

"In the consideration of an award of a Sweepstakes Premium, the committee met with some difficulty in arriving at a conclusion. The points had under consideration necessarily were the same as had led to the results in the awards already made."

The Kirby was already declared by them to be the "Best Combined Reaper and Mower," and it was impossible to place any other Combined Machine above it as *better* than the BEST. The Kirby had already gained the First Prize Gold Medal, and the "Wood" was awarded \$25 as being the *second best*. Therefore, further down the page, what more reasonable than to find the awarding of the "sweepstakes" in these words:—

"A majority of the committee voted that the sweepstakes should be given to the Wood self-raking Reaper with its mowing attachment, it having stood *second and but little below* in Combined Machines."

The much-asked question "what does sweepstakes mean?" has thus been settled, as applied to Reaping and Mowing Machines in Minnesota.

THE KIRBY and THE BURDICK having already triumphantly carried off the Grand First Prize Gold Medals in the two classes of Reaping Machines, the Judges kept the record good by giving the "sweepstakes" premium to the "Wood," because it "stood second and but little below in Combined Machines."

This amount of attention has been given to the "Sweepstakes Premium" in order to explain its real meaning as evidently intended by the awards of the committees at these two great Minnesota State Trials; and when it is properly and generally understood, and when it is remembered that nothing can be made *Better* than that which is already decided BEST (simply by naming it "sweepstakes,") due allowance will be made, and no caution be needed by those who may read in the newspapers, or elsewhere, glaring display lines and special notices regarding "THE GRAND SWEEPSTAKES PRIZE."

Prize Medals



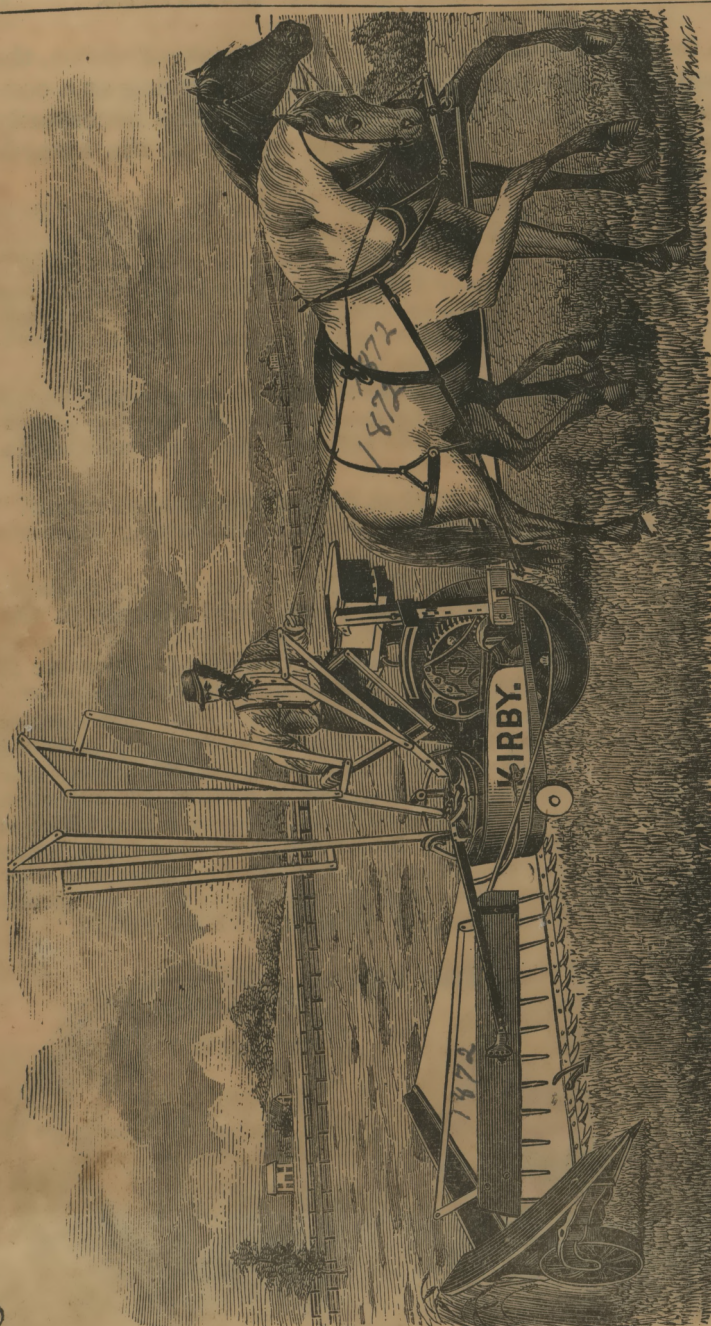
WON



AT THE

Rochester Trial.

THE KIRBY HARVESTING MACHINES.



Front View of the Kirby Combined Reaper and Mower as a Self-Raking Reaper.

For the Harvest of 1872 we have perfected a most valuable improvement—THE NEW LIFTER-LEVER—by which the machine can be **RAISED OR LOWERED IN REAPING** without stopping.

DO NOT FAIL TO EXAMINE IT.

“CONTROLLABILITY OF SELF-RAKES.”

THE QUESTION has been much debated, by farmers and manufacturers, as to what extent it is desirable that the motions of a Self-Rake should be **controllable**. Some claim that a “Continuous” Rake is the correct thing, because in delivering its bundle at regular intervals of, say 16 to 20 feet, under any and all conditions of the crop it requires no attention, and any one, however ignorant of the use of machinery, can run it. It is also claimed that such a rake can be made more simple, more strong, be more easily kept in repair, and that it is better to sometimes make a bundle too large, and at others too small, than to work one of the “Perfectly Controllable” Rakes that must, of necessity, have a number of cams, springs, and other complicated parts in order to allow any one of the arms to take off a bundle whenever desired.

Others claim that a Rake should be “Perfectly Controllable,” or so constructed that the driver may cause *any one* of the 4, 5 or 6 arms to remove a bundle, *at any time*, making them large or small as he chooses. The same class of men who favor this idea are those who, for a few years past, have been pleased with every new machine that has had numberless “traps” about it; a lever for this, a cam for that, a “rigging” of some kind for doing everything *un-necessary* to do in a Reaper. The purchasers soon finding they had no use for the “traps,” and that so many complicated and unnecessary “conveniences” were not as desirable as a simple and strong machine. The “perfectly controllable” rake is bought, tried and very soon is “set,” so as to make a bundle once in every revolution; the purchaser soon learning by actual use, that his constant attention is required in running his machine, avoiding obstructions, and watching his team, **without also sizing every bundle.**

Those who favor a “perfectly controllable” rake do not appear to have much confidence in its practicability, for it is notorious, that at every public Trial of Reapers where machines undergo a rigid and impartial test, the operator of a “perfectly controllable” rake will always “set” his rake to deliver a bundle regularly at every revolution, well knowing that if his machine was operated as made, the **work would not compare** with that of the Regular or “continuous” rake.

The Self-Rakes used on our Kirby Machines are free from the objections that apply to both the above classes. In having none of the complicated “traps” necessary for a “perfectly controllable” one, we avoid the other extreme of a “continuous” or “regular” rake. It is made with special regard to *strength and simplicity*, and if left without any attention, it will rake off a bundle once in every revolution, passing over 20 feet of ground, but when grain is uneven, having thin spots, and it is desirable to “double the bundle,” it is done by touching a lever; the rake then passes over the grain on the platform, and rakes off the *double bundle* at the next revolution. This is found very desirable in *turning corners*, doubling the bundle and carrying it past the corner out of the way of the team on the next round. Thus our rake runs itself, taking off bundles at uniform distances, or making them double when desired, having every advantage of simplicity and strength belonging to the “continuous” rake, with all the *necessary* controllability, and *without* the “traps” and complications of the “perfectly controllable” ones.

Read Pages 13 and 15.

A Perfect Self-Raker and a Perfect Mower.

The New Lifter is used both in Reaping and Mowing.



Kirby Combined Reaper and Mower--as a Mower--at Work.

All that is desired for a Perfect Combined Machine.

A REEL CAN BE USED IN MOWING WHENEVER DESIRED.

THE KIRBY COMBINED MACHINE.

*Self-Raker, Hand-Raker,
Mower with Reel and Mower without Reel,
ALL IN ONE MACHINE.*

EVERY good Farmer wants his work **WELL DONE**, at all times; and although it is much to ask, very many would require that a Reaper or Mower should do equally **perfect work** in wet or dry weather, in a gale as in a calm day, whether on rough, smooth, hard or soft ground, hillside or level, cutting high or low, and in all kinds and conditions of grain and grass.

Trusting you have already noticed page 11 on the "Controllability of Self-Rakes," we invite your attention to the Reel Beaters of the self-rake on our machines. You will see that they are constructed of such shape as to do equally **excellent reeling** in any kind or condition of grain, be it heavy or light, long or short, straight or crinkled, lodged or standing, and this, too, without requiring any change or adjustment, enabling the machine to pass from one condition of grain to another, and do good reeling in all, which **must be done** in order to do good raking. The bundles are left on the stubble in the **position most convenient for the binder**, with the butt perfectly square.

All our self-rakes are put together with one arm for a rake and three arms for beaters; though an **extra rake arm** and rake head are packed with each, to be used in place of the middle beater when grain is too heavy for bundles at the usual distance of 20 feet. **When two rakes are used**, a bundle is made going just one-half the distance. The lever for "controlling" the rake acts alike on each, when two are used, and a bundle may be raked off, at the will of the driver, at every ten feet, or be "carried" 20, 30, 40, or 50 feet.

By our **New Improved Lifter-Lever** (already mentioned) our Combined Machine can be instantly **raised or lowered in reaping** as well as in mowing, at the will of the driver.

It can be driven through any ordinary gate or bars easily, and on the road much more easily than a reaper with two driving wheels.

It can be worked on side hills as well as anywhere else.

The driver can at the same time watch his team and cutting apparatus without looking back, either in reaping or mowing, and cannot be thrown in front of the cutter bar. His seat is safe and easy, balancing the machine and taking all weight off the horses' necks.

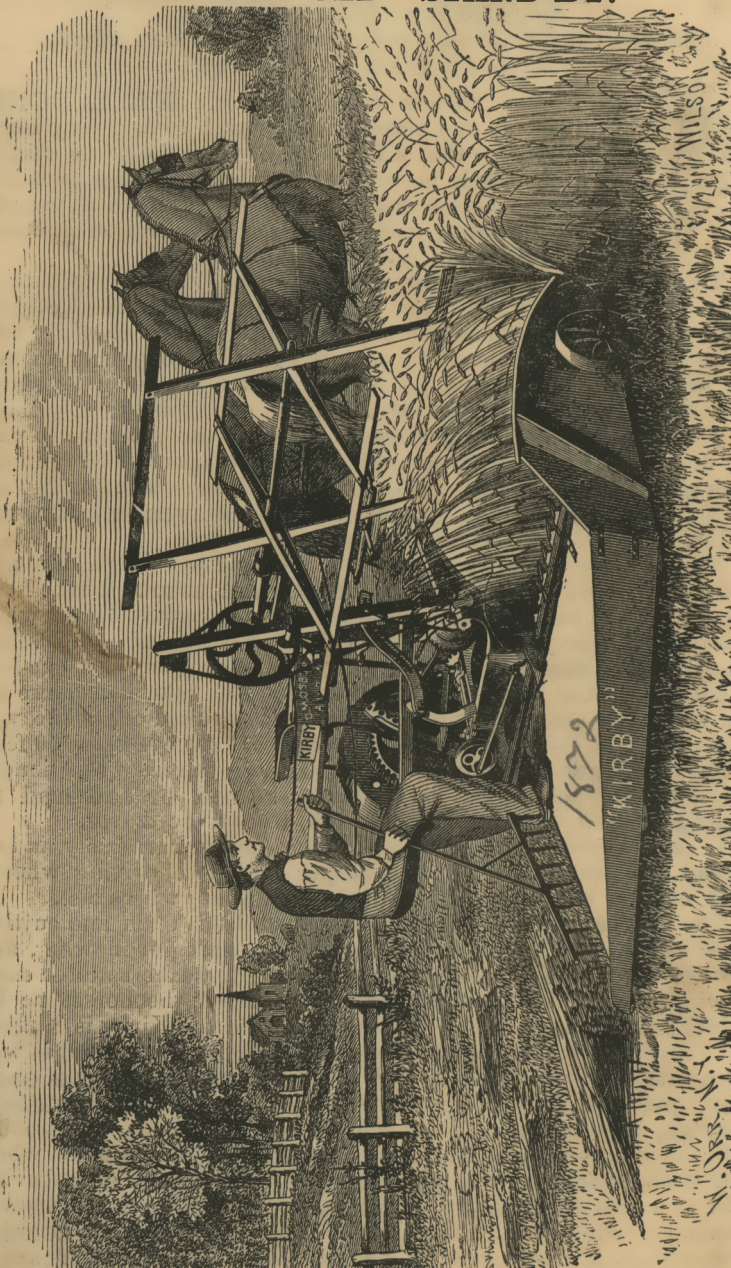
NOT "like a cart." We do not claim the Kirby is "like a cart," (except in having but two wheels on the ground,) for it is well known that the two wheels of a "cart," **directly opposite each other**, give the tongue an almost constant **swinging motion sideways**, a fault, which when found in a "cart reaper," is alike disastrous to horseflesh and to clean harvesting. The "grain" wheel in our Kirby machines stands far enough in the rear of the driving wheel to cause the **steady running** so noticeable, and so often commended, while for turning easily a good **clean square corner**, our Combined Machine with its **caster grain wheel** is unsurpassed.

Read Pages 11 and 15.

THE KIRBY HARVESTING MACHINES.

THE GOOD OLD "STAND-BY."

THE KIRBY HAS NO RIVAL FOR THIS KIND OF BUSINESS.



The KIRBY, as a HAND RAKER.—Easily Managed by one Man and 2 Horses.

Self-Rake will fit on all Kirby Hand-Rakers.

Perfect Reaper.

Perfect Mower.

} "THE KIRBY" {
 Perfect Self-Rake.
 Perfect Hand-Rake.

IN PAGES 11 and 13 we have spoken mainly of Self-Rakes, and it now remains to mention more particularly our Combined Kirby for Mowing, and as a Hand-Raker. In mowing, the driver uses the same seat as in reaping *with the self-rake*, it being **perfectly secure**, and from which he has the team under easy control, and the cutting apparatus forward, immediately under his eye. The frame and inner end of the finger bar are balanced and raised by the weight of the driver alone, a slight lifting by the right foot in the stirrup being all that is necessary to effect this. By a lever at the right hand, the outer end of the bar is easily raised.

The "independent action" [joint] which every mower must have to allow it to pass flexibly and easily over elevations and obstructions, is in the *frame* of the machine, or rather in connection *between* the frame and the drive-wheel, answering the intended purpose **far more effectually** and economically than a joint in the finger-bar of two-wheeled combined machines; for our knife and pitman **are always in the same line**, and not liable to the binding, wearing and breaking, incident to the "two-wheel jointed-bar" class of combined machines.

The Overhanging Adjustable Reel (see cut on page opposite) is a feature of the hand-raker, and is also intended to be **used in mowing** whenever the wind or condition of the grass make it desirable. It is firmly held in place by two bolts only, and is adjustable, high or low, forward or back, without changing the belt.

For the hand-rake we need scarcely say a word, as it has for years been conceded to be at the very "**head of its class**;" besides, not one farmer in twenty now buys a reaper, without it is a self-raker. We will say this, however, that our hand-rake attachment, including the Reel above mentioned, is furnished when a self-raker is sold, at an extra cost of but five dollars, which is a mere trifle compared with its value in case of accident to the self-rake, in harvest time, with hired hands to pay and no grain "down" to bind, as is often the case with machines that have no hand-rake attachments made for them.

In a thorough examination of any or **all our machines**, the following additional merits will be conceded:

Great strength, and as durable as iron and steel can make them.

Perfectly simple, and do not resemble an eight day alarm clock.

Iron main frames and babbitted boxes with shafts always in line, and running true.

No long timbers and no mortises or tenons to rot, warp, shrink or swell.

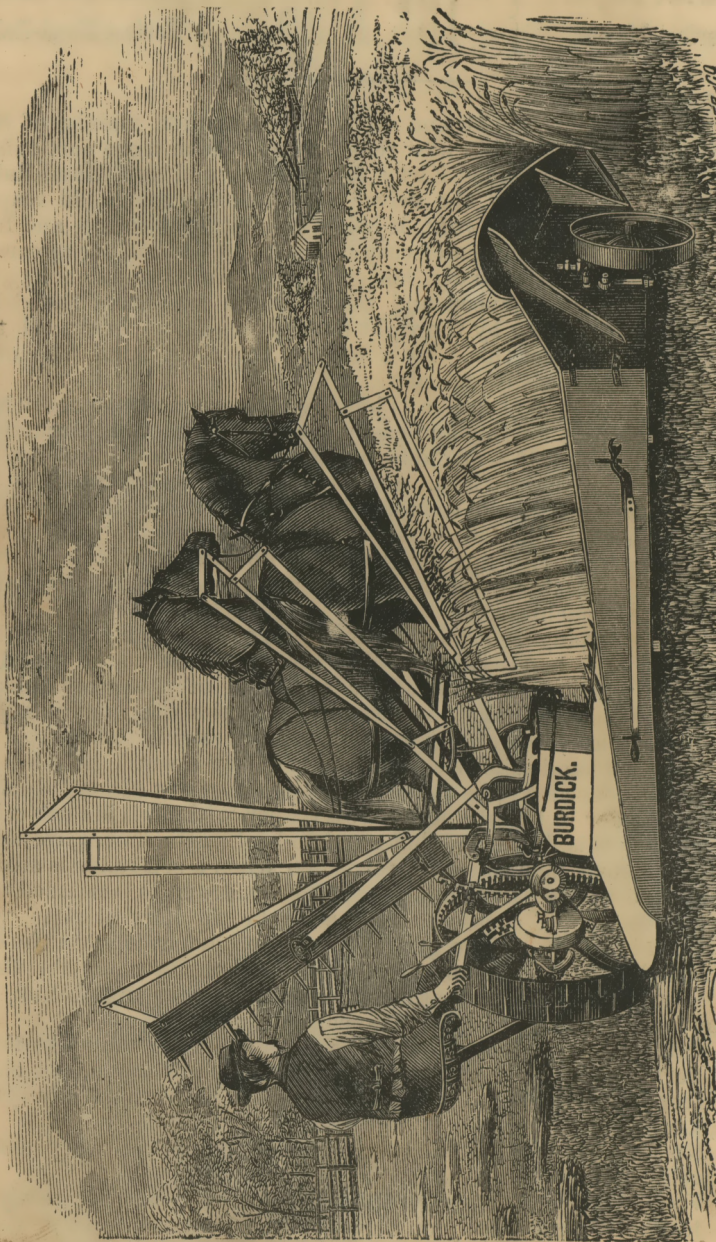
Very light, with **remarkably light draft**, and absolutely no side-draft. Weight wholly on drive-wheel, giving immense power.

Duplicate parts always fit, and prices of extras all very low.

Read Pages 11 and 13.

A PERFECT MACHINE.

VICTORIOUS WHEREVER TESTED!



OUR INDEPENDENT REAPER—"THE BURDICK."—Cuts 5 1-2 feet.

FOR REAPING ONLY.

Our Independent Self-Raking "BURDICK REAPER."

WE COMMENCED the manufacture of this machine a few years since, animated by a desire to fully and satisfactorily meet the requirements of our farming friends who are exclusively engaged in the raising of grain, or whose crops of grain and grass are so large as to warrant them in buying separate machines. To the latter class we would say that they will find the **Burdick Self-Raking Reaper** a worthy companion for the **Kirby Single Mower**. After thorough tests during the harvests of 1869, 1870 and 1871, we can warrant it with entire confidence, as being the most easily managed, the **lightest running** and **most effective** independent Self-Raking Reaper in use.

The **Self-Rake** is the same in principle as the one used on the Kirby Combined Machine, being **controllable** to the same extent. It has no Springs, Switches, Chains, or Gates to break, wear or get out of order. As in the Combined Machine, the Rake is sustained upon the **frame** of the Machine, and **not upon the finger-bar**, so that the cutting apparatus is always in the right line, and the gearing for driving the Rake always works smoothly.

The **Driver's Seat** is located outside of the main wheel, entirely out of the way of the gearing, with the levers for controlling the action of the Rake and throwing the Machine out of gear, within easy reach.

The **Tilting Lever** is so connected with the frame and hinged tongue, that the machine can be easily and instantly tilted up or down by the driver **while it is in motion**, to pick up lodged grain or to pass an obstruction. By means of a detached lever applied to the axle-plate and grain-wheel, the frame, cutting apparatus, and platform can easily be **raised or lowered perpendicularly**, and fastened at any desired height, from 2 to 18 inches, still allowing the **Tilting Motion**.

It will work on side hills as well as the Combined Machine, and can not be tipped over.

The strongest argument used in **favor** of two driving wheels for a **Mowing Machine** is also the most powerful argument **against** two driving wheels in **Reaping**. The flexibility of the bar that is desirable in mowing is of very great disadvantage in reaping. The Burdick, like the Kirby Combined Machine, has but one driving wheel, broad faced and high, between which and the grain wheel, the frame and cutting apparatus are firmly suspended.

The Guards are made of the best Malleable Iron and faced with cast steel thoroughly tempered; the same as in the Single Mower and the Combined Machine.

The **Foundation** or principal parts are good for a lifetime.

The **Gearing** is protected from dirt, and is so constructed that the machine is almost noiseless in its operation.

There is positively **no side draft**, and the machine is so perfectly balanced that there is **no pressure on the horses' necks**.

It is made almost wholly of iron and steel, so arranged as to render the machine **very strong**, while the simplicity and construction of its gearing avoids unnecessary friction, rendering it of **very light draft**, and **extremely durable**.

THE KIRBY Two-Wheel Mower.

1872

A TRIUMPHANT SUCCESS.

THE COMPLETE SUCCESS of the Kirby Two-Wheel Mower has never been equalled in the history of mowing and reaping machines. From every part of the country there comes united testimony in regard to its perfectly satisfactory performance in every possible kind of work.

Its extensive use for the past few seasons has more fully than ever before demonstrated the **perfection of principle**, upon which, not only it, but all of our machines are built. It has the flexibility and independent motion of frame and finger-bar peculiar to all Kirby machines, cutting close and clean over all variations of ground.

JOINTED CONNECTING ROD.

With the utmost **simplicity and strength**, there are combined in the Kirby Two-Wheel Mower **many excellencies** not found in any other machine; and chief among them will be noticed the **Jointed Connecting Rod**, (or pitman) an invention of Mr. Kirby's, and a feature belonging **exclusively to this mower**. The joint in the Connecting Rod (or pitman) works simultaneously with the joint in the finger-bar, keeping the Connecting Rod

ALWAYS IN PERFECT LINE

with the cutting apparatus, allowing the knife to run **perfectly free, without binding**, at whatever angle the bar may be raised or folded; thus **decreasing the friction**, and consequently adding to the already **powerful cutting capacity** decreasing the already **very light draft**, and adding largely to the durability, by relieving the connecting rod and knife-head from liability to breakage, consequent upon the binding and friction of these parts, incident to all other two-wheel machines.

By a convenient lever, the bar is raised to pass an obstruction, or even a tree, or folded completely across the machine in front for transportation, **without throwing out of gear, stopping the team, or the driver leaving his seat**.

Instantly thrown out or into gear, without stopping, when desired, by either foot or hand.

No stopping to fasten finger-bar in position when folded.

A loose or rigid tongue, as desired, without stopping.

To show absolutely **no side draft or weight on horses' necks**, leave neck yoke entirely off and put machine to work with stiff tongue.

The **points of the guards** can be raised or lowered without stopping. They are especially shaped to prevent clogging; they have steel plates, easily replaced when worn out; and are *not riveted*, but **bolted to the bar**.

The line of **draft is direct** on cutting apparatus where it ought to be; and there is **no strain of machine** by draft through axle, frame and braces.

Driver's seat is behind, completely out of danger, but in full view of cutting apparatus.

An adjustable spring runner under both shoes.

The leader-wheel is a caster-wheel and turns **perfect square corners**, even on soft ground, without raising and lowering the bar.

Machine **always on its wheels** and never tips up.

The excellencies of the Kirby Combined Machine all "boiled down" and added to.

Cuts $4\frac{1}{2}$ feet wide, follows rough as well as smooth ground, and is the **lightest running and most perfect working** two-wheel mower ever made.

SEE THE LIST OF 1871 VICTORIES.

GREATLY IMPROVED SINCE LAST SEASON. 1872



KIRBY'S NEW TWO-WHEEL MOWER.—"At Work."

See also Illustration on back of cover, and description on pages 18 and 19.

FOR MOWING ONLY.