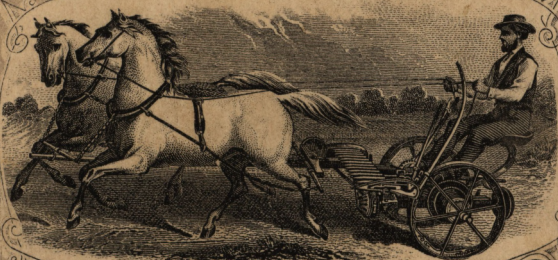


AULTMAN MILLER & CO.

Manufacturers of the



BUCKEYE

MOWER & REAPER

AKRON, OHIO.

BUCKEYE

Reaper and Mower.

With the harvest of 1876, the BUCKEYE completes its twentieth year. Invented in the year 1855 by Mr. Lewis Miller, the superintendent of our immense manufacturing establishment, it made its first appearance before the public at the great National Field Trial of Mowers at Syracuse, N. Y., in the summer of 1857, where it received the Grand Gold Medal—the highest award for the best mower. Of its competitors at that famous trial which were all of the one-wheeled mowers of that day, not one is now manufactured, it having long ago been conceded that the BUCKEYE system of two driving wheels, is essential to a perfect mower.

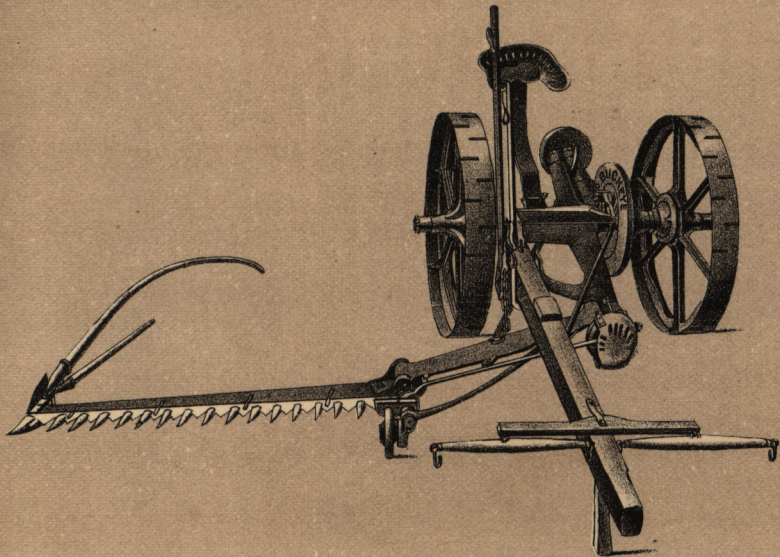
The decision of the judges at the Syracuse trial was re-affirmed in 1866, at the National Field Trial at Auburn, N. Y., and again at the Ohio State Field Trial, (open to the world,) held at Mansfield, Ohio, in July, 1870, at each of which it was awarded the Gold Medal, giving to the BUCKEYE the three highest honors, that have ever been awarded to manufacturers of mowers and reapers in America.

A far higher testimonial, however, to the merits of the BUCKEYE, is its ever-increasing popularity

among the practical farmers of America, as shown by its annual sales, the average of which exceeds that of any other machine of its class in the world, as does also the aggregate number built in the past twenty years.

At the first glance one would hardly recognize in the BUCKEYE Mower as now built, the machine exhibited at Syracuse in 1857, but a closer examination will show that in the arrangement of the gearing it is essentially the same. (This is the more remarkable when we consider the scores of machines which have been invented in the past twenty years, and which failing to meet the sanguine expectations of their manufacturers, have lost their short-lived popularity and are already forgotten.) In the form of its parts, however, the Buckeye has seen many and great changes, usually leading in, and always up with the latest improvements.

Strict attention to details in its manufacture has made the BUCKEYE always the best built machine in the market, and this, with the faultlessness of the principles on which its gearing and supports are arranged, have gained for it its world-wide reputation for durability, perfection of work, lightness of draft, ease of management, and safety for the driver.



THE NEW BUCKEYE MOWER, All Iron except the Tongue, Whiffletrees & Neckyoke.

THE BUCKEYE MOWER.

ITS LEADING POINTS OF EXCELLENCE.

THE MAIN FRAME OF THE BUCKEYE IS OF CAST-IRON with wrought iron supports, giving the necessary rigidity to secure entire freedom from springing of the shafting or cramping and binding of the gearing, or cutting apparatus, and at the same time sufficient strength to avoid all danger of breakage.

The superiority of cast-iron over wood for the main frame of mowers and reapers, has long been conceded, as wood soon swells and shrinks so as to make the joints loose, and warps so as to throw shafting out of line.

We also fully believe that cast-iron is as much superior to wrought iron, for this purpose, as the latter is superior to wood. To state the case mildly, a machine in actual use, is ten times as liable to be put to a strain great enough to *bend a wrought iron frame*, throwing shafting out of line and making the gearing run hard, (a trouble which few blacksmiths are able to remedy,) as it is to be put to a strain sufficient to break the cast-iron frame of the BUCKEYE.

No Cog-Gearing in the Driving Wheels.

The BUCKEYE was the first machine to do away with cog-gearing in the driving wheels, and to place its gearing in the body of the machine where it is covered and fully protected from mud and dirt. The wet harvest of 1875, like that of 1869, has fully demonstrated the fact, that the objection to cog-gearing in the driving wheels, is a valid one. Mud and sand raised by these wheels, fall into the gearing, causing the machine to run hard and wear out rapidly, and in wet weather rendering it useless for days and weeks, together, just at the time when most needed. The BUCKEYE, which has no cog-gearing in the driving wheels, can be used wherever it is safe for the horses to go.

DOUBLE JOINTED COUPLING.

THE DOUBLE-JOINTED COUPLING of the BUCKEYE allows the *cutter-bar* to adapt itself to all varieties of surfaces, so as to mow closely and evenly over knolls and ridges, and through hollows, dead furrows and ditches.

FOLDING OF THE FINGER-BAR.

(See Cut of Mower on the Road.)

To the double-jointed coupling is also due the acknowledged superiority of the BUCKEYE in portability, as it is the only Mower in which the cutting apparatus can be folded completely over, so as to lie securely in a horizontal position upon the frame of the machine.

LIGHTNESS OF DRAFT.

Side-draft and weight on the horses' necks are entirely obviated in the BUCKEYE by the perfect manner in which the machine is balanced, while the direct or forward draft is reduced to the lowest point practicable. *It is not necessarily the lightest machine that runs the lightest for the team; but the one which has its weight properly balanced on the ground or driving-wheels, the gearing so adjusted and secured that it may be worked without cramping or racking, and its cutting apparatus best adapted to its work.* The draft of the BUCKEYE is lighter than that of ordinary plowing, being only from one hundred and fifty to two hundred pounds, as fairly demonstrated by numerous dynamometer tests.

Finger-Bar in Front of Driver's Seat.

In the BUCKEYE the finger-bar is in front of the driving wheels, and the driver's seat is in the rear, by which arrangement the following advantages are gained :

FIRST: The driver can at all times have a full view of the operation of the knives, without interfering with the management of his machine.

SECOND: If at any time the driver should be thrown from his seat, the danger of falling in front of the knives is entirely avoided. If anyone doubts the reality of such danger, let him send to us for a list of such accidents which occurred in the year 1875.

THIRD: In reaping it permits the use of both front and rear supports to the platform, securing

a uniform motion of the bar in tilting to take up lodged grain.

STEEL-FACED FINGER, OR GUARD.

With the BUCKEYE is furnished the most perfect finger, or guard, now in use. This guard, which has been introduced at a heavy expense in machinery, is made of the best quality of wrought iron, inlaid with steel, with concave, cutting surface, *greatly reducing the friction of the knife and the draft of the machine*; while that portion of the guard coming in contact with the edge of the knife, being well tempered, forms a perfect shear-cut and renders clogging impossible. By the use of improved machinery, these guards are produced with great uniformity and regularity of finish.

To Regulate the Height of Cutting.

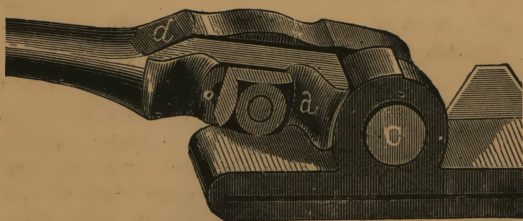
The Finger-Bar of the BUCKEYE has an adjustable steel spring sole at the outer shoe, and an adjustable wheel at the inner shoe, so that the entire bar may be raised or lowered, and the knives always kept parallel with the surface of the ground, which is the only position which will secure perfect work.

The well-known superiority of the BUCKEYE in the ease of its adaptability to all conditions of surface and grass, is due to the adjustable bar in connection with the leading-wheel and double-jointed coupling.

For cutting over rough and boggy ground, we make a *Bog-Shoe* which will be furnished when desired.

ADJUSTABLE PITMAN.

The contrivance shown below which has been used on our pitman for the past three years, for taking up the lost motion or wear at the knife-head, has proved a great success. It is extremely simple, not in the least liable to get out of order, furnishes a large amount of wearing surface and allows the use of the strongest known form of knife-heads, the value of which can only be fully appreciated after using one of the numerous styles of machines whose knife-heads are always giving out.



The adjustable piece “a” having a bearing on the outside of the knife-heel, makes the “thrust” or outward stroke while the hook “c” makes the “pull” or return stroke, thus dividing the wear between the two parts.

To tighten the bearing when worn, remove a portion of the packing from the back of the adjustable piece “a”. The bevel shown at “d” now crowds piece “a” up to the knife-head, making the bearing as good as new.

DUPLICATE PARTS.

In the manufacture of the Buckeye we maintain a perfect system of duplication, and we keep constantly on hand at our works, and with our agents in all parts of the country, a large stock of duplicate parts for all the machines ever built by us, from the original *wood-frame Buckeye of 1857*, to the *greatly improved iron-frame Buckeye of the present day*. Each casting is plainly marked, so that the farmer need not be at a loss to know how to order repairs.

JUNIOR AND SENIOR.

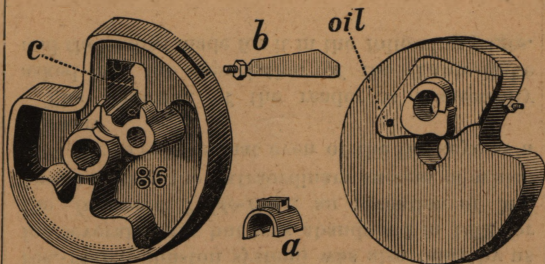
We make two sizes of the BUCKEYE MOWER, which we designate by the terms "JUNIOR" and "SENIOR." They are precisely similar in all their parts, differing only in size, weight and width of cut.

Both sizes are furnished either as Mowers only, or as Mowers combined with the Dropper or Table-Rake, as parties may order.

The JUNIOR, during the twelve years it has been before the public, has become a great favorite in the grass-growing sections of the country, where a Mower only is needed. It is sufficiently strong, and being lighter for the team, and costing less, preference has usually been given it as a mower; but as the country grows older and more adapted to growing all kinds of grain, our orders from year to year for the SENIOR, both as a MOWER and a COMBINED MACHINE, increase; clearly indicating that for general purposes the SENIOR, or large size is preferred.

"THE NEW BUCKEYE"

Which we offer for the harvest of 1876 is the latest and most approved form of the BUCKEYE. It differs from the ordinary form in having a tubular frame, a tilting lever (in addition to the lifting lever) to raise or lower the points of the guards, and a three-inch cutting section. It is all metal except the tongue, whiffletrees and neckyoke. The gearing is entirely out of sight, and protected from dirt. The bearings at both ends of the pitman are adjustable and it has the most perfect arrangements for oiling. It is especially adapted to meet the demand for a light Mower, but can be had also combined with the Table-Rake.

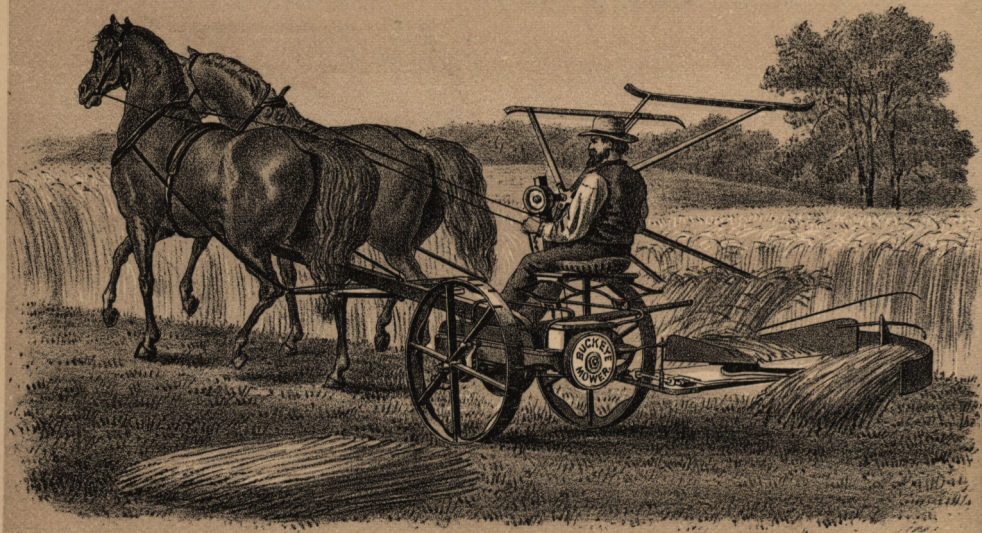


The New Buckeye, in addition to the adjustable pitman connection, has an adjustable box for the pitman in the crank-wheel as shown above. The brass box "a" can be tightened by filing away the four corners, or it may be removed and a new one put in its place. This box is supplied with the most perfect self-oiler in use.

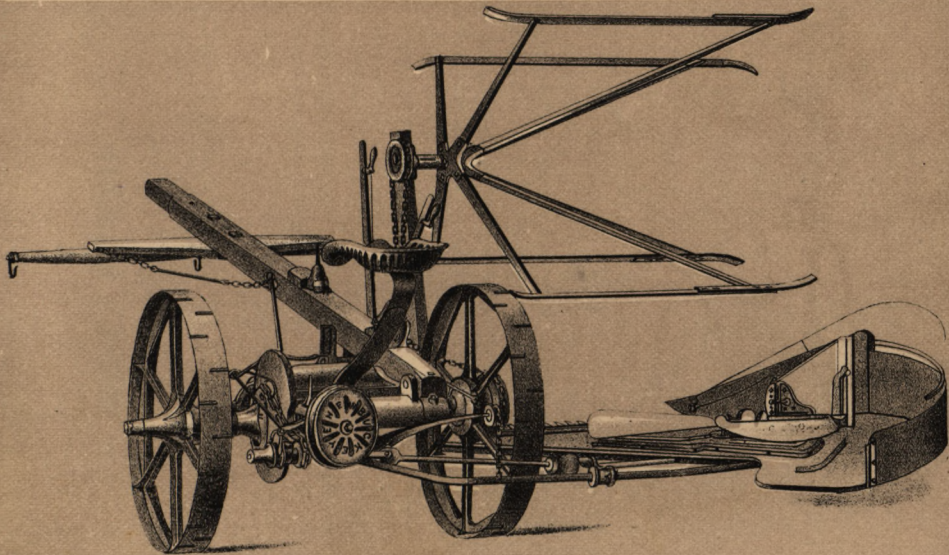
The Combined Buckeye Mower and Reaper.

As a reaper, the Buckeye began with the old forms of hand delivery in vogue years ago. It is still built in connection with the well known (rear-delivery) Dropper. The ordinary form of the reel-rake (Johnston system) was also built by us for several years, but was abandoned in 1872 for the *Improved Table-Rake*, an invention of Mr. Lewis Miller, the extraordinary success of which bids fair to eclipse that even of the Buckeye as a Mower.

The attention of the reader is respectfully asked for the description of the Table-Rake and the claims made for it in the following pages.



BUCKEYE SENIOR MOWER, WITH TABLE-RAKE.



THE NEW BUCKEYE MOWER, WITH TABLE-RAKE.

MILLER'S IMPROVED

TABLE - RAKE

IS AN AUTOMATIC, SIDE-DELIVERY REAPER, and is built and sold only in connection with the BUCKEYE MOWER. It consists of an ordinary quadrant platform, or table, with a fork on the end of a jointed arm, which sweeps around a vertical axis in the center of the table, so as to allow the fork to follow closely the surface of the platform. By means of a cam, or track, fastened securely on the platform, the jointed arm is extended or shortened to suit the form of the table, so that the fork, starting into the grain close to the inside shoe, sweeps across the platform in a line nearly parallel to the sickle, gathering and compressing the grain against the outside or circle-board, and delivering the gavel in a compact form for binding, and entirely out of the way of the machine on its next round. The fork is entirely independent of the reel, and is worked by means of a cog-gearing, connected with the main-shaft of the machine, and *while it is so arranged as to work automatically, delivering a bundle every thirteen feet, it is always under control of the driver, and can be stopped or started at any point by means of a lever worked by the driver's foot.*

In thin grain, and at the corners of the field, the bundles can be carried as far as desired before dropping. A stationary sheet-iron shield, some three feet in diameter, covers the center of the platform, preventing the straw from being caught in the gearing.

This rake allows the use of the over-hanging reel, just as it is found in the dropper—a great advantage over all reel-rakes, as it is easily adjusted for all kinds of grain. The rake itself requires no adjustment whatever for the different conditions of grain. The cutter-bar can be raised or lowered while the machine is in motion.

The platform is attached to the main frame both in front and rear, so that its weight is evenly balanced upon the ground wheels. It should be remembered that this double support of the platform can be had only with machines which have the cutting apparatus in front of the driving wheels.

REGULATING THE HEIGHT OF CUTTING.

ESPECIAL attention is called to our new arrangement for regulating the height of cutting when reaping. By carefully balancing the weight of the machine and platform upon the ground wheels, the whole is placed under the control of the driver, so that by the same lever which raises the mower-bar to pass obstructions, the reaper-bar is lowered, together with the front half of the platform and frame in such a manner as to drop the points of the guards low enough to take up the lodged grain with perfect ease.

The reel is lowered by the same operation that drops the cutter-bar to take up lodged grain. All this is accomplished without the multiplication of levers, swivel-joints and those complicated devices which so greatly lessen the durability of those machines to which they are attached.

By means of the adjustable supports of the finger-bar and platform, and the above described method of raising and lowering the cutter-bar by the lever, the Dropper and Table-Rake have a range of cut from the ground upward to the height of ten and fifteen inches respectively.

TABLE RAKE vs. REEL RAKE.

The following points in which the superiority of the Table Rake as compared with the so-called "Reel-Rakes" or the machines of the Johnston pattern, must be acknowledged, are worthy the attention of grain-growers.

First. The over-hanging reel used on the Table-Rake, the same as on the Dropper, is independent of the rake, and can be made to move fast enough to do its work without affecting the working of the rake, while with the "Reel-Rake," and all rakes of the Johnston pattern, there is great need of a faster motion of the reel-arms which cannot be secured without injuring the working of the rake.

Second. In the over-hanging reel the reel-arm is always parallel with the cutter-bar, and its motion is uniform the whole length of the bar, while on the "Reel-Rake" the reel-arm not only is not

parallel with the cutter-bar, but its motion at the outside-shoe is several times faster than at the inside-shoe. This defect in the Reel-Rake necessarily tends to throw a part of the grain diagonally across the platform, and as the grain is not compressed into a bundle before delivery, it is dropped upon the ground in much the same shape it falls upon the platform.

The over-hanging reel of the Table-Rake puts the grain squarely upon the platform, and the rake compresses it into a bundle and delivers it ready for binding in so much better shape that four men will bind more grain after the Table-Rake than five can after any "Reel-Rake."

Third. The well known tendency of the Reel-Rake to throw a twisted bundle in straight grain is in part also caused by the shape of the platform. That part of the bundle lying nearest to the body of the machine, at which point the platform is very narrow, necessarily touches the ground first, allowing the heads to catch in the stubble and leaving the straw nearly parallel with the tracks of the driving-wheels; the balance of the bundle which leaves the platform an instant later, is thrown nearly square across that already on the ground, making from uniform, standing grain about as ugly a bundle to bind as can well be imagined.

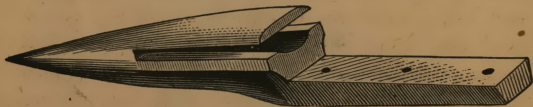
Fourth. In our new Table-Rake, the jointed rake-arm can be started at any instant, and stopped at any point in its circuit, so that the bundle when gathered may be carried on the rear of the platform, around a corner, or as far as desired;

while the Reel-Rake, (and this is true of them all, without a single exception,) when once it has started to deliver a gavel, cannot be stopped while the machine is in motion, but the bundle must be dropped no matter in how inconvenient a place.

Fifth. The weight of the platform, with jointed rake-arm, and other parts resting on the platform, is many pounds lighter than the platform and complicated machinery of the Reel-Rake, making a great saving for the *Table-Rake*, not only in direct draft, but especially in avoiding side draft, which is one of the most troublesome features of side-delivery reapers.

The New Buckeye Mower, packed for ocean shipment, measures about 30 cubic feet.

The Senior Buckeye Mower with Table-Rake, packed for ocean shipment, measures about 45 cubic feet.



WROUGHT IRON STEEL FACED GUARD.

DIRECTIONS.

When you order machines or repairs, be particular to mention the following :

1st. TOWN, COUNTY AND STATE TO WHICH THEY ARE TO BE SHIPPED.

2d. WHETHER BY FREIGHT OR EXPRESS.

3d. WHEN REPAIRS ARE WANTED, GIVE THE NUMBER ON EACH CASTING.

4th. WHETHER FOR "SENIOR," "JUNIOR," OR "NEW BUCKEYE," AND THE NUMBER OF THE MACHINE.

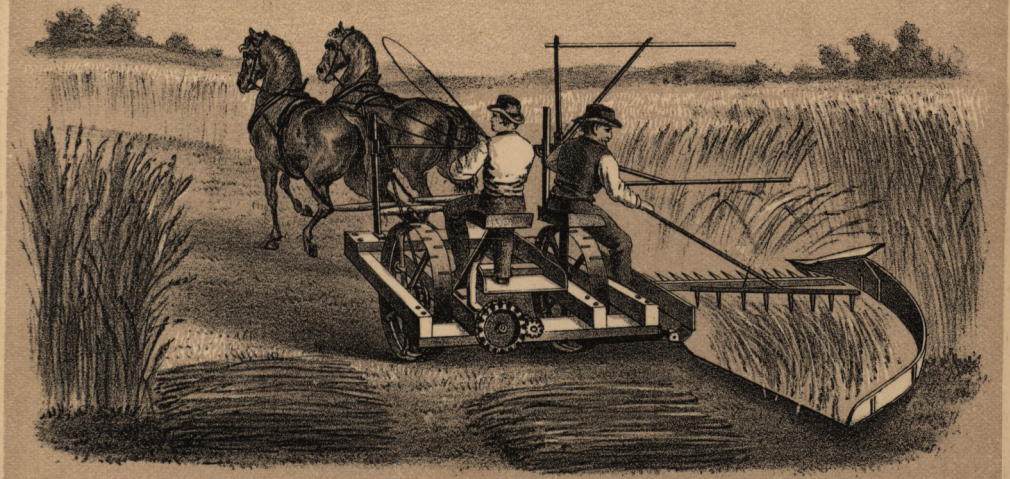
5th. YOUR POST-OFFICE ADDRESS.

Repairs for machines will be kept on hand by Agents, and all orders for Machines or Repairs will receive prompt attention.

For prices and terms to dealers, address,

AULTMAN, MILLER & CO.,

AKRON, OHIO.



BUCKEYE, OLD STYLE, WOOD FRAME, AS BUILT IN 1856.



OFFICE

AULTMAN, MILLER & CO.



WORKS

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