1876.

CATALOGUE

OF

Reapers and Mowers,

MANUFACTURED BY

The Johnston Harvester Co.,

BROCKPORT, N. Y.

HIGHEST HONORS

AWARDED

in France, Germany, Russia, Austria, Hungary, Poland, Denmark, Sweden, Holland, and the United States.

REAPERS AND MOWERS,

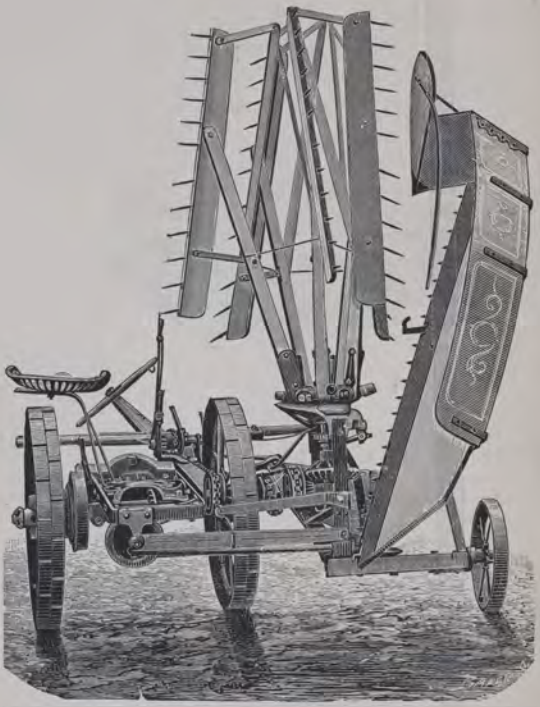
MANUFACTURED BY THE

JOHNSTON HARVESTER CO.,

BROCKPORT, N. Y.

ROCHESTER, N. Y.
E. R. ANDREWS, BOOK AND JOB PRINTER, 1 AQUEDUCT STREET,
1876.

Combined Reaper and Mower,



AS A REAPER,

Folded for Transportation.

OFFICE OF

THE

JOHNSTON HARVESTER COMPANY.

FOR the season of 1876, we take great pleasure in assuring our patrons that the high reputation of THE JOHNSTON MACHINES will not only be fully sustained, but by new and valuable improvements will be greatly enhanced, thereby rendering them more useful to the farmer and increasing the already enviable reputation which they have won throughout the world.

We would call attention first to the fact, that never in the history of Harvesting Machines, has one moved so rapidly to the front and maintained its ascendancy over all its competitors with such complete success, and proved itself so completely adapted to all kinds and conditions of grain in every part of the world, as the JOHNSTON.

The great test of a machine is its durability and the efficiency of its work in the field; and while we have not space to enumerate all or even a synopsis of their many trials and victories, we are proud to point out the greatest field trial held during the year 1874, which took place at Mettray, France, at which the most practical and distinguished agriculturists from different parts of that country, together with a number of technical engineers, formed the jury under the auspices of the Royal Agricultural Society of France, AWARDED ALL THE PRIZES, CONSISTING OF TWO GRAND GOLD MEDALS AND FIFTEEN HUNDRED FRANCS, to

The Johnston Machines.

And in the year 1875, at the greatest Self-Raking Reaper trial ever held in the world, at Angermunde, near Berlin, in Germany, where every known Machine of merit in both Europe and America competed, the JOHNSTON was adjudged the best Machine of all, and was awarded a GRAND GOLD MEDAL, the First Prize, over all its competitors.

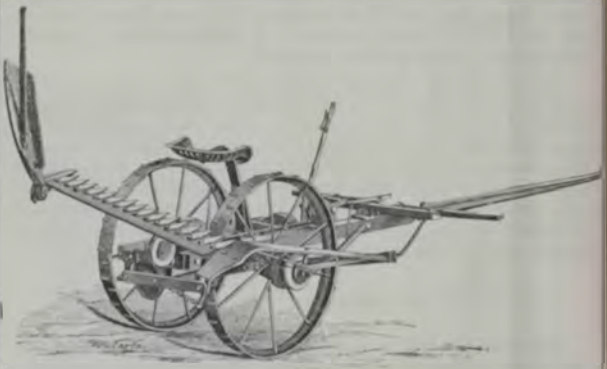
And in the United States, at the only important public trial held in the whole country, in connection with the Cincinnati Exposition in 1874, the JOHNSTON was also awarded the highest honors.

We merely mention these instances of the many victories won by the JOHNSTON MACHINE, as being the most prominent and most important which have occurred in the last two years.

Among the many distinguished honors bestowed upon the JOHNSTON during the past year, not the least was one conferred by the Crown Prince of Prussia and Germany, who requested the JOHNSTON MACHINE to be exhibited on his private estate at Potsdam.

This occurred on the 12th of July last, at which His Royal Highness, dressed in military suit, accompanied by his eldest son, made his appearance promptly at the minute which he had named for the trial. The Prince watched the working of the machine closely, and with the greatest interest, and remained in the field for nearly two hours, when, after a pleasant word with those present he took his leave, expressing himself highly pleased with the operation of the Machine.

For description and particulars of the Machines, we refer to the following pages.



Improved Combined as a Mower.

IMPROVED COMBINED, AS A REAPER.

Combined Mower and Reaper.

In this, we have a machine combining all the excellencies of the Self-Raking Reaper and the Mower, both of which are described in another part of this pamphlet. These advantages will be seen in reading the following description:

The Wheels

Are 36 inches high, with a broad tread, and made with wrought-iron spokes, each five-eighths of an inch in diameter, with a thread cut on each end, and the hub and rim cast on. They are set bracing at the hub, stiffening the wheel so that no side strain can affect it; and the hub is wide, giving a long bearing on the axle, causing the machine to run steadily and noiselessly. The number of spokes also braces the rim in more places than ordinary cast wheels, making them much less liable to be broken. Either wheel drives independent of the other, and both are out of gear in backing. The high wheel is found to be indispensable in parts of the country where the harvest is wet—enabling the machine to run successfully where many low-wheeled machines bury down.

The high wheel enables our machine to ride over deep furrows and rough land with much greater ease than low-wheeled machines. It also renders the machine equally serviceable in every season—wet or dry.

The Main Frame

Is a single bar of wrought-iron, with one joint only; solid at the corners, standing edgewise, well and firmly braced, and with the pole bolted along the side next the inner wheel, giving the frame great stiffness, and yet avoiding all surplus weight. Inside of the wrought-iron frame is a neat cast foot-board, with brackets on the under side to hold the bearings.

The Gearing

of this machine has no superior for strength and simplicity. It is well up from the ground, runs almost noiselessly, and, by a simple operation, the speed can be changed without difficulty, and without adding to the weight of the machine—giving slow speed for reaping and ordinary mowing—and fast for mowing in difficult places.

The Bearings

are long, solid boxes, bored out and keyed into brackets with wedge bolts, and always adjust themselves to the shaft without cramping or binding. They are attached to the machine in the most simple manner, and made of the most durable metal. The great advantage of these bearings over babbited boxes is felt by every farmer who has occasion to have his boxes rebabbited by inexperienced workmen. It is impossible to rebabbit a box so as to make the bearing true, except by the greatest care and by tools seldom at hand—or within reach of the farmer—while the boxes of the Johnston machines are replaced with no difficulty whatever, and at less expense than the bearings can be rebabbited.

Extension and Drag Bars.

The Extension Bar has ball joints to take up all wear, making much less vibration than ordinary straight joints, and adding much to the durability of the whole machine.

Our Drag Bar is of the most approved pattern, with a bridge-brace over the top to strengthen it.

The Finger Bar

is attached to a tilting drag bar by a very simple and strong device, which enables the driver to regulate the height of cut perfectly, both in reaping and mowing, while the machine is in motion.

The Pitman Connections

are of the most reliable, durable character, perfectly adjusted to compensate for all wear, and also to prevent any binding in the connections. The lower end of the pitman is attached to the knife by a ball and socket joint, held in place by a forked nut and bolt, to take up the wear, thus avoiding all lost motion; the upper end is pivoted to the pitman box in such a manner as to allow the box to work without binding on the crank-pin in any position of the cutting apparatus.

The width of Knife Head and superior manner of coupling the Pitman to it avoids all tendency to twist the knife in the guard slots.

Reaping Attachments.

For Reaping, the No. 1 Combined has a separate Drag Bar attached to a very substantial platform, five and a quarter feet wide, with an angle iron finger-bar so formed as to absolutely prevent sagging.

The guards are steel-plated, same as used for mowing, and so formed as to leave an open space back of the knife, which is very essential to prevent

clogging and lessen friction. The inner divider is of sufficient height to shield the raking apparatus from tall or leaning grain, and the outer divider high enough to divide and handle any grain without scattering.

This reaping attachment with the extra drag-bar is complete in itself, and is attached to or detached from the truck by moving two bolts and one key.

The Raking Apparatus

consists of five arms and blades, with extension slats, having a capacity for reeling the tallest grain without scattering. The rake-stand is located at a sufficient height from the cut of the knife, and set far enough ahead to enable the rake to reel the grain at the inner end of the cutting apparatus, delivering it straight on the platform, and putting it off in square, compact gavels.

The rakes are driven by a flat belt-chain, and run as steadily as on the geared Reaper, by means of our improved tension rollers.

Controllability of Rakes.

The rakes are under full control of the driver to deliver the gavel at any time. By means of our new Gear Trip, the rakes can be set to deliver gavels automatically, at the distances of 8, 12, 16 or 20 feet. When set in this manner, the driver can still carry the sheaf at will over thin places and away from the corners.

The shifter lever for throwing the rakes out of gear is in easy reach of the driver's seat.

Other Advantages

will be found on an examination and trial of the JOHNSTON, all being combined to form the best Mower and Reaper made. The finger-bar is easily raised and lowered; the same tilting lever lowers the points of the guards to cut tangled clover, or raises them for better protection on rough or stony land.

IMPROVED WROUGHT IRON HARVESTER.

Wrought Iron Harvester.

By the use of wrought iron we have succeeded in constructing a Harvester, which, for lightness, strength, durability and capacity for perfect work is unequaled.

The drive wheel is 36 inches in diameter with a broad tread, sustaining the machine on the softest ground. The carrying wheel is of large size, making it very light and easy work for the team. It is attached to the platform by a caster arm which allows the machine to turn readily at the corners.

The Gearing

is the simplest possible. By reversing the bevel-wheel the speed of the knife can be reduced, thus lowering the draft on the team.

The location of the gearing is well up from the ground, easy of access for oiling, and well protected from dirt.

Extension Bars.

By means of parallel extension bars, which have ball joints, thus taking up all wear, the cutting apparatus can be adjusted to any required height.

The Finger Bar

is made of cold rolled angle iron, giving it four times the stiffness of ordinary flat bars, and at the same time it is much lighter.

It is attached to the wrought iron drag bar which supports the rake standard.

The standard, being located on the drag-bar, high up and well ahead, balances the machine and insures good reeling capacity in all conditions of grain.

Tilting Device.

The tilting device is attached to the front end of the drag-bar, allowing the operator to raise or lower the cut of the knives at will, while moving.

Controllable Rake.

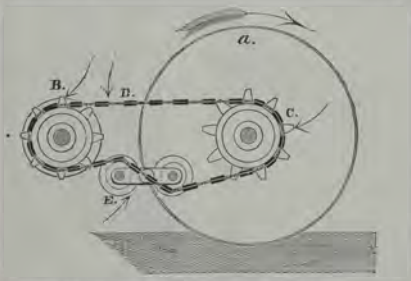
The rake is fully under the control of the driver, and by the use of the foot he can regulate the size of the gavels as perfectly as it can be done where the grain is raked off by hand.

This machine has the improved pitman. The reaping attachment on the Improved Combined Machine is identical with this reaper.

Combined, No. 2.

Is adapted to the wants of farmers who do not raise a large amount of grain. Is made very light and yet of sufficient strength to do the heaviest work, and we boldly assert that it is the lightest draft combined machine in the market. Can be changed from Reaper to Mower, and *vice versa*, in ten minutes. It has the GEARED TRIP, which is a special feature with and found only in the Johnston Machines.

This machine is particularly valuable for work in hilly and difficult places, and will prove satisfactory where other machines have been found too heavy and unwieldy. As a Mower it is unequaled.



Manner of Driving the Rakes.

COMBINED No. 2.

THE JOHNSTON

Self-Raking Reaper

Is arranged and constructed so as to bring the working parts into the most compact form, with a view to securing the essential requirements of lightness, strength, durability and efficiency. Attention is called to some of the salient features of the Johnston Self-Raker, whereby these points have been secured.

The Cutting Apparatus

is located opposite the center of the driving wheel, and the cutters and platform are so attached to the machine as to be readily adjusted at any height from the ground up to eighteen inches.

The Carrying Wheel

is also opposite the center of the driving wheel, and, as these are nearly on a line, the machine is enabled to turn corners easily and retain its balance without using a caster-wheel.

The Driving Wheel

has outward curved arms, which allows the gearing to be located within them, thus adding to the compactness of the machine, and throwing a large portion of the weight of the gearing and platform on the drive wheel; this gives it sufficient power to drive the knife and rakes under all circumstances, and also reduces the draft by throwing the greater part of the weight upon this wheel.

The Seat for the Driver

is on the outside of the driving wheel directly over the main axle, and on a line with the cutting apparatus, whereby he secures a full view of the cutting and raking without turning in his seat. By this arrangement, also, the weight of the driver does not affect the balancing of the machine, which is perfect whether the driver is in his seat or not. The seat is easily reached and out of danger from the knives and gearing.

The Pole

is attached to the machine between the drive wheel and cutting apparatus, at a point that makes the resistance of the two equal, thereby avoiding all side draft.

The Tilting Device.

The tongue is pivoted to the machine so as to allow the cutting apparatus to be tilted, or raised or lowered. A lever (that is within easy reach of the driver) is connected with the tongue, so that he can raise and lower the points of the guards while moving, thus enabling him to take up lodged grain or carry the machine over an obstruction.

The Gathering Apparatus

consists of five arms with rakes attached. Although but four rakes are commonly used on other machines, and may prove sufficient in ordinary grain, five are never too many, and they are really essential in leaning, short or thin grain, or in windy weather. They are especially useful when driving *with the wind.*

THE JOHNSTON

Single Mower.

This machine being built largely of wrought iron, insures the necessary strength and at the same time avoids the clumsiness and weight of wood or cast frames. It is a very simple machine, having no bolts or pieces in excess of what is necessary to perform the work required.

The Main Frame

is made of wrought iron formed from a single piece set edgewise. The corners being solid and firmly braced, prevents the bearings ever working loose. The frame, being set edgewise, is sufficiently strong to support the bar, when raised and carried upon it. The pole is bolted to the side of the frame and prevents it from springing sideways.

The Extension Bar

is connected to the main frame and finger bar by adjustable ball and socket joints. This construction enables the operator to keep this part of the ma-

chine in as perfect order after years of use, as when new, and greatly adds to the durability of the machine.

The Bearings

are solid boxes placed in universal sockets and held by wedge bolts. This construction enables us to make a perfect fitting of the box to the shaft, and hold it without binding.

Pitman Connections.

The Pitman is attached to the knife by a ball and socket, and the wear is taken up by a bolt with forked nut and key, thereby making the most perfect connection in use.

Tilting.

The points of the guards are raised and lowered at the will of the driver, by the tilting lever attached to front end of drag bar.

For Transportation,

the finger bar folds across rear end of frame, and adds no weight to the horses necks.

Construction.

The Mower is so made as to be easily taken apart for cleaning or repairing. The pinions can be replaced by simply unscrewing a nut, taking off the old one, and putting on the new. Any part of the machine can be replaced in the field with a hammer and wrench.

Cutting Apparatus.

The finger bar is of cold rolled iron, and is strong enough to bear the heaviest strain. The guards are malleable iron, with steel plates. The sections three inches wide, made of the best English steel. The shoes are malleable iron, with steel sole plates, to take the wear and regulate the height of cut.

The guards are fastened to the finger bar with bolts instead of rivets, making it easy to replace them when necessary.

FIRST PREMIUMS IN 1874.

Triumphant Success

OF THE

JOHNSTON REAPERS

IN EUROPE, 1874.

THE GRAND GOLD MEDAL OF HONOR,

Awarded the JOHNSTON in France,

At the GREAT INTERNATIONAL TRIAL OF REAPING MACHINES held at METTRAY (France), during five days, commencing on the 13th of July; the JOHNSTON REAPERS WON ALL THE FIRST PRIZES, viz

Two Gold Medals, Grand Medal of Honor and 1500 Francs.

Also, at the following Field Trials the JOHNSTON WAS awarded:

1st Prize **Two Medals,** ..... at PATAY, France.
1st Prize **Grand Gold Medal,** ..... at ST. MIHIEL, France.
1st Prize **Grand Gold Medal & 200 Fr.,** at NEUILLY, St. Front, France.
1st Prize **Grand Gold Medal,** ..... at VOVÉS, Eure-et-LOIRE, France.
1st Prize **Grand Gold Medal,** ..... at ST DIZIER, France.
1st Prize **Grand Gold Medal & 500 Fr.,** at NESLE, France.
1st Prize **Grand Gold Medal,** ..... at BLAMONT, France.
1st Prize **Grand Gold Medal,** ..... at GRANDVILLIERS, France

GERMANY.

1st Prize **GRAND DIPLOMA OF HONOR** to the **Johnston Reaper and Wrought Iron Harvester,** at Lübeck.
1st Prize **GRAND DIPLOMA OF HONOR** to the **Johnston Reaper,** Exhibition at Dessau.
1st Prize **GRAND SILVER MEDAL** to the **Johnston Reaper,** at Grimmen.
Special Prize **TWO MEDALS AND DIPLOMA OF HONOR** to the **Johnston Harvester and Mower,** at the Holland Exhibition at Dordrecht.
1st Prize **GRAND GOLD STATE MEDAL and SOCIETY'S BRONZE MEDAL, and TEN DUCATS** to the **Johnston Reaper,** at Sävar, Hungary.
1st Prize **GRAND GOLD MEDAL,** Field Trial, at Tamboff, Russia.
1st Prize **200 KRONER** each, to the **Johnston Harvester and Combined Reaper and Mower,** Six Days Trial, near Copenhagen, Denmark.
1st Prize **GRAND GOLD MEDAL,** Field Trial at Moholm, Sweden.
1st Prize **GRAND DIPLOMA OF HONOR,** Field Trial at Warsaw, Poland.

HONORS AWARDED THE JOHNSTON.

1875.

Great Triumph in Germany.

The greatest Self-Raking Reaper Trial ever held in Europe, closed at **Angermünde** near Berlin, July 22, at which 32 Reapers, comprising the Best Machines of the World, competed for the Prizes.

THE JOHNSTON

WAS AWARDED THE

GRAND GOLD MEDAL,

HIGHEST PRIZE OVER ALL ITS COMPETITORS.

UNPARALLELED SUCCESS IN FRANCE.

12 GOLD MEDALS

INCLUDING

4 Grand Medals of Honor,

AWARDED THE

JOHNSTON as First Prizes at Field Trials in France this Season.

VICTORY IN RUSSIA.

FIRST PRIZE GOLD MEDAL, at Veronish, Russia.

SCANDINAVIA.

FIRST PRIZE at Viborg, Denmark and Malmo, Sweden.

FIRST PRIZES

IN 1875.

1st Prize **GRAND GOLD MEDAL,** at Angermünde, Germany.

1st Prize **GOLD MEDAL OF HONOR (ex æquo),** at Nimes (Gard), France.

1st Prize **GOLD MEDAL,** at Saint-Pal (Pas-de Calais), France.

1st Prize **GOLD MEDAL,** at Pas (Pas de Calais) France.

1st Prize **GOLD MEDAL OF HONOR,** at Lury Sur-Arvon (Cher), France.

1st Prize **GOLD MEDAL,** at Ussey (Seine-et-Marne), France.

1st and 2d Prizes **GOLD MEDAL,** at Briey (Meurthe-et Moselle), France.

1st Prize **GOLD MEDAL (ex æquo),** at Montigney Le Roi (Haute Marne), France.

1st Prize **GOLD MEDAL and 400 Fr. W. I. Harvester,** at Rouen (Seine-Inferieure), France.

1st Prize **SILVER MEDAL and 300 Fr. Combined "Merveilleuse,"** at Rouen (Seine Inférieure), France.

1st Prize **GOLD MEDAL,** at Rocroy (Ardennes), France.

1st Prize **GOLD MEDAL,** at Bethune (Pas de Calais), France.

1st Prize **GOLD MEDAL,** at Chateauneuf (Loiret), France.

1st Prize **GOLD MEDAL OF HONOR,** Bourbourg (Nord), France.

1st Prize **GOLD MEDAL OF HONOR,** at Veronish, Russia.

1st Prize **Each, Combined and Mower,** at Viborg, Denmark.

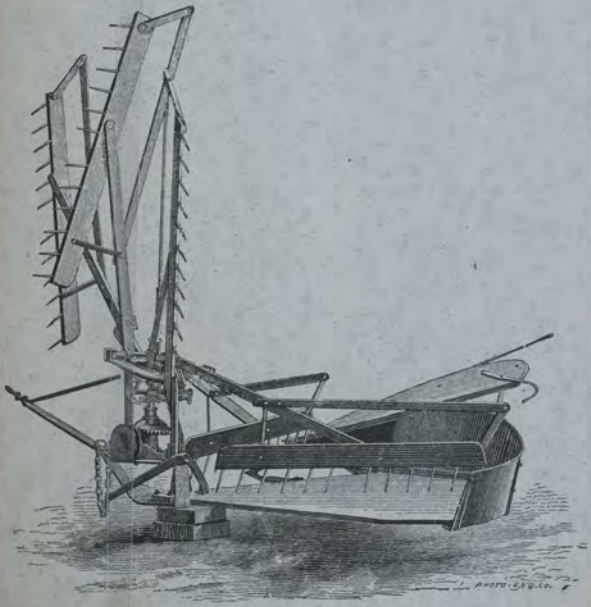
1st Prize **SILVER MEDAL, Combined,** at Malmö, Sweden.

1st Prize **SILVER MEDAL,** at the Great Exhibition, held at Küstrin, Germany.

1st Prize **SILVER MEDAL,** at the Great Exhibition held at Templin, Germany.

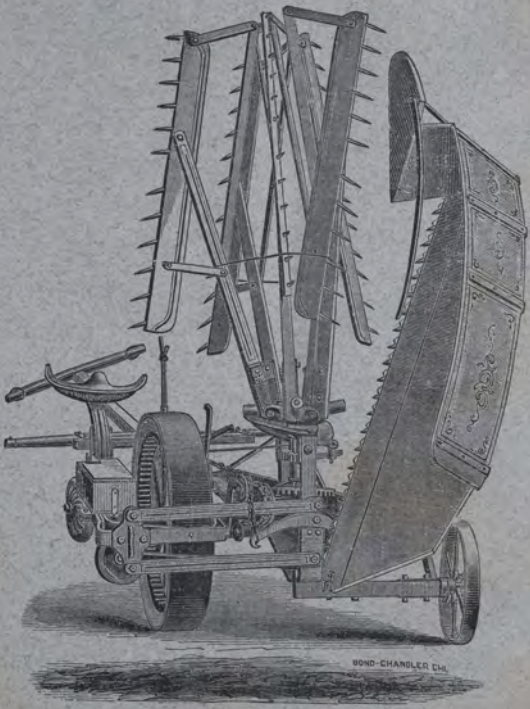
GRAND GOLD MEDAL OF HONOR

Awarded at Angermunde, in 1875, over all competitors, at the Greatest Reaper Trial ever held in Europe or America.



Reaper Attachment for Combined and W. I. Harvester.

Wrought Iron Harvester.



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