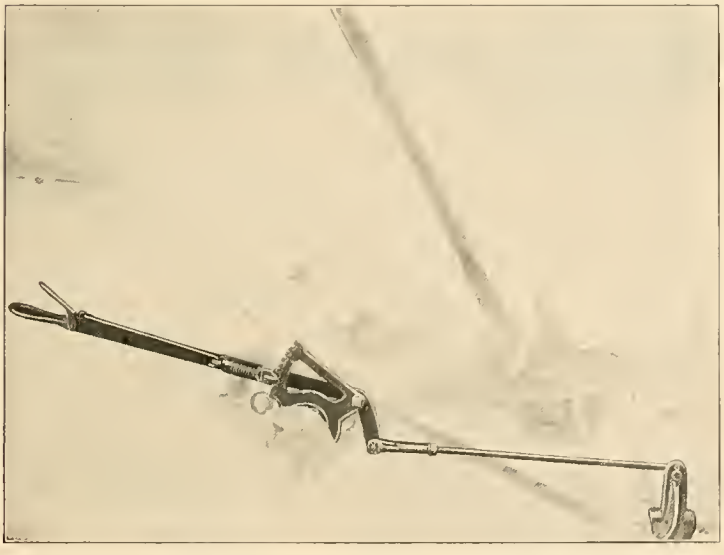
The End of the Tongue is Protected and Its Removal Easy: The manner of attaching and removing the tongue on the Deering mower is simplicity itself. The end of the tongue fits firmly into a socket under the main frame, which is cast in one piece with the frame. The end of the tongue is therefore covered at the top and sides which prevents moisture from coming in contact with and rotting the end. The rotting end of a tongue always has more or less play and quickly wears out. The tongue can be taken out without interfering in the least with the lifting lever parts, and by simply removing the three bolts shown in the illustration. By removing the tongue, the mower can also be stored in a small space in the shed.

Lifting Lever Compensating Spring and Draft Rod are Valuable Features: The flexible movement of the cutter-bar on the Deering New Ideal mower permits the cutting of an even stubble when working on hillsides or knolls. This is due to the lifting lever compensating spring and draft rod. The spring carries the weight of the cutter-bar with just enough of its weight on the ground to keep it working free and easy. The draft rod is parallel to the tongue, and consequently does not interfere with the up and down motion of the cutter-bar whether the mower is working up hill or down.



Note that the draft rod is parallel to the tongue

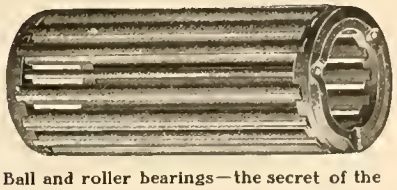
Fine Adjustments Can Be Made with Tilting Lever: The tilting lever quadrant has fine notches to permit the cutter-bar being tilted to a variety of cutting angles, allowing the operator to tilt his cutter-bar to leave either short or high stubble. In fact, the Deering will cut at more different heights of stubble than the average mower. These adjustments make it easier to mow peas and vines, also to raise the cutter-bar from the ground and tilt it so that the guards will work close, thereby preventing dirt from accumulating between the guards and the knife. The rod which connects the lever to the hinge coupling can be made longer or shorter, so that the right height or range of tilt can be made if the proper range of tilt to cut the right height of stubble cannot be made by the regular quadrant adjustments.



Showing tilting lever, quadrant and connections

The Foot Lift Gives the Operator Great Leverage: The foot lift on the Deering New Ideal mower is so arranged that the operator secures great leverage without applying practically any power. The driver simply presses down with his foot on the convenient flat step at the outer end of the foot lift under the seat.

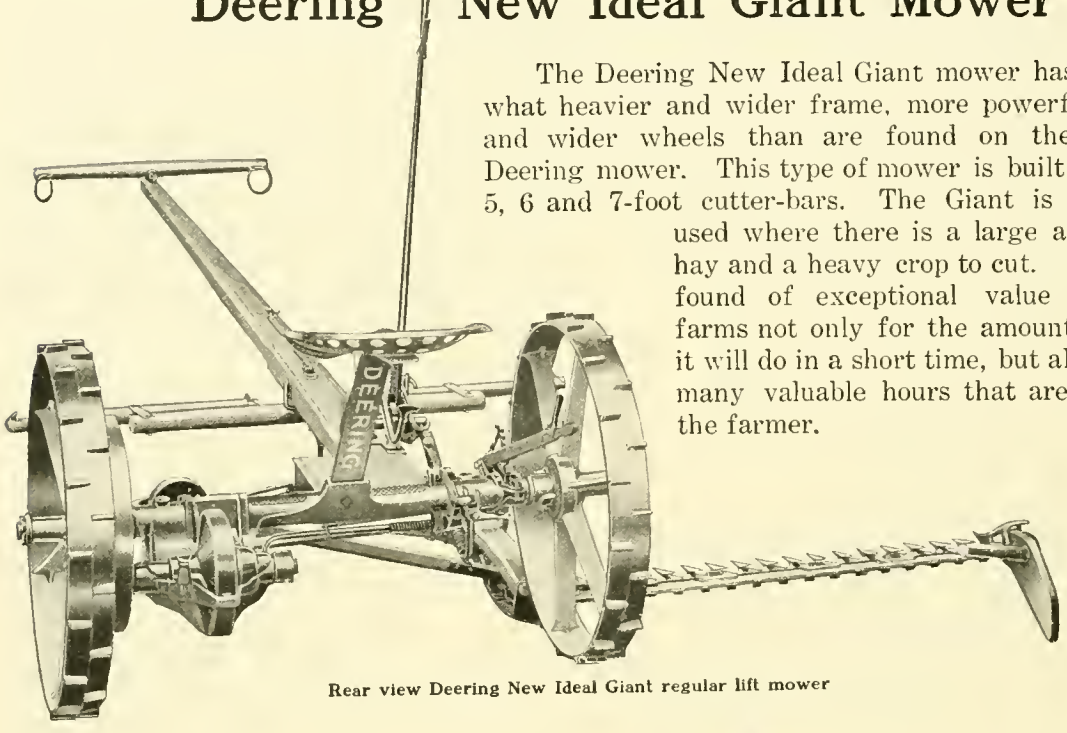
Ball and Roller Bearings: The Secret of Light Draft on Deering Mowers: Ball and roller bearings will be found wherever it is possible to reduce friction or lessen the draft. They are a marked improvement over the old "sliding contact" bearing. The ball and roller bearing has a rolling contact and is practically frictionless.



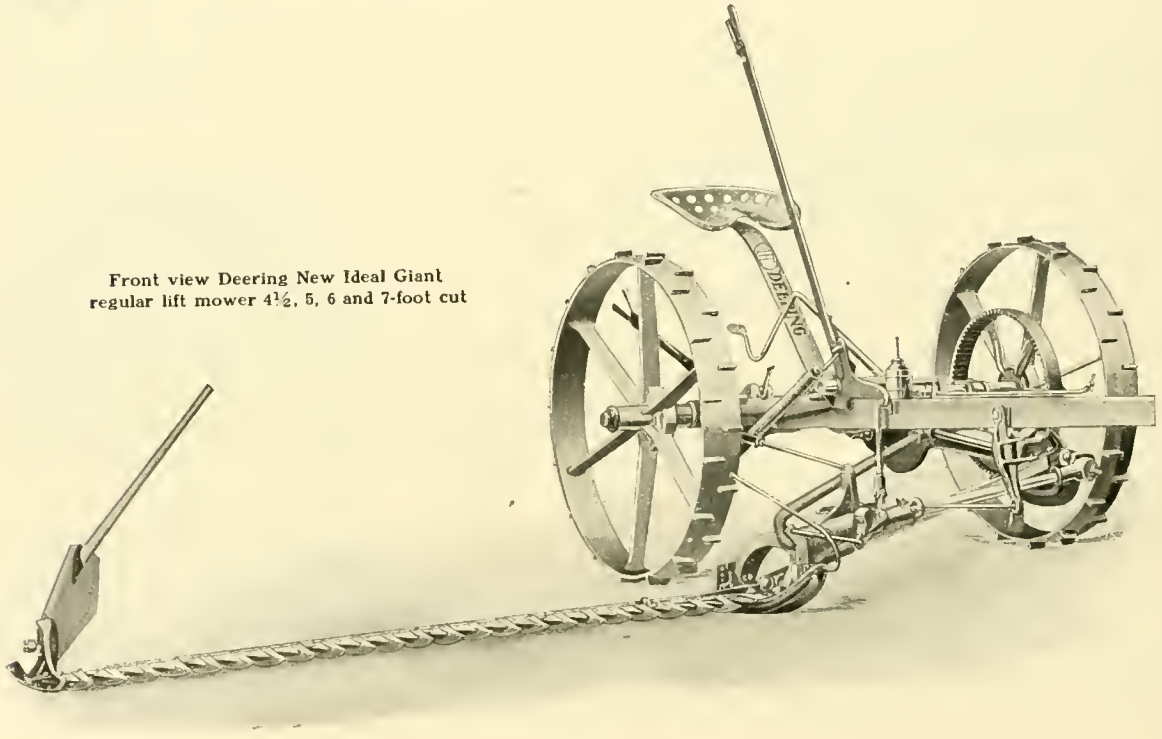
Ball and roller bearings—the secret of the light draft for which Deering mowers are justly famous

Deering New Ideal Giant Mower

The Deering New Ideal Giant mower has a somewhat heavier and wider frame, more powerful gears, and wider wheels than are found on the regular Deering mower. This type of mower is built with 4½, 5, 6 and 7-foot cutter-bars. The Giant is generally used where there is a large acreage of hay and a heavy crop to cut. It will be found of exceptional value on such farms not only for the amount of work it will do in a short time, but also for the many valuable hours that are saved to the farmer.



Rear view Deering New Ideal Giant regular lift mower

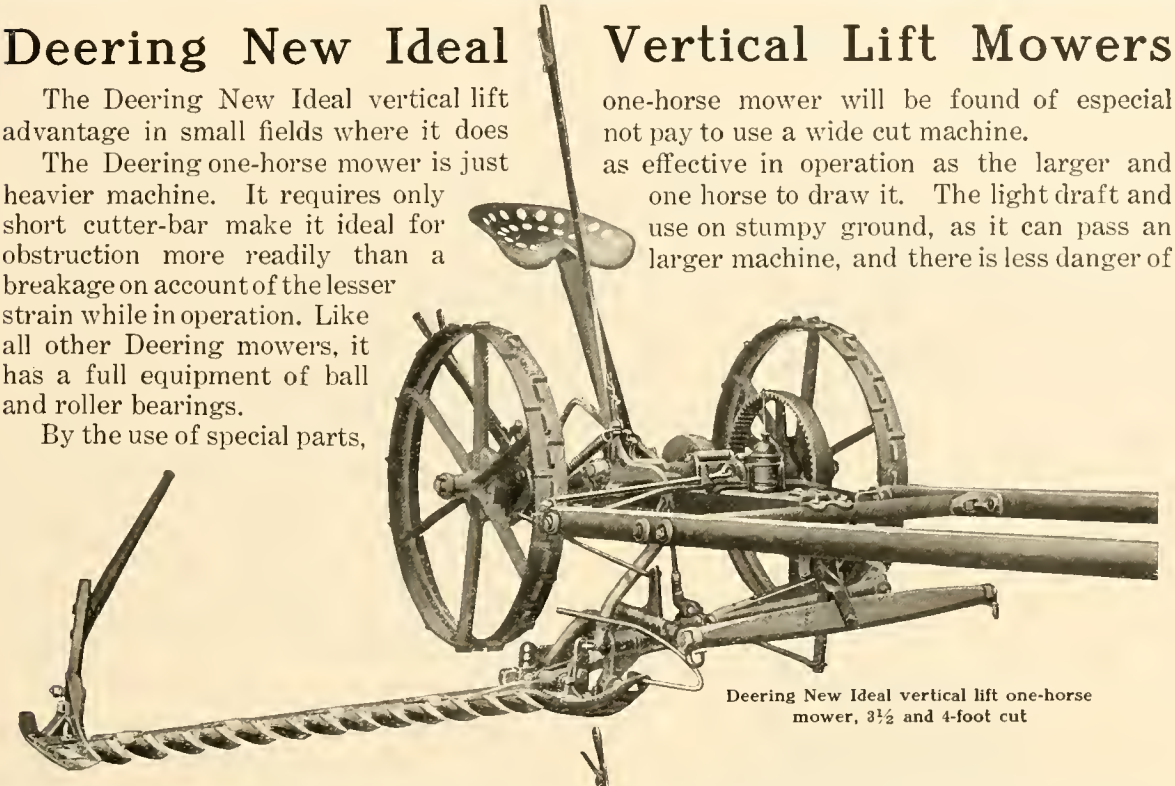


Front view Deering New Ideal Giant regular lift mower 4½, 5, 6 and 7-foot cut

Deering New Ideal Vertical Lift Mowers

The Deering New Ideal vertical lift one-horse mower will be found of especial advantage in small fields where it does not pay to use a wide cut machine.

The Deering one-horse mower is just as effective in operation as the larger and heavier machine. It requires only one horse to draw it. The light draft and short cutter-bar make it ideal for use on stumpy ground, as it can pass an obstruction more readily than a larger machine, and there is less danger of breakage on account of the lesser strain while in operation. Like all other Deering mowers, it has a full equipment of ball and roller bearings.

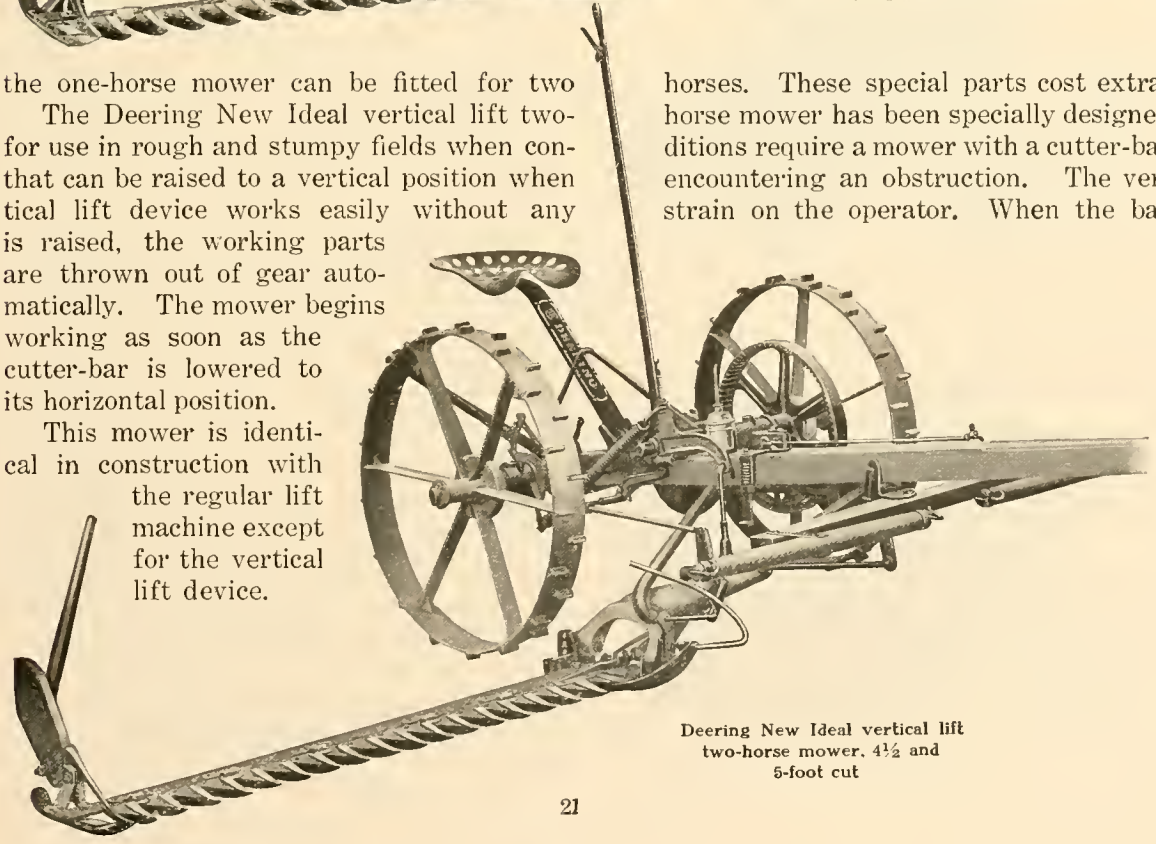


Deering New Ideal vertical lift one-horse mower, 3½ and 4-foot cut

By the use of special parts, the one-horse mower can be fitted for two horses. These special parts cost extra.

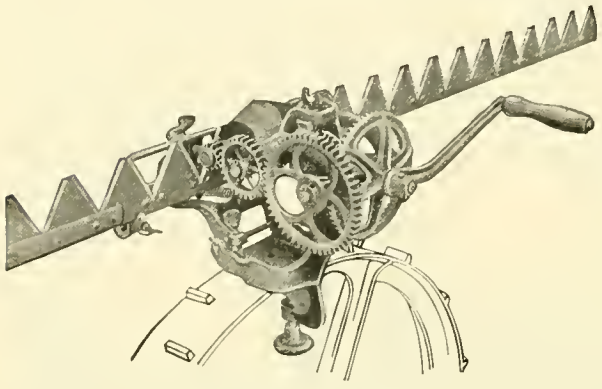
The Deering New Ideal vertical lift two-horse mower has been specially designed for use in rough and stumpy fields when conditions require a mower with a cutter-bar that can be raised to a vertical position when encountering an obstruction. The vertical lift device works easily without any strain on the operator. When the bar is raised, the working parts are thrown out of gear automatically. The mower begins working as soon as the cutter-bar is lowered to its horizontal position.

This mower is identical in construction with the regular lift machine except for the vertical lift device.

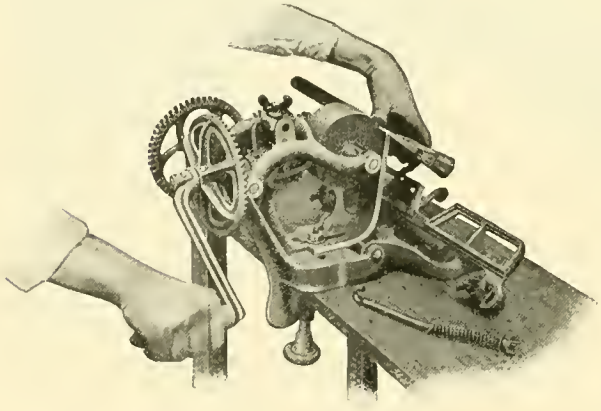


Deering New Ideal vertical lift two-horse mower, 4½ and 5-foot cut

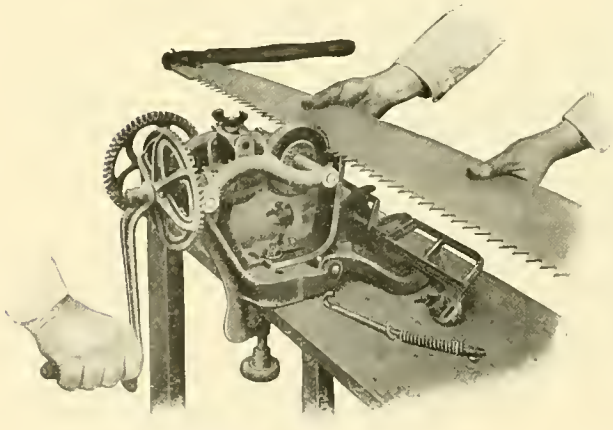
Deering Knife Grinder



Deering Knife Grinder



Very handy for sharpening tools



Gumming a cross-cut saw

There should be a Deering knife grinder on every farm where mowers, binders, reapers, feed cutters, and other machines are used daily. It is a distinct advantage to have facilities close at hand for quickly sharpening mower knives, axes, saws, hatchets, knives, etc., and for this reason when a Deering knife grinder has once been used, the farmer will not be without one.

Deering knife grinders are so constructed that the emery wheel will sharpen half of two sections at once, which corresponds to one whole section. At the same time, the correct bevel is preserved.

In the illustration at the top of the page a Deering knife grinder is seen sharpening mower knives. The cut gives a good idea of the operation.

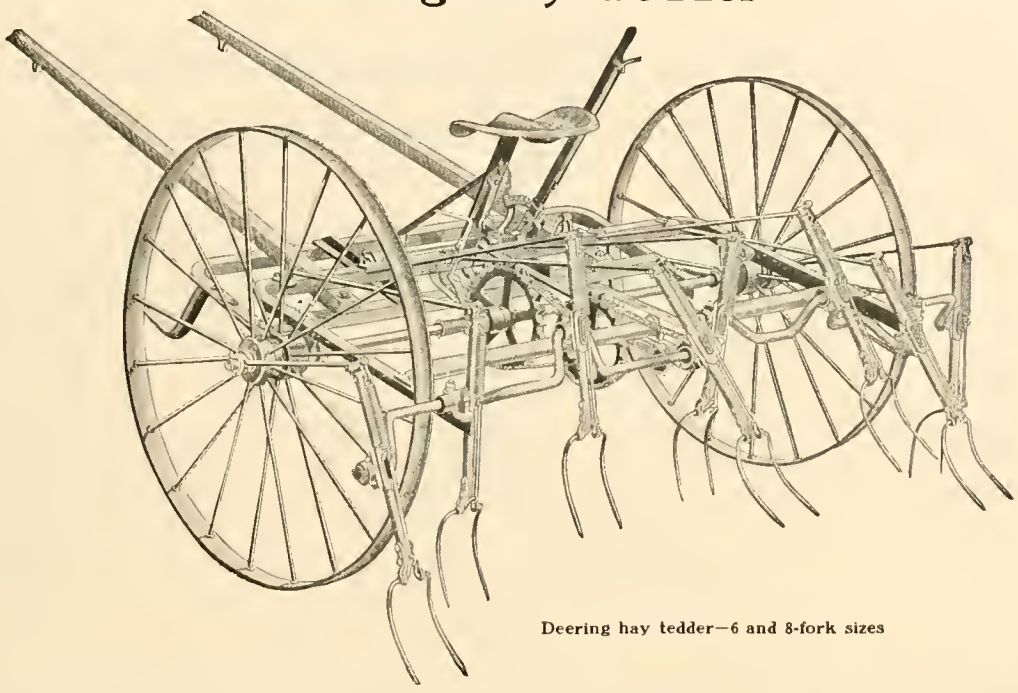
The degree of pressure may be regulated by a very simple adjustment, which enables the operator to grind out the nicks, and also control the action of the wheel. The knife is firmly held in place by clamps, but when desired it may be easily moved to the right or to the left.

No other grinder can be adjusted so that the operator by a rocking motion of the hand can grind a knife without clamping it in place. This is a decided advantage when time is limited. The grinder is designed for quick service.

The grinder may be quickly converted from a knife grinder to a tool grinder by simply substituting a flat stone for a beveled one. It can then be used to grind knives, harrow teeth, plow points, or to sharpen battered mower guards. In fact, it can be used for too many purposes to be enumerated here.

A special stone for gumming saws can be furnished on order, at a slight additional cost.

Deering Hay Tedder



Deering hay tedder—6 and 8-fork sizes

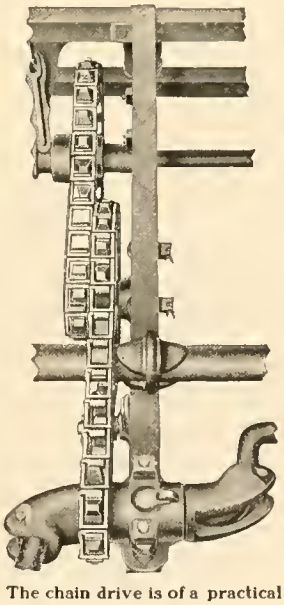
Tedded Hay is Preferred by Cattle and Horses: It has long been common knowledge that tedded or scientifically cured hay is in greater demand and brings better prices in the market than the untedded hay. With a Deering tedder it is easy to increase hay values. This machine stirs the hay thoroughly, leaving it in a loose, fluffy condition so that the air can freely circulate through it, thereby curing it uniformly and giving it a sweet odor and a good color. When a tedder is not used, it requires a much longer time for the sun to cure the cut grass lying in compact layers. The sun can get at only the top of the layer while the hay next to the ground is damp and becomes discolored. It is easy to understand why cattle and horses prefer tedded hay.

One-Piece Angle Steel Main Frame: The main frame is made from one single piece of heavy angle steel to which a cross sill of tubular steel and a center cross bar of heavy angle steel have been riveted. The thill frame is also made of one piece of angle steel.

No Bolts or Nuts: Rivets are used instead of bolts and nuts which are often a source of trouble. This construction gives the tedder unusual stability.

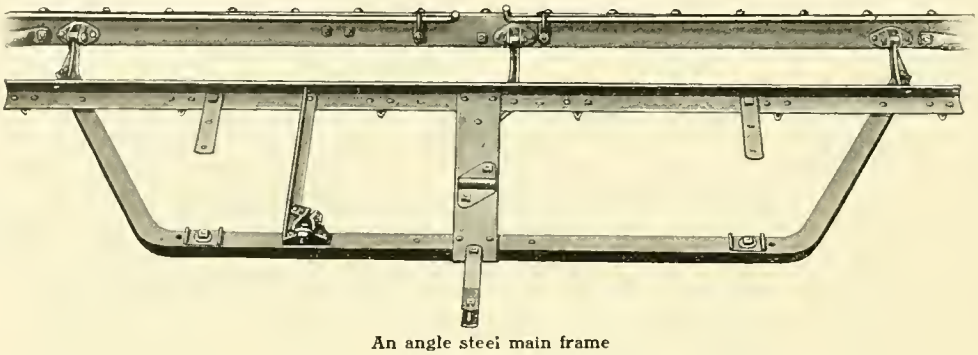
Oil Tempered Spring Steel Forks Protected from Breakage: The steel forks on the Deering tedder are of oil-tempered spring steel. Breakage is prevented by long, flexible springs which permit the fork to give backward until the obstruction has been passed, when the fork returns automatically into the regular tedding position.

Rapid Movement of Forks: The forks are so arranged by the different angles at which the cranks are set that each fork is raised to its highest point and returned to the ground while the drive wheels are moving only twenty inches. This insures a rapid movement of the forks, and results in the hay receiving quick and thorough tedding.



The chain drive is of a practical design and is located in the center of the frame

Deering New Ideal Rakes

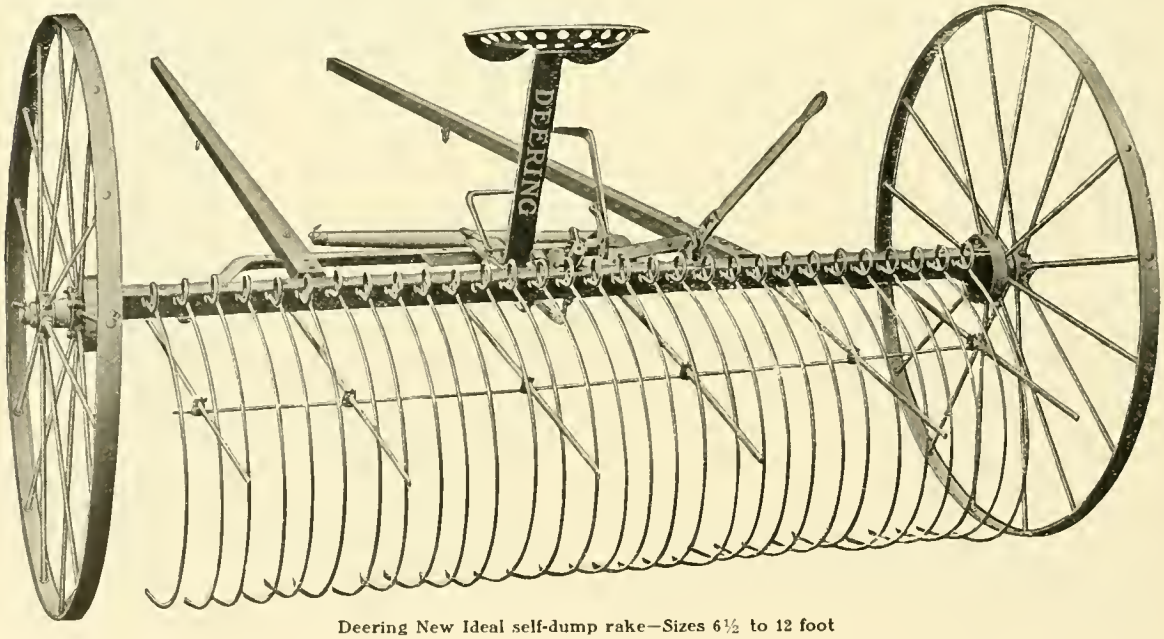


An angle steel main frame

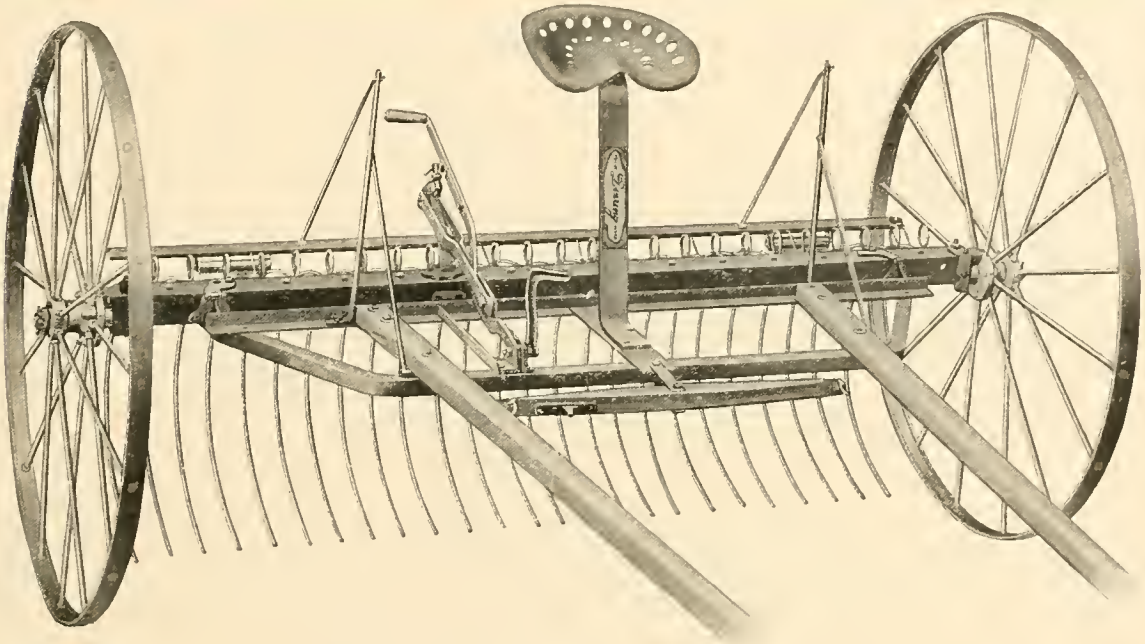
The Deering Self-Dump Rake has a Durable Steel Construction: The Deering New Ideal self-dump hay rake is practically an all-steel rake. It is built so strong that it will stand up most successfully under the roughest usage and the hardest work to which it may be put in fields where heavy crops of grass, clover, and alfalfa are grown.

Wheels Resist Torsional Strains: The hub, spokes and rim are of steel, and are so welded and riveted together that the wheel is practically one piece. The bushings of the hub are removable and can be quickly replaced when worn, without loss of time. The wheels have an inside flange, which gives great strength to the rims, and prevents twisting on hillsides.

Angle Steel Frame: The best angle steel is used in the construction of the frame, which is practically one piece, the different parts being riveted together instead of bolted. Consequently there is no danger of bolts becoming loose or of nuts being lost in the field. The advantages of this construction are very evident, as a rigid and strong frame is the result.



Deering New Ideal self-dump rake—Sizes 6½ to 12 foot



Deering New Ideal hand-dump rake—Sizes 6½ to 12 foot

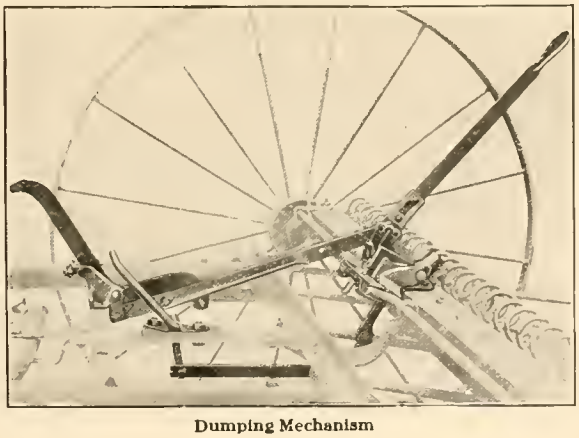
Angle Steel Rake Head: The rake head is made of high carbon angle steel, and is connected with the hound by malleable hangers. Sagging on the larger sizes is prevented by means of a truss rod.

Interchangeable Dump Rods: The dump rods are the same length and can be reversed or interchanged. Repairs are minimized and the durability of the rake greatly increased for this reason.

Dumping Mechanism Responds Quickly: When pressure is applied by the operator to the convenient foot lever, the power is transferred directly from the wheels to the dumping rods, which respond very quickly.

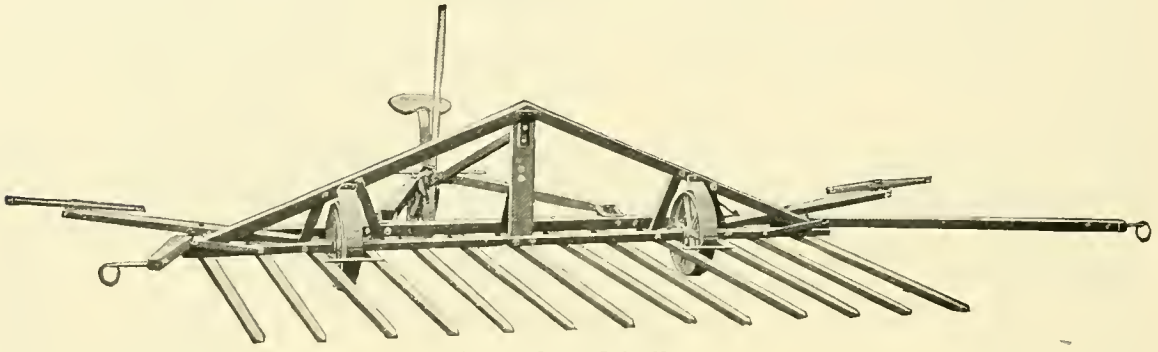
Tough and Pliable Steel Teeth: Owing to the design of the steel rake tooth holders, few bolts are required on the New Ideal rake. At the same time, the teeth can be easily removed if desired. The rake teeth are made of tough, pliable steel, and have been tempered to successfully withstand the roughest usage to which they will be subjected when working in uneven ground or in extra heavy hay. Farmers are consequently insured against trouble and delay resulting from breakage of rake teeth.

The Deering New Ideal Hand-Dump Rake: The Deering New Ideal hand-dump rake is similar to the self-dump rake with the exception of the dumping mechanism and the cleaners. On the hand-dump rake a steel overhanging cleaner removes the hay from the teeth when the rake is dumped. The levers and dumping arrangements work easily and smoothly. By means of the foot lever and the weight of the driver, dumping becomes a very simple operation.



Dumping Mechanism

Deering Sweep Rakes



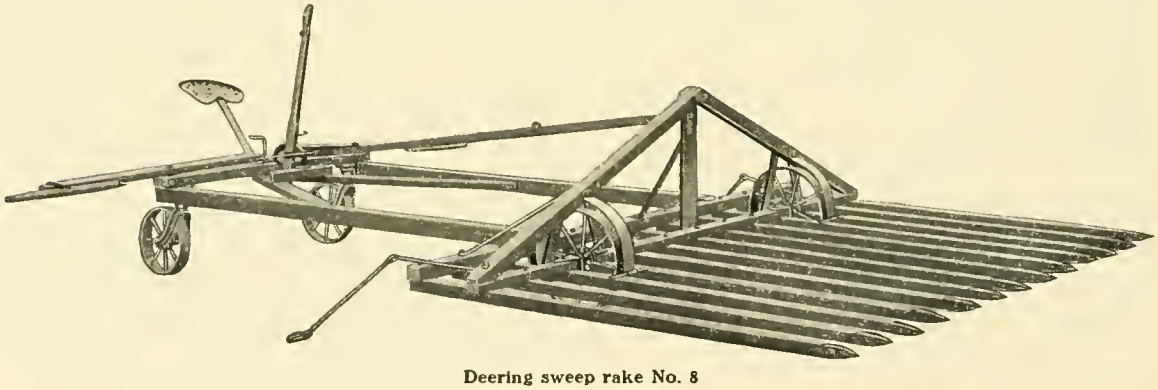
Deering Sweep Rake No. 6

Sweep rakes are, as a rule, subjected to a great deal of hard usage and severe strains, so it is essential that the right kind of materials should be used in a right way to insure great strength. A careful examination of the Deering sweep rakes will convince anyone that these tools are built to stand the hardest kind of treatment. Only the best materials have been used in constructing them and they are thoroughly braced where necessary.

Made in Many Styles: Deering sweep rakes are made in eight styles. Nos. 1 and 5 are two-wheel, side hitch rakes. Both are carried over the ground in a similar manner. Each is provided with a seat. No. 5 has a projecting runner at the rear which prevents the rake from tipping too far backward. Nos. 2 and 6 are also side-hitch rakes. Both have three wheels and are provided with a lever to control the teeth. Nos. 3 and 7 are three-wheeled, rear-hitch rakes, and are also provided with a convenient lever for locking the teeth in position. No. 7 has a power lift to raise the teeth and compression springs which allow the teeth to clear obstructions.

Nos. 4 and 8 are four-wheel, rear-hitch rakes, and are provided with convenient levers for controlling the position of the teeth. These rakes have a large capacity and are designed specially for use in localities where heavy crops of clover and alfalfa are grown.

The wheels are fitted with bushings which can be removed when worn. The teeth on all rakes are interchangeable. They are pencil pointed, metal-tipped, and so constructed that by simply turning the point upside down it is possible to rake closer to the ground.

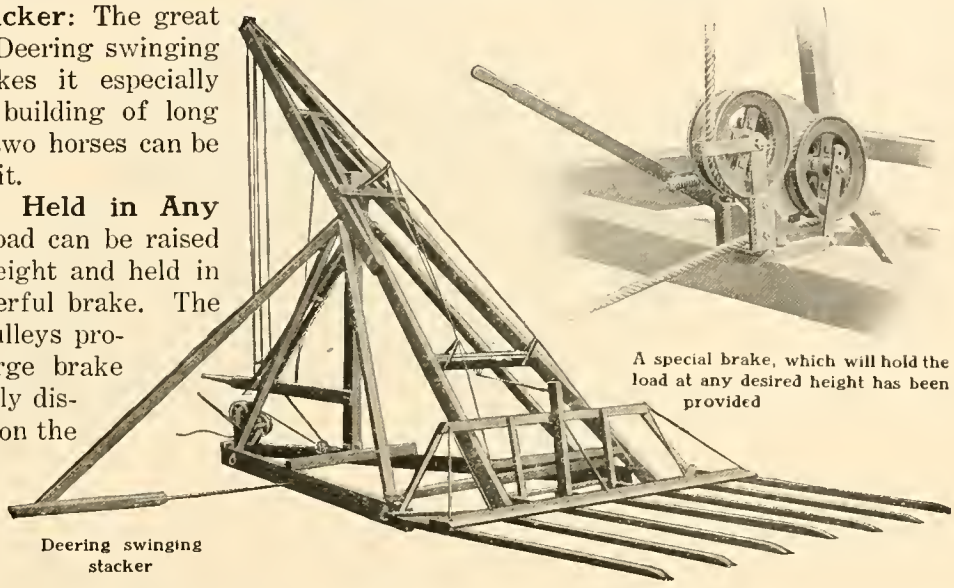


Deering sweep rake No. 8

Deering Swinging Hay Stacker

A Simple Stacker: The great simplicity of the Deering swinging hay stacker makes it especially adapted to the building of long stacks. One or two horses can be used in operating it.

Load can be Held in Any Position: The load can be raised to any desired height and held in position by a powerful brake. The large diameter pulleys provide an extra large brake surface and evenly distributes the wear on the rope. When the control lever is loosened the load can be swung over stack.

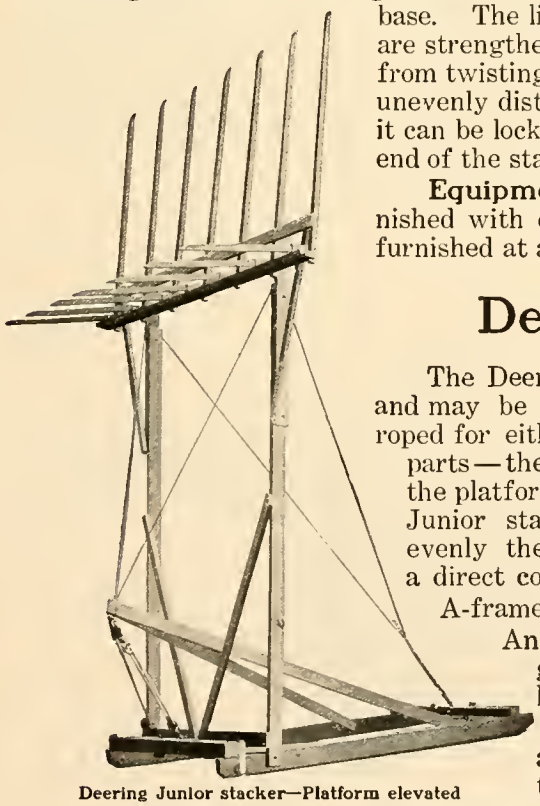


Deering swinging stacker

A special brake, which will hold the load at any desired height has been provided

Lifting Arms are Strengthened: The Deering swinging hay stacker has a rectangular base. The lifting arms are attached to the turning mast and are strengthened by truss rods which prevent the pitcher head from twisting out of position when the load is improperly and unevenly distributed. After the pitcher head has been raised, it can be locked and the hay dumped in the middle or at either end of the stack.

Equipment: A sledge, guy rope, and stakes are furnished with each stacker. Transports and hay retainers are furnished at a small additional cost.



Deering Junior stacker—Platform elevated

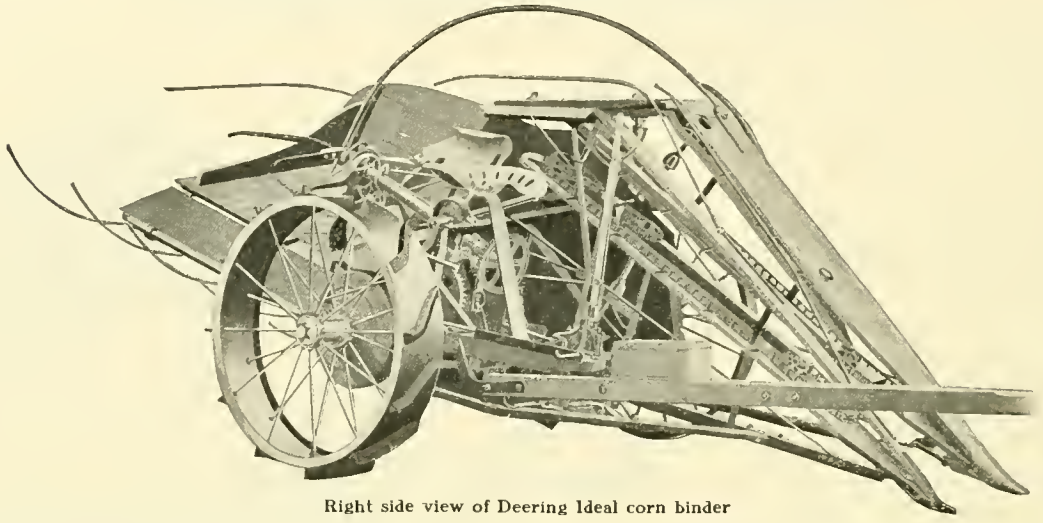
Deering Junior Stacker

The Deering Junior overshot stacker is light in weight and may be compactly folded for transportation. It may be roped for either one or two horses. It consists of only three parts—the ground frame, the elevating arms which carry the platform, and the A-frame. The platform of the Deering Junior stacker cannot sag or careen, no matter how unevenly the load may be placed upon it, because there is a direct connection from each side of the platform to the A-frame.

An adjustable stop prevents the platform from going clear over in case of accident to the pull-back rope.

There are no castings of any kind to break and all strains come as nearly lengthwise as possible on the timbers.

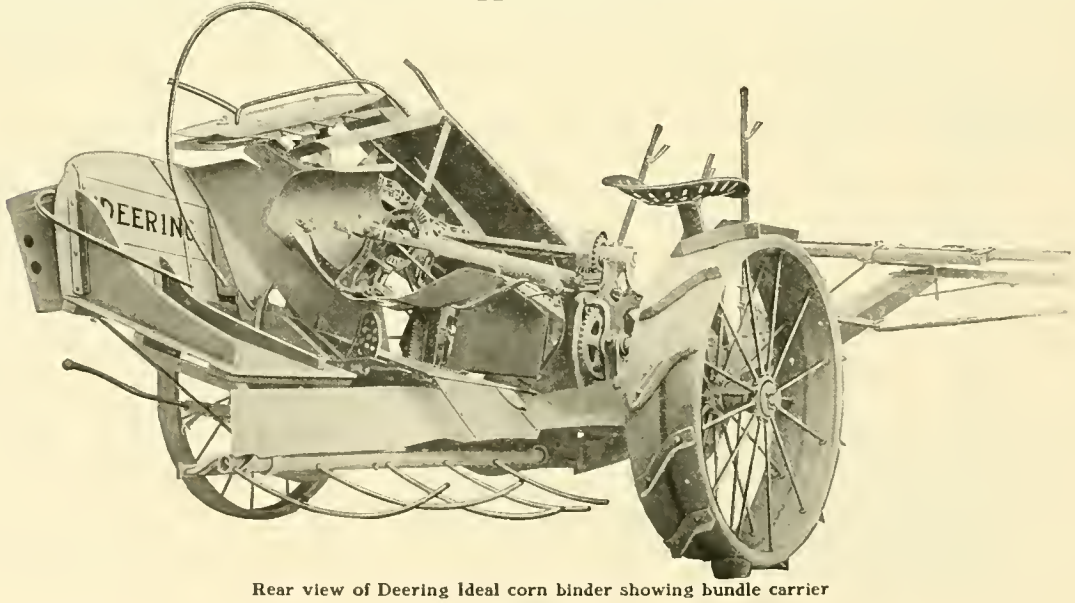
Deering Ideal Corn Binder



Right side view of Deering Ideal corn binder

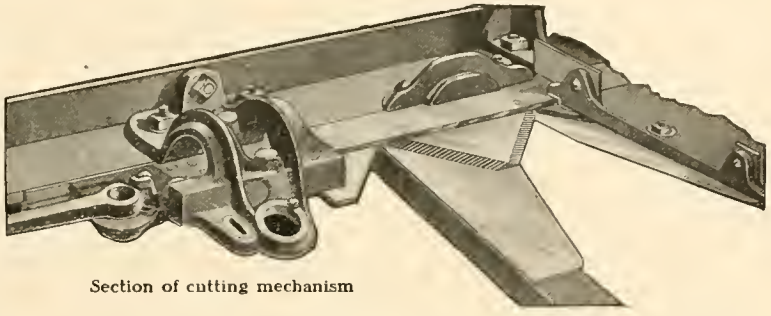
The Deering Corn Binder Saves Labor and Expense: The Deering Ideal corn binder cuts the standing corn, binds and discharges it as fast as the horses walk. Like the grain binder, it makes a big saving possible, not only in manual labor, but also in the number of hands required and wages and board for extra men. At the same time, the corn binder does from five to eight times as much work per day under average conditions as a man would do. Tall and short corn is handled with equal ease.

The Corn Binder Follows the Silo: The corn binder will be found of special advantage when the green corn is to be cut for immediate feeding to stock, or put through the silo filler, as a large area can be cut quickly to conserve the plant juices when the corn is in just the right condition to cut for these purposes. With the silo more popular than ever the corn binder is today, necessarily, in bigger demand than ever before.



Rear view of Deering Ideal corn binder showing bundle carrier

Cutting Mechanism: The cutting mechanism on the Deering corn binder consists of a reciprocating and two stationary knives. The stationary knives are placed at an angle so that the majority of the stalks are cut before reaching the oscillating section. The large reciprocating section cuts the stalks that are not completely cut by the stationary knives, and also all tough weeds, vines, or green undergrowth between the hills.

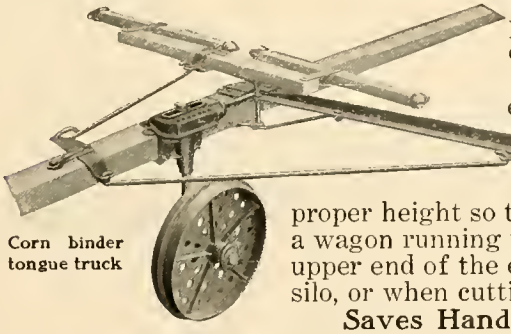


Section of cutting mechanism

Bundles are Bound Like Grain: When a sufficient number of stalks have accumulated on the binder deck they are bound into a bundle, the operation being similar to that of a sheaf of grain being bound on the grain binder.

Ball and Roller Bearings: Friction and draft is considerably reduced by ball and roller bearings distributed at points of great wear.

Tongue Truck: The Deering one-wheel tongue truck prevents the tongue from lashing the sides of the horses, relieves them of neck weight, and aids the machine materially in running smoothly.



Corn binder tongue truck

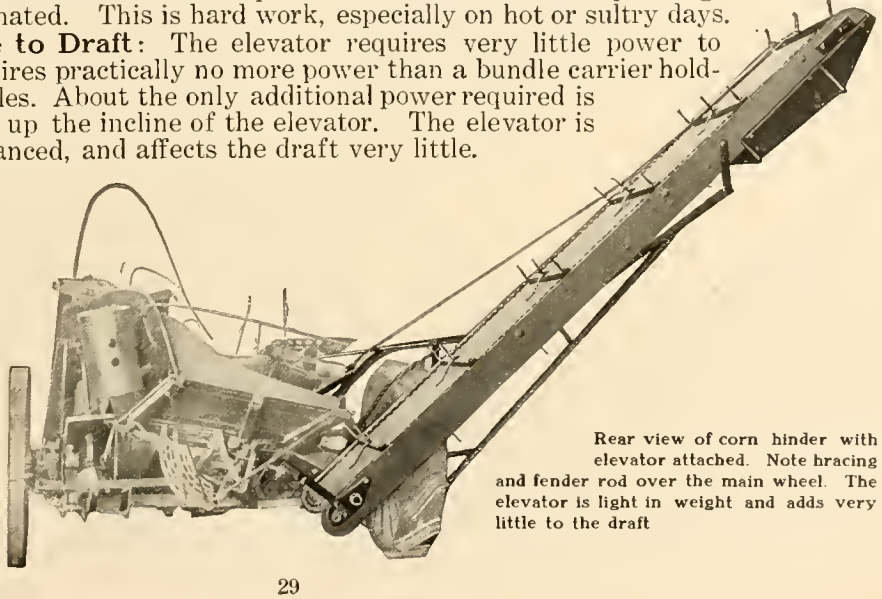
It is furnished complete with stub pole, forward pole and doubletrees, and sold on special order as an extra with the Deering corn binder.

Bundle Elevator: The purpose of the bundle elevator, which can be furnished on special order with the Deering corn binder, is to elevate the corn bundles direct from the binding attachment to a proper height so that they can be dropped in a horizontal position into a wagon running parallel with the corn binder, and directly under the upper end of the elevator. It is ideal to use when the corn is cut for the silo, or when cutting green corn for immediate stock feeding purposes.

Saves Handling: The elevator saves extra handling. Every farmer quickly realizes the value of this point. The extra labor of pitching the bundles into the wagon is eliminated. This is hard work, especially on hot or sultry days.

Adds Very Little to Draft: The elevator requires very little power to operate, in fact, it requires practically no more power than a bundle carrier holding three or four bundles. About the only additional power required is in carrying the bundles up the incline of the elevator. The elevator is lightly built, nicely balanced, and affects the draft very little.

(Write for illustrated catalogue on Deering corn machines).



Rear view of corn binder with elevator attached. Note bracing and fender rod over the main wheel. The elevator is light in weight and adds very little to the draft

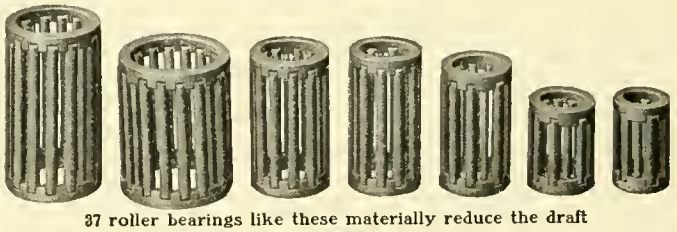
Deering No. 3 Corn Picker

What Would it Save You to Have a Machine of This Kind? Think it Over: The Deering No. 3 corn picker is a very popular machine in the corn belt. It saves untold labor to the farmer while at the same time enabling him to make a quick harvest and get in touch with the market long before those who pick their corn by hand. The corn picker works as fast as the horses walk, averaging 4 to 7 acres per day under fair conditions and even more. The hard and disagreeable work is done by the machine. All the driver has to do is to guide the horses and adjust the machine to different conditions of corn. Compare this with the old methods and you will quickly decide that everything is in favor of the machine.

This Machine Does Cleaner Work Than the Hand Picker: The Deering No. 3 corn picker will handle corn in any volume, whether the stalks are long or short. It will snap the ears from the stalk, remove the silk and husks, and deliver the ears to the wagon in much better condition than is ordinarily done by hand. This machine not only snaps the ears from the stalks, but husks them clean.

Roller Bearings Make Light Draft: The Deering No. 3 corn picker has 37 roller bearings of different sizes, which accounts for its comparatively light draft. They are found at the following points on the machine—main wheel has four; main shaft, two; main bracket shaft, two; snapping roll drive shaft, two; fly-wheel shaft, two; upper end snapping roll, two; wagon ear-elevator drive, two; upper and lower ends husking rolls, sixteen; wagon ear-elevator, two; husking roll drive shaft, one; fan and husk conveyor drive shaft, one; and first elevator idler roller, one.

All bearing boxes are self-aligning to prevent binding or cramping.



37 roller bearings like these materially reduce the draft

Front view of Deering No. 3 corn picker

Forecarriage Eliminates Neck-weight: The machine is provided with a forecarriage which prevents whipping of the tongue, causes the machine to ride smoothly over rough ground, and holds the divider boards steady. The forecarriage also eliminates neck weight on the horses.

(Write for illustrated catalogue on Deering corn machines.)

Deering 6-Roll Husker and Shredder

Many Uses for Corn Fodder: The demand for huskers and shredders is growing with every year. The farmer has found the true value of corn fodder, and he is now putting it into the silo, feeding it green to his stock, baling it for the market, blowing it into the mow for winter feeding, and using it as an absorbent bedding for his cattle.

An Ideal Machine for the Custom Shredderman: The Deering 6-roll husker and shredder is a self-feed machine, designed and built for the extensive corn grower and custom shredderman. Its great capacity and excellent showing, even under the worst conditions of corn, have proved beyond a doubt that this machine is an ideal machine to use in large shredding operations.

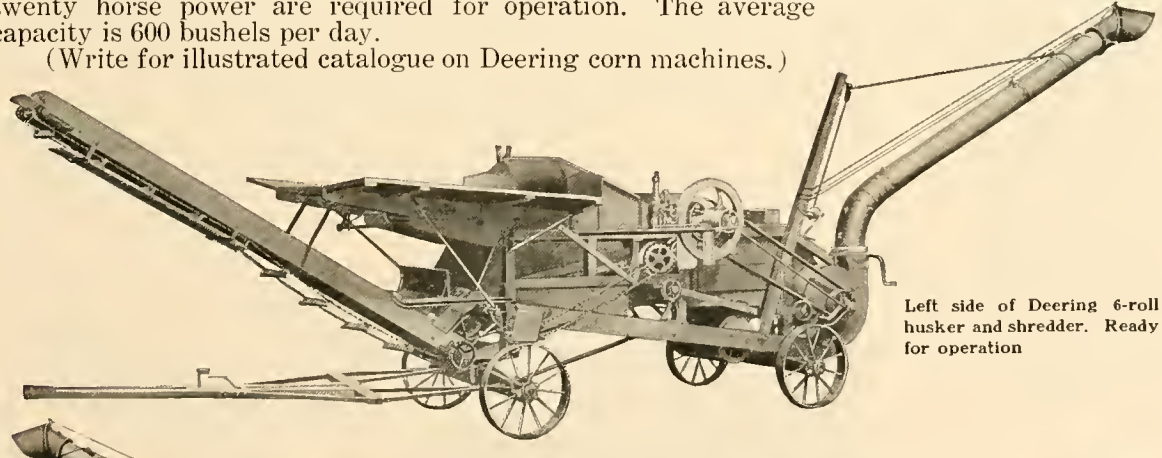
Efficient Snapping Rolls: Thoroughly efficient snapping rolls are absolutely necessary as the capacity of the husker and shredder is regulated by these rolls. The Deering snapping rolls are easily adjustable for all conditions of corn.

Husking Rolls are Ideal for This Purpose: The husking rolls on the Deering 6-roll husker and shredder are exceptionally well designed and equipped to do their work properly. The construction of the husking rolls should always be taken into consideration before buying a shredder. They are vitally important.

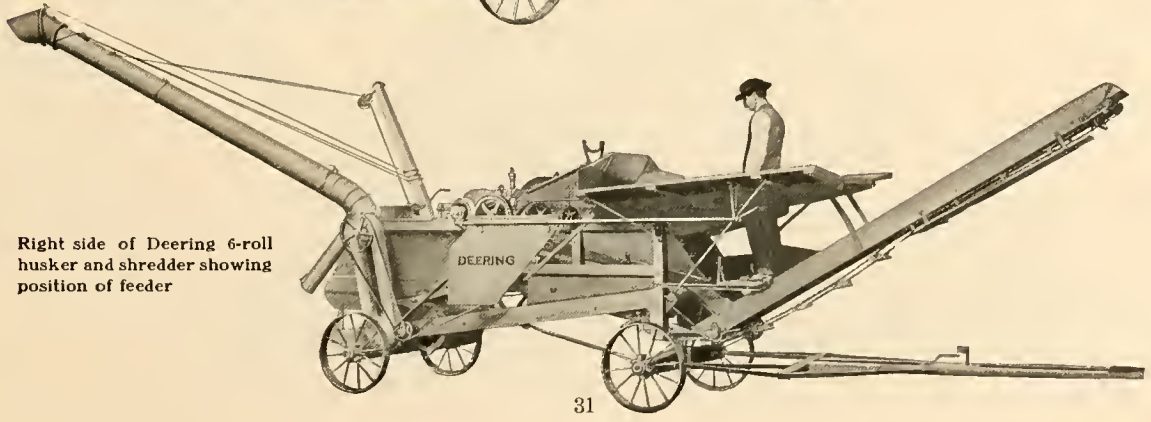
A Practically Constructed Shredder Head: Particular attention is called to the shredder head. The Deering shredder head is made up of steel blades placed so that no two blades follow each other.

Pulley, Power, Speed, and Capacity: The drive pulley furnished regularly with the Deering 6-roll has a diameter of 7¼ inches and a face 8 inches wide. The speed, to secure the best results should be 1,200 revolutions of the shredder head per minute. Fifteen to twenty horse power are required for operation. The average capacity is 600 bushels per day.

(Write for illustrated catalogue on Deering corn machines.)

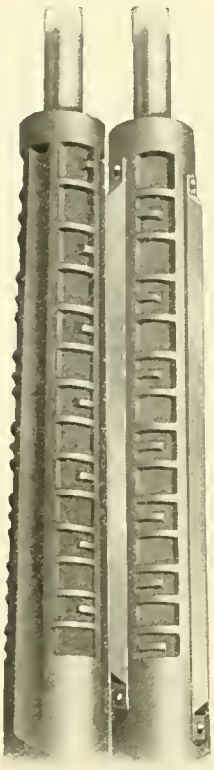


Left side of Deering 6-roll husker and shredder. Ready for operation



Right side of Deering 6-roll husker and shredder showing position of feeder

Deering 2 and 4-Roll Huskers and Shredders



Snapping rolls. Note the V-shaped ridges on one roll which fit into the corresponding grooves on the opposite roll. There are 3 ridges and 3 grooves. A positive grip is thus secured as the rolls work toward each other.

Built Mainly for Individual Use: The 2 and 4-roll shredders are built chiefly for individual use. The 4-roll, however, is large enough to be used together by such groups of farmers as wish to co-operate with each other in shredding their corn without the necessity of buying individual machines or having to rely on the custom shredderman.

Points of Difference Between 2 and 4-Roll Shredders: Deering 2 and 4-roll huskers and shredders are hand-feed machines and the same in general construction, except that the 4-roll has larger dimensions—a wider and heavier frame, a heavier fly-wheel, and three bearings on the shredder shaft where the 2-roll only has two.

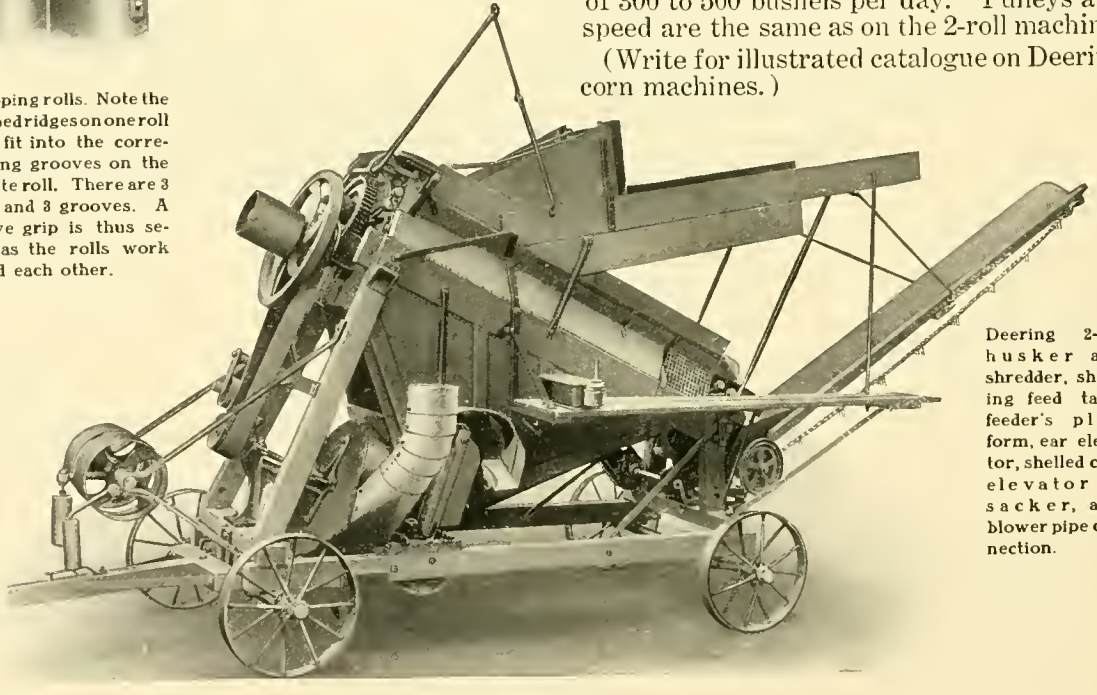
The Safety Lever is Within Easy Reach: The safety lever is located near the feeder, and immediately in front of the feed opening. By means of this lever the operator can quickly stop the rolls should any hard substance slip into the shredder with the corn as it is fed. It responds to the touch immediately. Breakage and wrenching of parts is prevented almost absolutely by this means. Should the operator slip and fall against the device, the rolls will stop automatically.

Shredder Head does not Powder the Leaves: The shredder head works satisfactorily in all conditions of corn, and does not powder the leaves. No two of the shredder plates are set in line. There are no knives to keep sharp, and there is no winding.

Capacity, Pulleys, and Power Location: The 2-roll requires 6 to 8-horse power for operation. The capacity is 150 to 250 bushels per day. The regularly furnished pulley has a diameter of 7¼ inches with a face 8 inches wide, and a speed of 1150 to 1200 revolutions per minute.

The 4-roll requires 10 to 12-horse power for operation, and has a capacity of 300 to 500 bushels per day. Pulleys and speed are the same as on the 2-roll machine.

(Write for illustrated catalogue on Deering corn machines.)



Deering 2-roll husker and shredder, showing feed table, feeder's platform, ear elevator, shelled corn elevator or sacker, and blower pipe connection.

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