THE JOHNSTON HARVESTER

VOL. 5. BROCKPORT, N Y., CHICAGO, ILL. AND TOLEDO, OHIO, 1880. NO. 1.

PRIZES.

Much has been written and many encomiums have been elicited by the admirable working of the machines of the Johnston Harvester Company. Valuable and costly prizes have been awarded them in public trials which have called out the best machines the world has produced to strive for the mastery. The universal sentiment on such occasions has always been to establish the superiority of the Johnston Harvester Company's machines. More than two hundred gold medals have been awarded them, and many diplomas and prizes of honor conferred by public societies, many of them under government authority. But the most important of all was the grand Object of Art awarded at the field trial of the Paris Exposition of 1878, two engravings of which are shown on this page, together with a short article referring to this prize, copied from the *Scientific American* of January 10th, 1880, to which we call attention. We point to this with pride as the most satisfactory and conclusive proof that our claims for superiority are correct and approved by this jury, composed of practical and disinterested judges, representing six different nations.

From "The Scientific American."

THE JOHNSTON HARVESTER PRIZE.

Our readers are already aware that the field trials of agricultural machinery at the Paris Exhibition of 1878 resulted in an overwhelming victory for American manufacturers. The special prizes for exceptional merit, as displayed in these practical contests, were twelve objects of art—Sèvres vases—only eleven of which were awarded, no sufficiently meritorious competitor appearing for the twelfth. Of the eleven awards, seven fell to Americans, one to a French exhibitor of an American machine, two to French exhibitors of French machines, and one to an English exhibitor.

In the harvesting tests, thirty-five reapers were entered, but only one award was made to that class of machines—the splendid specimen of ceramic art shown in the accompanying engraving—and that fell to the Johnston Harvester Company, of Brockport, Monroe county, N. Y., who have just received their prize.

The vase, as will be seen from our engraving, is of the shape called "tazza." It stands ten inches high, the bowl having a depth of three inches and a breadth of fourteen and a half inches across the top. Outside the prevailing colors are blue and gold; within are panels of scroll work, tritons and trefoils, with circular bands in gold. In the center is a raised medallion representing the city of Paris—a female head with a mural crown. Around the medallion are scrolls, rosettes, fruits, wheat ears, and other agricultural symbols. Around the body of the vase is a wreath of fruits, flowers and grain, with a spiral pink band bearing the inscription "Exposition Universelle, Paris, 1878," and medallions with agricultural symbols. The pillar is in blue and gold, with bands, frets and festoons; and the foot has a circular band inclosing quatrefoils on a green ground, broken by four panels, severally containing the words "Sèvres," "Paris," "Exposition," "1878." The intrinsic value of the vase is placed at one thousand francs; but that is a small matter compared with its actual value as a testimonial to the practical superiority and exceptional merit of the Reaper which earned it in a field contested by so many able rivals.

We take great pleasure in quoting the following from *The Farmer*, a widely circulated journal published in London:

"The Johnston Harvester Company, of 1 and 2 Chiswell street, London, at Stand No. 114, exhibit six of these well-known reapers.

"The Wrought-Iron Harvester of this firm, being the self-rake reaper awarded the only prize at the field trials of the Paris Exhibition in competition with all the world, settles its superiority for some time, or until the next great international contest. Besides the Paris field trials, it took the prize also at the Vienna Exhibition field trials, and the makers claim that no other reaper in the world has been awarded so many or such important prizes. A machine of such merit cannot be satisfactorily described on paper, and wants to be seen at work before it can be fully appreciated, but we may mention some of its good qualities. The machine is so constructed that it is well adapted to all kinds and conditions of grain. By means of a lever the machine may be tilted to the ground, when passing along, so as to take up the most difficult laid crops. The size of the sheaves can be controlled automatically by means of gear wheels of different sizes, each fitting into a corresponding wheel on the rake standard shaft. Notwithstanding that the machine is set to rake automatically at regular intervals, the sheaf at the corner, and in thin grain, may be carried on the platform by means of the foot lever, at the will of the driver. There is also a *positive* will trip, which may be used instead of the automatic, thereby placing the size of the sheaf entirely under the control of the driver. This is one of the Johnston's great merits—the controllable rakes—and they claim that theirs is the most successful system used. The whole of the rakes can also be set to rake the platform when required for swathing. The way in which all these operations can be performed is simplicity itself, and requires no mechanical skill on the part of the driver. To any one unacquainted with a self-rake reaper the frame of the wrought-iron harvester may appear much different to what he has ever seen before, but this is really one of its best features. The frame and similar parts are made of wrought-iron, and from long practical experience, the makers are well aware of every point in a reaper where there is likely to be any extra strain, and every such point is well braced and secure. This machine has a fast and a slow speed, changeable with the greatest ease, and in a few seconds. The great utility of the fast speed in the green crop at the Bath and West of England trials at Exeter was very apparent, and the machine did such work as to call forth the praise and admiration of every one who saw it. The makers claim that there is no work required of a self-raker but what this one will perform under all conditions—rough ground, hard, tangled or lodged grain, &c. We are confident that a machine carrying off such a prize as the *only* one offered at the Paris Exhibition field trials, against all competitors, must be possessed of unexceptionable merit.

"The Johnston Harvester Company's Combined Self-rake Reaper and Mower, Nos. 1 and 2, are also machines of a very superior class, the former being very similar to the Wrought Iron Harvester, only having two main wheels; in fact, it is a mower and a self-rake reaper "rolled into one," and, as the makers say, is two *perfect* machines.

"The Continental Reaper, both one and two horse, are specially constructed for those requiring a light machine, where the land is hilly, &c. All the good points of the Wrought Iron Harvester are, as far as practicable, faithfully embodied in these machines, and the one-horse especially has been remarkably successful in taking prizes at competitions.

"The Johnston Harvester Company also exhibit their Mower with wrought-iron frame, a machine which combines lightness with great strength, and, like their reapers, will stand any amount of rough work."

Sevres Vase---Special Prize, Paris Exhibition.

A perfect picture of the Machine that won this great prize, together with cuts of the Gold Medals, two of which were also awarded in addition to the Object of Art, will be found on the second page.

Sevres Vase---Top View.

THE SEVRES WARE IS THE FINEST AND MOST COSTLY PORCELAIN MADE IN THE WORLD.

PARIS EXPOSITION.

PARIS EXPOSITION.

THE JOHNSTON HARVESTER COMPANY'S WORLD'S PRIZE REAPER.

WROUGHT IRON HARVESTER.

PARIS EXPOSITION FIELD TRIAL AT MORMANT, JULY 22d, 1878.

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 thirty-six 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 castor 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 increased, thus adapting the machine to cut all kinds and conditions of crops.

The location of the gearing is well up from the ground, easy of excess 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 gavel as perfectly as it can be done where the grain is raked off by hand. The rake can be set to work automatically for every second, third, fourth, or fifth rake, and when set for any rake can be held over thin spots of grain, or when turning the corner.

The raising [illegible] rake chain shifting lever, and the lever for throwing the knife out of gear, are all within the reach of the operator, while sitting on the seat.

The Pitman connections are of steel and of the most approved pattern, with ball and socket connections, forked nuts, spring keys, and can be readily secured to compensate for wear, thereby preventing any lost motion. The Pitman box has an oil chamber, and is a perfect self-oiler. The standard is adjustable and can be set to reel long and short grain. By the use of the swathing switch every rake will sweep the platform. The rakes are driven by a flat wrought iron chain (the same as we have used for five years past), which has proved to be very strong and reliable and not liable to wear. The chain runs over tension rollers, which takes up the slack, making the rakes run very smooth and steady, and will not run ahead as with the old cable chain manner of driving the rakes.

The platform can be elevated (as shown in the cut) for passing through narrow roadways and for storing the machine when not in use.

The machine works almost noiselessly, thus indicating very little friction and, properly adjusted, will perform the work satisfactorily under all circumstances.

We think no Reaper made has been more thoroughly tested, under all circumstances, than the Wrought Iron Harvester, and it has proved itself equal to any emergency and gained the highest prize in every contest throughout the grain growing countries of the world.

The reaping attachment on the Improved Combined Machine is identical with this Reaper.

FOLDED FOR TRANSPORTATION.

The mechanical problems involved in the construction of mowers and reapers are, of course, the same here as in other countries, and they are worked out in pretty much the same way. It should be noted, however, that the great divergencies of soil, climate, and conditions demand a great variety of machines, as well as an immense number in use. There are in the United States not less than 40,000,000 acres under cultivation in grain, yielding not far from 1,000,000,000 bushels annually, besides some 25,000,000 acres in grass, yielding probably 28,000,000 tons of hay. It is estimated that in the cutting of these enormous crops more than 1,000,000 machines are brought into use every year. Their construction has been the subject of over 2,000 patents.—*The Manufacturer.*

A correspondent asks us: "What is your idea of the saddest thing on earth?" Easy enough! A tailor with a good memory.—*Wheeling Leader.*

No. 2 and 3 COMBINED.

Since the introduction of this machine it has steadily increased in favor with the public, and the sale has reached a number far beyond our expectations. It embraces all the principal and valuable features of our other machines; is made very light, yet of sufficient strength to do the heaviest work, and we boldly assert that it is the lightest draft Combined Machine in the market.

This machine is particularly valuable for work in hilly and difficult places and on rough, uneven ground, and will prove satisfactory where other Combined Machines have been found too heavy and unwieldy.

THE RAKE STANDARD

Is made of malleable iron which makes it light and strong, and is located at a sufficient height from the cut of the knife and set far enough ahead to enable the rakes to reel the grain at the inner end of the cutting apparatus, and avoid the difficulty of tall grain winding into the standard.

THE PLATFORM

Can be folded for transportation, for passing through narrow roadways, or for storing away during the winter, taking up but little space for storage.

It has changable speed—fast speed for mowing, and slow speed for reaping.

THE RAKES

Are driven by a flat wrought iron chain which has proved to be very strong and durable, and not liable to wear.

THE CHAIN

Runs over double tension rollers, which takes up the slack, making the rakes run smooth and steady, no matter what the position of the platform. This overcomes the difficulty of the rakes running ahead, as with the old style of cable chain manner of driving the rakes. It can be changed from a mower to a reaper very quickly. Cuts a 4 feet 9 inch swath in reaping, and leaves the gavel in a very compact form for binding.

THE ARRANGEMENT

Of the tilting and raising levers, Pitman connections, and extension bars are identical with those used on the No. 1 Combined, description of which may be seen on page 5.

As a mower it is unequaled, embracing all the valuable features of the No. 3 Wrought Iron Mower, description of which may be seen on page 7.

We cannot speak in too high praise of this machine and the record it has made since it has been introduced.

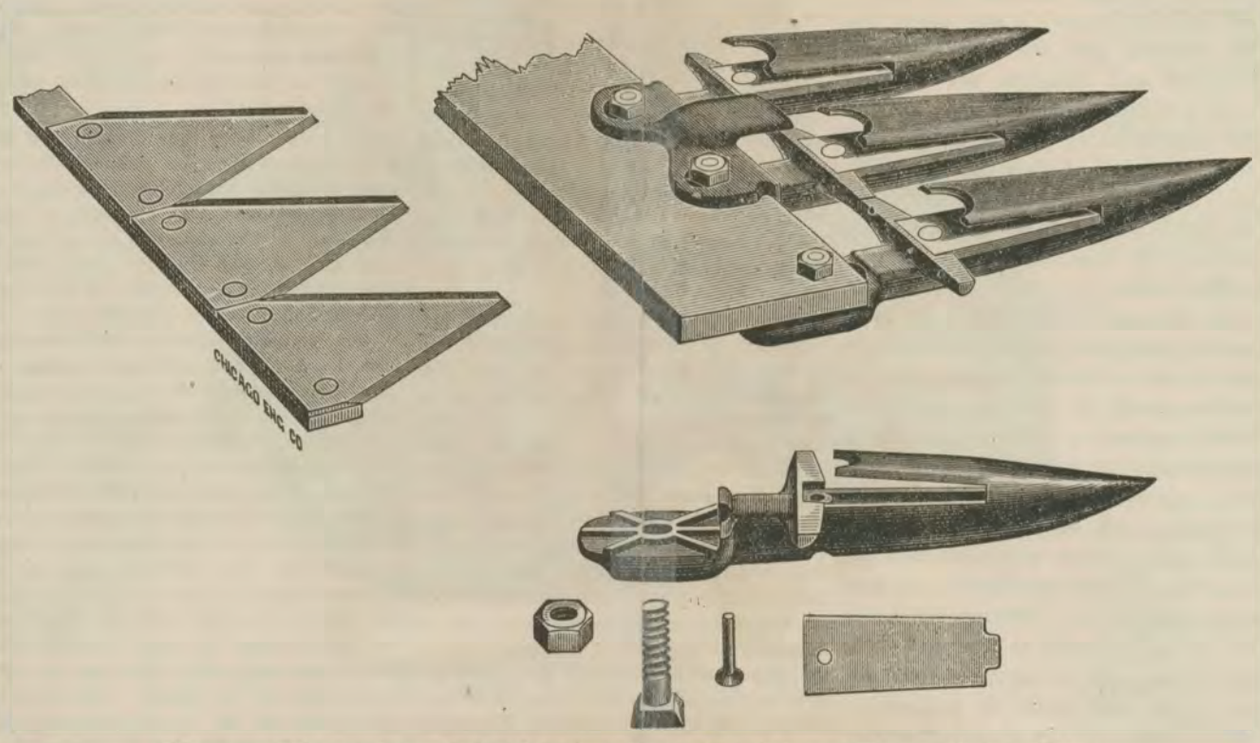
BURDETTE evokes the following under the inspiration of his mother's shingle:

When the angry passion gathering in my mother's face I see,
And she leads me in the bedroom—gently lays me on her knee;
Then I know that I will catch it, and my flesh in fancy itches,
As I listen to the patter of the shingle on my breeches.
Every tingle of the shingle has an echo and a sting,
And a thousand burning fancies into active being spring,
And a thousand bees and hornets 'neath my coat tails seem to swarm
As I listen to the patter of the shingle—oh! so warm!
In a splutter comes my father, whom I supposed had gone,
To survey the situation and tell her to lay it on;
So see her bending o'er me as I listen to the strain
Played by her and the shingle in a wild and weird refrain.
In a sudden intermission, which appears my only chance,
I say: "Strike gently, mother, or you'll split my Sunday pants."
She stops a moment, draws her breath, the shingle holds aloft,
And says: "I had not thought of that—my son, just take them off."
Holy Moses! and the angels, cast thy pitying glances down;
And thou, oh family doctor, put a good soft poultice on!
And may I with fools and dunces everlastingly commingle
If I ever say another word when my mother holds the shingle.

COMBINED No. 2 and 3.—(La MERVEILLEUSE.)

Wrought Iron Frame, Adjustable Connections, Malleable Rake Standard, Changeable Speed, Light, Simple, Strong and Durable.

The Johnston Harvester Co. Received the above Medals at the Centennial Exhibition of 1876.



View Showing Method of Attaching Guard to Bar.

READ THE OFFICIAL REPORT

OF THE

CENTENNIAL COMMISSIONERS

BELOW.

THE JOHNSTON HARVESTER CO.

OFFICIAL REPORT:

AWARDS.—Mower, Wrought Iron Harvester, Single Reaper, Combined Machine No. 1, Combined Machine No. 2.

REPORT.—1.—For large exhibit of Machines.

2.—For excellence of material, strength, durability, finish, and attention to details, as evidenced by the following facts: Solid wrought iron frames, table attachments, very strong and easily adjustable by lever and outside wheel that runs in a crank shaft.

3.—Pitman rod attached to knife by ball and socket, giving elasticity.

4.—Patent key nuts, easily adjustable to compensate for wear.

5.—Motion communicated to rake shaft by square linked chain gear, with spring tension rollers.

6.—Cam gear for traverse of rake, original, automatic and controllable.

7.—Speed of knife can be changed by reversible pinions.

8.—Driver's seat balances the pole.

9.—The machines work almost noiselessly, thus indicating very little friction.

10.—Prices reasonable.

J. R. HAWLEY, *President.*
A. T. GOSHORN, *Director-General.*
ALEX. R. BOTELER, *Secretary pro tem.*

THE LAST HALF CENTURY

The progress of industry in the United States in the last half century is shown by the following retrospective picture:

"Fifty years ago it took a whole day to go from New York to Philadelphia, and the passage to Boston required two days. Two steamboats leaving New York every other day were sufficient to carry all the passenger traffic between New York and Boston. The passage from New York to Providence cost eight dollars, and from Providence to Boston the distance was made in stage coaches. One small steamboat was sufficient for all the sound travel between New York and Hartford. Two small steamboats carried all the passengers between Albany and New York."

"MACHINERY *produces cheapness, cheapness creates demand, demand increases employment;* hence the absurdity of the cry that machinery is the enemy of the laborer. Both men and women accomplish so much more now than formerly, and have been receiving so much better wages for *a day's easy labor* than in their childhood for *a day's hard toil,* that they now feel "deprived," "injured" by machinery—after all it has done for them!—erroneously *attributing to machinery* a loss which is simply *shrinkage of capital.*"—*Statistical Review.*

FINGERS OR GUARDS.

With our Machine is furnished the most perfect guard now in use.

It is made of malleable iron and inlaid with a steel leger plate, having the same temper as the section itself.

This gives a perfect shear cut, and will leave a clean stubble in any kind of grain or grass, and renders clogging next to impossible.

The guards are *bolted* to finger bar, and, in case of accident, are easily replaced in the field.

Farmers who have used a guard riveted to the bar and been obliged to lose a half a day or more in getting a bent or broken guard replaced, will appreciate this feature.

THE JOHNSTON HARVESTER.

OFFICES
OF THE
Johnston Harvester Company.

MAIN OFFICE AND MANUFACTORY,
BROCKPORT, N. Y.

C. D. DEWEY, - - - President.
F. S. STEBBINS, Secretary and Treasurer.

EUROPEAN OFFICE,
1 & 2 Chiswell Street, London, England.
B. E. HUNTLEY, Manager.

WESTERN OFFICE,
73 West Washington Street, Chicago, Ills.
A. J. GLASS, Manager.

MICHIGAN, OHIO and INDIANA,
258 Summitt Street, Toledo, Ohio.
B. G. MCMECHEN, Manager.

New York, Pennsylvania, Eastern and South-Eastern States.
Brockport, N. Y.
C. A. SHERWOOD, Manager.

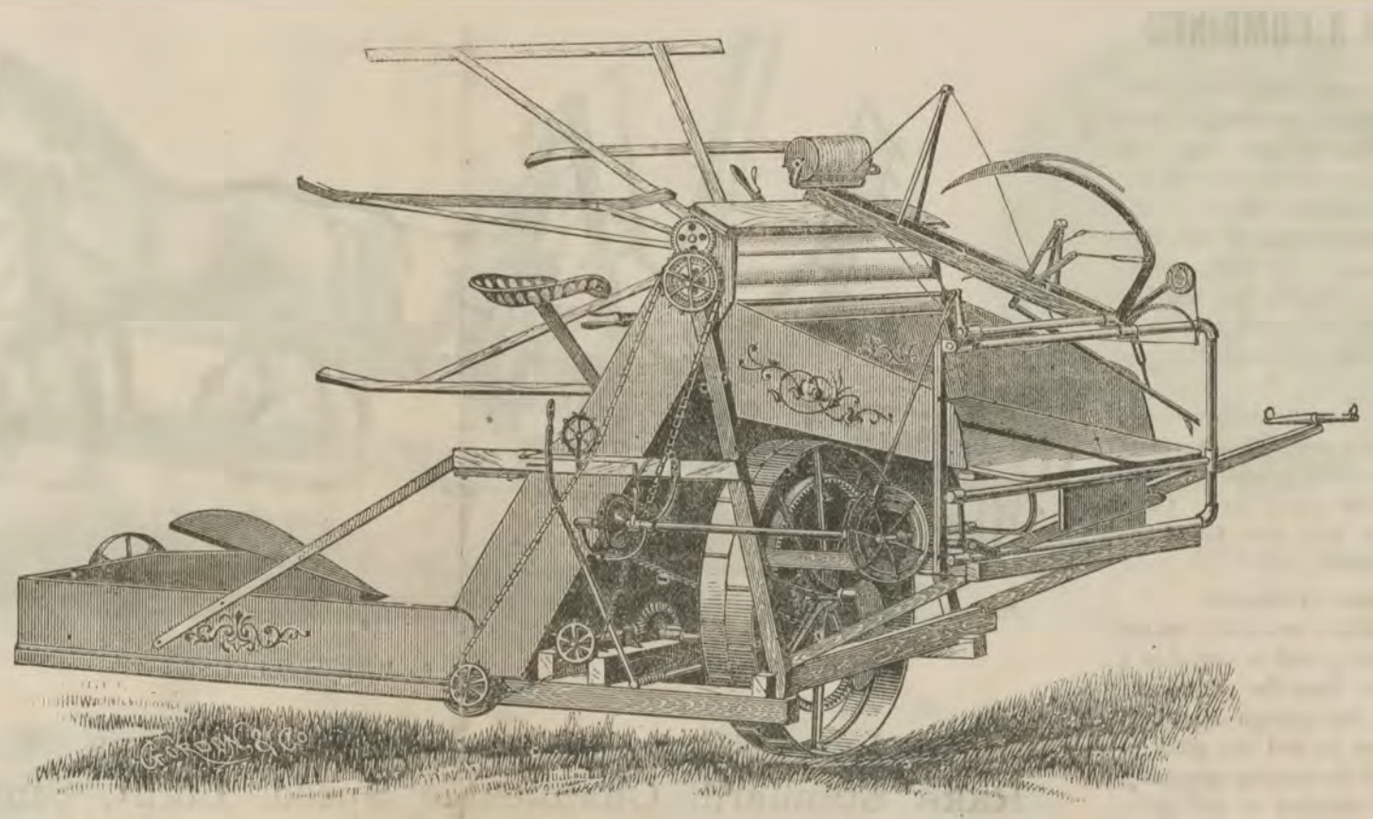
BROCKPORT, N. Y., 1880.

THE JOHNSTON HARVESTER CO.

This Company have for many years produced Reaping and Mowing Machines, which, by their peculiar construction and excellent working qualities, gained so rapidly in popularity as to be placed at once at the very head of Agricultural Machinery, and are now quoted by farmers and manufacturers as the STANDARD MACHINES of this age, for the work for which they are designed.

When the Machines of this Company were first introduced, there were many kinds of machines used for the same purpose which were more or less adapted to the wants of the farming community, but none of them possessed the qualities really needed to make their use profitable to the farmer, for tney coula not be depended upon in all seasons and in all conditions of the crop. Those that worked well when the grain was of medium height and standing straight, were almost useless, except in such grain; but as storms would come before grain ripened, which prostrated it to the earth, and many times the seasons were so wet as to mire down the cumbrous machines of that day, they were rendered inoperative at the very time when they were the most needed, and thus the farming interests were almost in as much danger after machines came into use as before But the advent of the Machines of the Johnston Harvester Company revolutionized the whole business of harvesting crops, for they proved equal to every emergency. They reaped the crop as it stood straight and easy to handle, and they saved it just as fully when laid flat by wind and storm. When so light and thin and short as to hardly furnish resistance enough for the knives to cut, and when it was so heavy and rank as to break the gearing of ordinary machines, equally in the one as in the other these Machines proved their superiority over all others. The principle of their action was thus established, and has proved its value in more than a hundred public contests with other machines of every grade and style; and they have ever since been broadening and extending their fields of usefulness every year, until they now encircle almost the entire globe.

They won golden opinions from all who witnessed the great trial near Philadelphia, during the Centennial; although no prizes were given to designate the excellence of one machine over another, there was no mistaking the public judgment, as it manifested itself in many ways. But in the greater and more complete trial in connection with the great Paris Exposition in 1878, there was only one prize offered for Reapers, which was to be given to the best Machine; and in competition with THIRTY-FIVE different Reaping Machines, this coveted prize was unanimously awarded to and borne off by THE JOHNSTON HARVESTER COMPANY. The cuts showing the appearance of this grand prize may be seen on the first page of this paper.



The Johnston Harvester Company's String Sheaf-Binder.

THE CAUSE FOR THE RISE IN PRICES.

Agricultural machinery of all kinds has of late years been sold at a very small profit. Material of all kinds have been very low. With last year's boom and a more prosperous business came a decided increase in price of all raw materials. Lumber has gone up 10 to 15 per cent.; iron from 120 to 160 per cent., and other goods in proportion. The actual cost of building agricultural machinery this season, at the present prices of material, will be very largely increased.

The *Rural New Yorker*, of February 14th, 1880, on this subject, says: "It is doubtful whether there has ever been so much activity in the iron business as at the present time in this country. Blast furnaces that for the last decade almost, have been cold and useless, are now making pig metal to their fullest capacity; rolling mills are working in some cases day and night; but the home supply is still much less the demand, and the iron works of England and Belgium are working hard to supply the deficiency. During the past week two vessels were loaded with 5,000 tons of steel rails in Liverpool, and it is reported that 13 other vessels are waiting to be loaded entirely with iron for this country.

The farmer is greatly interested in this briskness in the iron trade, inasmuch as all goods into whose make-up iron enters are rising in price. A week or two ago all the plow makers of the Northwest met at Chicago, formed a combination to regulate the prices of their wares, and began at once with an average rise of about 10 per cent Nail makers, stove makers, in fact, all branches of iron manufacture are also advancing prices. Mowing machines will go up probably at least $10 each, the coming harvest, hay rakes about $4, and other implements in proportion. Wood, wages, all things are advancing inprice, and those who intend to buy, must look forward to pay higher prices for their purchases."

VICTORY!

The Grand First Prize,

THE SOCIETY'S SILVER CUP,

Valued at £25, or about $125.00

TAKEN BY THE

JOHNSTON HARVESTER CO.

From Canterbury Times, Christ Church, New Zealand, Jan. 31, 1880.

Great Reaper and Binder Trial in New Zealand.

The reaper and binder contest, held under the auspices of the Canterbury Agricultural and Pastoral Association, took place on Jan. 26 at Fendaltown, where some magnificent paddocks had been placed at the disposal of the Association by Mr. Boag. The attendance was a most gratifying one, fully 1500 persons visiting the ground during the day.

At 20 minutes past eleven, Mr. Henderson dropped his flag, and the machines entered the crop, their places along the headland, decided by lot, being as follows:—1. Wood's twine binder; 2. M'Cormick's wire binder; 3. Deering's twine binder; 4. Wood's wire binder; 5. Osborne's wire binder; 6. The Johnston Harvestertwine binder. The Deering wire binder, which had been entered, was not on the ground. The judges were: Messrs. W. E. Ivey, school of agriculture; W. M. Ross, Kaiapoi Island; D. M'Millan, Waddington; W. Blake, Avonheal; and W. Conyers, Commissioner of railways.

The Committee had arranged with Mr. Boag that the machines should be tried both in wheat and oats, the crops being in adjoining paddocks. The wheat was first taken, the allotments containing about 1¾ acres each. The paddock, which contains 100 acres, formed a magnificent sight. Side by side there were crops of barley, Velvet chaff wheat, and some "Woolly ear" wheat, a comparatively new variety. That cut into was the Velvet chaff, estimated to yield over 50 bushels to the acre. The straw ranged from 3ft. 6in. on the higher ground to 5ft. 6in. on the lower-lying parts. The points to which the judges had to direct their attention were, (1) strength, combined with simplicity of construction; (2) lightness of draught; (3) quantity of ground gone over, and time occupied; (4) quality of the work done. The height of cut was, after some little discussion, fixed at a minimum of 12in. The machines finished their wheat allotments in the following order: M'Cormick, 12.50; Wood, string, 12.56; Wood, wire, 1.14; Deering, twine, 1.15; Johnston, twine, 1.30 (less 15 minutes delayed); Osborne, 1.44 (less an hour's delay for the change of horses).

After a considerable interval the machines, arranged in the same order as before, started work in the oats at 2.57. The oats are old Tartarians, two years from imported seed, and the crop is estimated to yield not less than 70 bushels to the acre. The order of finishing was as follows:—M'Cormick, 5.5; Deering and Osborne, 5.22; Wood, string, 5.23 (less 25 minutes delay in arranging the first dynamometer test); Wood, wire, 5.52; Johnston Harvester, 6.9. Here the last mentioned machine was most unfortunate, for when about half its work had been done, and in excellent time, one of the iron stays of the "kicker" or sheaf separator snapped, owing to a flaw. The broken part was mended in a very temporary fashion with a tie of wire, and the cutting was pluckily finished.

The judges arrived at their decisions only after a long and patient consideration. They each regarded the wheat and oat trials as distinct, and they were requested by the Association Committee to award to the best machine the Association's prize, and to give to the two next best a "highly commended" and "commended" respectively. For the wheat trial, they placed the Johnston Harvester string binder first, the Wood wire binder second, and the Osborne wire binder third. For the second trial, in the oat crop, the results were different, the M'Cormick wire binder coming first, the Deering string binder second, and the Osborne wire binder third. To award the prizes, they tabulated all the points obtained in both trials, and this method gave the Association's prize to the Johnston Harvester string binder. The M'Cormick wire binder received the "highly commended," and the Deering string binder the "commended."

The judges have thus decided that the wire nuisance may be satisfactorily disposed of, and by a machine displaying great strength combined with simplicity of construction, for they expressed themselves as being much pleased with the simple mechanism of the winning machine. At first sight the Johnston Harvester does not appear to be of very simple construction, but those who read the description published in these columns some time since will remember that the tying is effected by a straight and strong hook, and that the other parts are equally effective. Moreover, the knot is very peculiar, in that the ends of the twine are pulled through. In other words, the knot is a complete overhand one, while in other machines it is like a simple bow. The best work done by the Johnston Harvester was in the wheat crop, and there it was far before the others, the the stubble being left clean and even, and the bundles being tightly tied, and as regular as could well be desired. That equally good work was not done in the oats was largely due to the fact that Mr. George Wilson, who piloted the machine, was in too great a hurry, considering the heavy crop he had to deal with.

UNIVERSITY OF ROCHESTER.

This Institution, located in the city of Rochester, N. Y., was founded in 1850. It has had a steady and healthy growth from that time to the present, and under the inspiration and leadership of its noble president, Dr. M. B. Anderson, has become one of the foremost institutions of our country.

Dr. Anderson has been justly termed the Prince of college presidents, and has held that position longer than any other man now living.

The location and general facilities of the institution are unsurpassed. It has a cabinet for the illustration of Geology, Mineralogy and Natural History second to none in this country, and a library the equal of which, for practical value, it would be hard to find.

Its faculty contains such names as Dr. A. C. Kendrick, Dr. S. A. Lattimore, Dr. I. F. Quinby—all of them men of national reputation.

There has recently been added to the permanent endowment of this institution *a quarter of a million dollars* which will be at once available, and will increase its already great facilities for giving a young man a true education. The following gentlemen are the principal contributors to this fund:

Jeremiah Milbank, $25,000; John B. Trevor, $50,000; John F. Rathbun and Lewis Rathbun, $25,000; John D. Rockefeller, $25,000, John H. Dean, $100,000.

Hiram Sibley, of Rochester, a few years since, erected and gave to the University the magnificent building which now contains the library, and bears his name, and it is to be hoped that the time is not far distant when other wealthy men of Rochester will show their generous appreciation of the University, by liberal gifts.

From The Implement and Machinery Review, January 3d, 1880.

The Johnston Harvester Company, of Brockport, N. Y., and Chiswell street, London, made their string-tying Sheaf-binder, an important feature upon this occasion, and very deservedly it should have attracted considerable attention. Our readers upon referring to the August number of the Review of 1878, will find our description of it as we witnessed its performance at Bristol, and will therefrom form a number of favorable opinions calculated to give them very excellent impressions of this invaluable machine. It's a success wherever sheaf-binders are the "order of the day," and the prizes for their other reapers and mowers have placed the Johnston Harvester Company in the excellent position, which so well augurs for an increase of their business in Great Britain and throughout Europe, during the coming harvest of the present year.

No. 1 Combined (2 Bars), in the presence of FREDERICK WILLIAM, Crown Prince of Prussia.

Wrought Iron Frames! Changeable Speed! Adjustable Ball and Socket Pitman Connections! High Wheels! Light Draft! Easily Managed! Automatic Rake! Can be Set to Drop a Bundle 8, 12, 16 or 20 feet, or at the will of the Driver!

THE JOHNSTON HARVESTER CO.'S
COMBINED

REAPER AND MOWER.

In this we have a machine combining all the excellencies of the Wrought Iron Harvester and the Mower, both of which are described in another part of this paper. These advantages will be seen in reading the following description:

THE WHEELS

Are 34 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 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 babbitted boxes is felt by every farmer who has occasion to have his boxes re-babbitted by inexperienced workmen. It is impossible to re-babbitt 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 re-babbitted.

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 removing two bolts and one key.

Reaper Attachment for Combined No. 1 and Wrought Iron Harvester.

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 straight, compact gavels. The rakes are driven by a flat belt chain, and run very steady.

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 distance 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, or he can use the foot trip and throw off the gavels at will.

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, 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.

Description of Continental Reaper.

CAST STEEL SHAFTS.

All the shafts are made of the best cast steel.

THE BEARINGS

Are long, solid boxes, bored out, 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 babbitted boxes is felt by every farmer who has occasion to have his boxes re-babbitted by inexperienced workmen. It is impossible to re-babbit 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 re-babbitted.

THE FINGER BAR

Is made of cold rolled angle iron, so formed as to absolutely prevent sagging. The guards are of malleable iron with steel plates, the 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 RAKING APPARATUS

Consists of four 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 straight, compact gavels. The rakes are driven by a gear, and run very steady.

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 distance 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, or he can use the foot trip and throw off the gavels at will,

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

THE PITMAN CONNECTIONS

Are of the most reliable and 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 width of knife head, and superior manner of coupling the pitman to it, avoids all tendency to twist the knife in the guard slots.

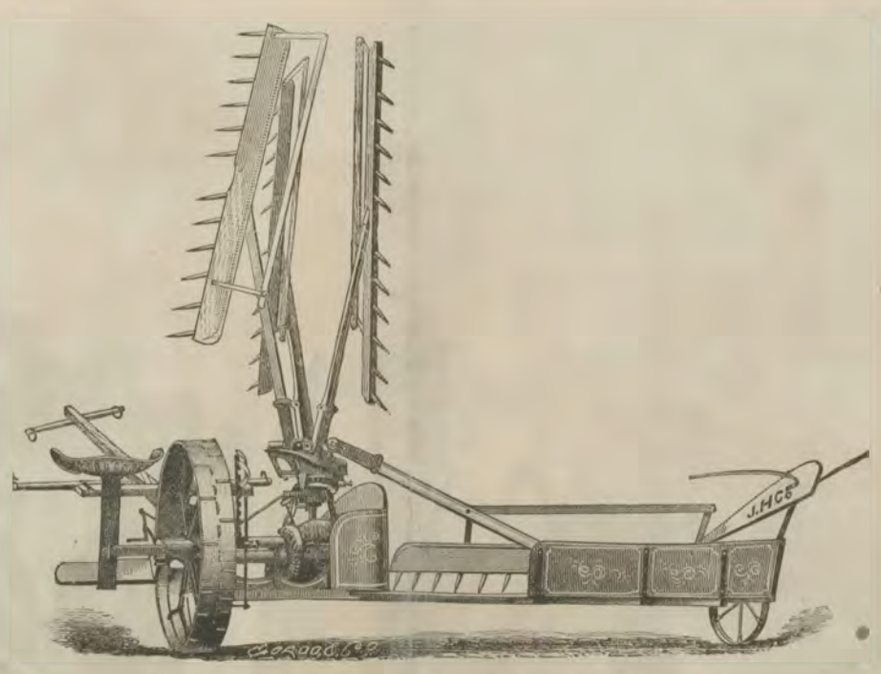
THE TILTING ARRANGEMENT

Is attached to the pole and platform by a very simple and strong device. The lever, being within easy reach of the driver's seat, enables him to regulate the height of cut perfectly while the machine is in motion.

MANY OTHER ADVANTAGES

Will be found on an examination and trial of this machine, all being combined to form the best Light Reaper in use.

The raising of 30 bushels of wheat to the acre will remove from the land 51 pounds of nitrogen, 24 pounds of phosphoric acid and 37 pounds of potash. This could be replaced by 60 pounds of sulphate of ammonia, 171 pounds of superphosphate of lime and 76 pounds of chloride of potassium.



Continental Reaper No. 1.

For Lightness of Draft, Durability and Efficiency, it has No Equal!

Cuts a Swath Five Feet Wide, and will Pass Through a Nine Feet Gate!

The Attention of Farmers

is earnestly invited to the machines herein shown and the record they have made wherever used, their unprecedented popularity is abundant evidence of the success which we have attained. They are in common use throughout a remarkable extent of territory, being employed all over the American Continent not only, but having large sales in every country in Europe, and even in the benighted but rich grain districts of Africa. They are also sought for in the far-off Australia, and what used to be known as the Cannibal Islands of New Zealand, where immense grain crops have for several years been cut with them.

Encouraged by past success, and the high appreciation shown our Machines everywhere, we feel stimulated to attain a still higher degree of perfection in the superior line of machines we have to offer the farming public for the coming harvest.

A witness in a case at Nashville was asked whether he had much experience in feeding cattle, and to estimate the cost of feeding a cow. He answered: "My father before me kept a dairy. I have had a great deal of experience in buying and selling and keeping cattle, as man and boy, in the dairy business, for 50 years. I think my long experience has qualifed me to know as well as any man can, the cost of keeping and feeding cattle." "Well," broke in the attorney impatiently, "tell me the cost of keeping a cow." "Well, sir, my experience, after 50 years in the business, is that it costs—well, it depends entirely on how much you feed the cow."

From the results of twenty-six years' trial, in England, farm-yard manure gave an average of forty-nine bushels of wheat and 2800 pounds of straw per acre, and mineral manures gave an average yield of only 25½ bushels of wheat and 1300 pounds of straw per acre. Mixed manures, farm-yard and mineral, gave forty-five bushels of wheat and 2750 pounds of straw per acre.

It is related of a well known merchant of a neighboring city, that, after making his will and leaving a large property to trustees for his son, he called the young man in, and after reading the will to him asked if there was any alteration or improvement he could suggest. "Well, father," said the young gentleman lighting a cigarette, "I think, as things go nowadays, it would be better for me if you left the property to the other fellow and made me the trustee." The old gentlemen made up his mind then and there that the young man was quite competent to take charge of his own inheritance, and scratched the trustee clause out.

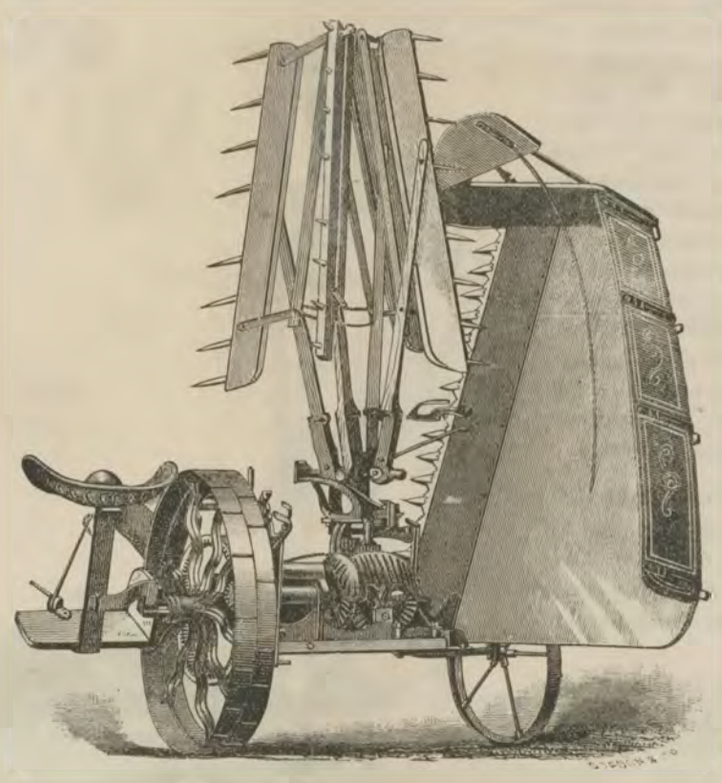
Nobody except the people in the front pews, last Sunday, and only a few there who listened very intently, could hear the tenor, when the choir started out on "When I can read my title clear," singing very distinctly, with his face turned toward the leader at the other end of the organ:

"I've lost the place; I'm in a fix;
Whatever shall I do?"

And then the leader in his profoundest bass replied, in faultless tune and metre:

"The tune is on page ninety-six,
The words on forty-two."

—Hawkeye.



Continental Reaper No. 1.

Folded for Transportation, for Passing Through Narrow Roadways, or for Storing during the Winter.

Continental Reaper No. 1.

For some years there has been a great desire among farmers, especially those having hilly farms, for a LIGHT machine, and one which at the same time should be durable and strong. This has now been accomplished, and THE JOHNSTON HARVESTER COMPANY pledges to the farmer, that, after many experiments and most severe tests, they have produced a machine unique and stylish in appearance, of ample strength and durability, made of the best materials, and which weighs only about 650 pounds.

Those having hilly farms, or rough and difficult fields, will find this a more desirable machine than any other of the so-called light machines, most of which are cheaply made and liable to be easily broken.

Experienced dealers in machines, who are well acquainted with all the different reapers manufactured, say that no farmer who sees this machine side by side with any or all others can hesitate a moment as to its superior merits. We advise all who are to use machines during the harvest of 1880 to take the pains to examine this machine, for they will find many points in it of great advantage over any other, and by purchasing it they will not be disappointed in anything promised as to its results.

It has been thoroughly tested in the large harvests and heavy grain of the past two seasons, and has given universal satisfaction wherever used.

FARMER'S OUTLOOK.

Information derived from the department of agriculture, shows the comparative total production and value of the leading crops of the United States, for the years of 1878 and 1879. The figures we give below. Their significance is apparent. Well do we remember the exultant feeling caused by the enormous crops of 1878, but the grand results of '78 are followed by the unparalleled production of '79.

The values reported below are understood to be the amounts realized by the producers without reference to what is paid by consumers:

	1878. Product.	Value.
Wheat, bush.,	420,122,400	$326,346,124
Corn, "	1,388,218,750	441,163,405
Oats, "	413,578,560	101,945,830
Rye, "	25,842,790	13,292,826
Barley, "	42,245,630	24,483,315
Buckwheat, "	12,246,820	6,454,120
Cotton, bales,	5,216,603	193,854,641
Tobacco, pounds,	392,546,700	22,137,428
Hay, tons,	39,668,290	285,533,752
Potatoes, bush.,	134,126,650	73,059,125
Total,		$1,488,570,866

	1879. Product.	Value.
Wheat, bush.,	448,755,000	$499,008,000
Corn, "	1,544,899,000	586,269,000
Oats, "	364,253,000	120,855,000
Rye, "	23,646,500	15,505,000
Barley, "	40,184,200	23,652,300
Buckwheat, "	13,145,650	7,860,488
Cotton, bales,	5,020,387	231,000,000
Tobacco, pounds,	384,059,659	21,545,591
Hay, tons,	35,648,000	325,851,280
Potatoes, bush.,	181,369,000	78,971,000
Total,		$1,904,480,659

This is leap year, and the Cedar Rapids (Ia.) *Times* exhorts young women to assert their rights, and claim their privileges early and often, "When the boys call, tell them if they mean business you are ready to take their future happiness into consideration, but if they don't, you've other fish to fry, and you cannot afford to waste gas and fuel for the sake of being spooney."

A domestic writer says: "Every country girl knows how to color red with madder." This must be an ethnological fact, as we have noticed that all girls, the madder they get the redder they are.

WROUGHT IRON MOWER.

This machine, being built largely of wrought iron, insures the necessary strength, and at the same time making it light and very durable. 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 of 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 machine 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 wedgebolts. 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 and 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 the drag bar.

FOR TRANSPORTATION

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

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.

WROUGHT IRON MOWER, No. 3.

AGRICULTURAL ITEMS.

—The farm products of Illinois for 1879 amount to $200,000,000, said to be double the product of all the gold and silver mines in the United States.

—No soil has yet been discovered in this country where remunerative crops can be secured without labor, or substantial property without value received.

—Horn shavings are excellent fertilizers, as they contain a large amount of ammonia. They are sold in the English market at the rate of $40 to $50 per ton.

—The best herds of dairy cows in this country yield from 600 to 800 pounds of cheese per cow. Few of these are thorough breeds, but are selected from the best grades of the various breeds.

—The most approved method of catching a sheep is to wait until the animal gets behind and close to several other sheep, then make a dash at its left hind leg, catching hold of the leg with the right hand above the hock.

—To cure the scab or scurvy legs in poultry, take lard and kerosene oil, equal parts, to which add sulphur sufficient to make a paste; rub the legs with this mixture till the scabs come away, then smear with a little olive oil.

—At the New York Dairy Fair Congressman Updegraff of Ohio said the value of dairy products of this country last year was $400,000,000. There are 12,500,000 milch cows in the United States, or three times as many as in Great Britain and Ireland.

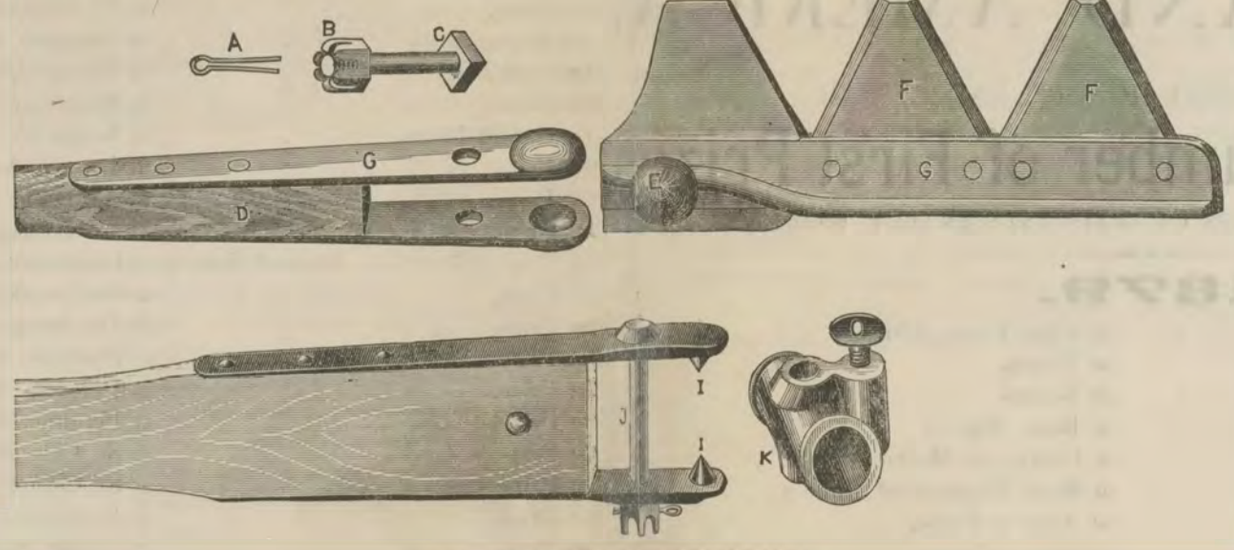
—H. C. Burleigh, an extensive breeder of Herefords, says a pair of two-year-old steers he once owned gained 14½ inches in girth in six months by feeding them with good, early-cut hay, and two quarts of corn, barley and bean meal equal parts per day.

—The condition of the public roads is the measure of the civilization of the inhabitants. Good roads facilitate trade intercourse, promote comfort and convenience, increase the value of real estate, add attractiveness to the neighborhood, and stimulate individual improvements.

—In seeding lands to grass for mowing fields or permanent pasture, a greater variety of grasses should be sown than is common in our general practice. Our farmers seldom use more than four varieties, often less. In England the best farmers use a mixture of 46 pounds per acre, made up of 17 varieties of grasses; while for lawns 20 or more varieties are used—and in each case every sort is put in for a purpose. The result is an earlier verdure, a thicker sod and a more lasting turf than is ever seen on our newly seeded fields. A mixture for our seeded ground should at least embrace the following varieties: Orchard grass, red top, herd's grass, meadow foxtail, timothy, red and white clover, blue grass, sweet scented vernal grass and meadow fescue.

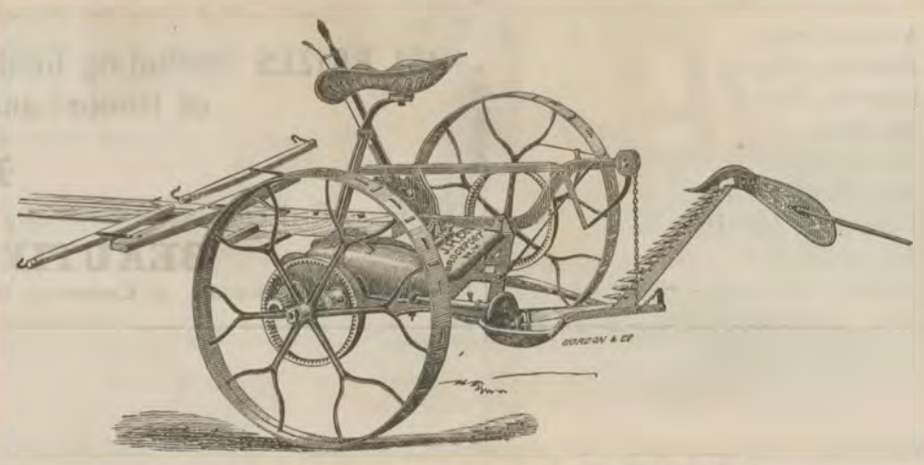
A BRIDAL couple from Washoe valley at breakfast in a Reno hotel, conversed as follows: He—"Shall I skin you a pertater, honey?" She—"No, thank you, deary. I have one already skun."—*Denver News.*

A CERTAIN bald-headed man had a large spider painted on the top of his head in fly-time, and the first day it scared his wife into a fit, and he was knocked out of his chair three times by people who wanted to kill the poisonous insect, without alarming the old gentleman by telling him it was there. —*Boston Post.*



PITMAN CONNECTIONS.

E is the ball on knife head to which the lower end of Pitman **D** is attached by sockets **G**, which are held in place by bolt **C** and forked nut **B** through which spring key **A** passes, to prevent it from working off. **K** is the Pitman Box, which is held between the pivots **I I** by means of the bolt **J**, thus making a perfect universal joint at both ends.



No. 5 CHANGEABLE SPEED MOWER.

MR. BILLINGS HAS THE FLOOR.

Inspirashun allwuss waits upon the bizzy. i hav seen men set down all day under a shade tree, with a hoe in their hand, cluss to the edge ov a kornfield, waiting to be inspired; but the weeds in that kornfield didn't wait for enny insparashun.

The man whom praze allwuss makes humble is an ironklad.

If a man will tell me what he thinks ov his nabors, i can tell him what his nabors think ov him.

In youth our pashuns keep us bizzy, in middle life our ambishuns, in old age the rumatism.

How many thousands there are who live out a whole life, and have nothing to prove it by, only that they have had the mumps, the meazles, and perhaps the chicken pox.

Thare iz this diffrense between the man who kant change hiz opinyun, and the one who won't—one iz an ideot, and the other a phool.

I suppose the world mite be divided into pholks that kno how to live, pholks that only sprout and vegitate, and pholks that never pay their debts until they are obliged to.

It would be absolutely krewel to banash all decepshun out ov the world; the majority ov mankind would be melankolly for a job.

The habits ov a snob are sumthing like the wearing ov a tite boot; they are painfull to the man who wears them, and ridickilus to those who see them.

We all ov us are apt to prate about our independanse ov karakter, and yet the notiss ov a grate man affekts most pholks, just az a pat on the hed duz a puppy.

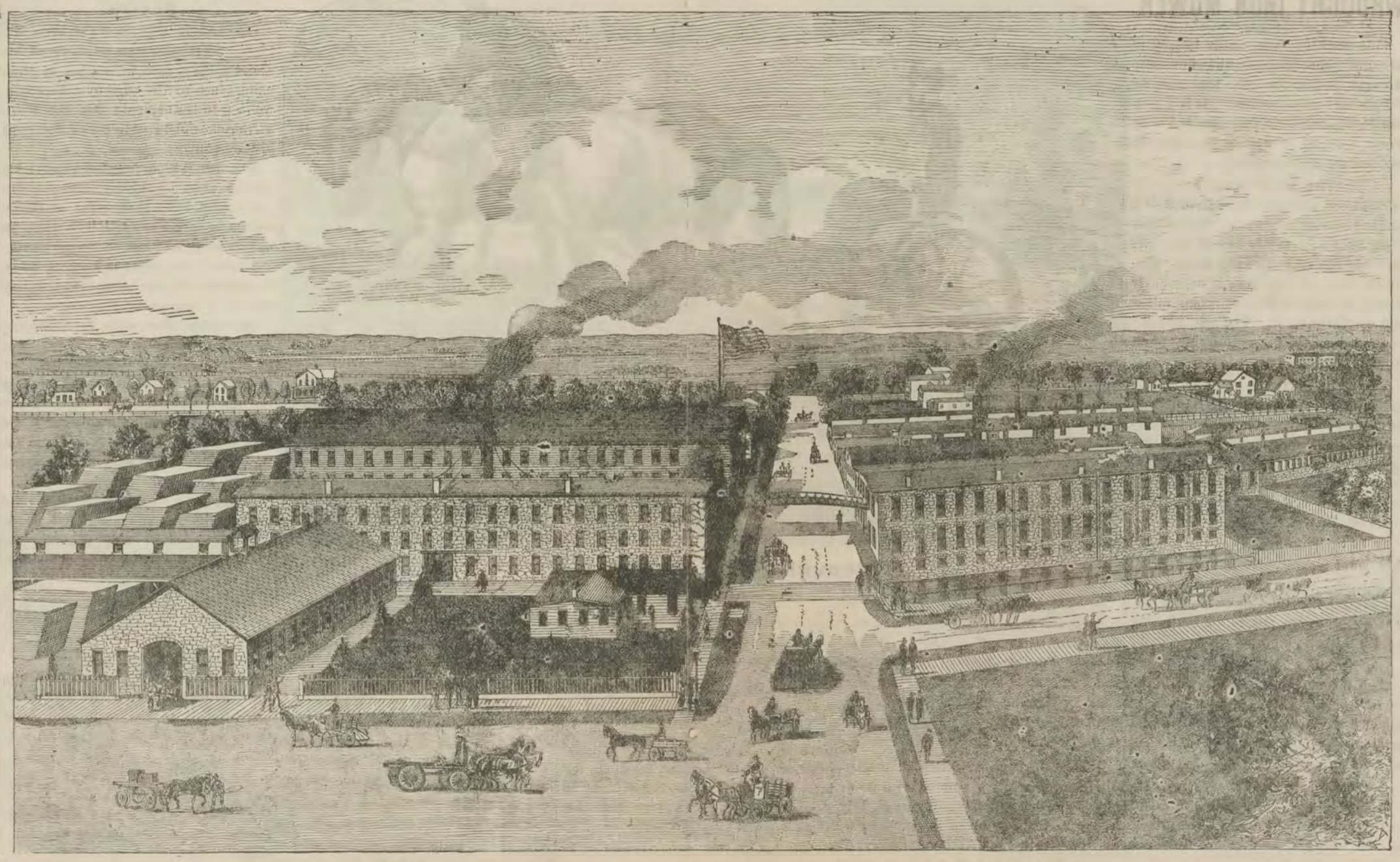
PITMAN CONNECTIONS.

The pitman connections, in use on all our machines, are of steel and of the most approved pattern, with ball and socket connections, forked nuts, spring keys, and can be readily secured to compensate for wear, thereby preventing any lost motion and adding greatly to the durability of the machine. Being a ball joint, it adapts itself to any position of the finger-bar, without cramping or binding. This is one of the most important points in a machine. Keep this joint tight, and you add years of life to your machine.

It is this care of details, careful selection of material, rigid system of accountability for good work done, and the frequent and thorough trial of of every machine in its progress toward completion, that have largely contributed to the popularity and universal success of the machines manufactured by this establishment.

No. 5 CHANGEABLE SPEED MOWER.

This new Mower has been thoroughly tested the past two seasons, and has given universal satisfaction wherever used, and we offer it to the farming community with confidence that it will please them. It has several new features, and many points of excellence which can be seen upon examination. The speed of the knife can be increased or decreased at the will of the driver. By using the slow speed in cutting light grass and clover when a high motion is not required, you reduce the friction and consequently the draft of the machine, and thereby add greatly to its wearing qualities. The pitman connections, tilting and raising arrange ment of the finger-bar, andthe cutting apparatus are the same as is used on the No. 3 Mower.



THE WORKS OF THE JOHNSTON HARVESTER COMPANY, AT BROCKPORT, N. Y.

Prizes Won in Field Trials

IN 1879,

IN COMPETITION WITH ALL THE LEADING MACHINES OF

EUROPE AND AMERICA.

THE VERY HIGHEST HONORS, AND BY FAR

The Largest Number of First Prizes

OF ANY SIMILAR CLASS OF MACHINES IN THE WORLD.

1879.

1st Prize and Diploma,	at Cape Town, Africa.
1st Prize,	at Troyes.
1st and 2d Prizes,	at Nevers.
1st Prize,	at Brest, May 21.
1st Prize,	at Charly sur Marne, June 2.
1st Prize,	at Sains Richaumont, June 2.
1st and 2d Prizes,	at Ancy le Franc.
1st Prize,	at Ancy le Franc.
1st Prize and 100 francs,	at Sens.
1st Prize and 100 francs,	at Cheroy.
1st Prize Diploma of Honor,	at Melle.
1st Prize,	at Falmouth, June 12.
1st Prize,	at St. Pol, June 30.
1st Prize,	at Bethune, June 30.
1st Prize,	at Amiens, July 5.
1st and 2d Prizes,	at Amiens, July 5.
1st Prize,	at Beauvais, July 5.
1st Prize,	at Beauvais, July 5.
1st Prize,	at Marquion.
1st Prize,	at Vis en Artois.
1st Prize Diploma of Honor,	at Argentan, July 12.
1st and 2d Prizes and 100 francs,	at Perigueux, July 16.
1st Prize,	at Saumur, July 17.
1st Prize and 300 francs,	at Saintes (Chaniers), July 19.
2d Prize and 100 francs,	at Saintes (Chaniers), July 19.
2d Prize and 40 Francs,	at Vicq sur Aisne, July 20.
1st Prize,	at Flogny, July 21.
1st Prize,	at St. Columb, July 21.
1st and 2d Prizes and 60 francs,	at Soissons, July 22.
1st Prize and Diploma of Honor,	at Arbois, Aug. 4.
1st Prize,	at St. Germain du-Plain, Aug. 10.
1st Prize,	at Gemozal, Aug. 11.
1st Prize,	at Braine-le.Comte, Aug. 11.
1st Prize,	at Seignelay, Aug. 11.
1st and 2d Prizes,	at Seignelay, Aug. 11.
1st Prize,	at Loulay, Aug. 11.
1st Prize,	at Aillye sur-Noye, Aug. 12
1st Prize,	at Arbois, Aug. 12.
1st Prize (Silver Cup, Prize of Honor),	at Chaumont, Aug. 12.
1st Prize,	at Doulevant, Aug. 15.
1st Prize,	at Doulevant, Aug. 15.
1st Prize,	at Peronne, Aug. 15.
1st Prize,	at Peronne, Aug. 15.
1st Prize,	at Peronne, Aug. 15.
1st Prize,	at St. Columb, Aug. 21.
1st Prize,	at St. Columb, Aug. 23.
1st Prize,	at Hernösand, Aug. 18.
1st Prize,	at Arleux, Sep.
1st Prize,	at Tweedmouth, Northumberland, Sept. 19

(This was a most important Trial—over 30 Machines competing).

THREE PRIZES--TWO GOLD MEDALS and GRAND OBJECT OF ART

AT PARIS EXHIBITION,

Thus making from the Harvest of 1877 to the present time a Grand Total of

131 PRIZES (including Gold and Silver Medals, Cups and Diplomas of Honor) and 4245 Francs in Money.

1880.

Grand First Prize of the Canterbury Agricultural and Pastoral Society, in January, 1880,

BEAUTIFUL SILVER CUP,

valued at £25 Sterling, at Canterbury, New Zealand, for the AUTOMATIC STRING BINDER.

E. R. Andrews, Printer, Rochester, N. Y.