

Farmers Read !

1866.

"THE KIRBY,"

MANUFACTURED BY

D. M. OSBORNE & CO., AUBURN, N. Y.

It Mows. | It Reaps. | It Rakes.

**A PERFECT MOWER—A PERFECT REAPER—A PERFECT HAND
RAKER—AND A PERFECT SELF RAKER—ALL COM-
BINED IN THE SAME MACHINE.**

The "Clipper Mower" is the Best and Cheapest Single Mower in the World.

	PRICES.
KIRBY'S "CLIPPER" MOWER, cuts 4 ft. 2 in. - }	100
KIRBY'S COMBINED, cuts in mowing 4 ft. 8 in. ; in reaping 5 ft. ; as a hand raker, }	150
KIRBY'S COMBINED, cutting as above, both as a hand and automatic raker, }	185

 **CASH—***Delivered on the Cars at Auburn.*

WARRANTY.

That they are well built, of good material, and capable of cutting, with one span of horses, an acre of grass or grain per hour. The purchaser to have the privilege of cutting two acres of grass or grain as a trial of the machine. If it should not work well, he shall give notice to the agent, and allow him time to send a person to put it in order. If it cannot then be made to work satisfactorily, it will be taken back and considered no sale.

J. Y. HOAGLAND,

GENERAL AGENT.

For Sale by **H. C. SANDERS,**

ST. JOHNSVILLE, N. Y.

It Beats Them All!

Call on the Agent and examine the "Kirby" thoroughly!

Read this through and you will get some new ideas about Machines!

"INDEPENDENT ACTION," yet two wheels not needed.

THE KIRBY.

IT MOWS. IT REAPS. IT RAKES.

TAKE NOTICE!

That it is the lightest and strongest Machine built.

That it is the lightest draft Machine built.

That it is the only Machine built that is as good a mower as any built expressly for mowing.

That it is the only Machine built that is as good a reaper as any that is built expressly for reaping.

That it is the only Machine built that is a perfect Hand-Raker and a perfect Self-Raker combined, and so that it can be used either way as desired.

That it is changed from a Mower to a Reaper very quickly, and from a Hand Raker to a Self-Raker by three bolts.

That in mowing it has an independent action between the Finger-Bar and Frame, which allows it to conform to the inequalities of the ground.

That *the joint is in the Frame*, and the cutting apparatus and connecting rod is always in line; when the joint is in the Finger Bar those parts are never in line, there is great danger of breaking the cutter-bar and the Machine works hard.

That it is exceedingly simple in construction—easily adjusted to cut high or low—will reap from two to nineteen inches high—that it is made mostly of iron and steel, therefore will not shrink, swell, warp and twist by exposure to the weather.

That it has no side draft, and a pair of the lightest horses will handle it any where—and that

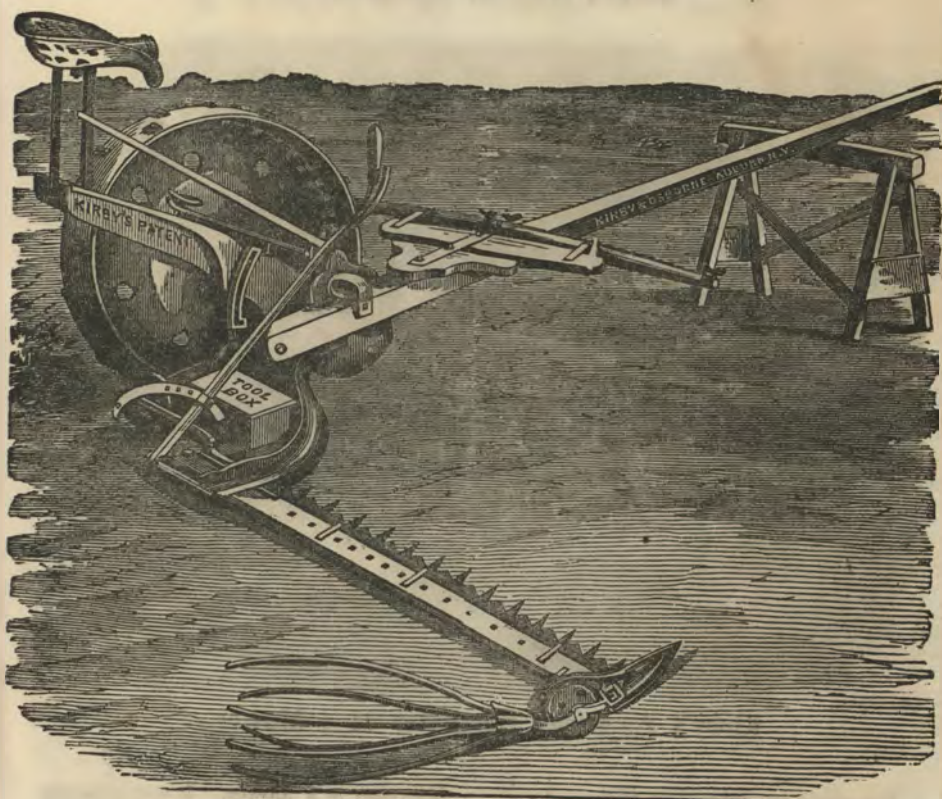
IT MOWS. IT REAPS. IT RAKES.

Examine the KIRBY and give it a fair trial before you buy any other Machine.

TESTIMONIALS.

We have in years past followed the custom of publishing a few of the abundant testimonials we have received, but the practice has become so much abused and the Kirby is so well known, we now deem them superfluous.

KIRBY'S AMERICAN HARVESTER.



KIRBY'S CLIPPER.

In exclusively grazing regions, where only a Mower is required, there is a growing demand for a light, cheap machine, that will do the mowing of an ordinary farm with but little expenditure of power and money. To meet this demand we have perfected the Kirby Clipper illustrated above. This machine has all the distinctive principles and advantages of the American Harvester, and the description of that machine on a former page will in a large measure apply to the Clipper. The Clipper has the same Independent Action of the finger bar, the same levers for raising the bar and throwing out of gear, and in fact all its features show it to be of the same renowned stock. It cuts a swath four feet two inches wide, and will mow from ten to twelve acres per day.

It is very light, weighing only some four hundred pounds, and the draft is very easy. It is simple, easily handled, and does its work beautifully. Several thousand of these machines have been manufactured and sold during the past 3 years, and have given great satisfaction; and the farmer who desires a light, cheap mower, should by all means try the Clipper before venturing to purchase any other machine.

Very Light Draft for Two Horses. "Mows as Clean as a Razor."

KIRBY'S AMERICAN HARVESTER.



Kirby's American Harvester as a Mower.

The above cut represents Kirby's American Harvester as a Mower. It cuts a swath 4 feet 10 inches wide, and will cut from 10 to 15 acres per day. The driver's seat is remarkably safe, convenient and easy, he sitting astride with his feet in stirrups, in such a position that it is impossible for him to be thrown, and being back of the cutters where he can keep the working of the machine under his eye, and control its action by means of the levers within his reach, while the gentle undulatory motion of the seat relieves him of the weariness of constantly sitting in one position. The seat also acts as a lever, whereby the weight of the driver balances the weight of the frame and throws the whole upon the driving wheel, adding to the power of the wheel, taking all pressure from the horses' necks, and lessening the draft of the machine. By means of the lever in front of the driver, he can throw the machine out and in gear at will. With the lever at his side he can raise either end, or both ends of the finger-bar to pass over obstructions, carry his swath, or move from field to field. When the machine is working, the Independent Action of the finger bar enables it to play freely up and down and follow the inequalities of the ground, thus permitting it to do good work on very rough ground, and through dead furrows and ditches, and allowing the cutters to be set any desired height both in mowing and reaping. Whatever may be the position of the cutters, the connecting rod is always in line, and never binds the cutters as with the jointed-bar machines. The Revolving Tracker clears the track for the wheel on the next round. The Overhanging Adjustable Reel can be used in mowing whenever desired.

A WORD OF ADVICE TO FARMERS.

Weight wholly on Drive Wheel. Reel easily affixed for Mowing.

Every farmer who is about to purchase a machine desires to secure the *best* the market affords. But among the multiplicity of machines offered it is often very difficult for him to satisfy himself which is best, especially if he is beset by a swarm of agents, each praising his own and running down all other machines. We propose herein to point out some common sense principles, which will aid any intelligent man in making the selection.

1. Avoid all newly invented or newly introduced machines. Why? Because you want a *perfect* machine, and do not want to test, perfect and introduce a machine at your own expense. Men are apt to think the latest invention must necessarily be the best; and when a new machine is brought out, they suppose that of course it must be an improvement upon all others. A little thought would convince them of their error. An invention is not always an *improvement*. All the primary features of all Harvesters are old, and the new inventions are upon some minor parts of the machine, and a majority of them are worthless. All successful machines are the combinations of the inventions of many men. The valuable and important patents on Harvesters are owned by men who have been some years in the business, and no new machine can be made to work successfully without using parts that infringe many of these patents; and the farmer who buys a newly introduced machine, either buys a machine with many of these necessary parts omitted, or runs the risk of numerous patent suits. Again, the best machines cannot be perfected in one, two or three years. It requires several years of experiment, observation and use, the study, experience and invention of many men, and the expenditure of many thousands of dollars, to detect all the faults of the best machines and apply the safe and proper remedies. There are hundreds of difficulties to be overcome in the successful manufacture and working of the best machines, of which one inexperienced in the business has no idea. Again but few of the Harvesters invented and started ever prove successful. At least nine out of every ten have been abandoned as worthless by the inventor and manufacturer after one, two or three years struggle; and the farmer who buys such a machine must buy another machine the next year, as thousands who have been thus duped can testify.

It will follow from the above observations, that one of the strongest arguments in favor of any machine is the fact that there are *thousands in successful operation*, coupled with the additional fact that wherever it is known and used the *demand is constantly increasing*. The farmer who buys such a machine is very sure not to be badly cheated. But among the machines that do good work and have been in successful use long enough to be thoroughly tested and improved there is some choice, and among the leading points to consider in making choice are,

2. The materials of which the machine is made. Upon these depend in a great measure its strength and durability. Many machines are made mostly of wood, and are liable to warp, shrink and check by exposure to sun and rain, and defects in wood are easily hidden by paint. *Iron and Steel* are the strongest and most durable materials of which any machines can ever be made, and the machine that is composed mostly of these must be preferred to one made largely of wood.

3. *Simplicity* is another element of strength and durability, and is essential to the easy management and working of a machine. A complicated machine needs a machine shop to keep it in repair, and an engineer to run it. Therefore the machine that gets the requisite motions with the least amount of gearing and "traps" is to be preferred.

4. *Convenience* is another requisite for a good machine. There should be levers for throwing out and in gear, and raising and lowering either end or both ends of the finger bar, and all within easy reach of the driver and easily handled. The driver's seat should be easy and above all *safe*. The raker's position should be the best possible for raking off with ease and efficiency. There are many times when a reel for mowing is almost indispensable, therefore the reel should be adapted to both mowing and reaping, and should be easily adjusted in every direction to suit it to the different conditions of grass and grain. The change from Mower to Reaper should be easily made. The finger bar should be capable of being set at any desired height, both in mowing and reaping. The guards and sections should be capable of being easily removed and replaced in case of breakage in the field. The parts to be oiled should be few and of convenient access. The machine that combines all these things in the simplest and most perfect manner is entitled to the preference.

5. Every good machine now has what is called an *independent action* of the finger bar, which enables it to follow the inequalities of the ground and be raised and lowered by the driver at will. The old stiff bar machines that can do good work only on perfectly smooth ground have pretty much gone out of use, and no farmer buying a new machine wants one of them. There are several modes of attaining this independent action, and the machine that attains it in the simplest, most durable and efficient manner should be preferred.

6. It should be a thoroughly good *combined machine*, and easily converted from a Mower to a Reaper. But few farmers can afford to own two machines, one for mowing and one for reaping, and no one desires to if he can get a single machine that will do both well. Even in grazing regions where but little grain is raised, a combined machine is preferable, for if a farmer raises but ten acres of grain, the reaping attachment, in profit and convenience, will pay him as good interest on its cost as any implement into which he could have put the money. Therefore if he can get a machine that will do both his mowing and his reaping at but little expense over what a single mower would cost, such a machine is decidedly preferable; and he has in that case not only a combined machine, but he has a more durable and efficient Mower than any of the light single Mowers can possibly be, and one that will out-last two or three of them. But really good combined machines are rare. There are probably a dozen Mowers that are good Mowers—there are half a dozen Reapers that are good Reapers, but the machines that are at the same time first class Mowers and first class Reapers are scarce, and when such a machine is found that is to be preferred above all others.

7. We believe that all these qualities cannot be attained in the highest degree in any two wheeled machine, for reasons set forth on another page of this pamphlet, (to which we call your particular attention,) and therefore we believe that a *one wheeled machine* that combines all these requisites is greatly to be preferred.

Probably every candid and intelligent man will assent to the above considerations, as those by which he should be governed in the choice of a machine, and if he selects a machine that combines all the above qualities in the highest degree, he is sure to have a good machine, whatever agents and interested parties may say to the contrary.

KIRBY'S AMERICAN HARVESTER.

Revolving Track Clearer. Adjustable Reel.

Nine years ago Kirby's American Harvesters were unknown. They were first offered to the public in 1857, some 200 of them having been manufactured and sold during that year; and although crude and imperfect, as all inventions are in their early stages, they gave good satisfaction and exhibited qualities that at once placed them in the foremost rank. Many of those first machines are working still satisfactorily and with little or no expense for repairs, and give promise of many more years of usefulness. During that season also, the Kirby, crude, untried and unknown as it was, bore off the silver medal as a combined machine at the great Syracuse trial—the most thorough field trial that has ever occurred in this country. From that day to this the fame of the Kirby has been ever increasing, and it is now known and renowned throughout this country and in Europe. There are now **30,000** of these machines in use, beneficently aiding 30,000 farmers to secure their crops, by doing the work of an army of 150,000 men; and a simple list of the premiums that have been awarded to them at United States, State and county trials and fairs, would more than fill the pages of this pamphlet. Many other machines have arisen, had their brief day, and disappeared, while the Kirby has kept steadily growing in popular favor as it has become more widely known, until three large manufacturing are kept at work to supply the ever increasing demand, and their yearly sales are counted by thousands.

But the Kirby of past years bears no comparison with the Kirby of to-day. This ever increasing popularity of the machine is due in a large measure to the untiring efforts of the inventor and the manufacturers in improving the machine and keeping it up to the progress of the age. The inventor makes it his sole business to study and experiment for its improvement, while the manufacturers are constantly on the alert, experimenting, seeking suggestions from their agents and the thousands of farmers who are using the machines, watching all new inventions and patents, and securing every improvement that can make the Kirby a better machine and keep it at the head of the list. In this way years of time have been consumed, and many thousands of dollars have been expended, in experimenting and purchasing patents, for the purpose of adding to the machine every useful and desirable improvement that the inventive genius of the age has brought forth, until there are now some **THIRTY DIFFERENT PATENTS** combined in this one machine, and many suggestions from Agents and farmers that are not patented have been embodied in the machine, so that it can be truly said to be the combined product of the inventive genius of many minds. Every year has added some desirable improvement, and we expect that by the same watchful energy the Kirby will for many years be kept in its place at the head of the Harvesters of the country, and be long known as the **BEST COMBINED MACHINE IN THE WORLD.**

Space will not permit an extended description of the machine, but we will briefly state some of its leading characteristics. It is made chiefly of **IRON AND STEEL**, and is by all odds the strongest and most durable machine in market. Many of them have run for years without a single dollar's worth of repairs. We once had occasion to compute the repairs used during one year in a single State where there are a large number of Kirbys in use, and found the average to be less than 18 cents per machine. Nothing possibly could prove more conclusively the wonderful durability of the Kirby.

It is the most **SIMPLE** machine in use, and this is one cause of its great durability. No machine can attain the requisite motions with less gearing and "traps." In fact its simplicity is an argument used against it by the agents of other machines, who say, "there is nothing of it," and point to the numerous wheels, cogs and traps of their machines to show their superiority, and also to show why their machines should be sold at a higher price than the Kirby.

* It has an **INDEPENDENT ACTION**, which enables the finger-bar to follow the inequalities of the ground, and be raised and lowered, at either end or both ends, by the driver, and no machine has ever attained the independent action in so simple, durable and efficient a manner as the Kirby.

It is a **CONVENIENT MACHINE** to work. The levers for throwing out and in gear, and to raise and lower the finger-bar are within easy reach of the driver, and are easily handled. The reel is easily adjusted in any direction, and can be used both in mowing and reaping. The raker's position is the best and most convenient possible. And in all its minor parts it is a marvel of convenience.

It is a **SAFE MACHINE**. It never tips over, and a man cannot be thrown from his seat; while we yearly hear of men who have been mangled or killed by being thrown from the two wheeled machines.

It is a **LIGHT DRAFT MACHINE**, has **NO SIDE-DRAFT**, NEVER CLOGS, CUTS CLOSE, and will do good work where any machine can work.

As a **COMBINED MACHINE** it is universally conceded to be far ahead of any machine yet invented. While of other machines, some are good mowers and poor reapers, and others are good reapers and poor mowers, the Kirby is perfectly adapted to each kind of work.

And many of its points of superiority over all other machines are attributable to the fact that it is a **ONE WHEELER MACHINE.**

† We have materially improved the machine for the coming season, and we feel that we can confidently say that the farmer who purchases a Kirby machine for 1866 will have a *better machine than was ever before produced.*

Average repairs per year less than One Dollar per Machine.



The Kirby Harvester as a Hand-Raker at Work.

THE KIRBY SELF-RAKER

Lightest! Cheapest! Strongest! Most Durable!

The high price of labor during the past four years has rendered important every device for saving labor and aiding the farmer in making and securing his crops. Especially has the attention of farmers and manufacturers been turned towards securing a simple and efficient Self-Raking Attachment for Harvesters. Some hundreds of Self-Rakers have been patented, but most of them have proved entirely worthless, and none of them have been wholly successful. The causes of these failures are various. One cause has been the fact that most of the Rakers invented have been cumbrous and complicated, and required a skilled mechanic to set them up, run them, and keep them in repair. Another cause has been the intrinsic difficulty of the operation, owing to the different conditions and positions in which grain is found, rendering it an exceedingly difficult thing to devise any single machine that is adapted to all these various conditions. Raking off by machinery would seem to be an easier and simpler thing to accomplish than cutting grain by machinery, yet experience has proved it to be one of the most difficult. Many inventors have been studying upon it for years, and many thousands of dollars have been expended by inventors and manufacturers in experimenting to produce a good Self-Raker, with but comparatively small results; for among all the Rakers that have been produced, there are but two or three that have been reasonably successful.

Another cause of failure is the fact that farmers have expected too much of a Self-Raker—expecting it to do good work in all conditions of grain and under all circumstances, forgetting that a machine must go through the same motions always, and has no discretionary power to vary the motions according to circumstances as a man can. Now since a machine must always go through a certain fixed motion, or combination of motions, it is evident that unless some certain fixed motion or combination of motions can be devised, which always being the same, will yet be adapted to every possible condition and situation of grain, no Rake can ever be invented which will do good work under all possible circumstances; and the man who expects such a Rake will inevitably be disappointed, for he is looking for an impossibility. As well might he expect a mowing machine to do good work in every place where it is possible for a man to use a scythe; yet mowing machines, although they cannot do everything that can be done with a scythe, can do most of the mowing on the farm, and are a great labor-saver and blessing, and no farmer can afford to do without them. So a Self-Raker can be made to do most of the raking off on a farm, and is therefore desirable. In many places a good Self-Raker will do better work than can be done with the hand-rake, and in most places it will do as well. Yet there are certain conditions of grain possible in which no Self-Rake can ever be made to do good work, and in such conditions the hand-rake must be used. Therefore it is indispensable that every Self-Raker should be so attached to the machine that it can be easily and quickly removed, and the hand-rake substituted. Another great advantage in having the Self-Rake removable is, that in case of accident to it the work in the field suffers no delay, but can go right on with the hand-rake.

From these considerations it will appear, 1st. That you must not expect impossibilities from any Self-Rake. 2d. That your Self-Rake should be so attached to your machine that it can be easily removed, and the hand-rake substituted in case of necessity—either from the condition of the grain or accident to the Rake. Thus equipped you will be ready “for any emergency.”

In common with other manufacturers we have been for years experimenting and examining and testing Rakes, and have expended thousands of dollars in endeavoring to procure a Rake for the Kirby which we could recommend to our customers. At last we feel that our labors are crowned with success, and that we can offer a Rake which will answer our own expectations, and meet the wants of our customers. We believe it to be the simplest Rake yet devised, and we think it will accomplish all that it is possible for any Self-Rake to accomplish. It delivers the gavels at the side of the machine out of its way on the next round, and the size of the gavels is controlled by the driver without any alteration of the machinery for light or heavy grain. The machine is not injured or altered as a Hand-raker, so that in case of any accident to the Rake, or in places where a Self-Rake cannot be worked, it is easily removed from the machine and the work can go on with the hand-rake without delay. While we have no desire to urge our self-raking attachment on any purchaser of the Kirby, we feel that we can recommend it as the best one that has yet been devised, and we are willing to allow every purchaser a fair trial of the Rake before he decides to keep it.

We acknowledge No Equal in the World!



The Kirby Harvester as a Self-Raker.

ONE WHEEL BETTER THAN TWO.

For several years past it has been a debated question among manufacturers and farmers, whether a Harvester was better with one wheel or two. All the older machines—as the Hussey, McCormick, Manny, and the Ketchum,—were one wheel machines. Like all inventions in their earlier stages, they were crude, imperfect, unwieldy, heavy draft, stiff-bar machines, and have been mostly replaced by later and more perfect machines. But the prejudices which were generated by these machines, have in a measure passed over to the later perfected one wheel machines—because a machine has one wheel, an unreasoning man, who knows the defects of the old one wheel machines, is very apt to attach all the faults of the old machine to the new one. When the two wheel machines came up they entered the field free from all these prejudices,—in fact the prejudice was in their favor, because it was contended that by their two wheels they had overcome all the defects of these old one wheel machines. The farmer of course did not know that they were *driven* to the use of two wheels because it was the only way they could get the Independent Action without infringing the Kirby principle. The only way they could get an Independent Action without using the Kirby principle, was to put a joint in the finger-bar; but the moment they did that their machine tipped over and they were obliged to stick in another wheel to hold the machine up. Seeing there was no help for them, they made a virtue of necessity, and began to cry up the blessings of two wheels—"it made a buggy of the machine"—"you could ride to church in it," &c., &c.,—and many machines were sold simply because it was a new and pretty notion to fold up the finger bar and ride about on two wheels; the purchaser forgetting that the sole end of a Harvester is to *mow and reap*, and that a common sulky is a much better two wheel conveyance than any Harvester can be.

Now we have always contended that for all practical purposes of mowing and reaping two wheels were decidedly objectionable, and that a two wheeled Harvester was as much of an anomaly as a two wheeled wheel-barrow. We have contended that in mowing no two wheeled machine can work on as rough ground as the Kirby with its one wheel. For instance, the Kirby can run in a ditch while the bar runs on the bank and cuts; no two wheel machine can do this, nor can it run in dead furrows or water furrows, *nor wherever the form of the land has a tendency to bring the machine into a similar position.* Again, the joint in the bar of a two wheel machine comes at or near the point of connection between the connecting rod and cutters, and whenever the finger bar is out of level the connecting rod works at an angle and binds, and wears and stops. In the Kirby whatever the angle of the finger bar, the connecting rod is always in the same line, and free to play. The joint of the two wheel machines comes in the weakest part of the bar, where there is the most strain, and must necessarily often get out of order. The joint also allows the bar to "bob up" and haggle the grass and slide over it; and if the finger bar comes suddenly against an obstruction, the joint doubles up and shoots the driver from his seat with more speed than safety, and every year some lives are sacrificed to the jack-knife propensities of these joints. Again, a reel cannot be used in mowing with a jointed bar machine. We have contended that a *really good* Reaper with two wheels and a jointed bar was an impossibility, because the two wheels track so wide that it is very difficult, if not impossible for the raker to deliver the grain out of the way of the machine on the next round, and because a joint in the bar requires extra and cumbrous and complicated fixings to make it stiff and substantial enough to hold the weight of the platform and its load of grain, and when it is made stiff enough there are *three* wheels on the ground, and something must break as soon as it is put on rough ground. Time and experience are proving the truth of our arguments on the two wheel question. In regions where the two wheel machines are well known, their sales are rapidly decreasing, while they find their best sales in new territory where their faults are not known. It has been our frequent experience in introducing the Kirby into new territory at the same time with the two wheel machines, that the first year they would out-sell us two to one, and the second year we would out-sell them two to one, and our largest sales are in territory where the two wheel machines are best known. No really successful two wheeled *combined* machine has yet been produced. Some of the heaviest manufacturers of two wheeled machines are going back to one wheel, and in a few years two wheeled Harvesters will be among the things that were.

ENTERTAIN MAGAZINE

PECULIARITIES OF CONSTRUCTION OF KIRBY'S AMERICAN HARVESTER.

IT IS AN IRON MACHINE.

The castings are made of Salisbury Iron—the strongest and most expensive iron in the market; the finger bar is made of wrought iron, with a flange on the front edge, thus giving great strength for a small weight of iron, and forming the most convenient possible place for bolting on the fingers. The bolts are made of the best Norway Iron, with forged nuts. We spare no pains nor expense in selecting the best materials that can be procured for the machine, and in workmanship and finish our aim is to excel every manufactory in the country.

IT IS AN INDEPENDENT ACTION MACHINE.

The Finger Bar and Driving Wheel act independently, each following its own ground, so that the Driving Wheel can run into a hollow and the Finger Bar over a knoll at the same time; or the wheel can run in a ditch and the bar on a bank and cut. The bar can play up and down independently of the wheel from 2 to 18 inches, thus enabling it to work well on *very rough ground, lessening the liability of breakage*, and permitting the cutters to be set at *any desired height*, both in mowing and reaping.

IT IS A PORTABLE MACHINE.

By means of a lever at the side of the driver, he can at pleasure, and while the machine is in full motion, raise either end or both ends of the Finger Bar to pass over obstructions, carry his swath, or move from field to field, or ride about town for pleasure.

THE DRIVER'S SEAT IS A LEVER.

The Driver's Seat is so pivoted over the Driving Wheel that the weight of the driver counterbalances the weight of the frame and the downward pressure upon the horses' necks, and throws the whole upon the Driving Wheel, thus adding to the power of the wheel, materially lightening the draft of the Machine, obviating the side draft, and permitting the cutters to lift more easily over stones and obstructions, and thus rendering them less liable to injury. The Machine runs lighter and better every way with the driver's weight added than without it.

The Driver's Seat is also a very safe, convenient and easy one, he being back of the Finger Bar, so that he can keep the working of the Machine constantly under his eye, and control its action by means of the levers within his reach, while the gentle undulatory motion of the seat relieves him of the weariness of constantly sitting in one position. There is no Machine in the country that has so *safe* a seat. The Driver sits straddle of his seat, with his feet braced in stirrups, and it is impossible to throw him, whereas, in most of the Machines in the market the driver can be easily thrown from his seat.

Unsurpassed on Rough or Smooth Ground!

"LIKE A CART" only Two Wheels on the Ground!

ADJUSTABLE OVERHANGING REEL.

One of our recent improvements is an Adjustable Overhanging Reel, which does away with the Reel arm heretofore used at the outer end of the Reel. This Reel is easily adjustable to any desired position, either up or down, or backwards or forwards, without any change of belt and can be used either in mowing or reaping. This is the only really adjustable reel in use, and has proved to be a great improvement over the old devices.

REVOLVING TRACK CLEARER.

Another of our recent improvements is a Patent Revolving Track Clearer, which rolls the grass over and spreads it evenly, instead of scraping over the ground and leaving it in bunches that require to be spread by hand.

CONNECTING ROD ALWAYS IN LINE.

Whatever the position of the Finger Bar, the Connecting Rod is always in the same line, and never binds the cutters, as with the jointed bar Machines. The Driving Head contains four boxes, thus doing away with the continual expense of renewing boxes, as with other Machines. The coxes are also set at different distances from the centre, to give longer or shorter stroke, according to the work to be done, and the Driving Head acts as a Balance Wheel to equalize the motion.

"Clogging" Prevented.

The sections are fastened to the cutter bar back with *Patent Projecting Rivet Heads*, which play through slots in the guards, *effectually clearing the Machine at every stroke*, so that it cannot be clogged in any kind of grass, be the same wet or dry. The guards are open on top, also preventing clogging; and a steel plate is inserted in each, for the cutting surface.

SHIPPING LEVER.

A Lever is attached in a convenient position for the driver to throw the cutters out of a d in to gear at pleasure, while the Machine is in motion.

SIMPLE GEARING.

The Gearing is *very simple*, and the speed so regulated that it does not require a fast walking team to operate the Machine. Oxen are frequently used to good advantage. All the Gear Wheels are guarded, so that grass and dirt cannot get in to clog them.

THE RAKER'S SEAT.

The Raker's seat is very easy, and his position the most convenient possible for raking off the grain. By a natural and easy quarter turn sweep of the arms, he delivers the grain at the side, out of the way of the Machine on its next round. This position is secured by patent.

Simplicity of Construction, Strength, and Durability,

Are attained in the highest degree by the ingenious and simple combination of all parts of the Machine.

Ability to Work on Rough Ground.

In this respect it is entirely unequalled by any Machine yet produced. Its on wheel, combined with the Independent action of the finger bar, enables it to go through dead furrows and ditches, among stones and bogs, and over knolls and hills, where no other machine can follow it, and where it would not seem possible for any machine to work.

Adaptation to all kinds of Work.

The independent action of the finger bar not only enables it to work on rough ground, but adapts it to every variety of soil, whether sand, clay, or wet marsh; whether soft or hard, rough or smooth, stony or hilly; to all kinds of forage, early and late, light and heavy, soft, fine, and wet grass, lodged and standing clover; to all kinds of work—whether mowing or reaping, or gathering grass and clover seed, or cutting flax. It can be set to work at any height, from two inches up to eighteen inches, and the change can be made in an instant.

A Perfect Combined Machine.

This is an advantage which cannot be too highly prized. While there are many machines that are very good mowers, and others that are good reapers, there is no other *Combined Machine* to be found. Mr. Kirby has furnished to the farmer the *two machines combined*, at the cost of a single one, and so thoroughly perfected that as a mower it will work as well as the best of those adapted only to mowing, and as a reaper as well as the best of those adapted only to reaping, and yet so simple in its construction that the change from Mower and Reaper is made in a few minutes.

Ease of the Raker's Position.

In all other machines have a side delivery, the raker is obliged to stand in an awkward and tiresome position to rake the grain off. In the Kirby Machine, the new and peculiar position of the raker's seat enables him to sit upon a spring seat in an easy position, and, with a rake of novel form, to take off the gravels at the side, out of the way of the horses, with but one movement of his arms, which is as natural and easy as if he were standing on the ground and raking. A boy can rake off all day without unusual fatigue.

Workmanship and Finish.

We are taking especial pains in the workmanship, finish and perfection of manufacture of the machine for the coming year, and our aim is to excel every manufactory in the country on this point. The inventor, Mr. Kirby, gives his whole time and attention to the improvement and perfection of the machine in all its parts, and every department is under the supervision of thorough and experienced mechanics. As our Harvester is avowedly the best in principle, we intend to make it also the most thoroughly made and perfectly finished machine in the world.

Simplicity.

A glance at the Machine will render obvious its marvellous simplicity in all its parts. It is easily put together, easily handled, easily altered to adapt it to different kinds of work, and is entirely free from the "traps" with which most machines are encumbered. We have frequently heard strangers remark upon seeing the machine for the first time, "Why there is nothing of it," and we consider that one of the strongest points of its superiority. It does not require an experienced mechanic to work it, nor a machine shop to keep it in order. Every farmer will appreciate these advantages.

Iron Frame. Gearing always in Line!

A full Stock of Extras always on hand.

Prices of Parts of Kirby Harvester.

NUMBERS CORRESPOND WITH NUMBERS ON OPPOSITE PAGE.

1. Main Driving Wheel,	\$12 00	Reel Belt,	\$2 50
2. Main Frame,	12 00	Sections, each,	30
3. Axle Plate,	4 00	Cutter Bar Head,	50
4. Iron Seat or Saddle,	1 25	Connection Pin,	15
5. Box Cap next axle plate,	60	Crank Shaft,	1 00
6. Box Cap next crank head,	60	Bevel Wheel Shaft,	1 25
7. Outside Stirrup,	40	Raker's Stirrup,	30
8. Bevel Wheel,	1 50	Track Clearer Complete,	3 00
9. Spur Pinion,	60	Reel Post,	75
10. Reel Yoke and Cam,	1 50	Reel Beaters, per Sett,	40
11. Heel Guard,	30	Reel Arms, per Sett,	40
12. Guard closed,	30	Hand Rake,	75
12. Guard open,	50	Raker's Seat Lever, (wood),	50
13. Lifter Wheel,	1 00	Neck Yoke,	1 00
14. Center Seat Iron,	30	Single Whiffletrees,	50
15. Spindle for Front Seat Iron,	40	Double Whiffletrees,	1 50
16. Front Seat Iron,	40	Lifter Rod and Crank,	2 00
17. Connecting Rod,	1 50	Lifter Lever,	2 50
18. Tightening Pulley and stud for belt,	60	Shifter Lever,	2 00
19. Platform Wheel 18 in. in diameter	3 00	Fender Rod, (this shape,) ✓	60
20. Lifter Lever Circle, (malleable,)	30	Oil Can,	30
21. Crank Head,	1 50	Reel Bundle,	7 00
22. Bevel Pinion,	60	Pole,	2 50
23. Circle Post and Stirrup,	3 00	Whiffletree Hook,	20
24. Reel Post Circle and Support,	1 50	Lead Wheel,	75
25. Reel Pulley,	1 25	Lead Wheel Stud and Belt,	25
26. Long Platform Axle Plate,	75	Axle Plate Pin,	15
27. Short Platform Axle Plate,	75	Belt Hooks and Eyes per Sett,	15
28. Socket for Plat'm Axle Plate,	1 25	Finger Bar Bolt,	15
29. Cutter Bar Complete,	6 00	Wood Seat complete,	15 00
30. Lifter Wheel Crank, (malleable,)	75	Large Wrench,	50
30. Track Clearer Spindle, "	75	Small Wrench,	40
32. Track Clearer Cone,	60	Cutter Bar Back, 1859-60,	2 00
33. Shoe for Finger Bar,	1 25	Cutter Bar Back, 1861-62 & 63,	1 50
Box Cap next Bevel Wheel,	75	Lifter Wheel Bolt,	15
Box Cap next Bevel Pinion,	60	Pole Bolt,	15
Rivets per pound,	50	Pole Hook,	30
Track Clearer Sticks, each,	06	Platform,	7 00
Guard Bolts, each,	06	Corresponding parts of Clipper Mow-	
Finger Bar, Complete,	15 00	er at same prices.	
Reel Shaft,	1 00		

Prices of Parts of the Automatic Rake.

R. No. 1. Cam,	\$ 75	R. No. 10. Large Face Wheel,	\$2 00
" " 2. Small Bevel Wheel		" " 11. Frame,	4 00
with Clutch,	60	" " 12. Shifter Holder,	40
" " 3. Clutch,	40	" " 13. Cap,	30
" " 4. Large Washer,	20	" " 15. Catch to Shipper,	20
" " 5. Pivot,	70	" " 16. Collar to Shipper,	20
" " 6. Piston,	20	Spring for Rake Head,	50
" " 7. Coupling Stirrup,	30	Spiral Spring,	50
" " 8. Rake Holder,	50	Rake Head,	2 50
" " 9. Bevel Pinion,	30		

For directions for setting up and using Machines, see the directions in the seat. Read them carefully. Keep every nut snug, try the nuts often to see that they are tight. Oil the lifter wheel in mowing—and the platform wheel in reaping. Many are careless, and let these wheels get dry. Also occasionally probe the holes in the bottom of the oil cups with a nail or wire, to be sure they are not filled up, to prevent the oil getting through.

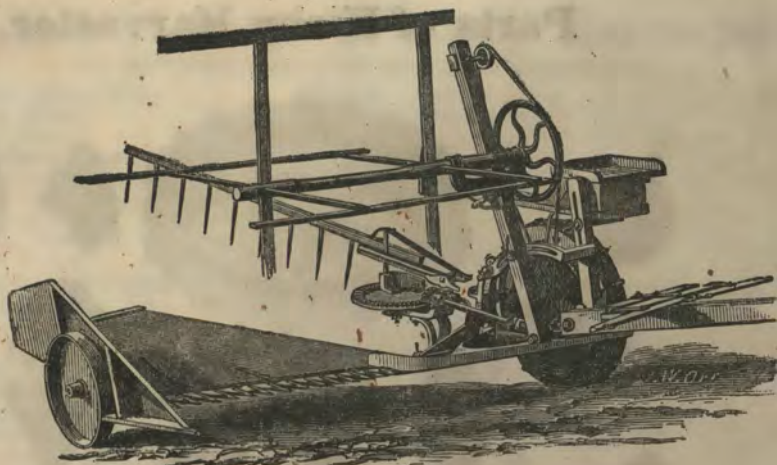
To put on a new guard, the outer end of the finger bar should be raised up so as to enable you to look through the guard, as this is the only way that you can tell when they are perfectly in range, which they should always be before the nuts are turned up tight. This is easily done by turning the track clearer under the end of the finger bar, and let it serve as a support for it while up. This same course is best also if the guards become loose, for as soon as they are loose they work down out of range, and it is very difficult, if not absolutely impossible to get them in perfect line without looking through them. Of course it becomes necessary, to take out the cutter bar. No machine will work well with the guards out of line, and this is a prolific source of difficulty, therefore great caution should be taken that they are always in line. The wooden pin found in the axle plate is placed there merely for convenience in shipping, and must be removed before the machine is used.

Parts of Kirby Harvester.

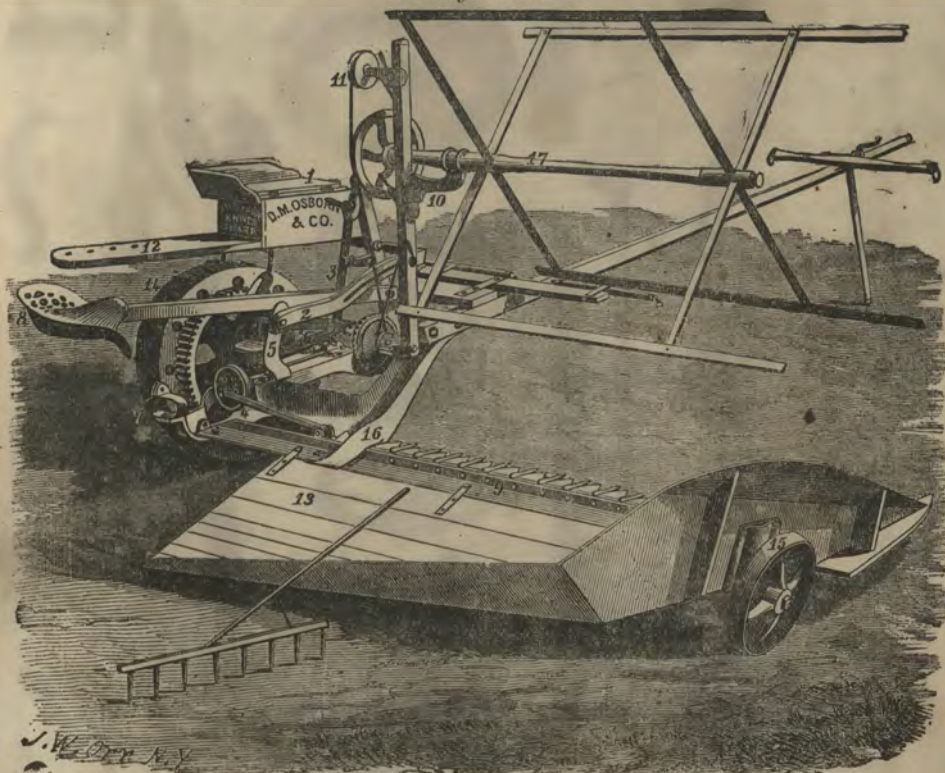
In ordering Extras, describe by name and No. what you want.



30,000 sold in eight years. Economy and Efficiency Combined.



Kirby's American Harvester set up as a Self-Raker.
See Pages 8 and 9.



Kirby's American Harvester set up as a Reaper.
See Pages 6 and 7.