

MONITOR MOWER,

AND COMBINED

Mower and Reaper,

SELF AND HAND RAKE,

NISHWITZ'S PATENT.

MANUFACTURED

BY

F. NISHWITZ,

Nos. 134, 136, 138, 140, 142, and 144 FIRST STREET,

WILLIAMSBURGH, N. Y.

GENERAL AGENT.

Sold by



HAND MONITOR REAPER.

THE SUBSCRIBER

WOULD RESPECTFULLY CALL THE ATTENTION OF FARMERS AND OTHERS
INTERESTED IN

MOWERS AND REAPERS,

To his Latest Improved Machine,

THE MONITOR,

Which has been in general use for the past six years, during which time it has been submitted to the most thorough and rigid tests, not only as to its capacity to do good work on all kinds of bottom and under all circumstances, but the utility of its construction, its durability, and the amount of Power required to operate it; fully demonstrating the truth of the assertion made on its first introduction, that I had embodied in the MONITOR, without any complication of its parts, the following very desirable points, viz: Lightness with strength and durability, light draft, convenience of management, portability, simplicity of construction, and adjustability to all the different kinds of work or land on which it is used.

First—To obtain these important results I have wholly discarded the old system, and resorted to the use of PLANETARY GEAR, thereby securing many advantages which cannot be otherwise obtained. This application of gearing constitutes one of the most important features of my machine. I would specially invite those who intend to purchase the coming season, to give it a careful and thorough examination, in order that it may be fully understood, and its merits duly appreciated.

Secondly—In the peculiar construction of the JOINT CONNECTIONS of the Cutter Bar, I simply use a tongue and groove COUPLING JOINT, which gives to the Bar, in connection with the tilting motion of the frame, all the freedom and scope necessary under all circumstances, to conform to all uneven surfaces, and still remain completely under the control of the operator. This is accomplished in a more simple and durable manner, than can possibly be obtained from any kind of hinge or double hinge joint.

Thirdly—The PRINCIPLE OF BALANCING THE MACHINE, by which the Cutter Bar is made to run lightly over soft, sandy, rough or stony ground, or to make it hug the ground as closely as desirable to cut lodged grass in good style, by simply altering the fulcrum which supports the seat; also removing all pressure on the horses' necks, except the weight of the pole, when the Bar is raised to pass over obstructions, or while at work, or when folded in moving to and from the field.

The application of PLANETARY GEAR, the JOINT CONNECTIONS, manner of BALANCING, and LEVER for raising and lowering the Bar, are characteristic points of the MONITOR, and in their use and application belong exclusively to me.

The success of the MONITOR is without a parallel. Notwithstanding the strong opposition it has met with from those interested in other machines, and the most unscrupulous misrepresentations made by them, in addition to all the means and influence they have brought to bear against it, it has gained the favor and approval of a discriminating public, and now ranks as the leading and most popular machine of the day.

The MONITOR, for the coming season, has been improved in many respects, and none but the best material is used in its construction. Such alterations have been made as experience has suggested, being fully determined to keep up with the progress of the times, and furnish the Farmer with a Machine which may be relied upon, with the fullest assurance that it will meet their wants in every particular, and at prices to come within the reach of all.

F. NISHWITZ.

Williamsburgh, L. I., January 15, 1868.



MONITOR IN THE FIELD PASSING AN OBSTRUCTION.

THE PRINCIPAL POINTS IN THE CONSTRUCTION OF THE MONITOR MOWER AND REAPER,

TO WHICH WE WOULD CALL YOUR ATTENTION, ARE—

1st—**Two Drive Wheels**, FREE from all GEAR, working independent of each other.

2d—**A new application of Gearing**, constructed on purely SCIENTIFIC PRINCIPLES (called Planetary Gear), whereby the intermediate shaft and journals are dispensed with, reducing a great amount of friction, and at the same time giving a rapid motion to the crank, forming the most *simple, powerful* and *compact* gear ever applied to a Mowing Machine. This gear is entirely supported on the main axle, independent of the frame, consequently is not affected by any undue strain by coming in contact with obstructions, thereby avoiding all possibility of being thrown out of its proper bearing.

3d—**A Perfect Joint**, by which the Finger Bar is attached to or taken from the Machine, without the use of pins or bolts, which cannot get loose by wear, as is the case with all the other joint-bar Machines; besides it may be worked either loose or rigid at pleasure, by simply turning a nut. It will allow the Bar to work *below* a level as well as above, both ends conforming to all uneven surfaces of the ground, and in leaving the field, can be folded in a perpendicular position without leaving the seat or stopping the team.

4th—**Arranging the Pole, Driver's Seat and Frame**, in relation to each other, in such a manner as to balance the weight of the Finger Bar, and prevent any unnecessary pressure on the ground, or throw any weight on the horses' necks while working, or when raised to pass over obstructions, or in any position it may be placed, thus balancing the weight which otherwise must be carried by the pole or a third wheel.

The Seat is adjustable, so as to adapt it to the weight of any person, by simply shifting the fulcrum of its bearing. It is also placed upon an easy spring, and well back over the rear, placing the Driver out of all danger, and giving him a good command over the Machine.

5th—**An Improved Finger**, LAID WITH STEEL, hardened and ground to a bevel, forming a perfect shear edge. It is attached to the bar in an improved manner, is stronger, more durable than any other in use, and will not clog in any kind of grass, wet or dry.

6th—**Steel Shoes**, or Runners at each end of the Finger Bar, adjustable to cut any required height, which is very desirable in cutting lodged grass, or working on rough and stony ground.

7th—**A Perfect Raising Apparatus**, entirely under the control of the Driver, by which the Bar can be raised and lowered, or held in any position required. When raised to the full height, the outer end will be six or eight inches higher than the inner, and in all eighteen inches, allowing it to pass over any obstructions or cut grass.

8th—**The Pole** is attached with a joint, to the Frame, consequently can bring no weight on the horses' necks, and is placed in such relation to the drive wheels and gear as to avoid all side draft.

9th—**The Cutter Bar** is made of first quality English Spring Steel, imported expressly for this use.

10th—**It is instantly thrown** into or out of gear by the hand or foot.

11th—**By numerous Dynamometer trials**, it is proved to be **LIGHTER OF DRAFT** than any other machine in use.

12th—**The Hand-Reaper** is easily attached, and in every way adjustable to cut high or low. The Reel is overhung, and always retains its position parallel with the Platform. The position of the Raker is good, and the grain is easily laid off in a clean and workmanlike manner.

13th—**The Self-Raking Reaper Attachment** is an entirely **New Invention**, perfected during the last season; is constructed on new principles differing from anything heretofore attempted; it is simply an attachment to the Mower, and is hooked on to the Finger Bar in a few moments' time; has no cog gearing or complicated machinery about it; will deliver either a small or large sheaf of grain at the pleasure of the driver, and will lay the sheaf six feet away from the standing grain; it is so extremely simple in its construction, that it can be operated by any person capable of driving horses; there is nothing about it liable to get out of order.

In short, the **Monitor** embraces all the points necessary to constitute a **Perfect Mower** in every particular, besides being as good a **Reaper** as the best. The unprecedented sales it has met with, even in places where other so-called standard machines have been long and favorably known, clearly show not only its utility but superiority. The preference it has taken at every trial with other Machines, for being the *lightest of draft*, and the simplicity of its construction, its durability and easy management, as well as good work under all circumstances, commend it to the notice of every Farmer.

It is fully **WARRANTED** in every particular. If any part of a machine should prove imperfect, or give way by fair usage during the first season, such part will be furnished free of charge, except it be a knife section, neck yoke, or whiffletree.

Three acres of grass may be cut on trial by the purchaser. If the machine fails to work as represented, he must notify the manufacturer or agent, who will put it in order, or failing to do so, will exchange it for one that is perfect, and will work as represented.

The Reaper Attachment is warranted to do the work as well as any Combined Machine. If on trial it fails to do so, the Attachment may be returned, and the money or note refunded for the same.

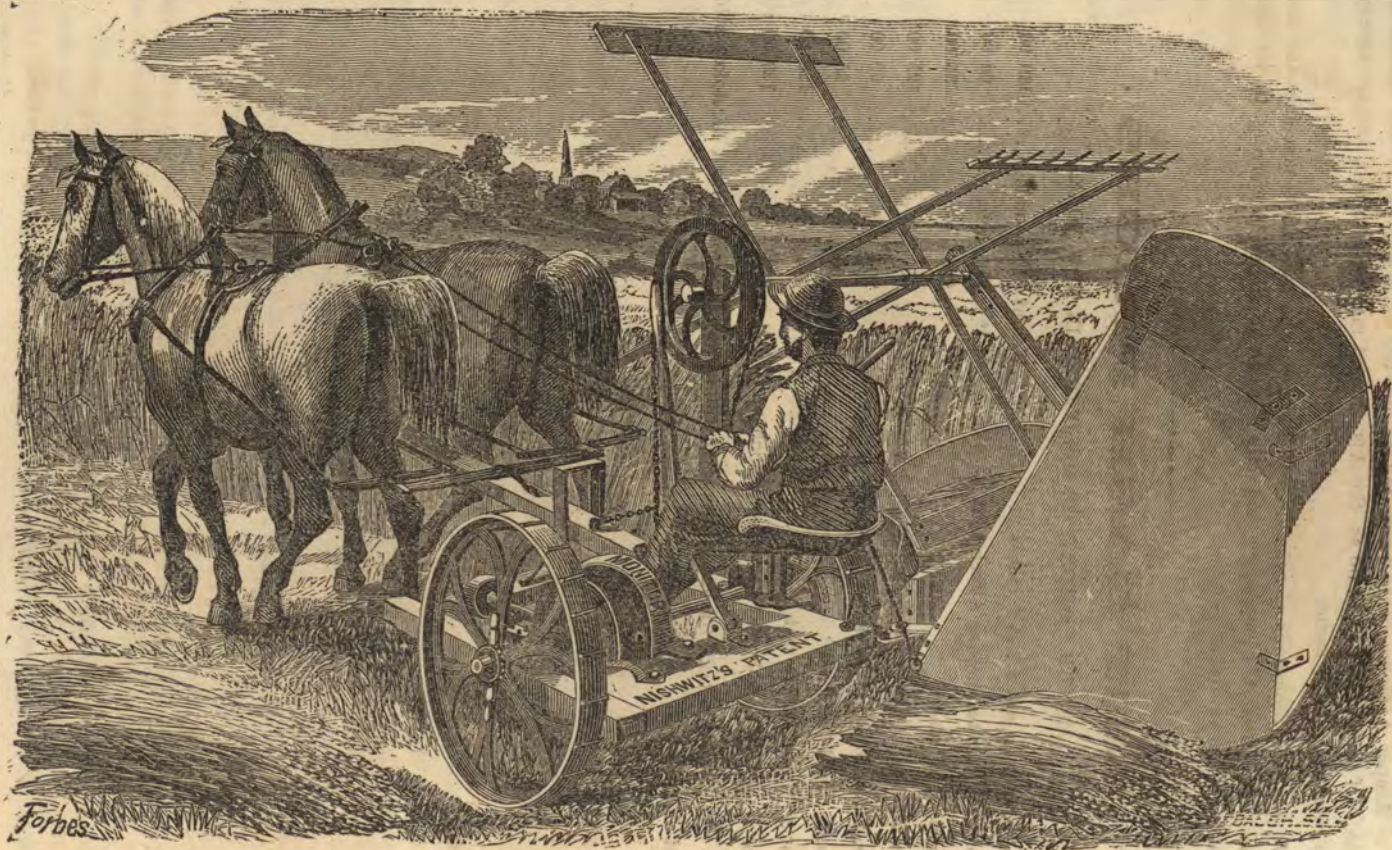
We can give thousands of references to Farmers who used these machines the last six years, but deem it unnecessary, and only a waste of paper, preferring to let the machine RECOMMEND ITSELF.

NET CASH PRICES

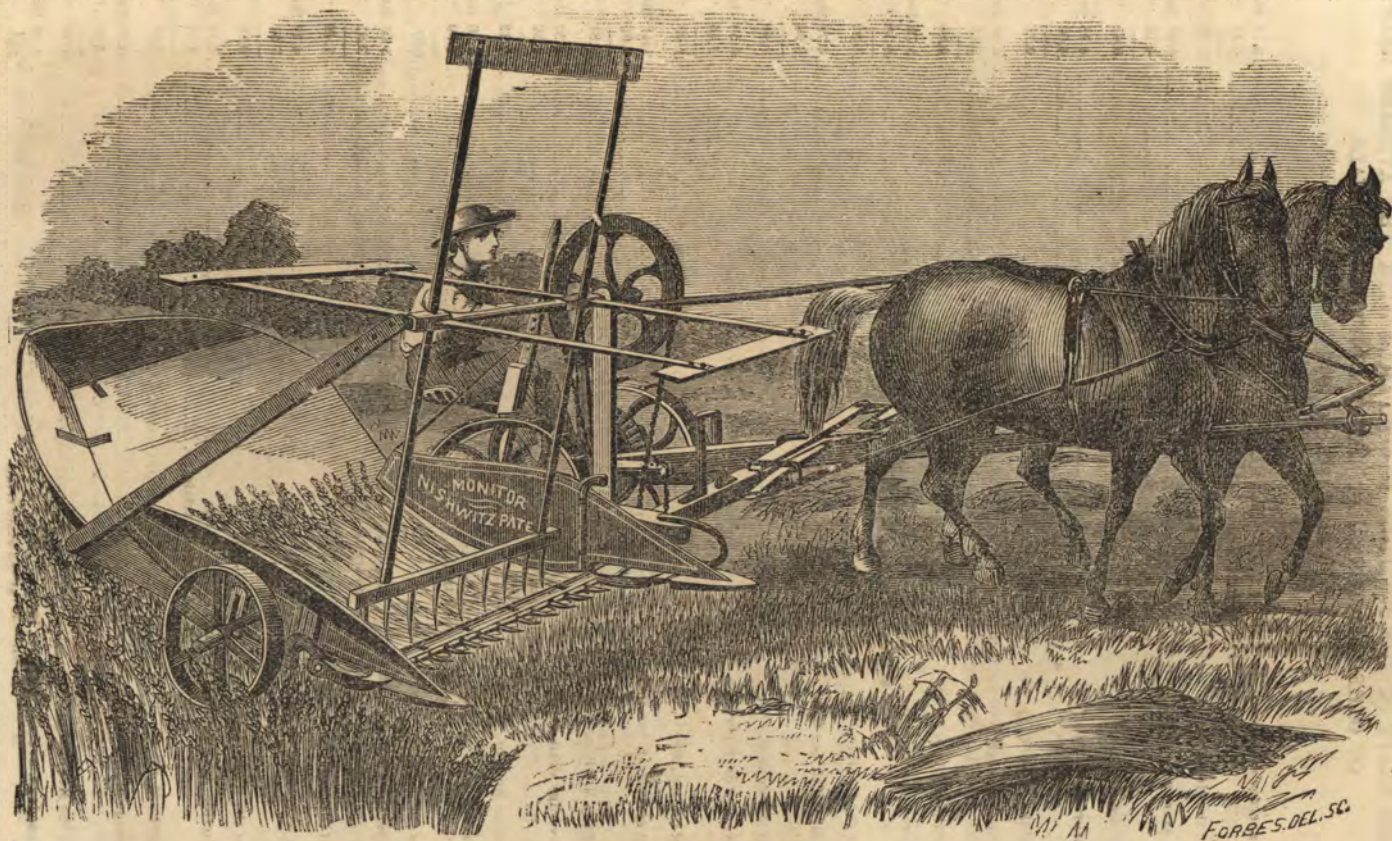
AT THE FACTORY, OR DELIVERED IN NEW YORK.

No. 1, Mower, cut 4 feet 9 inches.....	Weight 690 pounds.....	\$130 00
No. 1, Self-Rake Reaping Attachment.....	" 250 "	60 00
No. 1, Hand-Rake " ".....	" 250 "	35 00
No. 2, Mower, Cut 4 feet 3 inches.....	" 650 "	125 00
No. 2, Self-Rake Reaping Attachment.....	" 200 "	50 00
No. 2, Hand-Rake " ".....	" 200 "	35 00
No. 3, Mower, Cut 4 feet.....	" 550 "	120 00
No. 4, Mower, (one-horse) Cut 3 feet 6 inches....	" 500 "	120 00

 The new SELF-RAKE REAPER ATTACHMENT will fit any MONITOR MOWER, heretofore sold, without alterations.



Self Rake Reaper in the Act of Discharging a Gavel.



Self Rake Reaper in the Act of Raking a Gavel from the Platform.

AVERAGE DRAFT OF THE MONITOR, AS COMPARED WITH THE AVERAGE DRAFT
OF OTHER MACHINES, AT SIXTEEN DIFFERENT TRIALS,
FROM 1863 TO 1867.

Buckeye, average draft per inch.....	5.11 lbs.
Monitor, " " " " at the same trials.....	4.11 "
In favor of the Monitor, " ".....	1.00 "
Hubbard, average draft per inch.....	4.49 lbs.
Monitor, " " " " at the same trials.....	4.06 "
In favor of the Monitor, " ".....	0.43 "
Clipper, average draft per inch.....	4.78 lbs.
Monitor, " " " " at the same trials.....	4.00 "
In favor of the Monitor, " ".....	0.78 "
Cayuga Chief, average draft per inch.....	4.55 lbs.
Monitor, " " " " at the same trials.....	3.75 "
In favor of the Monitor, " ".....	0.80 "
Union, average draft per inch.....	5.70 lbs.
Monitor, " " " " at the same trials.....	4.18 "
In favor of the Monitor, " ".....	1.52 "
Ohio, average draft per inch.....	4.78 lbs.
Monitor, " " " " at the same trials.....	3.30 "
In favor of the Monitor, " ".....	1.48 "
Wood's, average draft per inch.....	6.50 lbs.
Monitor, " " " " at the same trials.....	4.46 "
In favor of the Monitor, " ".....	1.90 "
Farmer, average draft per inch.....	5.41 lbs.
Monitor, " " " " at the same trials.....	4.60 "
In favor of the Monitor, " ".....	0.81 "
Raritan, average draft per inch.....	4.52 lbs.
Monitor, " " " " at the same trials.....	4.39 "
In favor of the Monitor, " ".....	0.13 "
Kirby, average draft per inch.....	5.36 lbs.
Monitor, " " " " at the same trials.....	4.39 "
In favor of the Monitor, " ".....	0.97 "
Yankee, average draft per inch.....	5.00 lbs.
Monitor, " " " " at the same trials.....	3.51 "
In favor of the Monitor, " ".....	1.49 "
American, average draft per inch.....	4.17 lbs.
Monitor, " " " " at the same trials.....	3.51 "
In favor of the Monitor, " ".....	0.66 "
Young Warrior, average draft per inch.....	4.12 lbs.
Monitor, " " " " at the same trials.....	3.51 "
In favor of the Monitor, " ".....	0.61 "
Eagle, average draft per inch.....	5.21 lbs.
Monitor, " " " " at the same trials.....	3.51 "
In favor of the Monitor, " ".....	1.70 "
Chief of Onondaga, average draft per inch.....	4.29 lbs.
Monitor, " " " " at the same trials.....	3.51 "
In favor of the Monitor, " ".....	0.78 "

DIRECTIONS

FOR SETTING-UP THE MONITOR MOWER.

They are always shipped in three parts—1st, the Mower, to which is tied the Seat, Lever, Track-Clearer Board and Stick ; 2d, the Cutter Bar, and two sets of Knives ; 3d, the Pole.

In the Tool Box will be found one Guard, two Sections, one Wrench, Oiler, Cold Chisel and Punch, and a paper of Rivets.

After unpacking all the parts, first attach the Cutter Bar, by turning up the machine on its rear end, bring the cutter bar to the under side of the machine, with the points up, the upper side towards you and the heel towards the left hand ; insert the Tongue of the Bar into the circular groove of the joint, and fold it around into its place, without removing any of the joint castings ; turn the Machine back to its place, and fasten the short Chain which is attached to the Cutter Bar to the Iron Lever.

Put the Pole through the Manager, and attach it to the Pole Hinge (No. 15), also fasten the Foot Brace (No. 30) to the upper side of the Pole by the same bolts ; see that the short iron Lever comes under the Pole ; fasten the Seat-Bar into the Foot Brace, also to the fulcrum which supports it ; attach the main Lever to the Pole Hinge, and hook on the Chain for raising ; put on the Track Clearer, and the Machine is together.

Now elevate the Pole as high as the Horses will naturally carry it, and adjust and balance the Machine for the different kinds of work.

Adjust the short Chain which is attached to the Bar, so that when the Bar is raised, as in passing over an obstruction, the outer end will be as high as the inner ; this will let the Bar drop enough below a level for all ordinary work, but for very uneven ground lengthen this short Chain a little.

Balance the Machine according to the weight of the Driver, so that the Cutter Bar may run lightly on the ground. For a light person, move the upper end of Seat-fulcrum forward, and the lower end back ; for a heavy person, the reverse. In the same manner balance it still lighter, for rough and stony ground, or throw more weight on the Bar when cutting lodged grass.

By means of the adjustable Shoes or Runners at each end of the Bar, the Machine can be so regulated as to cut a high or low stubble.

Be careful to keep the Machine well oiled, the Cogs well greased, and the Nuts screwed tight. See that none of the Boxes work loose, and the Knives kept sharp.

DIRECTIONS FOR ATTACHING THE HAND REAPER.

1st, Remove the Seat-Bar from the Foot Brace, and bolt the Reaper Seat-Bar to the Frame just back of the gear ; bolt the Raker's Stand and Seat to the frame back of the right-hand Axle Box ; throw the Lever forward as much as possible ; raise the Machine to the height you wish to cut and hook the Chain to the Lever ; place the Iron Hanger in the hole on the rear end of the frame ; fasten the Pulley (which drives the Reel) to the right hand Ratchet-Hub with the Set-screw, and take off the Track-Clearer.

2d, Bolt the Reel Standard Iron to the Heel of the Platform ; also attach the Wheel to the outside of it, attach the Platform to the Finger Bar by three bolts, and hook the short Chain on the rear of the Platform to the Iron Hanger ; disconnect the short Chain from the Iron Lever ; pass it through the eye on the Platform, and use the Swivel for a nut ; screw it up tight, so as to keep the Platform snug up to the Bar.

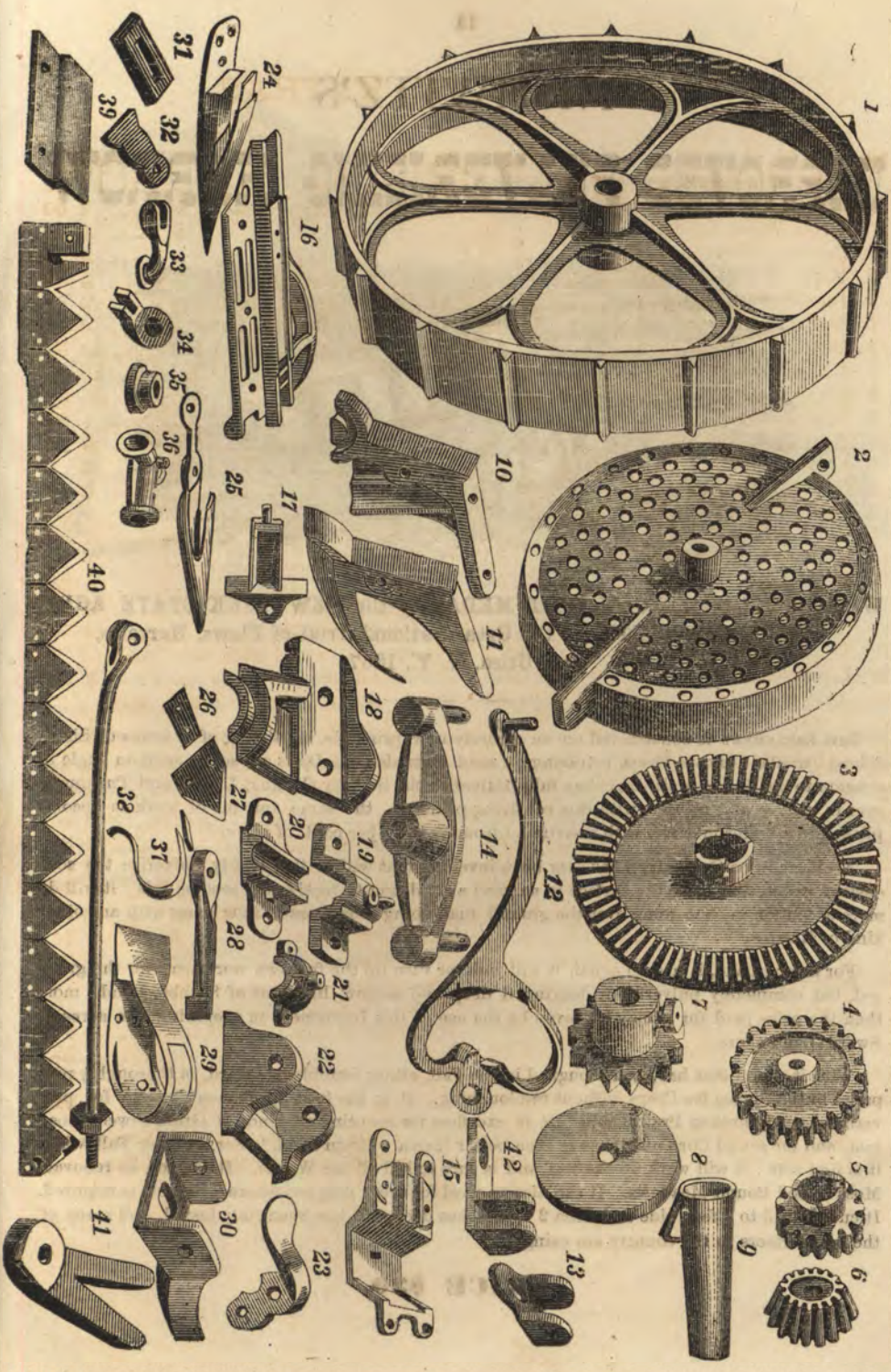
3d, Bolt the Reel Post to the Reel Standard, also the Inside Divider, and attach the Shield Board to the Inside of the Platform ; bolt the Reel connection to the Reel Post ; pass the Chain Belt under the two adjustable pulleys and let it run as slack as possible, and drive the Reel without slipping ; adjust the Reel to the proper height ; also forward or back so as to bring the Grain on the Platform.

After the Reaper is once set up, to change the Machine for Mowing, simply take out the Bolts that hold it to the Finger Bar, unhook the Chain from the Hanger, and set the Reaper off entire.

PRICE LIST OF EXTRAS.

No.	Price.	No.	Price.
1. Drive Wheel for Large and Medium Machines (each).....	\$9 00	39. Heel Plate.....	\$0 30
Drive Wheel for light.....	8 00	40. Scythe complete—4 ft. 9 ins....	7 00
2. Converge Gear.....	3 75	“ “ 4 “ 3 “.....	6 50
3. Bevel Wheel.....	3 00	“ “ 4 “.....	6 00
4. Intermediate Pinion.....	1 00	“ “ 3 “ 6 “.....	5 50
5. Main “.....	0 90	41. Track-Clearer Iron.....	0 60
6. Bevel “.....	0 75	42. Bearing for Iron Lever.....	0 30
7. Ratched Hub.....	0 75	Finger-Bar complete, No. 1.....	40 00
8. Crank Balance.....	1 50	“ “ “ 2.....	35 00
9. Pole Socket.....	0 40	“ “ “ 3.....	30 00
10. Rear Jaw.....	1 75	Scythe Heel.....	1 00
11. Front “.....	1 75	“ Caps.....	0 15
12. Gear Shifter.....	0 75	Iron Washer.....	0 5
13. Spring Clip.....	0 25	Split Keys.....	0 5
14. Arm, with Stud Pins.....	2 00	Lifting Lever.....	1 00
15. Improved Crank Box.....	1 75	Guard complete.....	0 50
16. Pole Hinge.....	3 50	Seat.....	1 50
17. Guard Center.....	0 15	Swivel.....	0 25
18. Shoe.....	1 75	Half Section.....	0 15
19. Upper part of Crank Box.....	0 75	Pole Manager.....	2 00
20. Lower “ “ “ “.....	0 75	Crank Shaft, with Pinion and Crank Balance.....	3 50
21. Axle Box.....	0 30	Crank Shaft, without Pinion and Crank Balance.....	1 25
22. Lower Pole Hinge.....	0 40	Track-Clearer, complete.....	1 50
23. Treadle.....	0 20	Inside Runner (Steel).....	1 50
24. Outside Shoe.....	1 50	Outside “ “.....	0 50
25. Guard Finger.....	0 25	Pole.....	2 50
26. Guard Plate (Steel).....	0 10	Whiffletrees.....	3 50
27. Section.....	0 25	Neck Yoke.....	1 50
28. Pawl.....	0 30	Rivets, (per lb.).....	0 30
29. Socket for Track-Clearer Iron.....	1 00	Shafts for One-Horse Mower.....	5 00
30. Foot Brace.....	0 50	Screw Bolts.....	0 12
31. Gauge.....	0 10	Brass Washer.....	0 20
32. Dog.....	0 10	Lever Chains.....	0 75
33. Cap for Axle Box.....	0 10	Pitman Pins.....	0 10
34. “ Crank “.....	0 10	Wrenches.....	0 30
35. Gear Shifter Collar.....	0 10	Chisel.....	0 25
36. Pitman Box (Brass).....	2 00	Punch.....	0 20
37. Dog Spring.....	0 30	Oiler.....	0 25
38. Pitman.....	2 00		

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 and length of the Cutter Bar.



NISHWITZ'S IMPROVED PULVERIZING HARROW



Was Awarded the **SPECIAL GOLD MEDAL** by the **NEW YORK STATE AGRICULTURAL SOCIETY**, at the Great National Trial of Plows, Harrows, &c., Utica, N. Y., 1867.

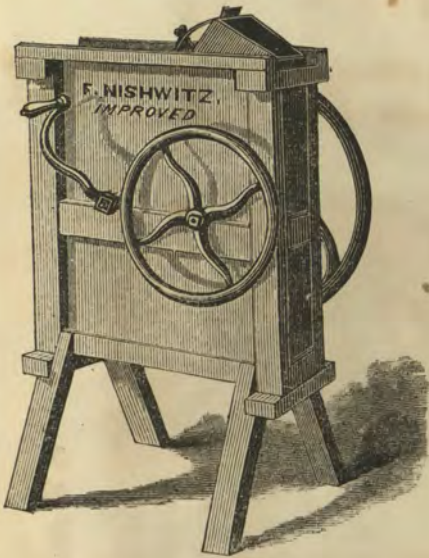
THIS IMPLEMENT is constructed on an entirely new principle, consisting of a series of Sharp Edged Circular Concave Discs, revolving on steel journals ; the Discs are set at such an angle in relation to the line of draft, that they fully Pulverize the Soil, by Cutting, Lifting and Turning it over in *fine, small furrows* ; with this revolving principle, the same amount of work is accomplished in a better manner, with a saving of from 50 to 75 per cent. of power.

No HARROW or CULTIVATOR has ever been invented that will so thoroughly pulverize the soil, destroy weeds, and leave the surface in so good a condition to receive the seed as this ; it will do more execution in once going over the ground, than going over three or four times with any other kind of Harrow.

For Sward Land, it has no equal, it will neither turn up the furrows, nor turn over the green sod, but completely pulverize it, leaving it deep and mellow, like that of Stubble Land ; more than the price paid for it may be saved by the use of this Implement in preparing five acres of Sward Land alone.

With it, Land that has been ploughed in the Fall, either Stubble or Sward, is thoroughly prepared in the Spring for Crops without re-ploughing. It is the best Implement known for pulverizing newly broken Prairie land. It is excellent for covering all kinds of Grain sowed broad cast, and for sowed Corn and Peas is even better than a "Grain Drill." For Summer Fallowing, it is first rate ; it will work up the soil, and is sure to kill all the Weeds. It is good to renovate Moss or Sod Bound Meadows. It can also be used for every purpose where a Harrow is required. It cuts from 5 to 7 feet wide and from 2 to 4 inches deep. It has been fully tested, and many of the best farmers in the country are using it.

PRICE \$30.



NISHWITZ'S

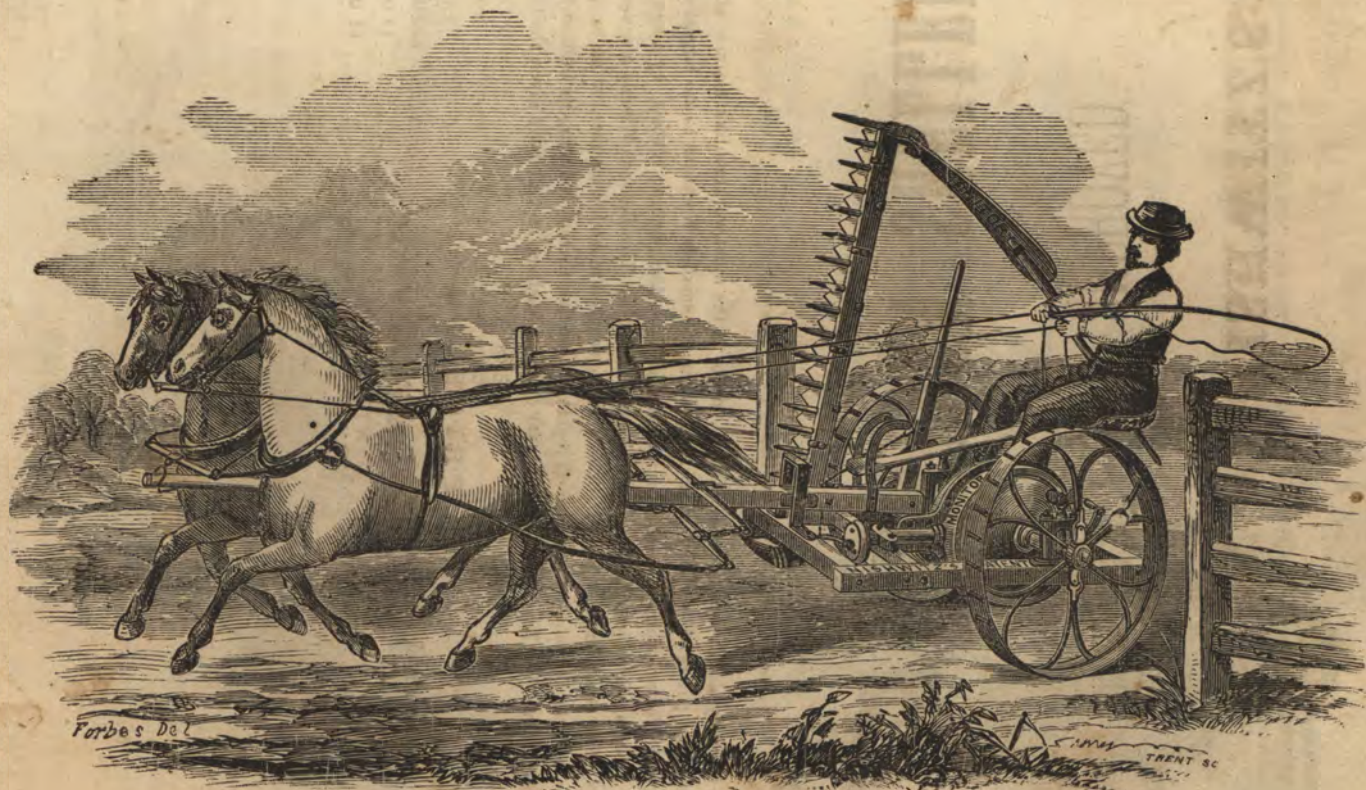
IMPROVED

CORN SHELLER.

THIS is a very simply constructed MACHINE, made in the most workmanlike manner and of the best material ; it is adapted to *Shell all kinds*, from the smallest Northern to the largest sized Southern and Western Corn. The Shafts are secured into the Shelling Wheels, by a new and patented process, which prevents them ever becoming loose The Balance Wheels are secured by screws, so as to be easily removed. The Feet are secured in such a manner, so as to stiffen the frame, and can be removed and packed inside the Sheller, thereby reducing its bulk and cost of transportation. We have built over 30,000 of these Shellers, and all have given the best of satisfaction.

PRICES:

One Balance Wheel, Single Hopper.....	\$10 00
Two " " " "	11 00
" " " Double "	14 00



MONITOR MOWER.