



Deering Harvesting Machines

HE necessity for correctly designed and well built harvesting machines cannot be over-estimated. The great prosperity of this country is due to its agricultural development. This development in turn is the result of the development of agricultural machines which have made possible the planting and harvesting of immense crops.

Of all the harvesting machines at the disposal of the farmer, none prove more popular than the Deering—this for the reason that Deering machines are conscientiously built in every particular. The demands and requirements of the farming world are always kept uppermost in the minds of the designers, with the result that Deering machines embody all features which prove popular and desirable.

INTERNATIONAL HARVESTER COMPANY OF AMERICA

(Incorporated)

Chicago,

U. S. A.

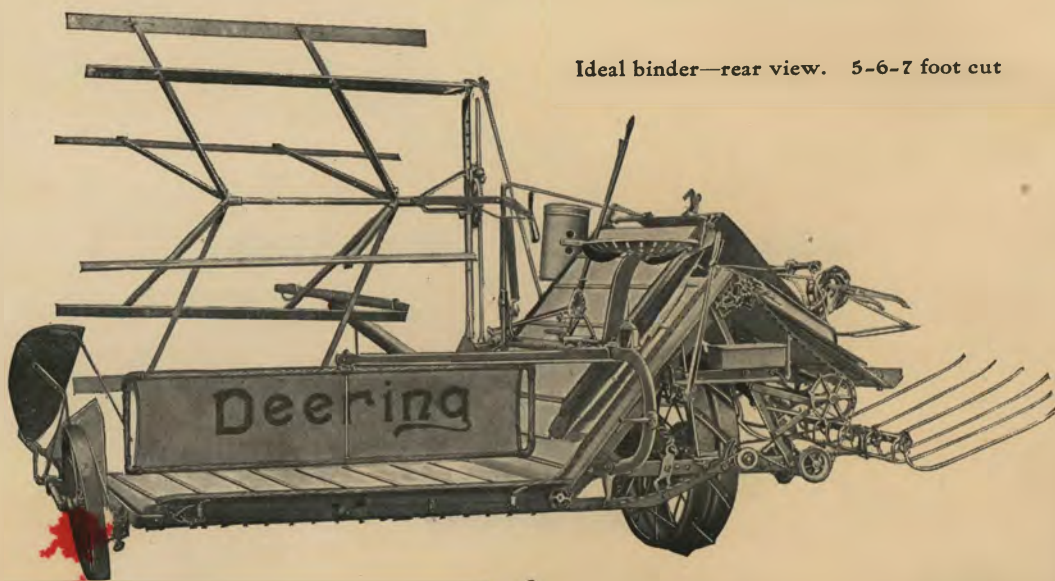
SOLD BY
J. T. GOUGH,
BEAR, DEL.

Deering Dom.

The Deering Ideal Binder

THE Deering Ideal binder, here illustrated, has been so favorably known for years that it seems almost unnecessary to call attention to its excellent features.

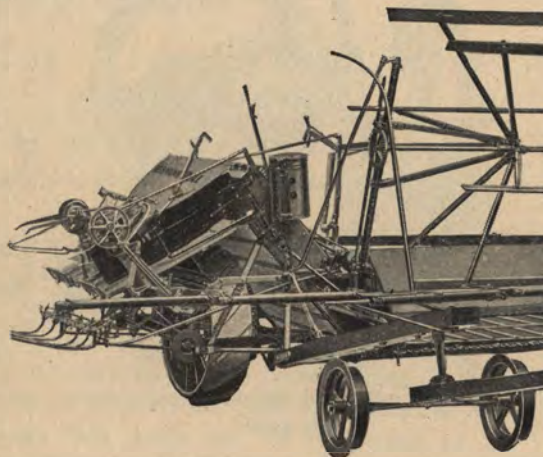
The frame is made of steel bars hot riveted instead of bolted together, so that there are no holes in this frame to weaken it. The main wheel has a wide face, and the steel spokes are shouldered and riveted to the malleable hub at the inner end, and clinched at the outer end to the malleable lugs on the face. The bevel gear is supported in the frame by a self-aligning malleable bushing within which roller bearing cages are fitted. The pitman is of the best second growth hickory, driven by a counterbalanced crank wheel on a line with the pitman head. The reel has four distinct movements, all secured by a single lever. The elevators are of the open end type with ample clearance, and all levers are within convenient reach of the operator. The knotter has been unchanged since 1883. The teeth of the bundle carrier are at right angles to the grain and yield singly or collectively.



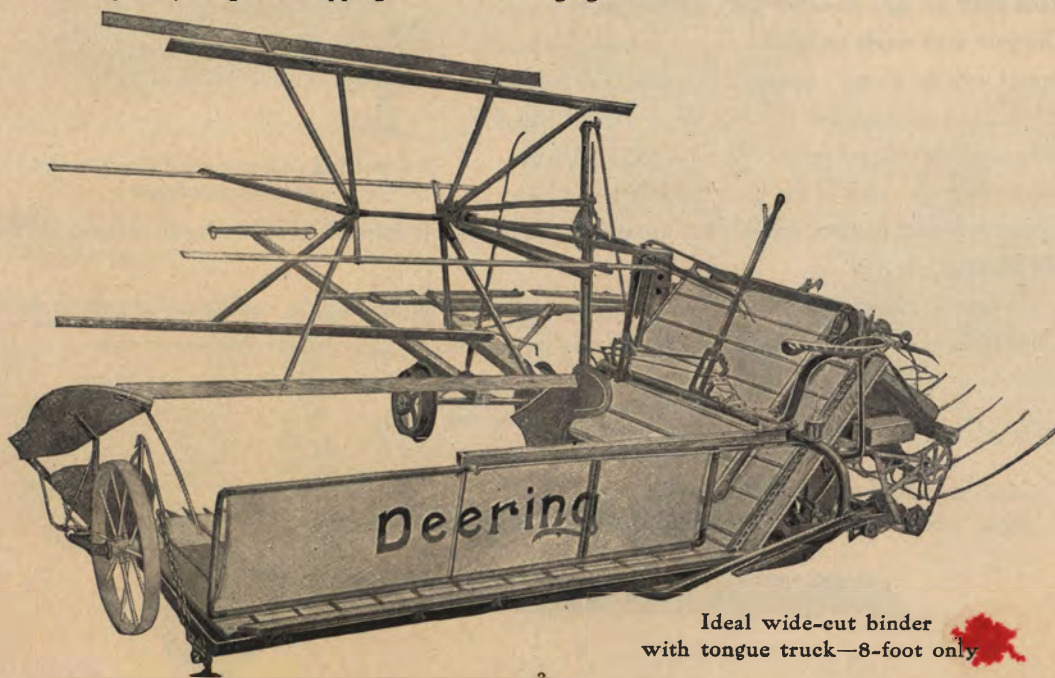
Ideal binder—rear view. 5-6-7 foot cut

Deering Ideal Wide-Cut Binder

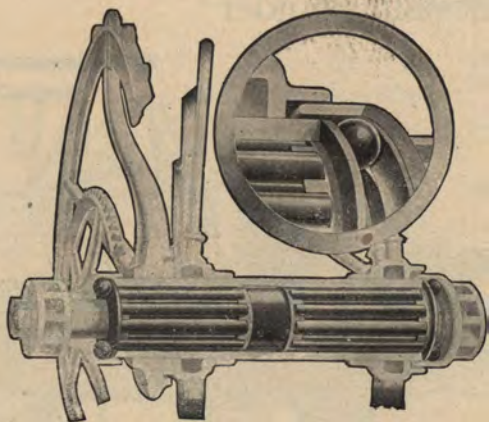
ON this page is illustrated the Ideal 8-foot binder, equipped with tongue truck. This binder is in appearance like the regular Ideal, the principal points of difference being the wider platform, reel and those parts which conform to the wider cut. The elevators and gearing are arranged for greater capacity to take care of the additional amount of grain to be handled by the 8-foot cut. All Deering harvesters and binders have 10-inch main wheels and folding dividers, both features of great value. Extensive grain growers find that the machine of great capacity is unusually satisfactory. It is possible to harvest in less time and with less hired help with an 8-foot machine than with the smaller machines. At this season of the year help is usually scarce, making it possible to accomplish twenty-five per cent more with an 8-foot binder than with the 6-foot binder. There is a great saving in time and energy. Both features are of immense importance where there is liable to occur a loss from storms or frost that may strike the crops about the time they are ready for harvesting. The 8-foot binder is equipped with a tongue truck which relieves the team of all neck weight. It also relieves both the operator and horses from jerking and jarring and whipping about where rough ground is encountered.



Front view, showing tongue truck



Ideal wide-cut binder
with tongue truck—8-foot only



Note the roller and ball bearings on the main axle

The Secret of Deering Light Draft

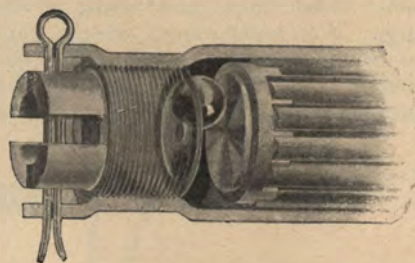
GOOD material, unexcelled workmanship, correct design, and a liberal equipment of famous Deering ball and roller bearings explain the light draft feature of Deering Ideal binders. These anti-friction bearings will be found on the Ideal binder wherever their use would tend to materially reduce friction.

The main wheel axle is surrounded almost its entire length with large rollers, and at both ends of the hub are steel balls to overcome end thrust caused when cutting on

hillsides or uneven ground. The wisdom of placing these bearings at this very important point cannot be questioned.

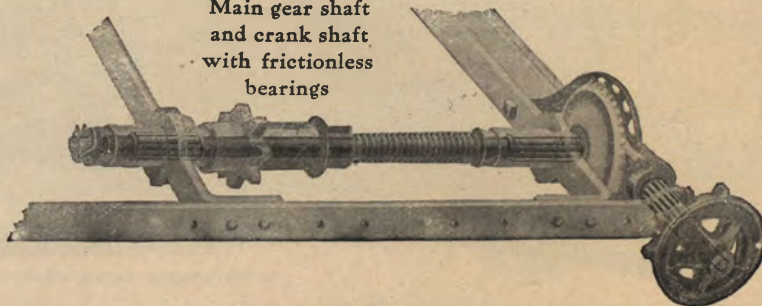
As shown in the illustration, the main gear shaft and crank shaft are also provided with anti-friction bearings. The gear shaft works on roller bearings at both points of contact with the frame. Steel balls are placed at the end of this shaft to overcome the end thrust always found in the working of bevel gears. There is no grinding contact between the back of the gear and box to cut away the bearings and produce friction, but there is a smooth, almost frictionless, roller contact secured by this ball bearing.

The main gear shaft is provided with a device at the end for keeping the bevel gears always in mesh. This hardened steel plug at the end of the shaft may be quickly and easily adjusted to take up wear.



Ball bearing and adjusting device on end of main gear shaft

Main gear shaft and crank shaft with frictionless bearings



The Deering Knotter

The Knotter that Always Ties



THE well known Deering knotter was first introduced on Ideal binders in 1883. It has been used continually since and has never been changed—positive evidence that it is one of the most reliable knotters made.

The importance of a correctly constructed knotter cannot be over-estimated, as it is this part of a binder which causes 99 per cent. of the binder troubles to the purchaser.



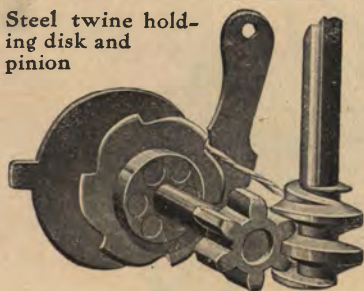
The Deering knotter is correctly constructed in every detail. The twine holding disk is made of steel, and has six notches so that for each bundle tied the wear comes on a different notch. This, together with the fact



that the disk is made of steel, makes it practically indestructible.

The pinion for the disk is also made of steel. It has six teeth and one tooth is used for each bundle, which insures minimum wear.

Steel twine holding disk and pinion

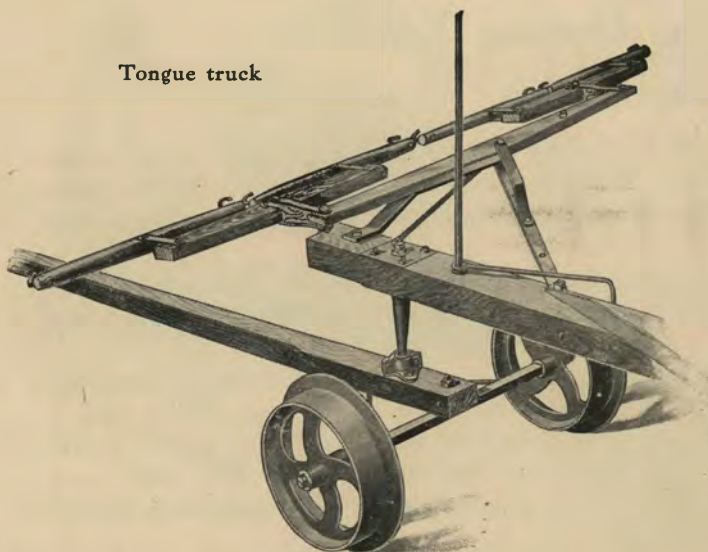


If, after considerable use, there should be noticeable wear, the pinion can be reversed by simply driving out the pin and putting it on upside down, which makes this part as good as new.

The worm which drives this pinion is drop forged, heavy and strong. The entire knotter is faultlessly constructed, free from complication, and works with marvelous precision.



Tongue truck



The Deering Tongue Truck

THE Deering tongue truck is part of the equipment of the 8-foot binder. It may be purchased as an extra for other sizes.

This tongue truck has proven extremely satisfactory. It causes the machine to run steadily and prevents jerking or jarring; consequently the life of the binder is considerably lengthened. Not only does the binder run easier and steadier, permit-

ting quicker and nicer adjustments, but the team is relieved from neck weight, side draft and threshing about of the tongue. This saving on the horses is a very important point and deserves careful consideration.

The Deering Ideal Binder Transport

WITH an Ideal binder transport one man can adjust, mount or dismount the Ideal binder with ease and dispatch. No hard lifting is necessary. The platform is raised high from the ground by means of the raising device, and the machine is then tilted, the tongue removed, and the transport wheels and stub axles inserted in position. The tongue is then placed in position at the outer end of the platform which is then lowered, and the main wheel is raised high from the ground to clear all obstructions while being transported.



Binder on transport

Deering Header-Binder

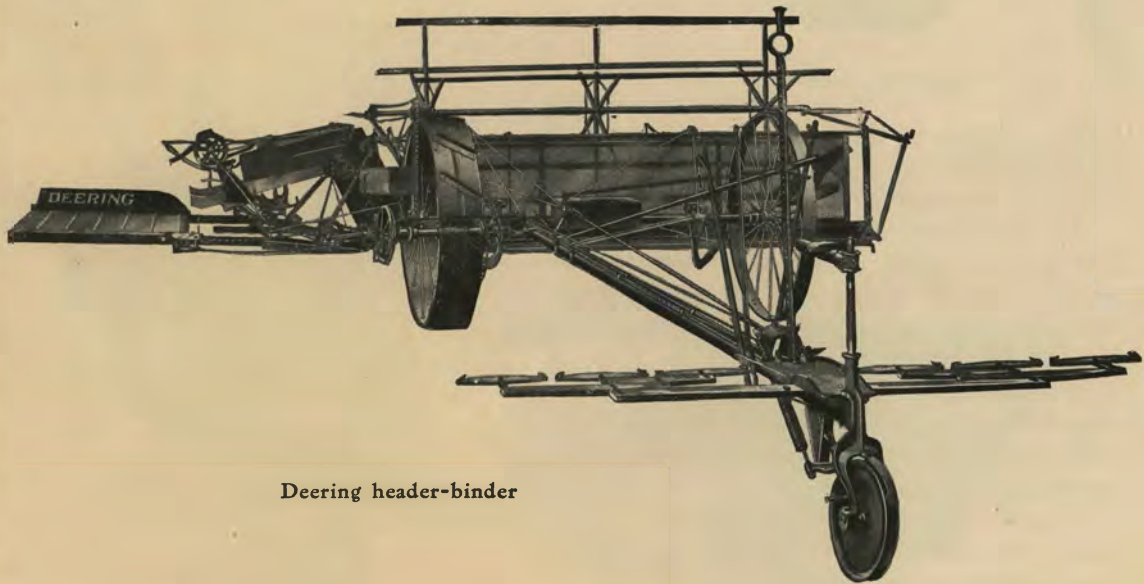
THE Deering header-binder, descriptions and illustrations of which are here given, is a machine with which one man can harvest as much in a day as two men operating two side cut binders, and he can do it with less work.

This header-binder possesses innumerable features which adapt it for use in our western country where a machine cutting a wider swath than the ordinary side cut binder is an imperative necessity, owing to the immense acreage given over to the cultivation of grains.

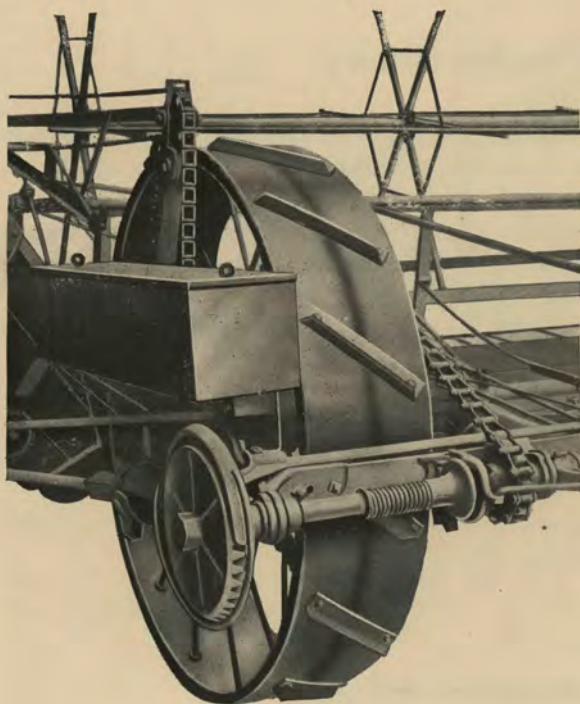
The scarcity of harvest help in this country, and the liability of damage by storms to the grain before it is safely into shocks, are two influences which urge the selection of a Deering header-binder.

This machine has no side draft and does not throw an unusual weight on the horses' necks. It will cut a full swath on a steep hill-side without danger of up-setting. It permits cutting close to the ground or leaving a long stubble.

There are many other features about the construction of this header-binder which recommend it to the careful consideration of grain growers who have an acreage extensive enough to warrant the use of a wide cut machine. Deering header binders are built with a 10, 12 or 14-foot cut.



Deering header-binder



Main wheel and main gear

spider so that six or eight reel arms may be used. It requires but one man to make all adjustments of the machine to meet varying conditions.

The tilting lever, reel lever and shifting lever are all convenient and work easily. Easy adjustments are essential inasmuch as they must be frequently made, especially when binding grain of uneven height on ground of hilly nature.

Ball and roller bearings are generously applied wherever their use would tend to reduce friction. The rollers are made of high carbon steel and the balls of hardened crucible steel.

When the amount of work which a Deering header-binder will accomplish is carefully considered, its extreme light draft is really remarkable.

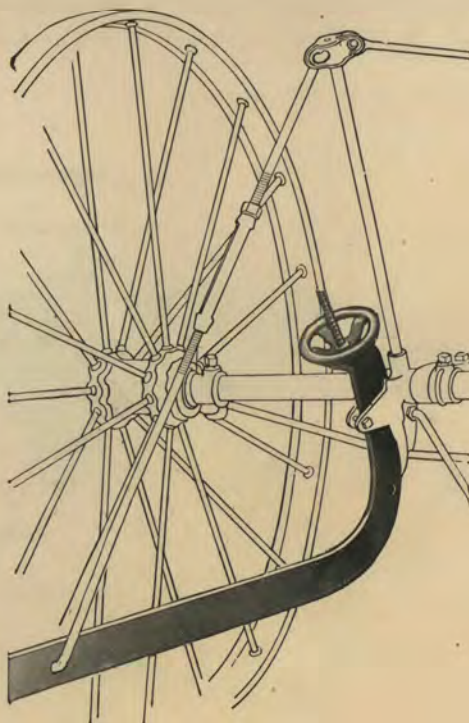
Unexcelled Features

THE Deering header-binder has very substantial wheels—the main wheel being of large diameter, with broad face—trussed axle, strong platform and rigid bracing.

It is provided with two line levers, which in connection with the tilting lever, permit the operator to quickly raise or lower the platform and yet always retain it in a practically level position.

These platform lining levers are found only on Deering headers and header-binders. They are extremely practical, and most effective in maintaining a level platform.

The reel is adjustable from the driver's position and is also provided with an adjustable



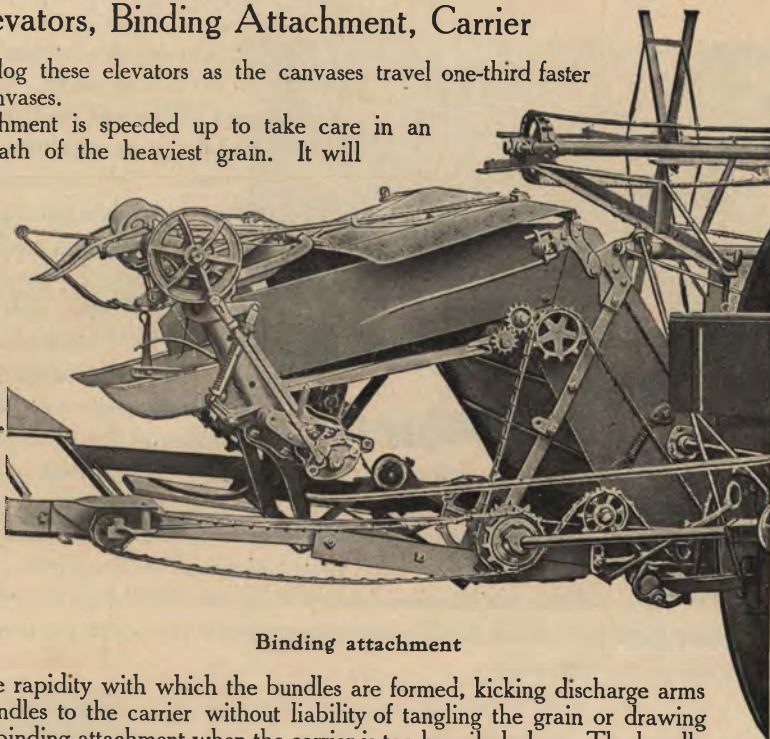
Outer line lever

Elevators, Binding Attachment, Carrier

HEAVY grain cannot clog these elevators as the canvases travel one-third faster than the platform canvases.

The binding attachment is speeded up to take care in an ample way of a 12-foot swath of the heaviest grain. It will

continue to bind a full swath of the heaviest grain and tie every bundle without choking or skipping a single bundle. It will make perfectly round bundles, tightly bound and evenly butted. It has a durable revolving steel butter so scientifically designed that it brings forward and evens up alike the butts of long and short grain. This attachment has three packers which bring the grain from the top of the deck and form it into perfect bundles. While a bundle is being bound, these packers are at rest, consequently, they do not drive unbound straw into a bundle. Because of the rapidity with which the bundles are formed, kicking discharge arms are used which throw the bundles to the carrier without liability of tangling the grain or drawing the bundles back on to the binding attachment when the carrier is too heavily laden. The bundle carrier has ample capacity and may be easily folded.

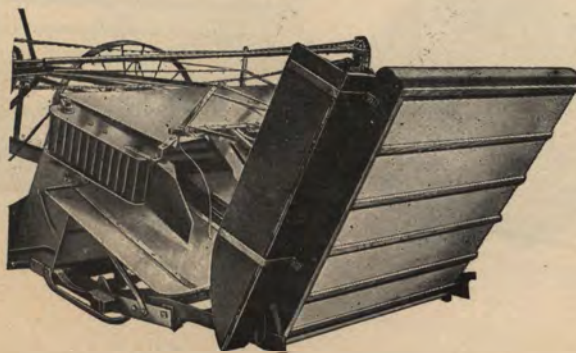


Binding attachment

By removing the binding attachment and putting in place an elevator, this machine may be used as a header.

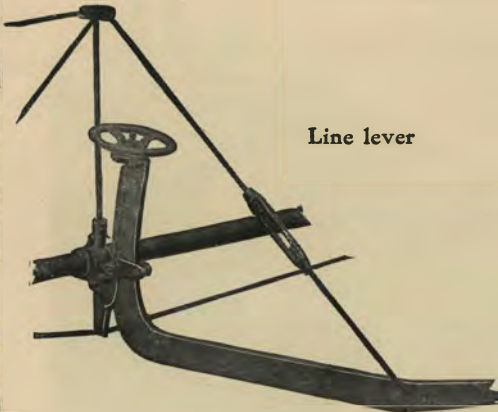


Kicking discharge arms



Bundle carrier—folded

Deering Header



Line lever

THE Deering header has many of the excellent features of the header-binder. It is built in three sizes, 10, 12 and 14-foot cut, and thus permits quick and easy harvesting of the grain, which is so essential where immense crops are harvested. Only one man and proportionately no more horses than are used for the side cut binder are necessary for the successful operation of this machine.

Among the many features of this header are the following: High main wheel with wide face heavily lugged, ball and roller bearings, hand wheel and screws for leveling the platform, adjustable reel spider, unique and simple pitman drive, tempered steel ledger plate guards, and a firmly braced elevator.

The action of the platform lining levers on this machine is similar to the action of the lining levers on the header-binder described on page 8.

The Deering tilting lever gives the machine great range of tilt and requires but small exertion on the part of the operator. The machine may be tilted when in operation just as easily as when standing still, because the drive force of the header has no effect upon the action of the tilting lever.

The weight of this machine is delicately balanced, which together with the adjustment of the strong equalizing springs, makes it possible for the operator to tilt the cutter bar from thirty inches above the ground down to cut a close stubble.



The Deering header

Pitman Drive

THE method of driving the Deering pitman is unusually simple and effective.

Instead of a set of gears to drive the pitman, it is driven by the lower elevator roller, as shown in the illustration, which greatly simplifies this part of the machine. There is no crank shaft, the elevator roller acting as a crank shaft. This insures a direct stroke and great power for cutting.

The deep sections on the sickle and its increased speed insure perfect freedom in cutting, no matter how heavy the crop or the undergrowth of grass and weeds may be. The guards are equipped with steel ledger plates; consequently, will cut heavy straw easier than if the guards were malleable, on which the edges soon wear round.

The platform is so strongly constructed and braced that the cutter bar is always certain to be straight and rigid throughout its entire length. The platform is provided with a steel canvas guide which always holds the canvas down close to the back of the sickle.



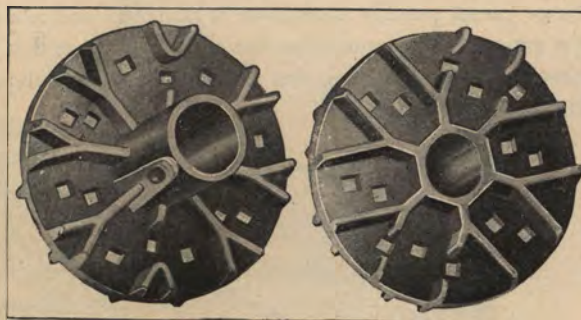
Sickle drive



Note the large bearing surface

Reel

THE reel on the Deering header is adjustable in that it may be operated with either six or eight fans. A strong lever arm pivoted on the main axle gives the reel a long range of action, either forward or backward without straining the chains which drive the reel fans.



Adjustable reel spider

Elevator

THE method of bracing the Deering header elevator is original and unquestionably one of the most satisfactory ever devised.

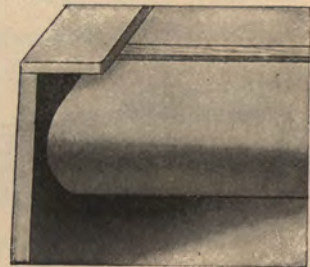
This bracing is accomplished by means of an angle iron bar which runs diagonally across the under side of the elevator to a point directly in line with the attachment of the elevator to the machine where it is pivoted to the tall elevator post.

This brace holds the elevator rigid in all positions and prevents

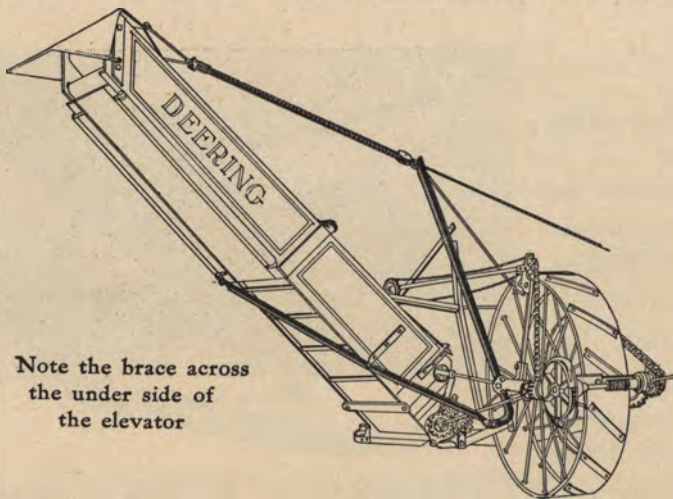
any tendency of the canvases running crooked and thus wearing the edges. No matter how heavy the grain, this elevator brace so strengthens the entire elevator that there is no chance of overtaxing or weakening it.

This angle iron brace permits the elevator to be raised or lowered without interfering with the perfect freedom of the canvases. When it is desired, therefore, to leave the crop in windrows the elevator may be lowered to a horizontal position, and the canvases will run smoothly. The elevator sides are made of wood, because wood is less liable to dent or spring out of shape than metal.

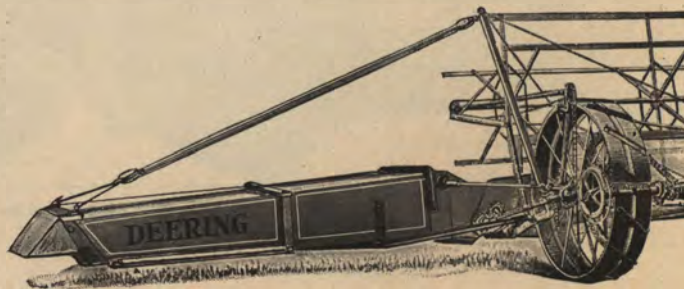
To prevent the lodgment of straw about the inside of the divider and elevator, the first guard on the cutter bar is placed close to the elevator. Straw cannot possibly accumulate at this point and retard the elevation of the grain. The canvas rollers are so held in place that the canvas comes close to the elevator sides, thus avoiding the accumulation of straw and the clogging of the rollers.



The edge of the canvas comes close to the elevator side



Note the brace across the under side of the elevator



Elevator lowered

Deering Ideal Reaper

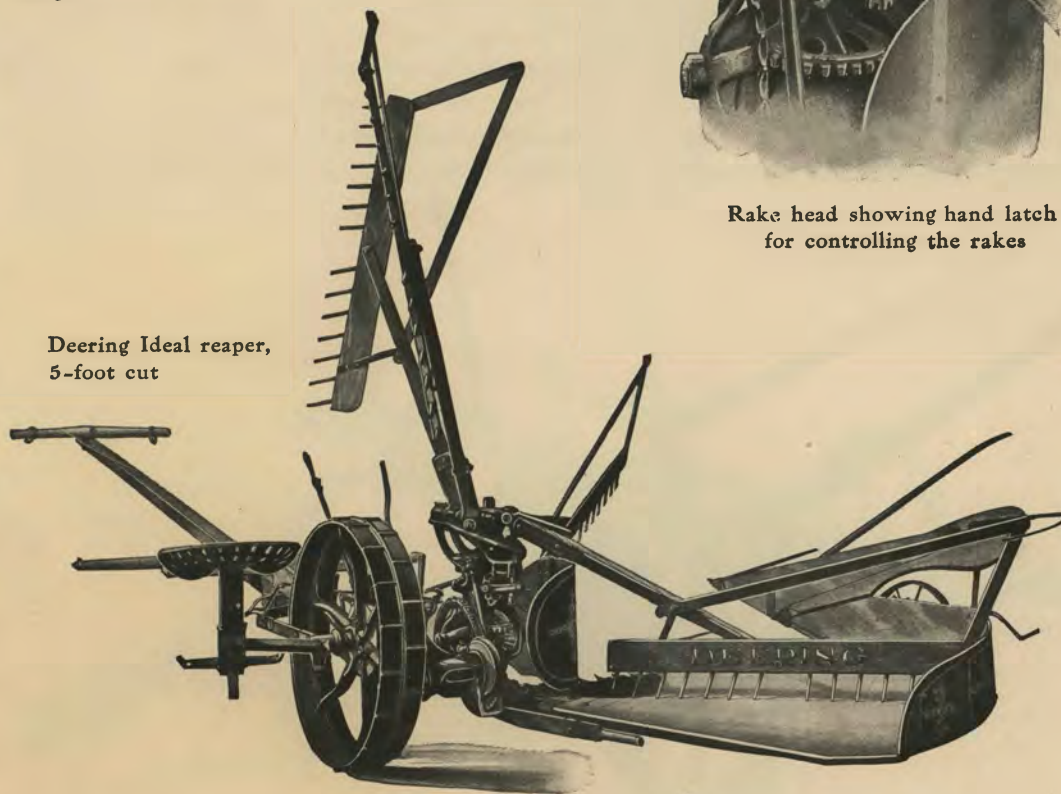
THE Deering reaper can be economically used for cutting clover, millet, timothy and other grasses for either seed or feed, also for cutting small fields of wheat, oats or buckwheat where a large binder could not be satisfactorily used. An automatic controlling device permits operation of the four rakes as desired. All the rakes may be made to sweep the platform, or act as reels until a sufficient amount of grain has accumulated on the platform. By pressing the foot on a convenient lever, the operator can prevent a rake from sweeping the platform so that when turning corners the grain can be deposited out of the way of the horses on the next round.

The entire machine is strongly and rigidly constructed, and the important bearings are liberally equipped with roller bearings to secure light draft.

The machine may be compactly folded for transportation or storage.



Rake head showing hand latch
for controlling the rakes

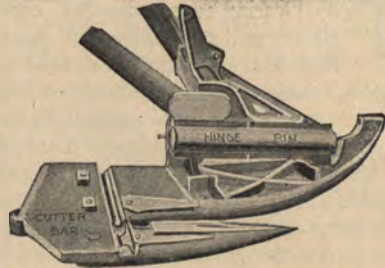


Deering Ideal reaper,
5-foot cut

Deering Ideal One-Horse Mower



THE Ideal one-horse mower, here illustrated, is an excellent machine for use on small farms, in parks and orchards, or wherever a small machine will take care of the crops and where a large one cannot be profitably operated.

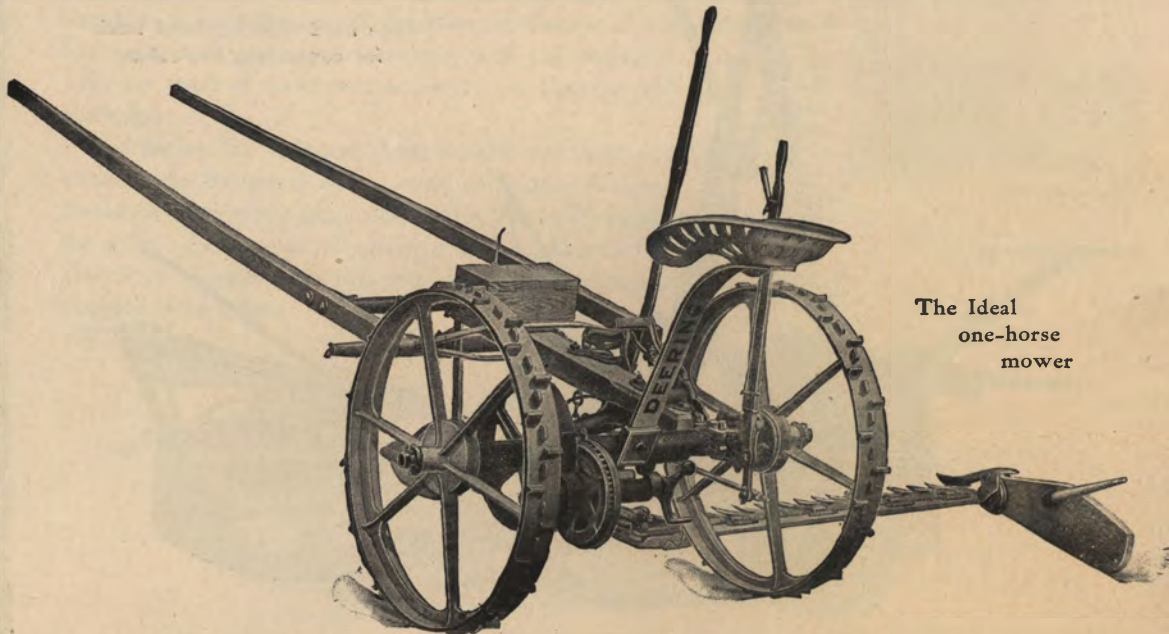


The heavy hinge pin prevents the cutter bar from sagging

This mower is like the regular Ideal in general construction. The cutter bar, however, is only $3\frac{1}{2}$ feet wide, and the frame, likewise, is narrow to correspond to the width of cut.

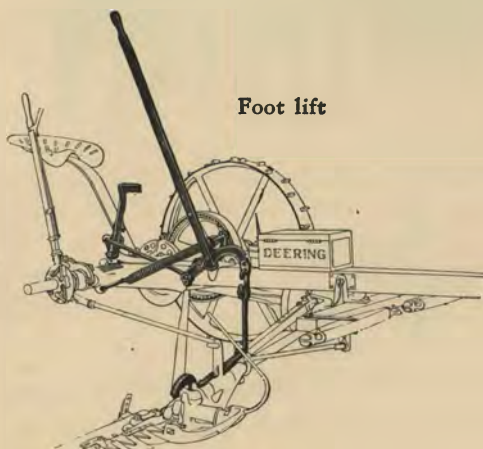
The bearings on this mower are equipped with balls and rollers. The main axle and gear shaft are equipped with roller bearings, and the ends of both the bevel and crank shaft are provided with ball bearings.

The frame is cast in one piece which prevents springing of shafts and bearings, and the gears are so placed that the entire mechanism is well balanced. The hinge pin which holds the cutter bar to the frame is solid steel, 9 inches long and $1\frac{1}{4}$ inches in diameter. Oil cups and holes are conveniently located. The cutter bar is protected by steel wearing plates, and the guards are provided with extra heavy steel ledger plates.



The Ideal one-horse mower

The Deering Ideal Mower

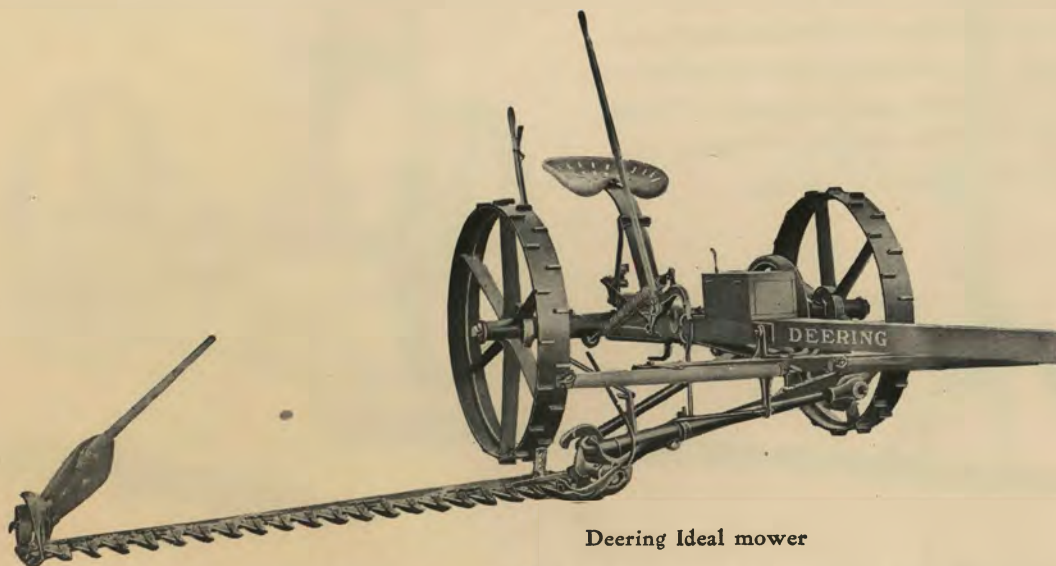


THE Deering Ideal mower, 4½ and 5-foot cut, is unquestionably one of the most satisfactory mowers on the market. It is properly designed so that it has ample traction at all times and operates without side draft.

When the grass is unusually heavy, tough or wiry, the cutting is difficult and there is a tendency for the knife to become choked and the wheels to drag and slide over the ground. To prevent this the mower must have sufficient weight to produce positive traction. In this respect the Ideal meets every requirement.

All Deering mowers have a draft rod connection with the drag bar in line with the tongue which saves wear and tear on the horses. This drag bar projects in front of the pitman and protects it. The pitman is made from the best second growth hickory.

The Ideal mower is provided with an unexcelled foot lift which is so located that the operator pushes forward to raise the bar. Pushing forward eliminates the tendency to throw or lift the driver out of his seat, a tendency so frequently found on other mowers.



Deering Ideal mower

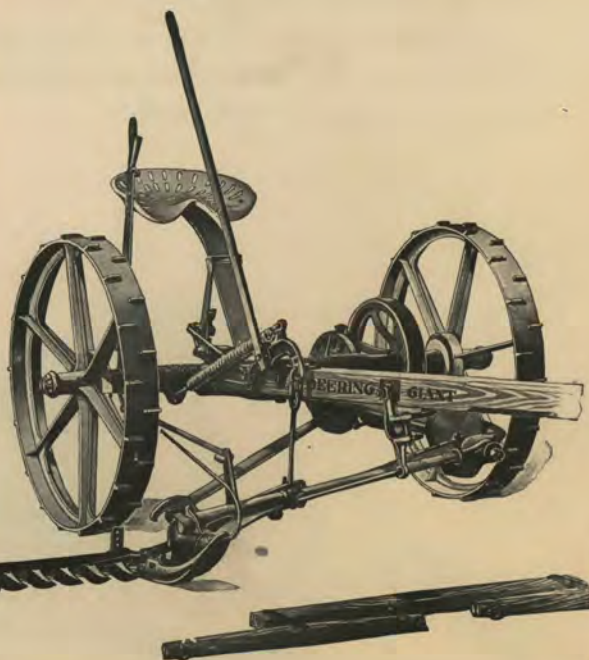


Under side of cutter bar
This bar has been designed for strength

The Deering Ideal Giant Mower

THIS mower is built with a 5, 6 or 7-foot cutter bar. It has a heavier frame and more powerful gearing than the Ideal mower, and also a reinforced cutter bar, which insures ample cutting power for harvesting the large and heavy crops of alfalfa, clover and other grasses which require a mower of unusual capacity and strength.

The cutter bar is substantially reinforced by a rib on the under side which gives the necessary strength to this important part. This bar is practically floated over the ground by means of a coiled spring. This spring not only assists in raising the bar, but takes just enough of the weight of the bar off the ground to permit it to float with perfect ease and freedom. The bar will follow all irregularities of the surface, however, and cut close in all conditions.



Deering Giant mower

Main Frame

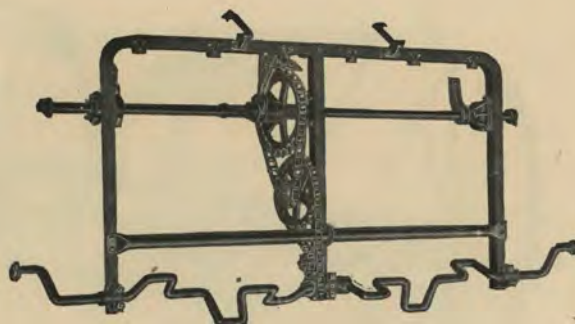
THE main frame is made from heavy angle steel reinforced by a cross sill of tubular steel and a center cross bar of heavy angle steel. The thill frame is made of the same material and is connected to the main frame by means of hinges. This provides a flexible connection and prevents jerking or jarring of the operator—a feature readily appreciated by many who have used cheaply constructed tedders.



The thill frame is connected to main frame by hinges

These forks are made of the best quality of oil tempered spring steel and 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 move forward only 20 inches. This rapid action of the forks insures quick and thorough tedding.

The forks on the outside of each drive wheel take up and stir any hay which is run over by the wheels, consequently, all the hay is left in a loose, fluffy condition so necessary for proper curing.



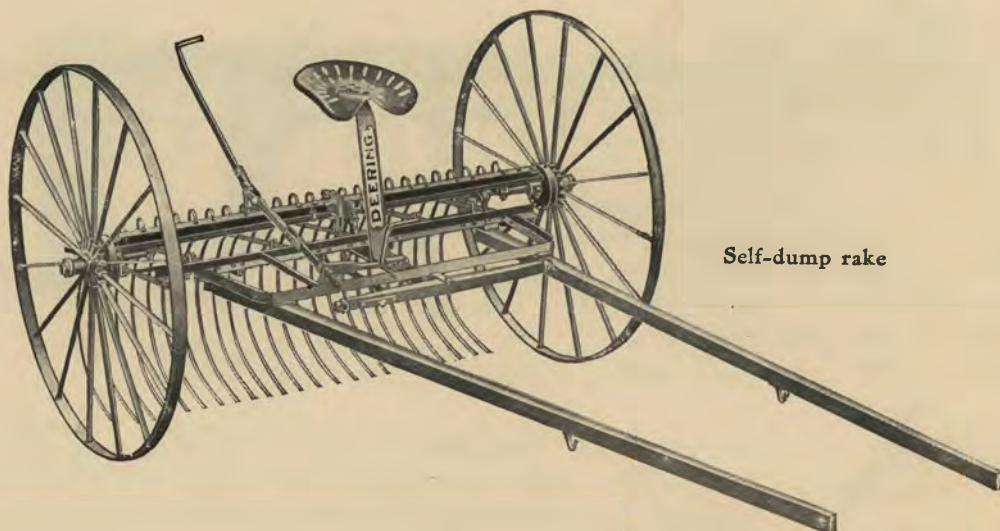
Angle steel frame, strong and durable

Forks

The forks of the Deering tedder are equipped with long flexible springs which prevent breakage when the forks come in contact with obstructions, or when lowered close to the ground. These flexible springs permit the forks to fold back out of the way as shown by the dotted lines in the illustration. They are rigid enough, however, to return the forks automatically into position for tedding as soon as the obstruction has been passed.

The coil spring allows the forks to fold backward





Self-dump rake

Deering Ideal Hay Rakes

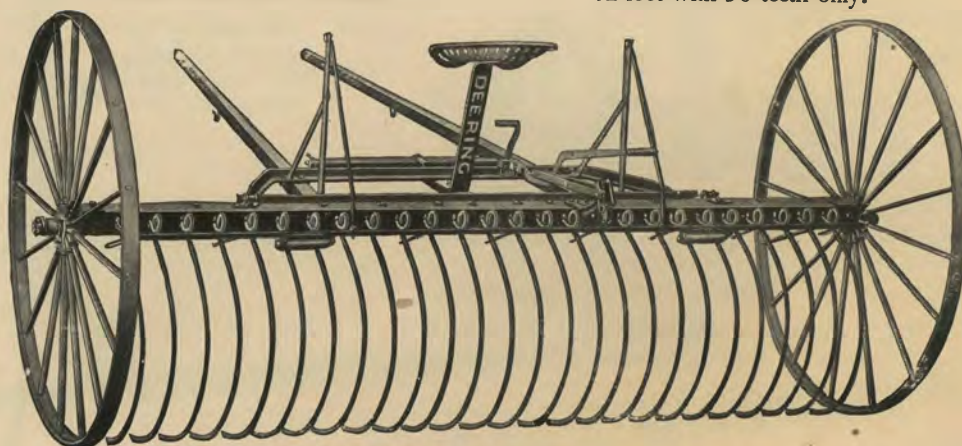
These rakes are made in two styles—self-dump and hand-dump—and in the following sizes:

Self-dump

8-foot with 20 or 26 teeth.
9-foot with 24 or 30 teeth.
10-foot with 26 or 34 teeth.
12-foot with 30 or 40 teeth.

Hand-dump

8-foot with 20 or 26 teeth.
9-foot with 24 or 30 teeth.
10-foot with 26 or 34 teeth.
12-foot with 30 teeth only.



Hand-dump rake



Reversible dump rods

Strong Practical Rakes

THE rake head is made of 40 carbon steel and the head and hound are connected by malleable hinges. On the larger sizes a $\frac{3}{8}$ -inch truss rod prevents sagging of the head. The wheels are 54 inches high with malleable hubs and removable bushings. The teeth are made from crucible steel, flat pointed so that they do not tear up the soil. The steel dumping rods, illustrated above, are of the same length and may be reversed in case of wear.

Dumping Mechanism



Steel
tooth
holders

THE self dump rake is provided with a convenient foot and lever attachment for dumping. The power for raising the teeth is transmitted directly from the wheels to the dumping rods which act when pressure is applied to the foot lever. On the hand dump rake, the levers and dumping arrangement work very easily. The foot lever and the weight of the driver assist the dumping lever.

Cleaners

THE cleaners on the self dump rake are oval steel and are held in position by an adjustable carrying rod. On the hand dump rake a steel overhanging cleaner removes the hay from the teeth as the rake dumps.

Teeth

ON the hand dump rake the teeth are carried high, making it especially adaptable for heavy bunching. They may be adjusted by the operator to varying conditions of the ground by means of an adjustable hand ratchet within easy reach of the driver. On the self dump rake the operator can regulate the height of lift of the teeth and the time of their return to the ground.



Deering dumping attachment on self dump rake is convenient



Two-wheel rake

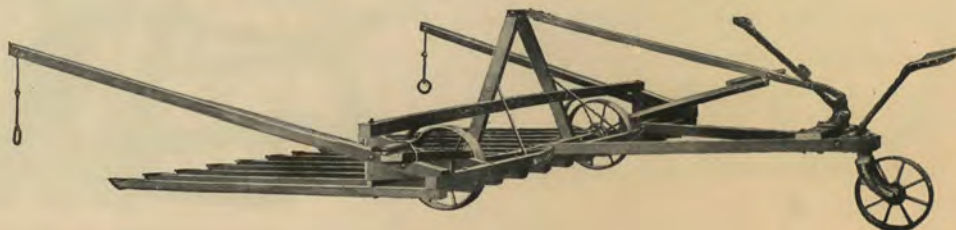
Deering Side Hitch Sweep Rakes

ON this page are illustrated the Deering two and three-wheel side hitch sweep rakes, which differ only in one point, namely, that the three-wheel rake has an extra third wheel attachment and a lever for controlling the position of the teeth.

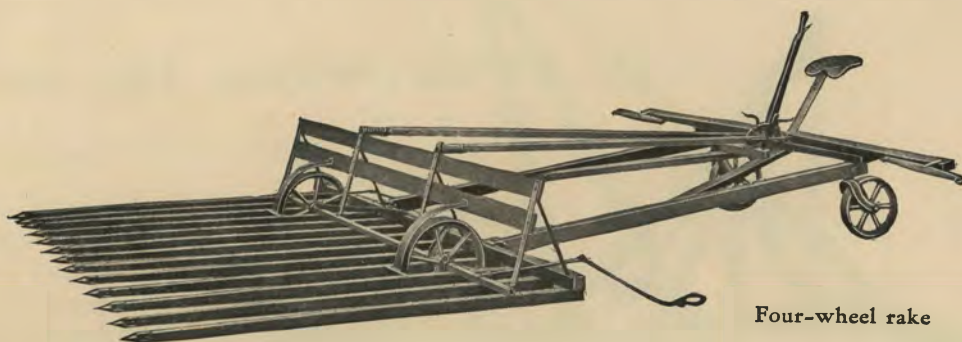


The long, strong, metal pointed teeth are arranged closely together so that it is possible to rake from the swath. These teeth are interchangeable, and the metal points are attached to prevent splitting. The two wheels which carry the rake are high and have long bearings in the hubs to prevent wobbling. Their position helps to balance the load.

On the two-wheel rake the driver controls the position of the teeth by sliding the seat forward and backward. On the three-wheel rake this is controlled by the lever which is part of the three-wheel attachment.



Three-wheel rake

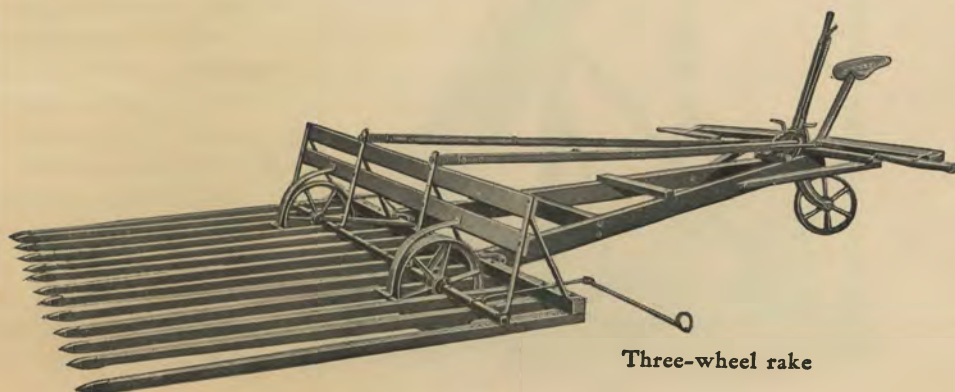


Four-wheel rake

The Deering Rear Hitch Sweep Rake

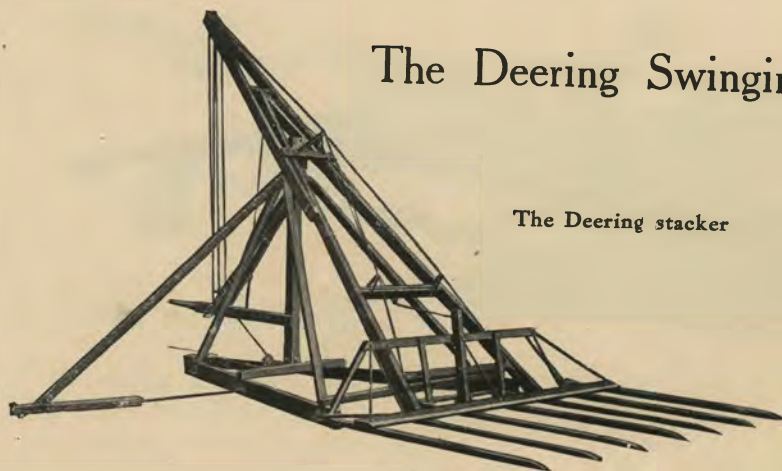
THIS sweep rake differs from the side-hitch rake in two important points. The rake is provided with a power lift and the horses are hitched at the rear of the rake head. The teeth are like those on the side hitch rake. The rake head is substantially built and braced and is not placed at right angles to the teeth, but tilted well toward the rear, which gives ample room for the hay and helps to balance the load. The power lift so operates that the draft of the horses assists the operator in raising the load when he raises the lever. This is accomplished by attaching the doubletree to the lifting arms by two iron rods.

The four-wheel rake is like the three-wheel rake with the exception of the two caster wheels at the rear; the frame supporting them being rectangular instead of triangular in shape. These caster wheels insure easy riding and convenient turning.



Three-wheel rake

The Deering Swinging Hay Stacker



The Deering stacker

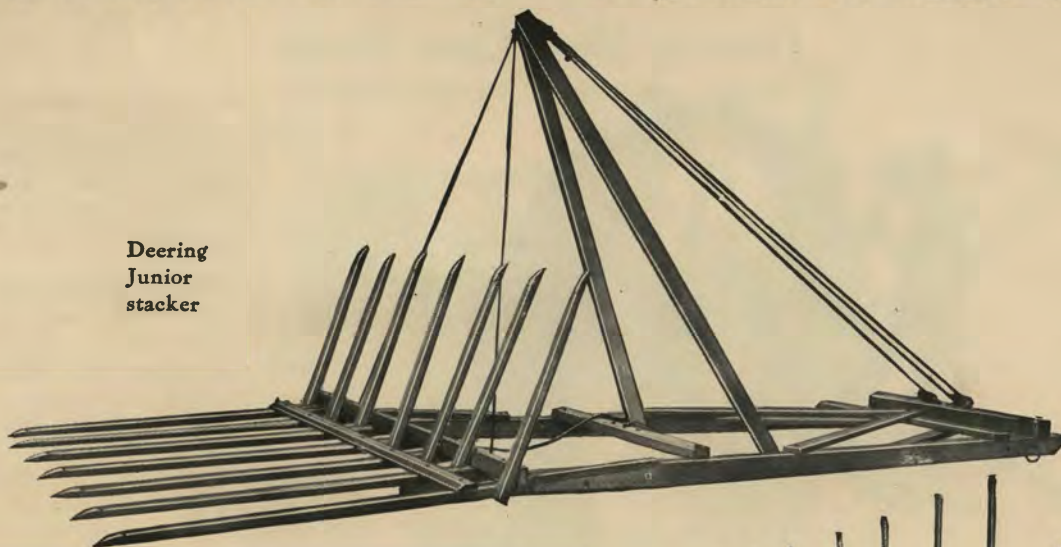


Platform elevated

THIS swinging stacker has been designed to be operated by one man. The horse walks out, raising the load to the desired height and then returns to the starting place, the load being securely held in its elevated position by the band brake. The operator then swings the load round, dumps it by means of a lever, and lowers the pitcher head to the ground by releasing the band brake. The stacker may be roped for either one or two horses.

This stacker will stand up under the hardest work without liability of breaking. No timbers of extreme length are used in its construction, and the lifting arms, which naturally receive the greatest strains, are substantially reinforced by truss rods. The center pole is unusually short which lends compactness to the stacker without sacrificing the height of lift. The controlling lever is long to insure easy swinging of the load and dumping.

Deering
Junior
stacker

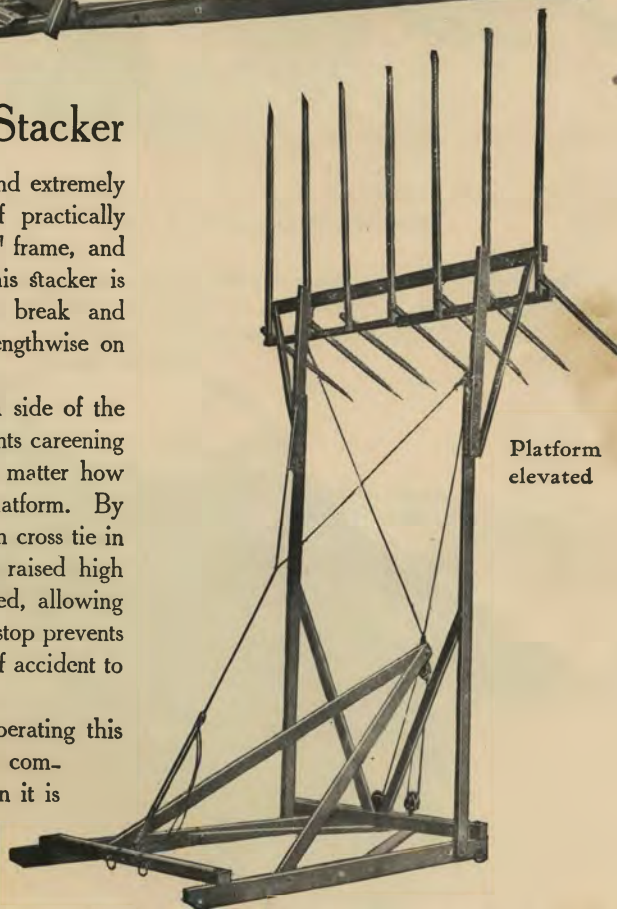


The Deering Junior Stacker

THIS stacker is of the over-shot type and extremely simple in construction. It consists of practically three parts—a ground frame, an "A" frame, and lifting arms which carry the platform. This stacker is unusually strong—there are no castings to break and cause delay and all strains come nearly lengthwise on the timbers.

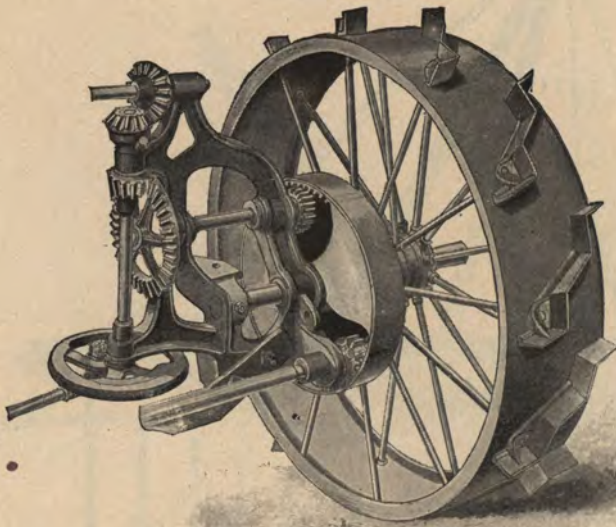
There is a direct connection from each side of the pitcher head to the "A" frame which prevents careening of the load or sagging of the platform, no matter how unevenly the load may be deposited on the platform. By bolting two strips in the rear of the platform cross tie in front of this cross tie, the fingers may be raised high enough to hold the load when it is elevated, allowing the stack to be topped out. An adjustable stop prevents the platform from going clear over in case of accident to the pull back rope.

One or two horses may be used for operating this stacker. It is light in weight, and may be compactly folded in a few minutes' time, when it is in convenient shape for quick and easy transportation or storage.



Platform
elevated

Deering Ideal Corn Binder

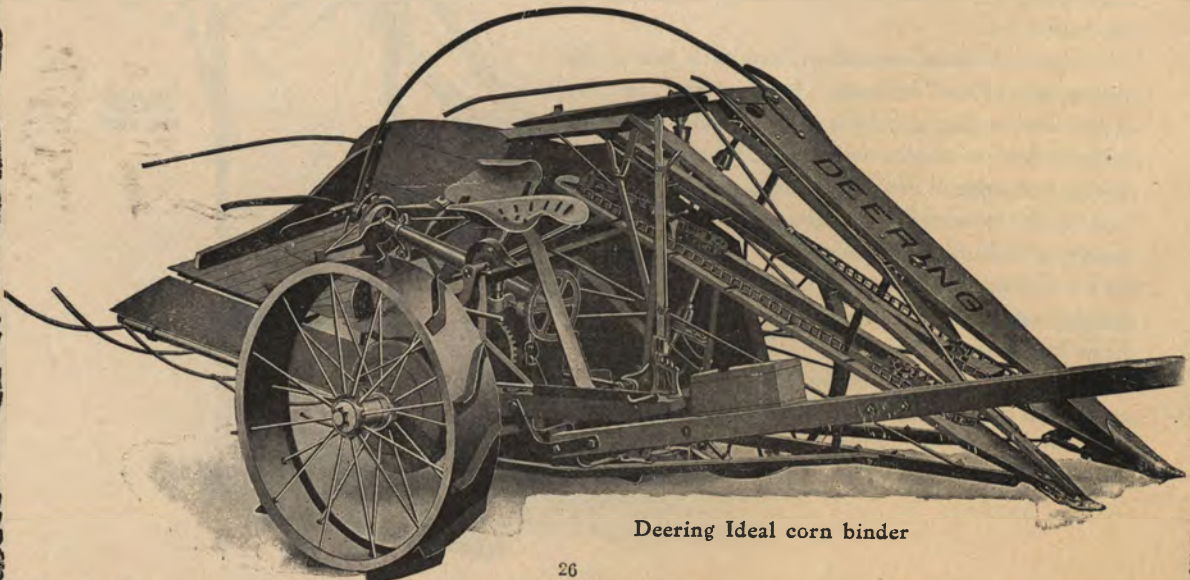


Main wheel and enclosed gear

THE same general principles which have made a success of the Deering grain binder were used in designing the Ideal corn binder, that is, the corn is bound while in a horizontal position like a sheaf of wheat.

The main frame is correctly and strongly built. The main wheel has broad, deep lugs, and has ample traction to supply power for the gears. Power is distributed in a manner to eliminate undue strain, being direct from the enclosed main gear on the main wheel to the knife, the gathering chains and the binding mechanism. All bearings are self-aligning, and are well supported by brackets which hold them in proper position. At all important draft centers, the binder is equipped with ball and roller bearings. The rollers are made of the best high carbon steel and the balls of hardened crucible steel.

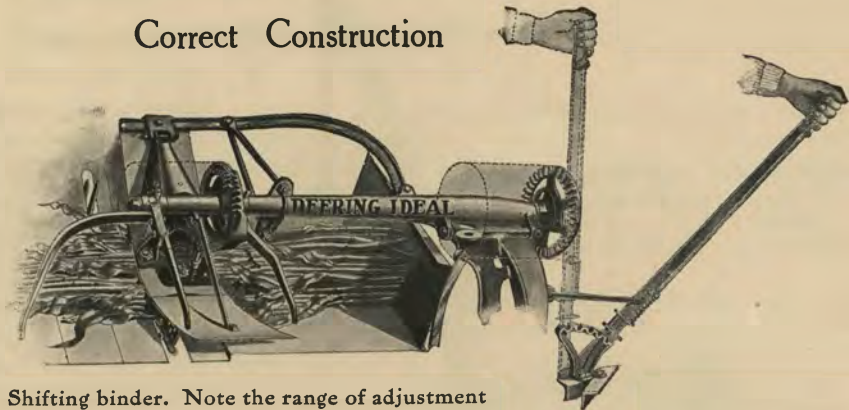
The conveyor chains carry the stalks to the binding attachment immediately after being cut without unnecessary handling. Interference by stalks or weeds is eliminated by the use of self-adjusting bell knuckles instead of rings, pins, cotters or ordinary knuckles.



Deering Ideal corn binder

Correct Construction

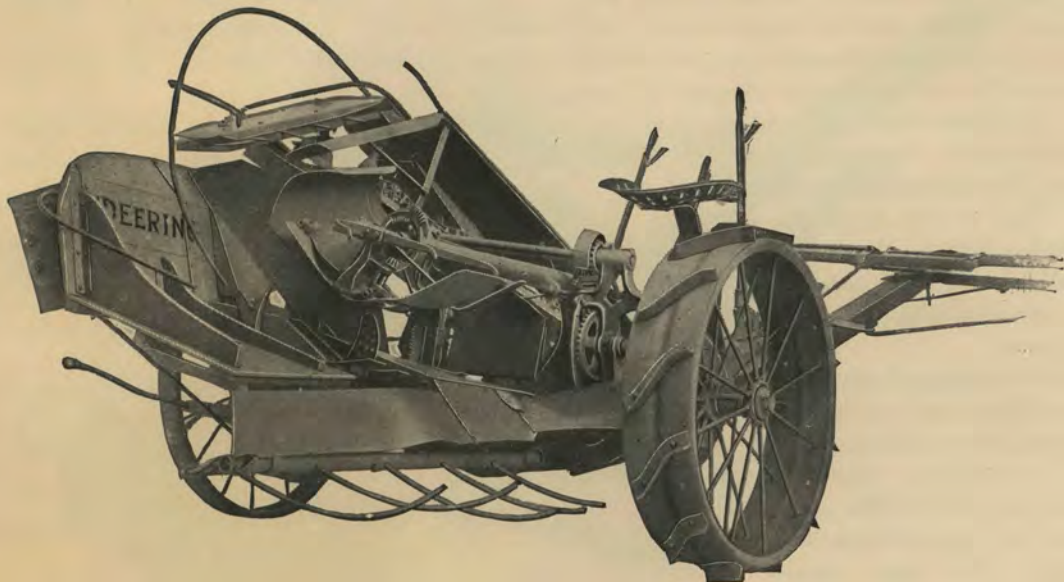
THE tilting device has ample range and is under the immediate control of the operator so that no matter whether the corn is short, tall, down or tangled, the binder handles it with uniform precision.



Shifting binder. Note the range of adjustment

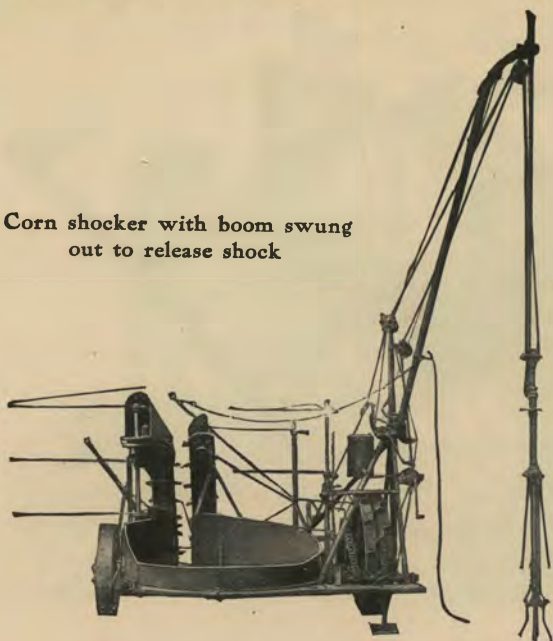
The cut stalks are guided to position for binding by steel rods. When sufficient stalks have been accumulated, they are bound into a bundle. The compression of the bundle against a small trip lever starts the action of the kicker arms which force the bundle to the carrier. The binding attachment has an actual range of band adjustment of 21 inches, 8 inches of which is secured by the shifting device and 13 inches by the aid of the adjuster.

The bundle carrier is of large capacity, firmly and substantially built and braced, and so located to eliminate side draft. It is tripped by a small foot lever.



Rear view of Deering Ideal corn binder

Corn shocker with boom swung out to release shock



The Deering Corn Shocker

THE Deering corn shocker has greatly decreased the expense of corn harvesting.

One man with a team can go into a field of corn and operate the corn shocker with ease.

Where the field is to be seeded while the shocks are standing, the shocker is indispensable as it permits the shocks to be placed a wide distance apart.

The operation of the shocker is very simple. The corn is cut somewhat after the fashion of a corn binder and the stalks are passed to the shock table, from the center of which rises an iron core around which the stalks are held in position by large compressor arms. After the shock is formed and tied, the shock is raised from the table by means of the boom, pulleys, rope and windlass, and the boom is then swung to the side and the shock released.

Deering Corn Picker and Husker

In this age of intensive farming, the corn picker and husker has become a necessity. Very often the farmer wishes to gather his corn and leave the stalks standing in the field. This is made possible by the use of the Deering corn picker and husker, as it picks the ears from the standing stalk in the field, husks them and elevates them to wagon driven alongside the machine.

The picker is built almost entirely of steel and malleable iron, wood being used only for the dividers and elevators. The frame is principally of angle iron. Roller and ball bearings are provided where they will aid in making light draft.

There are two independent drive wheels, one driving the picking rollers, snapping rollers and conveyor chains, the other the husking rolls and elevator chains.

The gearing is all placed high above the ground, which prevents any accumulation of stalks or trash.

A small caster wheel serves to take the weight off the necks of the team as it is located back of the pole hinge. This caster prevents the gatherer boards from bobbing up and down.



Deering Huskers and Shredders

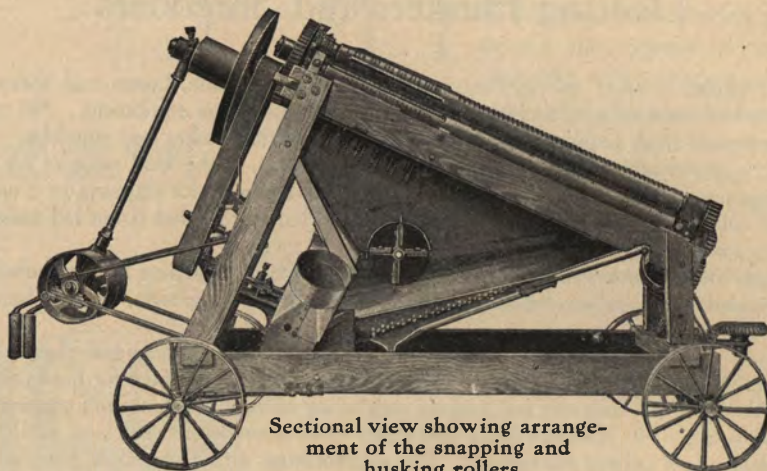
SHREDDED fodder is such an excellent fattening agent for cattle, horses and sheep that a husker and shredder has come to be a necessary part of an up-to-date farm equipment. No machine for this purpose has proved more popular or profitable than the Deering husker and shredder. The shredded fodder produced by this machine contains practically 40 per cent. of the food value of the corn crop, the other 60 being contained in the ears of corn. This fodder can be baled for shipping or it can be placed in a mow in a loose condition. The small portion of the shredded fodder that is not fed makes an excellent absorbent bedding for the stock.

Deering huskers and shredders are made in three sizes: a two-roll machine for the individual farmer or small corn grower, and a four and six-roll machine for the extensive corn grower, clubs of farmers, or custom work.

These machines are very substantially constructed. The frame is strong and durable; the bearings have a large wearing surface and are equipped with oil cups which are adapted for hard oil. Roller bearings are used for the rolls; the snapping and husking rolls being one and the same roll constructed in the best manner to do the work. The shredder head and cutter have a reversible steel face, and can be reversed quickly and all four edges utilized for cutting. The reciprocating screen separates the shelled corn from the fodder. The blower pipe can be adjusted to any position desired. The shredder is provided with a release lever which makes it easy to stop the machine should anything be thrown upon the platform which might get into the rolls and break them.



4-roll husker and shredder



Sectional view showing arrangement of the snapping and husking rollers

Practical Construction

AS the corn is fed into the machine, it is at once seized by the snapping and husking rolls. The snapping and husking rolls are one and the same. The stalk is pulled down between the rolls, while the ear is passed on to the lower portion of the rolls which are designed for husking. The rolls are placed at such an angle with the surface of the table that the ears pass down to the husking portion of the rolls by the force of gravity. The several rolls keep the ears constantly moving and bring them in firm contact with the rolls until all the husks are removed. The shredder head can be changed to shred either coarse or fine. It shreds perfectly without powdering the leaves.

The location of the feeder's stand makes it easy to pass the corn to the snapping rolls. The position of the feeding table can be easily changed to suit the feeder. The table is of large capacity and conveniently located to throw the corn onto it from the wagon.

The shredded fodder as it comes from the shredder head falls upon a reciprocating screen, kept constantly in motion to sift out any shelled corn that might be in the fodder. The shredded fodder is then carried to the stack, mow, or wherever desired by the force of the blower fan.



Shredder head and cutter with reversible steel face. Can be reversed quickly and all four edges utilized for cutting

The Deering Six-Roll Husker and Shredder

THIS machine, which is designed for custom work, is provided with a self-feeder which dispenses with the extra help to cut bands, as the operator can cut the bands and spread the stalks on the self-feeder by which they are delivered to the snapping rolls. The under side of the self-feeder runs close to the husking rolls, which forces the ears against the rolls. This insures satisfactory husking and keeps the ears moving, which eliminates the danger of clogging.

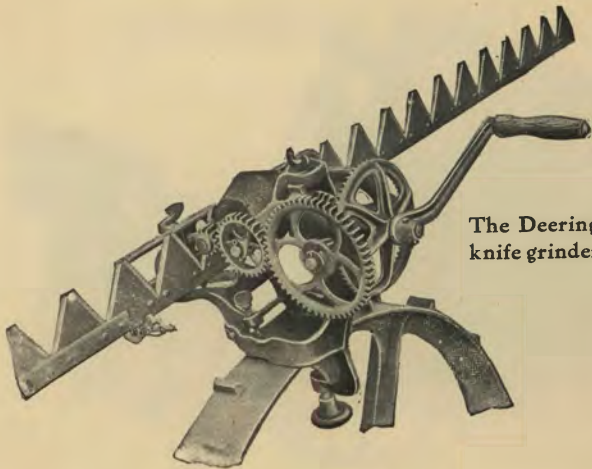


On the road

The shredder head is so designed that the stalks are thoroughly shredded and the pith largely torn out without grinding the leaves, which would destroy their food value. Should any corn be shelled, a very effective device is provided for separating this corn from the stover. A rod grating permits the shelled corn to be driven through it as it falls from the husking rolls. It is then cleaned of dirt and trash. The blower pipe can be placed in any position desired by use of the worm gear at its base and the windlass on the bottom which holds the pipe in position.

The husking rolls on this shredder are arranged the same as those on the Deering four-roll shredder. These rolls have excellent capacity and are remarkably efficient.





The Deering
knife grinder

The Deering Knife Grinder

A DEERING knife grinder should have a place on every farm. With it mower knives and tools of all descriptions can be kept sharp and bright. The knife grinder grinds two sections of a mower knife at once without disturbing the bevel or drawing the temper. The grinder may be attached to the mower wheel in the field, or it may be fastened to the bench in the workshop or to a box or table. Special stones for tool grinding may be had upon order.

Deering Binder Twine

DEERING binder twine is made from the best material, and under the supervision of twine experts. The best grades of manilla and sisal fiber are carefully examined, cleaned and correctly spun into twine of even length and strength. Deering twine when tested for length and strength will never be found wanting. Common twine troubles—uneven strength which causes breaking at a critical time, and rough strands which tangle in the can or cause trouble in the knotter—are never experienced by farmers who make it a practice to use nothing but Deering twine.





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J. T. GOUGH,
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