

UMASS/AMHERST



312066005066224

LIBRARY
OF THE



MASSACHUSETTS
AGRICULTURAL
COLLEGE

NO. 34331 DATE 6-7-11

SOURCE J. H. Co.

6

v. 2

S
677
152
v. 2

ARCHIVES
COLLECTIONS

SPECIAL COLLECTIONS

VO

DATE DUE			

CARD

International harvester company

Farm implements

v. 2

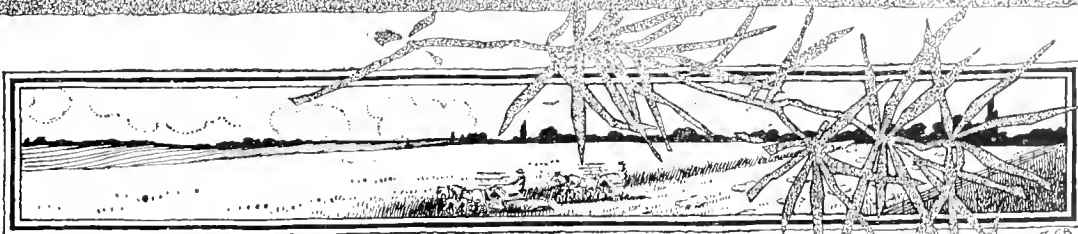
630.021

Ir 2

v. 2

Ms Cormick





McCORMICK

Industrial Progress

PROGRESS means to make improvement—to advance. For a farmer, it means the use of any machine which will increase crops with the least work. When you progress you are striving for easier methods of doing things, better ways of living, and the attainment of all improvements which will help you to live comfortably so that you can enjoy your work, and at the same time relish the free, fresh air and sunshine.

Are you doing it? Do you progress? The greatest advance ever made in any country cannot compare with the wonderful magic-like improvement of agriculture since the invention of the self-binder. With it there came a mighty forward movement in farming methods—a change from old ways to new, so that today, farmers are the most talked of and the most prosperous men in the world.

Farmers are making money and those who make the most are men who follow new methods, men who progress, men who use modern labor-saving farm machines—up-to-date binders, hay rakes, mowers, hay tedders, reapers, harrows, cultivators, etc.

Are you up-to-date? Are you using modern farm machines? Look at your equipment. Aren't some of your machines pretty well worn? Shouldn't you replace them? Don't follow old methods. Waste products of yesterday are profits today and you cannot afford to miss your money-making chances. You wouldn't like to go back to the days when there were no harvesting machines because you appreciate what improved farm machines mean to you.

There is no line of farm machines superior to the McCormick. These machines are used in every civilized country of the world and are recommended by the men who own them. The machines could have no better recommendation than this. It is to your interest to own McCormick machines, which are described in detail on the following pages.

INTERNATIONAL HARVESTER COMPANY OF AMERICA

(INCORPORATED)

CHICAGO

U S A



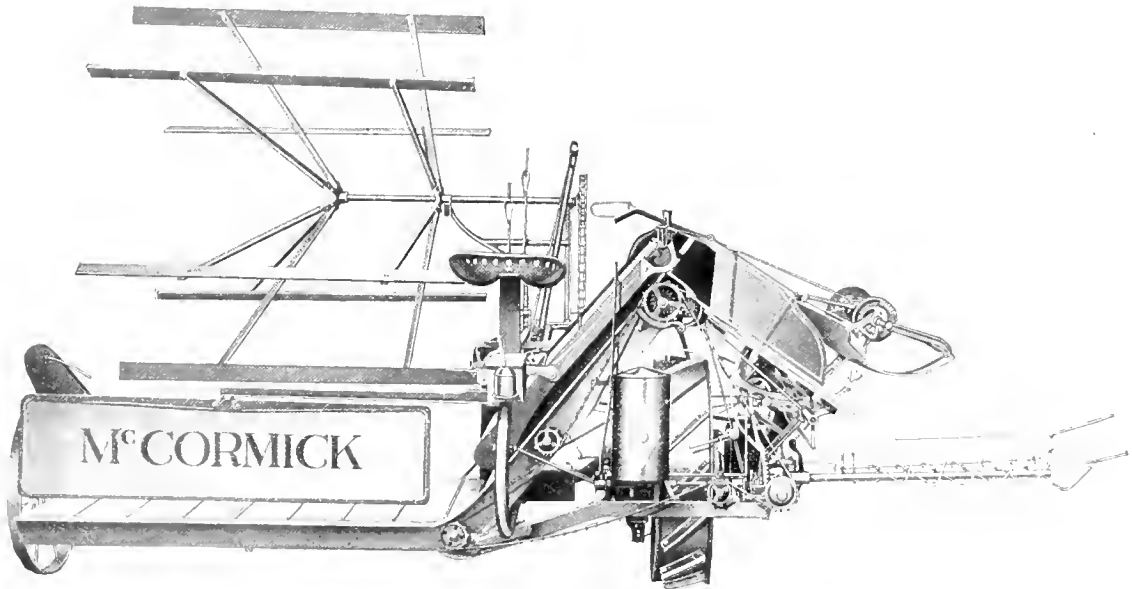
Look for the IHC Trade Mark. It is a Seal of Excellence and a Guarantee of Quality

M C C O R M I C K

McCormick Binder

THE McCormick binder is the outgrowth of the first reaper which was invented in 1831, and has always been the standard of construction. The reason for this is that the machine has progressed with the times it has been improved each year so that it is now a model of perfection. The McCormick binder naturally has an excellent reputation because it has done splendid work for so many years in all countries of the world. Thousands of these machines are in use and each farmer who owns one appreciates the features which make it efficient.

When grain is down and tangled, the McCormick binder will cut it successfully because the reel and the platform can be adjusted readily to meet the conditions. All bearings are accessible for oiling. The machine is easy to operate and light in draft, because it is equipped with ball and roller bearings which minimize friction. The McCormick binder is noted for its durability, which is a result of strong construction and the use of proper material.



McCormick Left-Hand Binder 5, 6, and 7-foot cut

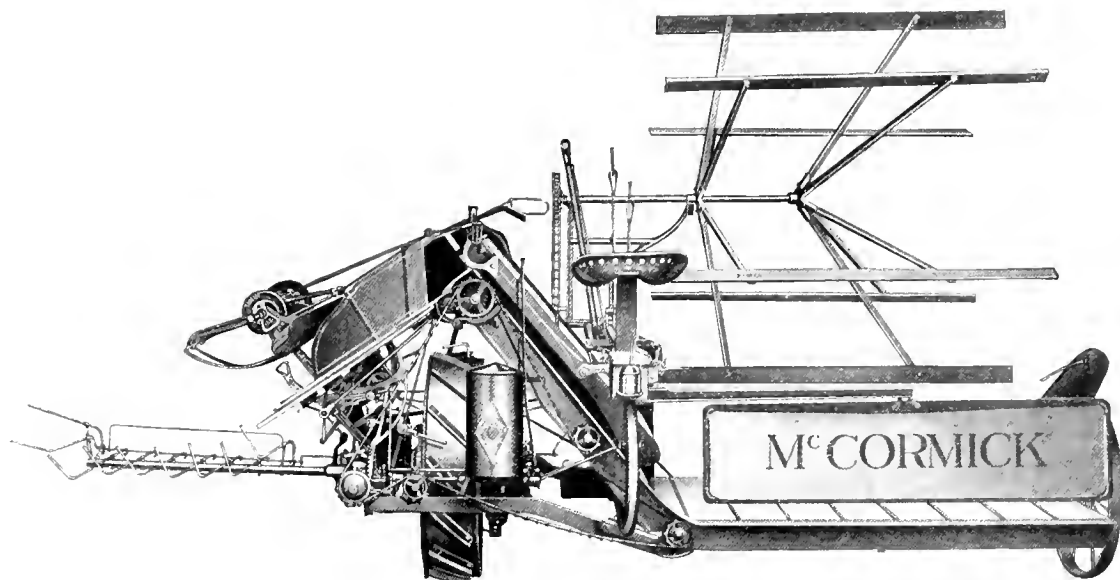
MCCORMICK

McCormick Binder

THE main frame is made entirely of angle steel and tubular cross-sills. Square tubing is used because it has the greatest torsional strength of any form of steel. The chains are exceptionally strong and durable— to be sure that they contain no defective links, each one is tested under severe pressure before it leaves the factory.

The main and grain wheels are strong, yet light. They are made of steel. The steel tube yoke adds strength to the frame. It extends from the front to the rear of the binder and back again, so that it serves as a support and double brace for the elevators.

Self-aligning bearings prevent binding on the shafts. The reel has a wide range of adjustment. It can be lifted high for cutting tall grain or set very low in case the grain is down and tangled. The dividers can be folded, which is a convenience when it is desired to store or transport the binder. The platform canvas tightener increases the durability of the canvas. Operating levers are conveniently arranged. The tilting and reel adjusting levers are in front and the lever to change the butter is right under the hand, an adjustment entirely lacking on some machines. The binder shifter lever is right at the side of the seat. The binder can be raised and lowered easily by means of the devices provided for that purpose on the main and grain wheels.

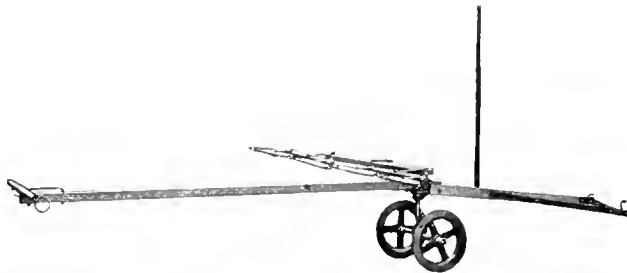


McCormick Right-Hand Binder—5, 6, and 7-foot cut

MCCORMICK

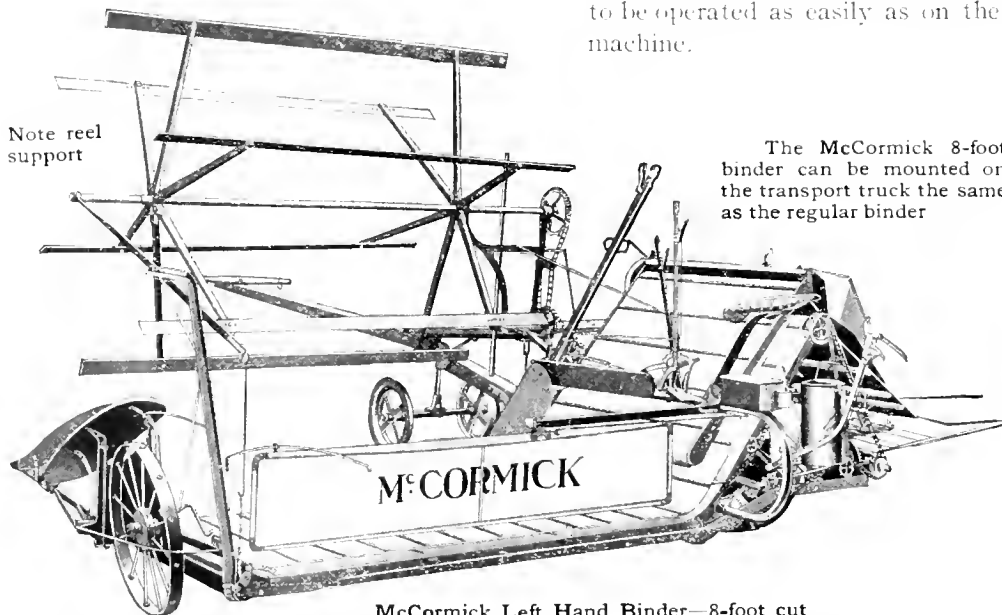
McCormick Wide Cut Binder

THIS machine has been designed for use on large farms where a large area of grain is grown. It is larger than the ordinary binder and cuts an 8-foot swath. The machine is regularly equipped with a tongue truck, as shown in the illustration. This tongue truck makes it possible for the team to pull the binder more easily and the machine is given a steadier and smoother motion, thus the strain on both the binder and the team is reduced. The advantage of the tongue truck is that it prevents neck weight, side draft, and tongue lashing. When the machine is equipped with a tongue truck, corners can be turned easily and quickly. The tongue truck can be supplied with the smaller machine at a slight additional cost.



Tongue Truck

Another advantage of the wide cut binder is that the outer end of the reel is held up by an improved reel support. This support holds the reel firmly in place and prevents the reel slats from whipping down and catching on the guards when either the main or grain wheels drop into a dead furrow or other depressions. The outer reel support on this machine permits the reel to be operated as easily as on the smaller machine.



Note reel support

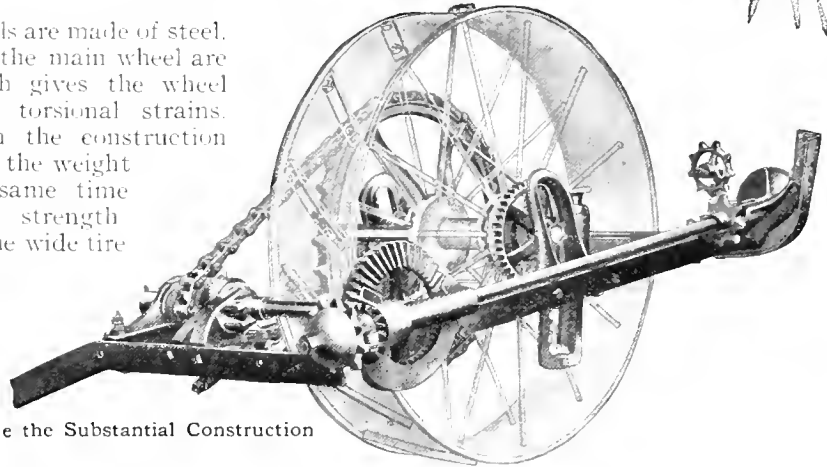
The McCormick 8-foot binder can be mounted on the transport truck the same as the regular binder

McCormick Left Hand Binder—8-foot cut

McCormick

Wheels

THE main and grain wheels are made of steel. The edges of the rim on the main wheel are made extra thick, which gives the wheel sufficient strength to resist torsional strains. Hairpin spokes are used in the construction of the main wheel to reduce the weight of the wheel and at the same time obtain the greatest possible strength. Heavy lugs are fastened to the wide tire of the main wheel in order to provide the greatest possible tractive power. The main and grain wheels are both equipped with roller bearings.

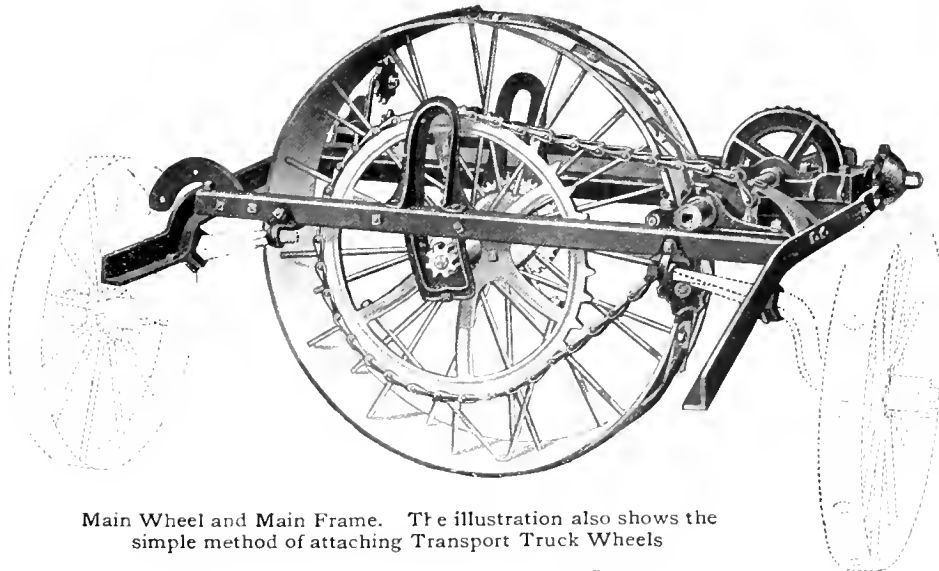


Note the Substantial Construction

Main Frame

The McCormick harvester* main frame is made entirely of angle steel and tubular cross-sills. This material has the greatest torsional strength of any form of steel. The size of the angles and tubes is proportioned so that the greatest strength is combined with the least weight. On account of the proper construction of the main frame, the McCormick binder is durable and has weight enough to make it wear well, yet at the same time it is light enough to run easily. The cross-sills fit accurately into the steel angles of the main frame and are bolted together securely, so that a solid foundation is formed for the brackets which support the main wheel.

This construction not only insures rigidity but also a solid and broad surface for attaching the different parts without the use of extra castings. The square steel tubing used in the construction of the McCormick frame has been severely tested to prove that it will not twist, bend, or spring. This means that the bearings will always be held in perfect alignment.

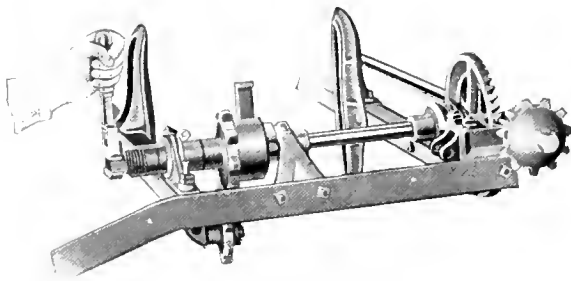


Main Wheel and Main Frame. The illustration also shows the simple method of attaching Transport Truck Wheels

Adjustment of the Countershaft

THE bevel gears on the end of the countershaft can be kept in perfect mesh by means of the adjustment which is provided at the end of the countershaft. The illustration shows how the adjustment is made. By adjusting the threaded portion of the outer end of the shaft the gears can be kept in proper mesh at all times.

Gears



Adjusting the Countershaft

Users of grain binders know that the draft of the machine is largely determined by the construction of the gears. McCormick gears are designed to reduce friction and are strong and durable.

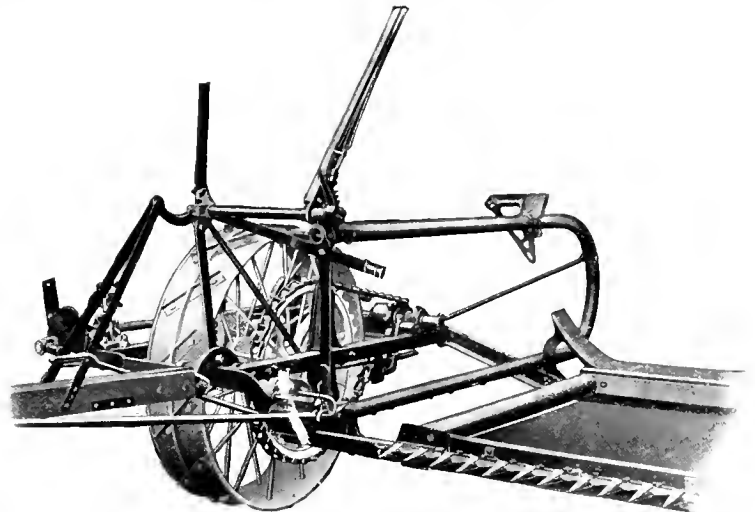
The crank shaft turns in extremely long bearings which insure accuracy of alignment and light running qualities. The counter and crank shaft bearing is so constructed that it forms a shield over the wheel and is connected to the frame in such a way that the bevel gears cannot be sprung apart.

Transmission of Power

Power for the entire machine is transmitted from the main wheel by means of a strong drive chain to the countershaft at the rear of the machine. The countershaft drives the bevel gears which transmit the power to drive the knife, reel, elevators and the binding attachment. Power is transmitted in such a way that motive force is evenly distributed and the strain on the various parts of the frame equalized. The knife is driven with a long steel pitman placed in such a position that it drives the knife with a direct stroke.

Chains

The chains which drive the various parts of the McCormick binder are made of malleable iron. The links of the main chain are fastened with steel pins. This makes the main chain exceptionally strong and durable. Malleable iron is used because it does not wear the sprockets as much as if steel chains were used. The main drive chain is kept in perfect tension by means of an automatic chain tightener.



Note the Solid Connection between the Platform and Main Frame

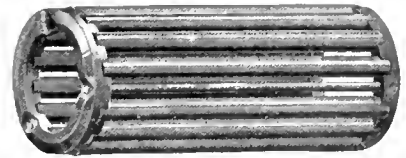
MCCORMICK

Bearings

THE reason the McCormick binder is light in draft is because it is equipped with ball and roller bearings. One of the roller bearings is shown in the illustration. Roller bearings are made of special steel properly tempered and hardened. They run in self-aligning removable bushings so that there is no possibility of any binding or twisting on the shafts.

Platform

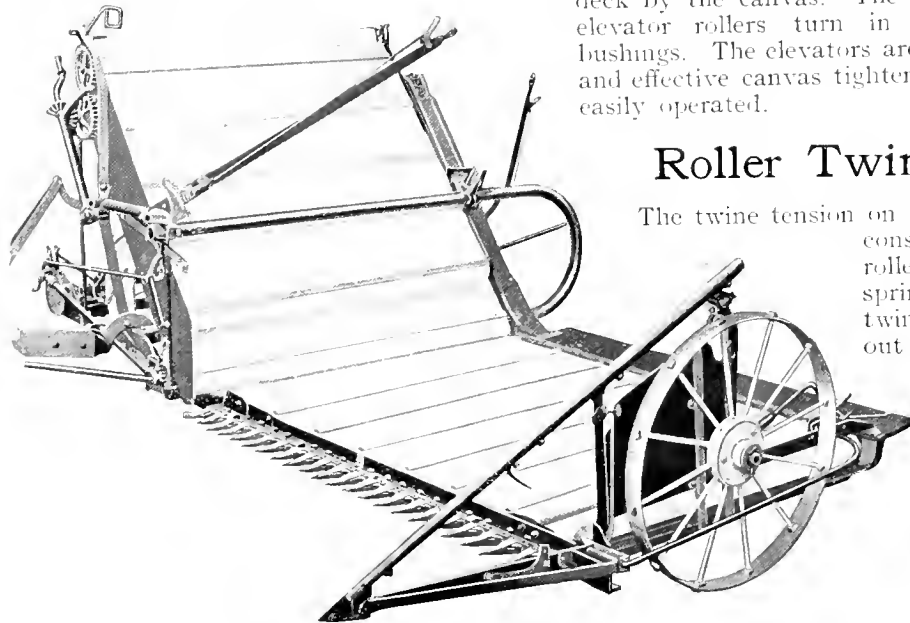
The platform frame is made of angle steel, reinforced by heavy cross-sills to which the one-piece steel bottom is riveted. There are no joints, consequently the platform will not warp or twist. The bottom is fastened to the sill in such a way that the sill receives the wear instead of the sheet steel bottom.



Roller Bearing

Elevators

The McCormick elevators will handle grain of any length in almost any condition without clogging. They are so constructed that they have the large capacity required for the successful elevation of grain from the platform to the binder deck. The frame of the elevator is very strong and the elevators are wide to permit the passage of the longest grain. They are open at the rear so that the heads of the grain will not be shattered. A deck roller has been added to insure perfect delivery of short grain and prevent it from being carried between the elevator and binder deck by the canvas. The bearings of the lower elevator rollers turn in removable hard-wood bushings. The elevators are provided with simple and effective canvas tightening devices which are easily operated.



Substantial Platform and Elevator

Roller Twine Tension

The twine tension on the McCormick binder consists of two corrugated rollers held together by a spring which allows the twine to pass freely without tangling or kinking. With this tension there is no necessity for re-threading the needle when a ball of twine has been used, because after tying the ends of the twine together the knot passes through the tension.

Knotter

THE McCormick knotter is so simple in construction and so easily kept in adjustment that it seldom gets out of order.

Each knotter is thoroughly tested before it is shipped, which, in a large measure, accounts for the excellent work of the McCormick binder in the field.



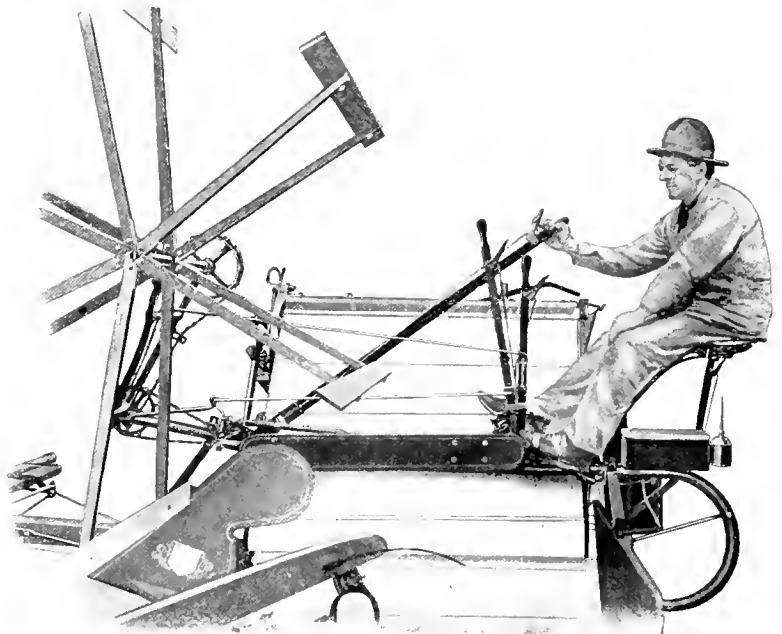
A Practical Knotter

Reel

The McCormick reel is fastened to the front of the elevator frame and to the tubular, steel braced frame which supports the seat and braces the elevator. This construction insures a rigid reel base. The bearing on the McCormick reel shaft is extremely long. This feature insures durability and practically eliminates sag. The reel is driven by chains. The action of the reel is controlled by two levers and the range of adjustment is sufficient so that good work can be done in long or short grain.

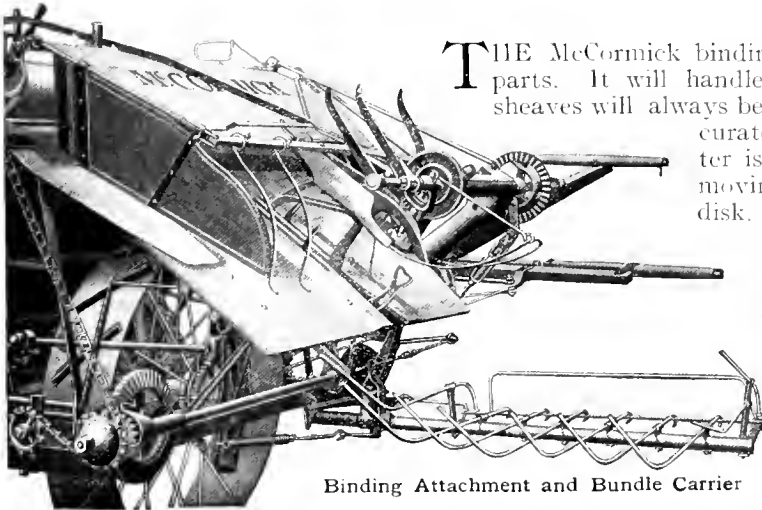
Lever

The illustration shows how conveniently the operating levers of the McCormick binder are arranged. The ease with which the McCormick levers can be operated enables the driver to handle the machine in the harvest field easily, no matter whether the grain is tall or short, thick or thin, straight or tangled. The tilting and reel adjusting levers are in front of the driver, and the lever to change the butter is right under the driver's hand—an adjustment entirely lacking on some machines. The binder shifter lever is also easily reached because it is right beside the seat. By means of the binder shifter lever the binding attachment can be shifted easily and quickly for different conditions of grain, so that the band will always be placed around the middle of the bundle.



Convenient Levers

Binding Attachment



Binding Attachment and Bundle Carrier

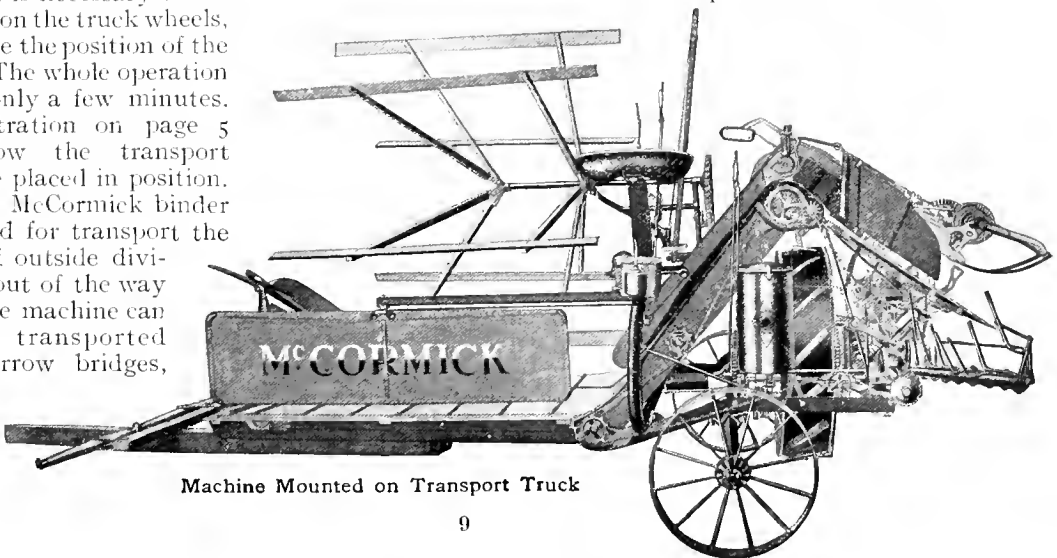
THE McCormick binding attachment has few parts. It will handle grain of any length and the sheaves will always be tied around the center by the accurate knotter. The McCormick knotter is very simple, as it has only two moving parts—the bill hook and twine disk. These two parts work in a substantial and accurately constructed frame. When the knot is tied the twine is fed to the bill hook by the twine holder which revolves toward and in the direction in which the bill hook moves. This does away with straining and pulling of twine and makes a perfect knot certain.

Cutting Mechanism

The knife of the McCormick binder runs smoothly and is driven by a direct stroke of the pitman. The guards are fitted with removable steel ledger plates which materially increase the durability of the cutting mechanism. The guards are held in perfect alignment by a strong cutter bar which is fastened to the rigid platform. The knives are tempered in oil which makes them exceedingly tough.

Transport Truck

All that is necessary to mount the McCormick binder on the transport truck is to raise the machine, put on the truck wheels, and change the position of the tongue. The whole operation requires only a few minutes. The illustration on page 5 shows how the transport wheels are placed in position. When the McCormick binder is mounted for transport the inside and outside dividers fold out of the way so that the machine can easily be transported across narrow bridges, through narrow lanes and gates.

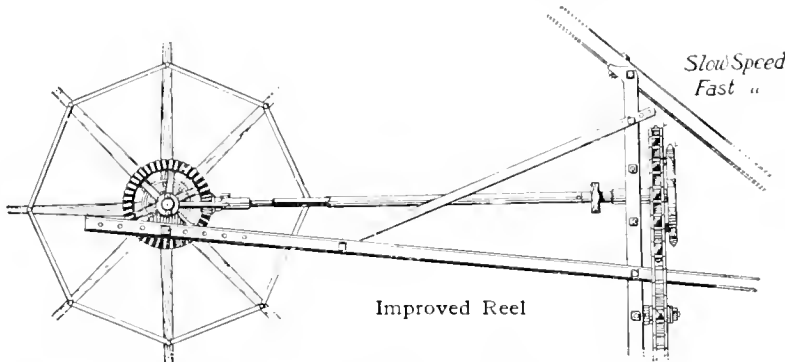


Machine Mounted on Transport Truck

McCORMICK

McCormick Header

THE McCormick header is designed for use in large wheat fields where the grain is allowed to get ripe before it is handled and where it is desired to deliver the grain directly to the wagon without tying it into bundles. The McCormick header can be depended upon as it is extremely durable and strong.

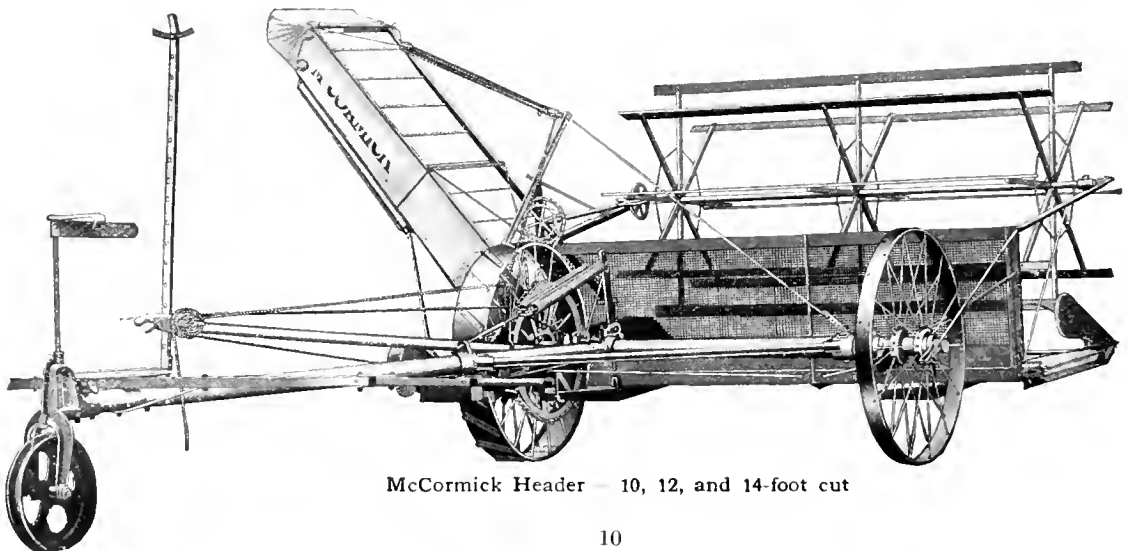


Improved Reel

One reason why the McCormick header is so strong and durable is because the main frame is constructed of tubular steel so that the machine will stand all the strains to which it is subjected. The main frame is strengthened by braces and reinforced at all points where strains occur. The cutting and reeling mechanism are very much like those on

the regular binder but arranged in a different manner. The horses are hitched behind and the machine is guided from the rear by means of a rudder wheel.

Power to drive all the mechanism is transmitted to the countershaft at the rear of the machine from the main drive wheel by means of an exceedingly strong chain. From the countershaft, power is transmitted by means of a beveled gear and tumbling shaft to operate all the working parts. The knife is driven directly from the main tumbling shaft by means of a pitman and a pitman crank. The elevator and platform canvases are driven from the main tumbling shaft by means of sprockets and chains. The reel is also driven by means of sprockets and chains. An advantage in the McCormick header is the slow and fast speed arrangement for the reel. This is shown in the illustration above. The fast speed can be used in case grain is short and a slow speed where grain is longer.

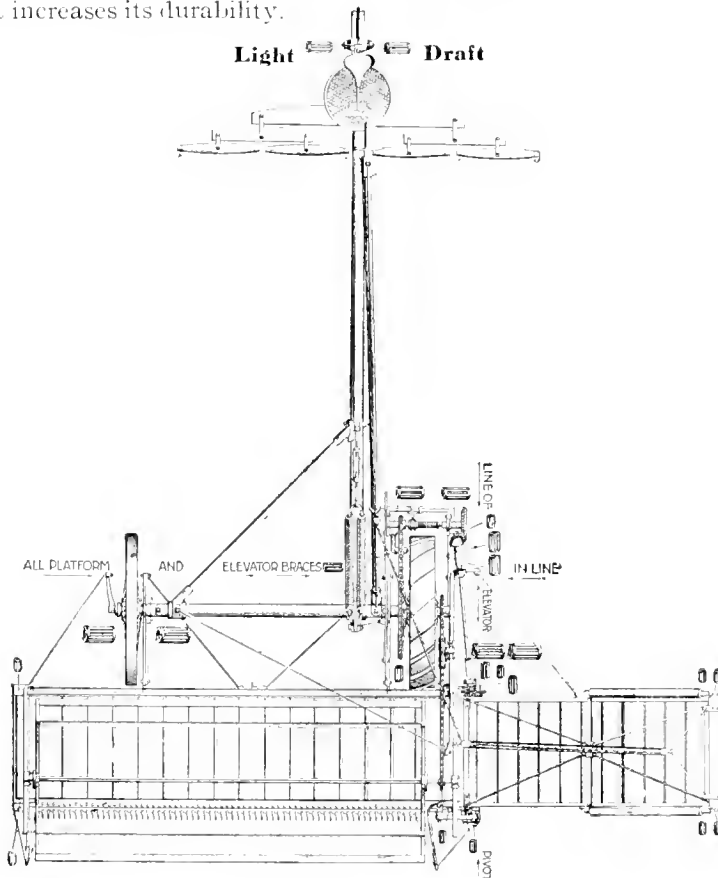


McCormick Header — 10, 12, and 14-foot cut

MCCORMICK

An Easy Running Machine

THE reason the McCormick header runs so easily is because it is equipped liberally with roller bearings. The illustration on this page shows where the roller bearings are placed. By means of these roller bearings friction is reduced. Roller bearings are placed on all moving parts where it is practicable to use them. Other principal moving parts are equipped with self-aligning bearings. The use of these bearings not only reduces the draft of the machine, but increases its durability.



Plan View of the McCormick Header, showing Position of the Roller Bearings

The reel works close to the guards so that all grain is forced upon the platform canvas. Three sets of arms are provided for the reel so that the slats are supported at each end and in the center. The center support provides a reinforcement which prevents breakage. In order to make the reel rigid, each reel arm is connected to the one next to it by means of a brace. The machine can be thrown in and out of gear by a convenient foot lever. The oil holes are convenient and practically dust-proof.

The McCormick header is made in three sizes and will cut swaths 10, 12, and 14 feet wide.

MCCORMICK

McCormick Header Binder

THE McCormick header binder is really two machines in one because the binding attachment can be removed and the machine used as a straight header by substituting a header elevator. This is a decided advantage because it enables the user to either cut the heads from the grain and deliver it to the wagon or leave it in a swath upon the ground. By using a bunching attachment on this machine grain can be left in gavels instead of a swath. When grain is deposited in gavels it can be collected more rapidly than when left in a swath.

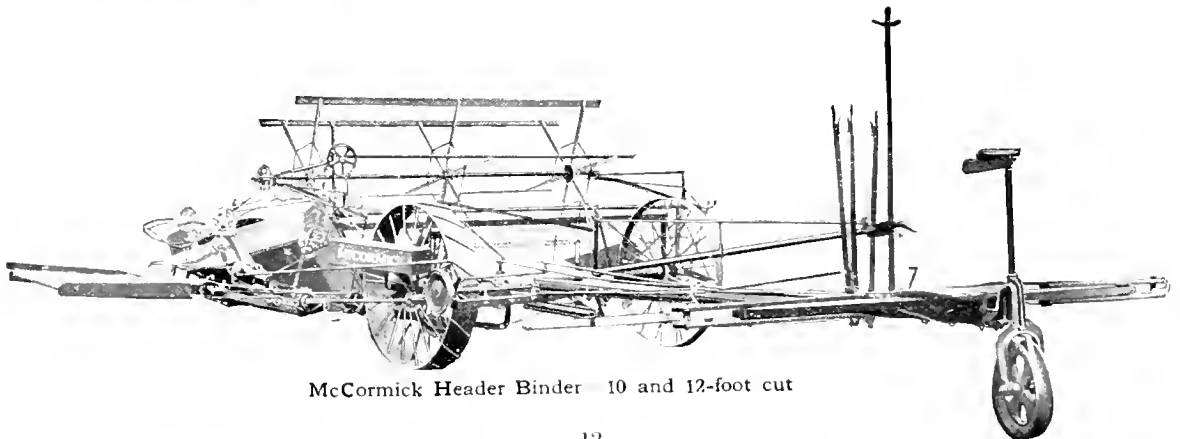
One reason why the McCormick header binder gives such good service is because the main frame is very strong and durable. This frame is made of large steel tubes substantially braced and very strong so that the frame will not bend out of shape. The platform frame is made of angle steel which is also securely braced.

Power to drive all the mechanism is transmitted from the main drive wheel by means of a strong drive chain to the main countershaft which in turn transmits the power to all working parts by means of beveled gears and tumbling shafts. The knife is driven from the main shaft by means of a pitman and pitman crank. A strong steel pitman shield protects the pitman crank. Power to operate the binding attachment is furnished from the main countershaft by means of a chain and two sprockets.

The reel is equipped with two speed sprockets which permits a change of speed in case the binding attachment is removed and the binder used as a header.



Main Wheel



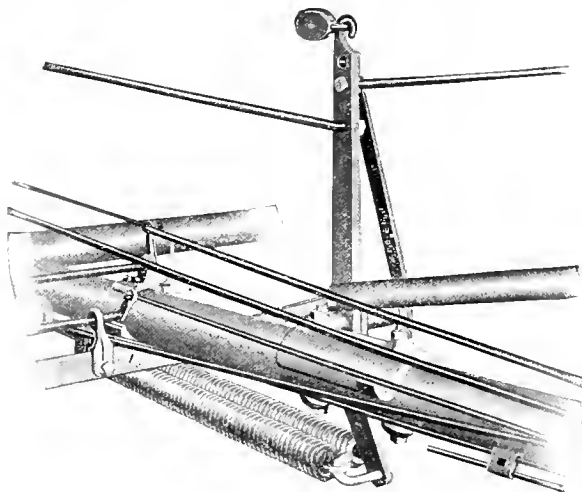
McCormick Header Binder 10 and 12-foot cut

MCCORMICK

Header Binder

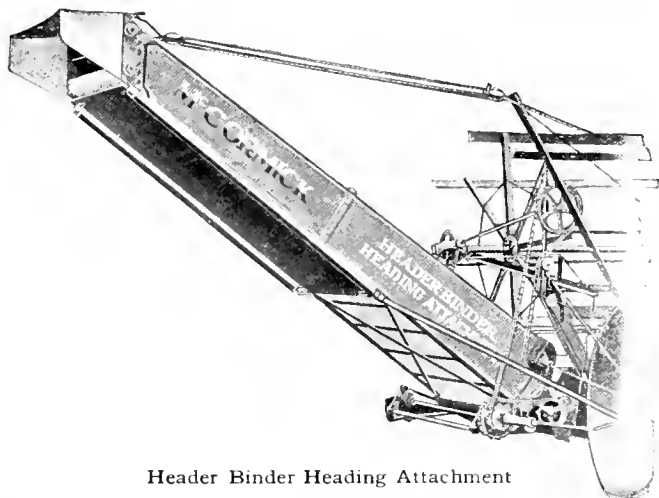
THE McCormick header binder is equipped with a convenient device which gives the reel an extreme range of adjustment. This device consists of hand cranks at the ends of the rods which hold the reel supports rigidly in position. This reel adjustment is of great value because it permits the operator to make adjustments so that he can operate the reel extremely close to the guards or away from them, as desired. The operation of the reel is controlled by means of two convenient levers which enable the operator to adjust the reel instantly to meet varied conditions and lengths of grain.

The raising and lowering devices enable the operator to raise and lower the platform and are especially valuable in keeping the platform level. By keeping the platform level at all times cramping and warping of the different parts is prevented.



Heavy Compensating Springs, which enable the operator to tilt the platform easily

Binding Attachment



Header Binder Heading Attachment

The McCormick binding attachment has been improved by adding a new knotter, which is very simple. If desired, the binding attachment can be removed and a header elevator used in its place. In this way the header binder is readily converted into a header and the owner of the machine is not required to buy a header. This feature is very valuable because it often happens that it is more practical to use the machine as a header than a header binder.

When the machine is shipped as a header, the levers and rods necessary to operate the reel and binding attachment are not included; but all such rods,

levers, and bell cranks are included with the binding attachment when the machine is shipped as a header binder.

MCCORMICK

McCormick Daisy Reaper

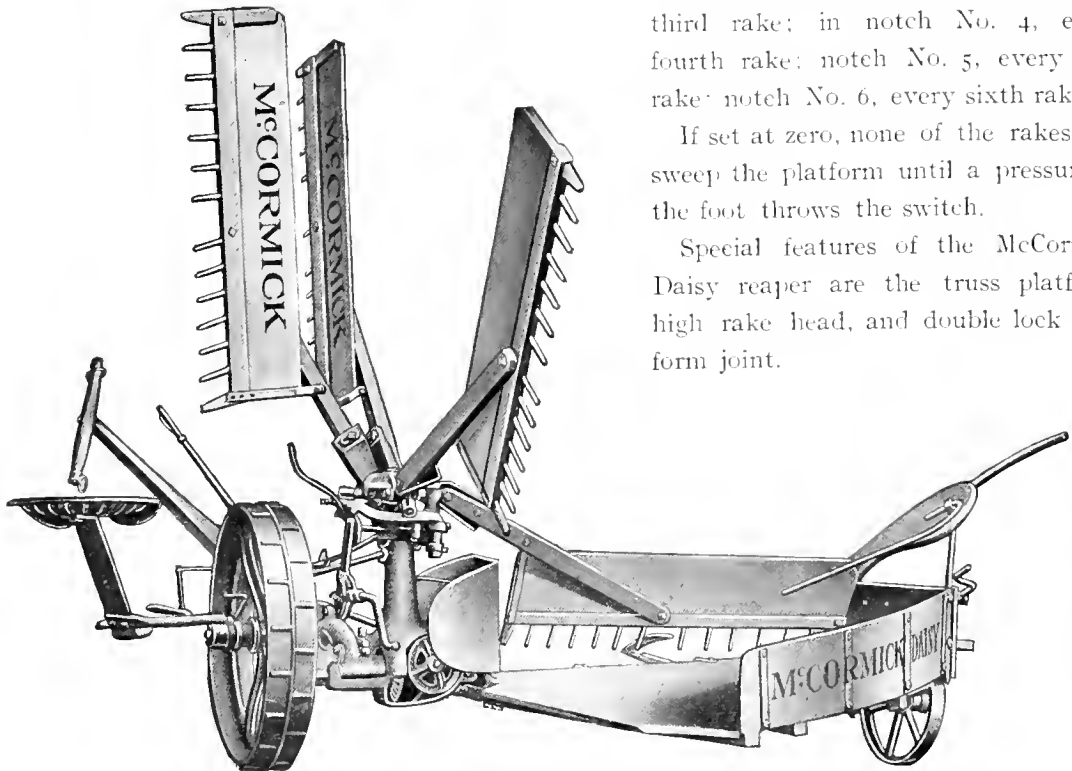
THE McCormick Daisy reaper is designed to meet the requirements of those who prefer to harvest small grain with a reaper, leaving the gavels on the ground until the grain is thoroughly cured and dried. The machine is adapted not only for cutting wheat and oats but also flax, clover, buckwheat, rye, and barley. The main and grain wheels are fitted with roller bearings, consequently the machine is light in draft—it can be drawn by two horses.

The McCormick Daisy reaper is driven by bevel gears and pinions. This method of transmitting power eliminates lost motion and reduces the draft. The gears of the Daisy reaper are heavy and will give long and continuous service. The rake arms can be regulated to deliver gavels of any size. By means of the control lever and an automatic trip, the rakes may be adjusted to sweep the platform as desired. When the lever is placed in the notch at Figure 1, every rake will sweep the platform; if placed in the notch at Figure 2, every second rake will sweep the platform;

if placed in the notch at Figure 3, every third rake; in notch No. 4, every fourth rake; notch No. 5, every fifth rake; notch No. 6, every sixth rake.

If set at zero, none of the rakes will sweep the platform until a pressure of the foot throws the switch.

Special features of the McCormick Daisy reaper are the truss platform, high rake head, and double lock platform joint.



McCormick Daisy Gear Drive Reaper

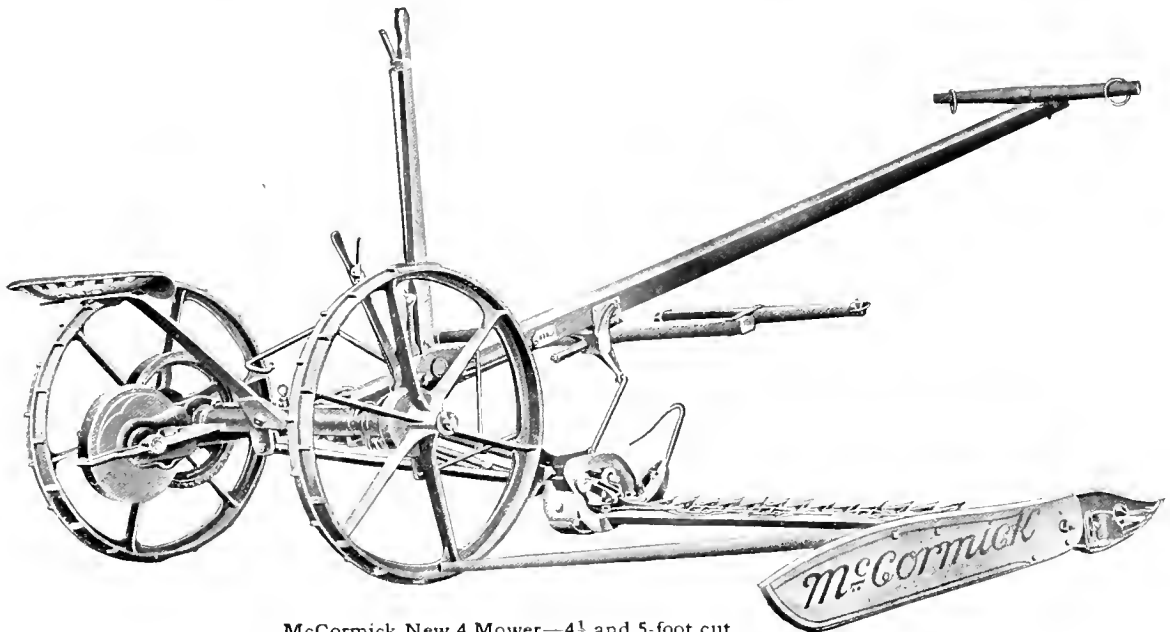
MCCORMICK

McCormick New 4 Mower

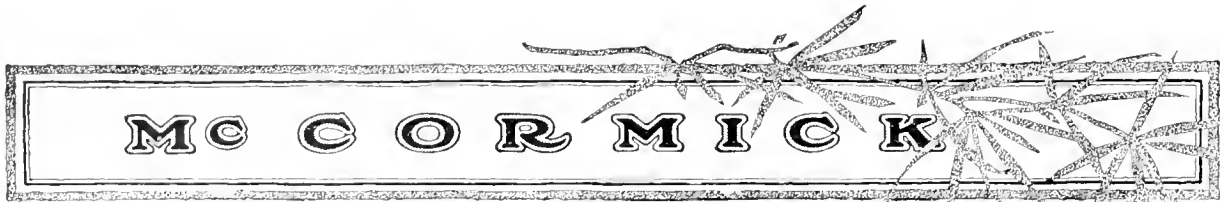
THE number of McCormick New 4 mowers in use is greater than that of any other similar machine. The reason for its popularity is that it is equipped with reliable features which are approved by the world's grass growers. This mower has a symmetrical and substantial main frame, simple and powerful gears, direct stroke pitman, long steel wearing plates for the knife, and frictionless bushings. The machine is light in draft and also very durable, because it is correctly designed and substantially constructed. The inner shoe hinge has an extra long horizontal bearing which strengthens the shoe and permits the cutter bar to be tilted up or down when it is desired to cut a high or low stubble. The cutter bar is connected with the machine by means of a double hinge attached to the inner shoe. The inner shoe is placed outside of the drive wheel, consequently a full swath can be cut without making it necessary for one of the horses to walk in the uncut grass.

Roller Bearings

Wherever practical, roller bearings are used on the New 4 mower. The roller bearings on the New 4 mower are not ordinary. They are made of the hardest steel obtainable, in fact the steel used in their construction is so hard that it is almost impossible to make an impression on it with a file. For this reason the roller bearings used on the New 4 mower are extremely durable and not only materially reduce the draft of the machine but increase durability.



McCormick New 4 Mower—4½ and 5-foot cut

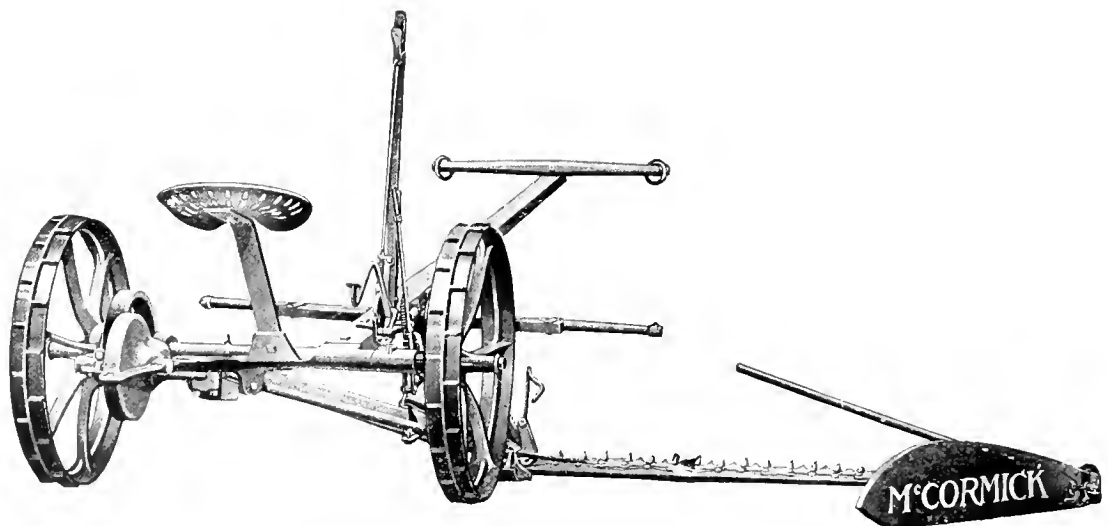


McCormick New Big 4 Mower

THE New Big 4 mower is the largest grass cutter in the McCormick line. It is furnished with a 6-ft. cutter bar and designed for those who have large meadows. The frame on this machine is heavier and the wheels are farther apart than those on the regular size mower. The frame is cast in one piece and forms a substantial foundation to carry the weight of the machine. All the holes in the frame are drilled at the same time to insure absolute accuracy in the fitting of the crank shaft and countershaft which are always held in perfect alignment. They cannot bind and unnecessary wear is eliminated. There is little friction. The machine is light in draft because every bearing is fitted with a roller bearing or a removable bushing. The cutter bar is made of steel, reinforced with a taper rib which extends the entire length of the bar. This rib strengthens the bar and makes it rigid enough to insure a smooth running knife. The knife has a clean shear cut because it is held firmly to its work by long steel wearing plates, and the sections are held close to the guards.

Roller Bearings

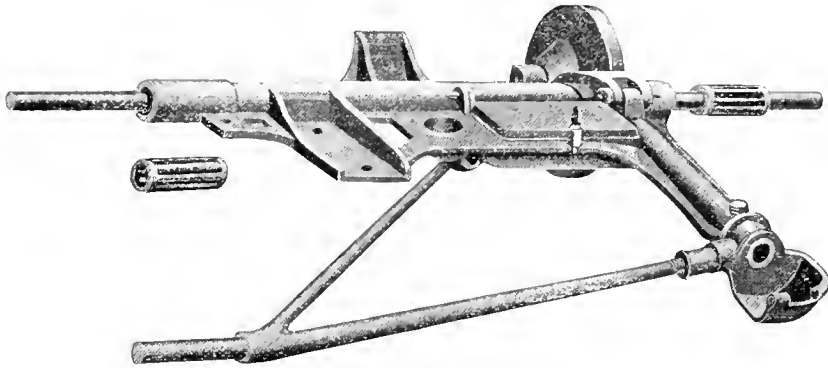
Roller bearings are used on slow moving parts to reduce the draft of the machine. These bearings are held in cages, consequently, if it becomes necessary to remove them, they do not fall apart. The illustration at the top of page 17 shows one set of bearings entirely removed from the axle. This construction is an advantage and is of great value if it becomes necessary to repair any of the internal working parts.



McCormick New Big 4 Mower 6 and 7-foot cut

McCormick

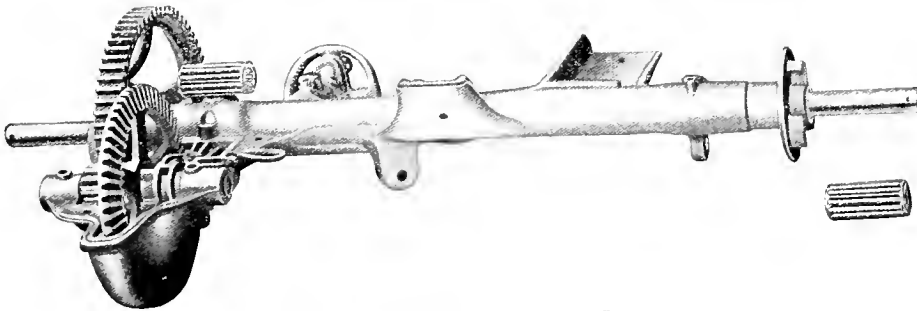
Main Frame



Substantial Main Frame

A SUCCESSFUL mower must have a strong main frame. The illustration above shows the construction of the main frame and a good idea can be obtained of its strength. The frame is cast in one piece and both the counter and crank shaft are held rigidly in place. The main axle is equipped with roller bearings which insure light draft. The crank shaft turns in removable steel babbitt lined boxes which is the most satisfactory style of bushing for such a shaft.

Gears



Note the Position of the Strong Gears

The large double gears of the McCormick mowers are noteworthy features. The bevel gear and spur pinion are mounted on the countershaft which runs in removable bushings. Consequently, the gears run smoothly and without noise. The illustration above shows that the gears are so placed that the resistance of the cutter bar is neutralized, consequently the machine is evenly balanced.

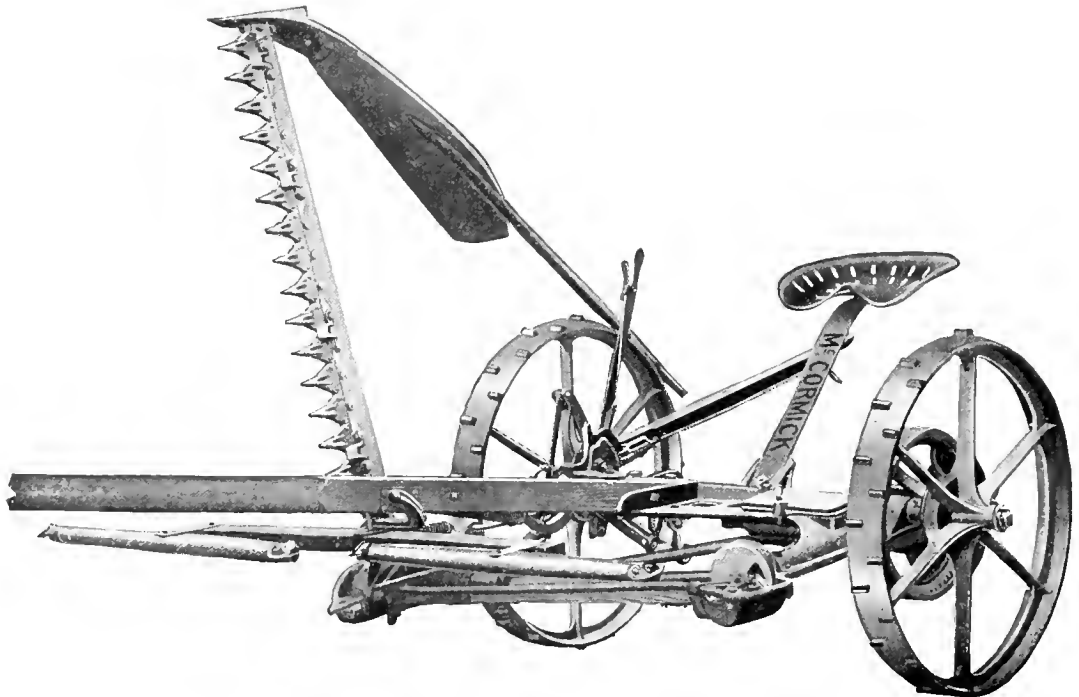
M C C O R M I C K

McCormick Vertical Lift Mower

THE McCormick vertical lift mower has been designed for cutting on rough and stumpy ground, where a plain lift mower could not be used to good advantage. This mower is a practical machine for all kinds of grass cutting. The cutter bar can be raised to a vertical position and lowered without stopping the team. When the bar is raised, the machine is thrown in and out of gear automatically. This feature permits the driver to cut close to a tree, stump, or rock, and save all the hay without loss of time or inconvenience.

The McCormick vertical lift mower will cut grass successfully in any place where the machine can be drawn by horses, and it will do good work under conditions where an ordinary machine could not be used.

As an all-purpose machine, the McCormick vertical lift mower is unsurpassed—it will do excellent work in uneven fields where there are stumps and stones, as well as in level fields.



McCormick Vertical Lift Mower 4½ and 5-foot cut

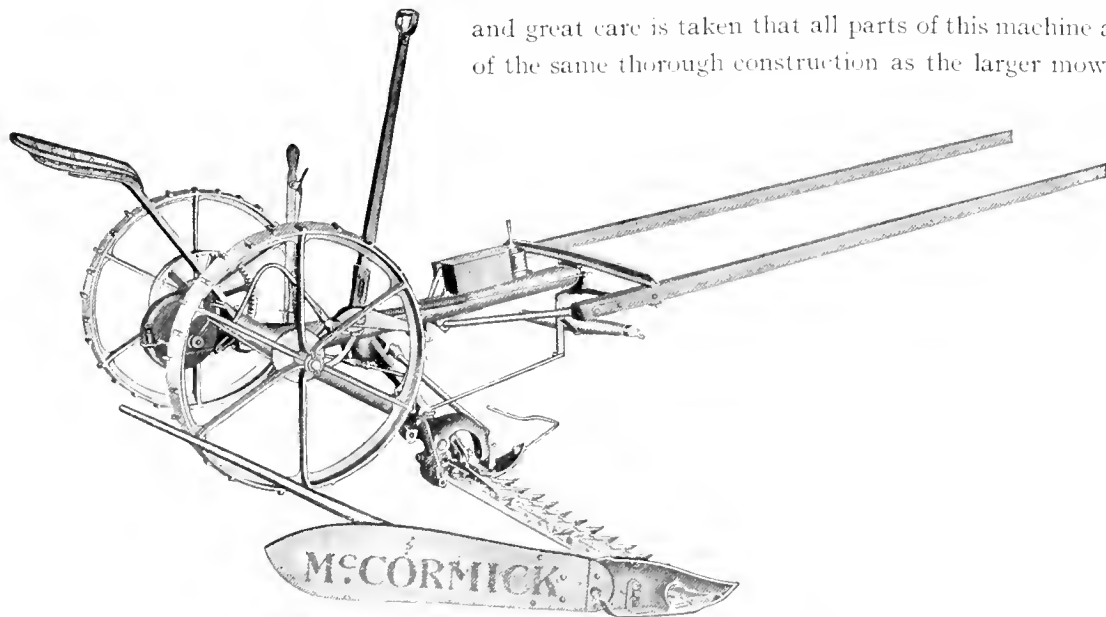
MCCORMICK

McCormick Little Vertical Mower

THE McCormick Little Vertical mower has been designed to meet the demand for a mower of small capacity that can be pulled by one horse. It is adapted for mowing lawns, parks, orchards, and cemeteries, because it can be operated in places where a large 2-horse machine could not go.

The main frame is constructed so that the parts are rigid, consequently they are kept in perfect alignment. All the holes on the main frame are bored by special machines, thus insuring an accurate alignment of the shaft and smooth-working gears. The machine is equipped with roller bearings on the main axle, the countershaft, and on the upper end of the flywheel shaft. These bearings cause all parts of the machine to run smoothly.

A special feature is the way the singletree is connected to the machine. It is connected to a draft rod in such a way as to give an even distribution of the power between the machine and the shoe hinge. The hills can be shifted to either side of the machine, as conditions may require. Choking in heavy grass is prevented by three pawls in the drive wheel which cause the knife to move almost instantly. The oil holes are in sight and are covered so as to be dust-proof. The pitman and cutting apparatus are of the same substantial construction as the McCormick 2-horse mower and great care is taken that all parts of this machine are of the same thorough construction as the larger mower.

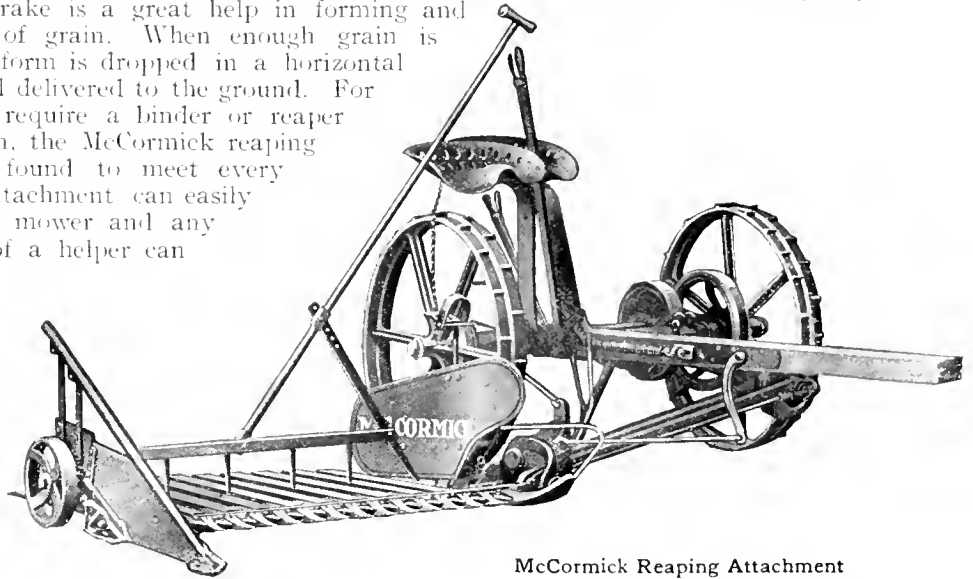


McCormick Little Vertical Mower—3½ and 4-foot cut

McCORMICK

McCormick Reaping Attachment

THIS attachment consists of a slatted platform, inside and outside dividers, a seat, and rake. The gavels of grain are formed on the platform which is held at an oblique angle by the operator. The rake is a great help in forming and dropping the gavels of grain. When enough grain is accumulated, the platform is dropped in a horizontal position and the gavel delivered to the ground. For farmers who do not require a binder or reaper to harvest small grain, the McCormick reaping attachment will be found to meet every requirement. This attachment can easily be connected to the mower and any farmer with the aid of a helper can harvest several acres of grain in a day. This attachment has given general satisfaction wherever used. It can be attached to the McCormick New 4 mower.



McCormick Reaping Attachment



Rear View McCormick Reaping Attachment

M C C O R M I C K

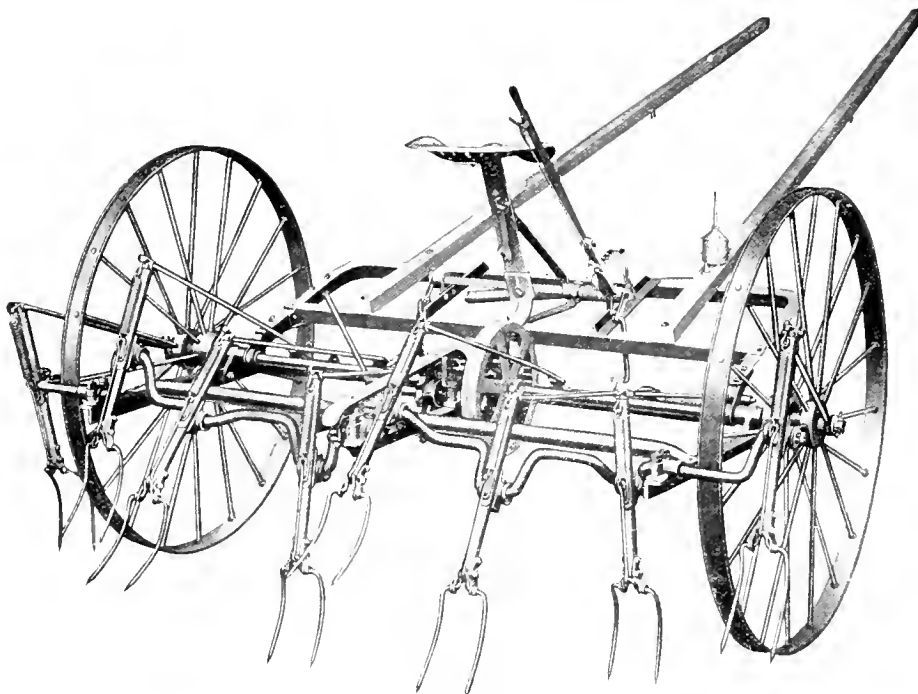
McCormick Hay Tedder

TEDDED hay cures in a very short time and for this reason the McCormick hay tedder is an invaluable machine for the hay grower. When it is used the farmer can handle the hay crop very quickly for the reason that hay can be tedded soon after it is cut.

The wheels, frame, and forks are made of steel which insures a substantial construction. The machine is driven by gears. The gear wheel which is mounted on the center of the axle drives the crank shaft to which the fork-arms are attached. All the forks are therefore given the full driving force of both wheels and the motion of the forks is uniform and positive—the heaviest hay will not retard the forks.

The illustration at the bottom of the page shows how each fork-arm is equipped with a coil spring. This spring takes up the impact of the forks and protects the machine from jars caused by the alternating movement of the fork-arms. This machine is constructed so substantially that heavy windrows can be tedded without difficulty. The forks continue in motion where corners are turned unless the machine is thrown out of gear—none of the hay is left untended. By means of a convenient lever within reach of the driver the forks can be regulated to work high or low as desired.

The McCormick hay tedder not only enables the farmer to improve the quality of his hay, but also to save much time when gathering the hay crop.



McCormick Hay Tedder—Supplied with either 6 or 8 Forks

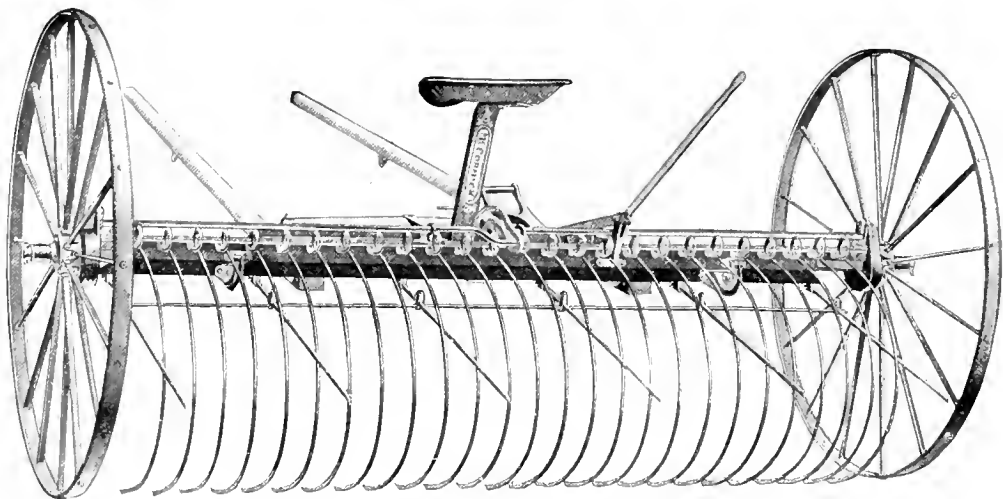
McCormick

McCormick Self-Dump Rake

IN THE purchase of a hay rake, the important things to look for are ease of operation and strength of the rake and wheels. The wheels are often the first parts to wear out. The McCormick self-dump rake is designed to meet these requirements, and is exceptionally durable and convenient. It is adapted for raking all conditions of hay. Is made with the same care and gives the same satisfaction characteristic of the McCormick line of machines. It rakes clean, dumps quickly, and the teeth return to the ground promptly after the windrow is passed.

The illustration below shows the simple design and construction of the McCormick self-dump rake. The wheels have staggered spokes and heavy 2-in. channel tires.

The teeth on the McCormick rakes are made of selected spring steel which has great strength and resiliency. The points of the teeth are shaped so that they will get all the hay without digging into the ground or picking up stones. The rake can be operated either with one or two horses, simply by adjusting the shafts. The wheels are fitted with removable hubs which can easily be replaced at a small cost, thus practically renewing the wheel. This rake is designed to have the greatest strength and rigidity with the slightest possible weight. It will be found that the McCormick rake meets every requirement for gathering hay into windrows.



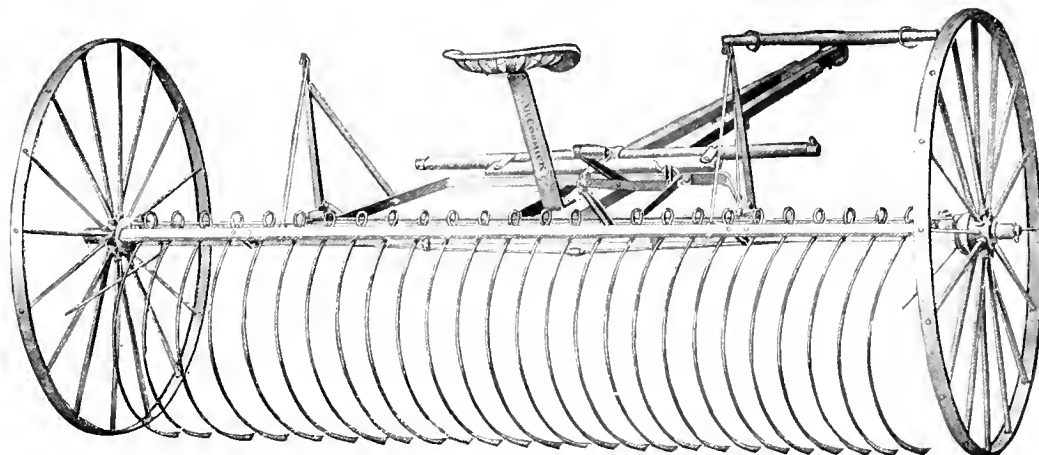
McCormick Self-Dump Hay Rake

McCormick

McCormick Hand-Dump Rake

THE McCormick hand-dump rake is the same as the McCormick self-dump rake, except that it is not equipped with a self-dumping device. The wheels are interchangeable—there are no rights or lefts. When the wheels are changed, a new wearing surface is provided which increases the durability of the machine. The teeth can be adjusted to work on or above the ground, according to the condition of hay being raked, or they can be locked down when bunching hay in a windrow. The frame is made of angle steel which prevents twisting. The rake head is strongly trussed to prevent sagging. The teeth are made of selected spring steel and the points are so shaped that they will gather all the hay without digging into the ground. The self-dump and hand-dump rakes can both be operated with either one or two horses, simply by adjusting the shafts.

The McCormick hand-dump rake is efficient in all conditions of hay and fields. The weight of the driver is utilized on this rake to help raise the teeth for dumping. Over-cleaners are used on this rake, which act in the same thorough manner as the under-cleaners on the self-dump rake. The advantage of using over-cleaners instead of under-cleaners on this rake is that the load is taken off the operator. Those who prefer the hand-dump rake, will find that the McCormick is built correctly.



McCormick Hand-Dump Rake

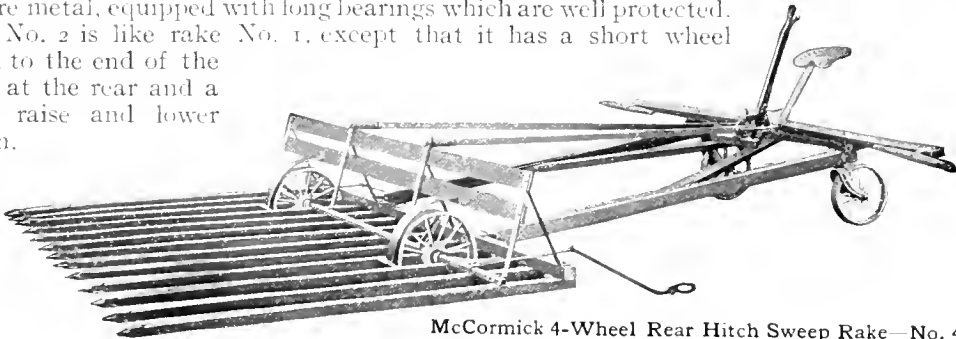
McCORMICK

McCormick Sweep Rakes, Nos. 1, 2, 3, 4, 5, 6, 7, and 8

McCORMICK sweep rakes are used where a large amount of hay is to be stacked at one time. These rakes will gather hay from either the swath or the windrow.

Rake No. 1 is a 2-wheel, side hitch type. The teeth are made of straight-grain yellow pine and are provided with metal points which prevent wear. The teeth are interchangeable and reversible, which increases the durability of the rake. The axle is made of steel pipe. The wheels are metal, equipped with long bearings which are well protected.

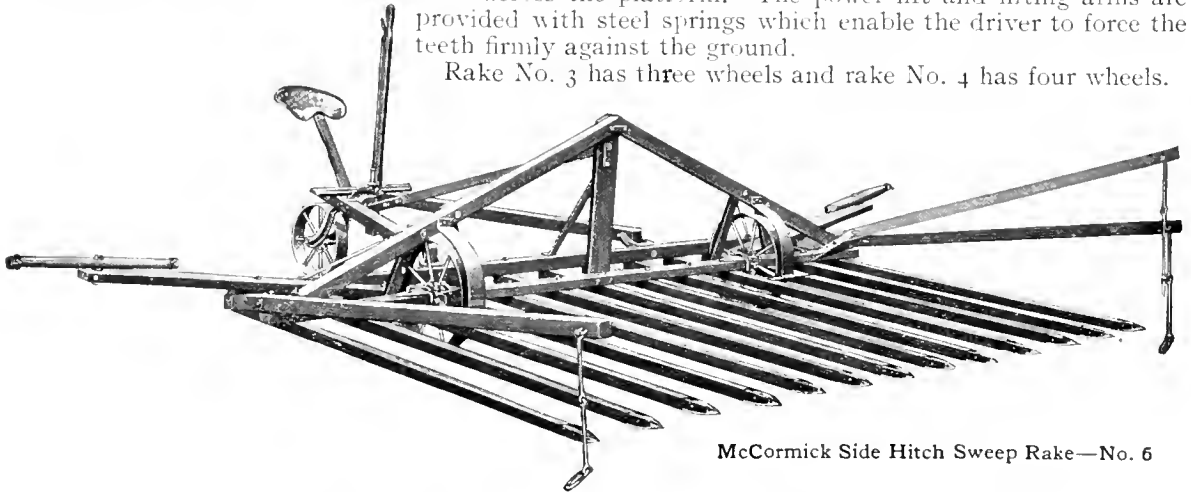
Rake No. 2 is like rake No. 1, except that it has a short wheel attached to the end of the A-frame at the rear and a lever to raise and lower the teeth.



McCormick 4-Wheel Rear Hitch Sweep Rake—No. 4

Rakes Nos. 3 and 4 are rear hitch rakes. The metal wheels of these rakes are mounted on a square tubular steel axle which extends across the platform. The power lift and lifting arms are provided with steel springs which enable the driver to force the teeth firmly against the ground.

Rake No. 3 has three wheels and rake No. 4 has four wheels.



McCormick Side Hitch Sweep Rake—No. 6

The metal wheels of rakes Nos. 5 and 6 are equipped with removable bushings.

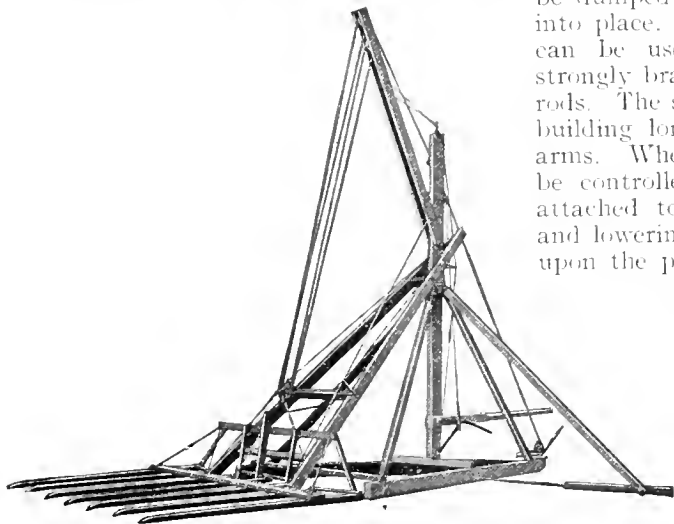
Rake No. 5 is a 2-wheel type. The position of the teeth is controlled by shifting the driver's seat.

Rake No. 6 has three wheels, and the position of the teeth is controlled by a lever. Nos. 5 and 6 are side hitch rakes.

Rake No. 7 has three wheels and rake No. 8 four wheels. Both of these rakes are rear hitch rakes. The metal wheels are fitted with removable bushings which can be replaced when worn. The wheels are provided with shields so that hay will not wrap around them.

McCormick Swinging Hay Stacker

THE McCormick swinging hay stacker permits the load to be locked in place at any height, and swung to one side over the stack. When over the stack the load may be dumped and the forks swung back and lowered into place. These stackers are very handy as they can be used to load into a wagon. They are strongly braced and twisting is prevented by truss rods. The swinging stacker is especially adapted for building long stacks because it has long swinging arms. When being lowered, the pitcher head can be controlled by means of a band brake which is attached to the pulley, around which the raising and lowering rope passes. When the load is placed upon the pitcher head, the horse is driven forward until the load has been lifted to the desired height; the load is then swung over the stack and dumped by means of a lever. The illustration shows the stacker in position to receive the load.

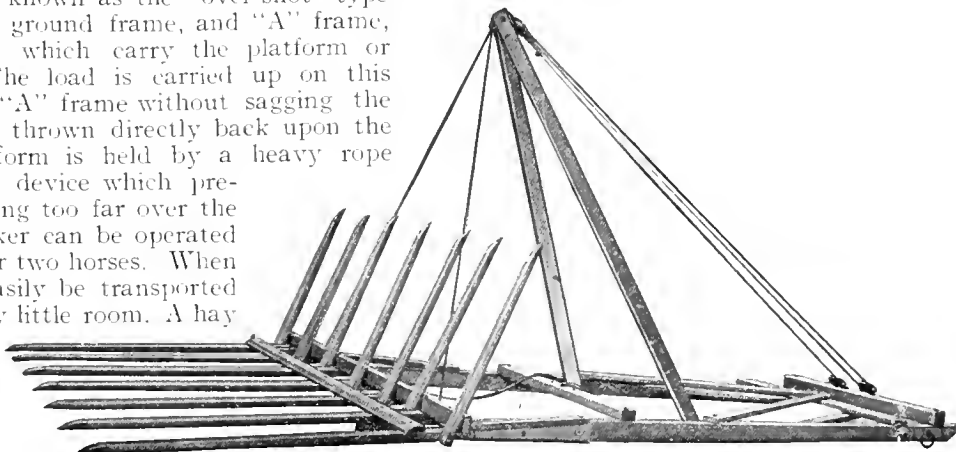


McCormick Swinging Hay Stacker

A sledge, guy-rope, and stakes are furnished with each stacker. A transport and hay retainer are furnished at a slight additional cost, upon special order.

McCormick Junior Hay Stacker

This stacker is known as the "over-shot" type and consists of a ground frame, and "A" frame, also lifting arms which carry the platform or pitcher head. The load is carried up on this stacker over the "A" frame without sagging the platform and is thrown directly back upon the stack. The platform is held by a heavy rope and coiled spring device which prevents it from going too far over the stack. This stacker can be operated with either one or two horses. When folded it can easily be transported and takes up very little room. A hay retainer and transport are furnished on special order at a slight additional cost.



McCormick Junior Hay Stacker

MCCORMICK

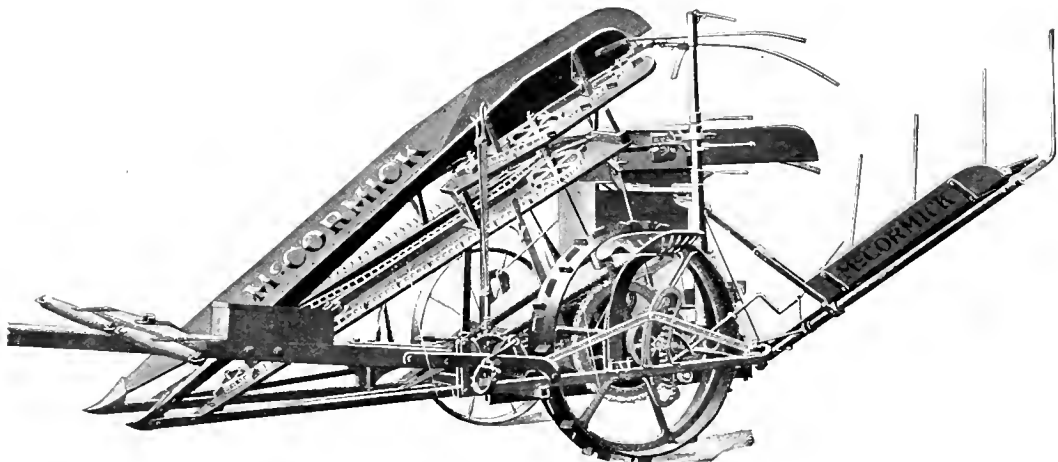
McCormick Corn Binder

THE McCormick corn binder will cut corn of all lengths. It will also work well in corn that is down, tangled, and lodged. This is possible because the machine is provided with convenient adjustments which enable the operator to raise and lower the gatherer arms, so that the fingers of the conveyor chains which extend to the points of the gatherer arms can grasp and elevate corn that is lying almost flat upon the ground.

The band shifting attachment also has a wide range of adjustment, and the bundle can be tied around the center even though corn be extremely long or short.

The Value of a Corn Binder

The real value of the McCormick corn binder lies in the fact that it can be operated in almost any field of corn. Instead of discharging loose corn, symmetrical bundles are formed, and the upright principle upon which the machine is constructed always insures squarely butted bundles. The advantage of tying corn into bundles is very great, because it leaves it in a convenient form to be shocked and handled at any time after it is thoroughly dried. It is also a decided advantage when a husker and shredder is used, because it saves tying loose corn into bundles or handling it in the old, awkward way.

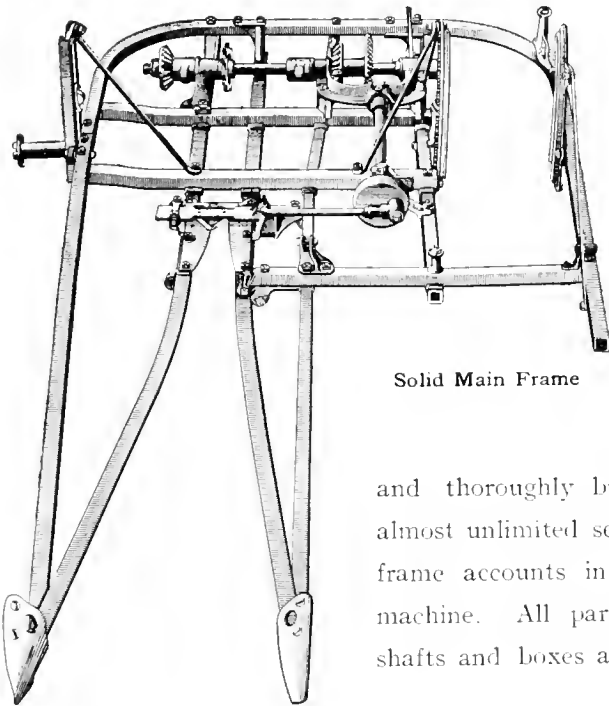


This machine is equipped with a practical bundle carrier

Strength Necessary

CORN is an exceedingly hard crop for a machine to handle. There must be sufficient strength in the main frame and the various parts to withstand the severe and constant strain to which they are subjected.

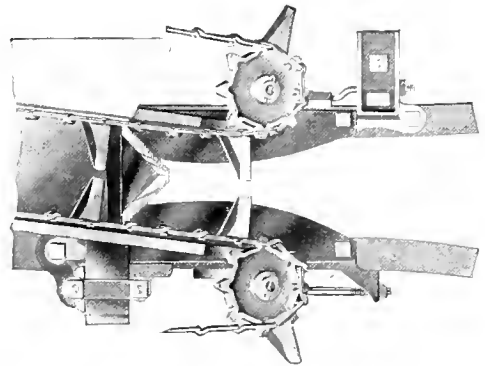
The main frame, being the part that is called upon to carry the weight of the machine, must necessarily be very rigid. The McCormick main frame is constructed entirely of steel. It is symmetrical in design, and thoroughly braced in such a manner that it will give almost unlimited service. The exceptional strength of the main frame accounts in a large degree for the light draft of the machine. All parts are held perfectly rigid, consequently all shafts and boxes are held in alignment.



Solid Main Frame

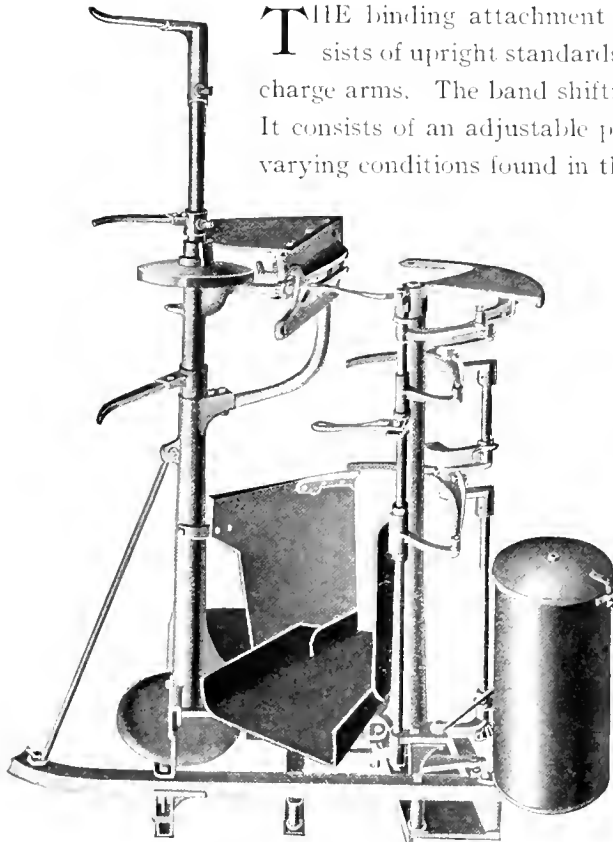
Cutting Apparatus

The cutting mechanism on the McCormick corn binder consists of a reciprocating and two stationary knives. The stationary knives cut a large portion of the corn before it reaches the reciprocating knife. This knife completes the operation, and also cuts all weeds, vines, and green undergrowth between the hills in the row; consequently a field of corn cut with the McCormick corn binder presents a clean, attractive appearance.



Sectional view showing the knives

Binding Attachment



Binding Attachment

THE binding attachment of the McCormick corn binder consists of upright standards to which are attached the packers and discharge arms. The band shifting attachment is extremely strong and simple. It consists of an adjustable platform which can be raised or lowered to meet varying conditions found in the cornfield. By means of the convenient lever which controls the band raising and lowering device, the user of the McCormick corn binder can tie the band in the position he desires.

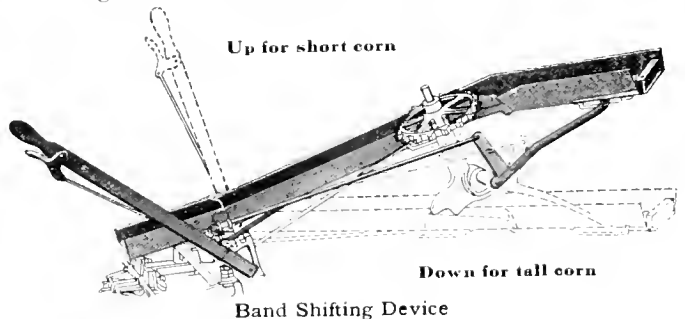
The McCormick corn binder is equipped with an improved type of knotter. This knotter is giving excellent satisfaction because it is accurate, seldom gets out of adjustment, and when out of adjustment, is easily readjusted. The principle upon which this knotter works, eliminates slips and reduces twine breaks to a minimum.

In case it is desired, bundles of varying sizes can be formed simply by adjusting the tripping mechanism.

Roller Bearings

The main and grain wheels of the McCormick binder are fitted with roller bearings which make this machine very light in draft. The use of roller bearings reduces friction to a minimum. Each roller of the bearings is held securely in position in a cage and they are so made that the durability of the machine is increased very materially.

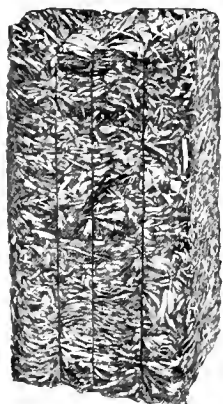
The main wheel supports the greater part of the weight of the machine and provides ample tractive power. The pronounced success of the McCormick corn binder is due to the correct construction of the machine.



MCCORMICK

Shredded Fodder

WHEN properly shredded, fodder makes an excellent and nutritious foodstuff which is almost equal to timothy hay for feeding purposes. Because of the great and growing demand for well-fed cattle, corn growers should utilize all of the corn crop. The best method of saving the stalks and fodder is to shred them with a McCormick husker and shredder. A conservative estimate places the value of shredded fodder at more than three times the value of the same amount of stalks and fodder when not shredded.



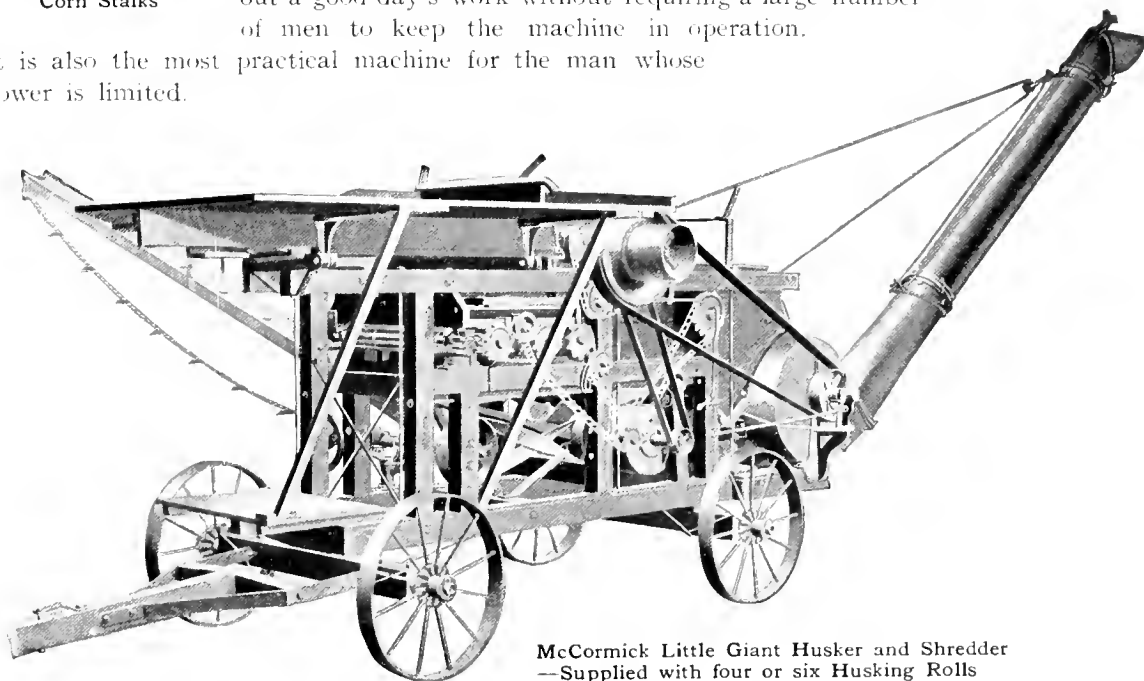
A Bale of Shredded Corn Stalks

McCormick Husker and Shredder

McCormick corn huskers and shredders are the most practical machines of the kind on the market. They are made in three sizes—4, 6, and 8 rolls.

The McCormick Little Giant husker and shredder is regularly furnished with 4 and 6 rolls. This machine is especially desirable for the farmer who husks and shreds his own corn, or for the man who desires to do commercial work on a small scale. The capacity is sufficiently large to turn out a good day's work without requiring a large number of men to keep the machine in operation.

It is also the most practical machine for the man whose power is limited.



McCormick Little Giant Husker and Shredder
—Supplied with four or six Husking Rolls

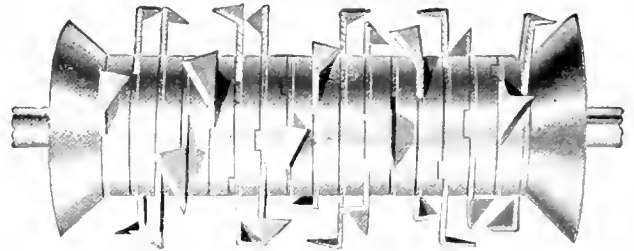
MCCORMICK

Release Lever

THE McCormick Little Giant husker and shredder is equipped with a release lever which enables the operator to throw the snapping rolls in and out of gear instantly. This feature is of special value because it permits the operator to stop the snapping rolls whenever it is necessary to remove twisted stalks or to prevent obstructions from passing through the snapping rolls, thus preventing expensive breaks.

Shredder or Knife Head

The McCormick shredder can be equipped with either a shredder or cutter head. The shredder head consists of saw-shaped teeth arranged in the form of a spiral. This construction permits the teeth to come in contact with every portion of the stalk, and the bell-shaped ends prevent stalks from winding on the shaft. They also prevent much dirt and trash from falling into the bearings, thus eliminating unnecessary wearing and heating of the bearings.



Improved shredder head

Blower

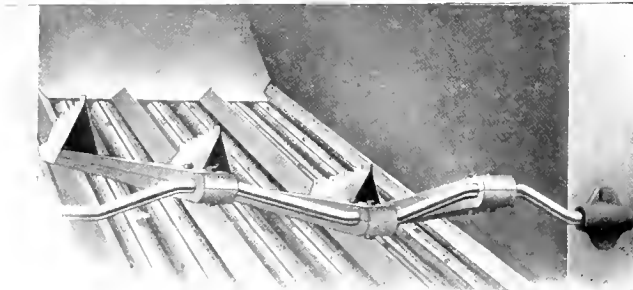
The blower with which the McCormick huskers and shredders are equipped has been thoroughly tested and has been found to more nearly meet the requirements for handling shredded and cut stalks than any other means devised. Under ordinary circumstances, it is unnecessary for a man to do more than regulate the hood in order to deliver the stover where desired. The blower is exceptionally valuable in filling barns, silos, etc., as it requires very little help to handle the stover.

Ear Retarder

The ear retarders are made of sheet steel and are mounted on a three-throw crank shaft. This device scatters the ears evenly across the snapping rolls and thus equalizes the amount of work that each set of snapping rolls is required to do.

Shelled Corn Saver

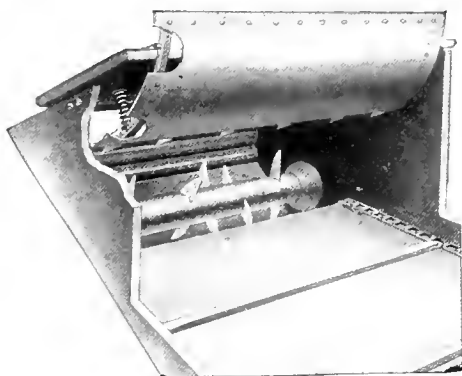
Every husker and shredder shells a small percentage of corn, and unless efficient devices are provided, this corn is blown into the stover. The McCormick husker and shredder is equipped with devices for saving and bagging this corn. The shelled corn is not only saved, but separated from the husks, etc., and delivered into a bag or basket, in such a condition that it is fit for the mill. There is absolutely no loss connected with shredding corn when it is done with the McCormick husker and shredder.



Practical ear retarders

McCormick

McCormick Improved Husker and Shredder



Self-Feeding Attachment

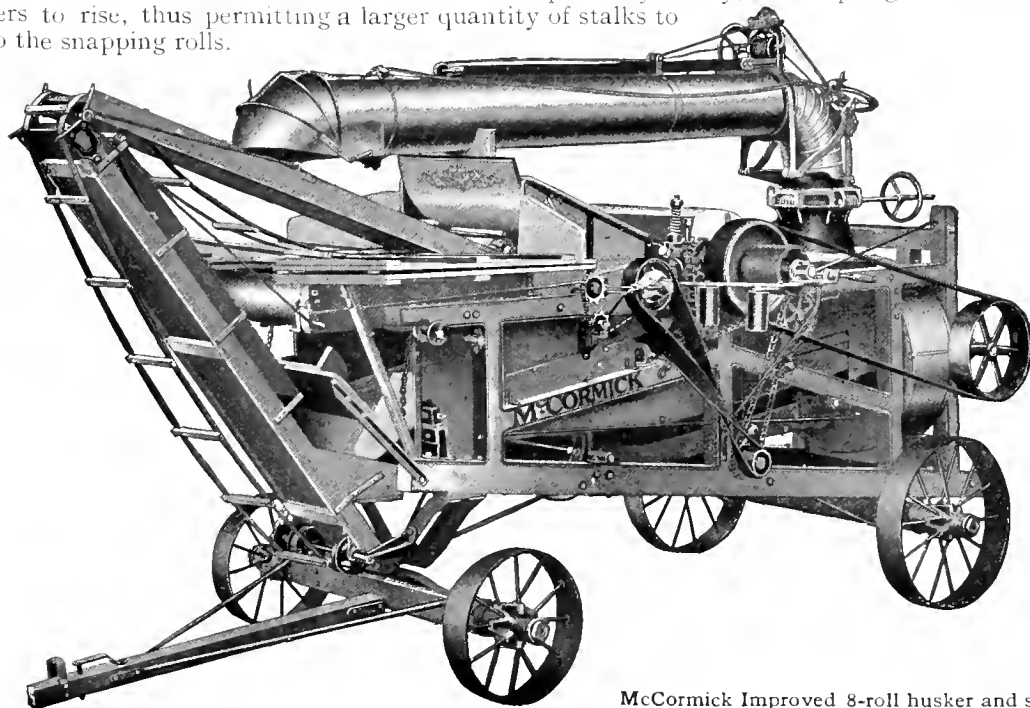
THE McCormick Improved husker and shredder is an 8-roll machine, designed to meet the demand for a husker and shredder that will turn out large quantities of work in a comparatively short time. This machine requires considerably more power than the McCormick Little Giant husker and shredder, and it would not be practical to operate it with less than 20-horse power.

Self-Feeding Attachment

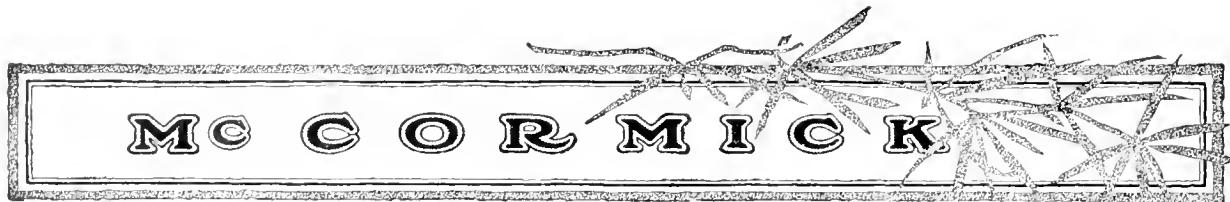
The self-feeding attachment for the McCormick Improved husker and shredder consists of a conveyor belt, feed retarder, and cylinder knives. The knives are placed in front of the snapping rolls and move the stalks forward, thus maintaining an even feed. They also prevent

crooked or broken stalks and pieces from accumulating in front of the snapping rolls. The illustration will give a good idea of the construction of the cylinder knives.

The feed retarder is arc shaped, hinged at the outer ends at the top, and held in place by springs at the lower end. In case the feed is exceptionally heavy, these springs allow the stalk retarders to rise, thus permitting a larger quantity of stalks to pass to the snapping rolls.



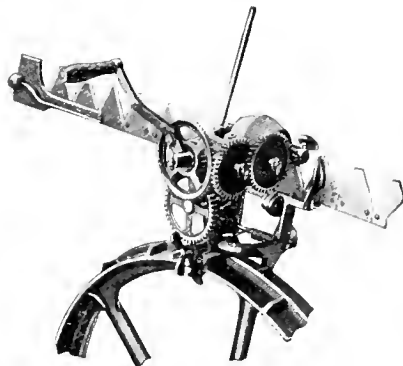
McCormick Improved 8-roll husker and shredder



McCormick Knife and Tool Grinder

THIS device is convenient for use in the work shop or in the field, as it can be attached very readily to a bench or a mower wheel. It can be converted very quickly from a knife grinder to a tool grinder, simply by substituting a flat stone for the bevel one. Special stones for tool grinding are furnished on order.

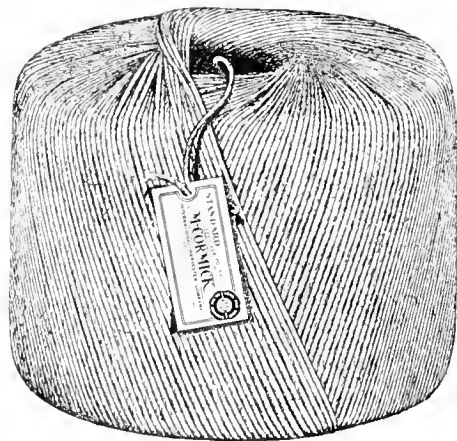
The knife grinder is speeded high and cuts rapidly. It will sharpen two sections of a mower knife at once without disturbing the bevel or drawing the temper. Unless mower knives are kept sharp it is impossible to secure the best results with the mowing machine. The McCormick knife grinder enables the farmer to always keep the knives sharp. The time required to sharpen knives is less than that required with an ordinary grindstone. A stone for gumming saws can also be furnished on special order. When desired, a foot power attachment will be supplied at a small additional cost.



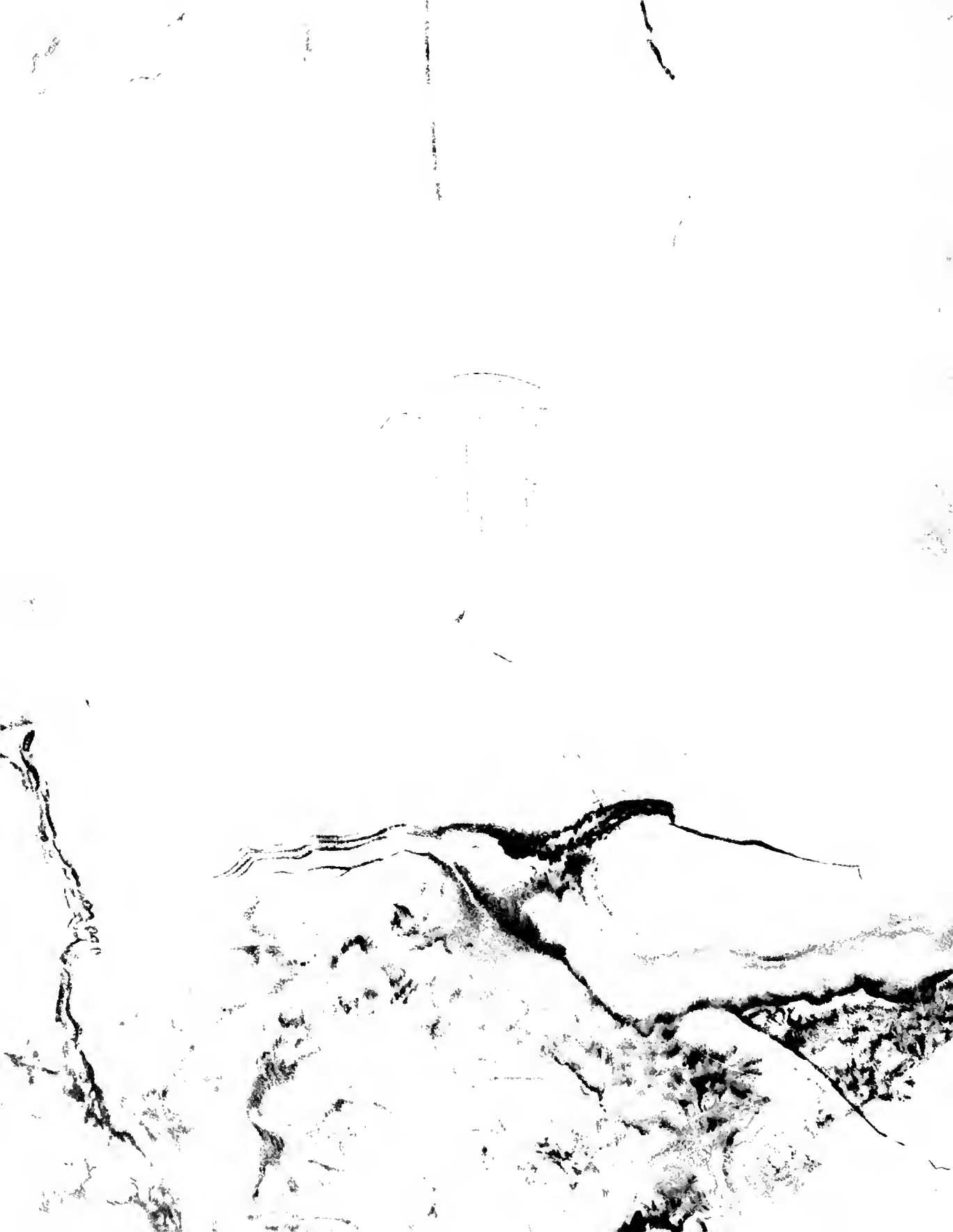
McCormick Knife and Tool Grinder

McCormick Binder Twine

Cheap twine is expensive, because it is bound to break, kink, and cause trouble. The time lost by using cheap twine is valuable and in the busy harvest season when the grain is ripe, time means money. Binder twine that kinks and breaks is not worth hauling home because it is not only a source of annoyance during harvest but it also delays the work of shocking. When bound with inferior twine, bundles often break open when they are pitched to the wagon or to the stack. With such bundles it is almost impossible to build a stack that will shed water.



You will not have these troubles if McCormick twine is used. It can be depended on. There is nothing cheap about it. It is guaranteed to be full length and full strength—twine that won't break and which will work smoothly. There is no better twine. McCormick binder twine is made of the very best sisal and manila fibres. The twine is uniform in size and is very strong. It will not kink and clog the knoter or pull thin and break like cheap and inferior twine. McCormick twine is made in four brands—sisal, standard, manila, and pure manila.







U