
McCORMICK
HARVESTING MACHINE CO.
CHICAGO, U.S.A.

OUR PYRAMID OF SALES.

THE WONDER OF THE AGE.

THIS PYRAMID SHOWS OUR WONDERFUL GROWTH BEGINNING WITH 50 MACHINES SOLD IN 1844.

AND ENDING WITH THE EXTRAORDINARY NUMBER OF 60,321 MACHINES SOLD IN 1887.

THE McCORMICK MACHINES EN ROUTE TO ALL PARTS OF THE EARTH.

THE
GREAT SALES OF 1887
PROCLAIM
THE
EXCELLENCE,
THE
SUPERIORITY
AND
THE
AVAILABILITY
OF
THE McCORMICK.

THE
LIGHT DRAFT,
THE
EASE OF ADJUSTMENT
AND THE
GOOD WORK
HAVE
CAUSED
THE
CRY TO ARISE SPONTANEOUSLY
FROM
ALL LANDS
"THE McCORMICK IS THE BEST IN THE WORLD."


57TH Annual
CATALOGUE
OF THE
McCORMICK
THE BEST IN THE WORLD
1888
MACHINES

THE WORLD-VICTOR.

WE HAVE presented our machines for years past in a similar catalogue to this, and have asked the farmers of the world to examine them and decide upon their availability. The decision can be told by a glance at the diagram of sales on the front page. It plainly tells of successful machines, of a record unmarred. It speaks louder than words of correct business methods. Our methods and machines have enabled us to obtain and hold year after year the very best representative men, from whom our customers have had fair treatment, and in whom they have had confidence. This confidence in our representatives has had influence in the building of the pyramid of sales—the greatest the world has ever seen—but more than this is the confidence which the people have in *us* that we will build no machine that has not been thoroughly tested at our own expense and clearly shown to be the best. By this confidence and the merit of the machines our great business has been augmented until the name McCORMICK has become a familiar word in all languages and in all countries wherever grain and grass cutting machines are used. It is our constant and greatest endeavor not only to retain but to increase our reputation of making the best machines. Ours, the largest and best equipped works in the world, reinforced by the accumulated resources of half a century, are devoted to this task.

We are fully awake to the fact that the Best Machines in the World can only be made from the best material. We buy no old iron, as other manufacturers do, but on the contrary import one-third of all of our pig of the famous Glen Garnock Scotch variety, which, mixed with the best Lake Superior and Hanging Rock iron, makes the very best castings the world has ever seen, strong yet flexible, easily worked yet durable. The square tube for our frame is made for us by special machinery, designed, and the output controlled by

ourselves. The fact that we could buy lumber by the cargo from eight to fifteen dollars per thousand less than we have to pay for "A" grade clear has not tempted us to work off culls and refuse. Our buyers make their selections from the best, and annually buy and pile in our yards to season for use not less than twelve million feet. The best lead and oil are not too good for the McCormick. In no place has money been spared. Though prices have depreciated and profits have gradually reached a minimum, there is no swerving from our standard of the best.

With such material and a corps of unequaled inventors that only our immense business and unlimited use of money in this direction render possible, we have been able to keep the art of building machines a progressive one. Complex methods have given way to simple ones. Steel and malleable iron have reduced weight as well as added neatness and strength. Draft is lightened. Not only has such decrease in weight lightened draft, but the superior ability of our inventors in taking advantage of every application of power, in running the steel shafts in Babbitt bushings, and the rollers in metal bearings, in making our chilled gearings, and in carrying the perfectly fitted cutter-bars by neat, strong springs, and the accurate work of the best fitted factory in the world—all these have combined to make the McCormick machines the envy of other manufacturers. Their working capacity has never been questioned. They are the all-round athletes, fit for the heavy, lodged and tangled rye of the early harvest, the rocks and ditches of the hillside, or to lightly move over the prairies.

How essential it is that a machine be purchased that can not only do good work, but that also carries with it the added quality of a prosperous existence, and the certainty that after many years it will be possible to quickly get extra parts for any emergency. The fact that harvest is of so short duration, and that no time can be lost without endangering the crop, has caused us to place at each town all over the country large stocks of duplicate parts to guard against any accident. A day's time lost waiting for such a part may mean the loss of acres of grain; it certainly means the difference in price between the McCormick and a cheap machine.

The pyramid on the front page only shows the actual sales. It does not show the unprecedented demand of last season. From all directions came thousands of orders that we could not fill, even though our mammoth works were run on double time. Every energy was exerted and of every resource advantage was taken, still

the procession of buyers for the McCormick machines could not be supplied; many, not content to take other machines, withheld their orders for 1888.

Yet, with such machines as produced this wonderful demand and sale, we have not been content, but always being in advance of the requirements of the farmer, have for 1888 a simple, light, easily worked mechanism for raising and lowering the machine, an improved guard and cutter bar on all machines, and a knotter wonderful for its simplicity and accuracy. The machines with these improvements attracted great attention at the fairs held in different sections of the country during the fall. Their merits are being even now discussed, and the demand already upon us foretells the decision. We have known what it would be, and knowing, have prepared.

Two additions, larger than many complete factories, were built to our works in the fall, and we are now building at the unequaled rate of four hundred and fifty complete harvesters, binders, reapers and mowers per day. Think of it—more machines made by us in one day than were sold in all countries less than forty years ago. Truly this is a wonderful achievement!

From no other institution in any land has the spirit of progress for which this last sixty years has been noted, received such an impetus as from ours. During the many years since our late honored President, Cyrus H. McCormick, invented the first reaper, until this day, we have been progressive. Always leaders! Always successful! The path has not been a smooth one. Over sixty different machines, blazoned with the names of their different makers, have succumbed to the inevitable simply because the farmers of the world are progressive. They want the best and are willing to pay us for it. Since creation the cheap has fallen by the wayside, and the fittest has flourished.

A thousand reasons for buying the McCormick will become apparent to the farmer who studies the illustrations and descriptions of our machines contained in the following pages. In all the many years in which we have issued this annual catalogue we have striven to set forth our machines with the plainest statement and the plainest pictorial display, advancing nothing but facts. Such will be found this our catalogue for 1888.

McCORMICK HARVESTING MACHINE CO.

January 1, 1888. CHICAGO, U. S. A.

VIEW OF THE McCORMICK LIGHT STEEL BINDER FOR 1888.

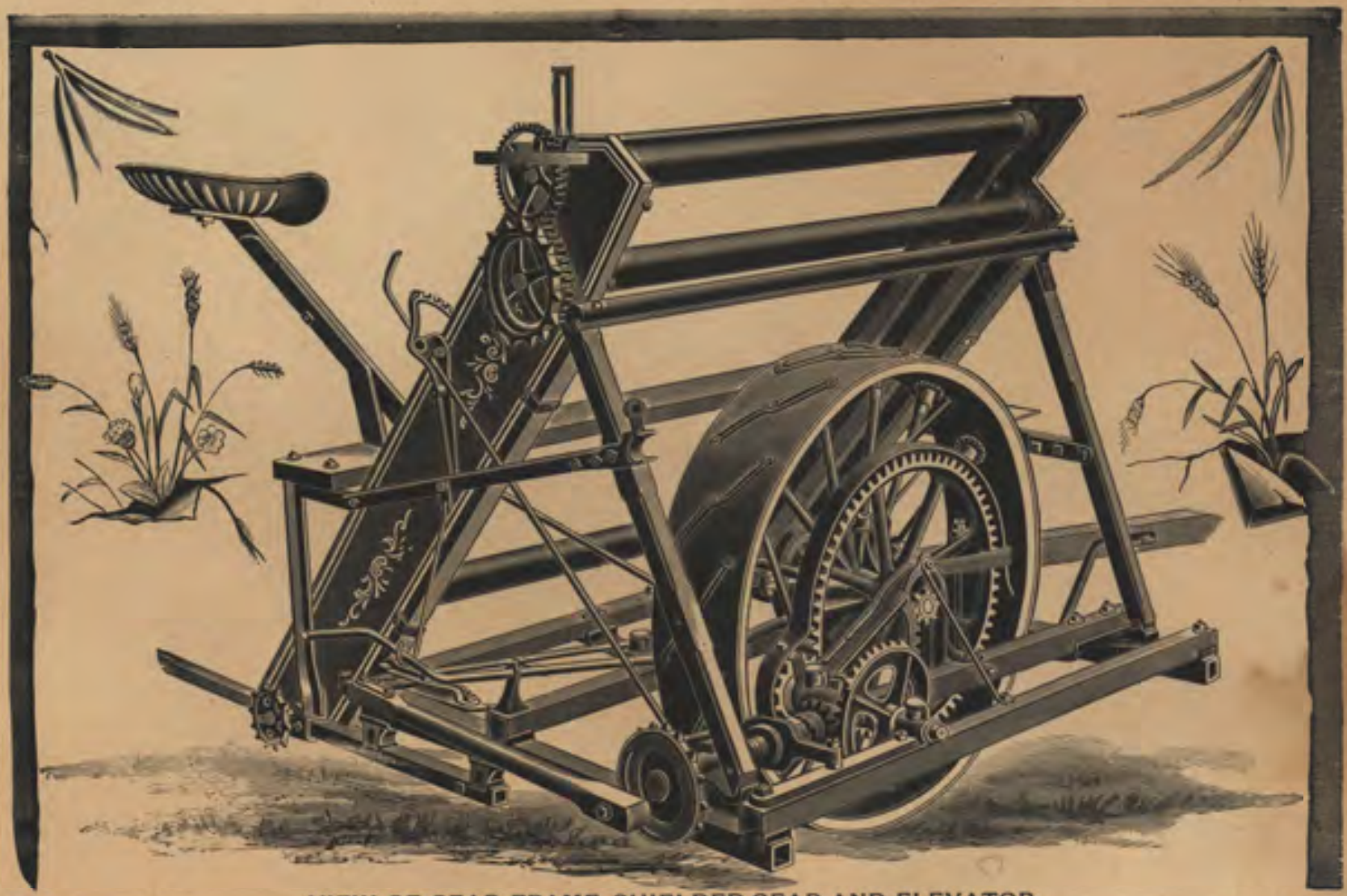
THE McCORMICK

LIGHT WEIGHT. —— LIGHT —— LIGHT DRAFT.

STEEL HARVESTER.

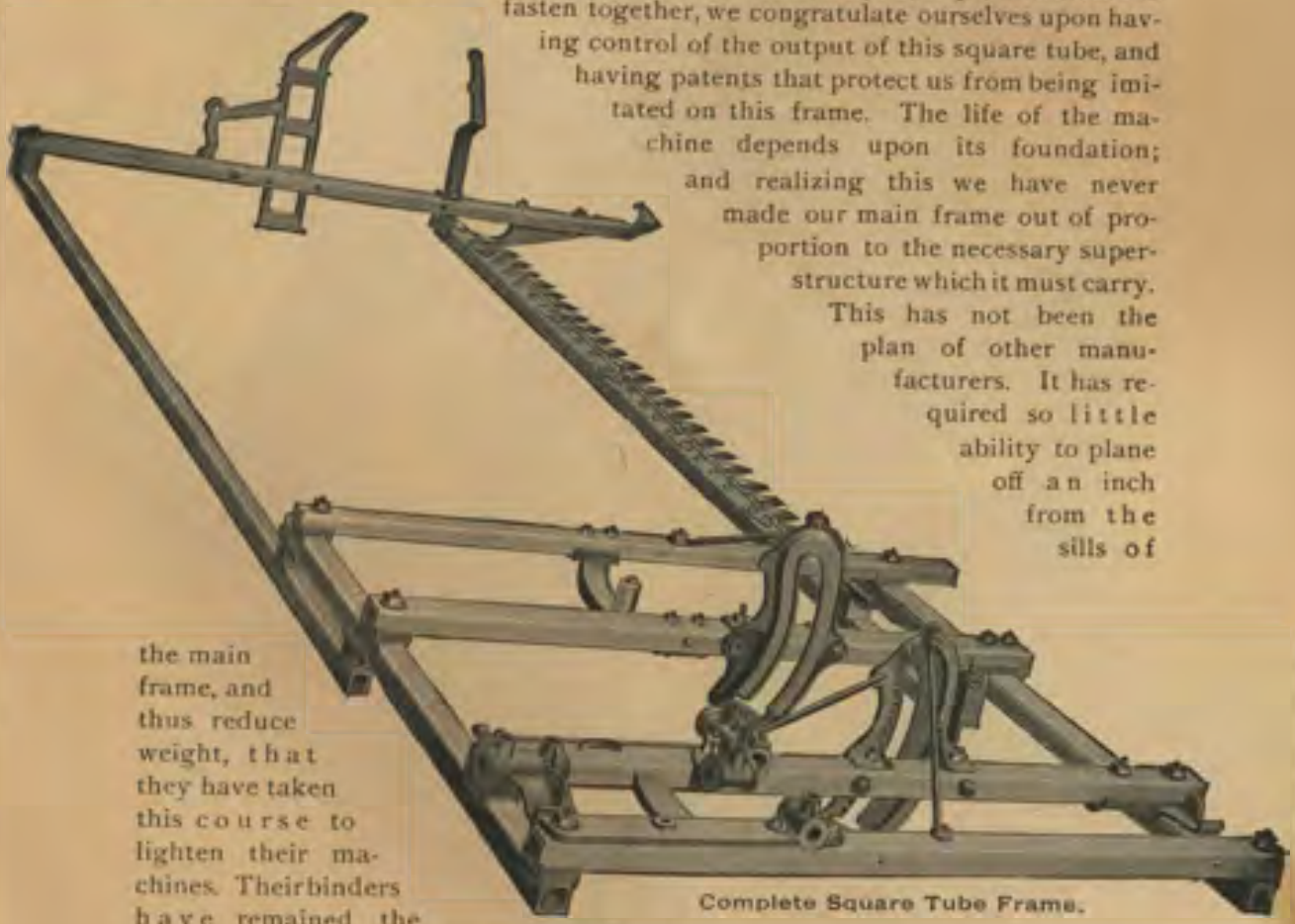
Thirty Thousand Square Tube Frames Won Fame During the Harvest of 1887.

OUR improvements for this season are the result of great thought and long and careful experiment. We have always contended that we can test and prove the utility and durability of an improvement—first in the shop, then in the field—far better than the farmer can during the few days of harvest, when worried by delays and over-ripe grain. We can be depended upon not to adopt anything new until it has proven not only to be capable of good work, but more simple, durable and capable than any other mechanism for similar work. A change for the mere purpose of talk has never been made; hence the fact that our record is without a failure. It costs money to run experimental machines in all countries and under all conditions of grain and grass, from Texas to Manitoba; still it is the way the "all round" McCormick machines have been proven and kept without a flaw, a result accomplished at our own expense and not that of our customers.

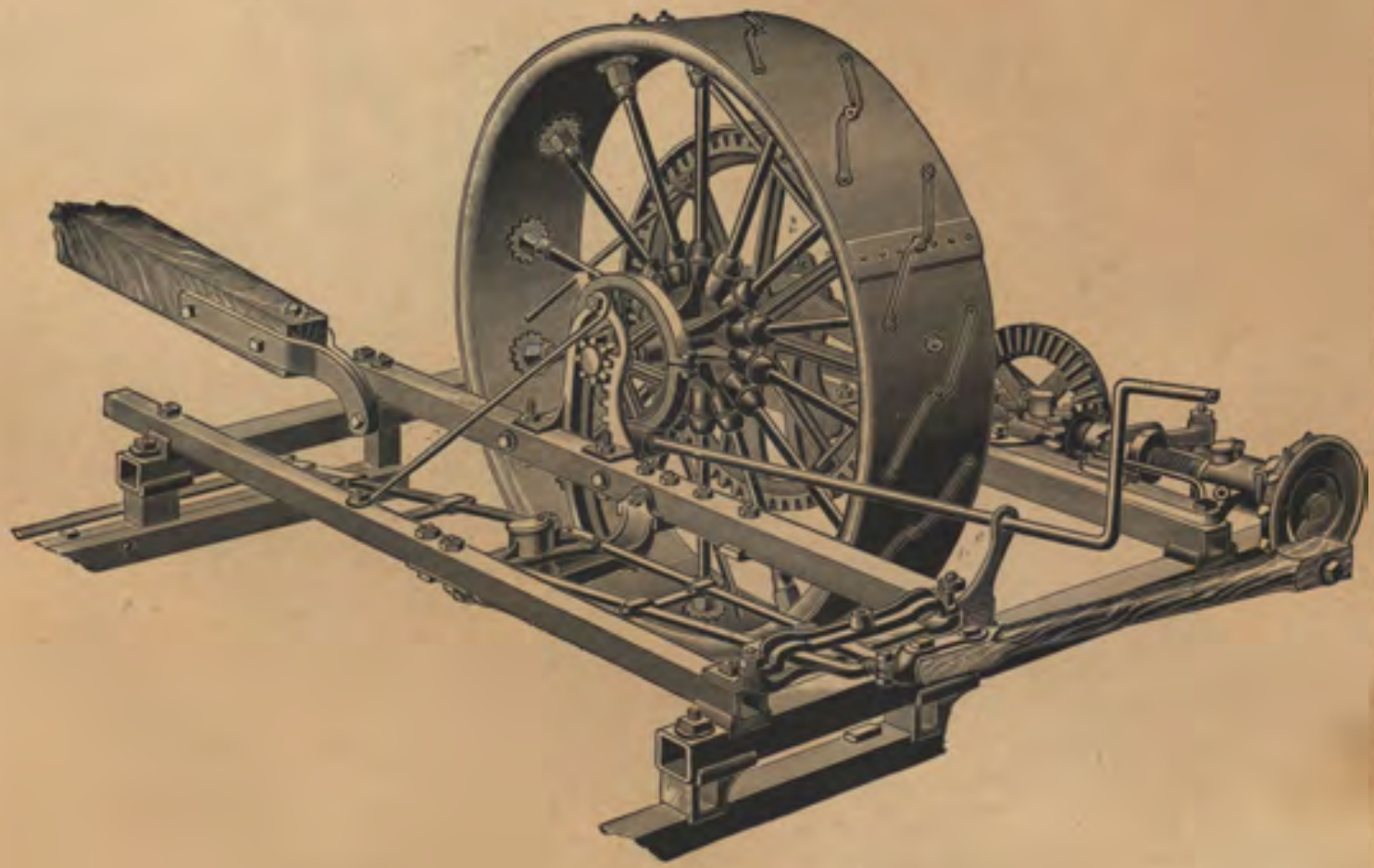


VIEW OF GEAR-FRAME, SHIELDED GEAR AND ELEVATOR.

Our Main Frame is of square tube, the only form of steel rods and pipes used for a similar purpose that is capable of being securely fitted and bolted together. The frame is one that gives the greatest strength in all directions with the lightest weight. Not only is it necessary that the frame carry the dead weight of the machine on the wheels, but it is fully as essential that it be so built that under no circumstances can the platform sag back and let the machine get out of line. The square tubes are fastened by malleable iron joint plates, whose edges fit closely upon each side of them, preventing all tendency to twist and cut the bolts, so common with gas pipe and angle iron. With thirty thousand frames built on the same plan, in the field during the past season, and not one twisted or sprung; with five years of experience, trying to build a machine of gas pipe, which we tried by all kinds of double and lock nuts, staples, keys, and rivets to fasten together, we congratulate ourselves upon having control of the output of this square tube, and having patents that protect us from being imitated on this frame. The life of the machine depends upon its foundation; and realizing this we have never made our main frame out of proportion to the necessary superstructure which it must carry. This has not been the plan of other manufacturers. It has required so little ability to plane off an inch from the sills of the main frame, and thus reduce weight, that they have taken this course to lighten their machines. Their binders have remained the same heavy affairs, hung high on the elevators, and lurching with great power on the weakened frame when the machine has gone on the trot into the dead furrow and dry run have racked the frame out of line. This fact has been plain to every one; but the great ability required to remove parts from, and lighten the binder, a mechanism that required years of thought and great mechanical genius to originate, could not be obtained. We have now lightened our binder to the amount of the weight of a heavy man, and therefore can decrease the weight of our main frame proportionately. Already, as the story of the durability and long life of our machines is being told, the wisdom of our method is seen.



Complete Square Tube Frame.

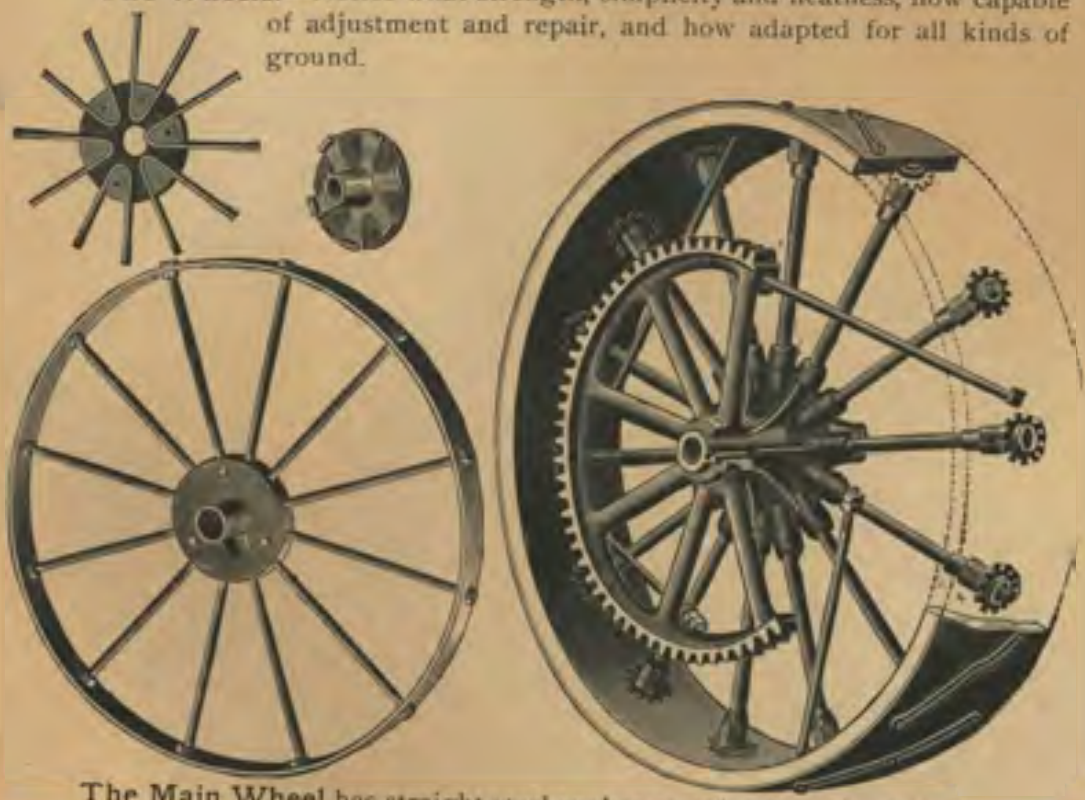


VIEW OF GEAR-FRAME, TRUSSED STEEL SWAY BAR AND SIMPLE LIFTING DEVICE.
Notice Lightness; yet Strength of Foundation.

Gear Frame.—The inside tubes of the gear frame upon which the side brackets are bolted, are stronger than the others. The side brackets are malleable, and braced so as to prevent any tendency to spring, and the outside one is tied down to the gear frame, so that the spur wheel shall always mesh the same in the large pinion. The whole frame is cushioned up six inches above the platform, so that the gearing will not fill with dirt and straw; in soft soil, cutting low, the whole frame will be clear of the ground.

The Main Box is cast in one piece and bolted to the frame with much care, so that it cannot be sprung, causing it to bind. The bearings are bored out large and fitted with our removable metal boxes, held by set screws, which with the steel shafts and double oil cups, letting the oil to each part of the bearing, make the best and easiest running gear known.

The Wheels.—Notice what strength, simplicity and neatness, how capable of adjustment and repair, and how adapted for all kinds of ground.



The Main Wheel has straight steel spokes cast deeply and solidly into the hub. The hub is fitted with a large closed oil cup holding sufficient for half a day. The tire is thick and fitted with a wood felloe. The felloe and hub, when made, are fitted into forms perfectly true, and then the strong jamb nuts upon the ends of the spokes are with powerful wrenches pressed against the felloe, making the wheel extremely stiff and perfectly round. The straight spokes make the wheel much easier to get at and oil, and with the wood felloe prevent the wheel filling and carrying dirt. The spur wheel is separate, and keyed upon the end of the hub and held firmly by four double nutted stay rods to the periphery of the wheel. A glance at the cut of the grain wheel with its removable box, hub and double spokes will show how light, neat and strong it is. There has never been a main and grain wheel made so perfect in all their parts.

It costs more to make the McCormick than any other machine! The quality and work are in it!

The New Raising Device for main wheel is pronounced by all to be the neatest ever put on any machine. A glance at the cut will show its lightness and simplicity. It is far superior to all other devices, in that it is more simple, more easily and quickly worked, is perfectly shielded from the dirt, and has plenty of space for trash carried up by the wheel to pass through to the ground. The grain wheel is easily and quickly raised and lowered by a lever which can then be dropped out of the way of tangled grain. The lever and ratchet and all of the raising device of the main wheel are malleable, and while light as compared with those of cast iron, still cannot be broken.

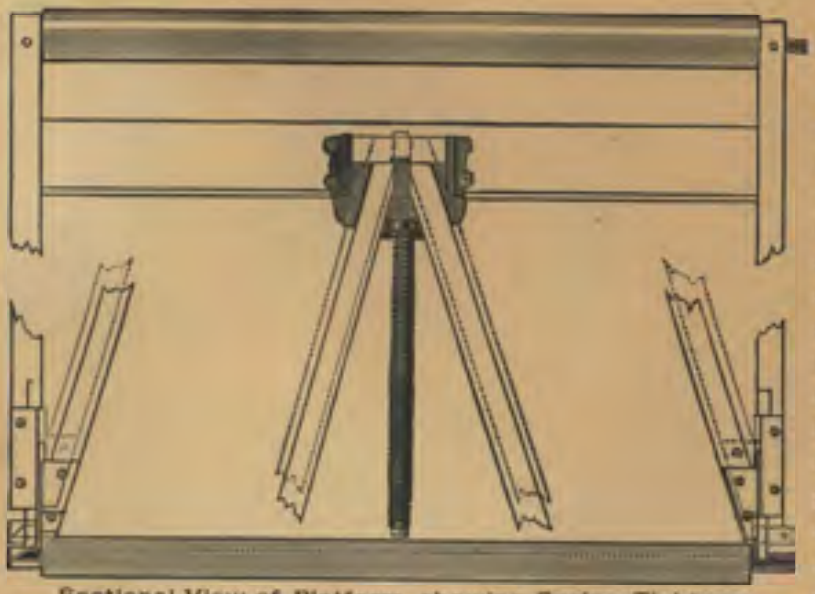
We urge comparison of the McCormick castings for neatness, strength and smoothness with all other makes of machines.

A Shield attached to the main axle closely covers the spur-wheel and large pinion in whatever position the wheel may be in the main frame.

The Spur Wheel and Large Pinion being Chilled and so closely covered by the shield will last the life-time of three ordinary machines, but while costly are a necessity to stand as well as the wheels and main frame of which we have already spoken.

Our Steel Sway Bar is patented, and its position in the machine is controlled by ourselves. It is made of steel and malleable iron, and while light, is so trussed that it cannot spring or kink. Its position under the elevators gives it plenty of room for a long and large center pivot, so that it has no tendency to rock and rub, as have all sway bars with short pivots in the center of the platform. Its pivot is bolted between the sills of the main frame, handy to get at and oil, and is perfectly rigid. Its rigidity must at once commend it, when compared with the splitting and tearing loose at the middle and ends that attend the use of long flexible wood supports. The bar is accurately balanced in all its motions and moving in the same plane, carries the sickle through its long stroke without pounding.

The Crank Wheel is malleable, fitted with a steel pin, and the whole driving mechanism is well nigh indestructible. The sickle can be quickly removed by pulling a single spring key. We urge careful comparison of this device with the wood sway bars and the sway bar supports, and cast crank wheels and pins of so called "all steel machines."



Sectional View of Platform, showing Spring-Tightener for Canvas.

The Spring in the Platform is one of the most valuable of our improvements. No part of the machine is subject to the same wear and strain, nor has to be replaced so often as the platform canvas, or rollers and guides. To all such weak spots we have given our attention. The rollers run in metal boxes in place of in the wood guides. The coil spring is so fitted to the frame that the roller is kept true and *the canvas always tight.* This arrangement is costly to make, but is only another illustration of the fact that we are not sparing money in making these the best machines in the world. We appreciate the words of praise and testimonials we have received from the many users of our machine, in which they tell of the canvas, buckles, straps and rollers saved and the ease of draft when the apron contracts in the dew and wet, compared with the rigid roller, as well as the trouble and time saved in not having to be continually adjusting the canvas.

Our Platform Canvas is made from the best grade of No. 5 ducking, weighing 27 ounces to the yard. The straps are carefully selected, and the ends of each slat tacked with buckskin. Other makers of binders use no better than No. 11 ducking, which weighs only 15 ounces to the yard, and costs 16 cents per yard less, thus decreasing the cost of a single canvas 70 cents.

It costs more to make the McCormick than any other machine. The quality is in it.

The Cutter Bar, Guards and Sickle are having more attention paid to them than ever before. Our new guard has the ledger plate running back to the bar, so the sickle must always lie flat, and not only have a close steel shear surface for cutting, but also nearly frictionless surface for sliding upon in the rear.

The Back Curtain to prevent the grain from falling too far back on the platform is adjustable by means of a thumb nut, and can quickly be placed in position for the different lengths of grain.

Our Three Horse Evener has a direct tongue draft from well back. It is simple, light, strong, and will not twist and split the tongue. The horses have room and do equal shares of the work. Compare it with the clumsy side draft affairs on other machines.

It costs more to make the McCormick than any other machine! The quality is in it!

A New Three Horse Neck Yoke will be furnished with each machine. The farm teams are seldom worked three abreast, and so the odd horse is very liable to pull off, crowd or forge ahead. By this neck-yoke it will be found that he can be more easily controlled; the whole team will work easier, while in backing and turning it will be of great help.

The Reel.—The formation of a good bundle and the general work of the machine depend greatly upon the right adjustment of a capable reel. The different conditions of grain grown upon the same farm and often in the same field necessitate a reel of great scope and one that is capable of being placed in any position. The quarter movement described by many other reels that are attached to the end of a lever is not sufficient; we use two levers, one for forward and back and the other for up and down motion. No reel made can reach to such a height as ours, nor so quickly be dropped to knock a corn-stalk from the cutter bar. Neither is there one so stiff and firm when ahead straightening down and tangled grain, for the knife. The bearings that carry it are light, neat, strong and very wide; hence it runs without springing or shaking. The support of one side of the reel frame can be adjusted so as to keep it always level, or if desired in rough ground when the grain is very short, the outer end of the reel can be the higher. It is driven from the rear by a wheel that has a double set of sprockets, thus giving two speeds for light and heavy grain. The shaft is of hollow pipe. It is stiff and will not warp, wear or spring as wood shafts are liable to do. Again, we urge a critical examination and comparison on the points of neatness, lightness, strength, durability and great scope of adjustment of our reel.

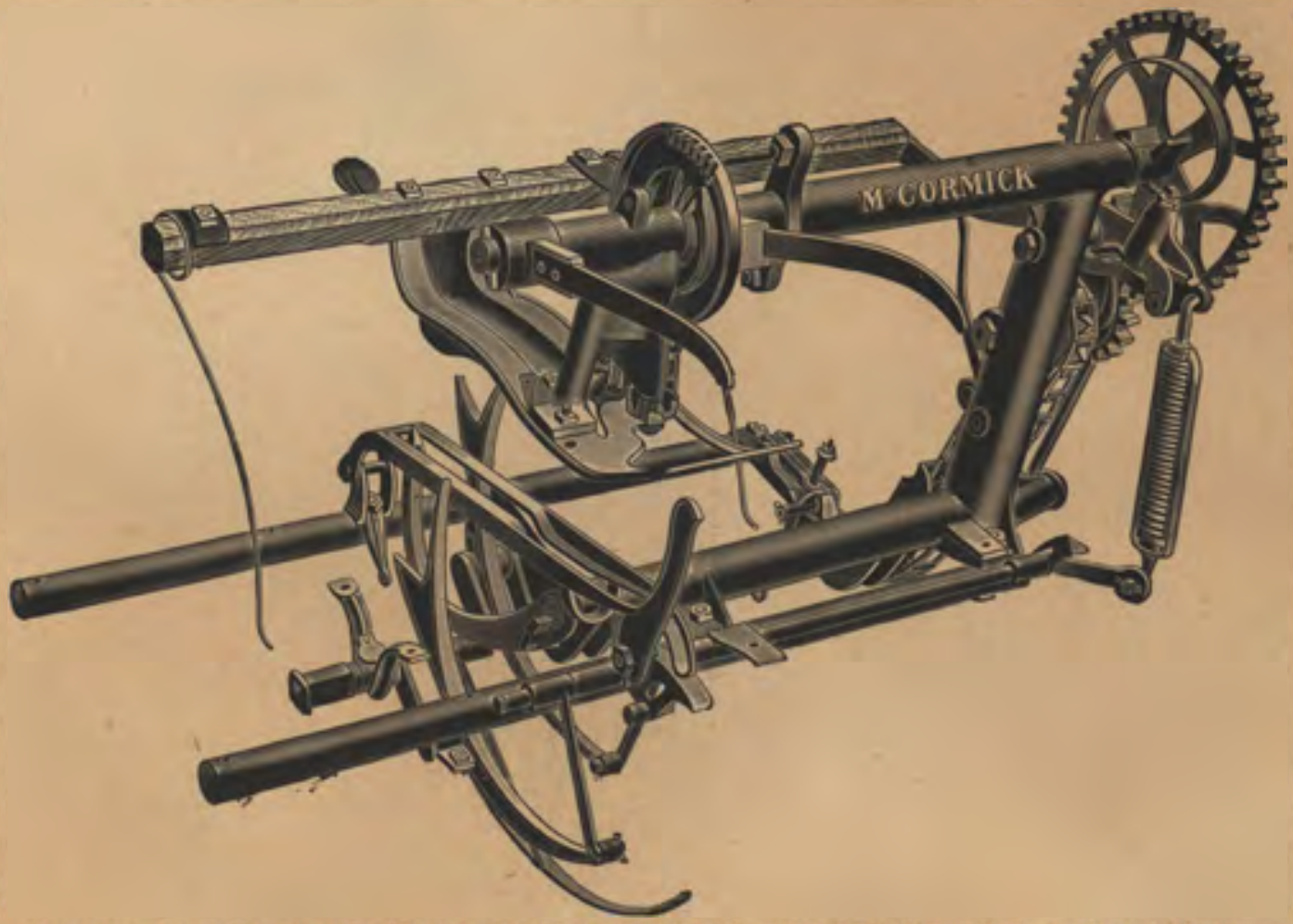
The Machine as a Whole is composed of the more important parts to which we have called your attention and many others which are worthy of consideration when shown in comparison with similar parts of other manufacturers. A glance at it shows how neat, perfectly symmetrical, trim and tasty it is, fit to show with the fine vehicles of the boulevard. The driver, riding on the steel spring seat, overlooking the machine, has the levers for the reel, tilt, gear, adjuster, and binder shifter, conveniently at hand, and controllable at will.

The reins pass through a loop to keep them from the reel, and a socket for the whip is in easy reach.

It costs more to make the McCormick than any other machine! The quality is in it!

The machine is so well balanced that it tilts in whatever position of the Binder by a swaying of the driver's body. With a Binder weighing but 198 pounds, with a machine which balances perfectly when the Binder is in the center of its seven-inch movement, for long and short grain, three and one-half inches forward is but six pounds weight on the end of the tongue. The McCormick front-geared chain Binder challenges all makes of rear and front-geared binders the world over, for a harvester and binder so well-balanced, at all times, during all its extremes of adjustment.

The Machine Runs as a cart, the main wheel and grain wheel being on the same line. The horses are hitched close back, and as the stiff running-gear of a wagon runs easier than the trembling one, so our main frame and wheels, light, yet stiff and sturdy as they are, with the light Binder, reel and elevators, are bound to make the machine run much easier than the light frame, trembling machines, with their heavy binders and elevators, their loads well back, and their wheels out of line. For an "all-round" machine, equally at home in the long and tangled early rye of the Central States, the heavy wheat of the Ohio and Mississippi river bottoms, or the lighter stalk of the spring wheat of the great Northwest, or for a season's work day after day on the same farm with only the diversified cutting and ground usually found, there has never been so light a draft and perfect working machine made. Why? Because the general plan is right; because it is sturdy and of light weight; its gears chilled and well-fitted, its steel shafts running true in Babbitt bushings, its whole mechanism simplified. It is the king of machines, and fitly carries the proud banner which we have unfurled aloft — *The Best in the World.*



FRONT VIEW OF THE McCORMICK LIGHT STEEL BINDER FOR 1888—Without Deck.

OUR NEW BINDER

WITH ITS SIMPLE KNOTTER.

Found Only on the McCormick. Marvelous for its Simplicity. Wonderful for its Accuracy.

The First Twine Binder weighed 800 pounds.
The Early Appleby weighed 400 pounds.
The McCormick weighs 198 pounds.

FOR years the problem has been to get a Binder lighter, more simple, less liable to get out of repair, that could be easily run by the user without necessitating frequent trips to town for the agent or expert. History is but repeating itself when the requirements of the age are met by us in this, our new simple Binder. In it roundabout, complex, mechanical movements have given way to simple ones, with added functions. Power is applied direct. Surplus parts in great number are removed. Weight is greatly decreased, and the Binder originally called Appleby, is now McCormick. The very simplicity insures perfection of work, as nothing can be got out of order. The expert is no longer needed. The farmer has but to drive ahead; the movements are sure; there is nothing to wear out, and the problem of the Binder is solved. How do we know? We have tested them in the shop and in the field. Hundreds, with our new head, were in the hands of the farmers last season, binding the grain of the extreme South and North as well as Australia, England and France. In the early morning dew they did not clog; poor

twine did not foul them; rain had no terrors for them; and the praises of all who used them combine to tell us that they are right. No machine was ever more thoroughly tested, and none ever proved to be so sure. As we build them day by day in our factory, and test each one binding straw, their great superiority over the old machines, in needing no adjustment, is remarkable. Think of it. The equivalent of more than 12,000 acres of grain will have been bound *in testing alone* before our great output for the coming harvest shall have left our works.

They not only tie with unfailing precision and accuracy, but they tie a better, closer-bound bundle than any other machine. Why? Because the parts of the Binder that carry the grain into position to be bound, hold it, and compress it, are better adapted for their purpose than similar parts in any other machine.

Our Adjuster, in easy control of the driver, never fails to carry the grain properly into the Binder. Its frame is very long, shielded above and below, and fitted with a coil spring similar to that used for the platform canvas. The rollers are bushed, the small one with brass. The canvas is specially made for this purpose, of No. 1 U. S. duck, and *a guard* at the upper end of the frame prevents any flapping or fraying. The adjuster is absolutely essential to the good work of the Binder, and hence we have taken much care and gone to great expense to make the very best. We urge careful comparison of our adjuster, its connection to the machine, and general construction, with the devices on any other machine for the same purpose.

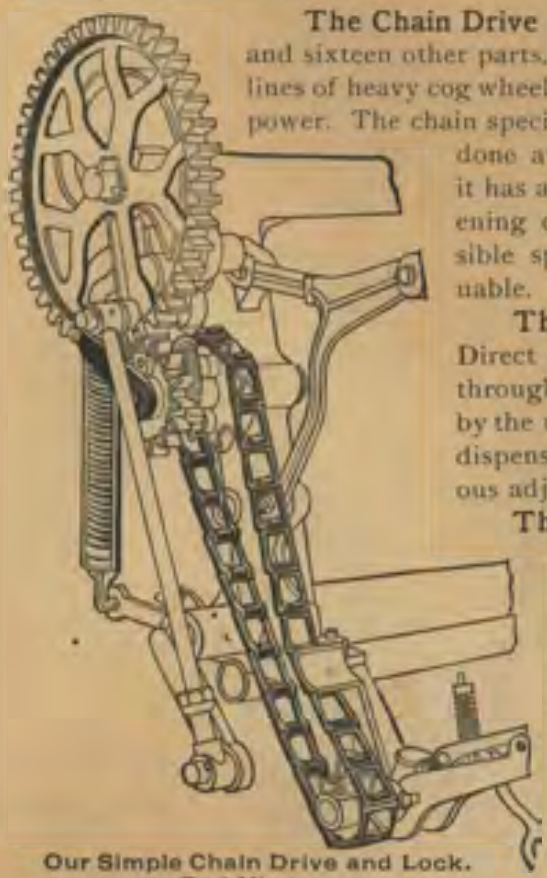
The Lever for Binder Shifter is at the driver's hand, and the Binder being so light is easily and quickly adjusted for long and short grain, so that each bundle can always be bound in the center.

The Trip and Compressor Finger is single, making it much easier to compress and indent the bundle so it can be bound tight, than when the finger is double. The finger is directly attached to the compressor arm, and thus can be quickly set to make any of four different sizes of bundles, without disarranging any other part of the mechanism, or involving adjustment of the trip so difficult in other machines.

The Under Compressor and Table Trip prevents clogging of the Binder, and besides compressing the bundle, facilitates its discharge by dropping out of the way and giving more *throat* to the Binder.

The Sheet Iron Deflector is placed in such a position that the grain will not pass back over the elevators and thus clog the machine. The adjuster, binder shifter, trip finger and under compressor are fundamental in forming a neat, square-butted bundle and tying it tight. In no other machine made are all these requisites found, and hence the user of the McCormick Binder can depend upon a neater, rounder, squarer-butted, better and closer-bound bundle, using less twine than from any other machine. We own and entirely control the under compressor and trip, and when the bundles are being thrown to the thresher, the better condition of those bound by the McCormick speaks louder than words of the final compression given by our under compressor.

Not only is the McCormick Binder noted for its good and reliable work, but its simplicity is marvelous.



Our Simple Chain Drive and Lock. End View.

The Chain Drive alone dispenses with two gear wheels and sixteen other parts. The day has gone by for using long lines of heavy cog wheels solely for the purpose of transmitting power. The chain specially made for this purpose has not only done away with this ancient method, but it has allowed a great simplification and lightening of the Binder. It has also made possible special features that make its use invaluable.

The Tripping Device is one of these. Direct connection with the trip stop is made through the compressor shaft and spring link by the under compressor and trip finger, thus dispensing with the trip shaft and its numerous adjuncts. This device is very simple.

The Twine Take-up Weight has done away with the complicated slack arm of many binders, and is more effective.

The Tension is so made that a knot or enlargement of the twine will not clog it, and still it always keeps the same pressure on the twine whether large or small.

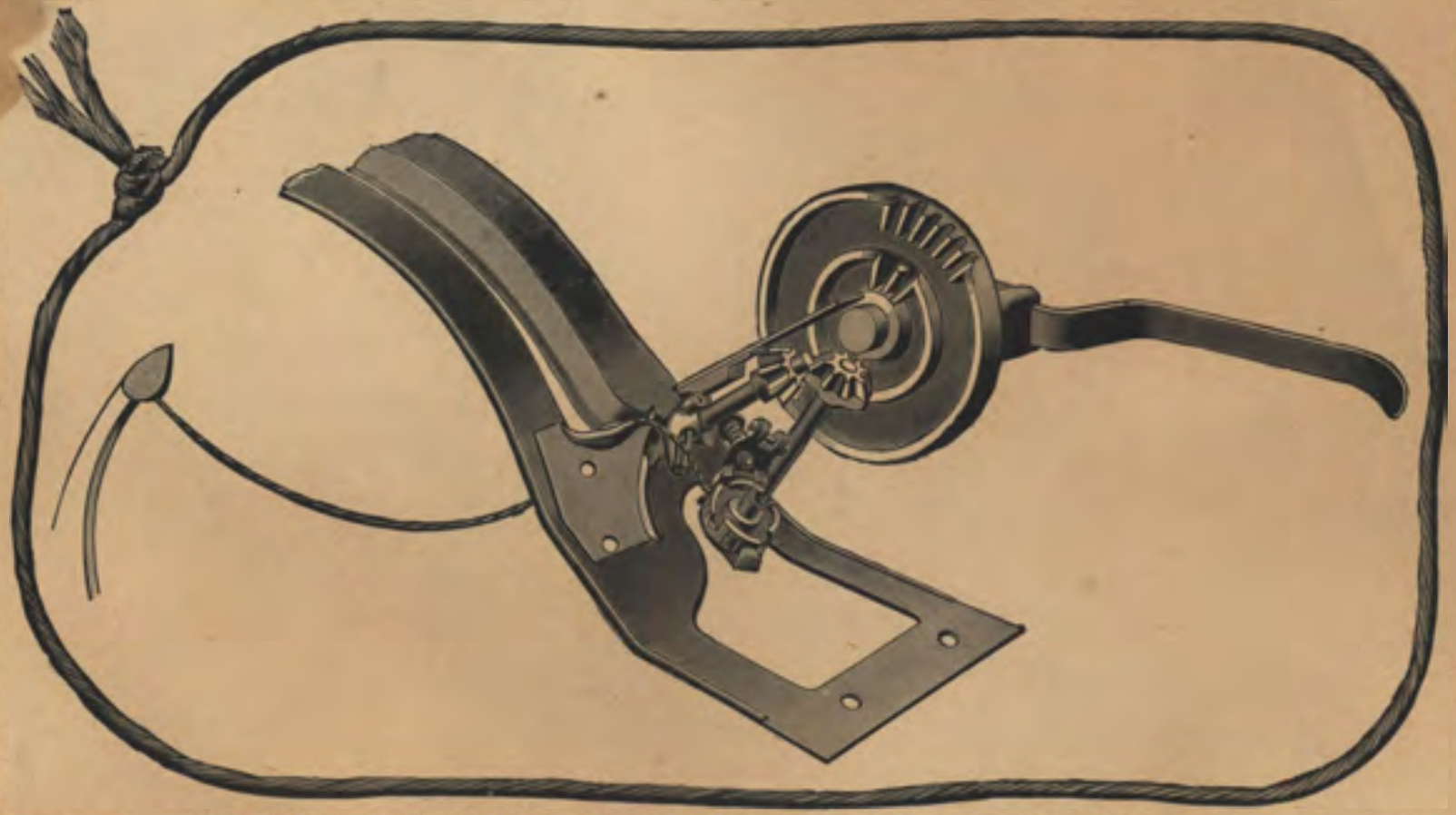
The Lock to keep the Binder from thumping when it is thrown out of gear after binding the bundle, is very neat, sure and simple.

A Removable Leaf in the deck held by a spring catch, can quickly be put to one side, so that the packers, shaft and gearing of the Harvester can be easily reached for oiling.

We have entirely removed the Sword Arm with its attendant parts, the sprocket wheels, gears, chains and shafts with which the average Binder is yet encumbered *beneath the tables*, and nothing remains but the packers and the needle.

We have also Dispensed with Thirty-nine Separate and Distinct Parts, weighing 20 pounds, by our knotter alone. The knotter, chain drive, trip and compressor, and the removal of all the various contrivements *beneath the machine*, make our new McCormick Binder of the simplicity of the wagon. When it is remembered that **our Binder has been reduced the weight of a man** by the throwing out of surplus parts, and its reliability and accuracy thereby increased, *the unwise policy of buying a heavy-geared binder and dragging this man's weight in surplus parts day after day through the field can be seen by the intelligent farmer.*

The exceeding simplicity of our Binder is a guarantee of its durability. The few parts remaining are perfect. Bearing surfaces are hardened, rollers are bushed and motion decreased. The McCormick Binder for 1888 will be found to more than equal the Harvester, which has such great fame as a light, capable, sturdy machine.

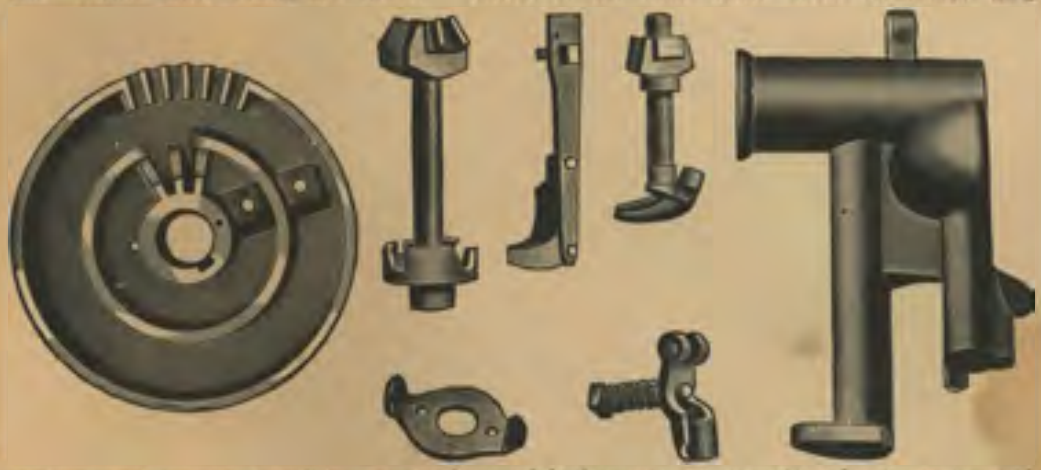


SKELETON VIEW OF THE McCORMICK NEW SIMPLE KNOTTER.

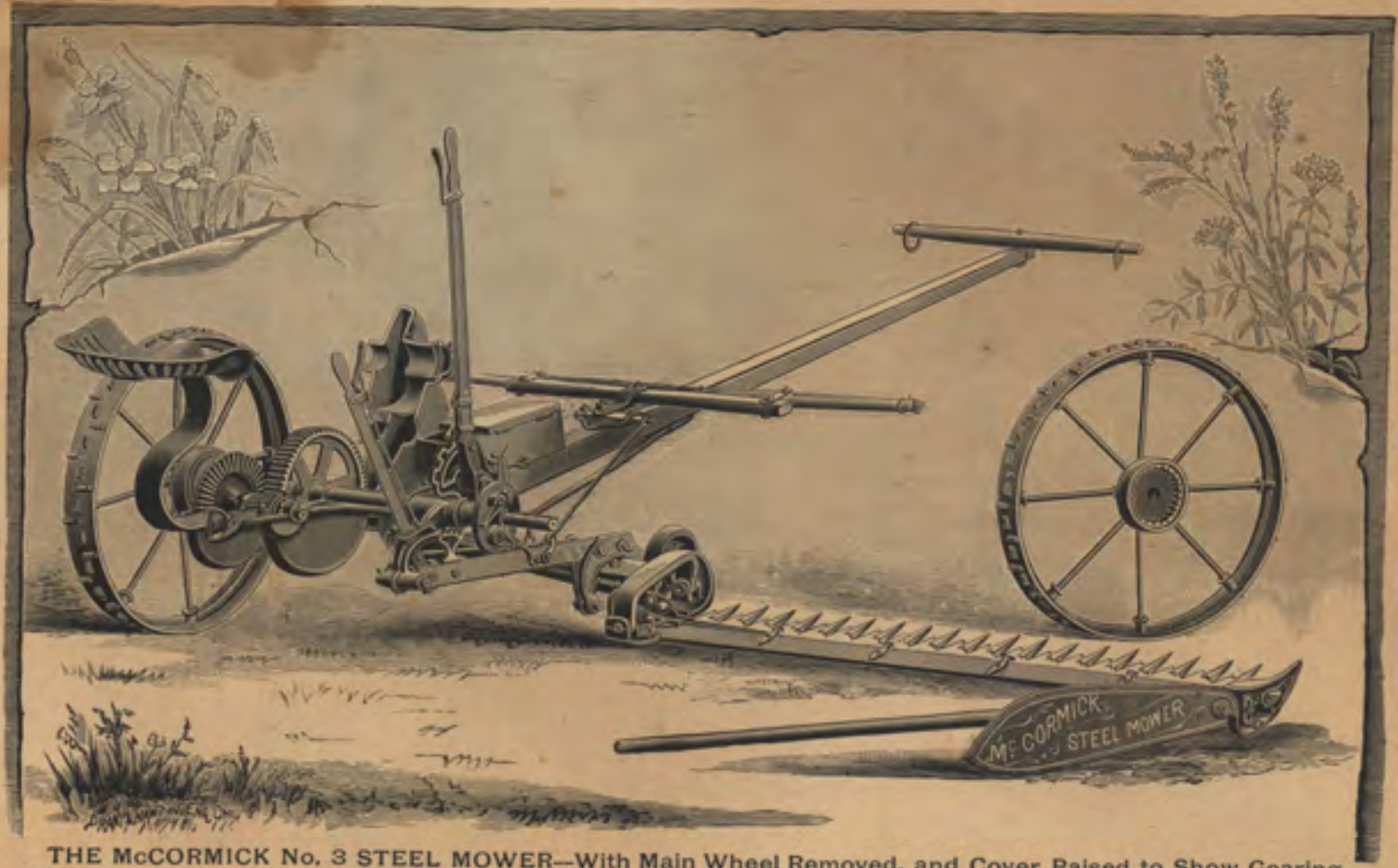
OUR NEW KNOTTER.

Seven Pieces do the Work of Forty-Six in the McCormick Simple Knotter.

THAT seven simple pieces with unfailing regularity tie the knots that render it possible to handle the food supply of the world, seems almost incredible, and can scarcely be comprehended. Especially is it wonderful when the simplicity of these pieces, their slow movement, precision and certainty are seen. Only the knotter, with the spring to hold the bill, the disc and knife, the cord holder, the frame and cam, are used. There is no slim knife arm to twist and



spring and cause trouble, no tucker with its numerous attendant parts and chronic complaints. The malleable breast-plate will not buckle and kink, and the dozen different ways of moving the disc, so complex and liable to lost motion and dyspeptic disorders, all yield the palm to this our simple, sure, easy and reliable movement. The knotter makes its turn, the disc but half a one, and the knot is tied. But two moving parts, and the question of the knot, that so long puzzled the century, is solved.



THE McCORMICK No. 3 STEEL MOWER—With Main Wheel Removed, and Cover Raised to Show Gearing.

THE McCORMICK

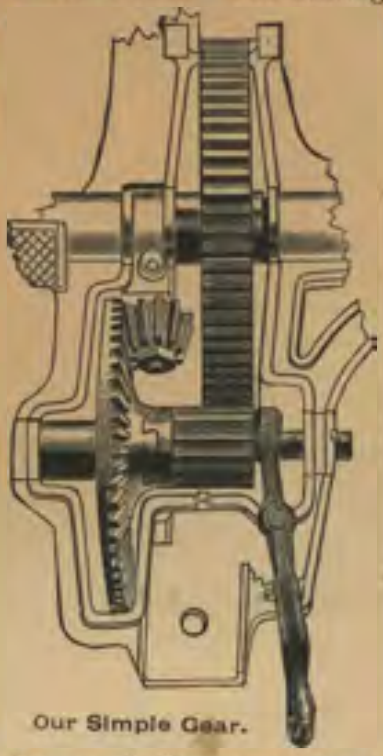
STEEL MOWER

No. 3.

THIS machine went successfully through the past season, and proved itself eminently worthy to be sold with our Harvester and Binder. However adverse the conditions it has been equal to all emergencies.

The McCormick Iron Mower was the pioneer in enclosed gear machines, and so great was its merit that almost all others copied after it. Always progressive and ever seeking the best, we were not content to allow the methods of past years to remain unstudied and unexperimented upon, and so, when getting ready to build this steel machine we began at the groundwork, viz: THE APPLICATION OF THE POWER. Remembering that all power gained by the lever is at the expense of distance, and therefore as the drive-wheel is but a lever, the larger it was made the greater amount of gearing that must be used to get the proper speed, the problem became to get the right proportion between the size of the wheels and the amount of gear. The more gearing the greater the friction, and the more the lost motion and consequent "back-lash." When a mower can turn its wheels three inches before the sickle starts to move, too much grass is jammed into the guards, and the machine must be backed to get the knife started by the time the grass is reached. This large amount of gearing and consequent lost motion would necessarily cause the breakage of pitmans and knife-heads by the thousand. We have given especial attention to all these points, and have taken out one wheel entirely from the regular gearing used on all enclosed gear machines; have placed our bevel wheel on a small steel shaft behind the axle; have improved our pawls and ratchets so that one-quarter inch engages a pawl in each wheel, and have thus made the best fitting and simplest gearing in the world, and as fine as though cut by a die. Yet with all this simplification the drive-wheels remain thirty-one inches high.

The Gear is closely encased from dust and dirt. The shipper is close at hand, and is fitted with an improved case of great durability. We wish to call attention to this gearing; to its simplicity, neatness, strength and accuracy of finish. By the placing of the bevel wheel upon a small steel shaft in the rear of the axle, not only is the power increased, but the crank shaft is lengthened almost a foot. The bearings are fitted with our removable *Babbitt bushings*, and they insure, with the length of shaft, a steady, true movement of the fly-wheel.



Our Simple Gear.

Our Pitman is Made of Second-growth Hickory with Swedged Steel Spring Straps, and a universal joint at each end. The bow end of the pitman is up, thus carrying it well off the ground, free from cut grass and obstructions.

The Brass Box has a large oil cavity, and being fitted with a cap that entirely covers the end of the pin, to prevent the waste of oil, needs no more attention than the rest of the machine. Any one who has run a mower knows how important a part of the machine the pitman is. Manufacturers of new-fangled ideas, which they have shown in cuts and lauded to the skies, and which have broken by thousands, also know. We know how important it is, and knowing, unhesitatingly say that our wood pitman, as it is built, cannot be broken. We guarantee it to be the best pitman ever put on a machine.

The Cutter Bar. Upon this largely depends the work of the machine. Never before since we built mowers have we come so near perfection. The guards are polished and perfectly lined to the cutter-bar. They are cut away beneath the bar of the knife so that it cannot gum and clog even in grass covered with dirt. The ledger plates are heavier, and neatly ground and strongly fitted. The sickle plays true, and the bar is perfectly smooth on top, allowing matted and badly-lodged grass that has been cut, to pass back over it.

The Coupling Arm (as shown on opposite page) is made of wrought iron in one piece and is much stronger and lighter than on other mowers. The push-bar for the coupling-arm is parallel with the ground, and is hinged to the arm behind and below it by a cup and saucer connection, so that the cutter-bar will run over, *not into*, rough ground and hummocks. This connection makes a perfect automatic floating-bar. Its principle is right. Machines that have their push-bars hinged above and ahead of their coupling arms, or that have had contrivances added to rigid bars thinking to make them float, are not rightly constructed and must of necessity fail in this purpose.

By the Tilt the guards can be locked down to shave the meadow, or thrown up high to slide over small obstructions, or by the small set-screw the dog can be held from the ratchets and the bar left free to float. The fact that our bar will automatically float when left free to do so makes the McCormick of great advantage over other mowers.

The Lead Wheel is attached to the front end of the coupling brace, and hence is **always resting and running upon the ground whether the bar is tilted up or not.** When the lead wheel is attached to the point of the shoe, as in other machines, and is tilted, it ceases to be of use. The rear of the brace-bar is closely fitted to a steel pin supported by a projection from the main frame. This coupling frame is made for strength and durability, and we urgently ask that it be closely examined. It is absolutely necessary that the cutter-bar be carried without wabble, and that when the machine gets old it retain its position. Look at this connection. We defy the world to produce its equal.

Our Coupling Arm, Lead Wheel and Coil Spring.

There is a Heavy Coil Spring in the heel of the shoe to carry the outer end of the cutter-bar from the ground, and a flat double-leaf spring beneath the tongue to carry the inner end. When it is remembered that thirty-five per cent of the draft of a mower is caused by the bar dragging on the ground, the great economy of horse-power of these springs, and the increased capacity of cut by their employment, can be seen and appreciated.

The Outside Shoe is fitted for either a wheel or supplemental slide, as may be preferred.

For Cutting Weeds this Mower is well adapted. It is not necessary to provide extra attachments to raise the bar, as on other mowers. Our large lead wheel and long slide, when to the extremes of their adjustment, raise the bar five inches.

A New Gag in the heel of the shoe raises the outer end of the bar to clear any obstructions.

This machine is made to stand the hard knocks of the sloughs; to cut the matted clover of clay lands and the wire grass of the prairies. It is an all-round machine built for service, and cannot be beaten.

It costs more to make the McCormick than any other machine. The quality is in it.

THE McCORMICK No. 4 STEEL MOWER IN OPERATION.

THE McCORMICK

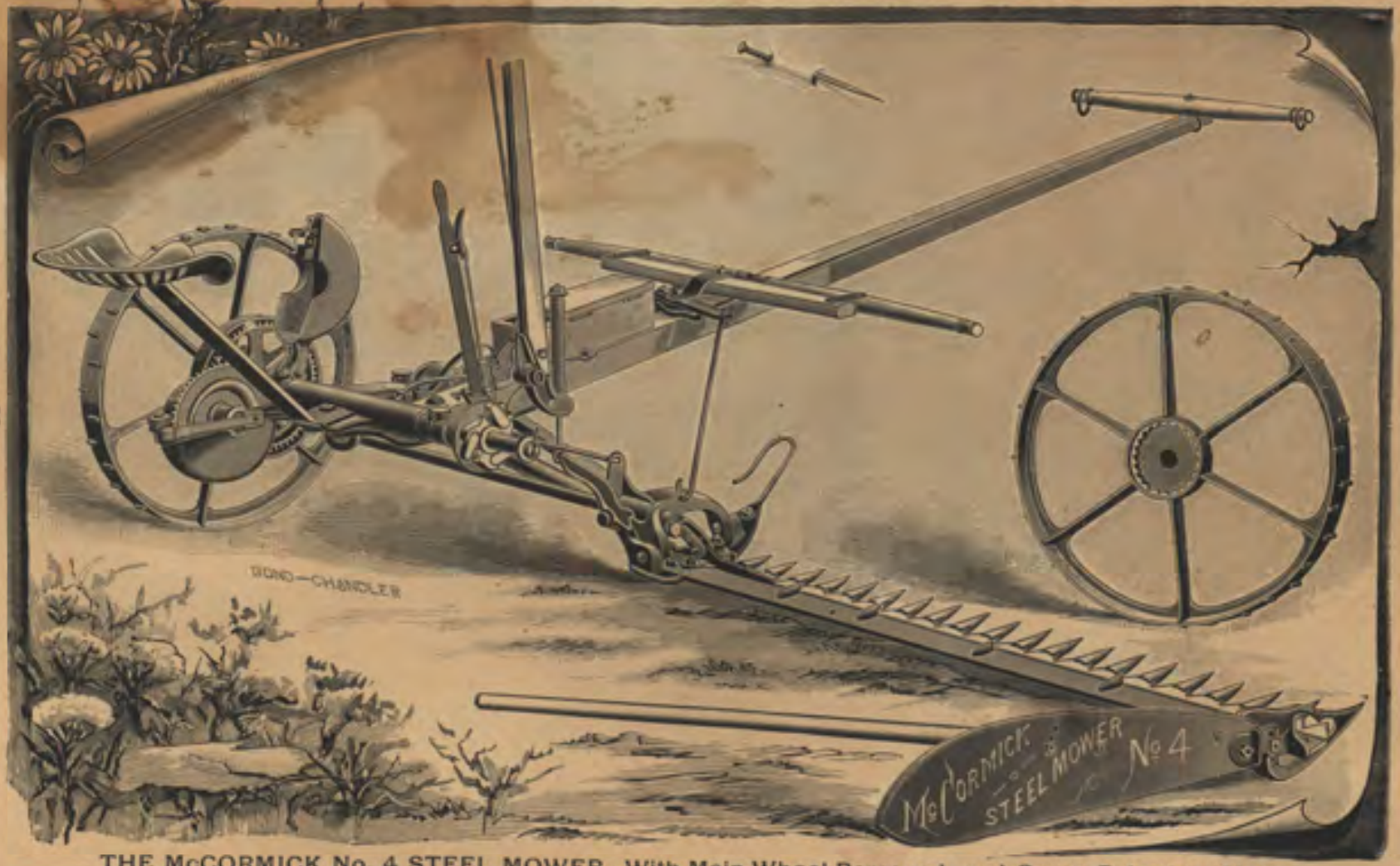
STEEL MOWER

No. 4.

WE built and sold four thousand of these machines during the latter part of the season just past. We wanted a strong, simple, durable and light machine that would contain all the desirable features necessary in a mower. We built this, and in order to test it thoroughly, sent the first hundred to different sections of the country, asking that the most difficult cutting be selected for them and that they be compared with the best of other mowers. It was at once seen that they were very light draft, a five-feet bar being carried with as much ease as a four-feet on other machines; that they ran almost noiselessly; could stop and start without backing in any kind of grass, and had great power as cutters. These qualities and the fact that we could sell them for a little less than our No. 3 Steel Mower, produced such a demand for them that from then on, the whole capacity of the Mower department of our great works was taxed in building them.

Such essential features of our steel machine as the pitman, gear and cutter-bar, were used with only slight changes, while the knives, guards and wheels are the same. The main frame for the coming season will be fitted with our well tried *Babbitt bushings*, which will insure easy running and prevent any tendency to heat.

The Spur Wheel is cast with the left ratchet plate, throwing the gearing close to the wheel, thus making it possible to keep the crank wheel high off the ground and to make the pitman the longest ever used on any mower.



THE McCORMICK No. 4 STEEL MOWER—With Main Wheel Removed, and Cover Raised to Show Simplicity of Gearing.

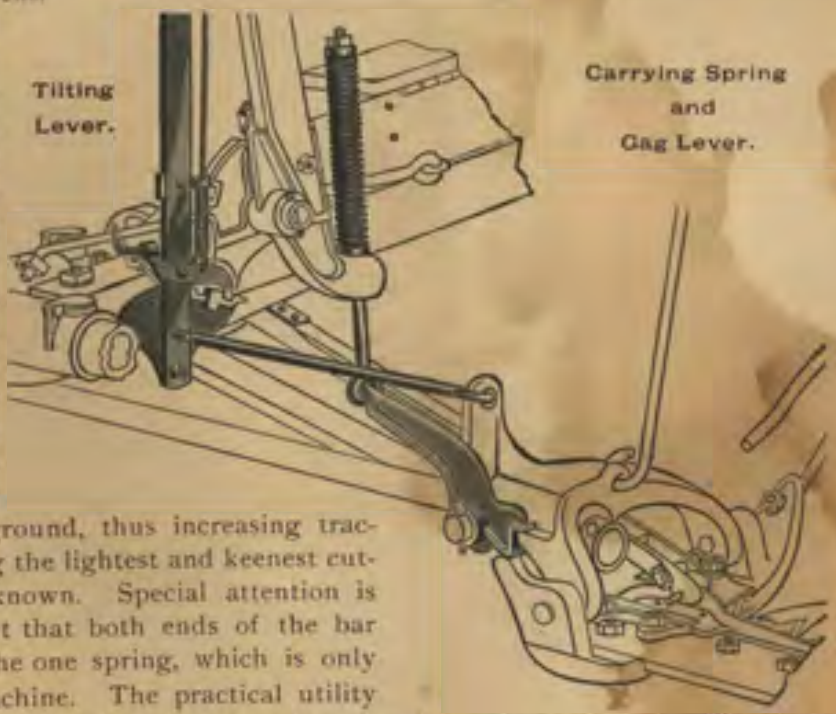
The Pitman is of our second-growth hickory, with **swedged steel fittings** at both ends and universal joints, a form that has been so well tested in all kinds of cutting for the last four years, on our Steel and other Mowers. One of our **patented brass boxes** will be used on the crank for the coming season.

The bow end of the pitman being upward and the crank wheel set high, the pitman is entirely clear of obstructions, and heavy cut grass, such as clover and alfalfa, will readily pass under without dragging. The great length of the pitman and its straight connection to the knife make a powerful drive, and prevent pounding and the consequent breaking of knife heads and the buckling of knives.

The "Y" Coupling Arm is made of one piece of wrought iron, and is light, neat and strong.

The Shoe Hinge is carefully pivoted to the coupling arm, and is rotated by the tilting lever at the will of the operator, so that the guards can be locked close to the ground, pulled up high, or by using the thumb screw, which holds the pawl from the ratchets, the bar floats automatically. In the diversified ground of the average farm all these movements will be found necessary.

A Draft Rod is attached well out to the shoe, making it impossible to spring the coupling arm, however great the force with which an obstruction may be hit. The hook, being ahead of the coupling arm, the draft of the horses tends to lightly carry the bar over rough ground without allowing the guards to plow into the hummocks.



A Heavy Coil Spring by means of an ingenious gag lever is pivoted to the shoe hinge, one end of which, resting on a bracket from the shoe, serves to carry both ends of the cutter-bar on the wheels so that it bears lightly on the ground, thus increasing traction and making the lightest and keenest cutting machine known. Special attention is called to the fact that both ends of the bar are carried by the one spring, which is only true of this machine. The practical utility of the spring in carrying the cutter-bar has been demonstrated. The draft has been tested by the dynamometer, and the great saving of power—nearly thirty-five per cent—has been shown. We urge a careful examination of this our simple method of increasing capacity without addition of power.

The Cutter Bar, Guards and Knives, the essential parts of the machine, are the same as on our Steel Mower, and have had our closest inspection. The

IMPROVED DAISY REAPER.

polished guards are cut away beneath the knife bar, so there will be no gumming and clogging in overflowed bottom lands. The ledger plates are firmer and heavier. The guard bolts are countersunk in the cold-rolled finger-bar with the nuts below, thus making a perfectly smooth face for the cut grass to pass over — all combining to make this the best cutting mechanism ever put on a mower.

A Ferrule inside of the spring is of use in raising the cutter-bar, the outer end of which, by means of the gag, is lifted to a great height, allowing it to freely pass over stumps, stones and other obstructions.

The Gearing, with but three cog wheels, is the simplest ever put on any mower. It is of the double-geared type with a bevel wheel mounted upon a small steel eccentric shaft in the rear of the axle, thus dispensing with clutches to throw it in and out of gear. The construction of this gear and its simplicity is very important in preventing "back-lash," and keeping a steady motion.

The well fitted cutting mechanism, the simple gear, the long pitman and the spring combine to make this machine the lightest draft and the most perfect cutter the farmer has ever seen. It is the simplest Mower made, unencumbered by useless parts, neat, trim, strong and durable, and will be found without fault. We give it our broadest warrant.

THE DAISY.

A Single Light Reaper.

THE first McCormick Reaper, built fifty-six years ago, was a single reaper, a one-wheeled machine, and though great and wonderful changes have been made through combined reapers and mowers into harvesters and binders, yet still the demand continues for a light, handy reaper, built simply for cutting grain and raking it off in bundles ready for binding.

The Daisy is a one-wheeled reaper, five feet cut, and so arranged that both ends of the platform can be raised simultaneously to any desired height of cut, by means of a convenient lever, while another lever tilts the cutting edge to any angle required for picking up lodged grain, and these changes can be made while the machine is in motion. The main wheel is on a line with the small grain wheel, enabling the machine to back and turn with great facility. There is no cog gearing in the main wheel to gather dirt or straw, and as all the motions of gearing, rake and tripping devices are accurately timed and positive, and arranged so that the operator can size the bundles to suit the grain, its operation will be found simple, positive and reliable. A neat, strong cast iron frame connects the main wheel axle to the frame, gives solidity to the entire gearing, and prevents the slightest tendency to any binding or cramping in the bearings of the main wheel. As a consequence, all the gearing runs freely and easily, a feature of prime importance, for which all the McCormick machines are noted.

The entire machine has been remodeled and improved, wooden pitman added, and in various minor ways made neater, stronger and more attractive, while its efficiency has been largely increased.

JANUARY.

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

The McCormick is moving ahead in Australia and New Zealand.

FEBRUARY.

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	..	..
..	..	..	..	..	..	..

The McCormick is working in New Zealand.

MARCH.

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
..	..	..	..	..	..	..

The McCormick is reaping the harvest in the valleys of Mexico.

APRIL.

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	..	..	..	..	..
..	..	..	..	..	..	..

The McCormick is occupied in Mexico, Texas and California.

MAY.

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..
..	..	..	..	..	..	..

The McCormick is at work in Texas, Cal, Ga., Miss., the Carolinas, Ala. and Arizona.

JUNE.

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
..	..	..	..	..	..	..

The McCormick is active in Kas., Mo., Va., Tenn., Ky., Ga., Italy and Spain.

JULY.

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

The McCormick is busy in Ill., Iowa, Mo., M'd. Ind., Neb., Col., Utah Wis., N.Y., Ohio, Mich., France, Austria, Russia and Asia.

AUGUST.

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	..
..	..	..	..	..	..	..

The McCormick is at work in Minn., Dak., Ore., Wash. Ter., Idaho France, England, Russia and Asia.

DECEMBER.

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

The McCormick is in the field in Australia The Argentine Republic, New Zealand and South Africa.

NOVEMBER.

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	..
..	..	..	..	..	..	..

The McCormick is now seen working in Southern Africa, Argentine Republic, Uruguay and Australia.

OCTOBER.

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..
..	..	..	..	..	..	..

The McCormick is humming away in the northern portions of Dakota, Montana and Manitoba

SEPTEMBER.

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	..	..	..	..	..	..

The McCormick is pushing ahead in Dakota, Montana Manitoba and Scotland.

DONOHUE & HENNEBERRY, Printers and Binders, Chicago, Ill.

McCORMICK.

BLUE JAY TW.

Made solely for us and under our supervision. We unhesitatingly pronounce it the most economical and the best Twine ever offered to the Farmer. Why? Because it has the right size and requisite softness, with low twist and extreme evenness, and has greater strength and greater length than any Twine heretofore produced. These qualities are made possible only by our special method of manufacturing.

ASK THE McCORMICK AGENT FOR IT.

TRY IT AND YOU WILL USE NO OTHER.

Our Blue Jay Twine is composed of a carefully, even-spun center, around which the second spinning of two-thirds Manila is ingeniously spun, thus giving it a double spinning and guaranteeing our customers the best twine ever made. We are the largest handlers of Twine in the world, and have a double interest, as every farmer knows, in handling only the best, thus insuring the good working of our machines. We have also pure Manila, and pure Sisal in any quantity, which bear our tag. For sale by McCormick agents only.

The McCormick Harvesting Machine Co.