

DUANE H. NASH,

MANUFACTURERS' AGENT,

No. 29 CORTLANDT STREET,

NEW-YORK.

ILLUSTRATED CIRCULAR FOR 1869.

UNION
MOWER AND REAPER.

LITTLE GIANT

Mower and Self-Rake Reaper.

WHITCOMB'S SULKY HAY RAKE.

BULLARD'S PATENT HAY TEDDER.

SHARE'S COULTER HARROW.

Bett's Branch Beam Hilling Plow.

AGRICULTURAL IMPLEMENTS OF ALL KINDS.

Agent.

WHITTARD & WILKINSON



The Union Mower & Reaper

THIS machine has been before the public for the past eight years, and we are, therefore, enabled to recommend it to Farmers with that degree of confidence which a long and severe test can alone give. From the start, it has met with the hearty approval and well merited praise of practical Farmers; and, in localities where it is known, it is acknowledged to be the standard machine.

The "Union" contains many original improvements peculiar to itself, which have been secured by letters patent. The inventor did not, however, shut his eyes to the fact that there were many desirable points in other Mowers, but built his first machine, appropriating any and all really valuable features without reference to whom they belonged, and when he had produced a perfect Mowing Machine, he secured the right to use the patents he had infringed. It is, therefore, a "union" or combination of those improvements which have been thoroughly tested, and we believe it combines more valuable features and will better meet the wants of Farmers than any other Machine in use.

As in the past, so in the future, the utmost care will be used in its construction, and we assure farmers that they will find it as ever, constructed of the *best* material, and in the most thorough manner.

We publish herein a detailed description of some of the peculiar features of the Union Mower, together with illustrations and warranty, and ask a careful examination of the same, feeling assured that practical men will acknowledge and appreciate its merits and superiority.

The demand for Union Mowers has increased so rapidly, that for several years we have been unable to supply orders sent in late in the season. By means of increased facilities we hope this year to fully and promptly meet the demand, but urge our friends to send in their orders early. Payment is not required any sooner for machines ordered early than for those ordered late. Our rule is "first come, first served."



TESTIMONIALS.

The "Union" has been before the public so long, and is so extensively known throughout the country, that we deem it superfluous to publish testimonials, and we therefore omit them. We take pride, however, in referring to the thousands now in use, and will upon application to us, or our agents, furnish recommendations from farmers in all parts of the country.

PREMIUMS.

It has been the custom of manufacturers to publish long lists of premiums claimed to have been received by them for their different Machines. We do not deem it necessary, as we allow every purchaser to be his own judge as to the merits of our Machine. As there may be some who will be influenced in their choice by such displays we think it proper to state that the Union Mowing Machine has received a **Greater Number of First Premiums**, in proportion to the number of exhibitions and trials at which it has been represented, **than any other Mowing Machine before the public.**

OUR CLAIMS.

We claim for the Union Mowing Machine

DURABILITY.

Careful estimates, made by responsible parties, who have sold for a number of years the Union and several other Machines, go to show that the cost of keeping the Union in working order is not one-third that of other Machines.

SIMPLICITY

in mechanical construction. This is a remarkable feature in the Union. It is so simple that its entire construction can be comprehended at a glance.

NEATNESS AND ACCURACY

of workmanship. Great pains is taken to have every machine put to a severe test before it is allowed to leave the factory.

CONVENIENCE

and ease of operation. The weight and draught is as light as is consistent with durability, and the whole machinery is under the complete control of the driver.

PERFECT ADAPTABILITY

to cut grass on salt marsh, as well as upon uneven hillside and lawn.

DESCRIPTION

OF

The Union Mower and Reaper.

Hanging the Cutter Bar.—There are two classes of hinged machines before the public: one with a loose pole and a vibrating frame, with the heel of the finger-bar hinged direct to the main frame. Thus, as the heel of the finger-bar rises or falls to accommodate itself to the inequalities of the ground, the front of the frame will also be elevated or depressed. The other class are advertised as the double-hinged finger-bar machines, and have a rigid pole fast to the frame, with a couple piece intervening between the heel of the finger-bar and the main frame. The advantages of the former over the latter are,

FIRST.—The hinging of the bar direct to the main frame renders the connection more perfect and secure, while at the same time it obviates all liability of the joints working loose.

SECOND.—It gives a broad base for the hinges at the heel of the bar.

THIRD.—The heel of the bar and the crank always retain the same relative position, a very important feature which cannot be over estimated. In other machines the bar is raised independently of the frame, so that the relative position of the working parts and the bar are continually changing as the bar rises and falls over uneven ground, thus causing a continual strain, and, consequently, a great wear.

FOURTH.—The frame is raised at the same time as the cutter-bar, thus allowing the machine to pass over obstructions between the wheels as high as the axle.

Position of the Knife-Bar.—Is in front of the wheels. This permits the operator to observe the action of the team and cutters without turning, thus enabling him to raise the bar to pass obstructions without withdrawing his attention from the team, while, at the same time, his position is rendered much safer.

Folding the Finger-Bar.—The arrangement of the various parts in the Union Mower is such as to allow the operator to fold the

bar with one hand, and without laying down the reins, and when so folded, a spring catch secures the bar in a firm and safe position.

Guards or Fingers.—These are made of the best quality of malleable iron, are faced with tempered steel plates, and are warranted not to break. They are placed close together on the bar, and afford a perfect protection to the cutters in passing over small stones. Any farmer who has used a machine with guards close together, on stony ground, will appreciate this arrangement.

Knife-Bars.—The very best quality of cold rolled Norway iron is used, and the hole is pierced for the connection close down to the line of cut; this brings the vibrating force directly on a line with the bar, and, consequently, no complaint is ever made that the knife-bars of the Union Mower break; a fact worthy the most careful attention of farmers.

Shoes and Wheels.—A small wheel attachment is used on the inner shoe, which rides down the cut grass, and aids the shoe in mounting and passing over hummocks or obstacles. The outer shoe is also provided with a wheel, which permits the machine to be backed or turned without raising the bar. Both these wheels are made adjustable, whereby the height of cut can be regulated.

Gearing.—The manner of gearing mowing machines is resolved into two distinct plans. First, where the motion is obtained by means of cogs on the drive wheel; and second, where the main gear wheel is keyed on the main axle and near its centre, it must necessarily be small in order to pass obstructions; hence, machines of this class are necessarily slow geared. In the other class, the main gear wheel can be made as large as desired, and, consequently, a rapid and easy motion of the knives is obtained. A quick-geared machine, with a small knife, cutting over but little space at each vibration, enables the farmer to favor his team in a warm day by driving slow, while in fields having heavy bottom its advantages are very great.

Throwing in and Out of Gear.—This, in the Union Mower can be done instantly with the foot of the driver, when his hands are engaged in directing the movements of the team.

Boxes.—These are of the best quality of Babbit metal. Babbitted boxes are superior to ordinary cast iron ones, since they run with much less friction, and are, besides, not so liable to heat.

The Elevating Lever is so arranged that the driver can raise the bar with ease to pass the obstructions, while by slightly pressing the foot on a pedal, it can be retained at any desired elevation above the ground.

Frame.—A wood frame for supporting the bearings has been found to so counteract and absorb the jar incident to the rapid motion of the gearing and vibration of the cutter, as to almost supersede the use of iron for such purposes. The wear of the working parts is at least 50 per cent. less than in iron frame machines. The frame is quadrangular in form, with its ends secured by means of draw bolts, which pass entirely through from one side of the machine to the other.

The peculiarities of the Union Mower are such that the

operator can elevate both the frame and the cutters at the same time, and thus pass obstructions between the wheels as high as the axle.

The Seat.—In the Union Mower a loose pole is used, and the seat is supported by means of metallic springs upon the rear of the pole, whereby the operator feels no annoyance from the motion of the machine. The weight of the driver balances the pole, thus removing all pressure from the necks of the horses.

Draught.—The patented draught arrangement, as used exclusively in the Union Mower, is believed to be superior to all others, since it prevents side draught, relieves the drag of the cutter-bar on the ground, and enables the cutters to pass in and out of dead water furrows with both ease and safety.



The Union Reaping Machine.

The cut on the following page represents the Union Machine as a Reaper. In place of the cumbrous quadrant-shaped table used on ordinary Reapers, it will be seen that we use a small, light frame or gatherer, made of light slats, upon which the cut grain is laid by means of an overhanging Reel. When a sufficient quantity has been gathered to make a suitable sheaf, the driver, by simply raising his foot, drops the gatherer into the stubble, which pushes through the slats and brushes off the grain. By this device the grain can be delivered ready for binding more evenly than by hand, and with much less labor; any boy capable of driving a team can manage the machine with ease. The whole is under the complete control of the driver, thus enabling him to deliver sheaves of any desired size. Its simplicity commends it to all. Many practical farmers, who have used this Dropper, pronounce it superior to side-rake machines, as it requires less power to operate it, and does not thresh out the grain; while all agree that it requires at least one-third less labor to bind the grain than when cut with the cradle.

1850



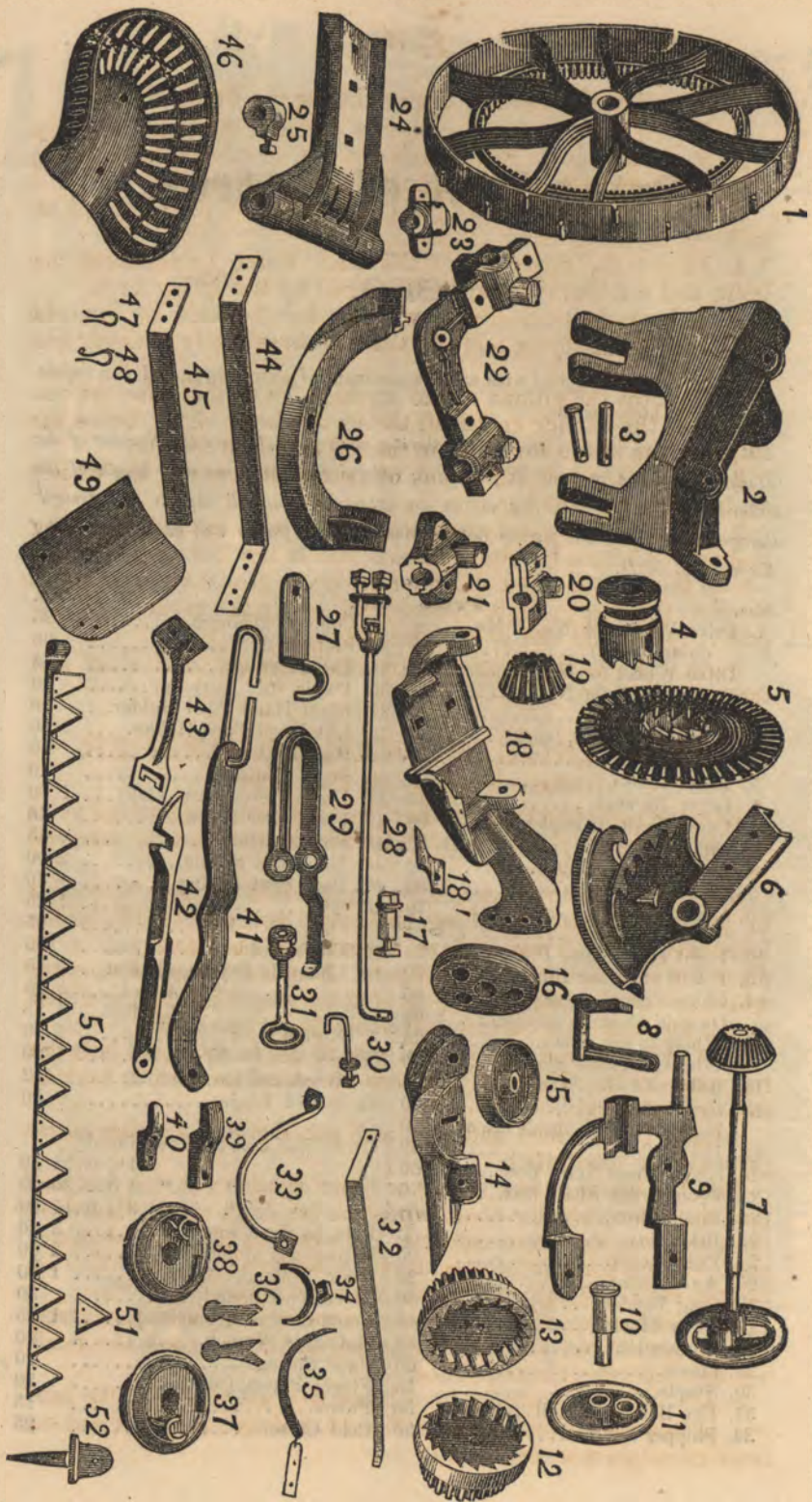
Price-List of Extras.

1869.

Our Agents are supplied with a full assortment of extra parts, and can repair machines without delay.

It is necessary, in all cases, when ordering extra parts, to give the Number of the Machine, and the year of its purchase; also, size of Machine and length of the cutter-bar. Parties ordering extras are expected to pay all express and freight charges. Orders from parties not personally known to us will be forwarded by Express, C. O. D.

No.	Price.	No.	Price.
1. Drive Wheel for No. 1 Machine, (each).....	\$8 50	33. Connection Guard.....	\$ 25
Drive Wheel for No. 2.....	7 50	34. Shipper Fork.....	30
Drive Wheel for No. 3.....	7 00	35. Latch Spring.....	15
2. Hanger Iron.....	2 50	36. Pawls, (per pair).....	10
3. Connection Bolts, (each)....	20	37. Right Hand Pawl Holder...	50
4. Clutch.....	50	38. Left Hand Pawl Holder....	50
5. Bevel Wheel.....	1 75	39. Heel Button.....	15
6. Lever Ratchet.....	1 35	40. Scythe Button.....	10
7. Crank Shaft, (complete)....	3 00	41. Under Lever, with Link....	1 00
Crank Shaft.....	1 00	42. Finger Bar Latch.....	40
8. Lever Catch.....	40	43. Shipper Guide.....	45
9. Pole Iron, (malleable).....	1 50	44. Main Seat Spring.....	2 00
10. Crank Twist.....	70	45. Back Seat Spring.....	80
11. Crank Balance.....	1 00	46. Seat.....	1 25
12. Right Hand Spur Pinion...	70	48. Connection Key.....	05
13. Left Hand Spur Pinion....	70	49. Crank Fender.....	85
14. Outside Shoe, (grey iron)...	1 00	50. Complete Scythe, 4½ feet...	5 75
Outside Shoe, (malleable)...	2 00	“ “ 4 feet...	5 25
15. Wheel to the same.....	25	“ “ 3½ feet...	4 75
16. Wheel to Inside Shoe.....	90	Scythe Back.....	2 00
17. Roll and Bolt.....	25	51. Section, (each).....	20
18. Inside Shoe.....	1 80	Blank Section, (each).....	12
Finger Piece on Inside Shoe.	10	52. Guard Finger.....	50
19. Bevel Pinion.....	40	Cutter Bar, with Shoes & Guards,	
20. Single Cross Shaft Box....	50	“ “ “ 4½ ft.	22 50
21. Front Crank Shaft Box....	75	“ “ “ 4 ft.	20 00
22. Double Box.....	1 60	“ “ “ 3½ ft.	17 00
23. Brass Box.....	1 00	Pole, (without irons).....	3 00
24. Pole Socket.....	2 00	Evener and Whiffletrees.....	2 50
25. Axle Collar.....	25	Neck Yoke.....	1 00
26. Gear Fender.....	50	Rivets, (per pound).....	30
27. Draw Hook.....	40	Track Clearer, (complete)....	1 25
28. Connection.....	2 50	Malleable Wrench.....	40
29. Clevis.....	60	Pawl Spring.....	10
30. Staple.....	15	Finger Plates, (each).....	10
31. Eye Bolt, with Roll.....	50	Punch.....	15
32. Shipper Lever.....	50	Cold Chisel.....	25



Directions for Setting Up and Using the Union Mower.

1. Fasten the pole to its socket by means of the front bolt *only*.
2. Place the seat in its position and the foot-board at the same time, and secure them by the bolts for the purpose.
3. Adjust the lever in its place in an upright position, and attach the elevating chain thereto.
4. Fasten the finger-bar to the main frame by means of the bolts, and see that they are well secured by the spring keys.
5. Bolt on the track-clearer with the handle inclining inwards.
6. Put in the scythe and see that it moves freely without friction.
7. Connect the pitman rod to scythe. To do this raise the cutter-bar at the outside end until the scythe head slides below the ridge on the inside shoe, put in the rod and drop the bar.
8. Adjust the height of cut by raising or lowering the wheels on both ends of the bar.
9. Suspend the whiffletrees *under* the pole in the following manner: Attach the draft chain or rod at the foot of the frame; loosen the front staple bolt under the pole; pass the evener clevis through the ring in draft chain or rod; put in the evener and support it by the roll and bolt under the pole.

NOTE.—Keep the knives sharp, the bearings well oiled, and the nuts tight.

TO CHANGE MOWER TO REAPER.

(Refer to Illustration Frequently.)

Remove right-hand drive wheel and bolt the chain wheel to its hub by means of set screws. (This wheel need not be removed when used for mowing.)

Remove the inside shoe and put in its place the shoe belonging to Reaper. Before attaching the cutter-bar remove the under lever and link. Then remove the outside shoe and put in its place the shoe belonging to Reaper. Attach the outside carrying wheel to outside shoe and adjust it to the proper height, and then attach the wooden separator. Remove finger-bar latch.

Bolt the cast-iron foot of reel post to inside shoe, and bolt the reel post to it. The reel post can be leaned forward or back to suit different grain.

Attach chain wheel and reel, and put the reel together as represented in illustration.

Bolt the wrought-iron spring or chain tightener to reel post and pass the chain over the chain wheel on the drive wheel, then over the pulleys on the chain tightener and over the chain wheel in reel post. The chain can be separated by means of a split link. To tighten the chain turn up the nut on hook bolt.

Bolt the V-shaped lever to the inner end of slat piece or gatherer, and attach the slat piece to cutter-bar, and then attach the small wooden separator to inside shoe.

Screw the foot treadle to foot board so that one end of its base will rest on middle cross piece of foot board and the other end on back cross piece of foot board.

Attach the crank lever to rear right-hand corner of frame, as represented in the illustration.

Then attach the short draw rod to treadle and inner end of crank lever, and the next shortest rod to the outer end of crank lever and to the front end of V-shaped lever.

Attach the bent rod to reel iron and the wooden arm or rod to the end of bent rod. (This wooden arm serves to catch the grain and prevents its falling on to the gatherer while the sheaf is being delivered.)

Attach the remaining rod to the back end of V-shaped lever and to the cast piece on bent rod, and adjust the height by sliding the cast piece on bent rod, and fasten by means of set screw. This should be adjusted to catch the falling grain when the slats are down. The crooked rod may be bent to suit circumstances.

 Drive slowly, and be sure that the slats pass the sheaf before raising them.



PASSING AN OBSTRUCTION.

WARRANTY.

Each Machine is warranted to do the work with as great speed and in as perfect a manner, in the hands of a competent manager, as any other, and a fair trial will be allowed before settlement. If any defect is discovered, immediate notice must be given to us or our agent, and sufficient time allowed for putting it in order. If then the Machine prove permanently defective, the money will be refunded, or a new Machine furnished, at the option of the purchaser.

Three sizes of Machines, adapted to the wants of farmers in different sections, are manufactured:

No. 1 Mower with a cut of 4 feet and 6 inches.

No. 2 Mower with a cut of 4 feet.

No. 3 One-horse Mower with a cut of 3 feet 6 inches.

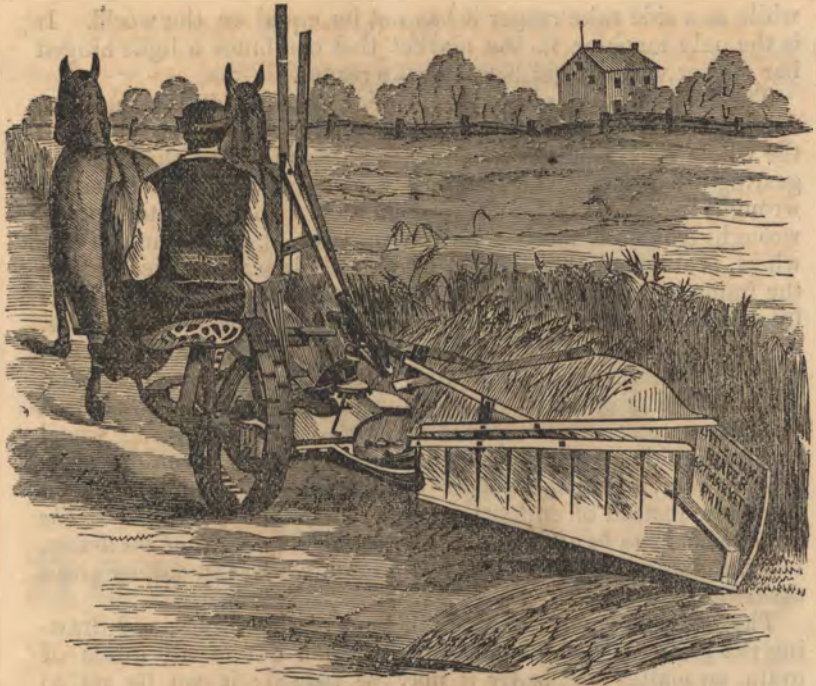
No. 1 Mower with Dropper.

Machines delivered on the cars at New York or Worcester.

Two complete scythes, two extra knife-sections, two guard-fingers, a malleable iron wrench, an oil can, a cold chisel, two punches, rivets, an extra composition box, and a pair of whiffletrees and eveners, accompany each Machine. Full directions for setting up and using, accompany each Machine. Apply to, or address,

DUANE H. NASH, Gen'l Agent,

29 Cortlandt Street, New-York.



LITTLE GIANT

Self-Rake Reaper and Mower.

Long and repeated experiments with Reaping Machines have clearly demonstrated the fact that a one-wheel machine is decidedly the best for cutting grain. Where a side rake is used on a two-wheel machine, the arrangement must necessarily be complicated and intricate, while with a one-wheel forward cut machine, like the Giant, the contrivance is simple and easily arranged. A comparison of the weight will fully prove the truthfulness of the above statement. In the two-wheel side rake machine, manufacturers find it necessary to use from twelve to fifteen hundred pounds of iron and wood, in order to secure the required strength. The Little Giant, when arranged for reaping, weighs but seven hundred and fifty pounds, and yet the gearing and wearing parts of the Giant are *heavier and stronger* than the corresponding parts of any other machine made.

The Little Giant has been in use as a side rake reaper and mower since 1865. The fullest assurance has always been given as to its performance, durability and strength, and in all cases the machine has sustained the warranty. The universal report being, "the Little Giant gives perfect satisfaction." We do not claim that this machine is as good a mower as our two-wheel mowing machine, but do not hesitate to warrant it to mow well,

while as a side rake reaper it has not its equal in the world. It is the only machine in the market that combines a light hinged bar mower with a rigid bar self-rake reaper.

The Little Giant, as a mower, weighs about 540 lbs., has one driving wheel, 37 inches in diameter, on which is nearly balanced the whole weight of the machine and driver. The shafting and gearing are strong, and the frame is made of a single piece of wrought iron, bent in the form of an arch. In the centre of this wrought iron arch, and on a line with the shaft of the driving wheel, is attached the jointed or hinged finger-bar; this side of the frame is carried on a small wheel, to which is attached a lever by which the finger-bar can be easily raised to pass obstructions.

The Little Giant, as a self raking reaper, cuts a swarth five feet wide, and weighs about 750 lbs. It will take an expert hand about fifteen minutes to change the machine from a mower to a self-rake reaper. The reaper is supported on the driving wheel and an outside carrying wheel, but differs from all machines of its class in carrying all the weight of the frame and the finger-bar on the table, instead of supporting the table on the finger bar. *The height of cut can be altered by a lever within easy reach of the driver, without stopping the team; this is a great advantage in cutting grain that is lodged in spots.*

The self-rake enters the grain in front of the knives, and drawing the grain on the table, insures a clean cut in all kinds of grain, no matter how badly it may be lodged; it can be set to make four sizes of sheaves; it is strong enough to do its work in all cases, whether the grain is green or dry, and works perfectly in cutting clover and timothy for seed. The gearing, shafting and boxes are covered so that dirt cannot get on them; a comfortable spring seat is provided for the driver, and is so arranged as to nearly balance the weight of the cutter-bar, thus bringing more pressure upon the drive wheel, where it is needed.

Testimonials from reliable farmers furnished upon application to us or to our agents.

WARRANTY.

Each machine is warranted to do the work with as great speed and in as perfect a manner, in the hands of a competent manager, as any other, and a fair trial will be allowed before settlement. If any defect is discovered, immediate notice must be given to us or our agent, and sufficient time allowed for putting it in order. If then the machine prove permanently defective, the money will be refunded or a new machine furnished, at the option of the purchaser.

Width of cut in mowing, 4 feet 6 inches; reaping, 5 feet.

Machines delivered on cars at New-York or Worcester.

Two complete scythes, two knife sections, two guard fingers, a malleable iron wrench, an oil can, a cold chisel, one punch, one socket holder, one cam hook and one paddle finger, accompany each machine. Full directions for setting up and using, accompany each machine.

DUANE H. NASH, Gen'l Agent,

29 Cortlandt Street, N. Y.



W H I T C O M B ' S
METALLIC SPRING-TOOTH
H O R S E H A Y R A K E ,
THE BEST HORSE HAY RAKE KNOWN.

The Rake is mounted on wheels, thereby obviating the objections which have been raised against all spring-tooth rakes where the weight rests on the rake.

The teeth are tempered by a process known only to the manufacturers, and their pliability is such, that stones and other obstructions, to the height of 14 inches, can be raked over without leaving the hay or injury to the rake.

By means of a treadle, operated with the right foot, the teeth are raised and the hay discharged. The left foot rests upon another treadle, which holds the points down, and prevents the hay from pressing up the teeth.

The teeth may be set at any required height, suitable for raking hay or gleaning grain, without scraping up the dirt. The cleaning rods serve to throw off the hay, when working in heavy clover or wet grass. It is well adapted to the roughest meadows, where its great excellence will be appreciated.

The position of the head, hung on the axle, allows the wheels and teeth to pass into and out of hollows or dead furrows at the same time; also, the wheels running closely to the end of the head, prevent the hay from running out, a decided advantage over rakes with the head in front or rear of the wheels.

This rake is made of the very best material and in the most workmanlike manner.

Price of Rake with Wheels - - \$38 00

Price of Rake without Wheels - - 32 00

Delivered on the Cars in New-York or Worcester.

BULLARD'S



IMPROVED HAY TEDDER.

The Patentee having spent some eight years in perfecting these machines, and having submitted them for the past five years to the severest tests of field work, in this country and in England, confidently offers them as the

BEST HAY SPREADER AND TURNER

yet found possible to make. As the hay harvest is a season of the greatest importance and anxiety to the farmer, the value of a first class hay-maker can hardly be over-estimated. Its use in a
SINGLE SEASON MORE THAN REPAYS ITS COST.

It is claimed for this machine,

That it will thoroughly turn four acres of grass in an hour, thus accomplishing the work of from eight to twelve men.

That this labor-saving occurs at a period in the day when time is very precious.

That it does the work so quickly, that the process of turning can be several times repeated, curing the hay so thoroughly that it can be taken to the barn in the best condition the day it is cut.

The machine is simple in construction, not liable to get out of repair, and can be used on rough ground.

Is of **LIGHT DRAUGHT, NEVER CLOGS**, and manifests its superiority by the thoroughness of its work in long and heavy grass.

As this invention is comparatively new to the farming community, we submit the following extract from the Report of the Judges of the Implement Trial, at Auburn, July 1866:

"**BULLARD'S PATENT HAY TEDDER**, Entry 18, was very thoroughly tested in clover, in timothy and in fine grass—in windrows as well as in swath. It received the unanimous approval of the Judges, and, we believe, of all the farmers who saw it in action. We think the introduction of this machine will be of the greatest importance to haymakers. It certainly fitted the clover for going into the barn, at least one day earlier than would have been safe for clover which had not been subjected to its action. And every kind of hay, when worked over by the Tedder, was cured with much less exposure to the sun than would otherwise have been possible.

"The Machine is admirably contrived to accomplish the work it was designed for; though we should be glad to bestow a higher compliment upon its mechanical execution than candor will permit us to do.

"The Machine tedded one acre of heavy clover, easily, in fifteen minutes, while the horses were walking at a natural gait (for the driver was not aware that we were taking his time), and four acres an hour was the average time in all the trials we made with it.

"The stirring of the hay was very complete; every portion of it was tossed rapidly into the air, and left on the ground, where it fell in a light fleecy condition—just as a farmer would desire to have it.

"At least forty thousand of these Machines ought to be sold this ensuing year, each of which would fully repay the cost of it before the season closed."

The Machine exhibited at this trial was one of the first made. Since that time great improvement has been made in the mechanical construction of the Fork and other parts.

The following from JOHN STANTON GOULD, *Ex-President of New-York State Agricultural Society*, will speak for itself:

HUDSON, April 13, 1868.

"MY DEAR MR. HERRING:

"I studied the 'Bullard Hay Tedder' very thoroughly at the great Auburn trial, in 1866.

"We tried it there under almost every possible condition, and it answered well to every test.

"The only objection we could make against it was, that it was carelessly made; the material of the machine was not as good as it should be; teeth of the spurs were ill-cut, and it lacked that complete mechanical finish which so ingenious an invention richly deserved.

"I have seen it since then, and all these faults have been thoroughly remedied. It is now a machine such as a good mechanic loves to look at, and such as a good farmer loves to have in his hay-field.

"Those who have never used this implement, little know how much they lose from the want of it. Those who have used it will never be without one.

"It is of great value in curing all sorts of hay; but for curing clover it is indispensable. It is light, strong and durable; does not clog like almost every other form of Hay Tedder, and leaves the grass light and easily penetrable by the sun and wind.

"I cordially and heartily commend it to every farmer, and sincerely hope it will be as profitable to you as it assuredly will be to all who use it habitually.

JOHN STANTON GOULD."

Testimonials from practical farmers who have used this Tedder will be furnished upon application.

Each Machine is warranted to do the work as represented.

Directions.—Arrange the Harness so as to raise the Thills sufficiently to have the Forks, when in motion, strike near the

ground. Keep the Machine WELL OILED, in all its bearings. Do not throw it into Gear when in motion, neither back the Machine when in Gear. Letters of inquiry, or orders for Machines, should be addressed to

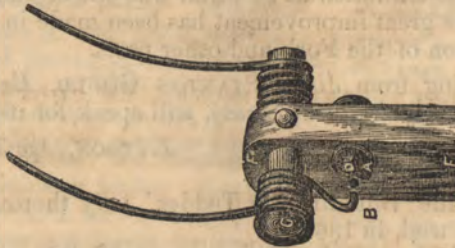
PRICE, DELIVERED ON BOARD CARS, IN NEW-YORK CITY.

6 Fork Machines fitted with Thills-----\$82 00

8 " " " Pole-----92 00

The large size can be used with one horse—Thills 3 00

KENNEDY'S IMPROVED HAY TEDDER FORK.



The difficulty and loss of time hitherto experienced in attaching or detaching the forks of tedding machines, in case of breakage, is entirely overcome by means of Kennedy's improved Fork; as by means of it, a fork can be removed and replaced in less than ONE MINUTE OF TIME, besides being much more firmly and securely fastened.

It has, moreover, this great advantage: Under the old system, if one tine was broken or damaged, the entire fork was lost, but, as these tines are made separate, either one can be detached without disturbing the other, thus saving one-half the loss by breakage.

To remove or replace a tine, it is only necessary to *loosen* the nut on the bolt D, turn the button until the straight side is on a line with the shank, and the tine is released.

These forks are made of better stock than any before offered, and can be readily attached to any of the BULLARD HAY TEDDERS now in use.

Apply to, or Address,

DUANE H. NASH, GEN'L AGENT,

29 Cortlandt Street,

NEW-YORK.

SHARES' COULTER HARROW,

AND
GRAIN COVERER.



SAVES LABOR---INCREASES CROPS.

After ten years' experience we believe this implement to be *unequalled* for the thorough and economical manner in which it **PULVERIZES & PREPARES THE LAND FOR THE SEED, AND COVERS IT WHEN SOWN.**

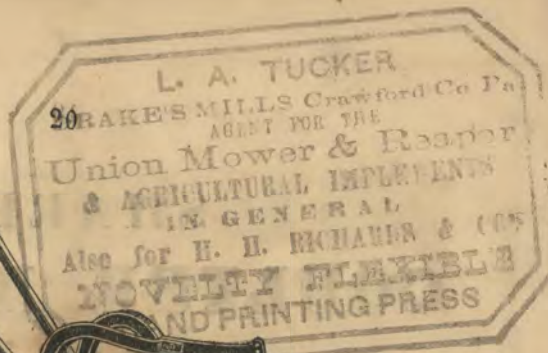
Comparative Merits.—The draft is much less than that of a common harrow, especially on turf land, as it takes less power to cut through sods than to tear through them. It does the work much faster, as it does not catch in stones or clog with weeds; consequently it never has to be lifted up, and has no tendency to pack the soil, as the common harrow has. It pulverizes the soil 4 to 6 inches deep.

In preparing land which needs plowing several times for root crops or grain, it is only necessary to plow *once*, as this Harrow will, by its lifting, pulverizing process, prepare the ground more thoroughly than can possibly be done with a plow, and in *one-fourth* the time, with the same team. Turf land can be ploughed in the fall, or at leisure; and when time to plant, go over it with the Coulter Harrow—it will be in as good order for planting as if ploughed the day before. In covering grain, it turns the seed under a uniform depth, and leaves the ground much smoother and more mellow than the common harrow.

A very large per centage, both in quantity and quality of cereals, will be gained by the use of this Harrow, from the evenness and depth with which it covers, especially if the season is dry. When sowed in the fall it lessens the liability of injury from frost. Grain lying upon the surface or slightly covered will not fill as well, and the heads are apt to be short, especially if the season is dry, and for fall sowed will be injured by the frost.

Where a Drill is used, this Harrow is also very desirable, as it prepares the ground for it much better than any other harrow.

Price at New-York, - - - - -	\$18
Sets of Teeth, separate, (11) - - - - -	11



B E T T S'

BRANCH BEAM HILLING PLOW.

Is adapted to every section of country, and every kind of soil where cast iron Plows are used.

Runs as deep as may be desired without any extra exertion in holding.

Holds easy, runs steady, and is not liable to clog.

Works different widths of rows by using it with the long or short wings, thus making a large or small hill as may be desired.

DESCRIPTION.

It is a great Labor-Saving Plow, and what every Farmer, Planter and Gardener needs, in cultivating all crops that require hilling, and which are planted in hills or drills, generally ranging from $2\frac{1}{2}$ to $3\frac{1}{2}$ feet apart.

Its advantages may be easily understood at a glance:

Its beam and mold-board are so constructed as to allow a portion of the loose soil, and also lumps and stones, instead of being thrown upon the plants, to fall in the centre of the furrow, leaving the ground perfectly loose and mellow between the rows.

It is also provided with a removable centre-piece, which is used to prevent the soil from falling in the centre of the furrow; suitable for plants that require much hilling, and also for ridging surface draining, or for nursery purposes.

It will save its cost by a very few days' use.

 Both sizes can be used with ONE HORSE, and both sizes throw same width of furrow.

No. 2, Adapted to Light Soil, with clevis.....	\$9 50
No. 1, " Heavy Soil, with clevis.....	10 00
Gauge Wheel and Standard, useful in light soil..	1 00

DUANE H. NASH,

Manufacturers' Agent,

29 CORTLANDT STREET,

NEW-YORK.