

1908  
Locks cover 25- Sept. 16



**T**HE man on our cover stands for a typical American—strong, intelligent and independent. We assume that every farmer believes in quality and independence, that he wants the best machines for his work, but wants his money's worth, that he wants to be able to buy just what he wants in a fair competitive market.

Quality, price and independence depend on each other absolutely. Consider two points in this connection. First, without a fair price you cannot get quality. No one can make a silk purse out of a sow's ear. You will get what you pay for and no more. Prices for 1908 will be higher because everything we buy is higher, including labor. For instance, pig iron is more than 100% higher, steel bars 70% more, and malleable iron has advanced over 90%. Lumber is more than double and other kinds of material in greater or less degree. Some manufacturers might cut the quality—we keep the quality at the Johnston high standard and ask you to pay a bare ten per cent increase on most of our goods. Isn't that more than fair.

WE are not in the trust, of the trust, for the trust, by the trust; no stockholder in the trust holds any stock in The Johnston Harvester Co. and no stockholder in The Johnston Harvester Co. holds any stock in any other harvesting machine company; nor have we any agreement, verbal or otherwise, or stand in any position which in any way tends to compromise our independence. ☞ ☞ ☞

Second, without independence, you will not get quality, but you will get plenty of price, the highest a monopoly chooses to put on. You cannot doubt that control by one corporation will mean control for their benefit, not yours. It will mean no improvements unless you pay for them in higher prices and perhaps no improvements at any price. It will mean cheaper materials or you pay all the advance and probably more. Where do your real interests point, toward trust products or independent manufacturers? Where would the price go to if it were not for the independents?

Johnston machines have the quality, are sold at a fair price, and the name stands now as it always has, for independence. We mean exactly what we say in our declaration on this page. We show clearly our principles, our policy. Our sales increase rapidly, which shows that many thousands of new as well as old customers believe in our quality and our independence.

Our new malleable plant will be in operation about January 1st. This will add materially to our ability to serve you promptly and well. We shall not fail you. Let us have your fair consideration. That is all we ask, but that much we think is our due.

**OFFICERS**

E. W. ATWATER - President and Treasurer  
G. A. FARRALL - Vice-President and Supt.  
L. D. COLLINS - - - - - Secretary

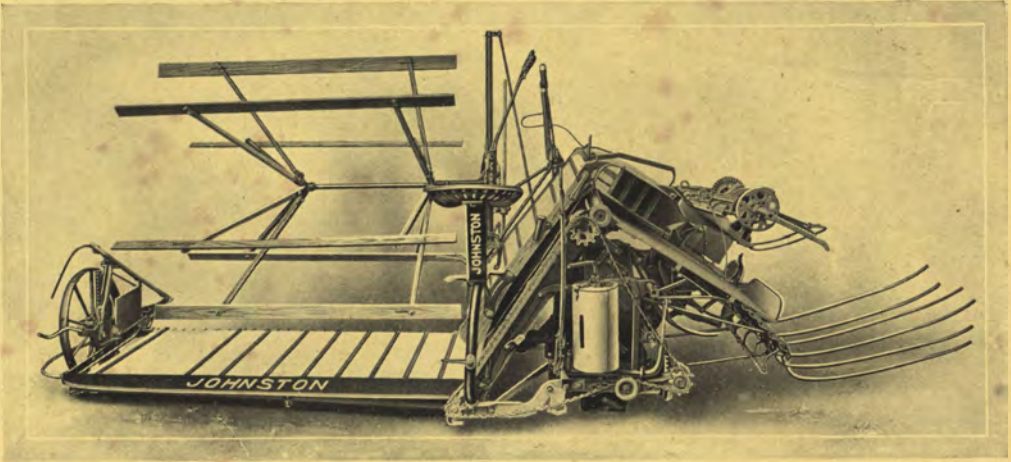
**THE JOHNSTON HARVESTER  
COMPANY, Batavia, N. Y., U. S. A.**

## Johnston "Continental" Binder

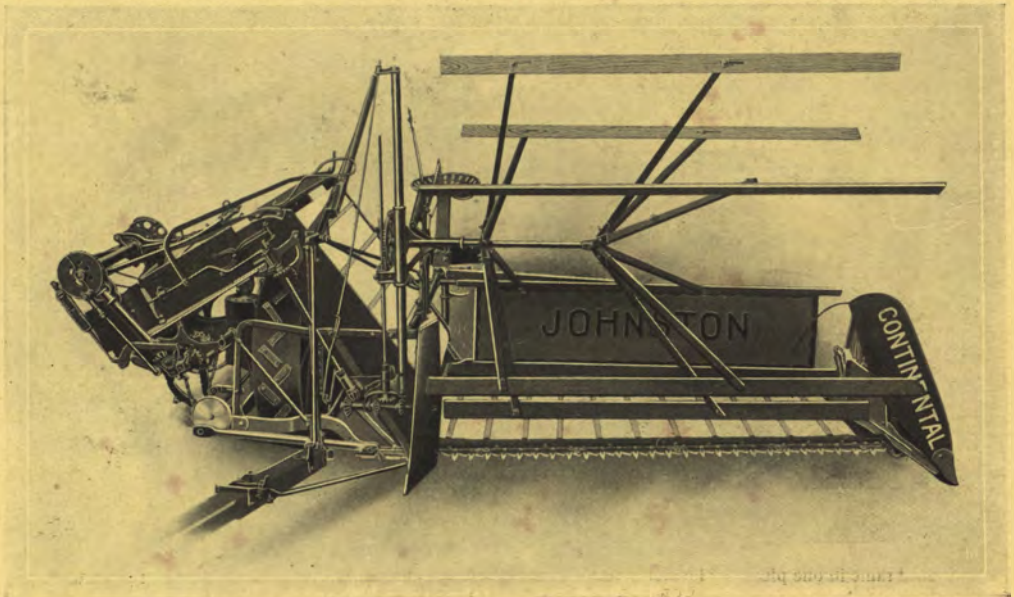


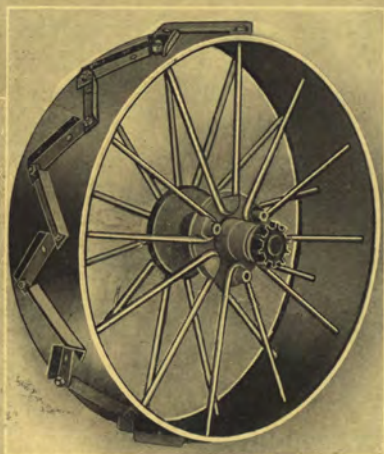
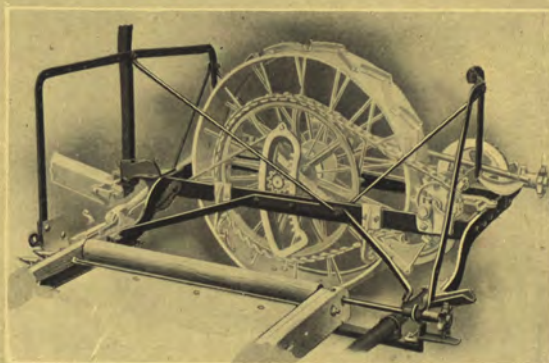
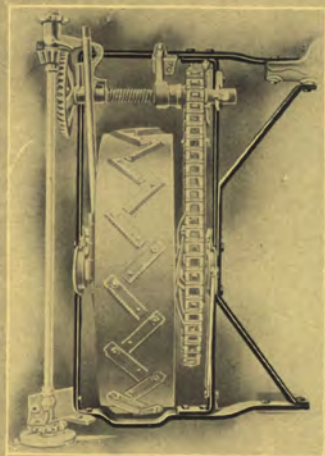
Has greater strength and more elevator capacity than any other grain binder. Roller bearing wheels, folding dividers, right hand levers, gear drive reel and binder attachment, a trip that never repeats, a knottor that always ties. Sizes : 5 foot, 6 foot, 7 foot, 8 foot.

## Johnston "Continental" Binder



**B**UILT for faithful service, and in such simple fashion that you will not feel like swearing at its complications. Easily put together and stays put together when the work is done thoroughly. Easily kept in repair. Drives with great power; is light draft and convenient to operate. Cuts, elevates and binds any kind of grain that grows, under any and all conditions of crop and ground. It will not fail you at the critical time, nor any other time. It has pleased all of our customers. It will suit you to a T.





Main Frame in one piece. Elevator Frames. Main Wheel. Roller Bearings. Gearing and Brass Bush. Chain and Tightener. Raising Apparatus.

## Johnston "Continental" Binder



STEEL is the basis of construction and our aim is to use as few parts as possible and yet not add in any way to the expense of keeping the machine in repair.

The steel main frame is in one piece, well braced with all necessary gearing and shafting compactly and securely fitted to it. A brass bush bearing at rear end of crank shaft prevents heating. Shafting always in line and gearing in perfect mesh. Main wheel has plenty of clearance.

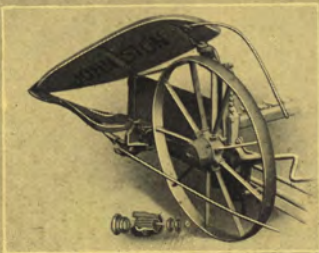
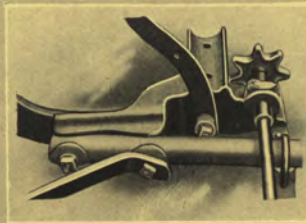
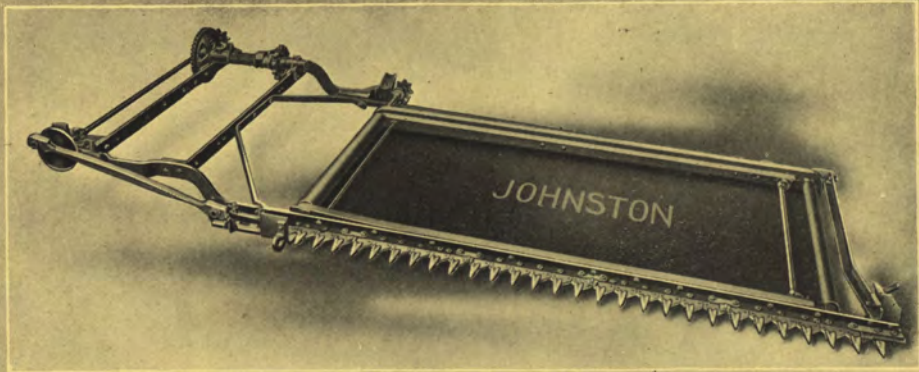
The elevator frames and braces are steel. They carry the elevators securely in position, at just the right height to give sufficient clearance for the wheel but not so high that too great power is needed for elevation.

We do not know of a binder wheel in use that has the strength of the Johnston. It carries the load of the machine without danger of breaking down on rough ground. Is 36 inches in diameter, giving great driving power. Is constructed after the suspension pattern with steel hair-pin spokes, attached to cast hub and steel rim, made heaviest at the edges. The spokes are strengthened at the outer ends and held by angle steel calks. These are placed diagonally to the edge of the rim but at right angles to each other, and give the greatest traction in all kinds of soil. The hub is fitted with steel roller bearings, made dust proof by a series of steel and flange washers. The bearings reduce the draft to the minimum.

The driving power is by chain, steel Locke Belt, so fashioned that the links will not separate in operation. The links are strong, have the right pitch, and work freely. We use a spring-trip tightener with a sprocket to carry the chain. The tightener is easily adjusted.

The drive wheel end of the machine is raised and lowered by gear, worm and shaft, works smoothly and is well shielded. The chain can be removed without taking the wheel out of the frame. You have simply to lower the pinion to the last notch in the segment, cut deep for the purpose, and release the tightener.





Platform, Connections—Front and Rear and Roller Box. Finger Bar Stiffener. Torsion Pipe.  
Pole and Frame Connections. Grain Wheel and Folding Dividers.

## Johnston "Continental" Binder



THE sheet steel platform is riveted in one piece and supported on under side by angle steel ribs. An extra strong angle carries the inner end and a steel torsion pipe braces the rear. Both are securely bolted to joint casting and frame. The joint casting supports the platform roller but a separate box is used as a bearing. It is cheaply replaced when worn. In front, the platform angle is connected with the frame by the inner shoe. The angle has an eye in front where pole brace is attached. This, in effect, transfers the strain in draft to the rear of the machine.

We use a steel angle cutter bar and guards fitted with steel plates. The guards are set flush with the bottom of the platform and allow very close cutting. We make our own knives. Note steel angle stiffening plate at inner end of platform and cutter bar, also stay rod, with set nuts, that holds the guides the proper distance apart.

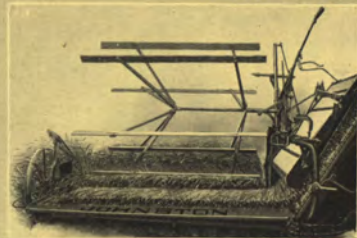
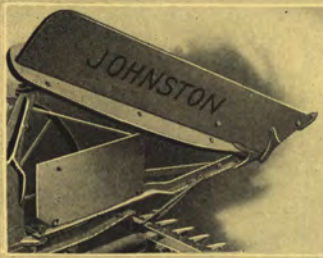
The pole is fastened at the lowest point to the draw iron by pin held in place by a small latch that drops over the head of the pin. The draw iron is set between main frame and steel tilting post, making a very strong connection that will not give trouble.

We use a wood pitman without metal bearings. Wood bearings last longest. The pitman slips on easily and has direct action.

The grain wheel post is attached to outer platform angle and is braced to under side of platform, also. The steel wheel has broad, rounding tire that will not cut in. The hub box is separate and fitted with dust-proof roller bearings. The platform at this end is raised and lowered by rack, crank and worm.

Both dividers are made so that they will fold over the platform for convenience in transportation. No bolts or nuts to loosen. Simply raise a lever or pull out a catch pin. The outer divider has steel angle support and a sheet steel shield keeps the grain from pushing through divider and wheel.





Outer Divider Extension. Reel Standard, Gearing—upper and lower, Levers. Reel Hinge.  
Reel, in tall grain and short. Backwing and Connections.

## Johnston "Continental" Binder



**I**N addition to the regular divider, each binder is provided with an extension divider for tall grain. It is fitted complete with extra point and socket, and is easily attached.

All levers are on the right hand side, except for carrier and backwing. All are easily reached from the seat.

The reel can be tilted or shifted quickly, for grain that is tall, short or medium, standing or down, straight or tangled, heavy or light. The Johnston handles the crop perfectly, even if it is in bad shape to be taken care of. A balance spring carries the weight of the reel in shifting.

We show the reel set for tall grain; also, set low and far out to catch tangled grain. When tangled grain leans toward the machine, the tendency is for the grain to lop over, to be cut too far from the ground, and to be shoved on to the platform instead of falling naturally. The reel can be set with the beaters just clearing the points of the guards, and so force the grain to stand

while being cut, and to fall where it should.

For very short grain, the reel can be set with the beaters just above the guards. All of the grain falls on canvas.

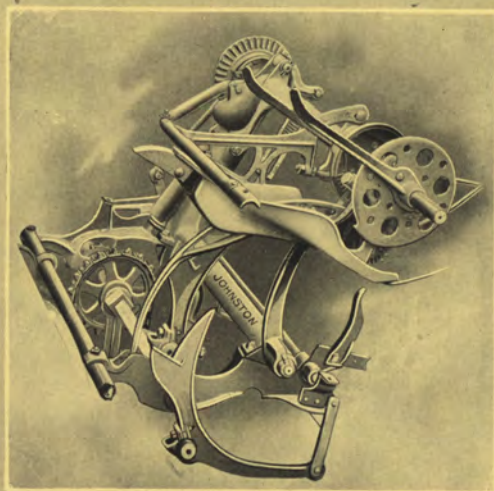
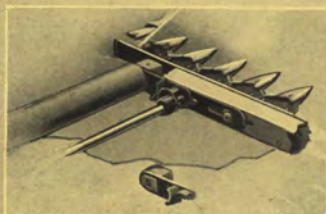
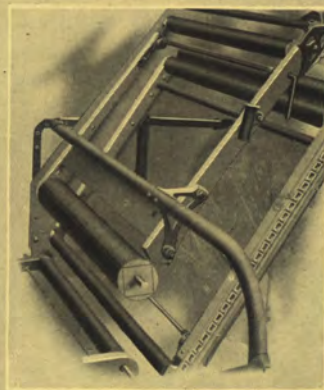
The Johnston reel is gear driven, has two heads or supports for the steel pipe axle and six beaters. It is light, yet strong, compactly built, works smoothly and there is no lost motion. The gears mesh perfectly and wear well.



The standard bracket slides on small rollers, up and down the pipe. This prevents binding. The standard is steel trussed and can be adjusted so as to keep the beaters level and parallel with the platform. The reel joint swings out and back easily on a large bearing. The dotted lines in the cut show hinge joint in its back position.

The backwing can be set for long or short grain and can be removed if desirable. Has a very simple adjustment. You have only to lift a rod with a bent end, out of one hole and drop it into another.





Elevators. Separate Roller Box. Canvas Tightener Levers for Elevators and Platform Binder Attachment and Gearing. Seventh Roller. Tier Frame Support.

## Johnston "Continental" Binder



THE elevators are better constructed and have greater capacity for every condition of grain than on any other binder made. We are the only ones using a  $5\frac{1}{4}$  inch roller at the lower end of the upper elevator. This roller pulls all tangled or short grain into the throat of the elevator, instead of pushing it out between the lower rollers, helping instead of hindering. The canvases are held taut for light grain, but here again the large roller helps by providing room for the canvases to give when carrying

heavy bunches. There is no loss, no clogging in either case.

Note thorough construction of elevators. Both are securely braced and held in line, a steel arch supporting the upper elevator. We show end of the large roller, which is the built-up kind and will not warp. We provide a spreader rod for top of lower elevator and separate box bearing for shaft that drives the upper elevator. Self-aligning boxes make the rollers run true and are cheaply replaced when worn.

The canvases are well made, of the best grade of materials throughout. An eccentric lever, operated from the outside, tightens or releases each canvas. A cam slide and lever are the only parts used for this purpose and they are always in order. The slide has oil-soaked wood bearing in which the rollers run and there is practically no wear.

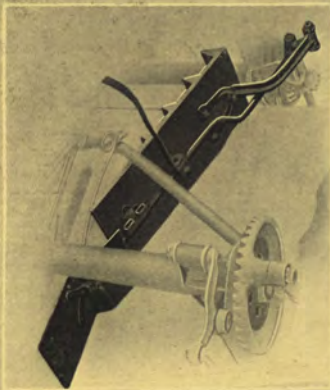
The seventh roller prevents loss of grain between elevators and decks and helps it on its way to the decks. The deck cap is fastened close to the seventh roller, below its center and no grain can get through there.

The decks are steep slanted. The grain slides down easily.

The Johnston binder attachment is driven by gear. There is positive action, no lost motion. Saves wear, saves weight. The construction is simple and compact. The frame is cast in one piece and makes, what is very necessary here, a perfect bearing for the shafting and gearing used in making the bundle.

A malleable frame support with cast roller carries the weight of the attachment in shifting. The gears mesh perfectly and wear well.





Binder Lock. Packers. Knotter Cam—Hook closed. Knot being tied. Knife Arm Cam—Twine being cut.  
 Twine Holder Cam. Agitator. Adjusted for long bundle. Dump Board Spring. Twine Can Cover.  
 Agitator Gears. Roller Box. Adjusted for short bundle.

## Johnston "Continental" Binder



THE Johnston trip never repeats or causes the making of small bundles. We use a spring-trip binder lock that always works. The trip and compressor springs are adjusted independently, but one nut takes up the wear.

Packers and driving-dog are always in perfect time with the needle. The packers keep just ahead of the needle, doing the heavy work. Packers and packer crank run in detachable boxes, which are self-oiling, reduce friction and are cheaply replaced when worn. The needle is carefully fitted.

The flange on twine can cover keeps the can in shape and the tension plate steady.

For eighteen years, we have used the same knotter, without any change. It always works perfectly. This is because its parts are cam-driven and they must work right. We show cuts of cam for

knotting hook, with the twine over the hook just ready to begin tying; the hook, after three-fourths of the turn and knot nearly tied; the cam for knife arm, the knot tied and the twine being cut; the cam for twine holder gear. Each cog on this gear means a bundle tied. Every knotter is carefully fitted and they are thoroughly tested before leaving the factory.

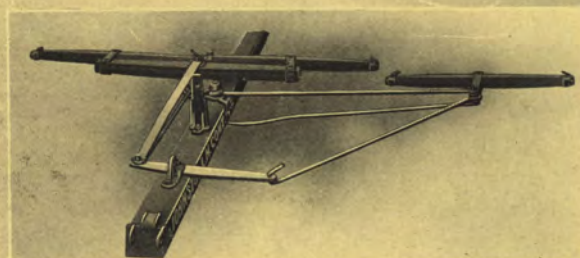
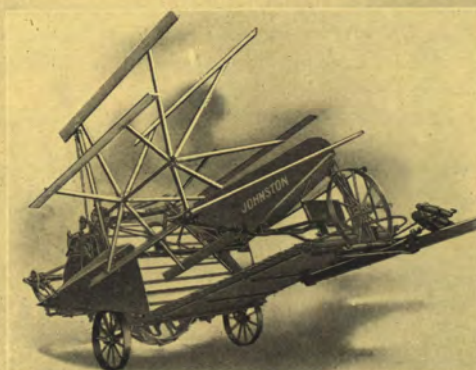
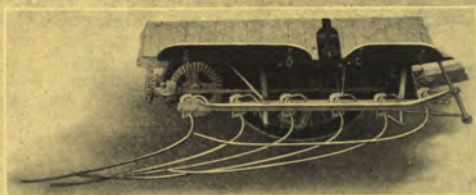
A third discharge arm is provided with each machine. It can be adjusted ahead of the others, to part the heads in heavy tangled grain.

The Johnston butter helps to make a nice bundle by keeping the butts of grain even. A sheet steel extension holds the bundle while it is being bound. The butter gears mesh perfectly. A separate roller box is provided for bearing at this point.

Shifting the binder attachment and adjustment of the butter controls the placing of the twine around the bundle. Can bind long grain 24 inches from the butts and short grain 8 inches from the butts. Can bind in the right place every time.

The deck dump-boards have spring trip. A ratchet nut takes up the wear.





Bundle Carrier, folded and extended. Binder on Truck. Truck Axle Fastenings, inside and out. Steel three-horse Equalizer. Tongue Truck for 7 foot and 8 foot machines.

## Johnston "Continental" Binder



THE Johnston steel bundle carrier folds to the rear, out of the way. Has six fingers that are held in place or tripped by the foot, from the seat. It is easily attached to the machine and perfectly supported. Is built for strength and carries its load easily. Is well balanced and dumps and returns to place quickly.

Our transporting trucks are the stub axle kind. The binder can be mounted in five minutes. The truck consists simply of two steel axles, a pair of special steel wheels and four malleable supports that are always bolted in position on the main frame of the machine.

The wheels, complete with their axles, are slipped through both brackets, given a quarter turn so that pins will fit in back of inside bracket, and are locked with small latches. After

raising both wheels out of the way, hook pole iron in casting on underside of platform and slip forward casting, which is always bolted to top of pole, into socket on end of platform. It is locked there automatically. Pick up your lines and go ahead. Not one bolt or nut to be touched in the entire operation.

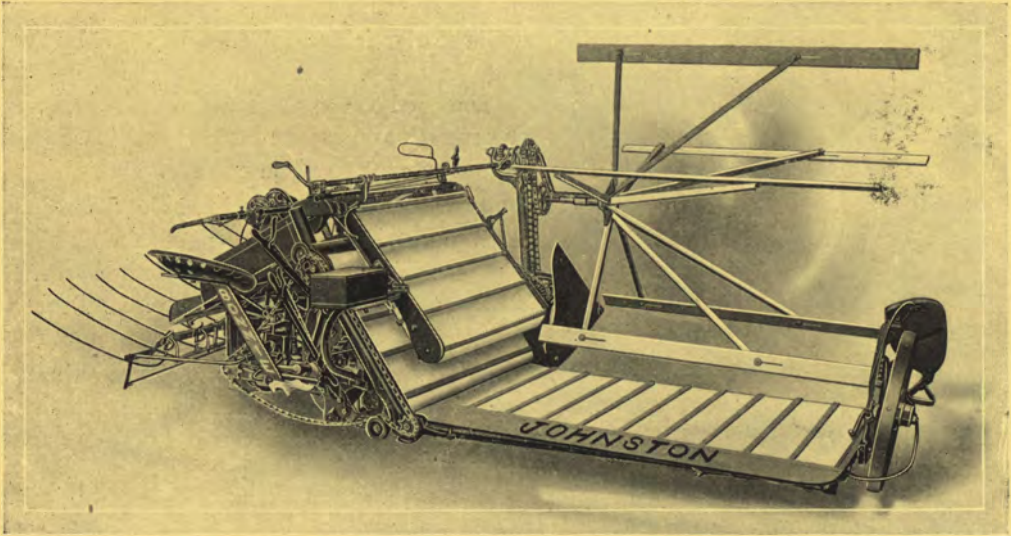
The Johnston steel three-horse rig is fifty percent. lighter, yet will wear longer and work better than the old style. There isn't a better rig on the market.

Every 8-foot binder is furnished with an up-to-date tongue truck and a four horse equipment. The truck prevents side draft and neck weight. Will be shipped with 7-foot machines when ordered.

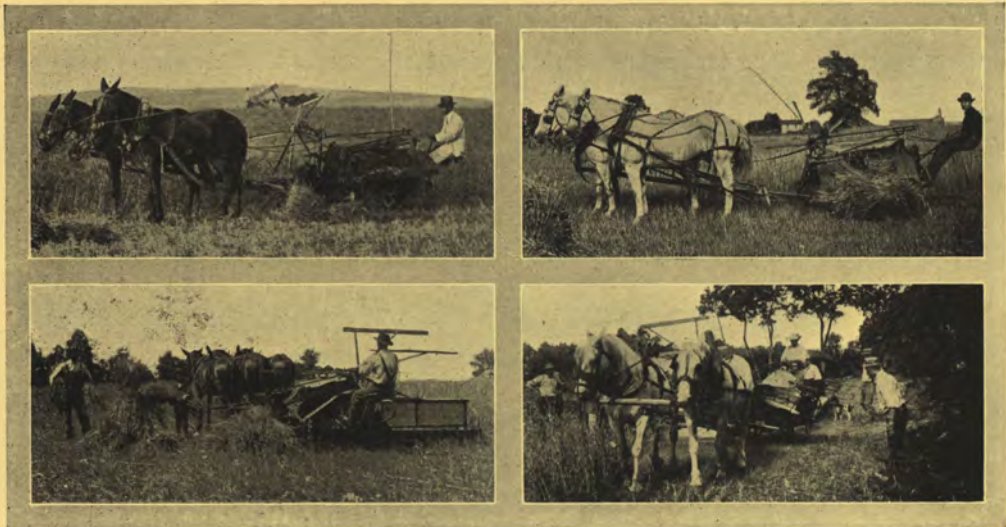
The Johnston Continental Binder has withstood the test of years in all countries, under all kinds of conditions and circumstances, and today finds the Johnston Continental Binder the most improved and satisfactory machine made. Every owner of a Johnston is an enthusiastic owner.



## Johnston "Bonnie" Binder



**T**HE only successful low elevator binder manufactured. Elevates grain to a height of 27 inches only. Is especially adapted to use in hilly country. Handles perfectly the heaviest crops that grow. Is a right-hand binder, light draft, well balanced, no neck weight. Has a reel that travels completely around the circle. Has same style elevators as on the "Continental," gear drive binder attachment, steel frame, wheels and platform, roller bearings in both wheels, folding dividers, folding steel carrier, stub axle truck. Built in one size only, 6 foot.



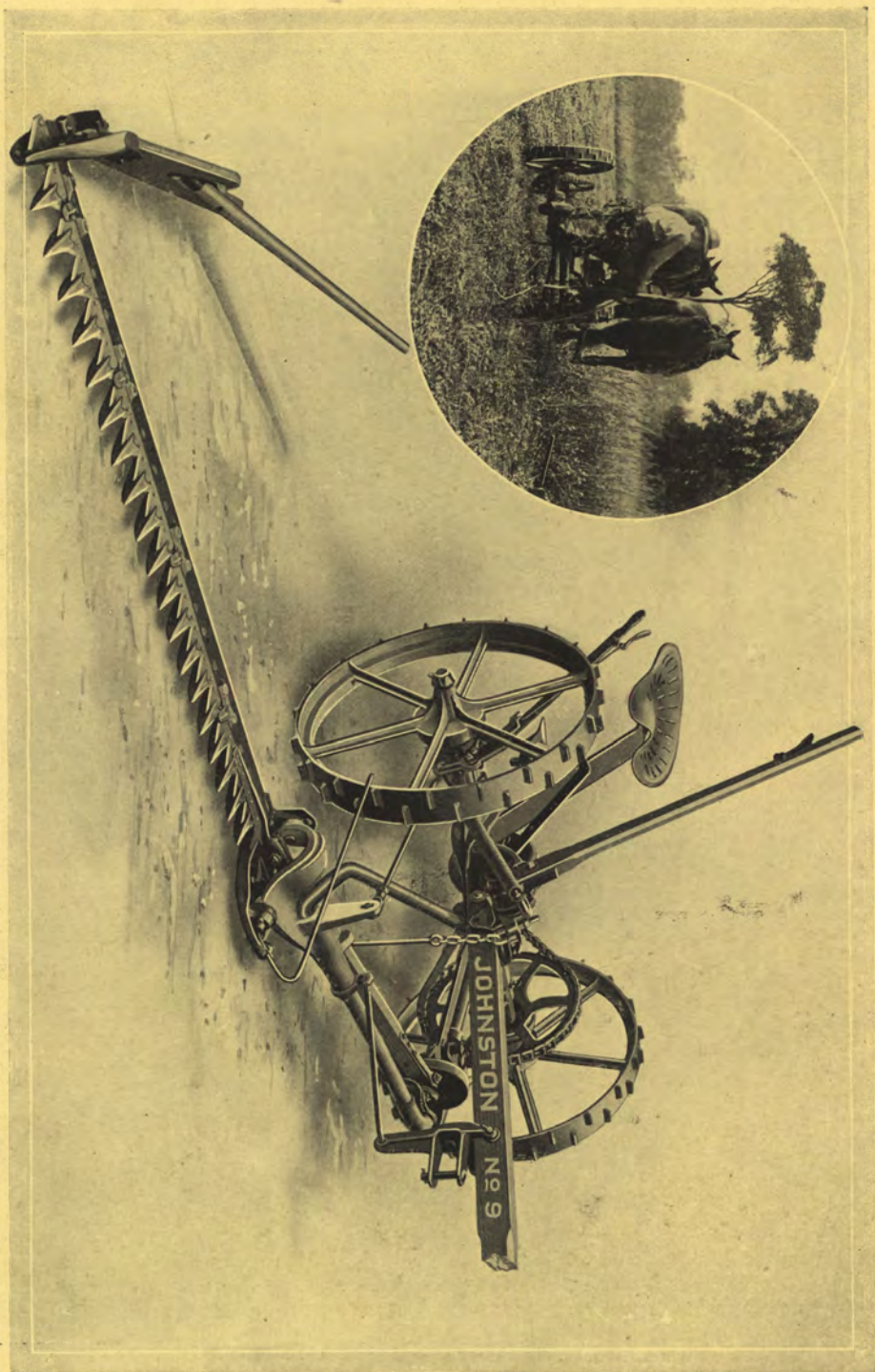
"Bonnie" in Spain.

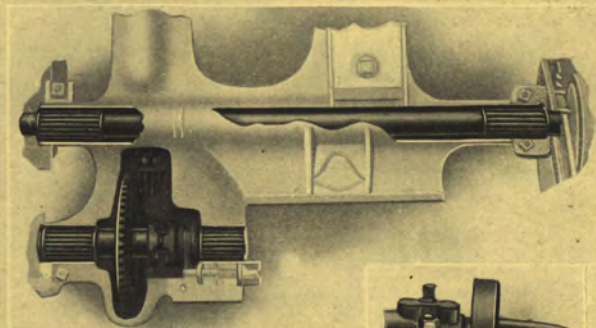
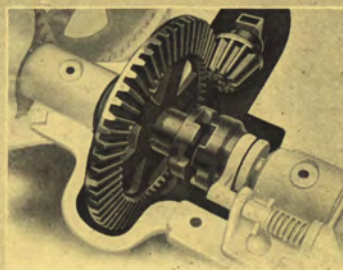
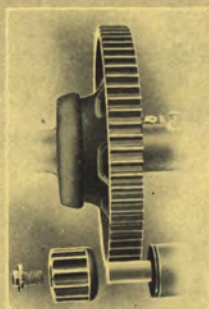
In North Carolina.

In New York State.

In France.

Johnston Mower, No. 9, Chain Drive





No. 9 Chain. No. 10 Gearing. Shield. Pawls. Roller Bearings. Horizontal Crank Shaft. Oil box and Crank Wheel. Pitman. Ratchet Nut, Lock Spring and Babbitted Box.

## Johnston Mowers, Nos. 9 and 10



THEY are not built simply to be sold but to stay sold, to make friends of every purchaser, to work well, to wear a long while. For every dollar you invest in Johnston mowers, you get your money back with mighty good interest.

We build both chain and gear drive mowers. The driving power constitutes their only difference.

On the No. 9, we use steel Locke Belt Chain, with detachable links of the right strength and pitch. They do not come apart in operation. An adjustable tightener is used.

On the No. 10, we have a large gear and a small pinion that mesh perfectly and are an absolutely positive driving force.

Both chain and gearing are well shielded. Either small sprocket or pinion can be easily removed, when worn.

The necessary power is furnished by high wheels, each with three pawls that compel even motion without unnecessary jar to the knife or waste of power.

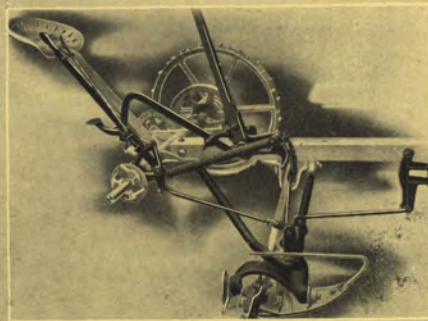
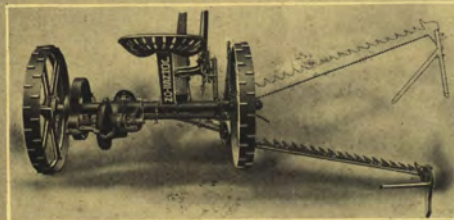
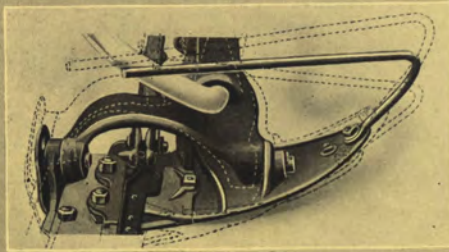
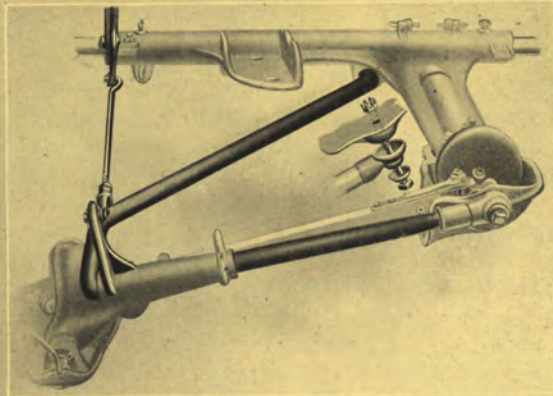
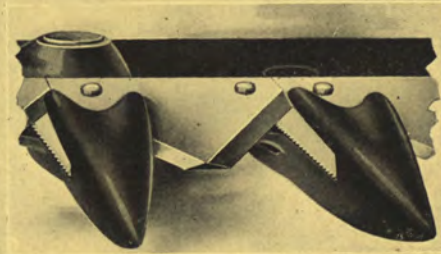
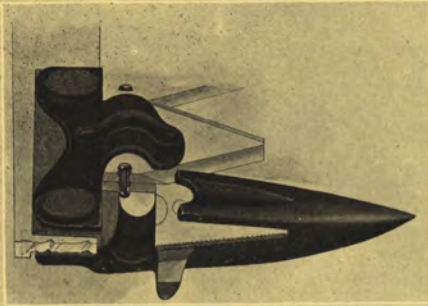
The frame is cast iron and just heavy enough to make a firm bearing, keeping all shafting in line and all gearing running smoothly. Two sets of roller bearings each for main axle and intermediate shaft at the rear, reduce the draft. The bearings are steel and dust-proof.

The gearing is back of the main axle, giving balance to the machine. Gears are properly made and fitted. The machine is thrown out of gear by a lever in easy reach of the driver. There is ample provision for oiling.

The heavy crank shaft runs in horizontal position under the main axle and retains oil on the bearings. Separate boxes at each end hold the shaft in line, and are easily replaced when worn.

We use a long, wood pitman with heavy malleable connections and a babbitted cast iron box that makes a good bearing and does not heat, if kept properly adjusted and oiled. The box has separate oil chamber. A malleable flange washer keeps out the dirt. The bolts at each end have ratchet nut held in place by steel lock springs. Makes an easy, secure adjustment. Note angle of the pitman. Has direct action and the smallest possible amount of friction at each end.





Showing Guard, Wear Plate and Oval Head Rivets. Serrated Guard Plate. Outer Shoe Sole Plate. Push Bar. Raising Gag. Whiffletree Hooks and Chafing Plates. Range of Tilt of Inner Shoe and Bar. Levers.

## Johnston Mowers, Nos. 9 and 10



THE cutter bar is always rigid. Is made of steel with a bead on under side. The guards are fitted with serrated steel plates. These, with the knife, give a perfect shear cut. The bar is smooth on top with nothing to catch the loose grass. We make our knives. Sections have oval head rivets, top and bottom. They take out the grass through the openings between the guards. The sections extend over the knife back and bear on adjustable, hardened steel wear plates that keep the knife in line. The outer shoe has steel subsole. It is adjustable to suit any height of stubble.

In Johnston mowers, the draft is evenly divided between the pole drawing the truck and the draft rod pulling the cutting apparatus. Our wide-cut mowers have frame extension to widen the truck and even the draft.

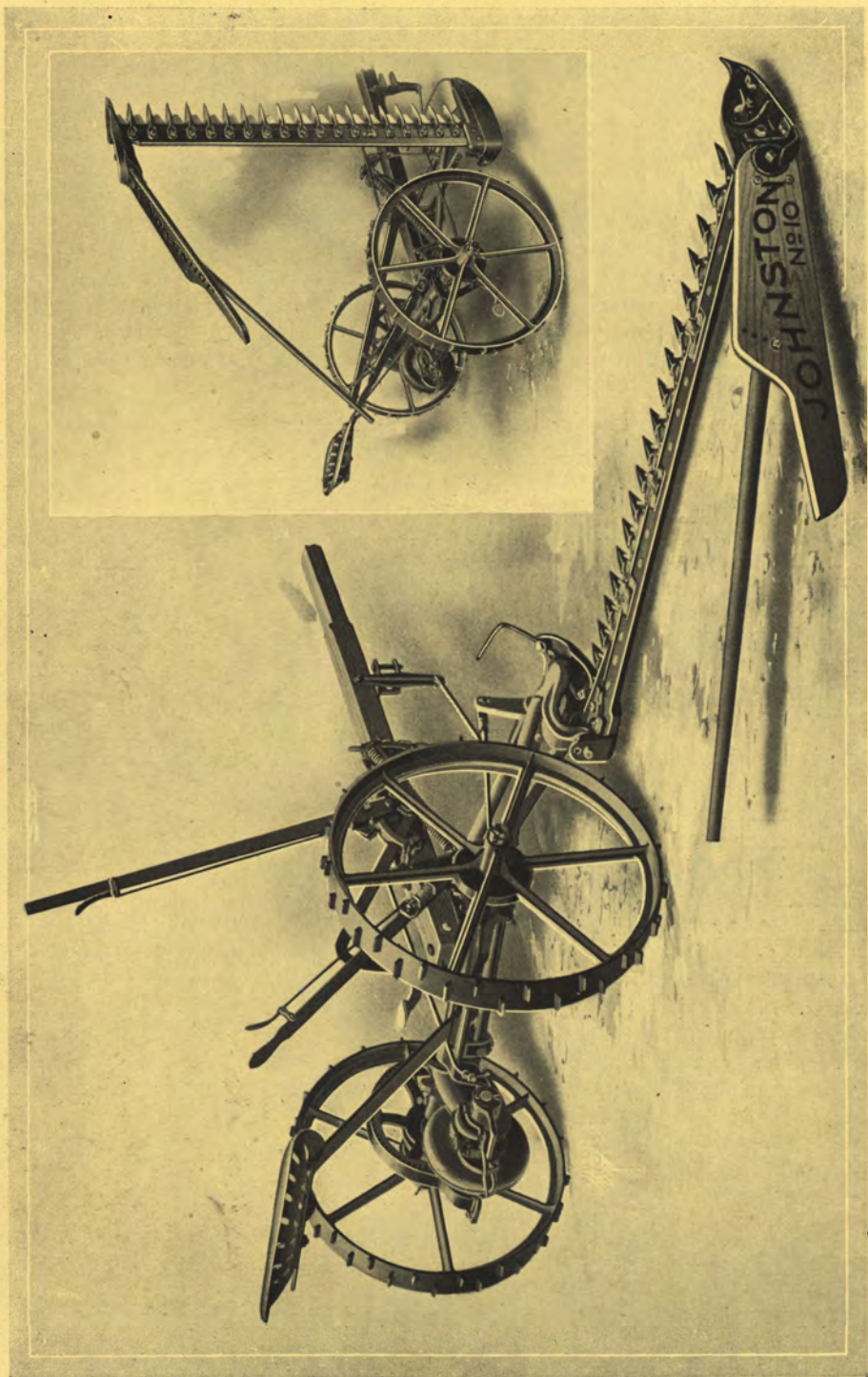
Johnston whiffletrees draw from underside of the pole where the draft rod is attached. This brings the pull in a direct line from the push-bar. The whiffletrees hooks are driven into the ends and will not pull out. Steel chafing plates make eveners and whiffletrees work easily and prevent wear.

The steel push bar is in one piece, works free in the joint casting and is attached to the frame in practically parallel points so that there is no binding when the bar is raised. Note ball and socket joint in front. The connecting bar joint is wide and attached to inner shoe by steel pins at two points. This reduces wear.

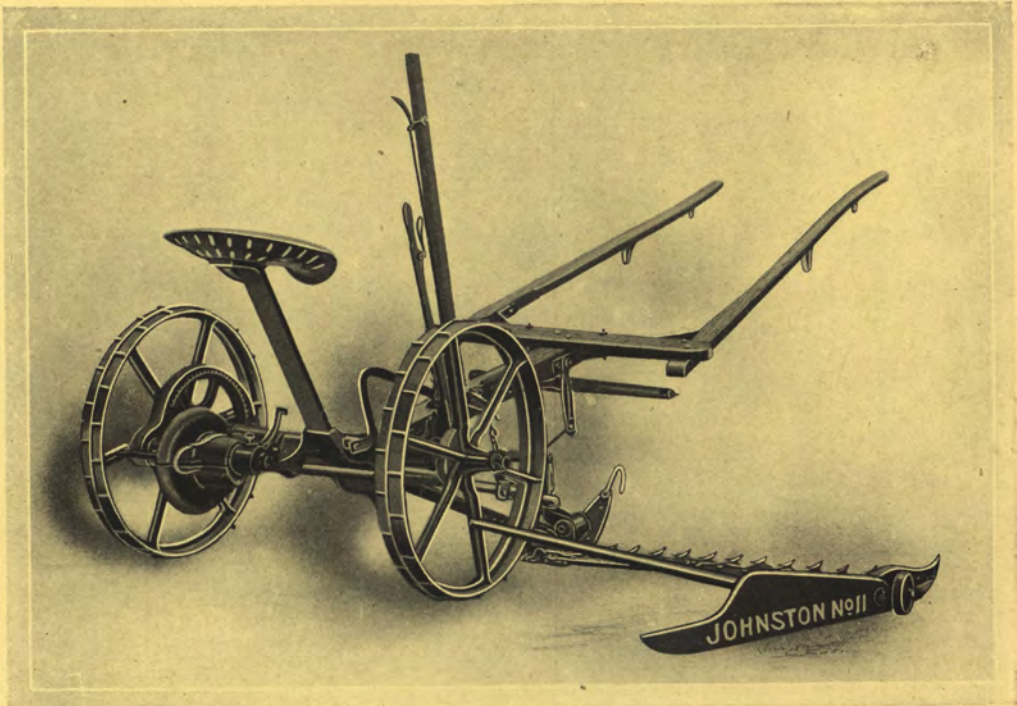
The levers give a wide range of adjustment to bar. We show, by dotted lines, the highest and lowest points at which the knife will cut. Other cuts show high and low positions of the cutting bar when raised to pass obstructions, in turning corners or cutting on a side hill; also, a side view of the levers. The carrying spring carries the weight of the bar in raising. It drops of its own weight and without jar when released. By use of foot and hand levers, the operator has absolute and easy control of the bar at all times. Adjusting hooks regulate the tension of the raising spring. For transportation, the cutting bar can be folded and securely fastened by bar support.



Johnston Mower, No. 10, Gear Drive



## Johnston Mower, No. 11



OUR one horse mower. The biggest little mower made. For parks or extensive lawns or in orchards, it is indispensable. For small farms, a one horse mower will be found very convenient.

The Johnston No. 11 is built on the same general lines as our

No. 10. The features include a perfect system of gearing placed at the rear of main axle, horizontal crank shaft with separate boxes (brass, in front), wood pitman,

roller bearings for main axle and bevel wheel shaft, three pawls in each wheel and convenient levers. The lower bevel-gear shield is detachable, as is also the crank wheel shield. They are easily removed and cheaply replaced in case of accident. The thills are well made of good stock and thoroughly braced. The single tree draws from underside of stub tongue. The machine is light draft, has power and capacity, and wears well. Is especially constructed for close cutting.



# Johnston Steel Hay Tedder



Three-tine Fork-Spring Trip. Tilting Spring. Wheel Hub, Section of Frame with pivot, Roller Bearings. Steel Locke Belt Chain, Pipe Brackets and Caps.

## Johnston Steel Hay Tedder



FOR good work, any hay tedder must have strength, smooth running and perfect balance. Every Johnston tedder fills the bill on these three points and all others as well.

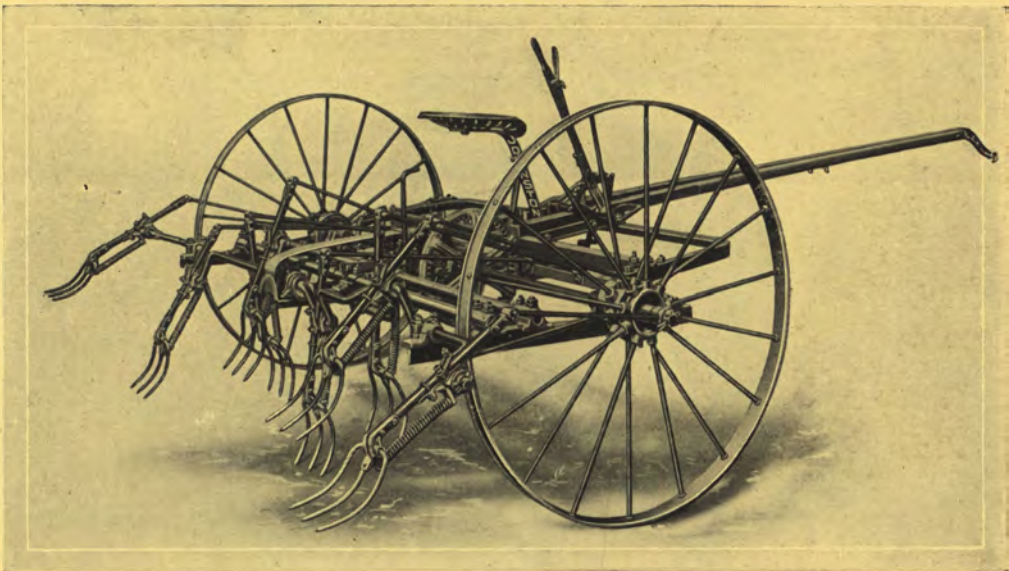
The forks must have a perfect support, in order that they may work with even motion. Our main frame is made in two sections. The rear part is made of steel angle and steel pipe. It is absolutely rigid with brackets and pipe fitted securely. The front section is steel angle, pivoted at the main axle.

The steel wheels have double hubs, staggered spokes and wide, channel-steel tires, concave side out. Three sets of roller bearings are provided for main axle. They reduce draft. We drive from the center by steel Locke Belt Chain. Power applied from both wheels at once, gives even draft. A steel shield protects the chain.

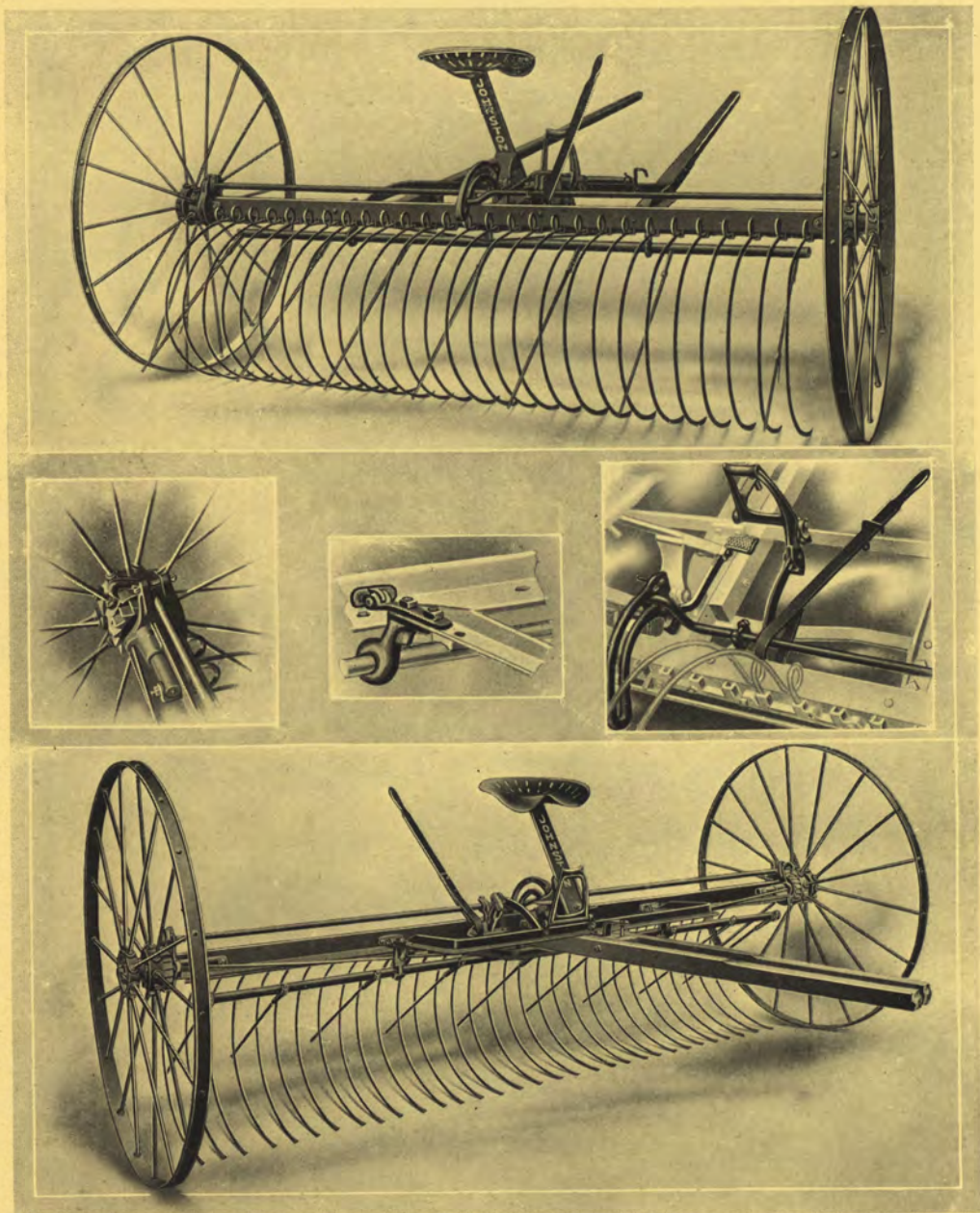
The forks have three tines in one piece of steel, spring tempered. A spring trip saves breakage. No two forks strike the ground at the same time. Outside forks stir the hay that the wheels pass over. The fork crank boxes are made in two parts, securely fastened to the frame. They hold the cranks in perfect line. The tilting lever controls the height at which the forks work. A spring in front carries the weight.

The eight fork frame has steel truss and cushion springs at each side to save frame and operator.

Combination pole and thills furnished with each machine, but no whiffletrees unless ordered extra.

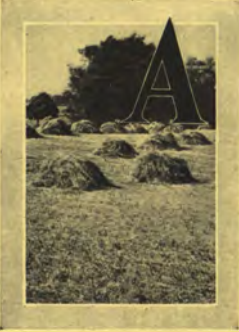


# Johnston Steel Hay Rake



Wheel Hub, Axle Support, Dump Rod Catch. Frame Hinge. Levers on right side. Combination Pole and Thills.

## Johnston Steel Rake



LIGHT, durable, self-dump machine. Draws evenly and cleans the ground. Handles easily the heaviest crops, on rough or level ground. The Johnston rake-head and main frame are steel angle, steel-trussed and securely hinged. They will not sag with any necessary weight above or below. The rake-head is balanced so that the weight of the driver assists in working the machine.

The steel wheels have double hubs, staggered spokes, channel steel tires with concave side out to give more traction.

The steel teeth are long, flat-pointed, interchangeable. They have free action, hang low and lift high when dumping. They are fastened to the rake-head by detachable tooth holders, which cost little to replace. Steel cleaners pack the hay and keep it from rolling.

We use a one piece dump rod, dumping from both wheels at once. All levers are on the right hand side, except foot lever for cleaners. Both hold-down lever and trip link are adjustable. A ratchet plate on the trip link regulates the tripping when fast or slow-walking horses are used. Combination pole and thills, for one or two horses, furnished with each rake.

The Johnston Steel Rake will give service and lots of wear. As its name implies it is constructed almost entirely of steel. The combination pole and thills are of wood.

There are few bolts used on this rake. There are no complicated parts to get out of order. You are sure of simplicity, capacity and great strength with a Johnston steel Rake.

There is no better Rake made than the JOHNSTON.





Reaper Gearing, Roller Bearings, Grain Wheel and Outer Divider. Raising Lever and Suspending Bar.  
 Rake parallel with Bar. Automatic Trip. Rake Standard.  
 Platform Support and Braces. Reaper Folded.

## Johnston "Continental" Reaper



I N some sections of the country, the self-rake reaper is still used in rye and barley. The Johnston "Continental" has behind it a number one, thirty years' record, has won more first prizes in the field and at exhibitions than any other machine. Is well known in every country in Europe as the lightest draft reaper made. It is durable, easy to operate and has wide range of adjustment.

Has strong cast frame, separate shaft boxes and gearing in perfect mesh. The boxes are secured by heavy staples and double nuts. Each box has siphon oil cup. Boxes, when worn, are cheaply replaced. Shields keep out the dirt and straw. A large cast main wheel with wide rim and cast lugs give the necessary power.

The hub of wheel is fitted with dust-proof roller bearings. They reduce friction.

Each end of the platform is raised independently, the inner end by a raising-screw and the grain wheel end by crank and worm. All levers in easy reach from the seat. A balance spring carries the weight of the machine in tilting.

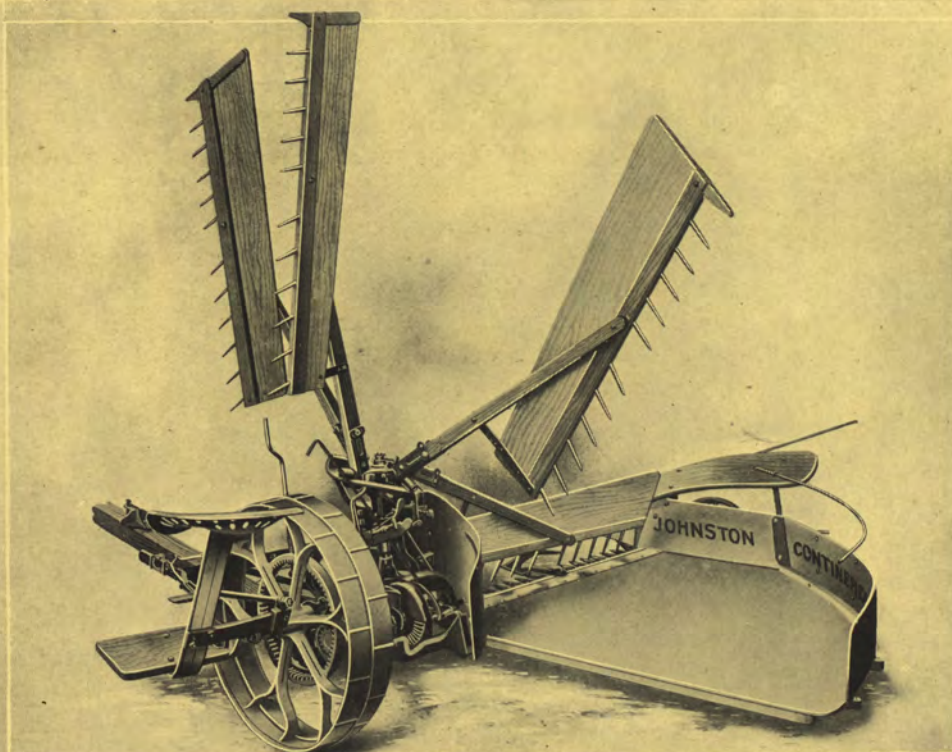
By means of a high rake standard, well shielded, and solid rakes, instead of open we avoid winding of straw about the rakes. The rakes are parallel with the finger bar its entire length, and so discharge the gavel squarely, in the best shape for binding.

The cam is adjustable for long or short grain. With our automatic (or AA) trip, the operator can set to rake off every second, third, fourth, fifth, or sixth rake. He can prevent the delivery of a gavel at any time in turning corners or in the grain.

The platform is steel-trussed to prevent sagging. We use steel pipe support for frame hinge and inner end of platform. When folded for transportation, the pipe serves as axle for the grain wheel. Steel braces hold the platform when raised and a U-shaped steel support keeps the machine upright while wheel is being put on.



# Johnston "Continental" Reaper

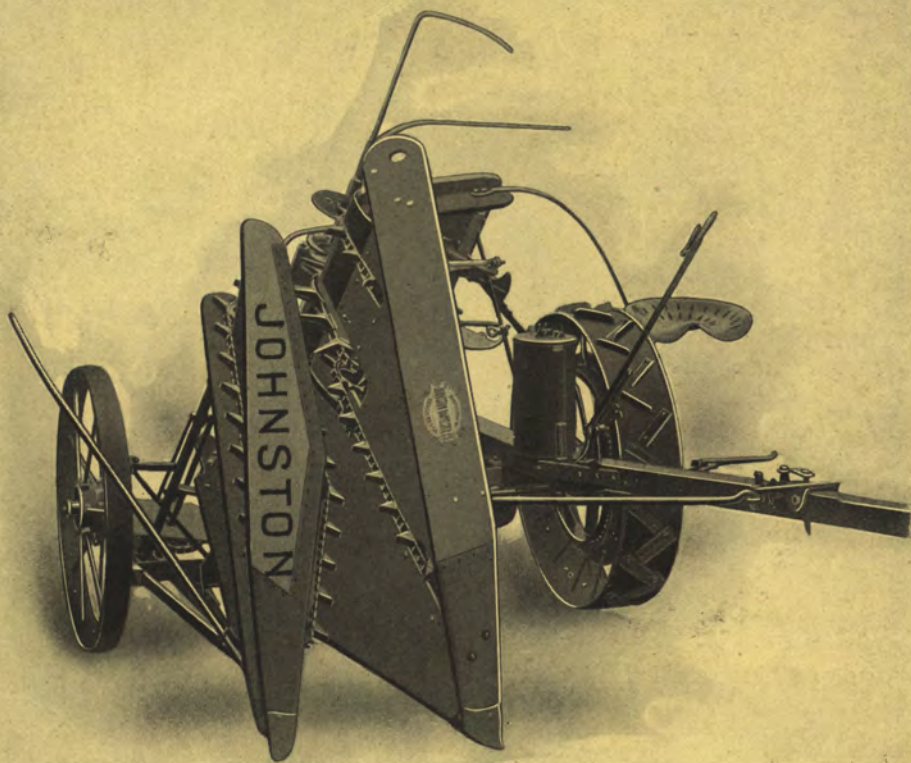
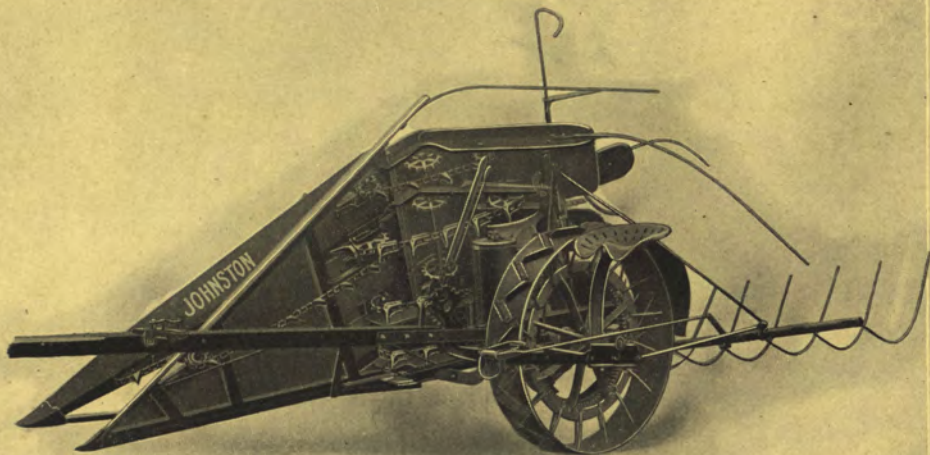


"Continental" in Russia.

In Bulgaria.  
The lightest draft reaper manufactured.

In Italy.

## Johnston Corn Binder





Showing Frame, Wheels and location of Pole and Seat. . . Forty inch Wheel, Roller and Brass Bush Bearings.  
Main Drive Gears. Cutting Apparatus. Conveyor Fingers. Adjustable Chain Tighteners.  
Separate Idler Sprocket Box. Binder Attachment. Automatic Gates. Set for Short Corn.

## Johnston Corn Binder



UR machine has lighter and more direct draft, cuts with greater power, requires less power for elevation and binds with less loss than any corn binder made.

The Johnston has the largest drive wheel in use and the only one of its kind. Is 40 inches in diameter with wide rim and angle steel calks, giving great power. The hub of wheel has dust-proof roller bearings that decrease the draft.

The main frame is steel, in one piece and is wide enough so that machines can be safely worked on side hills. The complete machine is 5 feet 11 inches wide and will pass through any ordinary farm gateway.

The Johnston elevates and binds corn in an inclined position—the natural way. Binding corn in a horizontal position is very wasteful. Binding in a vertical position requires more power.

None of the vertical or inclined machines except the Johnston have the pole attached to the frame inside of the wheel. This divides the weight and work of the machine between the wheel and the operator on one side, and the elevators and gearing on the other, with the binder attachment directly in the line of draft. No side draft. The machine is always in perfect balance.

Our cutting apparatus includes two stationary side knives, a center knife and the regular sickle or smooth knife. Corn is cut clean and not torn up. There is no clogging.

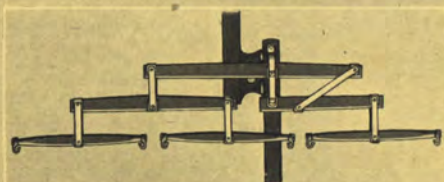
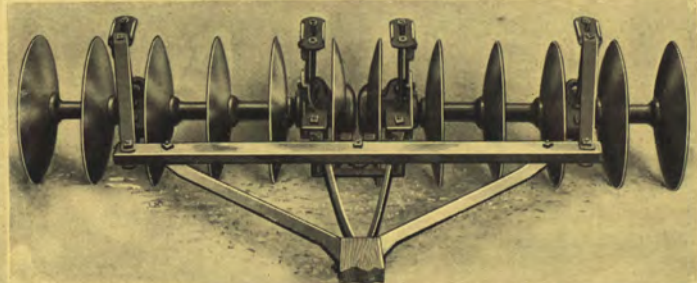
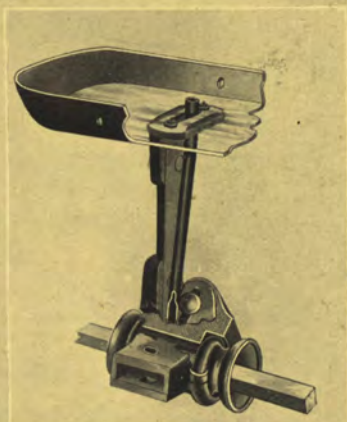
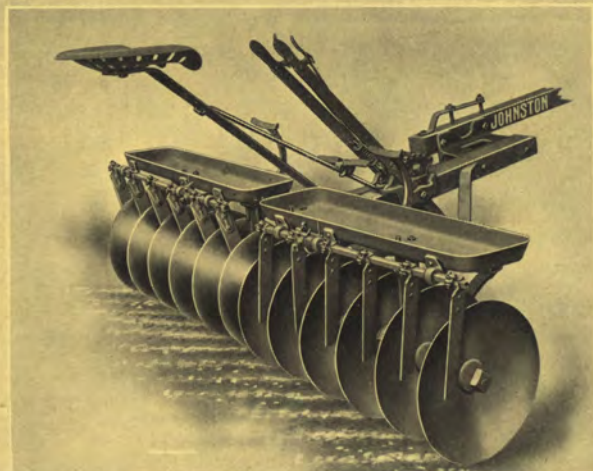
The gathering chains with stationary fingers pick up the row knocked down in opening up the field. They handle tangled corn perfectly.

The conveyor chains with folding fingers carry the corn to the binder attachment. Just before the needle passes around the bundle, automatic gates (found only on the Johnston) release the fingers. These fold and keep the incoming corn from crowding. There are no packers. The Johnston knocks off less ears than any other corn binder.

The binder attachment is gear-driven. It has the widest adjustment of the band on any machine. Binds 32 inches from the butts or as low as 18 inches. Can bind above or below the ears. For very short corn, the binder frame extension is removed and needle and knotter lowered. The stalk channel has a 4-inch adjustment. All levers convenient to the operator. The Johnston steel carrier takes five bundles and trips from the seat.



# Johnston "Continental" Disk Harrow



Wood Bearing Draft Standards. Cross Bar Thimbles. The Simplest Frame Work. Center Bumpers. Set-over Pole, for three horses. Scraper Lever. Sizes and Styles.

## Johnston "Continental" Disk Harrow

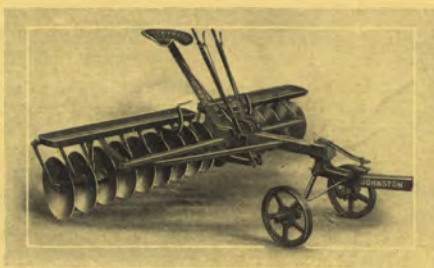


JOHNSTON "Continental" cut well, pulverize thoroughly and wear a long while. They till the entire width of cut. Tubular steel cross bar and steel braces are the only sort of frame used. Small thimbles prevent cross bar bolts from cutting out.

An ordinary pole is furnished for two or four horses, but for three horses we use a stub and set-over pole, with the middle horse directly in the line of draft. There is no side draft and the gangs draw and cut evenly.

The "Continental" is the lightest draft disk harrow manufactured. Convex center bumpers for each gang take care of the end pressure. They simply roll against each other, revolving in the direction in which the soil is turned. No other method will relieve the end pressure effectively. Certainly, ball bearings will not do it. The "Continental" has wood-block bearings for the draft standards. They take all of the pressure from the standard thimbles and reduce the draft to the minimum. The block is adjustable to take up the wear and the bearing is dirt proof.

The standards are not in one piece, but five, any one of which can be removed with out taking the gang apart and are cheaply replaced when worn. Light, strong, convenient construction. A steel oil tube runs from weight box to each standard bearing.



To further reduce draft, we furnish tongue truck when ordered that way.

Johnston "Continental" have steel-blade Rose scrapers, operated by automatic foot levers in front. Pressed steel weight boxes are used. Each gang has a shifter lever to control the cutting angle.

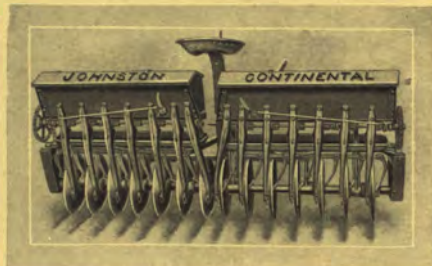
The "Continental" is made in eight different widths of cut—from 4 feet 4 inches to 13 feet, with 16, 18 or 20 inch solid or cut-out disks.

The more cultivation, the larger and better the results—a fact on which all farmers now agree.

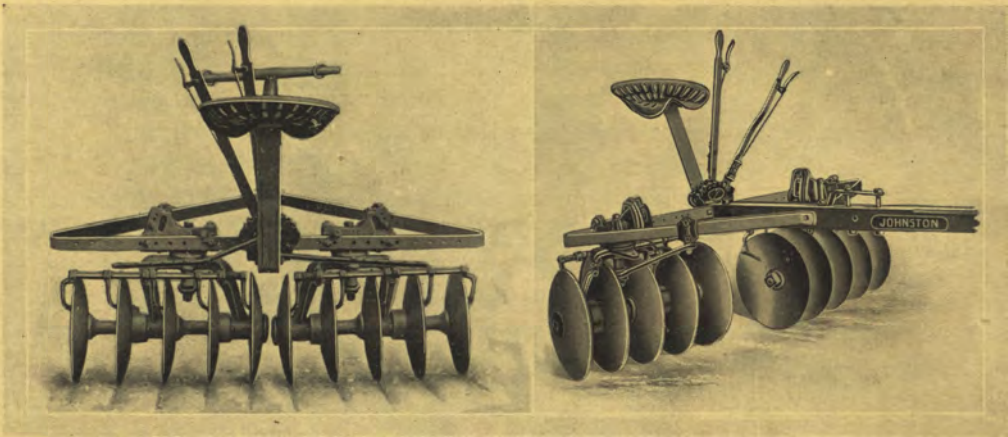
The Disk Harrow does the work of a plow and finishes what a plow cannot.

The Disk Harrow is one of the greatest aids—in fact a necessity to successful farming.

Center cut attachment furnished when ordered. Disk Drill and Seed boxes for each gang in each size. Will sow all kinds of grain and can be set up to sow in rows or broadcast.



## Johnston Orchard Disk Harrow



Can be used in any kind of orchard, orange grove, vineyard, preparing for cotton or for general work on small farms. It is designed especially for fruit culture.

It is reversible—covers the roots or not, as you wish. The gangs are interchangeable in their position on the frame and may be set to throw the soil to or from the trees or vines. It is adjustable—to any depth, in the middle or at the ends, by means of gang hinges. Levers adjust each gang separately to any angle, regulating the amount of dirt thrown. The disks do not hurt the tender roots. In grape cultivation the Johnston cultivates all of the ground. A plow cannot do this. It is a good side hill harrow. The steel frame is in one piece. Strong arches or yokes support the gangs and separate bearing-boxes take up the friction. We furnish as an extra attachment, a steel extension frame. With it, the operator can cultivate under the trees, close to the trunks, and the horses do not interfere with the branches or injure the fruit. This extension will save many times its price.

The harrow is furnished with solid or cut-out disks, 16 or 18 inch, with eight disks to cut 4 feet 4 inches or ten disks to cut 5 feet 6 inches. With the extension frame, the machine measures 10 feet 1 inch in width.

