

March 10 1892

THE
MORGAN
"SPADING"

[Trade Mark "SPADING."]

HARROWS



MANUFACTURED ONLY BY

D. S. MORGAN & CO.

B. L. BRAGG & CO.,

GENERAL AGENTS,

SPRINGFIELD, MASS.

THE MORGAN SPADING HARROWS

SOMETHING ENTIRELY NEW.

NO HARROW IN THE WORLD EQUALS THEM
IN OPERATION.

Warranty.—All goods are guaranteed to be made of the best materials and workmanship, to be durable with proper usage, and to do good work when properly operated. Warranted against breakage only by manifest defect in material.

The Best Pulverizers in the World.

THEY ARE LIGHT DRAFT.

HISTORY.

The "MORGAN SPADING HARROW" was brought out by us and first offered for sale in the Spring of 1890. But few were made or sold that year as we only aimed to perfect it. While skeptical dealers prophesied it would not work or prove a success and competitors ridiculed it and false reports were circulated it rapidly gained in popular favor. Its novel appearance and clearly radical departure from anything manufactured excited curiosity, that led to a trial and that was always convincing that we had the "World's Greatest Pulverizer." It is not surprising therefore that in 1891, before February 1st, we were overwhelmed with orders and were obliged to run our factory day and night to supply the demand and its sales during 1891, practically the first year reached a figure probably never before attained by the most popular harrow ever made during the first year of its introduction and equal to that of many old established makes. We shall double our output for 1892 and the present outlook warrants us in claiming we shall find a ready sale for all of them.

CONSTRUCTION.

The action of each cutter might be pronounced similar to that of a small spade, lifting and turning the soil from a depth of four to six inches, doing more perfect work than is possible with any other Harrow in the world.

The blades or spades are made from spring steel, in operation vibrating and shaking off the soil.

The gangs are so arranged that they freely float enabling the most uneven ground to be thoroughly harrowed and left level.

It leaves no furrows or ridges, such as is left by disc, cutaway, and other harrows, so, when the field is harrowed it is all left smooth.

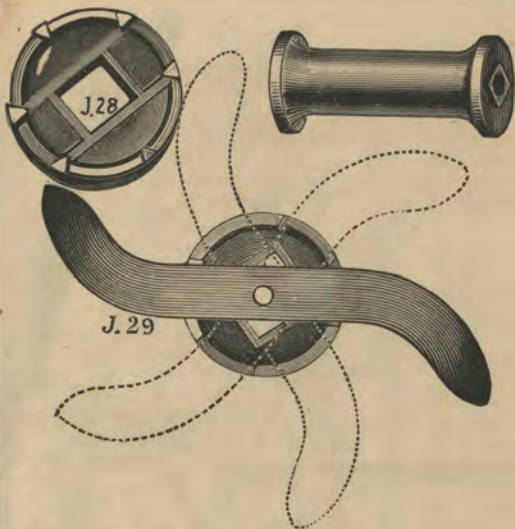
Although the work performed is greater, yet the draft compares favorably with other implements of this character.

While, by reason of the peculiar construction of the blade or spade, the style of operation differs from that of the solid disc or cutaway harrow, yet, a comparison with these tools will, perhaps, demonstrate a material reason why the draft should be much lighter.

Solid discs in one revolution bear, substantially, a constant scraping contact with the earth, of about four feet. Cutaway discs present a very similar contact, of about two feet in a revolution. Both styles are, usually, weighted down to perform their work.

Our blade, is narrow, rounded and sharp—the end having but about two inches cutting surface—or one foot in a revolution of one set of blades. The penetration is, consequently, easily made; the peculiar shape or angle of the blade does the rest—works the soil much deeper, thoroughly pulverizes, leaves the ground more even, and all with less draft.

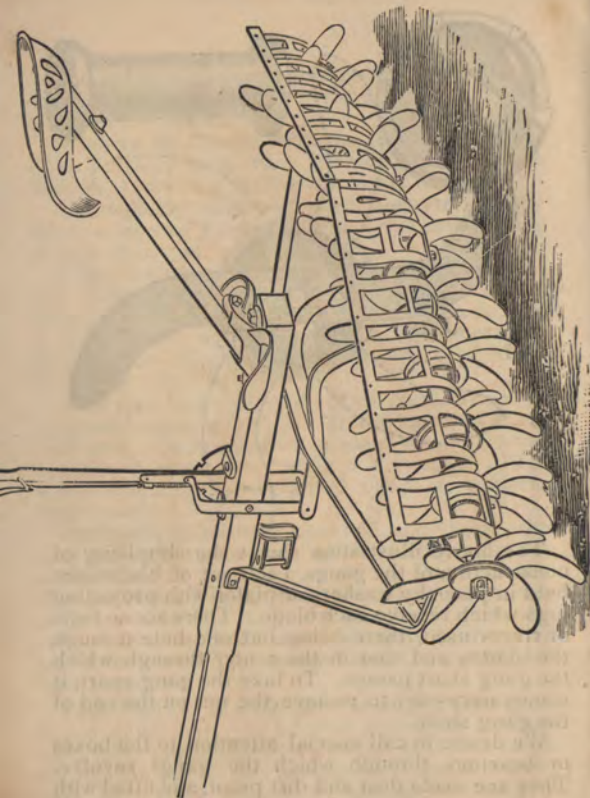
Each blade is a solid piece of forged steel and is not at all likely to become damaged. While altogether improbable—if through some unlocked for mishap one should become so, it can, if necessary, be readily replaced by the farmer and at a trifling expense.



The above illustration shows the simplicity of construction of the gangs, each set of blades are held in place by washers or plates with projecting lugs which receive each blade. There are no bolts or rivets used, there being but one hole through the blades and that in the center through which the gang shaft passes. To take the gang apart, it is only necessary to remove the nut on the end of the gang shaft.

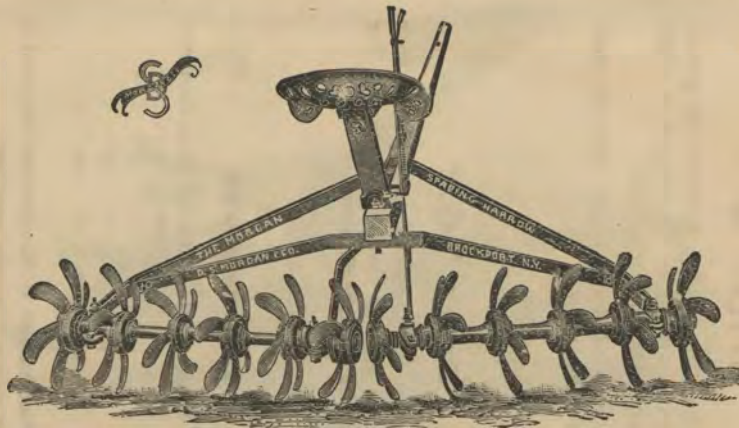
We desire to call special attention to the boxes or bearings through which the gangs revolve. They are made dust and dirt proof, and fitted with an oil chamber which is covered, not with a cork, or plug, but a light spring cap.

The frame is arched so as to clear the most uneven ground.



Morgan Spading Harrow, Style "A."

6 ft. Standard Size for two horses, 12 sets of 16 inch Blades.
With cleaner attachment.



MORGAN SPADING HARROW, STYLE "A" & "C."

6 ft. Standard Size for two horses—12 sets of 16 in. Blades.

Weight 300 pounds.

STYLE "A"

Has two adjustable gangs. It works the ground deep or light according to the position in which the gangs are adjusted by the lever.

This style is adapted to any ordinary work required of a pulverizer.

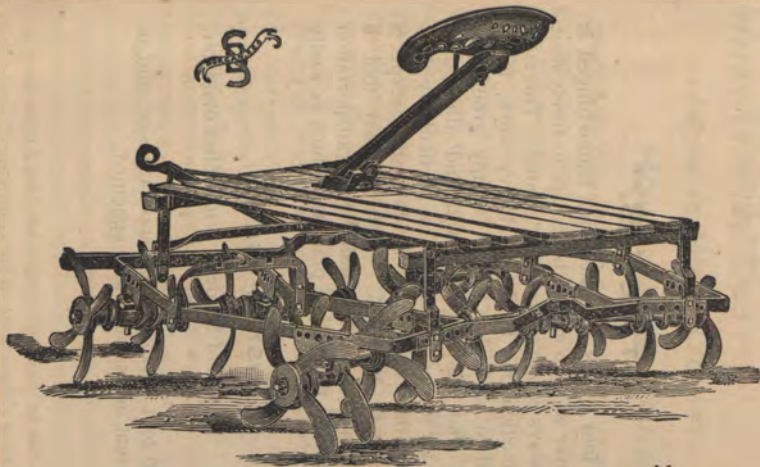
STYLE "C."

This harrow is the exact counterpart of style "A," except it is built heavier throughout. The blades being 18 inches in diameter.

LIST OF SIZES.

3 ft. (for 1 horse)	8 sets of Blades,	16 in. diameter.		
5 "	10 "	" "	"	16 "
6 "	12 "	" "	"	16 "
8 "	16 "	" "	"	16 "
10 "	18 "	" "	"	16 "

The 6 foot harrow is the standard size and is always sent unless otherwise specified.



MORGAN SPADING HARROW, STYLE "B."

Weight 362 lbs. 6 ft. Standard Size for 3 horses—20 sets of 16 in. Blades.

STYLE "B."

Has four gangs, mounted on a frame hinged at the center so as to allow the gangs to freely float, thus always conforming to the ground. This style is for particularly hard and heavy work, being adapted to hard clay, heavy, lumpy ground, or ground that has been plowed and allowed to remain for a long period. For particularly difficult work this class, style "B," is in some respects preferable to style "A." It is an easy tool to handle, can be quickly folded for transportation by removing the riding platform which is easily done.

LIST OF SIZES.

6 foot,	20 sets of Blades,	16 inches diameter,
10 "	32 " " "	16 " "

The 6 foot harrow is the standard size, and is always sent unless otherwise specified.

WHAT IT WILL DO!

HOW IT WILL DO IT!

HOW IT HAS DONE IT!

For Fitting Ground Without Plowing.—There is a great deal of land that can be thoroughly fitted with the Morgan Spading Harrow without the aid of a plow, even when the soil is very compact and baked, as it not only thoroughly pulverizes the ground, but it will work it up from a depth no other harrow can reach. And if it is desired, the grain or grass seed can be sown over the field broadcast and no harrow made will equal it for covering the sown grain or seed.

For Fall Plowed Ground.—In this class of work the Morgan Spading Harrow will show its best points, especially if the soil is heavy and packed by rains. It has been customary on this class of work to break up the ground with a cultivator or similar tool and then if in big lumps and clods, as is usually the case, to work with other tools and roller to pulverize them, and the work required has led many farmers to abandon fall plowing as too expensive. But with the Morgan Spading Harrow all is changed, and they find without the aid of any other tool the ground can be thoroughly pulverized

and worked up and left as smooth as after a spike or spring-tooth, and not in ridges or furrows as after a disc, cutaway or other rotary harrow.

For Sod Ground—It will fit sod nicely, but care must be used not to set the gangs at too great an angle, nor to weigh the harrow too heavy, and also to drive the harrow in the proper direction. Otherwise if the sod is fresh and shallow plowed the teeth will go below the depth of plowing and tear up the sods.

For Clods and Lumps.—It is surprising the rapidity with which the Morgan Spading Harrows will cut up, reduce and pulverize to a seed bed lumpy, hard ground, and nothing in the shape of a harrow made will equal it. While with the weight of the driver on it will soon pulverize any ordinary lumpy ground, still for extreme cases, as for instance, getting out clay for a brick yard (for we have sold harrows for that purpose), we have a weight box attachment that can be furnished at a small additional cost.

For Cultivating Corn.—If desired, we can furnish adjustable frames for cultivating or plowing corn that spread the gangs so two rows can be cultivated at a time, and as the harrows break up the

ground and destroys the weeds, but does not ridge it, it is highly prized for this class of work. We charge extra for adjustable frames.

For Corn Stubble.—The Morgan Spading Harrow will work splendidly on this ground even if not plowed as the blades will cut up and cover the stubble, at the same time thoroughly pulverizing the ground, but if the corn stalks are left long and much trashy vines or grass grows up and the harrow used during damp, wet weather it may need our cleaner attachment to keep the blades free and the harrow from clogging.

The cleaner attachment will be furnished at a small additional cost.

For Working in Manure and Straw.—Nothing can equal the Morgan Spading Harrow in working in and thoroughly mixing with the soil manure or straw spread over the ground. In this class of work if the ground is wet and sticky a cleaner attachment might be necessary.

For Vineyards and Orchards.—For vineyard and orchard work the style "A" harrow is used with great success. For this class of work we furnish *reverse irons*, whereby the gangs can be easily reversed, to throw the soil *from* the plant, cultivating the ground thoroughly whether throwing the soil to or from the roots of the plant.

EDGEMONT, MARYLAND.

D. S. MORGAN & Co.

Gentlemen.:—I saw your Spading Harrow at the Hagarstown Fair last fall, and as soon as I saw it I thought it would be a good implement for cultivating fruit trees. *I now have six of these harrows in my orchard of 700 acres*, and consider it the best tool for orchard work I ever used.

JOHN A. NICODEMUS.

For Stony Ground.—While the disc, cutaway, and all other rotary harrows are useless in stony ground owing to the large surface they present and which prevents them from working into the soil, the Morgan Spading Harrow is more like the spring tooth in this class of work as it has a narrow thin blade not easily affected by stone and we have had the best reports from its work on such ground.

Deep Cultivation.—A trial will convince any one that no harrow manufactured to-day will work up the ground so deep as the Morgan Spading Harrow. It must be extremely hard ground if with the weight of driver it does not penetrate five or six inches, still by taking off weight of driver and setting gangs at but slight angle, it will work shallow as one could want.



TONNERRE, *FRANCE*, June, 1891.

D. S. MORGAN & Co.

Gentlemen:—I have made the Morgan Spading Harrow compete at Nogent on the Seine (Aube) and I have brought back the first prize medal of Gold.

PAUL FRANCEY,

Gen. Agt. for France.

(The above is a cut of the Gold Medal.)

CONCLUSION.

From the foregoing it will be seen that the Morgan Spading Harrow fills a long felt want among the farming community, and is being eagerly sought for by the most enterprising and successful farmers and planters of the United States and foreign countries. While it does a class of special work no other harrow will do, it is nevertheless a general purpose harrow, working perfectly in any place or soil where a harrow is needed.

Our harrow is fully covered by patents owned and controlled by us, and we have a "trade mark" on the word "SPADING" as applied to our harrow.

While we will fully protect any and all purchasers and users against any claims for royalties or penalties, we also will rigidly maintain our rights and protect ourselves against infringers.

To Order Harrows.—Apply to us or any of our agents for prices. Then send the price of the Harrow by New York draft or postoffice money order to us or any of our jobbers or agents. Give shipping directions in full and prompt shipment will be made at lowest rate of freight.

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