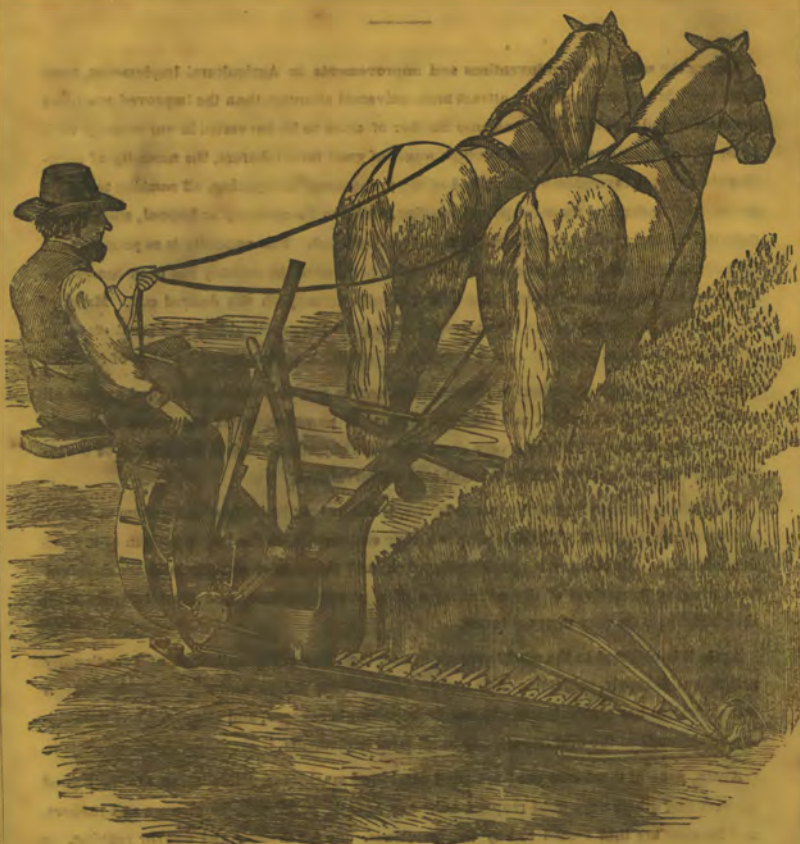


KIRBY'S HARVESTER.



MANUFACTURED BY

D. M. OSBORNE & CO.

Cor. Genesee and Mechanic-sts., Auburn, N. Y.

Herman Hickok, Norwich, N. Y., Gen. Agent.

1860.

Mowing and Reaping Machines.

Among the many modern inventions and improvements in Agricultural Implements, none seem more important, and none attract more universal attention than the improved machines for reaping and mowing. The immense number of acres to be harvested in our country each year; the increasing scarcity and the high wages of good farm laborers, the necessity of securing the crops in favorable weather, and of the proper stage of ripening, all combine to create an imperative demand for some power machine, which by its economy and speed, shall supercede the ancient method of gathering the harvest by hand. This necessity is so pressing that for a few years past a large amount of the inventive talent of the country has been concentrated upon efforts to produce a machine that will fully accomplish the desired end. Many of the machines now made are so far successful as to show the practicability and great economy of power harvesters, but none have yet fully realized the expectations and wishes of farmers.

One of the greatest objections to the machines now in use, and which holds good against all of them, is their great weight, and the large amount of power required to operate them, exhausting the strongest team in a very short time—an objection which it is felt must be obviated before these machines can be brought into universal use.

Another objection to the machines now in use, is the impracticability of using them upon any but the smoothest land. This objection is a very serious one, as the larger portion of the cultivated land in this country is rough and uneven, and the owners of such land are debarred from availing themselves of the advantages of a power machine, and must compete with their neighbors on very unequal terms.

Again it is objected to the machines now in use, that they are complicated, and continually getting out of repair, subjecting their owners to vexatious delays and continual expense. A farmer seldom has conveniences at hand for repairing breakages, and simplicity and durability are elements of the first importance in all farm implements.

Again, none of those now used are good *combined* machines; while some are very good mowers and others very good reapers, none are equally good, *both* as mowers and reapers, and farmers are thus forced to buy two machines, one for mowing and one for reaping, or else do either their mowing or reaping very imperfectly or by hand, where the same machine should serve for both purposes.

We have been fortunate enough to secure a machine patented recently, which obviates these and other serious objections. The inventor, Mr. Kirby, has been for many years past engaged in building various kinds of mowers and reapers, and by a long practical experience was well qualified to judge of the defects of existing machines, and by severe study and many experiments, has been enabled to produce a machine in which he has been peculiarly happy in remedying these defects by the most simple expedients. On the following pages will be found illustrations and descriptions of this machine.

5881

KIRBY'S AMERICAN HARVESTER.

Mr. WILLIAM A. KIRBY, the inventor of this HARVESTER, for some years superintended the manufacture of Harvesters in Buffalo, and by this means he attained a thorough practical knowledge of the working of Harvesters, and saw the many defects of those in general use, and the need of a better Machine. More particularly was his attention directed to three prominent objections to the Machines then in use, viz., their great weight and heavy draft, the rigid finger bar, enabling them to work only on smooth land, and their wooden frames constantly getting out of shape and out of repair. He believed these defects might be remedied, and he devoted his whole time for many months to study and experiment, and during the summer of 1855 built one Machine, embodying the principles which he had discovered. That Machine was successful beyond his most sanguine expectations; and it is a remarkable fact that the same Machine has been in successful use every season since, and has cut over four hundred acres of grain and grass; and the farmer who owns it says he thinks it the best Machine he ever saw. In 1856, Mr. KIRBY obtained two patents upon the principles embodied in his Machine, and during that year he made seven Machines, and sent them into different portions of the state of New York for trial. Though imperfect in manufacture, these Machines excited much attention, and worked to the entire satisfaction of those who used them, as will be seen by the testimonials on the following pages. The unprecedented success of these Machines confirmed the patentee in the conviction that the principles he had combined in them, though imperfectly developed, were correct, and he applied himself with renewed vigor to the perfection of the Machine in all its details; and those manufactured by the Buffalo Agricultural Machine Works, in 1857, were the results of his ingenuity and perseverance.

This Company commenced the manufacture of KIRBY'S AMERICAN HARVESTER in the spring of 1857, and during the season manufactured and sold two hundred Machines. These were distributed over a wide range of country, and subjected to the severest tests in all kinds of work, and upon every variety of ground. The immense growth of grass and grain during that year rendered it the severest season for testing the strength and capability of Harvesters that has occurred since they came into use, yet the AMERICAN HARVESTER passed triumphantly through the season,

and gave the most unqualified satisfaction to those farmers who purchased it, as the testimonials on the following pages will show.

The early and complete success of the AMERICAN HARVESTER is unparalleled in the history of such Machines. While of the many Harvesters that have been invented, the larger portion have proved entire failures, when submitted to practical tests, and the few that have succeeded have required years of experiment, and many alterations, before they could be made to work, the KIRBY MACHINE has, in the first year of its manufacture, taken a stand with the foremost of such Machines. Nothing could more fully attest the correctness of the principles upon which it is constructed, nor could there be a more emphatic voucher of the ingenuity of the inventor.

For the harvest of 1858. over 1,000, and for the harvest of 1859, about 3,000 Machines were manufactured and sold, we believe, in every State and Territory in the United States, and have everywhere vindicated their right to the reputation they had previously acquired, of being the best Combined Machines yet invented, everywhere holding their ground as the lightest, strongest, most efficient and convenient Machine in market.

Within the last year, we have added two entirely new features to the Machine, viz: a *Revolving Track Clearer*, which is the only one that will effectually separate the cut from the uncut grass, and which will leave it spread evenly on the ground; also a most simple and ingenious arrangement by which, when the machine is backed, it is thrown out of gear, and the knives do not run. The track clearer patent we have secured the exclusive control of in the United States, and the throwing out of gear arrangement we have taken measures to secure a patent for.

We spare no pains nor expense in selecting the best materials that can be procured for the manufacture of the Machines, and in workmanship and finish, our aim is to excel every manufactory in the country. The castings are made of Salisbury iron, (the strongest and highest priced iron known;) the bolts of the best Norway iron, with forged nuts; the finger bars are wrought iron of refined scrap, rolled to our order; and the cutters of steel rolled in England expressly for the Kirby Machine, and every department is under the supervision of thorough and experienced mechanics. As our Harvester is avowedly the best principle, we intend to make it also the most thoroughly made and perfectly finished machine in the world.

FARMERS:

BEFORE YOU BUY A MACHINE, READ THIS.

Some Reasons why the Kirby Harvester is the Best in Market.

As many Farmers are not acquainted with the peculiarities of the various Harvesters in market, we will briefly point out to them the prominent features of the leading machines, that they may know what they are buying when they purchase a machine. In what we have to say, we shall speak of other machines in classes, as they embody similar principles, and you can apply the argument to various machines that come to your notice, as under the one or the other class.

1. INDEPENDENT ACTION.—The first class which we shall mention, as it is the most important one, is the INDEPENDENT ACTION MACHINES. These machines have been introduced within three or four years, and their distinctive feature is *their ability to work on rough ground*, and this is accomplished by the *independent action of the finger bar*, which freely rises and falls in following the inequalities of the ground, independently of the driving wheel. This independent action gives the machine so many advantages on smooth as well as rough land, that the older machines not possessing this feature, are fast going into disuse, and will soon be wholly abandoned. Indeed, the manufacturers are now *pressing these machines off on any time and at almost any price, to get rid of them*. You will find the independent action machines are the only machines that can be sold wherever the Farmers are posted up as to their merits. We shall, therefore, explain somewhat at length the advantages of Mr. Kirby's method of obtaining the independent action.

In the machines now before the public, the independent action is obtained in two ways. 1st. By a peculiar mode of attaching the driving wheel to the main frame, thus establishing the independent action between the wheel and frame, as in the Kirby machine. 2d. By a joint or spring in the finger bar near its connection with the frame, establishing the independent action between the bar and frame. These are

the only modes of obtaining an independent action of the finger bar now in use. With the last mode it is *necessary* to use two wheels to carry the frame, or else the machine would *tip over*; and the manufacturers being forced into a two wheeled machine, make a virtue of their necessity, and attempt to brag over it. If it was the object of a Harvester to be used as a cart for hauling manure, or a buggy to ride to church in, there might perhaps be some sense in bragging over the two wheels, but we suppose Harvesters are made primarily and solely for mowing and reaping grass and grain, and should be adapted to that as their chief end. For all the *practical* purposes of a *Mower and Reaper* two wheels are decidedly objectionable. For instance, the Kirby machine, having but one wheel, can run in a ditch while the bar runs on the bank and cuts; no two wheeled 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.*

2. WHAT MACHINE CANNOT BE SUCCESSFUL AS REAPERS. — Again, the two wheeled machines track so wide that it is impossible in reaping to deliver the grain out of the way of the machine on the next swath. Hence, no successful two wheel Reaper has ever yet been made, and in regions where it is necessary to *pretend* the machine is a combined machine, in order to sell it at all, the manufacturers, while they recommend and warrant it as a Mower, say “The *reaping attachment* is warranted to work satisfactorily, and should it *fail to do so*, the *attachment may be returned.*”

There are other reasons besides the width of track why a two wheel jointed bar machine cannot be made a successful reaper. The bar of a reaper should be stiff, as it has to carry the platform and load of grain, and usually the raker also. If the bar is jointed, of course there must be extra and complicated and cumbersome fixings to hold it and its load in place, and there must be a strong wheel at the outer end of the bar, and sometimes another at the inner end to hold it up and carry it. Thus you have three or more wheels running on the ground abreast, or nearly so, to hold the machine up, and keep its joints straight, and every turn of the machine and every uneven place cramps and strains both the wheels and the machine; and the side draft is very great. A successful reaper with two wheels and a jointed bar is an impossibility.

3. OBJECTIONS TO JOINTED BARS FOR MOWING. — The objections to a jointed bar for mowing are these; the joint comes in the very place

in the bar where there is the most strain, and even if it is made strong enough to stand the strain, still, as it takes all the strain of the bar it must wear rapidly, and the outer end of the bar must drop back; this, of course, increases the strain and the friction, makes the cutters work hard, and the longer it is used, the worse it gets, till it finds its way into the scrap heap. Again, the joint comes at or near the point of connection between the connecting rod, or pitman and the cutters, and only when the machine is working on a dead level does the connecting rod work in line with the cutters. Whenever the finger bar is out of a level, the connecting rod works at an angle, pulling and pushing the cutters against the top or bottom of the fingers, wearing them rapidly and creating friction; and whenever the ground is so rough as to throw the bar considerably out of level, the cutters bind and will not work at all. Hence you will find the agents of these machines will never allow you to lift the outer end of the bar while the machine is in motion. Still again, there is only the weight of the bar to hold it down to its work, and whenever the ground is sideling, or in such shape as to give the outer end of the bar a tendency to raise, it goes "bobbing around" haggling the grass badly. Once more: in certain positions these jointed machines are dangerous to operate, especially so in stumpy ground, for when the horses are in full motion, if the outer shoe comes in contact with some fixed obstruction, the joint will double up like a "jack-knife," and the driver be converted into a two horse projectile, shooting through the air with more speed than safety.

None of these objections hold against the Kirby machine. The finger-bar is stiff and firm, and yet *perfectly free in its play up and down* in following the inequalities of the ground. Either end will rise and fall, or the whole bar will rise and fall without any cramping to the machine, or connecting rod or cutters. Whatever may be the angle of the bar, *the connecting rod is always in the same line*—turn the machine upside down and it is still in the same line, and the cutters perfectly free. With its one wheel it can run anywhere where a wheel-barrow can run. Hence it will work on rough land where the two wheel jointed machine can't stir. It has the weight of the frame added to the weight of the bar to hold it down to its work, and don't go "bobbing around." It is perfectly safe for the operator in all positions, and just as portable and convenient to ride to church on, if desired for that purpose, as the two wheel machines.

In reference to the machines which have springs in place of the joint we can say nothing from experience, no machine embodying this principle ever having been in successful use. There are a few being manufactured this year, but as yet they are merely an experiment, and will probably be short lived. They are only mowers, and make no pretensions to reaping. They possess the objections of two wheels, and we should judge the objection of weakness would apply with still more force to the spring than to the joint, while it must allow less freedom of play to the finger-bar, especially at the inner end.

Thus while the independent action machines are very much superior to, and destined to supersede all others, it is demonstrated that Mr. Kirby's method of obtaining the independent action is the best for a mower, and the *only* one good for anything in reaping.

4th. WOODEN FRAME MACHINE.—Most of the machines now before the public are wooden machines, whether with the old fashioned rigid bars, or the independent action. The old style wooden finger bar, is so objectionable on every account that it has been generally abandoned, but most of the machines still retain the wooden frame. The objections to it are these: To obtain the required strength it must be cumbrous and heavy. It shrinks and swells and warps with every exposure to dew, or shower, or hot sun. The nuts must then be tightened, throwing the gearing out of place, creating extra friction and wear, and after one or two year's work and storage, the machine is used up and has to be laid aside. The Kirby is an *Iron* machine, and not open to these objections. The gearing will be found in precisely the same position after being run twenty years, as when it left the workman's hands. The finger-bar retains its shape, the guards are in line, and everything remains without being subjected to change by every shower and every dew.

5th. COMBINED MACHINE.—Here we have the field almost to ourselves. As you have seen, it is the only successful combined machine among the independent action machines, and among the old fashioned rigid bar machines there has never been but one that has gained any reputation as a combined machine. That is a wooden machine, and so heavy and cumbrous, that is generally known as the "Horse Killer," and is rapidly going out of use. Of the other rigid bar machines, while one or two have had their day as Mowers, most of them have only been Reapers. None of these have ever been successful in both

mowing and reaping, and it has only been within a few years, since combined machines have come into general demand, that they have set up any pretensions to the ability to both mow and reap. Our independent action gives us an incalculable advantage over them as Mowers, to say nothing of our lightness of draft, portability, convenience, iron frame, etc., and we will only take the space to give some of the reasons why the Kirby is superior to any of them.

1. The independent action allows the cutters to be set at any height in a moment, thus adapting it to all kinds of grain, and gathering grass and clover seed, while the other machines can only change their height by building up the driving wheel, or some other equally bungling and inconvenient method.

2. The form of the platform and method of fastening it. Our platform is of peculiar form, extending back in an angular or curved shape—giving ample room for the grain, and permitting the raker to deliver the grain at the side by an easy sweep of the rake. The platform is fastened on top of the iron finger-bar, thus giving stiffness and strength, and allowing the crossbraces underneath to have a bearing from the bar. Thus we are enabled to have a light and at the same time strong platform.

3. The raker's position. The most common position for the raker in the machines now before the public is a stand at the back or outer corner of the platform. Here the raker stands with his breast against a support, and with a fork, by two distinct and unnatural motions, pushes the grain off at the side by main force. Riding thus on the small wheel which supports the platform, he receives a blow on his breast every time the wheel passes over an obstruction or drops in a hole or dead furrow. But few constitutions can stand such usage long. Again, in order to sustain the raker's weight in this position, the platform and its supports must be made strong and heavy. The raker's weight is carried on the small platform wheel, instead of on the driving wheel where it should be, thus creating a very heavy side draft, and every time the platform wheel passes over an obstruction or drops into a hole, the pole is thrown against the horses' sides, and the instances are numerous in which horses have been actually killed by this heavy thumping against their sides. In the Kirby Machine the raker is placed directly behind the horses on a comfortable seat, his weight directly on the driving wheel where it is most easily carried, and with

a rake of peculiar construction, he can, by a quarter turn of the arms, which is perfectly natural and easy, leave the grain in good condition for binding, entirely out of the way of the machine on its succeeding swath. This position gives him full control of the grain, and enables him to work the machine with or without a reel, as he chooses, and is the *only* position in which a machine can be worked without a reel. It also permits the raker to dispense with a driver, which cannot be done in any other position. This position of the raker and form of the platform are secured by patent granted to Mr. Thos. D. Burrall; and the Kirby and Burrall machines are the only machines authorized to use it.

In reference to the machines that deliver the grain in rear, it is only necessary to say, that it requires several men to follow the machine and bind the grain while it is green, and move it before the next swath can be cut. This method of delivery is now generally abandoned. Thus you will see that the Kirby Machine is superior as a Mower to any that is adapted to *mowing only*, and surpasses as a Reaper any machine adapted to *reaping only*, and is really a *perfect* combined machine, and the only one in market entitled to that name. When you add to the advantages above named, its lightness of draft, *wherein it surpasses all machines*, its simplicity, durability, portability and convenience, we think you will feel no hesitation in coming to the conclusion that the Kirby Machine is the *best* one in market.

Prices of Extras for Kirby's American Harvester, 1860.

Guards, each,	\$0,25	Driving Wheel with Gear,	10,00
Sections, each,	20	Connecting Rod,	1,00
Rivets, per lb.,	20	Platform Wheel,	1,00
Guard Bolts, each,	03	Axle for do	75
False Shoe, (bolts to finger bar,) 75		Lifter Crank,	25
Shoe, (bolts to false shoe,) 50		Lifter Wheel,	50
Outside Stirrup,	35	Revolv'g track ele'r. comp't,	2,50
Inside Stirrup and Circle Post,	2,00	Finger Bar, complete	10,00
Axle Plate,	3,00	Cutter Bar, complete,	5,00
Crank Head,	1,25	Iron Seat,	75
Spur Pinion,	50	Reel Pulley,	1,00
Bevel Wheel,	1,00	Reel Shaft,	1,00
Bevel Pinion,	50	Reel Belt with couplings,	2,00
Pole, with foot b'd and irons,	3,00		

When ordering Extras, state number of machine, and the year purchased.

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

KEEP YOUR KNIVES SHARP.

DIRECTIONS

FOR SETTING UP AND USING

KIRBY'S AMERICAN HARVESTER.

FOR MOWING.

1ST. KEEP YOUR KNIVES SHARP.

2d. Bolt on the pole ; for cutting ordinary height, put the back bolt in the third hole from the top ; to lower the points of the guards, put it in the lowest hole ; to raise them, in the upper ones.

3d. Bolt on the finger-bar, taking care to draw the nuts snug, and see that the bar is down snug to its place in the shoes.

4th. Put in the cutter-bar—see that it slides easy in the guards ; if it does not go in easy, you will probably find that the finger-bar is not down close to its place. Put in the connecting rod and draw the nuts snug ; try turning the gearing and running the knife by the connecting rod, to see that all is clear.

5th. The holes in the crank-head are marked No. I, II, III, IV.—No. I gives a 3 inch throw, No. II and IV give a $3\frac{1}{2}$ inch throw, and No. III gives a 4 inch throw. The $3\frac{1}{2}$ is right for ordinary mowing, 3 inch for reaping or mowing in good standing grass, in clear bottom, 4 inch for very bad bottom, and where there is any tendency to clog.

6th. Bolt on the lifter and track-clearer.

7th. One of the reel support irons is bolted to the top of the stirrup and the other to the front bolt in the pole. It is adjusted the same, either for mowing or reaping.

8th. Oil the bearings and connections and outside reel bearing with good lard or sperm oil. If the bearing of the reel should wear any, tack a bit of leather around it and keep it oiled.

9th. Adjust the driver in his seat according to his weight. If light, he should sit well back ; if heavy, farther forward. This is done by means of the different holes through which the seat bolt passes. Also by the slot in the front iron of the seat where it is hinged to the standard. See that your horses are properly harnessed, and then *go ahead*.

FOR REAPING.

10. If the machine is set up as a mower, and you want to change to a reaper, take off the lifter-lever, lifter-rod, and wheel and shoe, put on the platform and raker's seat. The front end of the raker's seat lever is bolted to the front standard, in one of the two lower holes, and rests on the stirrup. The driver's seat in mowing is bolted to the lever—the driver's seat in reaping being the top of the tool-box.

11th. Adjust the height by the pins in the axle plate, and platform wheel plate. Level the platform by the pole bolts.

12th. KEEP YOUR KNIVES SHARP.

KEEP YOUR KNIVES SHARP.



The above cut represents Kirby's American Harvester, as it appears in the field at work as a mower; and the cut on the opposite page represents the same machine as it appears in the field, reaping. As a mower, it cuts a swath 4 feet 8 inches wide, and will cut from 10 to 15 acres of grass per day. As a reaper, it cuts a swath 5 feet wide, and will cut from 12 to 18 acres of grain per day. In mowing, the driver's seat is remarkably convenient and easy, he being back of the cutter 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. In reaping, the raker has a spring seat, and his position enables him to deliver the gavels at the side of the machine by an easy quarter turn motion or circular sweep of the rake.

 For Prices, see inside of cover in back of this book.

KIRBY'S AMERICAN HARVESTER

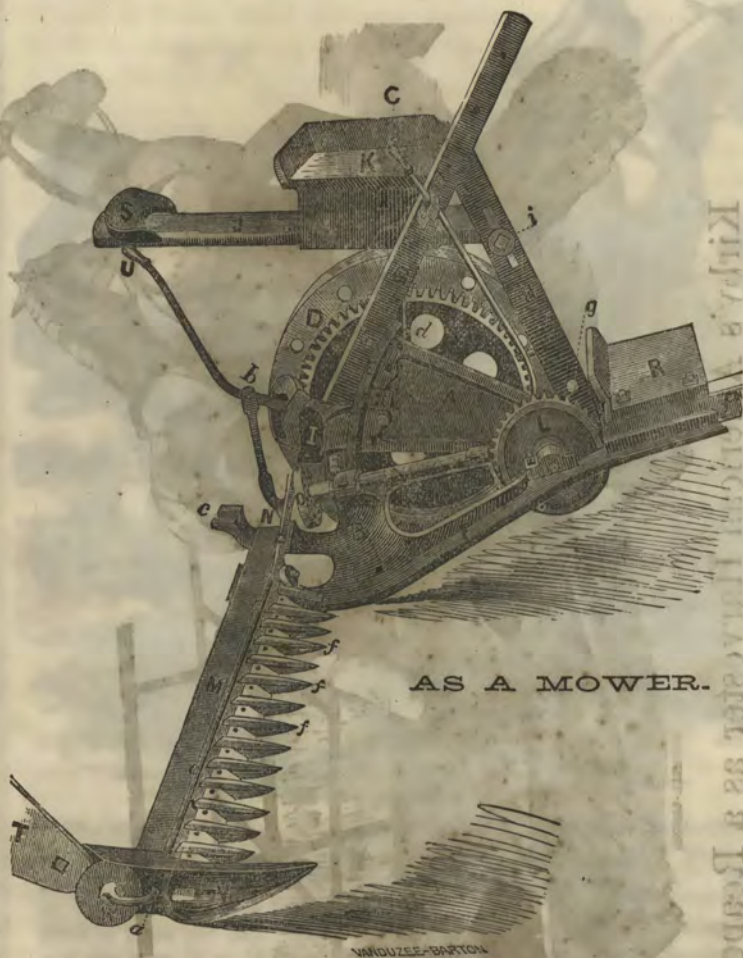


MANUFACTURED BY

Kirby's American Harvester as a Reaper.

The above cut represents the Kirby's American Harvester, which is a machine for reaping grain. It is a simple machine, and is easily operated. The main frame of the machine is made of iron, and of such peculiar form as to enable the operator to reap with the least weight of iron. The small end of the frame is attached to the axle of the wheel, and the large end is attached to the cutting blade. The horse is harnessed to the machine, and the operator sits on the seat, and guides the machine as it moves forward. The cutting blade is made of iron, and is of such a shape as to cut the grain cleanly, and without bruising it. The machine is a very simple and efficient one, and is well adapted for use in the field.

KIRBY'S AMERICAN HARVESTER



AS A MOWER.

DESCRIPTION OF THE MACHINE.

The above cut represents Kirby's American Harvester as a mower, and shows the working parts distinctly. D is the driving wheel, which turns on an axle attached to the axle plate A ; F is the main frame of the machine, which is made of iron, and of such peculiar form as to combine the greatest amount of strength with the least weight of iron. The small end

of the axle plate A turns freely around the shaft of the bevel gear L, on the other end of which shaft is the pinion which meshes into the gearing of the driving wheel, and the large end plays in a groove of the circle plate E. E, which circle plate is firmly attached to the main frame F. The axle plate being thus free to play up and down in the groove of the circle plate E, permits the driving wheel to vibrate up and down entirely independent of the main frame, and the axis of its vibratory motion being the shaft *o* which is attached the pinion meshing into the driving wheel gearing, the up and down motion of the driving wheel does not throw the machine out of gear.

This independent vibratory action between the driving wheel and main frame, permits either the wheel or the finger bar to follow the inequality of the surface without affecting the motion of the other; thus the wheel may run in a ditch while the finger bar runs upon the bank, and the cutters continue in motion cutting the grass close; or the wheel may run over a knoll, while the finger bar runs through a hollow and shaves it out smoothly. It also enables the finger bar to be raised at pleasure. It can also be set to cut at any height both in grass and grain, for which purpose there is a projection X upon the circle plate E, and holes in the rim of the axle plate, to which holes an iron pin is fitted, upon which the projection X rests, and simply by changing the pin to the various holes, the finger bar is set to cut at various heights.

H is a wooden standard, fastened firmly to the front part of the main frame, and braced by the standard G, which is fastened to the circle plate E. To the standard H, the seat board J is fastened at *i*, and rests upon the iron support *d*.

In mowing, the driver sits upon the seat S with one foot in the stirrup I and the other in a stirrup upon the other side of the driving wheel. The seat board J is thus made to act as a lever by means of which the weight of the driver balances the weight of the front part of the frame and the pole, and throws it, as well as his weight, upon the driving wheel, taking all the pressure off the horses necks, lessening the draft, and adding to the power of the driving wheel sufficiently to hold it to the ground without using an unnecessary weight of iron for that purpose. The machine is thus made to run lighter and easier with the weight of the driver added. The seat S may be moved forward or back according to the weight of the driver, so as to make a perfect balance in all cases.

M is a wrought iron finger bar, with a flange upon the front edge through which the fingers *f f f* are bolted.

V is the outside shoe, fastened by means of a false shoe to the finger bar,

in such a manner that the pitch of the shoe and the height of the finger bar may be varied at pleasure.

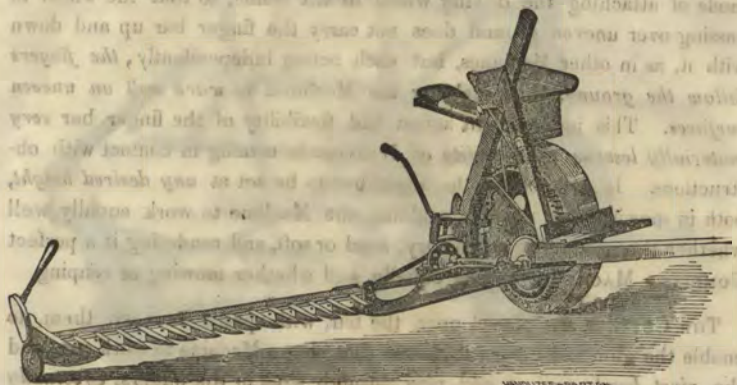
Motion is given to the cutters from the driving wheel D, which drives the shaft on which is the bevel gear L, which meshes with a small bevel gear and drives the shaft on which is the driving head O; this driving head is connected with the cutter bar by means of the connecting rod P. The driving head O acts as a balance wheel, and has four holes or boxes for the connecting rod, obviating the necessity of continually buying new boxes. These boxes are placed at different distances from the centre, to give a longer or shorter stroke to the cutter bar, according to the work to be performed.

The small pinion on the shaft of the bevel gear L, is thrown out and in gear by means of the lever C, and the motion of the cutters is thus always within the control of the driver. By means of the lever U the driver can at pleasure, elevate the finger bar to pass over obstructions, or move from field to field. The lever U is connected at *b* with another lever which at N connects with the long rod *e e*, which passes along the finger bar M and through the outside shoe V at *a*, into the wheel W. The driver, by pushing down upon the lever U, throws the outside end of the finger bar upon the wheel W, and by raising upon the lever U, he raises the inner end of the finger bar. Thus the driver can at pleasure elevate either end or both ends of the finger bar, and a spring attached to the lever U, holds the finger bar in whatever position the driver puts it.

T is a track clearer; P the pole, and K the tool box.

To convert the Machine into a Reaper, the lever U, long rod *e e* and outside shoe V are taken off, and the platform bolted on the finger bar M. The raker's seat is a board bolted to one end of a long wooden lever, or spring, which is bolted to the standard H through the hole *g* and rests on the top of the stirrup I, the seat being about parallel with the driver's seat S, and the raker sits with one foot in the stirrup *c* and the other on the platform. The iron S of the driver's seat is transferred to the raker's seat. In reaping, the weight of the raker balances the front of the frame, and the driver sits upon the tool box K with his feet upon the foot board R. The frame and inner end of the finger bar is elevated and fastened at the proper height, by putting the bolt under the projection, X, of the circle plate, E, into the upper holes of the axle plate A. There is a wheel upon the outer side of the platform, with an arrangement for varying the height, which carries the outer end of the finger bar at the proper height. One end of the reel goes into the holes in the upper end of the standard G, and the other end into the reel arm attached to the platform. The belt that carries the reel passes around a small pulley at the side of the bevel gear L, and a larger pulley on the inner end of the reel shaft.

KEEP YOUR KNIVES SHARP.



KIRBY'S AMERICAN HARVESTER AS A MOWER.

With Finger Bar elevated by the Lifter.

Peculiarities of Construction of Kirby's American Harvester.

IT IS MADE ENTIRELY OF IRON, except the seat and pole; the finger bar is made of wrought iron, with a flange on the front edge, thus, adding strength and preventing the cut grass from riding on the bar; and the very simple arrangement of the frame, gearing and connections, dispenses with a large weight of iron necessary in other Machines.

THE DRIVER'S SEAT is pivoted over the Driving wheel, the front end being fastened to the frame, and the driver sitting upon the other end upon a seat which can be gauged to correspond with his weight. The seat is thus made to act as a lever, by means of which the weight of the driver counterbalances the weight of the frame and the downward pressure upon the horses, 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, relieving the horses from the pressure and weight of the frame, and permitting the knives and fingers to more easily lift over stones and obstructions, and thus rendering them less liable to injury.

Schärfe die Messer.

INDEPENDENT ACTION OF THE FINGER BAR is secured by the peculiar mode of attaching the driving wheel to the frame, so that the wheel in passing over uneven ground does not carry the finger bar up and down with it, as in other Machines, but each acting independently, *the fingers follow the ground*, thus enabling the Machines to *work well on uneven surfaces*. This independent action and flexibility of the finger bar *very materially lessens the liability of breakage* in coming in contact with obstructions. It also permits the finger bar to be set at *any desired height*, both in mowing and reaping, enabling the Machine to work equally well whether the ground be wet or dry, hard or soft, and rendering it a perfect COMBINED MACHINE, working equally well whether mowing or reaping.

THE CUTTERS are placed upon the bar, with spaces between them, to enable the gum and other substances that clog a Machine to work out; and the *rivet heads* project and play through slots in the fingers, *effectually clearing the Machine at every stroke*.

THE GUARD FINGERS are fastened to the Machine in a simple manner, requiring but few bolts, and are easily removed and replaced. They are of cast iron, and whole both at top and bottom, and more than twice as strong as the ordinary open guards.

THE CONNECTION from the *crank head to the knife rod* is simple and light, *doing away with the continuous expense of renewing boxes and cranks*, as in other Machines.

THE RAKER'S SEAT is very easy, and his position the most convenient possible for raking off the grain.

THE GEARING is very simple, and the speed so regulated that it does not require a fast walking team to operate it. Oxen can be used to good advantage.

A LEVER is attached, in a convenient position, for the driver to throw the cutters out and in gear while the Machine is in motion.

BY MEANS OF A LIFTER, the driver can at pleasure, *elevate either end or both ends of the finger bar*, to pass over obstructions, carry his swath, or move from field to field.

SIMPLICITY OF CONSTRUCTION, STRENGTH, AND DURABILITY are attained in the highest degree, by the ingenious and simple combination of all parts of the Machine.

KEEP YOUR KNIVES SHARP.



KIRBY'S AMERICAN HARVESTER AS A REAPER.

The Superiority of Kirby's American Harvester

Over all others will become more obvious by looking at its several superior points in detail, and then considering that all these separate excellencies are combined in one Machine, in the most simple and effective manner. In some of these excellencies it is entirely unequalled, and in none of them is it surpassed. While other Machines may equal it in some of its desirable qualities, we can safely say there is not another Machine in the world which combines all the excellencies that are found combined in KIRBY'S AMERICAN HARVESTER. These excellencies are:

1. **WEIGHT.** *It is the lightest Machine in use*, as will be seen by referring to the Report of the Judges at the Syracuse Trial. The immense advantage which this lightness gives to the Kirby Machine over all others, will be apparent to any one who will carefully consider the remarks of the Judges upon that point.

2. **EASE OF DRAFT.** It will be seen by reference to the tables of draft, and the numerous testimonials on the following pages, that it is the *lightest draft Machine in use*. The tables show this to be so on perfectly smooth land, but on rough and hilly land the difference between this and other Machines would be still more marked; not only on account of the lightness of the Machine, but also on account of the *flexibility of the finger bar*.

When the finger bar is attached rigidly to the frame, and lies heavily upon the ground, any inequality of the ground causes both an unusual side draft and a greatly increased direct draft, for, when the wheel goes into a depression, or the bar strikes an elevation, nearly the whole weight of the Machine comes on the bar, destroying the power of the wheel, cutting the grass very unevenly, and badly straining the Machine, if not entirely stopping it. Machines made with the cutter bar in front of the driving wheel, with a lever to raise and lower it, are certain, if the bar is dropped to the ground, to run into and cut off all the ground above a certain level; or, if lifted off the ground, to clear elevations, cut the grass high, and throw the weight all on the horses necks. From this it is apparent that the flexibility of the finger bar in the Kirby Machine gives it an incalculable advantage, in ease of draft, over the lightest of other Machines on rough ground.

3. PRICE. *It is the lowest priced Machine in market.* Every man's pocket will testify to the advantages of the Kirby Machine in this item.

4. STRENGTH. The Machine is made entirely of iron, except the seat and pole. The weight is so distributed as to give the greatest amount of strength with the least weight of iron. All parts that are liable to strain are made very strong. We pay an extra price for materials, for the sake of getting the strongest the market affords, and the Machine will stand any test of strength that a Machine is capable of enduring.

5. DURABILITY. Being made entirely of iron, the Machine is not liable to decay, nor shrink, nor check, nor warp, by exposure to the weather. It is well known that Machines, made with a wooden frame, on exposure to the storms, dews and severe heat of summer, will shrink and swell, and warp and check. This, besides gradually weakening and destroying the frame, throws the iron work, and the running parts attached to it, out of place, causing one part to bind and another to wear; and every hot day, every shower, and every night's exposure, increases the difficulty, until the Machine is destroyed. These are difficulties that cannot be overcome in a wood frame Machine, but are entirely obviated in one with an iron frame. The simplicity of the Kirby Machine also increases its durability, for every one knows that the more complicated a Machine is, the greater is its liability to get out of order. There are but few parts in this Machine that are liable to wear, and those parts are so constructed that they can be easily removed and replaced. The independent action of the finger bar greatly lessens its liability to breakage. When the finger bar is attached rigidly to the frame and driving wheel, upon coming suddenly in contact with any obstruction, the whole weight and force of the Machine is brought to bear, at

once upon the point of resistance; but with a flexible and movable finger bar, there is a giving and lifting of the bar, which brings the strain upon it gradually and slowly, and very much lessens the liability to breakage. Again, a flexible bar will *pass over* many obstructions which would stop or break a Machine with a rigid bar. The guard fingers being whole on the top, are much less liable to break than the common open finger.

6. **SIMPLICITY OF CONSTRUCTION.** A glance at the Machine will render obvious its marvellous simplicity in all its parts and combinations. It is easily put together, easily altered to adapt it to different kinds of work, and is entirely free from the "traps" with which most Machines are encumbered. 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.

7. **ABILITY TO WORK ON ROUGH GROUND.** In this respect it is entirely unequaled by any Machine yet produced. 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.

8. **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. 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.

9. **IT IS A PERFECT COMBINED MACHINE,** working equally well whether mowing or reaping. 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 scarcely a good *Combined Machine* to be found. But 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 construction, that the change from Mower to Reaper is made in a moment.

10. **EASE OF THE RAKER'S POSITION.** In all other Machines having 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 pecu-

liar position of the raker's seat, enables him to set upon a spring seat in an easy position, and, with a rake of a novel form, to take off the gavels 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.

11. **PRESSURE UPON THE HORSES NECKS** is taken off and obviated by the peculiar position of the driver's seat. This pressure has been a serious objection to most of the Machines heretofore made, and some have attempted to obviate it by jointing the pole, and putting a small castor wheel under the front portion of the frame to sustain it; but in practice this method is found to have serious objections. Such a wheel must necessarily be small, and on ground that is in the least uneven, it will drop into every little depression, requiring extra power to lift it out, and to drag it over all elevations of surface, while it is impossible to run it through dead furrows and water furrows. The castor wheel not only adds very much to the draft of the Machine, but, on ground that is not entirely smooth, it causes a continual thumping of the pole upon the horses breasts. In one neighborhood last season, four horses died from inflammation of the lungs, caused by working them on such Machines. But few farmers can afford to furnish horses for such wholesale slaughter. In the Kirby Machine this pressure is obviated by making the driver's seat a lever, by means of which the driver counterbalances the weight of the frame, and throws it on to the driving wheel, where it is most easily drawn, and the Machine actually runs lighter with the driver's weight added, while in other Machines the driver's weight adds so much to the draft of the Machine. It has been a matter of surprise with many, that a Machine so light could hold itself to the ground with power sufficient to drive the gearing and cutter bar, but the fact that the weight of the frame and driver are thrown on the driving wheel, thus adding to its power, explains it.

12. **IT CANNOT BE CLOGGED**, in any kind of grass, be the same wet or dry. The peculiar shape of the fingers, and the method of putting on the knives, renders it self-clearing at every stroke.

13. **IT SPREADS THE GRASS** better than can be done by hand. The cutter bar being of wrought iron, and much narrower than the wooden bars, the grass falls over as it is cut, and does not pile up on the bar and drag and clog.

 **We Challenge the World to Produce a Machine which Combines all these Advantages so Perfectly as Kirby's American Harvester.**

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TRIALS AND PREMIUMS.

In the various TRIALS that occurred in 1858, KIRBY'S AMERICAN HARVESTER was remarkably, yet deservedly successful, as the many FIRST PREMIUMS awarded to it at State and County Fairs and Trials, attest. Its unequalled combination of superior points, enables it to distance all competitors, and during the season it has met and vanquished, in fair trial, every machine of any reputation in the country.

At the New York State Fair, it was awarded the First Premium and a Silver Medal as the best reaper.

At the Indiana State Fair, it received the First Premium as the best combined machine.

The Tonawanda Valley Agricultural Society awarded it the First Premium at their Fair at Attica, N. Y., Sept. 23d, 1858.

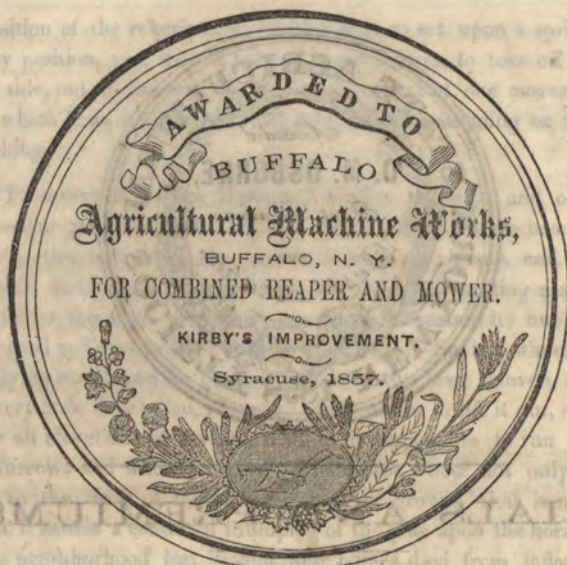
At a trial of mowers, at Wyoming, N. Y., July 6th, 1858, the First Premium was awarded to Kirby's American Harvester.

At a trial at North Java, N. Y., July 10th, 1858, it received the First Premium.

At a trial of Harvesters at Delaware, Ohio, July 6th, 1858, under the auspices of the Delaware County Agricultural Society, Kirby's American Harvester received the First Premium as a Reaper, and Second Premium as a Combined Machine, and the committee stood two to three for giving First Premium as a Combined Machine.

At the Erie County Fair the First Premium, as combined machine, was awarded to Kirby's American Harvester.

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THE SYRACUSE TRIAL.

THE NATIONAL TRIAL OF REAPERS AND MOWERS held under the auspices of the United States Agricultural Society at Syracuse, in July, 1857, excited a very deep interest throughout the country. The magnitude of the interests involved, both to the farmer and to the manufacturer—the high character of the Society instituting the trial, and of the distinguished gentlemen selected from various portions of the Union to conduct it—the severity of the tests to which the Machines were submitted, all conspired to enlist the attention of the public, and establish the conviction that the results of the trial, and the report of the judges, would go far to determine which of the many Machines before the public is really the best for general use. At that trial all of the Machines in the country which have ever been successful in practical working, were thoroughly tested and compared, and the result is embodied in a very interesting report issued by the Society, copious extracts from which will be found in the following pages.

This being our first year, we entered upon the trial totally inexperienced, with a new machine, which we had no opportunity to test until we went into the field for trial. Our contest was with machines which had had the benefit of years of experiment and improvement, and were operated by men who were old stagers in such Trials. We had the misfortune to draw the worst lots in every field. But, against all these disadvantages, our Harvester at once took a stand at the head of the best in the country, and maintained it throughout, as will appear from the following extracts from the Judges' Report.

We cannot better commence our quotations from the Report, than by giving the very comprehensive and judicious remarks of the Judges upon the general utility of Mowing and Reaping Machines, and the enormous saving to the farmers of the country which would be effected by their general introduction. On these points they speak as follows:

"The interest of farmers, and most emphatically of farmers' wives and daughters, in these Machines, is, in the aggregate, still greater than the manufacturers.

"An estimate by a Committee of the New York State Agricultural Society, of the cost of cutting and curing a ton of hay with the scythe, or with a Machine, shows a saving of *seventy-five cents* a ton in favor of the latter. A more careful comparison would show a still greater saving. The diminution of the number of hands employed in harvesting, lightens the labors of the females of a farmer's family very greatly, at a period when their energies are already taxed to the utmost. The food consumed by extra hands is also saved. The grass being evenly spread by the Machine, dries, and is ready to put into cock much sooner than when cut by a scythe; and is therefore less subject to injury from dews and rains. Chemical philosophy and practical trial, alike concur in proving that the greatest amount of nutritive matter is secured in hay when the grass is cut while in blossom. Since this period is a very brief one, farmers having large meadows to cut, are unable to secure a great proportion of their crops while it is in the best condition, if it is done by hand; but the more rapid action of the Machine enables them to cut the whole while in the most perfect state. It is now well settled, that good Machines will cut more grass from an acre than a scythe can possibly do; probably the best Machines will average

one twenty-fifth more to an acre than the best scythe cutting; or, a machine will cut twenty-six tons of hay from ground where a scythe could obtain only twenty-five tons.

"These advantages were not taken into the calculation which measures the superior economy of Mowing Machines by seventy-five cents a ton. If they are admitted, they will largely increase the pecuniary difference between the two modes of cutting. Without insisting on these latter advantages, and assuming seventy-five cents as the true measure of the difference, we find that the substitution of these Machines for scythes will effect a saving of ten millions three hundred and seventy-eight thousand, nine hundred and eighty-one dollars to the United States; two millions, seven hundred and ninety-six thousand, five hundred and ninety seven dollars to the state of New York; one million, three hundred and eighty-two thousand, one hundred and twenty-six dollars to the state of Pennsylvania; and one million and eighty-two thousand three hundred and fifty-six dollars to the state of Ohio.

"Suppose a Machine to be invented which will effect a further saving of twenty per cent. over the best of those now in use, the annual saving effected by such Machines in the United States would be two millions, seventy-five thousand, seven hundred and ninety-six dollars; in the state of New York, five hundred and fifty-nine thousand, three hundred and eighteen dollars; and in the state of Pennsylvania, two hundred and seventy-six thousand, four hundred and twenty-four dollars. Should the farmers of the United States use a Machine, twenty per cent. worse than the best of those now in existence, they would sustain a corresponding *loss*. There was much *more* than twenty per cent difference between the Machines exhibited at Syracuse; and this fact conclusively shows how deeply the farmers of our country need a reliable guide in purchasing Mowing and Reaping Machines, and how necessary it is that bodies, charged with the responsibilities of affording them such a guide, should spare no effort to ascertain the truth, the whole truth, and nothing but the truth, respecting their operations.

"It has been our object, from the beginning, to conduct the trials that they might be self-determining, so that the announcement of the results of our weights and measures might determine the question of the relative merits of the different Machines without the intervention of our own judgments or opinions. We have steadily adhered to that determination throughout the trials. We have had no partialities for individuals or localities to gratify, and our single aim has been to award the palm to merit alone. How far we have succeeded in our endeavors, is now for you and the public to determine."

AWARDS OF JUDGES, &c.

The following is a copy of the awards of the Judges to KIRBY'S AMERICAN HARVESTER at the "National Field Trial of Harvest Implements, by the United States Agricultural Society:"

"AWARDS OF THE JUDGES."—*Combined Machines*.—Second Premium to the Buffalo Agricultural Machine Works—Kirby's improvement—a Silver Medal, for the Second Best Combined Machine."

"*Mowers*.—To Buffalo Agricultural Machine Works, a Diploma, for Cheapness, and Ingenious Adaptation of Cutter to Uneven Surfaces."

The Judges thus speak of the peculiarities of KIRBY'S AMERICAN HARVESTER:

"BUFFALO AGRICULTURAL MACHINE WORKS—THE KIRBY MACHINE.—The chief peculiarity of this Machine consists in the independent action of the finger bar, which is secured by the peculiar mode of attaching the driving wheel to the frame, so that the wheel, in passing over uneven ground, does not carry the finger bar up and down with it; but, each acting independently, the fingers follow the ground. This independent action and flexibility of the finger bar lessens the liability to breakage when in contact with obstructions. It also permits the finger bar to be set at any desired height, and to facilitate its motion in soft ground. This contrivance for securing the rise and fall of the cutter bar is very ingenious, and is worthy of commendation. The gearing is good. This Machine had the misfortune to draw the *worst lots in both fields*, which made its performance seem worse than it really was. We consider it a good and useful Machine, destined to take a *high rank*."

The Trial commenced in a field of lodged clover. Before drawing the lots, the Chairman of the Committee announced that the Committee had decided lot No. 1 to be ten per cent. the worst lot in the field to mow. It was our misfortune to draw lot No. 1, and the Judges, in their Report, speak of it thus:

"It is but bare justice to Mr. Osborne to say, that *his lot was by far the worst in the whole field*. It was more uneven, had more trees and stumps, was more trampled by the spectators before and after cutting, than any other in the field; hence, the numbers annexed to his work in Tables A and B really indicate a greater degree of merit than some that are marked higher by the Committees."

The next lot cut was in a field "two-thirds herds-grass or timothy, one-sixth red clover, one-sixth June grass." The Judges thus speak of the general characteristics of the field:

"The elevation from west to east was estimated at eighty feet; and it was generally conceded, by spectators and judges, that there were few fields presenting a greater combination of difficulties, or one better calculated to bring into view the bad qualities of Machines than this. The tough, soft undergrowth of the *poa-pratensis*, which was uncommonly luxuriant, offered considerable difficulties to the knife, and brought out all the clogging propensities of the Machines.

"The following sketch will give a very clear idea of the field as viewed from the plank road:"



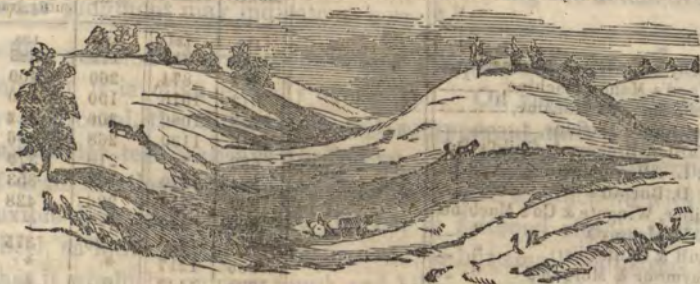
Here, as before, we drew the worst lot in the field. And while most of the other Machines had one or more attendants to clear the Machine when clogging or dragging, and render any other assistance that might be desirable, we had no such assistance, considering one man sufficient to work our Machine. It was understood that this fact should have its due weight, and that a Machine which required three men to work it successfully, should not receive as high numbers as one which required but one man. Yet, for some unaccountable reason, this fact seems to have been disregarded in making up the tables, as appears from the following remarks of the Judges:

"Mr. Osborne had a very bad lot in this, as in the clover field, and worked in both without any assistance. While all the Judges agreed on the correctness of the numbers as representing his actual work, several were of opinion that, in view of the disadvantages he labored under, and his conscientious abstinence from

employing assistance, higher numbers should be assigned to him."

The next Trial was in reaping a field of rye. The Judges, in describing the field, say:

"The Reaping Trial commenced on the 17th of July, on the rye lot of Mr. Hayden, near the farm house. It is believed there are few fields in the country better calculated to try the powers of Reaping Machines than this. It was hilly, stony, and crossed by deep water furrows. The annexed cut will give some idea of the inequalities of the surface:"



"The Committee on Grains and Grasses report 'that the crop was estimated at from twenty-five to thirty bushels to the acre. The straw averaged five feet high, stood thick on the ground, rather leaned to the eastward, and in some places considerably lodged.'"

Here again we had the misfortune to draw the worst lot in the field. The Judges say in reference to it:

"The lot cut by the Kirby Machine was crossed by a water furrow two feet deep by actual measurement; and if a field had been made on purpose to interpose all imaginable obstacles to reaping by horse power, it could scarcely have been more difficult. The profile below shows a section of the field crossed by the Machine at right angles:"



We have compiled from the tables of the Report the following table, showing how our Machine compares with the other Com-

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bined Machines upon the ground, in several important particulars. There were fourteen entries of Combined Machines, all of which are included in the following table, though A. H. Carryl's Machine was withdrawn during the Trial, and R. L. Allen's does not seem to have been tested at all in reaping:

Table of Weight and Draft of the Combined Machines.

KIND OF MACHINE	WEIGHT.		DRAFT.	
	Mower.	Comb'd.	Surface draft	Total power expended in cutt'g grass
	LBS.	LBS.	LBS.	LBS.
Kirby's American Harvester, ---	658	815	179	383
Wood's Manny Machine, ---	874	874	260	400
Pells Manny's Machine, ---	912	1018	190	430
Ketchum's Machine, ---	753	1080	200	412
Warder, Brokaw & Child's Do. ---	1015	1130	268	466
R. L. Allen's Machine, ---	682	*	210	379
T. D. Burrall's " ---	884	1220	183	353
Miller, Wingate & Co's Machine, ---	949	1016	226	428
T. R. Hussey's " ---	800	950	†	†
Hull & Sanford's " ---	*	*	190	375
Seymour & Morgan's " ---	956	1217	*	*
Dutton's Atkins " ---	1008	1443	*	*
T. J. Frelinhausen's " ---	705	822	250	492
A. H. Carryl's " ---	995	*	*	493

* "No Report."

† "Original Notes rubbed out and meaning doubtful."

This table shows that KIRBY'S AMERICAN HARVESTER was also by far the *lightest* Machine there. In *surface draft* it *greatly excelled*, in *lightness of draft*, all the Machines on the ground, while the table shows only three Machines equal to it in the total power expended in cutting grass, and the difference in the sharpness of the blades and the length of the stubble will easily account for their equaling us here. We were unfortunate in this trial in having knives that would retain a good edge but a short time, and, as we had cut one lot just before the test of draft, our knives must of necessity have been in much worse order than those properly tempered. Again, the height of the stubble makes a very great difference in this test, and, as we cut very close, we suffered there. For instance, the Judges say that Burrall's Machine left the stubble 3½ inches high, while ours left it only 2½ inches high; and this will easily account for the lightness of draft

shown in that column for his Machine. The Judges say on this point:

"Of course, the higher the stubble is cut from the ground the easier is the draft, and we desired to find some uniform rule by which we could apportion a deduction from each Machine proportionably to its stubble; but we could not satisfy ourselves in this particular. Sometimes *half an inch made a great difference in the draft*, and other times it was so trivial as to be of no consequence. To arrive at any reliable rule would require far more extended and varied trials than it was in our power to make. We have, therefore, given the column, leaving each one to make such corrections of the column showing the actual draft as his judgment may indicate as correct."

The question of draft is one of great importance to the farmer, and yet it is often entirely overlooked. On very smooth and level ground, the difference is not so apparent, and, as the dynamometer test is always applied on such ground, the difference of draft in a heavy and light Machine, or in a Machine with a flexible bar, and one where the bar is fastened rigidly to the wheel, as indicated by the instrument, is but small compared to what it would be on very rough and hilly ground. An indicated difference of ten pounds, on perfectly smooth ground, would be multiplied many times in ascending a steep hill, or in going over rough ground where there are constant inequalities to overcome. Upon this subject the Judges say:

"Another question, connected with the amount of draft, seems to call for remark in this connection. We allude to the *weights of Machines*. This difference on level ground is trifling, but when ascending hills it becomes of *great importance*; and as most farms are more or less hilly, it becomes *a matter of serious consequence to the farmer to select the lightest Machine*, other things being equal. The ascent in the Hayden meadow was estimated at eighty feet from the plank road to the eastern end of the lot. Its length was sixty rods, and the horses averaged four minutes in walking the distance. It follows, therefore, that the power expended in overcoming simply the gravity of each Machine, is expressed by the weight of the Machine raised perpendicularly eighty feet high in four minutes.

"It is often overlooked that time, as well as force, is an element in the consideration of power. A variation of ten pounds in the draft of two Machines is looked upon by many as a mere bagatelle. It is not considered that this force is extended through-

out every second of time of working. If, then, the two Machines work for ten hours, the difference of force is not represented by 10 lbs., but by that number multiplied into the number of seconds in ten hours, viz: $10 \text{ h.} \times 30 \text{ m.} \times 60 \text{ sec.} \times 10 \text{ lbs.} = 360,000 \text{ lbs.}$ Our excuse for allusion to a principle so entirely elementary must be found in the fact, that it is so strangely overlooked by many farmers and mechanics; and we hope that the remark may stimulate inventors to attempt every possible reduction of force, even if it be apparently very small, being assured that in the long run it will be very considerable."

In their general remarks upon Harvesters, the Judges say:

"It is also very clear, from this trial, that the cutter bar should be flexible, as connected with the frame of the Machine. The grass is cut more evenly, and side-draft is prevented; for, when the knife on a stiff Machine rises over a knoll or other obstruction, the pressure on the surface of the ground increases the resistance, and causes side draft. For this reason, those Machines which have flexible fastenings of the cutter bar to the frame have the least side draft, provided the draft is properly attached.

"Much difference of opinion exists among the builders, with regard to the comparative merits of cast and wrought iron fingers or guards. We do not suppose that our judgment will settle conflicting opinions on this point; yet we deem it proper to say that we believe the cast iron finger to be the best on the whole. We think it better that a guard should break than bend. In the latter case the friction will be greatly increased, consuming an increase of power, which is expended in wearing out and deranging other parts of the machinery. Many country blacksmiths are not qualified for such a job, and make it worse by their attempts to repair it, while any farmer can take off a broken guard and replace it by a new one in a few minutes.

"A difference of opinion also exists with respect to the advantages of wooden and iron finger bars. In our opinion, iron finger bars (which can be made much narrower than wooden ones,) are better adapted to the cutting of fine, short grass than wooden ones, on which, from their greater breadth, the grass piles up and tends to clog the knife.

"When the grass is long, and the wind is blowing in the same direction that the Machine travels, it is very difficult, if not (in some cases,) impossible to cut without a reel. In other cases it is much better to cut without one, as the grass after cutting is in a much better condition for drying. We therefore consider it desirable that Mowers should be furnished with reels, which can be quickly and easily removed and replaced. They would then be enabled to cut under all circumstances."

It will be observed that all these marked advantages which the Judges consider of so great importance, are possessed by KIRBY'S AMERICAN HARVESTER.

We here close our quotations from this valuable report. We cannot but feel that both farmers and manufacturers are greatly indebted to the Society for the many important points that have been brought out and established by this Trial, in reference to Mowing and Reaping Machines—points which will aid the manufacturer in his experiments for improving his Machine, and guide the farmer in making his selection from the various Machines in the market.

In confirmation of the extreme lightness of draft of the Kirby Machine, as indicated by the Dynamometer at the Syracuse Trial, we give the reported amount of draft of various Machines at a Trial of Reapers in Hamilton, Ohio, in July, 1857, where the power required to operate the several Machines was tested by the Dynamometer, with the following result, showing Kirby's Machine to be the lightest draft Machine on the ground:

	LBS.
Kirby's Machine,-----	200
Hiltz's "-----	225
Whiteby's "-----	225
Hussey's "-----	225
Iron Harvester,-----	250
Ohio "-----	275
Atkins' "-----	275
McCormick's Harvester,-----	275
" "-----	300
J. J. Mann & Son's Machine,-----	300
Manny's Machine,-----	300

INDIANA STATE TRIAL.

The only State Trial of Mowers and Reapers that occurred in 1858, was held at Laporte, Ind., July 7th and 8th, under the auspices of the Indiana State Board of Agriculture. The trial occupied two days, and, except the celebrated Syracuse Trial, was the most thorough and important trial that has ever occurred in this country. The machines entered for trial, were as follows: Kirby's American Harvester, Mc Cormick's, Ketchum's, Rugg's, Seymour & Morgan's, Riley's, Esterly's, J. J. Mann & Sons, Aultman & Miller's, Warder, Brokaw & Childs' New York Combined, Heath's Eagle, R. L. Allen's, Deitz & Dunham's with Trump's Improvement, H. F. Mann's Great Western, Mann's with Witt's Improvement, and Wemple's self-raker. The committee say, in reference to these machines, "Most of the machines were of great merit, and were enthusiastically followed by a large crowd throughout the day, in defiance of the hot sun, and atmosphere heated to 90° in the shade. Among the Reapers, your committee found but little really to condemn. They all cut clean and level enough, though one or two machines trailed a little. In this respect, no machine tried worked badly. Ten years ago, the least perfect would have been considered a success without probable competition. Even now, when examined alone, where its work is performed without the inspection and comparison of other work at the same time, it would be decided the perfection of art.

"The automaton rakers, though ingenious, and in grain of proper and uniform thickness, do fair work, yet in uneven grain, or where it is too thin or too thick for a gavel of the proper size at a single revolution, they must fail to do the best work. With the hand rake, these difficulties can be overcome.

"It is of the utmost importance that the gavels be collected evenly and compact, of the proper size for a sheaf, and be delivered in such a manner as to be readily and easily lifted by the binder, with the least possible difficulty."

COMBINED MACHINES.

"There were nine entries of Combined Machines, in each of which there was much to commend. A few of these performed very well as Mowers, although they had less merit as Reapers; while others were better Reapers though not so good Mowers. Ketchum's and McCormick's machines, as mowers, have some superior claims, while Rugg's, Riley's, and the New York Combined, are entitled to favorable consideration.

Schärfe die Messer.

"Your committee, however, after the most thorough examination, are unanimous in their award of the FIRST PREMIUM of \$30, to KIRBY'S AMERICAN HARVESTER. THIS IS, BEYOND ALL QUESTION, THE LIGHTEST DRAFT MACHINE ON EXHIBITION. The weight is 850 lbs. and the actual draft for mowing was 170. While larger machines may be more admired and sought for in the prairie districts, in our opinion this could be used with more success in the timber and upon uneven ground. The width of cut is five feet as a Reaper, and four feet eight as a Mower."

The committee state above that the Kirby machine was, beyond all question, the lightest draft machine on exhibition, and below we give a table of the draft of the various machines entered, compiled from the tables of the report:

TABLE OF DRAFT OF MACHINES AT THE INDIANA STATE TRIAL, 1858.

NAME.	DRAFT.	NAME.	DRAFT.
Kirby's American Harvester,	170 lbs.	Esterly's Machine,	275 lbs.
Aultman & Miller's Machine,	225 "	Heath's Eagle, "	350 "
R. L. Allen's, "	225 "	Deitz & Dunham's do.,	350 "
Ketchum's, "	300 "	Rugg's, do.,	325 "
J. J. Mann & Sons, "	250 "	Seymour, Morgan & Allen's,	338 "
H. F. Mann's Great Western,	275 "	Riley's Machine,	350 "
Warder, Brokaw & Child's, N.		McCormick's, do.,	350 "
Y. Combined,	250 "		

From the Report of the Harwich Agricultural Society, Canada West.

"The next thing the society turned their attention to was the introduction of new and approved implements. As there was but one reaping and mowing machine in the township, they thought it would be advisable to purchase one and have it sold to some of the subscribers for the benefit of the society; but before doing so, it was thought it would be a wise thing to see a trial of as many of the above machines as could be got together. A deputation was appointed to have the merits of two machines tried, one of which was made in Ingersoll, C. W., after Manny's Patent; the other was made at Buffalo, after Kirby's Patent. The trial was made on a field belonging to our President. We regret to be obliged to say that the Canadian machine was fairly beaten in every respect. The one from Buffalo was purchased next day after the trial, by two young men of our township, who have since done good work and good service to many of our subscribers with it."

DAVID WILSON, Pres't.

ALEX. HOUSTON, Sec'y.

TESTIMONIALS.

We have received a large number of testimonials from the farmers who used Kirby's AMERICAN HARVESTER during the harvest of 1859. As our space will permit us to give only a portion of them, we have selected a few from each locality in which the machines have been used, to show that they have been equally successful on every variety of surface and soil, from the rugged hills of New England to the broad prairies of the West. We call especial attention to the remarkable unanimity with which all speak of the *lightness of draft, simplicity, durability, ease of management, adaptability to uneven surfaces, and perfection of work* both in mowing and reaping, exhibited by the KIRBY MACHINE. We invite all who are desirous of purchasing a machine the coming season, to give these testimonials an attentive perusal.

HAMOND, St. Lawrence Co., N. Y., Dec. 5, 1859.

WATERTOWN AG. WORKS.

GENTLEMEN:—Your favor requesting my opinion of the Kirby Harvester is at hand, and in reply, I would say that as a combined machine I do not think there is its equal, and I have examined some ten or twelve different machines. One of my neighbors has a Manny machine on which he works three horses most of the time, and I think it is as hard work for them as it is for my team on the Kirby. I cut 75 acres of grass and grain, and the ground was very rough and stony, and all the breakage I had was three knives, and not hard work for my team. I can do a good job of mowing when they can't work a Manny machine no how. Yours in haste, J. PICKERT.

DUANESBURGH, Schenectady Co., N. Y., Jan. 1860.

D. M. OSBORNE & Co.—GENTS:—I certify that I have bought a Kirby mower and reaper, and have used the same on my farm and am satisfied with my machine, and it is my choice among the machines in use.

JOHN A. FERGUSON.

STANFORD, Dutchess Co., N. Y., Dec. 22, 1859.

D. M. OSBORNE & Co.—GENT:—Having used one of your mowing machines for the past season, I am induced from its simplicity of construction, lightness of draft, and its adaptation to smooth or uneven surfaces, to say to you and the public, that it excels any machine I ever saw work.

A. W. KNAPP.

LEBANON, N. Y., Dec. 30, 1859.

D. M. OSBORNE & Co.—GENTS:—While examining one of Kirby's American Harvesters last summer, I became fully convinced that the great desideratum for farmers was attained, namely, an easy and effective combined mower and reaper, simple in construction and easily changed, and am confident in the belief that had it been on exhibition at our annual fair last fall, it must have received the first prize.

Very respectfully yours, DANIEL B. SHAPLEY,
President of the Madison County Agricultural Society.

LEBANON, N. Y., Jan. 29th, 1860.

D. M. OSBORNE & Co.—GENTS:—I have used one of Kirby's American Harvesters for two harvests. Before I made a purchase of any machine I examined most of the various machines in use in this vicinity, and being somewhat familiar with machinery, I became convinced that Kirby's was the best for mowing and reaping, and have had no occasion to alter my first impression. It has proved itself very durable, of light draft, and easily managed on rough ground.

Yours with respect, SANFORD WHITMORE.

SMYRNA, Chenango Co., N. Y., Jan. 17, 1860.

D. M. OSBORNE & Co.—GENTS:—I have been heretofore very much opposed to mowing machines, but having been convinced of their utility, by your energetic agent in this vicinity, Mr. M. N. Campbell, I deem it but just to you as the manufacturers of Kirby's American Harvesters, to give a statement of its benefits to me. I paid for extra help to do my harvest in 1857, \$132.00; in 1858, \$127.00; in 1859, with your combined machine, I cut over the same amount of land and drew all my hay and grain with a light pair of four and five year old horses by paying only \$36 for extra help, also reaping for my neighbors nearly enough to pay for that extra help. The machine is very little worn, and I can see no reason why it should not last a number of years as good as it is after this harvest.

I am very truly yours, A. R. GRITMAN.

GENOA, Cayuga Co., N. Y., Jan. 18, 1860.

D. M. OSBORNE & Co.—GENTS:—We purchased one of you combined reapers and mowers last season, and used it on our farm. We performed the work full as well as we expected, and in lightness of draft, freedom from side draft, and from bearing on the horses necks, and in facility for raising and lowering the finger bar, it is far superior to any other harvester we know of, and we feel perfect confidence in recommending it to farmers in want of a combined mower and reaper.

RALSAMON SHELDON,
J. P. SHANGLE,
F. H. SHANGLE.

BUTLER, Wayne Co., N. Y., Sept. 5, 1859.

D. M. OSBORNE & Co.—GENTS:—I can say after using Kirby's machine that I am much pleased with it; it more than meets my expectations. As I depend entirely upon hired help, my haying and harvesting has been quite a task.—I commence gathering my hands, then tug and toil with the cradle and reythe through the season. Perplexities arising from many hands and bad weather, is almost entirely obviated in the Kirby machine.

There was a trial in an adjoining lot of clover of Kirby's and Manny's machine; it was lodged and badly tangled, and stony at that. Not being able to see the trial, after the lot was cleared, I went to examine the stubble. The Kirby machine did its work far superior to the Manny machine. Where the Manny would slide over, or just take off the heads of the clover, the Kirby cut it clean and close to the ground. I purchased a Kirby machine. I think it money well invested, for I dispensed with all my extra hands, I cut my wheat that was badly lodged better than it could be cut with a cradle. Barley that was badly crinkled it took clean, and oats it cut in superior order. I mowed clover and timothy very badly lodged and tangled. I mowed one piece on rough surface where they refused to attempt to work the Manny machine.—This machine worked perfectly satisfactory. I worked with a light team. I think they will work the machine as easy as to harrow all day. It works easy, does the work well, and is just what every farmer wants. I think it the best machine made. In conclusion, I did the same amount of work with one third the cost, in better order, and in better season than ever before.

MARSALL HIBBARD.

CANAJOHARIE, March 6, 1860.

D. M. OSBORNE & Co.—GENTS:—Having attended various trials of mowing machines whenever such opportunities occurred, and having for five years used a Manny machine myself, I can without the slightest hesitation, recommend the Kirby as every way worthy the purchase of every farmer. Its simplicity, ease of government, adaptability to the unevenness of the ground, durability, lightness of draft and price commend it above all others I have seen in the market. In June last I attended a trial of all the prominent machines offered to the public, including, of course, the Buckeye, Wood's, Ketchum's Improved, and others, and I express the general conviction of the practical portion of the spectators when I say, it did the best work in the quickest time, and with the least cost of draft of any machine on the ground. As a reaper it is the most easy and expeditious I have seen work. The adjustability of the knives to the slow motion, just as good in cutting grain, as a fast motion, and increasing still further the ease of draft, puts it, we believe, above any rival. It is in fact the best mower we have seen, and reaps as good as it mows. JAMES AUKELL.

STANFORD, Dutchess Co., N. Y., Dec. 1859.

D. M. OSBORNE & Co.—GENTS:—The Kirby mower that I purchased from you has given entire satisfaction. Its good qualities over numerous other machines with which I am acquainted, are: Its lightness of draft, when set so that the weight of the machine resting upon the wheels, the finger bar does not strike the ground. With the pin in the bottom hole, I cut on very smooth bottom. In the second, on ordinary meadows, and in the third from the bottom, on very stony or uneven surfaces.

2. Its perfect adaptation to clover, a peculiarity, the benefit of which, I think every farmer upon trial, will be ready to admit.

3. It cannot be broken, with the exception of knives upon bottom where there is small stones. I have mowed 70 acres the past season, all with oxen, 20 of which was stony and uneven, without a break or hinderance of any kind except re-placing a knife, when a small stone happened to break one. There is no side draft, and being all iron, it will not warp, and is consequently every day the same. I give it my decided preference.

EDSON CARL.

NEW TOWN, N. J., April 13, 1860.

D. M. Osborne & Co.—Gents:—I take pleasure in saying that I have used one of your Kirby Mowers and Reapers for two years, and find it to be the best combined machine that I ever saw in operation. I have cut over some four hundred acres, and in no instance has it failed to cut every thing that it has been tested in. Some part of the ground was very rough, and some very low meadows and grown up with hassicks and bogs, &c., but the little Kirby machine was just the one to pass through it with a certainty. The independent motion of the drive wheel is such that it works over uneven surfaces, better than any other machine can possibly do that has a stationary or jointed cutting bar. I have used Manny's and Dunham & Staat's machines, and neither one suited me, as the draft was too much for my team, and did not do the work as good in mowing nor in reaping as the Kirby. The Kirby is a light machine, light in draft, and less liable to get out of order than many others are. Some others, who have a cumbersome machine to sell, cry out that the Kirby is too light to stick to the ground, and must slip in heavy grass, which is all stuff; as I can assure you that in no case has it been but what the Kirby was successful with me, and under all circumstances triumphant, and no such thing as fail when needed. I feel cheerful in saying that you have, in my estimation, the only good and easy combined machine that is in use in our section at least.

Yours, very respectfully, J. RANDOLPH CUBBERLY.

LAWRENCEVILLE, N. J., April 13, 1860.

D. M. Osborne & Co.—Gents:—We, the undersigned, each purchased the Kirby machine last year from one of your agents, and take pleasure in saying that we were successful with them in both reaping and mowing. We have used several other kinds and find it easy to decide in favor of the Kirby machine. It is a light machine, though made strong and durable, cutting every kind of lodged grass with much ease—not only easily cut but well out. We have cut full one hundred acres of grain and grass, which is a fair test. For reaping we consider it far ahead of Manny's, and much better and more convenient to deliver the grain from. For cutting over uneven surface the Kirby has got the advantage over all others that we have seen, as the drive wheel is independent in its motion in crossing over dead furrows or over ridges, always leaving the cutting bar to act to the surface in the furrow and to raise free over the ridges without cutting in the ground, as all other stationary machines must do.

Yours, very truly,

HENRY D. PHILLIPS.

R. B. PHILLIPS.

LAWRENCEVILLE, N. J., April 14, 1860.

Messrs. D. M. Osborne & Co.—Gents:—The Kirby machine that I purchased two years ago I have thoroughly tested, both in mowing and reaping. I consider it superior to any other that I have seen or used. I have used one of Dunham & Staat's machines, and find that the Kirby machine is lighter draft and more convenient to get the grain from the platform. A more durable machine could not be made for the weight of it. I have worked it over the farm for two years, and the cost of repairs has been fifty cents. I consider it a very durable machine, and would recommend to all who want a combined machine to get the Kirby.

Yours, &c.,

BENJAMIN JOHNSON.

LAWRENCEVILLE, N. J., April 13, 1860.

This is to certify that I have used one of Kirby's machines as a mower for the past two years, and from its lightness of draft, simplicity and durability, I consider mine one of the best machines now in market. Mine has not cost me, since using it, one single penny, and I have cut over a considerable more than one hundred acres of ground, through grass that Manny's and Ketchum's machines would not cut, upon trial.

JOHN F. PHILLIPS.

0081 31 1194 J. M. OSBORNE & CO.

HAMILTON SQUARE, Mercer Co., N. J.

D. M. Osborne & Co.—GENTS:—I purchased one of the Kirby Mowers and Reapers from one of your agents last year, and must say it did its work to my entire satisfaction. I used it in both mowing and reaping, cutting some thirty acres. I have used other kinds, but never used one that worked as easy for myself and team as the Kirby one has. We find it has no side draft, and requires but a slow team to work it. My opinion is that a common pair of oxen would work it well, as the stroke can be regulated to any desired motion given, either by a fast or slow team. Yours, &c., JOHN H. CUBBERLY.

0081 31 1194 J. M. OSBORNE & CO.

SHARON, Schoharie Co., N. Y., Dec. 12, 1859.

D. M. Osborne & Co.—GENTS:—From what I have seen of the American Harvester it comes nearer to the thing we farmers want, than any thing that I have known of the shape of a combined machine. I have used a mower for the last three years, and think I ought to know a good working machine from a poor one. The Kirby as a mower, stands ahead of all I have seen work. Any man looking at its work, the simplicity of its construction, strength and durability, and the lightness of the machine, the ease with which it is worked by both man and beast and also its peculiar adaptation to unevenness of ground, must like it; while for reaping and topping Timothy and clover seed, it works to a charm. I would say to all wishing a machine, try one of Kirby's American Harvesters before purchasing any other. Truly yours, ISAAC LOUCKS.

0081 31 1194 J. M. OSBORNE & CO.

CARLISLE, Schoharie Co., N. Y., Dec. 6, 1859.

D. M. Osborne & Co.—GENTS:—The Kirby mowing machine I purchased of you last season, I used in light and heavy, dry and wet grass, and it worked to my entire satisfaction, being as easy work for my team as plowing stubble land. I went to see my neighbor who had bought the combined machine of you, and it worked so well, that I asked him to let me use his reaping attachment to cut my grain. I got it and it worked beautifully. I want a reaping attachment; it is the best machine in the market, to my notion. I recommend all to try it, who have no machine. Truly yours, DAVID P. BROWN.

0081 31 1194 J. M. OSBORNE & CO.

ARGUSVILLE, Schoharie Co., N. Y., Dec. 13, 1859.

D. M. Osborne & Co.—GENTS:—I purchased one of Kirby's American Harvesters of you last season, and tried it in both grain and grass. It works well—is simple, durable, and of very easy draft. I also tried the Buckeye, and hitched from one to the other. The Kirby being the lightest draft, I can recommend the Kirby American Harvester to all desirous of getting a machine not only as a mower, but as a reaper, a perfect combined machine.

Yours, &c., JNO. HYNNEY, Jr.

0081 31 1194 J. M. OSBORNE & CO.

STOCKPORT, Columbia Co., N. Y., Oct. 8, 1859.

D. M. Osborne & Co.—GENTS:—After attending two trials of Machines, we became satisfied that the Kirby machine was the best we ever saw. We immediately bought one of your agent in this county, and has worked not only well, but to our entire satisfaction. We each of us own farms, and it has done all the reaping and mowing for both of us, and we have paid six cents for repairs.

Yours truly, ROBERT CHITTENDEN,

ABM. BURGERT.

0081 31 1194 J. M. OSBORNE & CO.

We attended the trials mentioned above, and each of us bought a Kirby machine of D. M. Osborne & Co's. agent, in said county, and we add our testimony to that of Messrs. Chittenden & Burgert.

JOHN SMITH,

CYRUS B. NASH,

RICHARD STEVER.

0081 31 1194 J. M. OSBORNE & CO.

ELSON CARL

GLENVILLE, Schenectady Co., N. Y., Sept. 26, 1859.

GENTLEMEN:—I have used one of Kirby's American Harvesters two seasons, and am perfectly satisfied that in respect to durability, lightness of draft, ease of management and quality of work, it is surpassed by no other machine with which I am acquainted, either as a mower or reaper, and there are a number of different machines in the neighborhood. I have used it on both smooth and rough ground, and am satisfied there is no machine before the public which, for lightness of draft—amount of work, and ability to keep the surface of the ground, through ditches, and over stones, free from side draft, comfortable position for the driver and raker, workmanlike manner in which the grass and grain are cut and laid, and durability, all considered, combine so many advantages as this machine, therefore, I cheerfully recommend it above all others, to any farmer who wishes a machine.

Yours, DANIEL KNAPP.

To D. M. Osborne & Co.

GHEAT, Columbia Co., N. Y., Sept. 4, 1859.

D. M. OSBORNE & Co.—DEAR SIR:—I have worn out two Ketchum machines in six years. The past season I used one of your Kirby mowers, bought of your agent, P. Phillip, and I am satisfied that in many respects it is the best machine I ever saw. I have cut grass with it at the rate of twenty acres per day. It is easily managed, is light of draft, is strong and durable. I have not paid one cent for repairs, and my machine, with the exception of a little wear of the knives, is as good as the day I bought it.

Yours truly, NORMAN VAN BRAME.

GERMANTOWN, Columbia Co., N. Y., Dec. 23, 1859.

D. M. OSBORNE & Co.—GENTS:—Permit me to give my experience and opinion of your Combined Mowing and Reaping Machine, one of which I used on my farm during last haying and harvesting. I had before used one of Ketchum's Mowing Machines for three years, and one of Manby's Mowers and Reapers one year, neither of which worked to my satisfaction. But by your recommendation I was induced to try one of Kirby's Combined Mower and Reapers, which I at first took upon trial, and afterward purchased; and I do not hesitate to give my testimony in favor of Kirby's machine, which not only worked better and easier than either of the others, but it done its work better and is of lighter draft, more durable and less likely to get out of order, I therefore take great pleasure in recommending Kirby's combined Mower and Reaper to the public, as the best machine now in use. PHILLIP HOVER.

SHARON, Schoharie Co., N. Y., Dec. 12, 1859.

D. M. OSBORNE & Co.—GENTS:—This is to certify that I got your agent, Mr. John S. Pindar, last season, to cut a piece of grass for me. I wanted to sow buckwheat on the ground, the grass being so fine and thick that it was impossible to plow it decently. He commenced cutting while the grass was wet, with my team, they had never been before a mowing machine. The machine worked first rate, cutting it much closer than I could with the scythe, and without clogging, and much easier for my team than to plow. I should say the machine looks like a very durable one, and is very simple.

Sincerely yours, WILLIAM BERGH.

ARCADIA, Wayne Co., N. Y., Jan. 14, 1860.

D. M. OSBORNE & Co.—GENTS:—The undersigned purchased of your agents, J. E. & B. Greene, in the fall of 1858, one of Kirby's reapers and mowers, and hesitate not to say that it has fulfilled my expectations, and I give it a decided preference over other machines; have been called upon to cut grain and grass where the owners of other machines were discharged. I cut for my son a piece of wheat badly lodged, on side hill and did good work. A neighbor employed one of Manny's machines in his wheat on smoother land, not so stout, and discharged it for bad work. I have worked for neighbors with satisfaction, when others had been discharged.

WILLIAM YOUNGS.

ANTWERP, Jeff. Co., N. Y., Dec. 13, 1859.

D. M. OSBORNE & Co.—GENTS:—By request of your agent at Wattertown, I was induced to become an agent in the town of Antwerp for the sale of the Kirby machine, and after giving it a thorough trial I have no hesitation in saying that I consider it the best combined machine I ever used. I cut ten acres of wheat in ten hours, with my son to drive it, who is in his twelfth year, and laid it in gavils in good shape to bind. It works easy for a team, and is a perfect made machine. I was not to one cent expense while I used it. Furthermore, the Dewalf machine was supposed to be a good combined machine, but in a piece of oats that the Dewalf would not work, and left the field, I followed them in and cut them to the entire satisfaction of the gentleman, Mr. Beaman, who owns the lot. Therefore, it being well made, of easy draft, and with a flexible cutter bar which adapts itself to all uneven surfaces, it cannot but commend itself to all.

Yours truly, JESSE E. WILLIS.

LITCHFIELD, Herkimer Co., N. Y., Dec. 10, 1859.

D. M. OSBORNE & Co.—GENTS:—I have used one of Kirby's machines the last two seasons, am well pleased with it and can recommend it very highly. My horses are light, weighing only 1900, actual weight, and they worked it as easy as a plough, and it works equally well in any kind of grass. I have mowed in a light grass on wet ground and it cuts better than could be done with a scythe by hand. I have worked my horses on a Ketchum's and Manny's, and think it works one-third easier than either of them. The flexible joint, which no other machine I have seen has, makes it work admirably on rough ground, it is also very durable, being all iron, except pole and seat. We have also used it as a Harvester, and as such it gives perfect satisfaction. A piece of Black Sea Wheat all blown down, we cut clearer and better than we could any other way.

Yours truly,

J. R. MATTESON.

L. F. MATTESON.

MOUNTAIN HOME, OTISCO, Onon. Co. N. Y. Dec. 26, 1859.

D. M. OSBORNE & Co.—GENTS:—In reply to your request, for my opinion of the Kirby's Mower and Reaper, purchased of you last August, I am free to say, I have been greatly disappointed in the working of the machine. My objections to it, (which arose more from prejudice than anything else,) are entirely obviated, and I am forced to admit, after full and fair trial, and careful observation, the superiority of the Kirby machine in every particular. I have cut all sorts and kinds of grass, and found it impossible to clog it, when the knives are kept sharp. I am greatly pleased with its lightness of draft, its perfect adjustability, allowing no weight on the horses' necks; it has no side draft, is very light and compact, strongly built, not liable to get out of order, and the independent action of the cutter bar, gives it many and great advantages over any other machine now in use. I found no trouble in cutting from ten to twelve acres per day. The low price of your machine, among its many other good qualities induce me to recommend my brother farmers to try a Kirby machine before purchasing any other. Yours truly, JACOB P. CLARK,

SODUS, Wayne Co., N. Y., Jan. 14, 1860.

D. M. OSBORNE & Co.—GENTS:—We purchased the last season of your agents, J. E. & B. Greene, one of Kirby's combined machines, are well pleased with our bargain. It is a self-adjusting machine to uneven surfaces, have been present at trials with other machines, and could divine the reason why it cut closer, to be as above stated. The lightness of draft is an important item, in which it excels; the freedom from side draft, and in fact all the excellencies which render a machine desirable are combined in Kirby's.

H. T. DENISON,
BEEBE B. DENISON,
HORACE DENISON.

AMSTERDAM, Montgomery Co., N. Y., Jan. 13, 1860.

D. M. OSBORNE & Co.—GENTS:—I send you the names of the buyers and users of Kirby's machine. S. J. Luke, of Florida, Montgomery county—"It mows and reaps well." John M. Phillips bought one—"the machine mows and reaps the best of any in use. I used a team of three years old colts, for mowing, and they worked it with all ease." Luke Phillips reaped forty-five bushels sowing of oats in eleven hours, and had never used a machine before of any kind, and after he got used to the machine, he thinks that he could do it in much less time. E. Lockwood says, "I am well pleased with the reaping of Kirby, the raking is very easy; one person can rake off the machine all day in the heaviest oats; would rather do it than rake or bind." Lewis Phillips says: "I would rather rake off the Kirby than drive the team. I think it the best machine in use." Daniel Martin "thinks Kirby's the best mower of any in use, and the lightest draft machine in use." Samuel Lewis says "the Kirby machine is the best reaper in tangled grain." J. J. Bassett of Amsterdam—"the best mower in use." W. A. Milmine, of Florida—"I reaped a piece of wheat with Kirby's machine; in reaping it exceeds all others in use." Yours, &c., W. H. JACKSON.

WASHINGTON, Dutchess Co., N. Y., Dec. 31, 1859.

D. M. OSBORNE & Co.—GENTLEMEN:—Having purchased a Kirby machine during the last summer, of Trowbridge and Wilkinson, I have used it with entire satisfaction. Its particular points of superiority are lightness of draft, combined with strength and durability, and the independent action of the driving wheel and cutter bar gives it, in my opinion an entire superiority over all others for rough and uneven surfaces.

Yours truly,

SMITH H. THORN.

CLINTON, Dutchess Co., N. Y., Dec. 1859.

D. M. OSBORNE & Co.—GENTS:—I have used one of your combined American Harvesters the past season on nearly all kinds of ground and in grain very heavy and very light, and I find it works well anywhere. In rough meadows it works admirably, passing in and out of holes with perfect ease. As a harvester it cut as heavy rye as I ever saw grow, and left it in very good gavils for binding. The draft is light and our horses are never fretted by side draft, so that although I have seen many machines work, yet for all kinds of grain and grass, and for all kinds of ground, I would give your Kirby machine the preference.

DE WITT WEBB.

FISHKILL, Dutchess Co., N. Y., Jan. 1, 1860.

D. M. OSBORNE & Co.—GENTS:—The Kirby Machine I bought of your agent at Poughkeepsie, works to a charm, it suits me exactly.—As a mower, I found the draft light, very easy for two horses, there is no weight on the necks of the horses, and very little side draft. I can mow an acre of grass an hour with ease. For simplicity, durability and strength, the machine is superior to any I ever saw. I cut twenty five acres grass over smooth, rough and uneven ground, and it travels over small ditches without any difficulty. The independent action of the finger bar, I consider a decided improvement; it makes the machine better adapted to rough, uneven ground. Keep the knives sharp and there will be no difficulty in mowing any kind of grass, either coarse or fine. I consider the Kirby machine preferable to any other I have seen, and would cheerfully recommend it to any that need one.

Yours &c.,

SYLVESTER TOWNSEND.

KINDERHOOK, Columbia Co., N. Y., Oct. 1, 1859.

D. M. OSBORNE & Co.—DEAR SIR:—I am manager of Ex President Martin Van Buren's farm, on which he resides, known as Lindenvold. The farm lies along the Kinderhook Creek, and a large portion of the meadows were flooded a short time before harvest. I first tried the Manny machine, then the Jerome machine, and both failed to do the work, particularly in the flooded grass. I then, after examining a number of other machines, requested your agent to bring a Kirby machine on the ground, he did so, and it has worked throughout to my entire satisfaction.

Yours truly,

ISAAC COLLINS.

KEEP YOUR KNIVES SHARP.

CANAJOHARIE, Dec. 31, 1859.

B. & A. SMITH.—GENTS:—I am much pleased with the Kirby mowing and reaping machine, that I bought of you the last harvest. I have used it both as a mower and reaper, and am pleased with it in both capacities. I think it well adapted for hill as well as level land. I reaped my Rye on a very steep side hill without difficulty, and better than it could have been done with a scythe. I could not be induced to exchange for any other machine that I have seen. I think it is well adapted for reaping as mowing. I have saved in harvest labor this season, about one half the cost of the machine.

Yours, &c.,

N. SLINGERLAND.

CANAJOHARIE, Feb. 21, 1860.

MESSES B. & A. SMITH.—GENTS:—I have used your Kirby American Harvester the past season with entire satisfaction, both as a mower and reaper. I have a large clover around the place, cutting it the way it was lodged snorter stubble than my neighbors did with the Hollenbeck machine, cutting against the lodge. I am satisfied I did much better work than I could have done with the scythe or any other machine that I have used. As a reaper, I do not think it has an equal; it reaps perfectly, cutting all of the grain and delivering it so it will dry about as well as from the cradle. I am satisfied a farmer will save enough with it from his farm in one year, more than he could with the cradle, to pay the price of the reaper attachment. Its independent action of the driving wheel, allowing it to be in a dead furrow, and passing over obstructions without interfering with the cutter-bar, so it cuts a uniform height of stubble, is a great superiority over all other machines I have knowledge of. In lightness of draft, and freedom of side draft, it has no equal, and the perfect control the driver in his seat has over the machine, makes it the most desirable machine in the market; and I can cheerfully recommend my friends in want of a scythe, to buy the Kirby American Harvester, and to buy the combined machine; for a farmer is short-sighted, to buy a machine that will do but half of his work, when for a little extra, he can get one to do all.

EDWIN WILLIAMS.

MINDEN, Montgomery Co. N. Y., Jan. 24, 1860.

MESSES B. & A. SMITH.—GENTS:—The Kirby American Harvester that I bought of you this season, has given me entire satisfaction. I consider it by far the best machine I have used in this section, and I am familiar with most of the prominent machines. I have used the Ketchum machine for six years, and sold it this summer. I decided to try the Kirby, because I considered it by much the best machine in lightness of draft and its adaption to uneven surfaces. I know of no machine that will in any way equal it. It works perfectly as a reaper. I reap all my grain with it. I would recommend it as fully for reaping as mowing. I am at a loss to understand why a farmer will buy a machine that will mow only when he can get one that will do the whole work. You have but to get a farmer to try the Kirby, and he is sure to buy it.

Yours respectfully,

H. C. SANDERS.

The undersigned, having used Mr. Sanders Kirby machine, and seen it at work, join with him in recommending it to the public as a very perfect and desirable machine, and would say that it is far ahead as a mower and reaper to any other machine in this section.

JACOB SANDERS,

S. F. SMITH,

JACOB P. BELLINGER.

Jan. 24, 1860.

CANAJOHARIE, Montgomery Co. N. Y., Dec. 7, 1859.

MESSES B. & A. SMITH.—GENTS:—I have used your Kirby American Harvester the past season with much satisfaction. I cut my grass with it and reaped my oats. I would cheerfully recommend it to my friends as a very perfect and successful working machine; the independent action of the driving-wheel and the cutting-bar, peculiarly adapt it to uneven land.

I am yours truly, &c.,

GEORGE GEORRTNER.

DEPAUVILLE, Jeff. Co., N. Y., Dec. 12, 1859.

WATERTOWN AG. WORKS.

GENTLEMEN:—Your letter of the 25th ult., asking my opinion of the Kirby machine has been duly received. In reply, I would say that I cut about 45 acres of grass and about 15 acres of grain with the one I purchased of you this season, and it worked both as a mower and reaper to my entire satisfaction in every particular, except the knives, which appeared to break from being too highly tempered, or from some other cause. The Kirby is of lighter draft, and better adapted to uneven surfaces than any other machine with which I am acquainted.

I would recommend those who want a perfect combined machine, and one that will perform its work well, and with great ease to the horses, to purchase one of them. I would also add, that being made almost entirely of iron, it is very durable, and not liable to be effected by the weather.

Yours, &c., JOHN O. SPENCER.

KEEP YOUR KNIVES SHARP.

SPEAKERS BASIN, Montgomery Co., N. Y., Jan. 23, 1860.

MESSES B. & A. SMITH.—GENTS:—The Kirby American Harvester that I bought of you the past season, gave me much satisfaction. I cut about eighty acres of grass with it, much better than could have been done with a scythe, and at much less cost. I think it a very easy working machine, and better adapted for uneven land than any other machine. It is simple and durable, and I can cheerfully recommend it to every farmer that wants a machine.

Yours, &c., JOHN A. MITCHELL.

I have seen Mr. Mitchell use his Kirby mowing machine, and have used it on my farm and I fully join him in recommending it to the public as a very perfect machine. It is far ahead of any other machine that I know of—too much cannot be said in recommendation of it.

Yours truly, ALBERT H. OLMSTED.

MAPLE TOWN, Montgomery Co., N. Y., Dec. 22, 1859.

MESSES B. & A. SMITH.—GENTS:—I wish to add my word to the many good opinions you have of the Kirby Harvester. I was much pleased with it as a mower and think it better adapted to uneven surfaces than any other machine that I am familiar with; and for reaping, it is much superior to the cradle, doing cleaner work, gathering more grain from the same land and with much less labor. The reaping from the machine is comparatively easy work; a boy 18 years old did all the reaping this season. The machine has saved me a considerable sum in the way of harvest this season.

Respectfully Yours, DANIEL EHLE.

PALATINE BRIDGE, Dec. 16, 1859.

MESSES B. & A. SMITH.—GENTS:—I have used and seen used nearly every kind of mowing machine that is in use in this county, and it is with much satisfaction that I recommend to my friends your Kirby American Harvester. It is much easier draft, more free from side draft, under better control of the driver and better adapted to uneven ground than any machine that I have ever witnessed my team to. The independent action of the cutter-bar permitting the driving wheel to run in a dead furrow and yet cut a level swath, and the convenient use of the lever by which the cutter-bar can be raised over large stones and stumps, permits this machine to be used upon land that no other one would work upon. You can recommend the machine to your friends with perfect confidence. It cannot fail to suit any man that wants a machine.

Yours truly, ALVA FULLER.

FLAT CREEK, Feb. 23, 1860.

MESSES B. & A. SMITH.—:—The Kirby American Harvester that I bought of you last summer, pleased me very much. I think it the best machine in use that I know of, and for rough or uneven surfaces, it is altogether ahead of any other mowing machine; it works very hand-some as a reaper, cleaning the ground much better than can be done with a cradle. I think more grain can be gathered from the same number of acres with this machine, than can be gathered with a cradle. If this letter will do you any good, you are free to use it as I have no hesitation in recommending the Kirby to the public as a very fine working machine.

I am truly your friend, PETER C. VAN SCHAICK.

SPEAKERS BASIN, Montgomery Co., N. Y., Dec. 12, 1859.

MESSES B. & A. SMITH.—GENTS:—The Kirby reaper and mower we bought of you the past season, proved entirely satisfactory. Our land not being fully prepared for a machine we feared we should not be able to use it to advantage in this we were agreeably disappointed, it is so constructed that it works as well in rough as smooth land. We have no difficulty with it anywhere. We reaped about one hundred and forty bushels of grain with it; it did the work well, much better than could be done with a cradle. It is raked with ease, and the gavel is delivered entirely out of the way and in good order. A man that has an ordinary sized grain farm, with this machine save the cost of the reaping attachment in one harvest in the additional grain he will obtain from the land, the machine picking up the grain so much cleaner than the cradle. We would truly recommend the Kirby American Harvester to our friends. We think we have saved more than half the cost of the machine in the one harvest in hired labor—besides the trouble and expense of boarding a large lot of men for several weeks.

Yours truly, JOHN L. LIPE.

EPHRAIM LIPE.

CANAJOHARIE, Dec. 30, 1859.

MESSES B. & A. SMITH.—GENTS:—Knowing the great reputation that your Kirby American Harvester had obtained in this section as a mower, I ran no risk in buying it as I did after I had finished my hay harvest the past season. If proved as good a reaper as recommended, I knew that I would have the best machine that is in use in this section. I found your reaper all that could be desired. I commenced reaping as you know on a new piece of land in which was a steep side hill and all very rough and uneven. It worked with perfect satisfaction. I cut all my grain with it, and think I saved money by the use of the machine, not only in labor, but it gathered the grain from the land much cleaner than could be done by the cradle. In reaping my Ketchum machine for fifty dollars, and buying the Kirby, I made a first rate trade. Knowing as I do now the value of a reaper and mower, I would not have a machine that would not do both. You can recommend these machines fully as reapers—they are a perfect success.

Yours, &c., HORATIO NELLIS.

LITONFIELD, Herkimer Co., N. Y., Nov. 30, 1859.

D. M. OSBORNE & Co.—GENTS:—I can speak highly in favor of the Kirby machine. I think it the best machine now in use, the best adapted to all kinds of ground, owing to the flexible joint, it possesses advantages over any other now in use. I find that the driving wheel may be run over a knoll, or in a hollow, and it will not raise the cutter bar, nor crowd it heavily on the ground, as many others do. I have used one of your machines two years to cut some fifty acres of grass each year, and have not paid out one shilling for repairs.

E. B. FULLER.

NEW BERLIN, Chenango Co., N. Y., Dec. 14, 1859.

D. M. OSBORNE & Co.—GENTS:—The undersigned having seen and used Kirby's mowing machine, and Little Buffalo Harvester, would most earnestly recommend its use by farmers generally, believing it as good, if not the best machine in use, as well as the most durable.

ORIN FIELD,

SAMUEL WHITE.

H. PHELPS,

E. H. CADY.

CLERMONT, Columbia Co., N. Y., Dec. 9, 1859.

D. M. OSBORNE & Co.—GENTS:—I take pleasure in adding my testimony in favor of the Kirby mower, having taken one on trial this season, it more than satisfied my expectations. I have given it thorough trial and taken pains to compare it with others, and in my opinion there are none that can equal it; the principle of its construction combines simplicity and durability. The draft is very light compared with other machines, and its durability surpasses anything of the kind.

ROBERT WASHBURN.

AURELIUS, Cayuga Co., N. Y., Dec. 21, 1859.

D. M. OSBORNE & Co.—GENTS:—I bought of your agent this season, one of Kirby's mowers and reapers. I cut about one hundred acres of grass, wheat, oats and barley. It performed to my entire satisfaction in all places. It runs light, is very durable and easily managed by two horses, and the labor for the operator very easy. My team was quite light, and they could draw it all day with ease. I think it the best machine I have seen. It costs not

D. M. CULVER.

GLEN, Montgomery Co., N. Y., Feb. 28, 1860.

MESSES. B. & A. SMITH—GENTS:—It is with pleasure that I inform you of the successful working of the Kirby American Harvester that I bought of you in July last. I have had no trouble with it in any way, except soon after I got the machine, when I attempted to cut grass without sharpening the knives; this mistake was soon rectified, and then all was right. I have seen most of the different machines at work that are in use in this county; I think mine far superior to either; I could not be induced to change. I had a Buckeye in the same field with the Kirby and changed my team from the one to the other; the difference in the two machines was very great.

Yours truly, BENJAMIN MOUNT.

CURETOWN, Montgomery Co., N. Y., Dec. 5, 1859.

MESSES. B. & A. SMITH.—GENTS:—The Kirby American Harvester I bought of you this season, works to my entire satisfaction. I have cut over more than one hundred acres of meadow. Myself and hired man with this machine, have gathered the crop from a farm of two hundred and twenty-eight acres this season without hiring a day of extra labor; former years I have had to pay out a large sum for labor in harvest. My neighbors have the Manny & Buckeye in use. I think my machine much better than either. I think it superior in its ease of draft and adaptation to uneven surfaces. I am satisfied that I gathered several tons more hay than I could have done with either the Buckeye or Manny.

Yours truly, CONRAD HOESE.

CANAJOHARIE, Feb. 25, 1860.

B. & A. SMITH.—GENTS:—The Kirby mowing machine that I bought of you in the summer of 1858 has done me good work, and I am much pleased with it. It works well on rough land, is very strong and works much easier than any machine in my neighborhood, is easy draft and free from side draft. I would fully recommend it to my friends as a good machine, and just the thing to suit them.

Yours truly, JAMES McEWEN.

SEWARD, Schoharie Co., N. Y., Dec. 13, 1859.
D. M. OSBORNE & Co.—GENTS:—The Kirby American Harvester I purchased of you last season, works to my entire satisfaction in both mowing and reaping; it works first rate and does not fall short of its recommend; it stands ahead of all other machines in this vicinity. I would not be without one if I could not get another.
Yours, ISAAC KARKER.

SHARON, Schoharie Co., N. Y., Dec. 22, 1859.
D. M. OSBORNE & Co.—GENTS:—I purchased a Kirby machine of you last season and I am well pleased with its work; it is light of draft, adapts itself to uneven surfaces, and works as well reaping as mowing; it is very simple in its construction, durable and easily managed. I generally cut from sixty to one hundred loads of hay, which has cost me, on an average, one dollar per load. This season, by using your machine, I have paid out only eleven dollars, and I find it a good investment. I witnessed the working of quite a number of machines this season, and would much rather have the Kirby.
Yours, &c., DANIEL FEATHERS.

GHEENT, Columbia Co., N. Y., May 2, 1859.
D. M. OSBORNE & Co.—GENTS:—My farm is principally a grain farm, and I bought one of your harvesters, (Kirby's Patent) of your agent, in this county, to use as a reaper, and I can say that it works well. I have cut Rice and Oats. I can cut from twelve to twenty acres per day, and do it much better than can be done with a cradle. It leaves the grain in good condition for binding. A man can bind nearly twice the quantity he could if cut with a cradle. It is quickly and easily converted into a mower, and I have cut grass over both rough and soft bottom successfully.
Respectfully yours, JOHN E. NEW.

EAST GENOA, Cayuga Co., N. Y., Dec. 20, 1859.
D. M. OSBORNE & Co.—GENTS:—Last summer I took one of your Kirby machines on trial, and after testing it with a Hubbard machine in cutting grass, on my own farm, and in cutting grain on the farm of a neighbor, I became satisfied that the Kirby was the best, much the best in reaping. It is the most convenient and has the lightest draft of any machine in use. Of course, we keep it.
JACOB SHARPSTEEN.

MIDDLEFIELD, Otsego Co., N. Y., Dec. 26, 1859.
D. M. OSBORNE & Co.—GENTS:—With a view of selecting a good mower and reaper to assist me in my haying and harvesting, I attended on the 13th of July last, the appointed trial of machines, under the direction of our County Agricultural Society. After witnessing the operation of the nine machines exhibited at the trial, several of which were of the most approved patents, and worked admirably, I made choice, on account of combined merits, apparent durability, and adaptation to rough ground, of the Kirby machine, purchasing of Mr. Robert Davis, of Cooperstown. I knew nothing about working a mower, and had never seen a reaper in operation; but arranging the machine entirely from your directions on the tool box, I have successfully worked it in cutting fifty-five acres, of all kinds of grass, from fine, thick bottom, to the heaviest lodged clover, and twenty four acres of very heavy oats, several acres of which were badly tangled. In all situations it has performed its work with ease, both to the team and driver, and with a neatness and rapidity fully up to my most sanguine expectations. I have never for a moment regretted my purchase, and I have no doubt that if the farmers of Otsego were aware how easily your machine can be operated on our rough or uneven meadows, they would very generally make the needful preparations in the Spring and avail themselves of its use in the coming haying and harvest. Very respectfully, DELOS M. WOOD.

GENOA, Cayuga Co., N. Y., Dec. 22, 1859.

D. M. O-SBORNE & Co.—GENTS:—Last Summer I had an opportunity of testing the Wheeler machine and the Kirby machine together in my own lot, in cutting grass, using, myself, first one and then the other, to my own satisfaction. I decided on buying the Kirby machine, for the following reasons: it is much less complicated, more convenient, much lighter in weight and draft, and more easily understood and managed by farmers generally, and after using it through the season it fully sustains my first impressions.

Yours truly, J. M. TILLOTSON.

BEEKMANTOWN, N. Y., 1859.

D. M. OSBORNE & Co.—GENTS:—I have during the past season been engaged in the mowing machine business. I have attended mowing trials in company with other machines, and am sure that Mr. Kirby stood ahead in all cases.—During the early part of haying I attended a trial on the farm of Mr. A. Hyde Chazy, in company with Mr. Manny. The result of the trial was, I sold two machines on the ground, and two more, a day or two after.

The verdict was unanimous in our favor. There is no use talking, the machine can't be beat.

Yours most respectfully, N. H. GALE, Agent.

EAST GENOA, Cayuga Co., N. Y., Jan., 1860.

D. M. O-SBORNE & Co.—GENTS:—On testing last season one of Kirby's Harvesters with other machines in our own lot, I was soon satisfied that the draft of it was fully one third lighter than the others, and the convenience of its arrangements for raising and lowering, were far better than any other kind of machine I had ever seen; it has done good service through the season. I now think it is the best machine I could have bought.

GEO. MORGAN.

AURELIUS, Cayuga Co., N. Y., Dec. 9th, 1859.

D. M. OSBORNE & Co.—GENTS:—The machine I purchased of you last summer, I am happy to say has exceeded my expectations, it has worked to my perfect satisfaction, in every respect, and under all circumstances. I have put it to the most thorough tests in every variety of grass and grain, and it has performed its summer's work without one cent of expense, and for lightness of draft, and ease of management, it has no equal.

Yours respectfully, WM. A. TOWNSEND.

GHEAT, Columbia Co., N. Y., Aug. 27, 1859.

D. M. OSBORNE & Co.—GENTS:—I bought one of your Kirby mowers of P. Phillips, your agent in Columbia county, have used it during the past season, and consider it the best mower I ever saw in operation. It cuts close, is very easy for a team, and will cut grass wet or dry. I cut over both rough and smooth bottom, and it will cut on soft bottom, wherever horses can walk. I have not paid anything for repairs, and my machine is in perfect condition.—I would not exchange it for any other.

Yours truly,

RODOLPHUS ROSSMAN.

POUGHKEEPSIE, Dutchess Co., N. Y., Dec. 13, 1859.

D. M. OSBORNE & Co.—GENTS:—The Kirby Mowing machine that I purchased of your agents, Frowbridge & Wilkin-on, last summer, I am happy to say fulfilled its promises in every respect, and I am willing to pronounce it inferior to none, and in its adaptability to uneven surfaces, far superior to any in use. Its light draft, together with its durability, are among its greatest recommendations. I think the independent action of the cutter, is the best improvement yet made on mowing machines.

Yours respectfully, JAMES A. SEWARD.

KEEP YOUR KNIVES SHARP.

GHEENT, Columbia Co., N. Y., Nov. 1, 1859.

D. M. OSBORNE & Co.—GENTS:—I bought a Kirby machine of your agent in this county—have had it working on one of my farms during the past season, and am much pleased with its operation. I have had other machines working on my other farms during this season, but prefer the Kirby to any that I own, or have seen. It is strong, durable, and works well.

Yours truly, EDWARD B. PUGSLEY.

LELE LA MOTT, Lake Champlain, N. Y., Jan. 2, 1860.

D. M. OSBORNE & Co.—GENTS:—Last season we were induced to buy one of Kirby's American Harvesters. In the hayfield it worked to our entire satisfaction, and as a harvester we think it far superior to any other machine.

We take pleasure in recommending it to the attention of all brother farmers, feeling assured that if they are in need of a mower and reaper, they can do no better than to purchase one of Kirby's.

RANSOM HALL.
CARM HALL.

FISHKILL, Dutchess Co., N. Y., Jan. 7, 1860.

D. M. OSBORNE & Co.—GENTS:—We, the undersigned, take pleasure in stating that the mower and reaper purchased of you last season by John R. Phillips, has done its work in every place tried, in a most perfect manner; it worked to the entire satisfaction of all who witnessed it, both in grass and grain, lodged or standing, on ground either rough or smooth, wet or dry. The team used was very light, but they worked it with perfect ease, with the help of one man, I gathered about thirty-five tons of hay, 200 bushels of wheat and rye, and about 700 bushels of oats, besides mowing and reaping for my neighbors.

Yours, &c.,

JOHN R. PHILLIPS,
J. B. JONES,
WM. VAN AMBURGH.

GLENVILLE, Schenectady Co., N. Y., Dec. 15, 1859.

D. M. OSBORNE & Co.—GENTS:—We purchased one of your Kirby's combined machines and have used it. Last season we cut fifty acres of grass, twenty acres of oats, thirty acres of buckwheat, with one pair of horses, and with three hands went through haying and harvesting. We can recommend it as the best reaper and mower now in use.

S. O. & J. V. HEDDEN.

NIKKAYUNA, Schenectady Co., N. Y., Dec. 18, 1859.

D. M. OSBORNE & Co.—GENTS:—I purchased a Kirby Mower last season. I have used it, and recommend it as the best mower in use.

JOHN ROBESON.

GLENVILLE, Schenectady Co., N. Y., Jan. 3, 1860.

D. M. OSBORNE & Co.—GENTS:—I had a trial of the Buckeye and Kirby mower, determining to purchase the best, and bought the Kirby. I consider it the best mower in use, for lightness of draft, durability, and adapted for all kinds of land.

JAMES VAN VORST.

MARCELLUS, Onondaga Co., N. Y., Jan. 19, 1860.

D. M. OSBORNE & Co.—GENTS:—Having used one of your Kirby harvesters, and given it a fair trial, I would just say I am perfectly satisfied with it. I tried it in clover, in timothy, oats and wheat, and it works to a charm. I reaped my timothy seed, and afterwards mowed the stubble for hay. I would therefore say to those that wish to buy, get one of Kirby's machines. I never saw better work done by any machine, either reaping or mowing. I am well pleased with the machine.

Yours truly,

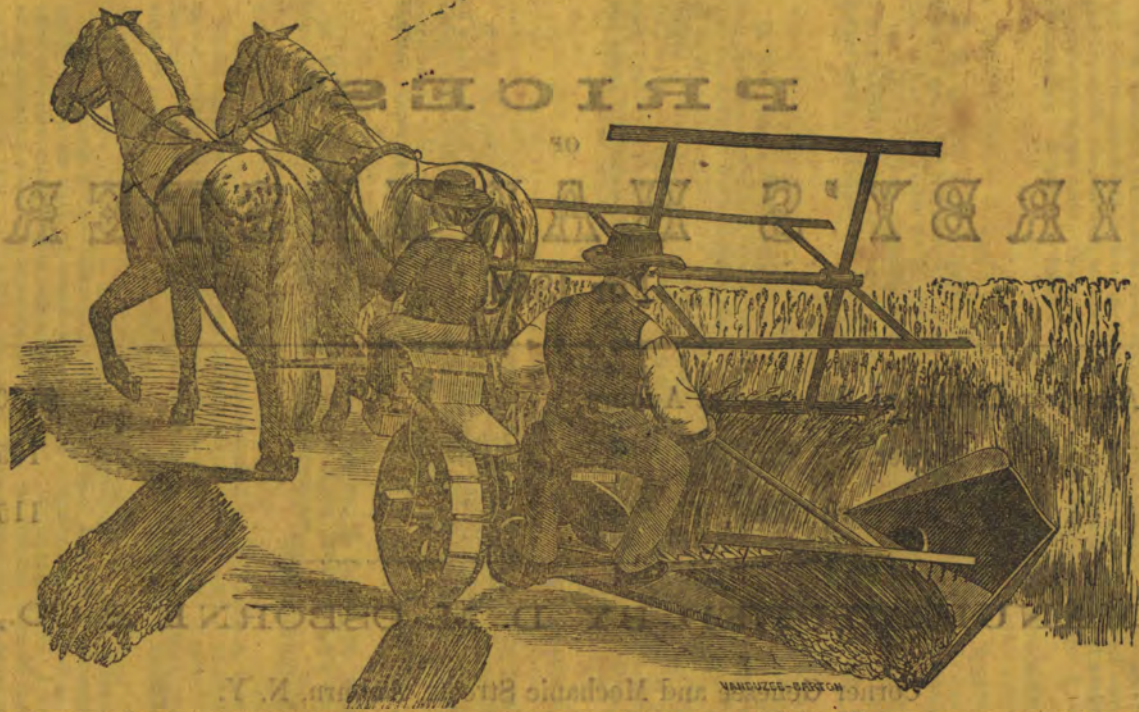
ROBT. F. NORTH.

PRICES
OF
KIRBY'S HARVESTERS
For 1860.

American Combined, delivered at Auburn,	\$130
do as Mower, " "	105
do do with Reel,	115

MANUFACTURED BY D. M. OSBORNE & CO.,

Corner Genesee and Mechanic Streets, Auburn, N. Y.



Kirby's American Harvester as a Reaper.