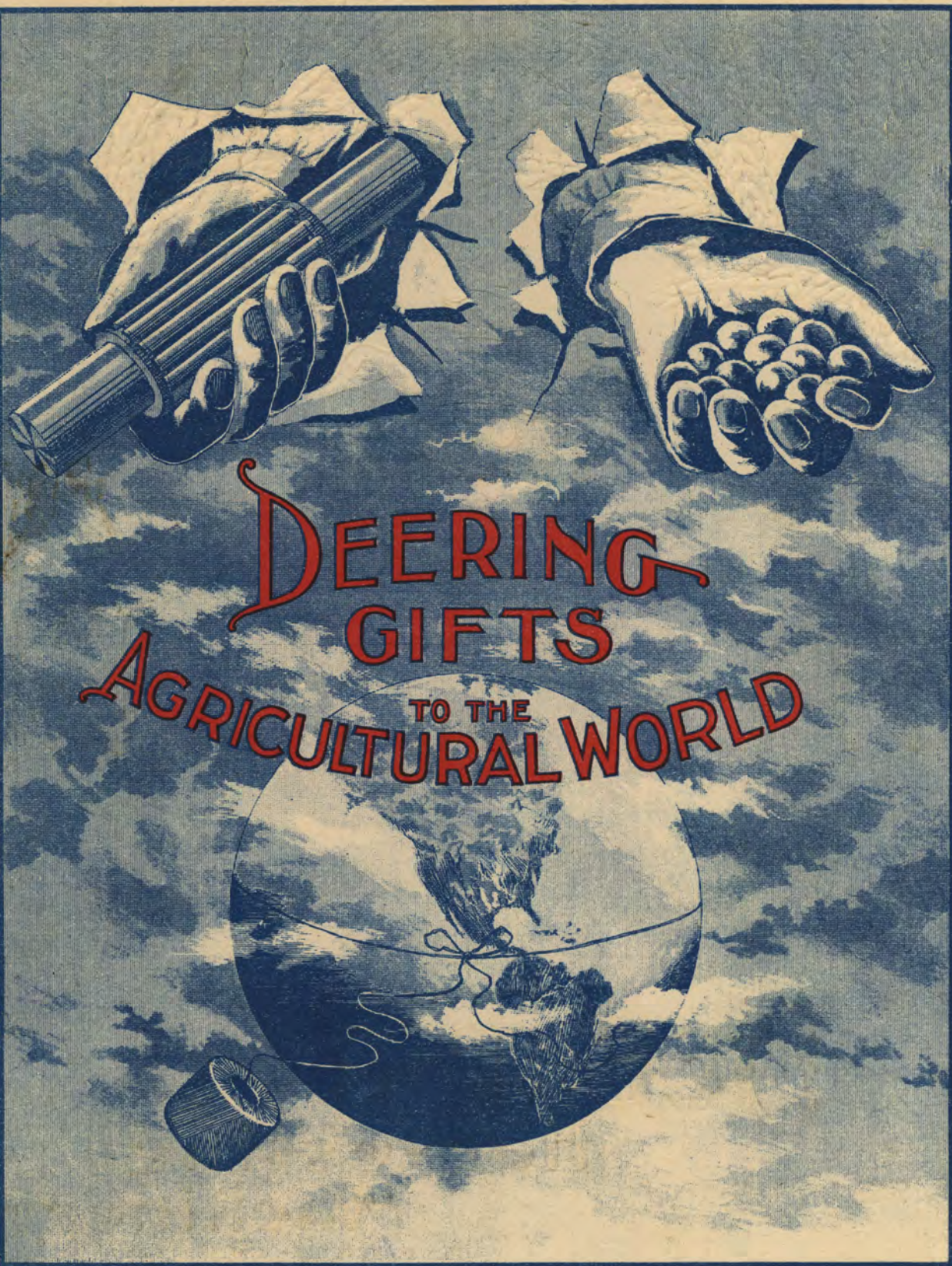




DEERING
Harvesting
Machinery





1901

THE new century is upon us, and the lights and shadows, the successes and failures of the past one hundred years have now been etched by the hand of time upon the pages of history.

Marvelous have been the improvements made during the period just passed and could our ancestors return to life, great would be their astonishment and delight as they viewed the advance that has been made by the world in arts, sciences and inventions.

While from time immemorial the wealth of the world has been wrested from the earth and the tiller of the soil has furnished the sinews of war to the fighters in the battle of life, yet not until after the middle of the century just closed was the invention conceived that has done more to help the peoples of the earth than any score of other improvements upon old methods.

From the invention of the *Marsh Harvester* (Deering) in 1858 dated the final emancipation of the farmer from the slavery of the harvest field. The evolution of the harvester to the perfect and complete *Deering Ideal Light Draft Binder* of 1901 has been of steady growth.

The *Appleby Binder* in 1878, *single-strand binder twine*, a product of *Deering* introduced in 1880, all *steel frame binders* first manufactured in 1885 and *roller and ball bearings*, given to the world in 1891, are all epochs in the evolution and form a strong and unbreakable *chain of title* leading to the present *Deering* productions.

DEERING HARVESTER COMPANY,

JANUARY 1ST, 1901.

Chicago, U. S. A.

TRIUMPHANT AT PARIS

All Records Surpassed by Deering Harvester Company A Remarkable American Achievement Twenty-Four Medals

The American citizen is justly proud of the record which his country has made at the Universal Exposition held at Paris in 1900, as no other foreign country received greater recognition than his own. To the Deering Harvester Company were awarded the highest honors including

THE GRAND PRIZE

THREE GOLD MEDALS

TWO SILVER MEDALS

ONE BRONZE MEDAL

— AND THE FOLLOWING COLLABORATOR'S MEDALS: —

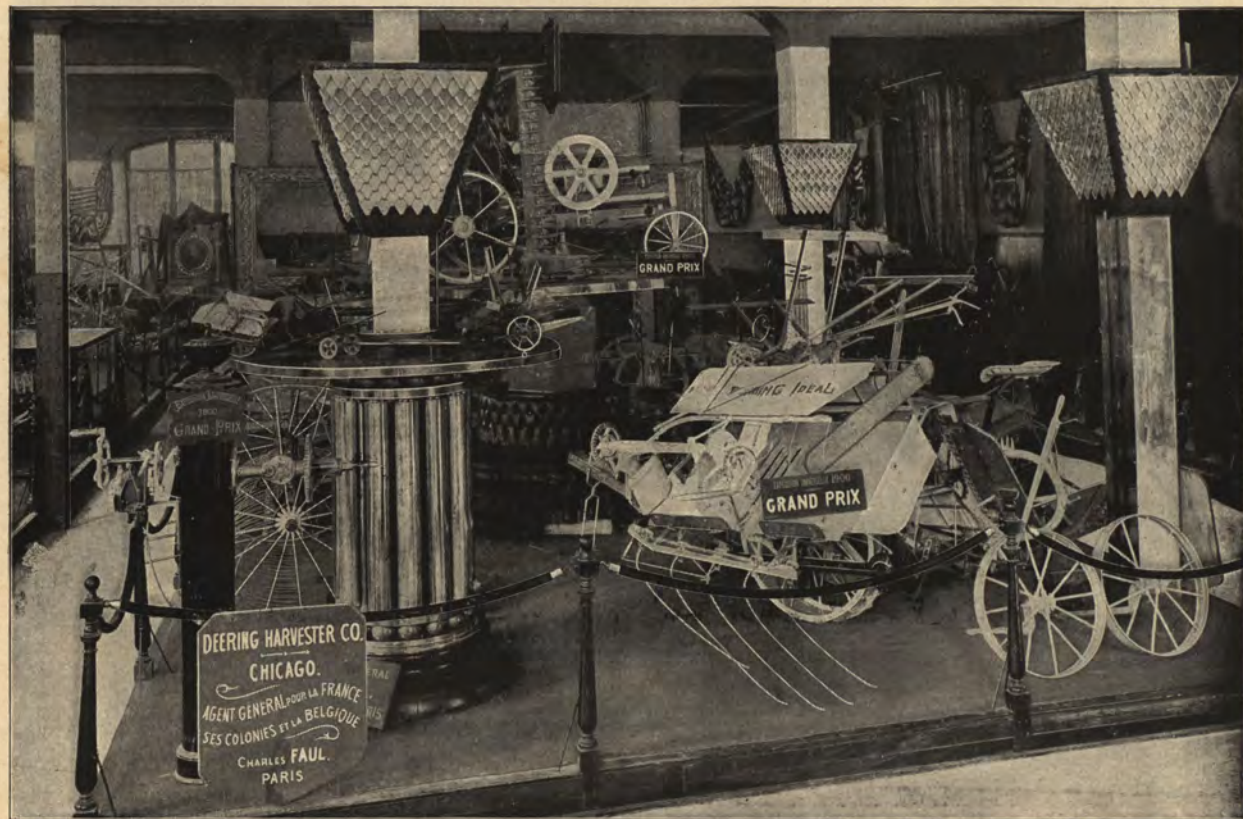
THREE GOLD

FOUR SILVER

TEN BRONZE

ALSO A CERTIFICATE OF HONOR FROM THE FRENCH GOVERNMENT.

This is the greatest number of highest grade medals won by any manufacturer of Harvesting Machinery at the Exposition Universelle of 1900, or at **any prior** exposition, making a **world record** that has **never** been equaled. The awards were distributed in Festival Hall, on August 18, 1900. The President of the French Republic, M. Loubet, presided over the ceremony, which was a scene of impressive grandeur. Fifteen thousand people were present in the great Salle des Fetes, which was decorated with lavish splendor.



General Exhibit of Deering Harvester Company—Paris Exposition, 1900.

TRIUMPHANT AT PARIS

The Ambassadors from all nations were present and addresses were made by President Loubet and M. Millerand, Minister of Commerce and Industry.

The Deering Exhibits

The seven exhibits of the Deering Harvester Company were as follows:

1. Exhibit of Harvesting Machinery, United States Agricultural Implement Annex, first floor.

2. Official Retrospective Exhibit, United States Section of the Palace of Agriculture.

3. Binder Twine Exhibit, United States Section of the Palace of Agriculture.

4. Automatic Metal Working Machines, United States Section of Machinery Hall.

5. Corn Harvester Model, United States Agricultural Implement Annex, adjoining Corn Kitchen, third floor.

6. Model of the Deering Harvester Works, United States Section of the Palace of Civil Engineering and Transportation.

7. Paper Twine-Spinning Machine in American Building at Vincennes.

These several exhibits were prepared with great care and attracted the enthusiastic attention of the throngs of visitors to the Exposition.

The Official Retrospective Exhibit

The Deering Harvester Company

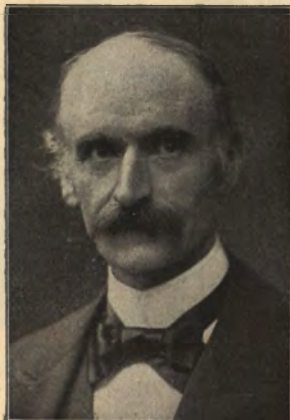
was nom-

inated to the French authorities by Hon. Ferdinand W. Peck, Commissioner-General of the United States to the Paris Exposition as being the proper party to make the official retrospective and historical exhibition of the art of manufacturing harvesting machinery.

The French authorities ratified the nomination and the delicate task was completed by this Company in a most perfect, elaborate and satisfactory manner.



Twine Jury, Paris Exposition, 1900.



M. Picard, Commissioner-General, Paris Exposition, 1900.



Jury for Harvesting Machines.—Paris Exposition, 1900.

TRIUMPHANT AT PARIS

The exhibition was absolutely unique and the first and only one of its kind ever made. It consisted of nearly **two hundred** working models, water color paintings, showing machines in operation and photographs of harvest scenes from all parts of the world. The space was surrounded on three sides with glass wall cases, while seven transverse cases divided it into aisles.

The President of the French Republic, accompanied by Minister Millerand, Commissioner-General Picard, Assistant Director Delaunay-Belleville, The Introducer of Ambassadors Crozier and many others of the highest government officials, honored this exhibit by a visit. The President was much interested, and personally complimented Mr. James Deering on the enterprise displayed by his Company and the general excellence of this great educational display.

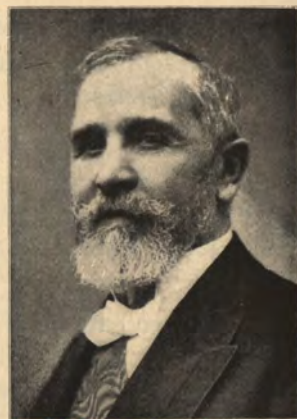
Among other notables who visited this marvelous exhibit were Leon Bourgeois, former Prime Minister of France; M. Cambon, Ambassador of France to the United States; Prince Stirbey of Roumania, and King Oscar of Sweden and Norway, and all expressed themselves as greatly delighted.



M. Millerand,
Minister of Commerce and
Industry, Republic of France.

The Largest Photograph

A feature of the Paris Exposition that attracted a great deal of attention was an immense photograph, 18½ feet in length and said to be the largest one in the world, which portrays the **nine** thousand employees of the Deering Harvester Company, each one of this great sea of faces being **distinctly recognizable**.



M. Emile Loubet,
President Republic of France.



M. Cambon, Ambassador
to United States from France.

The General Exhibit

The general exhibit consisted of the different machines produced by the Deering Harvester Company with the wooden parts made in birds-eye maple and the metal parts finished in gold, silver and bronze. They were most skillfully painted and models of artistic beauty.

The Deering Automobile Mower, one of the latest triumphs of this Company, was on a revolving pedestal where it could be easily seen from all sides.



Deering Corn Exhibit—Paris Exposition, 1900.

TRIUMPHANT AT PARIS

Against the rear wall was the now famous model of the **Deering Harvester Works**, 18½ feet wide by five feet high, showing each building down to its veriest detail, the whole being illuminated by electricity. In the foreground was to be seen the Deering Railway Station with trains speeding by, while in the rear upon the river were found steamships loaded with their cargoes of iron and wood to be used in the production of Deering Light-Draft Ideals.

Just below the factory model was the panorama of an American farm with its houses, wind-mills, barns, bridges, roads, fences and hills, forming a beautiful and realistic picture. In the foreground was a miniature meadow with a Deering Ideal Mower drawn by two horses and driven by a farmer, engaged in cutting grass, which fell naturally back of the knife, being a marvel of mechanical art and one of the most **perfect** working models **ever exhibited**. On ebonized oak tables were working models of all of the machines manufactured by the Deering Harvester Company. There were two pillars, surrounded by immense roller and ball bearings, one of them being covered with polished brass plaques upon which was placed a mechanism for dropping a ball down through a series of spirals, and the other pillar being covered with plate glass mirrors on three sides, while a painting showing the Deering Twine Mills occupied the fourth space, through one of the windows of which a strand of twine reaches to the moon, representing the **weekly output of Deering Twine**. Around the pillar supporting the Automobile Mower was a circular divan of Russia leather provided with disappearing writing desks, which were easily adjusted for the accommodation of visitors. There was also shown an octagonal glass case, within which were nine thousand steel balls, emblematic of the nine thousand employes.



Deering Special Machinery Exhibit—Paris Exposition, 1900.



View of Deering Twine Exhibit—Paris Exposition, 1900.



A successful and practical wide-cut harvester is now being produced by the **Deering Harvester Company**, thus adding one more grain and horse saver to the list of Deering Ideals. This machine is guaranteed to cut an eight foot swath in **heavy grain**, and can be easily transformed into a Header. It is free from the defects of other machines and absolutely without **side-draft or neck-weight**. This harvester is a radical departure from all so-called "combined" machines now on the market, and it is the only machine drawn by four horses that will cut an eight foot swath either as a binder or header. The Deering Ideal Binder and Header is not an experimental machine. It has been thoroughly tested during the last two seasons in the most difficult crops to be found in the United States. Farmers and experts are unanimous in their testimony as to its perfect success under all conditions. It solves one of the greatest of harvester problems. The neck-weight and side-draft are overcome by the use of a **stub tongue** supported at the forward end by a pair of **trucks with flanged wheels**. The stub tongue is attached to the truck by a ball and socket joint; thus supported by this construction the machine is capable of being turned and guided like an ordinary wagon.



Deering Eight-Foot Binder, with Tongue Truck.

DEERING IDEAL BINDER

"BINDERS THAT BIND THE BEST"

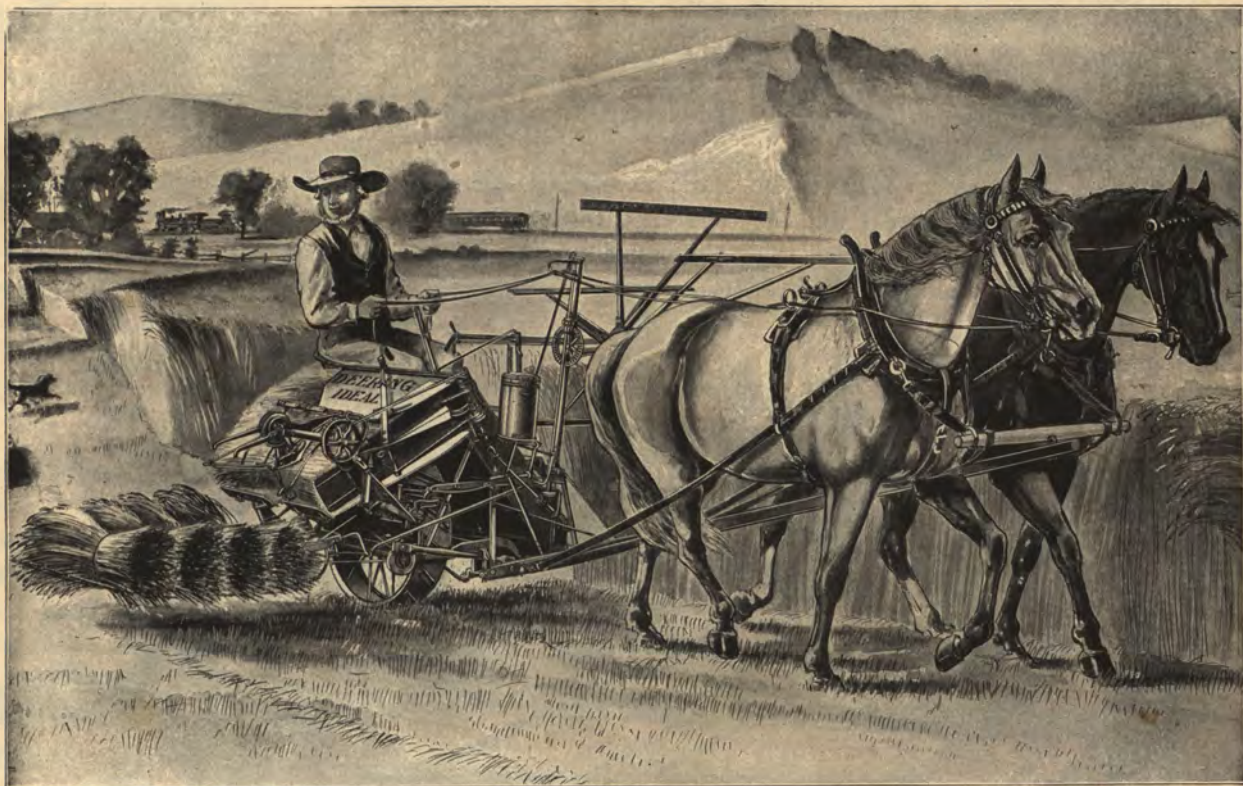
If there ever was any doubt of the Ideal Binder's absolute superiority, its work throughout the last harvest must have removed every vestige of it.

The "Ideal"—no name could better describe it—has won its way to fame. No other binder includes so many and such excellent features in its makeup.

The Deering factory has supplied the agricultural world with successful mechanical devices for nearly half a century, and the Ideal Binder is heir to many of them. To enumerate all would require more space than is allotted to this circular, but the following will appeal to farmers and each in itself is a good reason why they should purchase the Ideal Light Draft Binder :

BICYCLE BEARINGS
PERFECT TILTING-LEVER
EVERLASTING MAIN-FRAME
SELF-ALIGNING BUSHINGS
INGENIOUS CANVAS-STRETCHER
APPLEBY BINDER ATTACHMENT
UNFAILING DEERING KNOTTER

ECONOMICAL BUNDLE-CARRIER
SIMPLE, STRAIGHT-STROKE PITMAN
SUCCESSFUL DOUBLE BUTT-ADJUSTER
CONVENIENT, EFFECTIVE SINGLE-LEVER REEL
DRIVE CHAIN WITH BROAD-SHOULDERED MALLEABLE LINKS
BINDER SHIFTING-LEVER THAT GIVES 10-INCH SCOPE OF ADJUSTMENT
FEWER SPROCKETS AND LESS CHAIN THAN ANY OTHER BINDER



Deering Ideal Light Draft Binder—Best Binder ever Built.

DEERING MAIN-FRAME



FOUNDATION that has stood the test

of years and without losing an iota of its original strength and rigidity needs no eulogist.

There are thousands of such foundations to

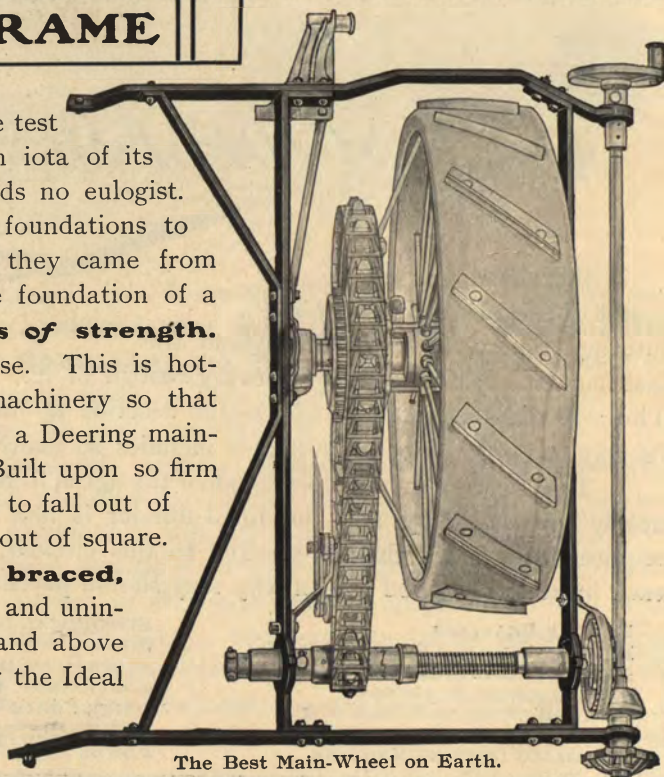
Deering binders, as faultless today as when they came from the Deering factory. The main-frame is the foundation of a binder and Deering main-frames are **towers of strength**. The choicest material is chosen for this purpose. This is hot-riveted scientifically together by powerful machinery so that it becomes one strong symmetrical whole. If a Deering main-frame ever gave way we never heard of it. Built upon so firm a foundation it is next to impossible for shafts to fall out of line, gears cramp or elevators to become out of square.

The entire superstructure is **thoroughly braced**, each working part performs its work smoothly and uninterruptedly. These additional features, over and above bicycle bearings, go a long way toward making the Ideal Binder **lighter draft** than other machines.

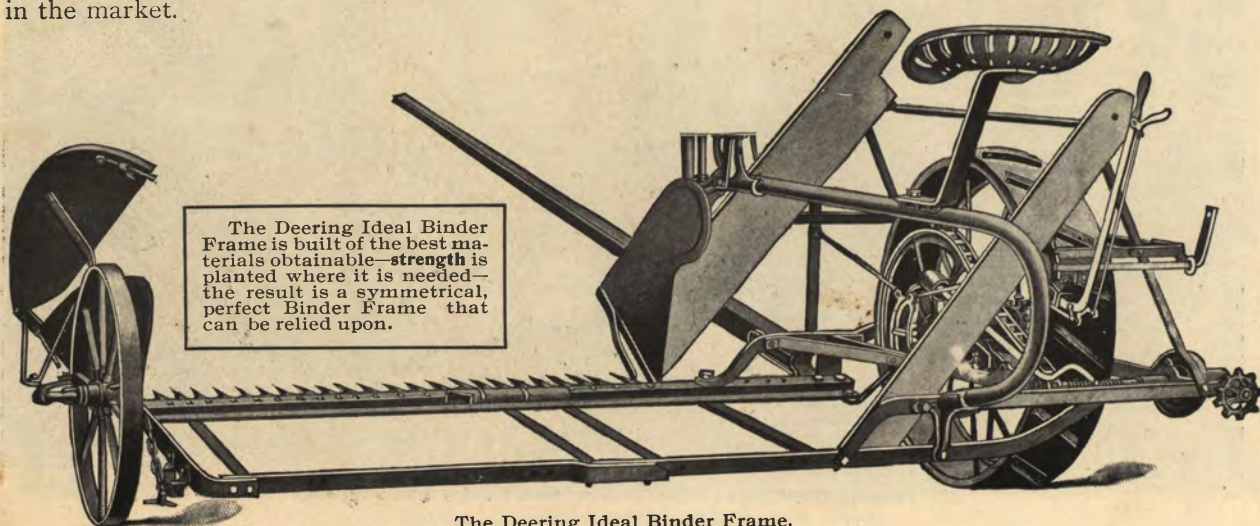
They are worthy a few thoughts. Think them over. The **main-wheel** is carefully

and mechanically constructed. It has a flanged tire which prevents picking up of sand and sifting it into the mechanism. The machinery is set well apart from the wheel, giving plenty of mud room. The steel spokes are shouldered and riveted to a tough malleable hub and clinched to the malleable lugs on the face.

There is not a cheap feature about the **Deering Binder**, and the expense of making a machine of this kind is great but the difference in cost between the Deering Binder and other binders is more than offset by the service obtained from it and by the durability of the machine—it is always ready—does not get out of order—is stronger and more lasting than any other machine in the market.



The Best Main-Wheel on Earth.



The Deering Ideal Binder Frame is built of the best materials obtainable—**strength** is planted where it is needed—the result is a symmetrical, perfect Binder Frame that can be relied upon.

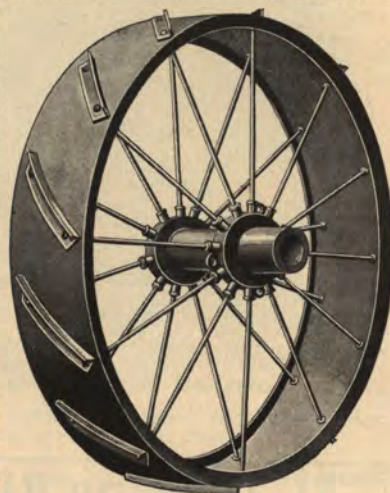
The Deering Ideal Binder Frame.

SELF-ALIGNING BUSHINGS

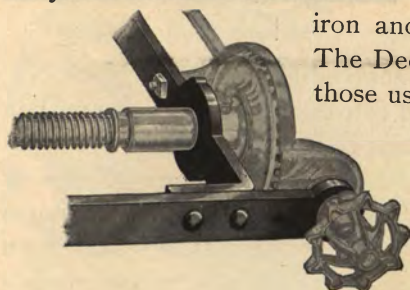


BEING fastened within cross-sills by removable malleable bushings which are self-aligning, the main gear-shaft of the DEERING IDEAL BINDER will never wear out as all straining and cramping is done away with; this is a **point of excellence** that cannot be estimated too highly. These bushings are easily removed and replaced without the use of

tools; there are no bolts of any kind to loosen. The main-wheel is connected to the structural steel frame, which frame is much stronger than actual requirements, and set well apart from the wheel on all sides. The drive-chain distributes the power of the drive-wheel to the different parts of the machine and it is important that this distributor should be strong as well as carefully made. Our drive-chain is the best that can be made, of the **finest quality** of malleable



Ideal Main-Wheel.



Self-Aligning Bushings of Main Gear-Shaft.

iron and having large well-shouldered links of most approved construction. The Deering drive-chain links have three times as much wearing surface as those used by some manufacturers. The main drive-chain is set three inches away from the drive-wheel so that it cannot clog. Other machines are supplied with small sprocket-wheels and their chains are set from one-half to one and one-half inches away from the wheel. Chains are expensive and close fitting gears subject to getting filled with dirt, wear badly, and sprocket-wheels and chains are out of place when located where sand and dirt can be poured down upon them.

Elevator Chain and Sprockets

Sprocket-wheels and chain are among the first things on a binder to wear out. The Ideal Light Draft Binder has **fewer sprockets** and **less chain** than any other binder built.

The following little table of comparisons is valuable and instructive:

IDEAL BINDER

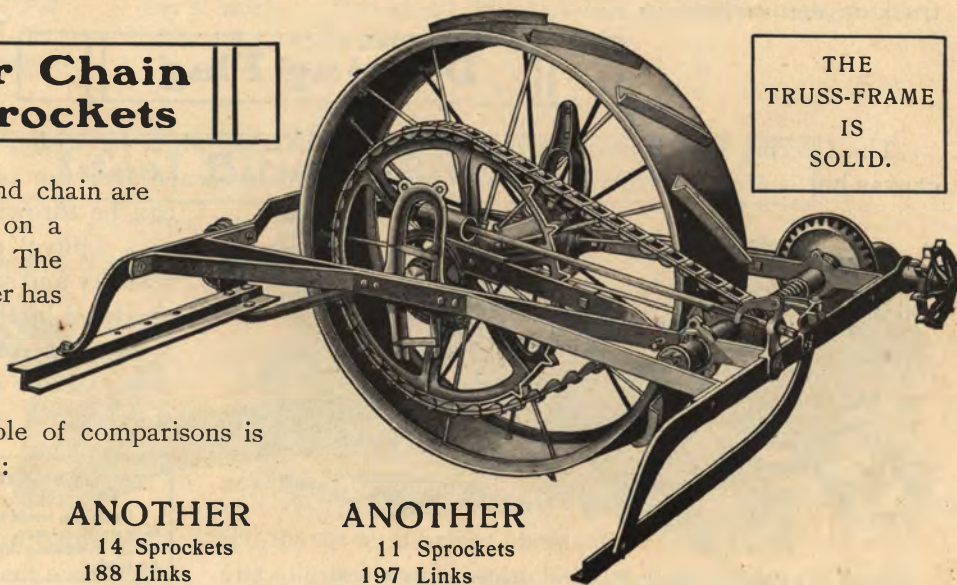
4 Sprockets
88 Links

ANOTHER

14 Sprockets
188 Links

ANOTHER

11 Sprockets
197 Links



THE
TRUSS-FRAME
IS
SOLID.



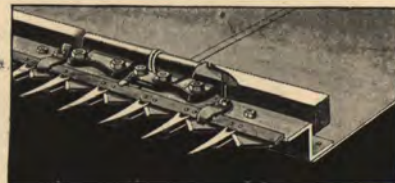
The Deering Jointed Platform Binder.

over roads and bridges and to leave the machine when stored away. It can be folded up complete in a few minutes. The Deering Jointed Platform is as strong as any platform in the world and its **jointed** parts are its **strongest parts**. Notice the solid platform joint supported by five steel bolts.

Deering Rigid Platform and Truck

We are also manufacturing this season a Rigid Platform Binder and Truck to be supplied in certain localities where there is a demand for such a machine.

The machine mounted on its truck can be readily transported and conveniently stored away when the harvesting season is over. One man can easily mount the machine on this truck or take it off and have it ready for work in from **three to five** minutes' time. There are no bolts, braces, pins or cotters to remove nor do the wheels have to be removed from their axles. Every other truck requires **some** of the actions above referred to or else the removal of a wheel the bearings of which when thrown down in the field become filled with dirt or sand. The Deering Truck is so light and of such convenient form that it can be easily carried in a light buggy and yet it is stronger than any other truck on the market.



The Solid Platform Joint.

Deering Flag

The Deering Flag is never in the way of the operator when he wishes to buckle the platform canvas but is always in the way of any grain that would escape over the rear of the platform. It can be thrown forward for short grain in a "jiffy;" acts as a shield in windy weather and saves the grain from being scattered by the reel. It is a flag that is **respected** in every quarter of the globe and is up to the usual Deering standard.



Deering Rigid Platform Binder on its Truck.

AN AGENT'S LETTER

PLATO, MINN., Aug. 8, 1900.

I wish you would send your man around and take extras as they are in my way. I have no room for them. There is no money in handling Deering repairs because Deering Binders do not break.

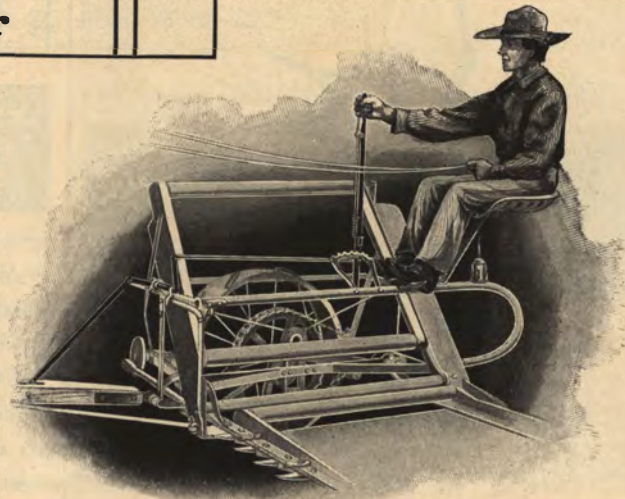
D. BERGMAN.

Tilting-Lever



YOU press the lever and the machine does the rest:—this is the whole story of the convenience of the Deering tilting-device. You can cut a long stubble or a short one and change from one to the other in less time than it takes to tell about it; moreover, you do not have to strain your back to do it.

The absolute freedom of the Ideal Light Draft Binder from neck-weight has often been remarked—the Deering tongue hitch is responsible for it. Instead of hitching the tongue high, as do all other manufacturers, and pulling down on the horses' necks, we have connected the pole to the binder **at the lowest possible point**. Consequently the pull being upward, the machine is perfectly balanced and there is no burden on the necks of the horses.



Perfect Tilting-Lever of Ideal Binder.



The Deering Canvas-Stretcher.

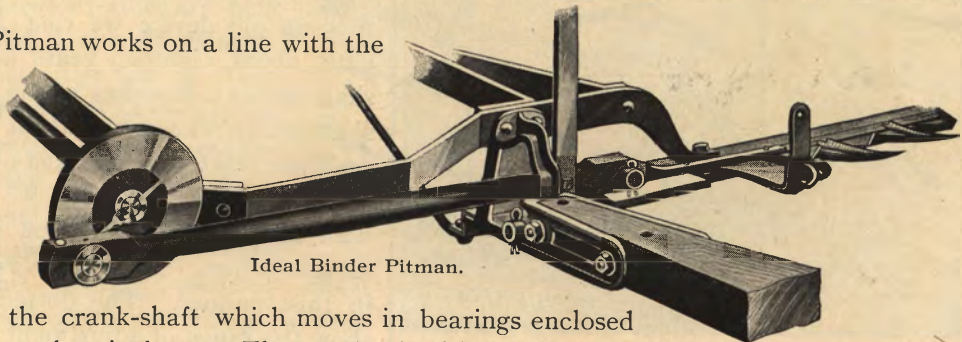
Canvas-Stretcher

By a simple movement of a small lever at night after the cutting of the day is finished, the Deering Canvas-Stretcher loosens the platform canvas and dew or rain will not impair its usefulness.

A like movement next morning makes it taut and ready for the day's work. This is an **ingenious contrivance**, simple, convenient and a money-saver.

Ideal Binder Pitman

The Ideal Binder Pitman works on a line with the knife, consequently not an atom of power is wasted on the down stroke. The thrust is direct, strong and never varying. Its stroke is regulated by a



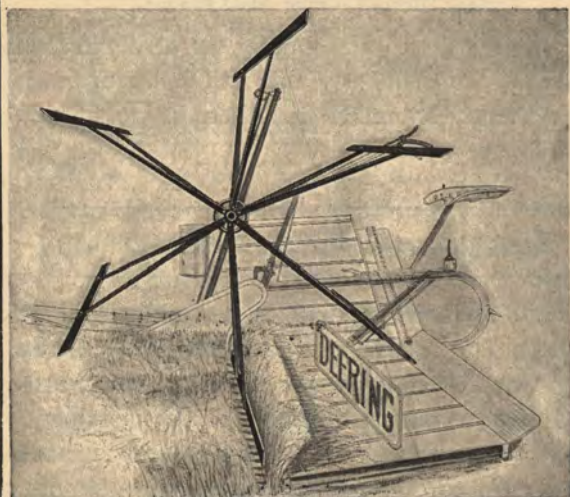
Ideal Binder Pitman.

crank-wheel keyed to the crank-shaft which moves in bearings enclosed within the bars of the steel main-frame. The crank-wheel is counterbalanced like that of a mower.

DEERING REEL



Long Grain.



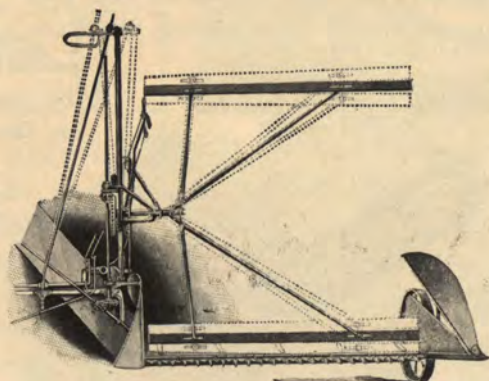
Short Grain.



Tangled Grain.

THE reel on the DEERING IDEAL LIGHT DRAFT BINDER is operated by strong gears and there is no trouble in raising the heaviest lodged grain. The reel-arms all radiate from the same point, having one common support which is of malleable iron. A **single lever** adjusts the reel to any desired position for work.

Other machines having hinged reel supports, which are frequently met with, require two levers to operate them, thereby leading to many inconveniences, besides not being adjustable to the extent of the DEERING REEL. The hinged reels



Dotted lines show range of adjustment.

cannot be thrown up and down two feet in a direct line, as can our reel, and has many other disadvantages. In fact, the reels of our competitors are largely distinguished for obsolete features, abandoned by this company years ago; one of them being the old style, long reel-shaft extending out over the platform, and another the chain-drive reel, an old device we cast aside as being out of date, about eighteen years ago. The long reel-shaft causes a drooping of the outer end of the reel-shaft which can never again be made right. All reels sag more or less at the outer end in time, and to obviate this difficulty we equip our machines with an adjustable stay-rod which keeps the reel always in line. No **other reel** can be adjusted in this manner. The dotted lines in the picture show the range of adjustment that can be made.

Shifting Lever

A Rocker-arm supports the IDEAL BINDER-ATTACHMENT and the latter can be easily shifted a distance of ten inches. The band can be placed **exactly where you want it.** In short, tangled or lodged grain, it is sometimes necessary to get down to the ground, and with the aid of our Z-bar one can cut to the last inch. In getting all

the grain one can do so without gathering foreign substances, our guards being specially shaped for this purpose.



Binder Shifting Lever.

with some machines. The straw is delivered to the deck **without any waste** whatever by the use of canvases running at equal speed and the grain is elevated without being shelled.

Elevator Supports

In the DEERING IDEAL BINDER both the front and rear elevator frames are held in position by threaded steel rods connecting them to the side castings and are thus adjustably braced. This permits the proper squaring of the elevators so that the canvases will pass over the rollers correctly.

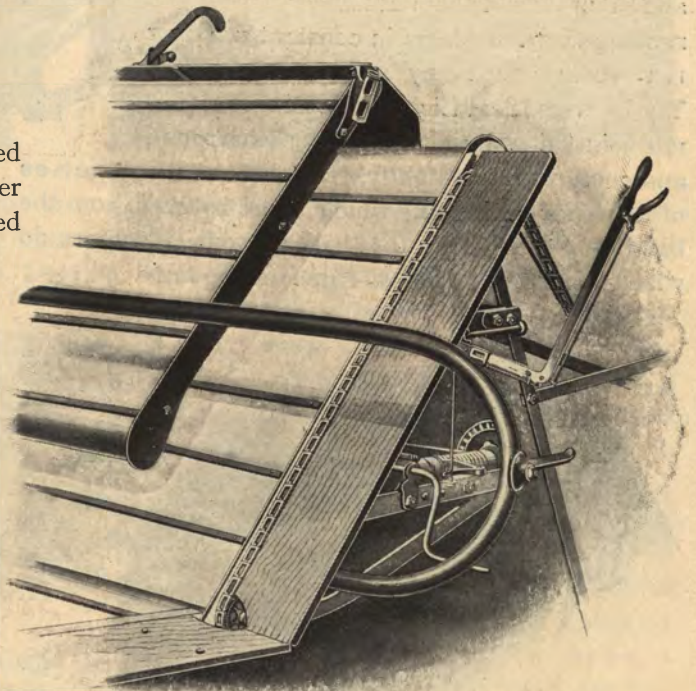
This is a DEERING improvement, and is not used by **any other** harvester manufacturer. The Deering elevator chain is protected by a shield which prevents grain from wrapping around the sprockets.



A Close Shave.

Elevators

The elevators of the DEERING IDEAL BINDER can absolutely handle **any length of grain**, there being sixty-seven inches of space between the frame of the front elevator and the rear yoke. An adjustable support for the purpose of squaring the upper elevator fastens it to the steel yoke. The canvas must expand in handling heavy grain and the canvas slides are curved on the inside in order to permit the same. In consequence the grain is not crowded through a narrow opening and shelled as is the case



The Ideal Elevators will Handle any Grain that Grows.



WHILE Mr. J. F. Appleby, beginning in 1858, invented the twine-binding attachment and thereby conferred a great and lasting boon upon the farming community, it is also true that the DEERING HARVESTER COMPANY was **first** to secure the rights and to build this great invention. Not only was the DEERING HARVESTER COMPANY **first**, but it has kept in the lead and to-day the DEERING IDEAL BINDER-ATTACHMENT with its many points of excellence cannot be equaled.

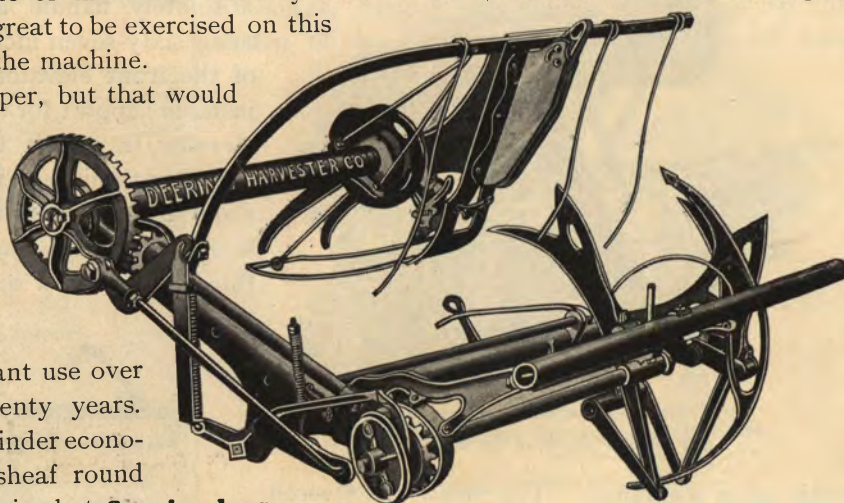


The Deering Knotter

The Deering Knotter

Notice the DEERING KNOTTER pictured on this page, as simple a device as is possible to produce and yet be **perfectly adjustable** in every way. Every part of this knotter and of the whole binder attachment is made of the most carefully selected steel, and malleable and wrought iron, no care being deemed too great to be exercised on this **most important** part of the machine.

It could be made much cheaper, but that would not be the DEERING way of doing business. We wanted the **best** that could **possibly be made** and to-day no more reliable attachment than this can be found anywhere, and thousands of them are now running that have been in constant use over ten years and many over twenty years. The Deering Ideal Light Draft Binder economizes in twine by making the sheaf round and compressing it tightly, requiring but **five inches** of twine for each knot, which twine is taken from the band and not from the ball as some machines do which waste ten inches of twine on the knot.

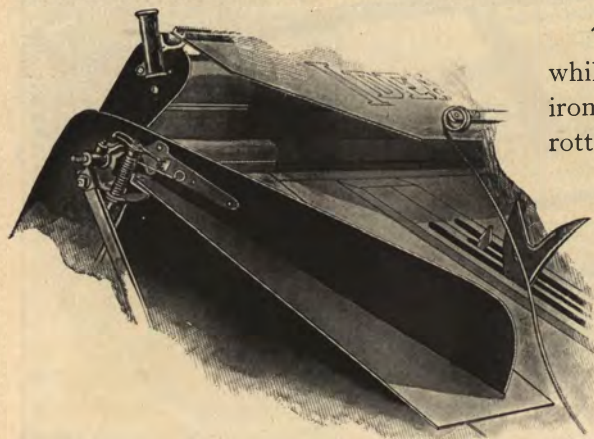


Deering Ideal Binder-Attachment.

Ideal Binder-Deck

The Deering Binder-Deck is of rolled steel, which, while it costs more to build than a deck made of sheet iron or wood, has the advantage of neither buckling nor rotting. The IDEAL BINDER-DECK is roomy and the heads of the grain that is cut by our machine are never touched by the machinery. A plain steel shield, held in position by a coil spring, absolutely protects the loose straw from scattering.

The simple devices known as the retarding-springs hold the grain back while being bound, and the sheaf is consequently discharged squarely without waste.



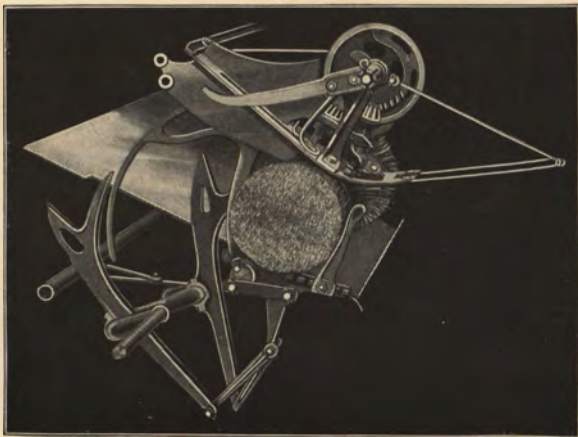
Grain-Shield and Binder-Deck.

Deering Binder Attachment

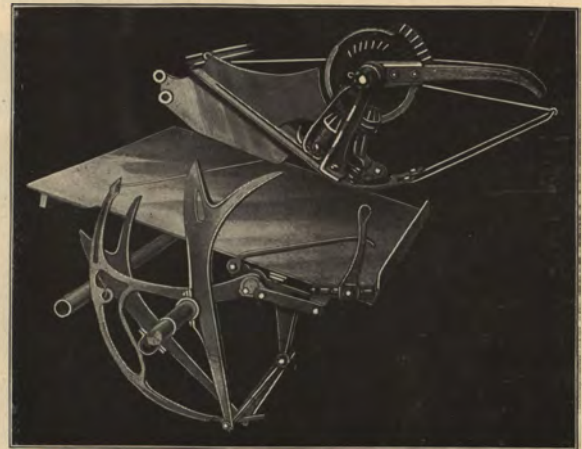


FROM the illustrations on this page one can get an idea of the almost human attributes of the DEERING IDEAL BINDER ATTACHMENT. People who have never used our machines really have no conception of the wonderful work done by this invention. It is a revelation to people who have changed to a DEERING after using another kind, and they never tire of discussing the many unequalled points of **excellence** found in the DEERING BINDER ATTACHMENT. A strong feature of this appliance is that one of the packers always precedes the needle to the breast plate, and the way is cleared at this very important point. Binders having needles working independently of the packers frequently clog between the needle and the

breast plate but the Deering never does, and a most annoying and frequent cause of delay is thus simply done away with.



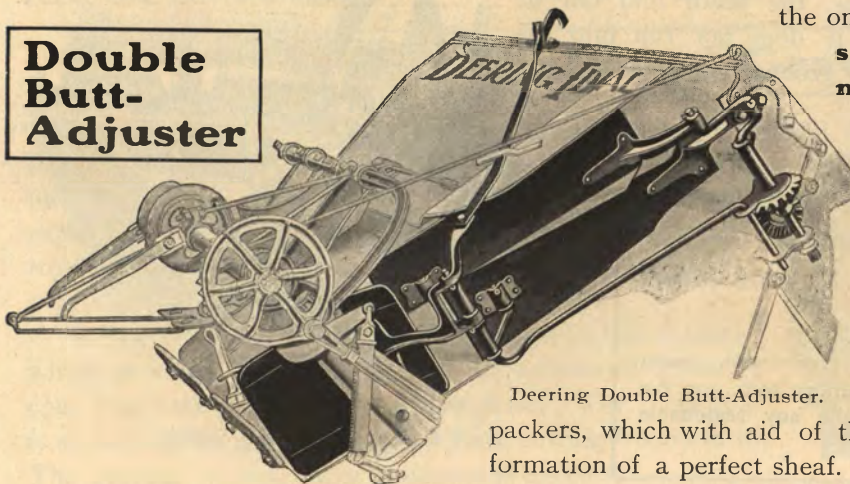
It Makes a Tight, Round Bundle.



The Packers Lead the Needle.

The amount of money squandered in vain attempts to make single butt-adjusters work properly has been great. The **double** vibrating butt-adjuster illustrated on this page has stopped all expenditure on experimenting as far as the Deering Harvester Company is concerned. It is the only **successful adjuster for**

Double Butt-Adjuster



Deering Double Butt-Adjuster.

the packers, which with aid of the butt extension promotes the formation of a perfect sheaf.

squaring the butts by means of a vibrating

board. Being composed of two separate boards, each perfectly balancing the other, one of them is constantly engaging the grain and an accumulation at the mouth of the elevators cannot occur. This insures a steady stream for the

Bundle-Carrier

A Deering Bundle-Carrier will do one man's work in the field and adapt itself to every condition without special attention from the driver. The least that grain is handled when ripe, the least danger of waste from shelling out. The Deering Bundle-Carrier handles the bundles carefully and discharges them gently butt foremost, and not head foremost, as do many contrivances. While it

dispenses with the services of one hand in the field, it does not add to the work of the team. Hung to the main-frame **on a line**

with the main axle, it is perfectly balanced and creates no neck-weight, which is not the case with bundle-carriers hung **to the front of the frame ahead of the main-wheel**, by a heavy support as competitors have it. One manufacturer makes the tilting of his binder a difficult task by moving the drive-wheel far forward of the machine with the intent of counteracting the additional weight. The

Ideal Light Draft Binder is perfectly balanced and easily tilted. The Ideal Bundle-Carrier is superior to every other device of its kind and really is **the only practical bundle-carrier on the market**, as shown by the fact that many have taken

Requires no Attention.

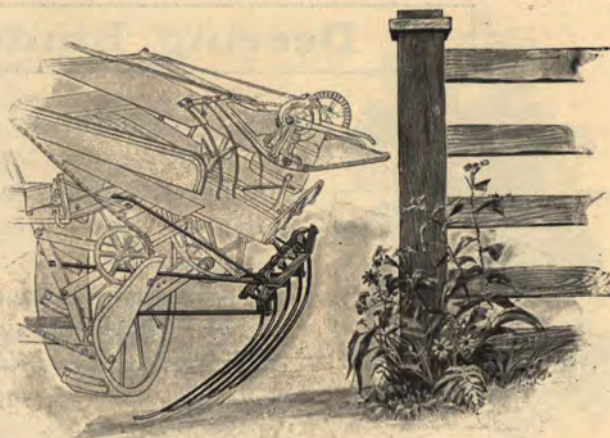
license under our patents. When passing through a gate, or in contact with obstructions, the teeth fold out of harm's way. When backing it does not run into the ground, nor will it strike the ground going down hill and fail to dump.

A Few Salient Points.

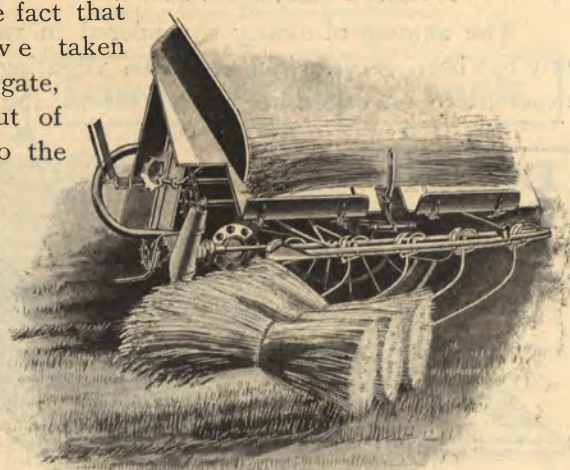
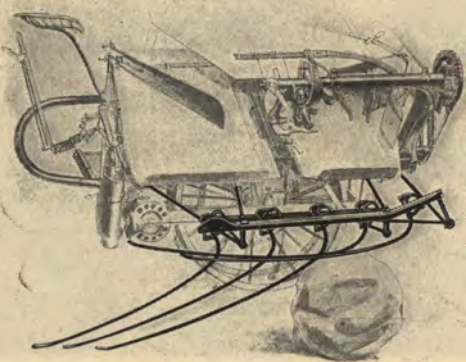
The Deering Bundle-Carrier will not break when in contact with obstructions.

It never fails to fold in dumping.

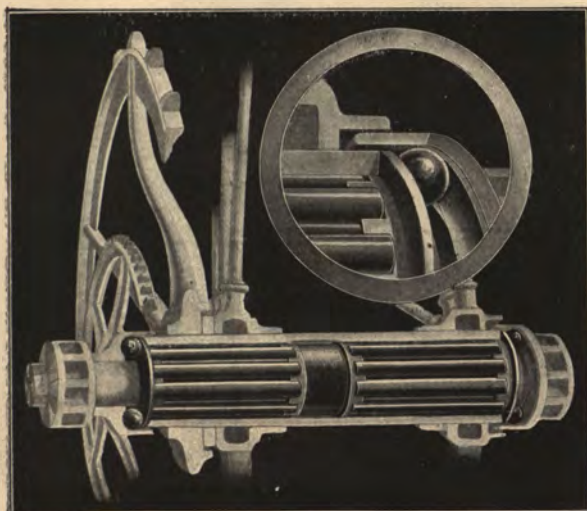
It carries the sheaves so that they cannot be caught by the discharge arms and thus be drawn back into the binding mechanism. It will handle any reasonable number of bundles.



The Deering Bundle-Carrier.

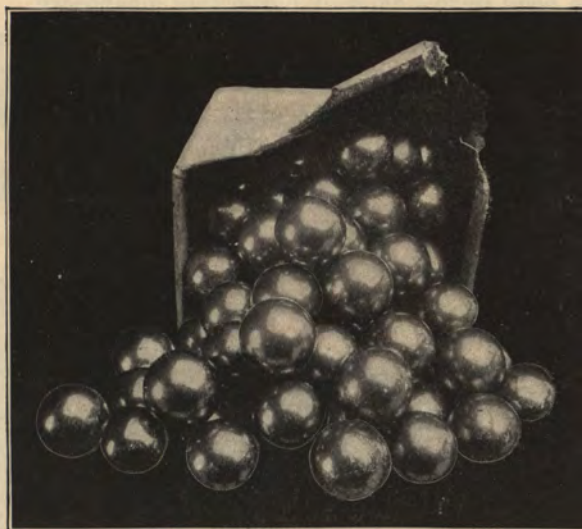


Dumps the Bundles Gently.



Roller and Ball Bearings on Main Axle of Ideal Binder.

Our machines are heavy enough to handle all kinds of grain without strain, and yet not so light as to rack to pieces in doing heavy work, as is the case with some machines in which the construction is too light in places. That we have the **lightest draft** machine in the world, is a fact well known and it is largely due to its light weight and our rightly constructed and rightly placed roller and ball bearings.



Deering Ball Bearings.

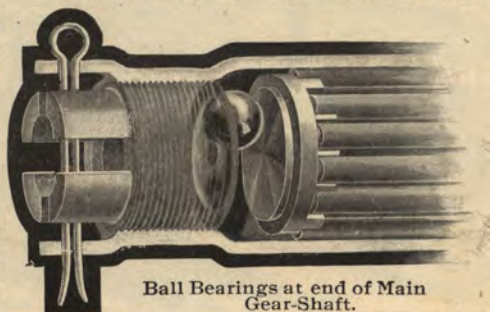
The Bearings in DEERING Machines

are made to conform with the work to be done. The rollers are constructed of high-carbon steel and the balls of the best hardened crucible tool-steel. The quality of the latter is as good as that used in high grade bicycles.

Crank-Shaft and Gear-Shaft

The gear-shaft and crank-shaft bearings of our IDEAL BINDER are inclosed within expanded holes formed in the steel main-frame. Others attach the bearings by brackets and depend upon bolts to keep them in position. These bolts are constantly coming loose and cause trouble. No bolts whatever are used by us in keeping our gear-shaft or crank-shaft in place.

At the inner end of the gear-shaft a steel ball is placed which prevents end friction, and an adjustable threaded cone keeps the main gear in proper mesh. The main gear is so inclosed as to prevent straw from getting wound in it. The gearing on most other machines is exposed.



Ball Bearings at end of Main Gear-Shaft.



At some time in the distant future there may be a machine built that will be better than the DEERING IDEAL MOWER, but we doubt it, and there is certainly none now on the market that will compare favorably with it in any particular.

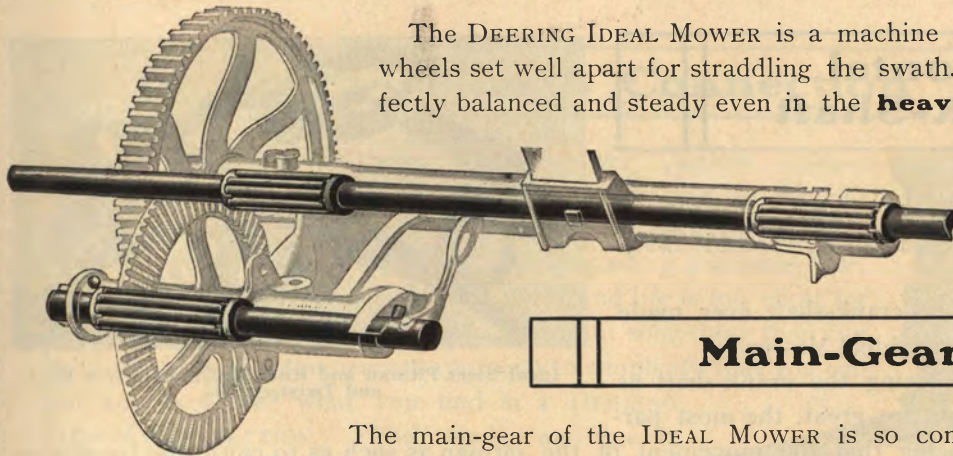
Of course there are cheaper mowers, that are **cheap** in style, workmanship, and efficiency. There are also other mowers that at first glance may look somewhat like the IDEAL, and perhaps deceive an inexperienced person, looking at the machine carelessly, but there is but one IDEAL MOWER, and it stands at the head in this class of harvesting machinery.

Throughout the world unstinted praise has been justly showered upon the DEERING IDEAL MOWER, and it is to-day as well and favorably known in Europe and even more remote portions of the world as it is in America.

More than one-half of the manufacturers of mowing machines in this country have endeavored to **imitate** this superb machine in some manner, but none has as yet succeeded.



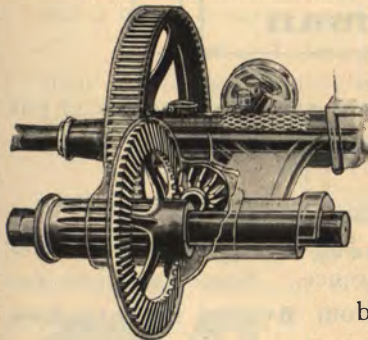
Deering Ideal Mower with Bicycle Bearings.



Main-Gear

The DEERING IDEAL MOWER is a machine of modern design with wheels set well apart for straddling the swath. It is absolutely perfectly balanced and steady even in the **heaviest cutting**. Many years of experimenting having brought it to this state of perfection.

The main-gear of the IDEAL MOWER is so constructed that the full capacity of the machine is never used, there being **no lost motion**, and the cogs, pinions and gearing being so nicely and accurately adjusted that the knife starts instantaneously with the first motion of the wheels.



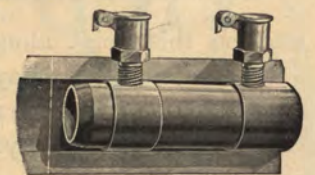
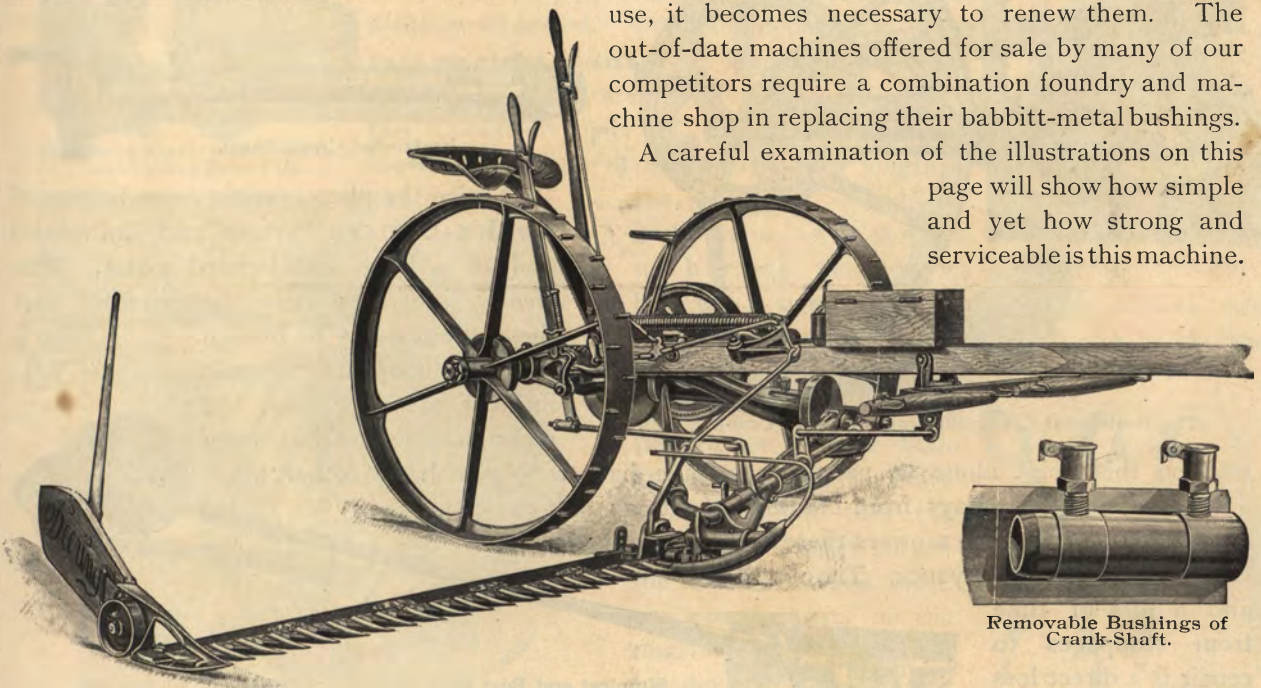
Simple Gears of the Ideal Mower.

Friction is entirely overcome by the clever use of roller bearings exactly where needed on the main axle and gear-shaft, and all end thrust in gear-shaft is overcome by the use of bicycle ball bearings at the outer end.

Removable Bushings

The bearings on the DEERING horizontal crank-shaft are supported by bushings made of metals of hardened brass composition and can easily be removed and replaced at a trifling expense if, after years of continued use, it becomes necessary to renew them. The out-of-date machines offered for sale by many of our competitors require a combination foundry and machine shop in replacing their babbitt-metal bushings.

A careful examination of the illustrations on this page will show how simple and yet how strong and serviceable is this machine.



Removable Bushings of Crank-Shaft.

Horizontal Crank-Shaft

On this page will be found illustrations showing our horizontal crank-shaft, vertical crank-wheel and pitman.

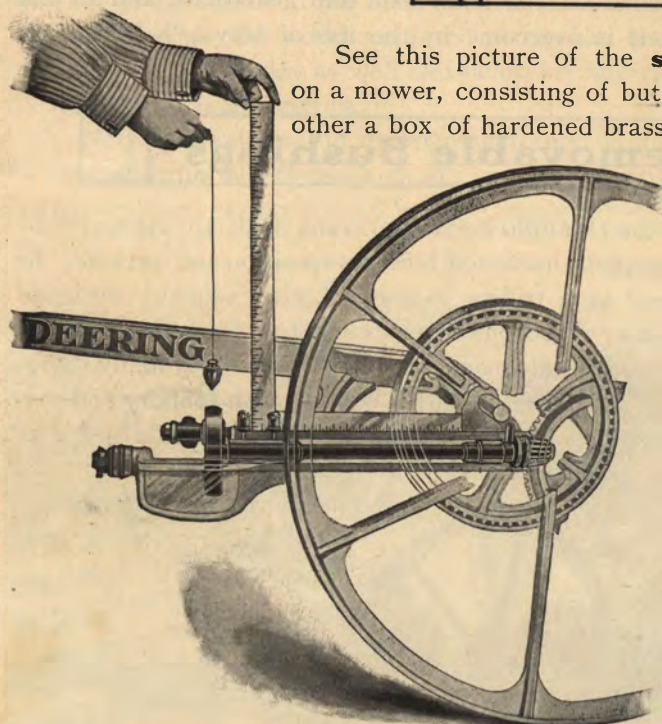
The **first** horizontal crank-shaft ever made was placed upon a Deering Ideal Mower.

The advantages of placing the crank-shaft as high at front as possible are great, the most particular one, perhaps, being that the movement of the pitman is such as to cause the least wear upon the knife-head.



Ideal Steel Pitman and Knife-Heads Tied in a Knot and Twisted Cold.

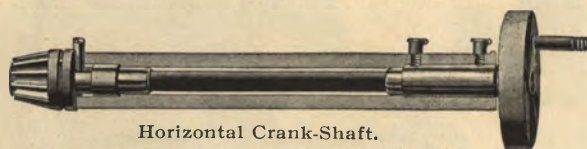
Two-Piece Pitman



The Horizontal Crank-Shaft and Vertical Crank-Wheel.

See this picture of the **simplest** and **best steel pitman** ever put on a mower, consisting of but **two pieces**, one a forged steel bar and the other a box of hardened brass composition.

Compare this pitman with those on machines made by other manufacturers, and note the difference. Some of them are composed of from **five to twenty-five pieces**, with a corresponding weakness.



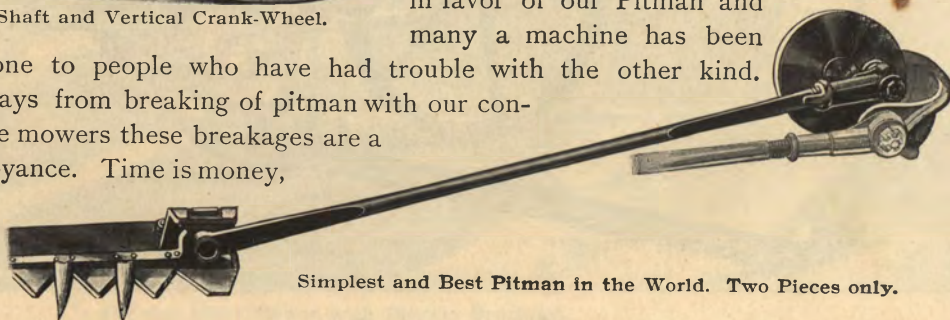
Horizontal Crank-Shaft.

Notice the photographic reproduction of the IDEAL STEEL PITMAN and knife-head tied in a knot and twisted **cold**. This clearly illustrates their strength and that they cannot easily be broken.

Too much cannot be said in favor of our Pitman and many a machine has been

sold on this point alone to people who have had trouble with the other kind.

There are no delays from breaking of pitman with our construction, while in some mowers these breakages are a constant source of annoyance. Time is money, and a loss of time from stoppages to repair is a direct loss of money.



Simplest and Best Pitman in the World. Two Pieces only.

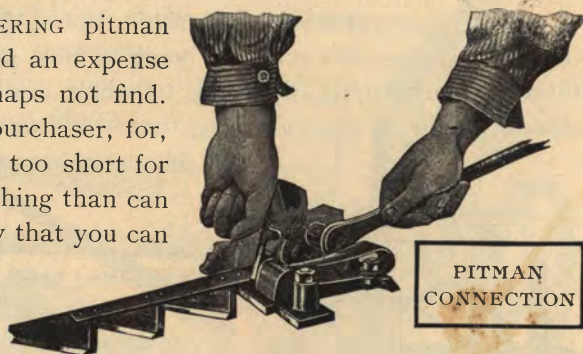
Pitman Connection

You can connect and disconnect the DEERING pitman instantly; no delays, which are always vexatious and an expense from waste of time; no tools to hunt for and perhaps not find. This one point alone should decide an intending purchaser, for, during the cutting season, time is valuable and life is too short for perplexing problems in mechanics. You want something than can be done easily and the nearest approach to simplicity that you can get, and these are what you find in a DEERING

PITMAN CONNECTION. The whole machine is constructed on the same simple lines. Could the

selection of a mower be left to the horse, there is no doubt in the world as to the choice that would be made, for if there ever was a **light draft machine** made, it is the DEERING IDEAL MOWER, and a humane man should always consider this point.

Our serrated steel guard-plate, tempered steel wearing-plates and spring steel-clips, all lend their aid to accomplish the grand result of reducing the power required to operate the DEERING MOWER to the lowest possible amount.



PITMAN
CONNECTION

Deering Knife Sections

The **highest grade** of cutlery steel is used in making the DEERING KNIFE SECTIONS, and the amount of labor required and number of handlings by different



Tempered Steel Wearing-Plate
and Spring-Steel Clip.

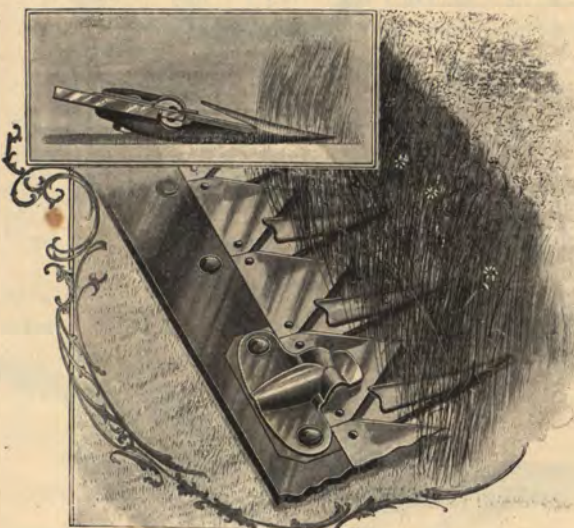
skilled workmen in furnishing the finished perfect knife section, would hardly be believed unless actually witnessed. Our knife department is the most **perfect plant** of its kind in the **world**, and expense is not considered in manufacturing this important part of the DEERING IDEAL

MOWER. Instead of using the entire length of



Deering Knife Section.

the cutter bar to slide the knife upon, as is the case with many mowers, we have but a small amount of wearing surface, using as we do five wearing plates, which can be replaced at any time at a trifling cost. Our machines require less repairs than any others, and they are so constructed that the parts that do wear out are the **inexpensive** ones, the **costly** parts of the machine being protected by devices designed for that purpose.



Deering Machines Cut Close to the Grass Roots.



Deering Serrated Ledger-
Plates Give a Perfect
Shear Cut.

Adjustable Drag-Bar

The Cutter-Bar of the DEERING IDEAL MOWER can always be lined up perfectly, the adjustable drag-bar used on this machine being a most **perfect mechanism** for accomplishing this result. Other manufacturers, in trying to adapt imitations of this device, have utterly failed, and in endeavoring to get something that would answer the purpose, and yet not be **just like it**, have

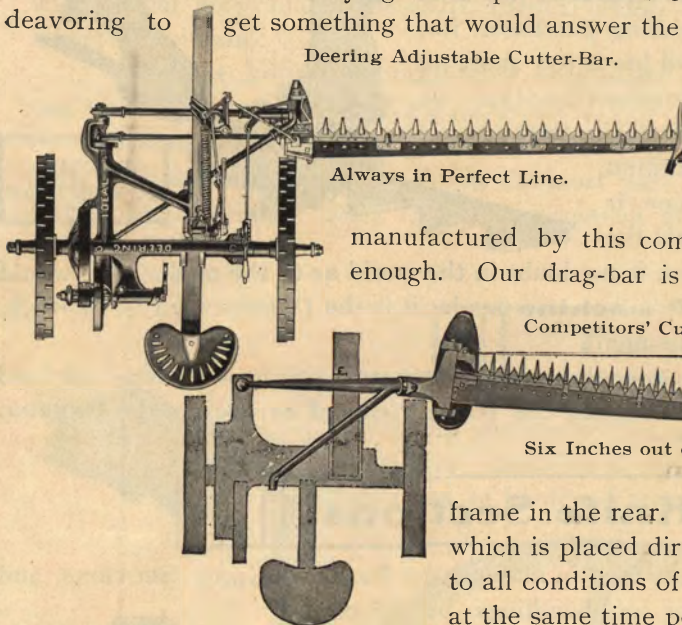
produced a large amount of side draft and wasted much energy in various ways. Some have no support whatever, depending upon a draft-rod to keep the bar in line. In the

DEERING MOWER, as in the other machines manufactured by this company, the best of everything only is good enough. Our drag-bar is made of high carbon steel, 1 1/2 inches in

diameter, and is one continuous piece placed in front of the pitman and forming a complete protection for the same. This bar extends through a swivel-hinge coupling to the main-

frame in the rear. No other manufacturer uses this coupling, which is placed directly in front of the main-wheel and conforms to all conditions of ground without producing any side draft and at the same time permits of the utmost range of tilt. In con-

necting the IDEAL finger-bar to the swivel-hinge, a solid eight-inch steel pin is used instead of two short stud bolts such as are used on other machines, thus doing away with any great amount of wear at this point. A smooth surface that cannot clog is obtained by fastening the guards to the bar with counter-sunk plow-bolts having the nuts beneath the bar.



Deering Adjustable Cutter-Bar.

Always in Perfect Line.

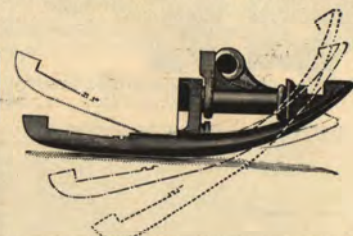
Competitors' Cutter-Bar.

Six Inches out of Line.

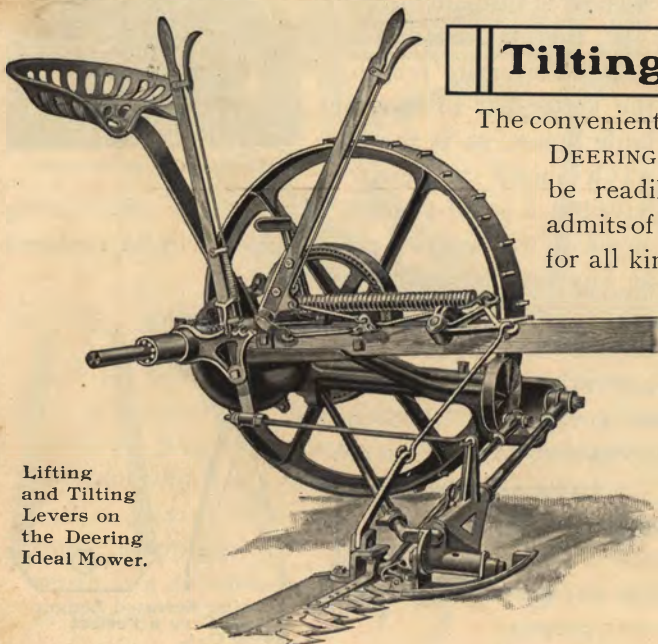
Tilting-Lever

The convenient tilting-lever on the DEERING IDEAL MOWER can be readily reached and it admits of absolute regulation for all kinds of work by means of a thread adjustment

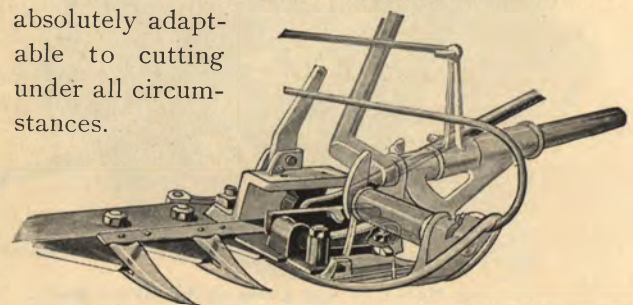
connecting the tilting-lever with the rod, also allows the cutter-bar to **float**, and thus be absolutely adaptable to cutting under all circumstances.



How the Bar "Floats."



Lifting and Tilting Levers on the Deering Ideal Mower.



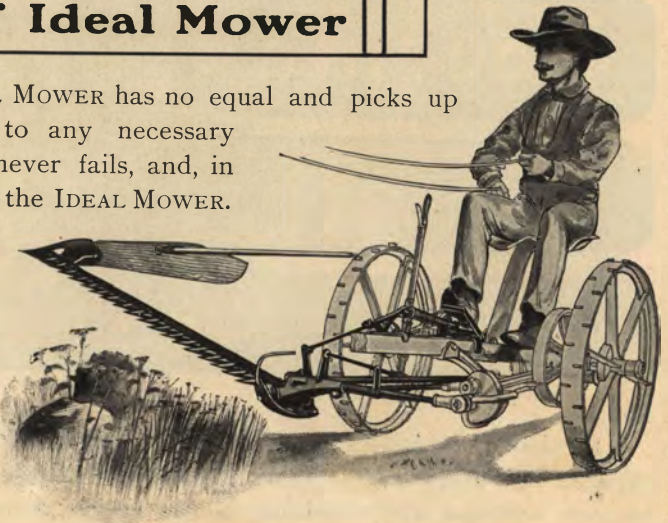
The Deering Hinged Coupling.

Foot-Lift of Ideal Mower

THE Foot-Lift of the DEERING IDEAL MOWER has no equal and picks up the bar instantly, elevating it to any necessary height. It works smoothly and never fails, and, in fact, is another **ideal feature** of the IDEAL MOWER.

Its simplicity is such that it can be operated by a child.

The advantage of having a machine provided with a perfect appliance of this kind and in being able to lift the bar instantly and with the greatest ease when meeting an obstruction or turning corners can at once be seen. In fact, the raising and lowering of the bar for any purpose, is under the **perfect control** of the operator by means of this foot lever. A coiled spring assists in raising the bar and lightens the labor of the movement. By means of this spring the bar is floated lightly over the surface of the ground **greatly reducing draft** and making side-draft an impossibility.



Improved Foot-Lift of the Ideal Mower.

Spring Hold-Up Catch

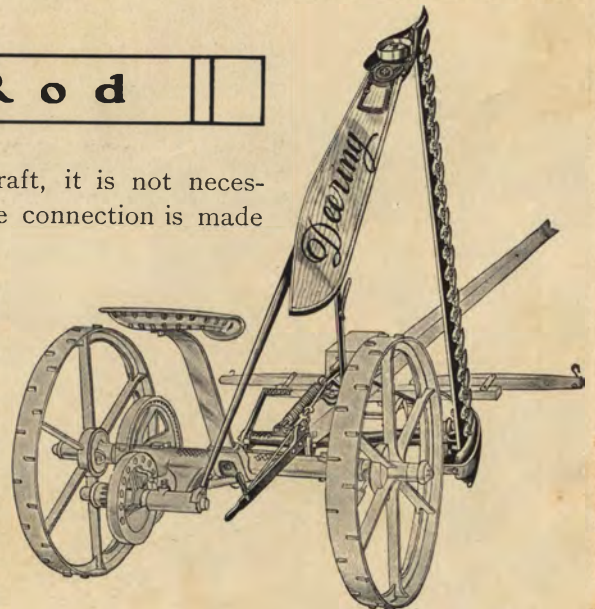
The IDEAL Cutter-Bar can be folded up after using, and when through with the day's work, and is firmly and securely held in position after folding by an automatic spring lock which will never permit it to fall, but which can instantly be disengaged and the bar lowered by catching hold of the swather.

Draft - Rod

The DEERING IDEAL MOWER having no side-draft, it is not necessary to connect the draft-rod with the shoe, and the connection is made with the drag-bar, midway between the shoe and the mower frame, which is the proper place.

While the Deering Mower is not a cheap machine, it is the best, and the **best is always the cheapest**. It is durable and although it costs more at first it will outlast several cheap mowers and be a continual source of satisfaction to the user.

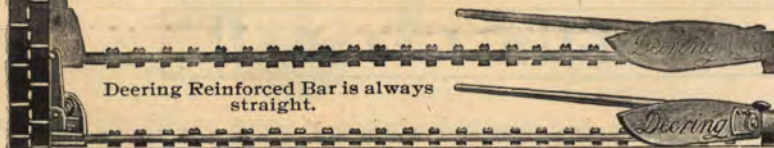
Simplicity, Light Draft, Strength. These are the three star features of this unrivalled mower.



How the Cutter-Bar Folds When Not in Use.

Deering Ideal Giant Mower

"Giant" is the only term that adequately describes our wide-cut mower; in strength and capacity it is every inch a giant. The mammoth crops of alfalfa, clover and wire grass common to some sections, and stumbling blocks in the paths of most mowers, possess no terrors for this machine. It is built on generous lines with a **strong, wide frame** for straddling the cut grass, besides leaving a clean track for the wheels. It has reinforced bar of special strength and rigidity. The materials in the Deering Ideal Giant Mower are the best procurable, and the machine is equipped with Deering roller and ball bearings, which make it run smoothly, lightly and almost noiselessly, as near the **ideal** of mower perfection



as is attainable. It has won an enviable reputation by honest work and is a reliable machine under all conditions.



Deering Ideal Giant Mower, Five, Six and Seven-Foot Cut, Equipped with Bicycle Bearings.

Deering Ideal One Horse Mower

The DEERING IDEAL ONE-HORSE MOWER is the same machine in every respect as the ordinary sized DEERING MOWER, only **smaller**.

It is used for cutting lawns, parks, cemeteries and small farms.

The sales of this machine increase every year; its lightness and the ease with which its every part can be manipulated have combined to make it a prime favorite with its users.

It is not a dwarf machine. It is a **perfect** one-horse mower and is not equaled in any respect by other productions on the market.

If you want a small machine, this is the only one that will satisfy you in every way.



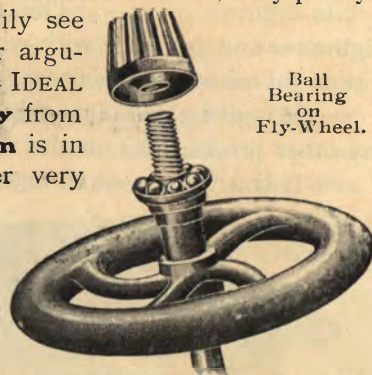
Deering Ideal One-Horse Mower.



The DEERING IDEAL CORN BINDER for 1901 in addition to its many other points of excellence is the **first** and **only** machine having that long needed feature,

A SHIFTING BINDER

By a shifting binder is meant a binder that has a **real** shift so that the band can be placed **where desired** on the bundle. It is not a make-shift in the shape of a false bottom, very pretty to look at in the sales room but **useless** in the field. One can readily see why a **vertical** binder cannot be made to shift, and this is another argument in favor of binding corn in a horizontal position. The DEERING IDEAL CORN BINDER is so designed that the power is distributed **directly** from the drive wheel, and the instant it starts, the **entire mechanism** is in action. This insures durability and long life of the parts. Another very strong point in favor of the new machine is the **improved cutting apparatus**. There is certainly less than **one-half** as much power used here as on competitors' machines having one little, over-worked section. The stubble left by the IDEAL CORN BINDER is **even** and the machine may be tilted similar to a grain binder, thus regulating the length of stubble to suit. The increased space between the deck and the drive wheel of the DEERING IDEAL CORN BINDER gives room for **four** or **five** bundles on the Carrier.



Ball
Bearing
on
Fly-Wheel.



Deering Ideal Corn Binder with Frictionless Bearings and Shifting Binder.

NO NECK-WEIGHT NO SIDE-DRAFT

The absolute freedom of the Deering Ideal Corn Binder from side-draft or neck-weight is a great point in its favor. It is also the **lightest draft** machine and does not waste horse power in doing unnecessary work, as is the case with some competing machines. The Deering tongue is connected with the main-frame **between** the wheels. All vertical machines place their tongues **outside** the main-wheel with all the working parts to one side, thus producing enormous side draft.

A great amount of labor is saved by not elevating the corn, as is necessary in vertical machines. The work can be done better by binding the corn in a **horizontal** position, as is acknowledged by every disinterested person, and there is no doubt as to the unnecessary waste of power in its elevation.



It works like a Grain Binder.

A Popular Corn Binder

Comparisons between the Deering Ideal Corn Binder and the binders made by others who are trying to make machines for similar purposes cannot be made, for there is no comparison.

The Deering is **superior** to any other.

Our agents sold so many of these binders during the past season that it was impossible for us to fill all of the orders, and the corn binder department of our works is being enlarged on account of the extraordinary demand for these machines. No other corn binder is so popular, and other factories would have sold but few machines could we have supplied them.

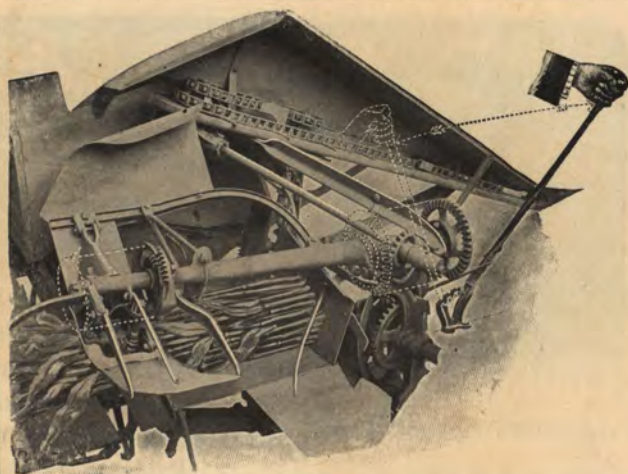


Illustration showing range of shift.

Fifteen Points of Excellence

- First.....Binds corn in **horizontal** position.
- Second.....Shifting binder that **really** shifts.
- Third.....Improved cutting apparatus, requiring but **one-half** the power that competitors' machines do.
- Fourth.....The drive wheel having direct connection imparts motion to **all** the working parts the **instant** it starts.
- Fifth.....Large space between the deck and drive wheel.
- Sixth.....Horizontal bearings that retain oil.
- Seventh.....Bicycle ball and roller bearings at eleven important points.
- Eighth.....A thirty-seven inch steel drive-wheel that will not slip.
- Ninth.....A perfect bundle-carrier.
- Tenth.....A butt-adjuster that squares the butts of the bundles.
- Eleventh....A fly-wheel for preserving steady motion in the cutting apparatus.
- Twelfth.....A wide frame, giving **steady motion**.
- Thirteenth..Frame balanced on the main axle and neck-weight thus avoided.
- Fourteenth..Tongue connected with main-frame between the wheels in such a manner as to **properly balance** the machine.
- Fifteenth....No Neck-Weight—No Side-Draft.



Raise and Lower Device—Points always level.



Our rake department is now one of the most complete in the world and our facilities for turning out this class of machinery are not equaled by any other factory.

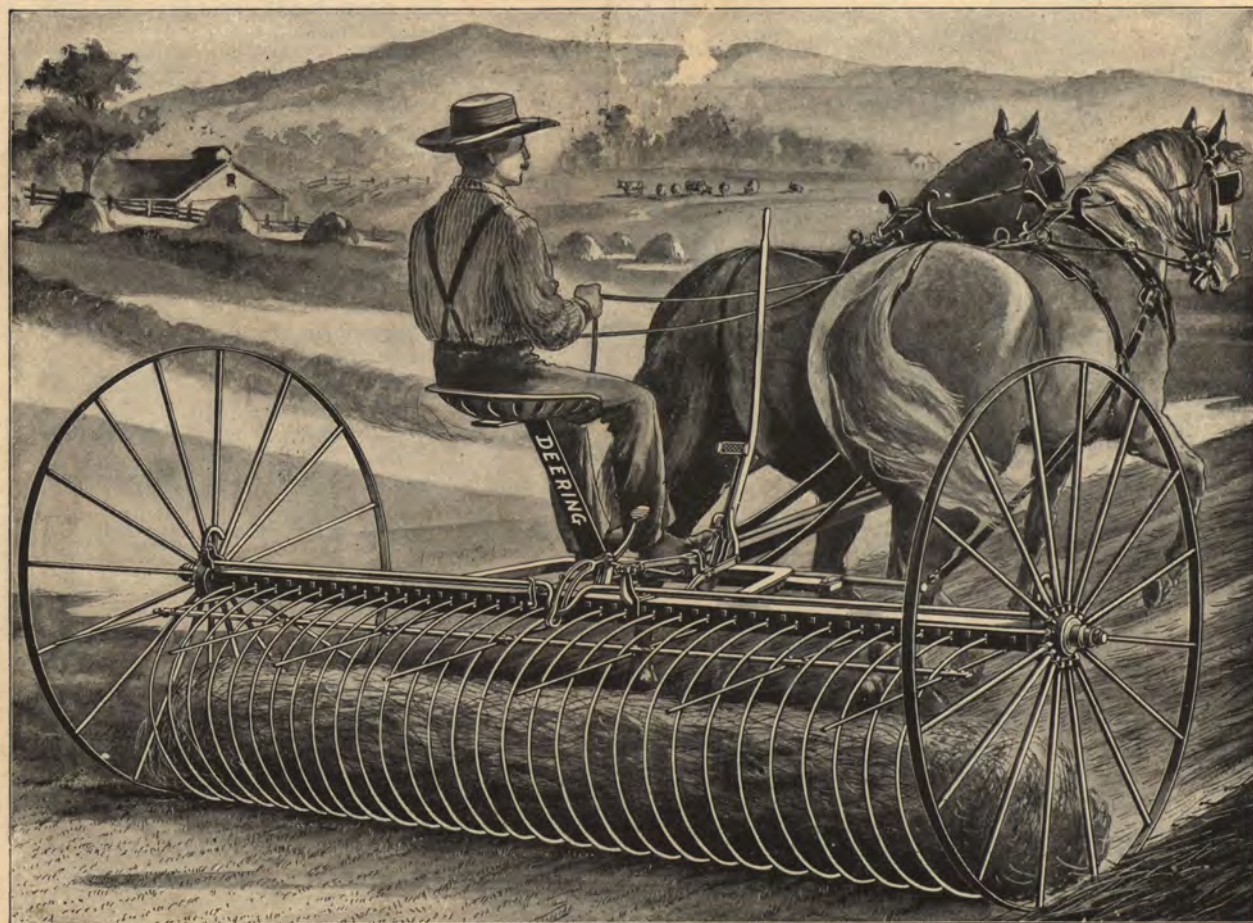
On this page is shown a horse-dump rake which ranks with other machinery made by the DEERING HARVESTER

COMPANY and when that is said, all is said, for the name DEERING stands for **superior excellence.**



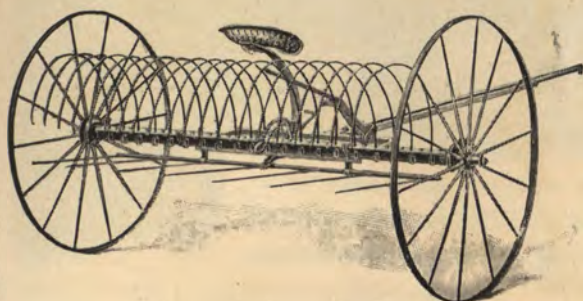
Rake
Tooth
Clip.

It can be operated by a child—has perfect steel undercleaners—has high carbon angle-steel axle—can be dumped by hand or foot—has oil-tempered teeth of finest quality—has simplest dumping mechanism on earth—has no cogs or pinions of any kind—has shouldered steel spokes in wheels.

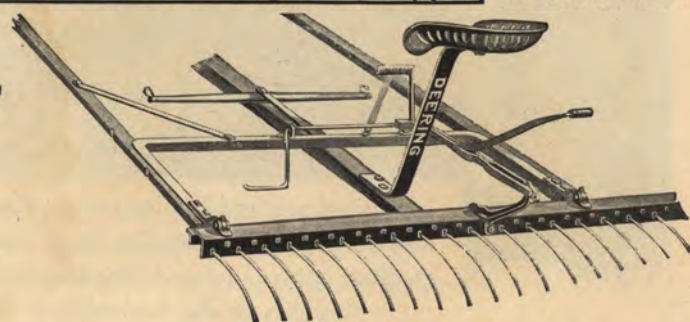


The Deering Horse-Dump Rake.

Deering Hand-Dump Rake



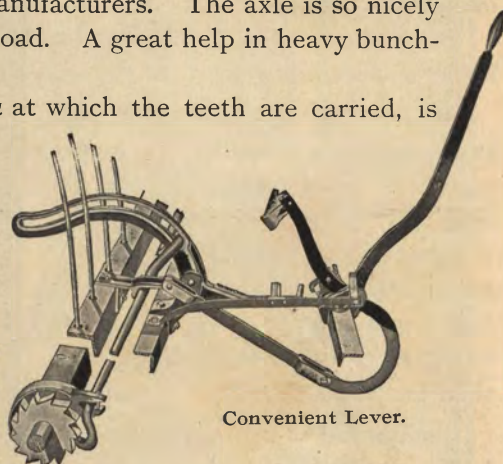
Dumps and Cleans Perfectly.



Perfect Lock-Lever and Hand and Foot-Dump.

The hand-dump rake shown on this page is as perfect in every detail as one can be made and farmers preferring this style of rake will make no mistake if they select a DEERING, for it possesses every improvement and many that are not used by other manufacturers. The axle is so nicely balanced that the weight of the driver helps to dump the load. A great help in heavy bunching is the clever lock-lever arrangement on this machine.

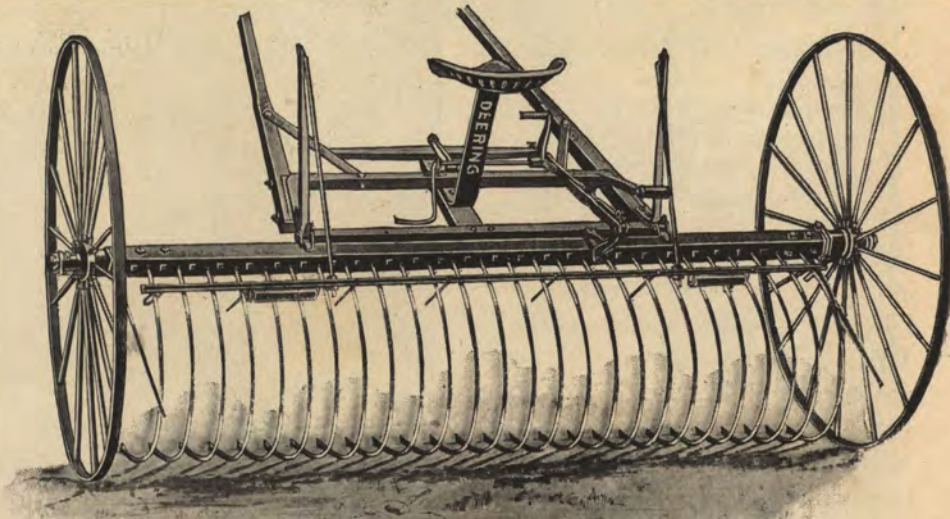
The DEERING HAND-DUMP RAKE, owing to the height at which the teeth are carried, is specially adapted for heavy bunching and one can make a **larger windrow** with it than with any other machine. All DEERING rakes are constructed so that the teeth have play enough in the axle and they are seldom broken from contact with obstructions. Each tooth can be easily removed by itself, being fastened independently. The adjustment for raising and lowering the points of the teeth works perfectly. We can furnish either steel or wooden wheels as desired. Either one or two horses can be used on our rakes, as a combined pole and shafts equipment is a part of each machine.



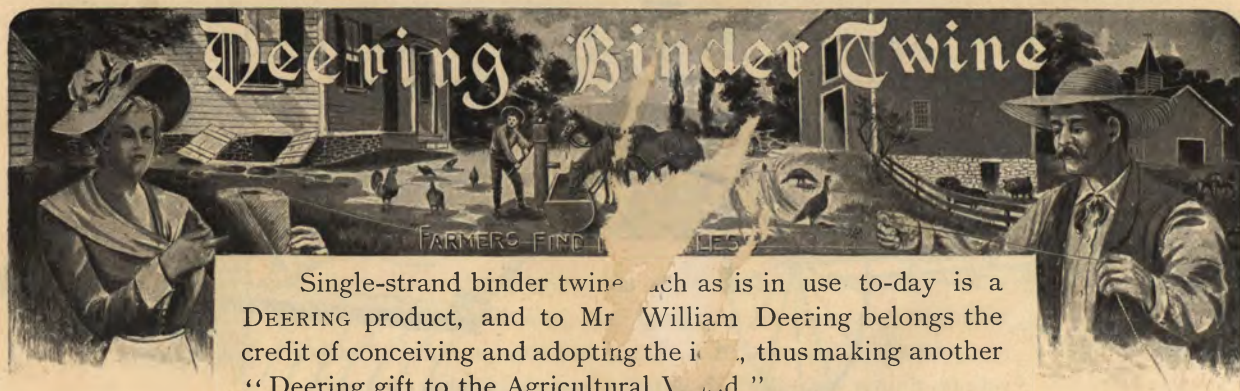
Convenient Lever.

The different Hay Rakes manufactured by this Company are as follows:

- 8½ FT. - 20 TEETH
- 8½ FT. - 26 TEETH
- 10½ FT. - 26 TEETH
- 10½ FT. - 34 TEETH
- 12 FT. - 30 TEETH



Deering Hand-Dump Rake.



Single-strand binder twine such as is in use to-day is a DEERING product, and to Mr William Deering belongs the credit of conceiving and adopting the idea, thus making another "Deering gift to the Agricultural World."

The DEERING HARVESTER COMPANY owns and operates the largest plant in the world for the manufacture of binder twine, and is everywhere recognized as the leader in this industry.

DEERING BINDER TWINE is used the world over, and it is highly spoken of everywhere. If you are looking for trouble do not use it, but if you want to get along smoothly without any snarls or kinks and to know that you are getting the **full length** of twine that you pay for, then buy the DEERING.

Each brand of twine is designated by a tag of different color:

Guaranteed Pure Manila (650 ft.),
Red Tag.
Manila (600 ft.), Blue Tag.
Standard Manila (550 ft.), White Tag.
Standard (500 ft.), Brown Tag.
Sisal (500 ft.), Yellow Tag.

DEERING BINDER TWINE is put up in flat fifty pound bales, each containing ten balls of five pounds each. This bale is another original DEERING production and is much more convenient than the square bale used by some manufacturers, as it can easily be carried under the arm or slipped beneath a buggy seat. The bag can be used afterwards as a grain sack or for some other useful purpose.



Views of Deering Twine Exhibit, Paris Exposition, 1900.

Deering Binder Twine



DEERING TWINE is uniform, and during the last two seasons it varied less than **one per cent.** from correct measurements. When you buy cheap twine from any dealer you

happen to come in contact with, you can **never be sure** of the length or quality you are getting, you can never be sure that it does not contain thin and thick places and lack strength. Our pledge is upon the tag—you can rely upon it.

Our twine is made from Manila fibre obtained from the bark of a species of plantain that grows in the Philippine Islands, and from Sisal fibre derived from the leaves of a plant belonging to the cactus family which thrives best along the Gulf coast of Yucatan.

There are, however, many qualities of fibre, and twines made from the poorer grades, by manufacturers who have no regard for their reputation, are flooding the market and causing trouble and annoyance to the unwary buyer. There is only **one safe way** to buy twine and that is to accept **none** that does not bear a DEERING tag, for then you will know "it's just what the tag says it is." We purchase only the **best** grades of fibre for this purpose, and both our Sisal and Manila twines are made with the same care as to detail and the same tests as to quality as characterizes our other manufactures. A booklet entitled "Twine Facts for Twine Users" will be furnished free. Apply to Chicago office or local agency.



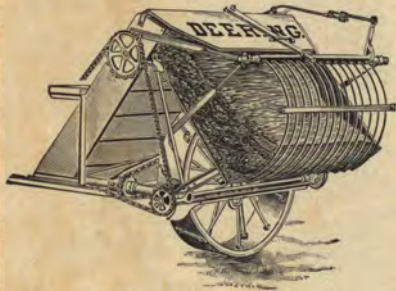
Interior Views of Deering Twine Factory.



Deering Water-Proof Canvas Cover.

affords complete shelter for a binder. It is made of heavy duck and if a shower threatens can be thrown over the machine in a moment. It is handy for use at night, saving the labor of hauling

the machine to the barn or shed and back again to the field in the morning. A Deering Canvas Cover will add **years to the life** of a binder. Deering Local Agents carry them in stock.

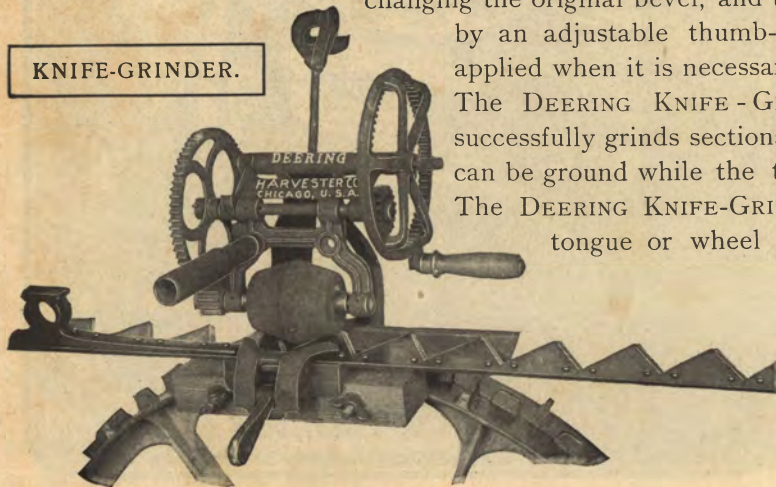


Deering Flax-Carrier.

kind, and can be easily operated. It is of simple construction and made of the **best quality** of materials. Its emery wheel grinds two edges of the knife-section at the same time, without changing the original bevel, and the pressure can be adjusted at will

by an adjustable thumb-nut, so that heavy pressure can be applied when it is necessary to grind out nicks or broken edges. The DEERING KNIFE-GRINDER is the only machine which successfully grinds sections at the heel or knife-head. Knives can be ground while the team is feeding, thus losing no time. The DEERING KNIFE-GRINDER can be readily attached to the tongue or wheel of the machine.

KNIFE-GRINDER.



Deering Knife-Grinder.

Our two brands of DEERING HARVESTER OIL are both heavy body oils, are specially manufactured for use on harvesting and similar machinery, and can be **depended**

upon in any and all climates. One is called "DEERING HARVESTER OIL" and the other "DEERING EXTRA HARVESTER

OIL," the latter being of heavier body.



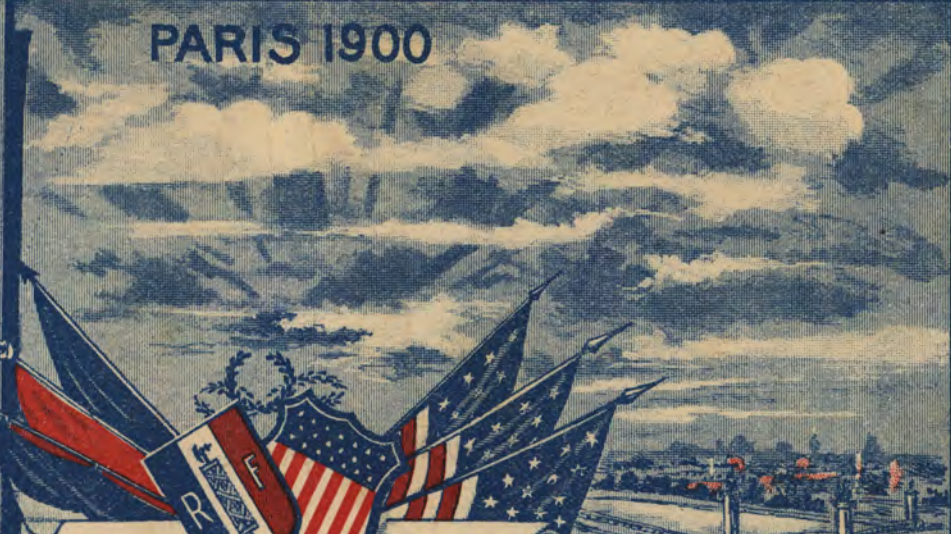
Deering Harvester Oil.

IT IS ECONOMY TO HAVE ONE OF THESE GRINDERS. IT CAN BE PROCURED AT ANY OF OUR AGENCIES AND WILL SAVE THE MONEY IT COSTS IN A SINGLE SEASON.

PARIS 1900

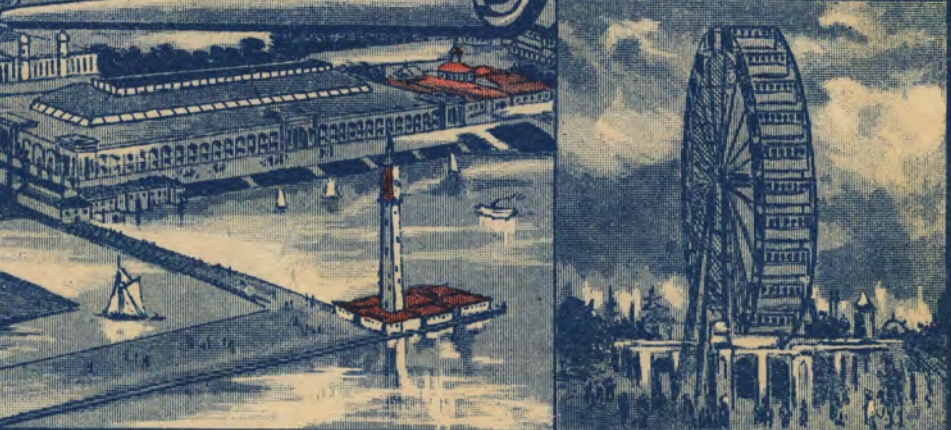


CHICAGO
1893



DEERING
AND MACHINES
Deering Inventions
Have done more to
lighten the labor of
the farmer in harvest
time than all other
harvester inventions
of the past century

 Deering Harvester Company
(A COPARTNERSHIP)
CHICAGO, U.S.A.
JAN. 1, 1901



FOR SALE BY

