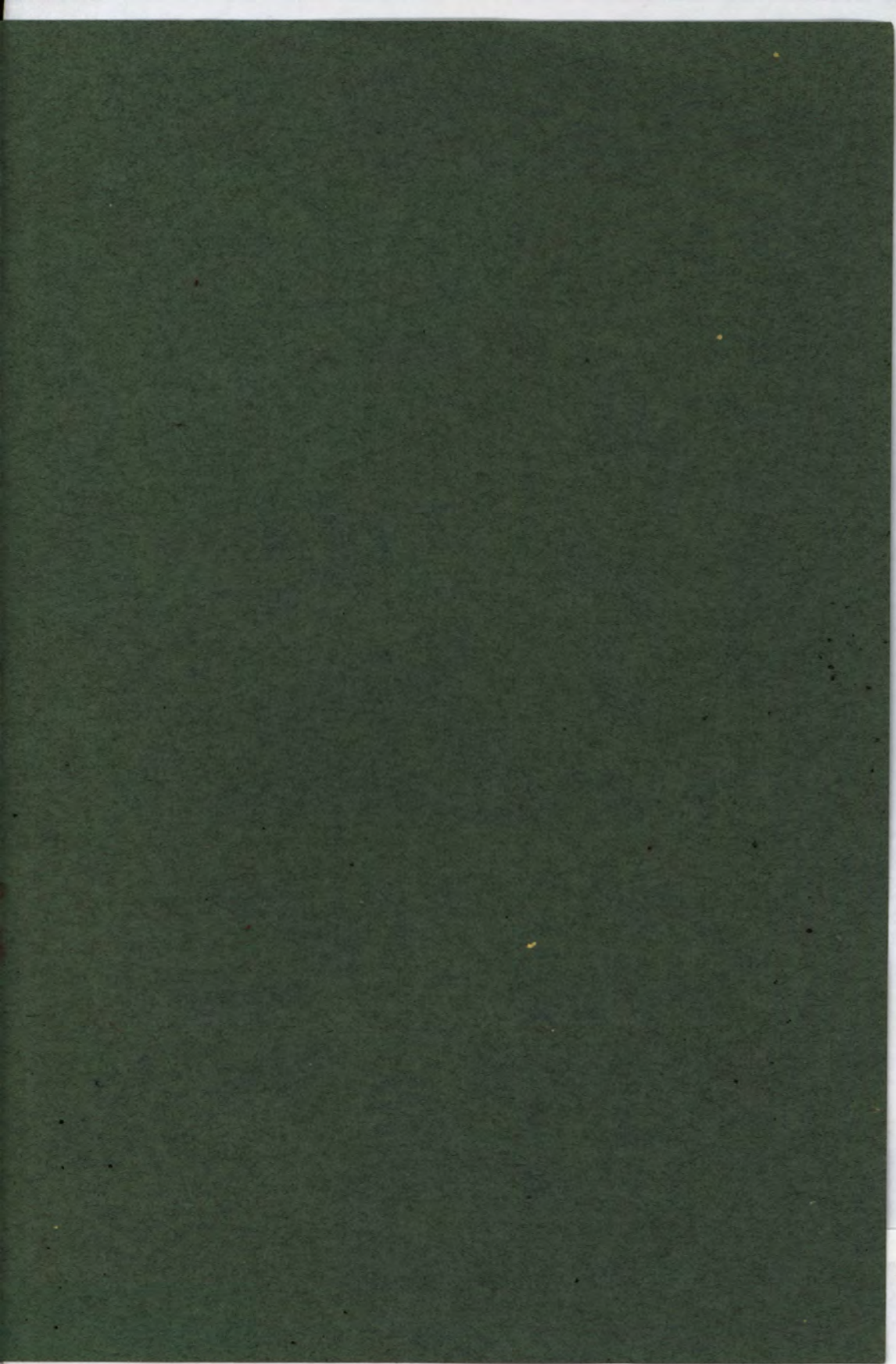




American Harrow Co.
DETROIT, MICH.





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A BRIEF DESCRIPTION OF
THE FAMOUS

NEW AMERICAN

CULTIVATOR AND HARROW

WITH ITS ATTACHMENTS



American
Harrow Company



DETROIT, MICHIGAN

D. M. FERRY, . . . President
R. W. GILLET, . . Vice-President
W. W. COLLIER, Sec'y and Treas.

MAKER OF

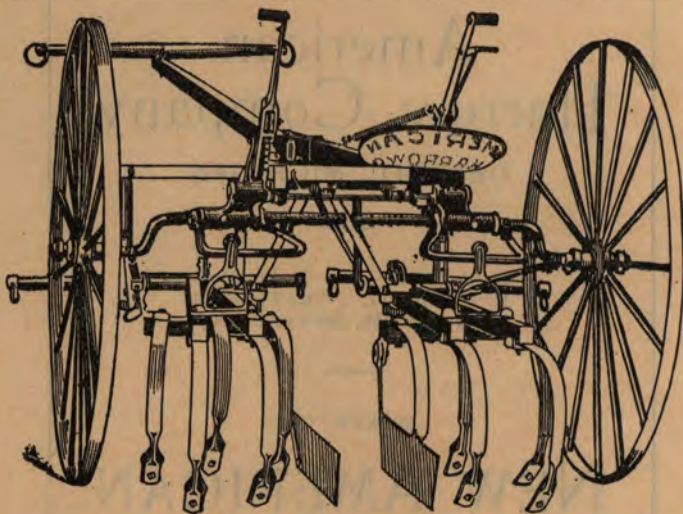
NEW AMERICAN

MANURE SPREADERS
RIDING AND WALKING
CULTIVATORS, AND
DISC HARROWS

The New American Cultivator.

THE NEW AMERICAN has been so favorably known and so thoroughly appreciated by its thousands of owners for so many years that it may seem incredible to some that anything about it should be improved, but improvements are constantly being made, and while the NEW AMERICAN is one of the oldest cultivators on the market today, it is also one of the most up-to-date. It answers the demands of the modern farmer in a way peculiar to itself, and to a degree unequalled, we believe we are justified in saying, by any other cultivator. That is, there are more desirable features embodied in its construction than in any other one machine.

The levers are to a cultivator as the rudder is to a ship; and in the levers particularly the New American excels. Our patent Lock Lever device has always been foremost among the important features of this machine, but the Lock Levers as now used are very much superior to the Lock Levers as formerly used.



New American Cultivator Double Lock Lever, Telescope Arched Axle, Steel Wheels, Central Section removed. Patent Reversible Points on the Teeth.

They are in more convenient position for handling, the radius of the sectors is larger, giving a finer graduation to the depth of cut, and to each lever is attached a tension spring, which is very easily adjusta-

ble, so that the operator can set it to handle any weight of section with perfect ease.

The Spring Teeth (or shovels) are set in the ground to any desired depth, and the Lock Levers hold them securely in that position whether in sand, gravel or clay, hard or soft ground. No "loading" or standing on the sections is ever necessary to force them in, no matter how hard the ground is. And a perfectly uniform tillage is always obtained.

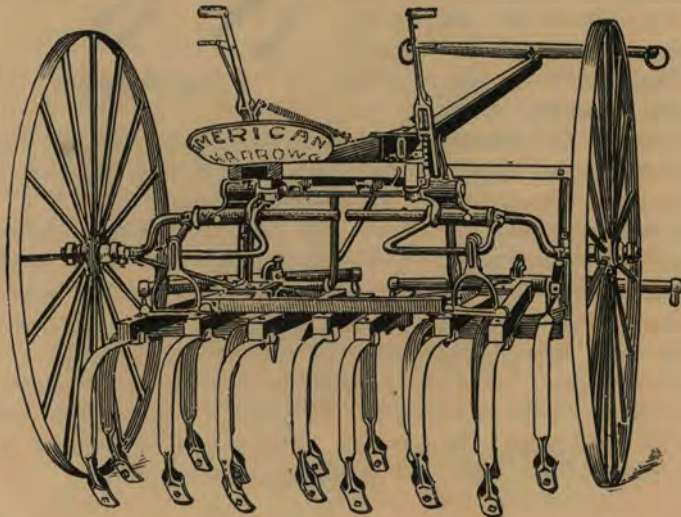
The tension of the springs can be so regulated that they will raise the sections as soon as the levers are released.

A boy can operate this machine just as well as a man, as it is not muscle but machinery that does the work.

If desired the sections can be allowed to float and the spring tension set so that they handle right for any operator.

The trip mechanism is in itself a very neat mechanical device—a small coil spring holds it either locked or unlocked, and it is changed instantly from one position to the other by a slight pressure of the thumb or finger.

When it comes to the guiding part, the NEW AMERICAN is perfection itself. The sections are hung on rollers that travel on a horizontal bar, and a very slight pressure will swing them from one side to the other. It will be noted also that because they travel on a



The New American as a Harrow, Double Lock Lever, Telescope Arched Axle, Patent Reversible Points on the Teeth.

horizontal bar the depth of cut is always the same no matter how much they are swung from side to side.

Another, and probably the best, point about them is that they swing or guide just as easily when at work in the field as they do in the show room.

At the front end the sections are pivoted to a coupling which, while allowing them to swing easily, holds them securely from tipping sideways. This coupling may be set in or out on the front arch, so the Sections can be set close together for small crops or far apart for large ones. In any position the sections will always run straight and therefore guide easily. The teeth or shovels must therefore always cut full width, and cannot pitch the soil either to the right or left.

The teeth (or shovels) nearest the row are in front and in full view of the operator, enabling him to guard against injury to the young plants, and aiding in hilling up large crops.

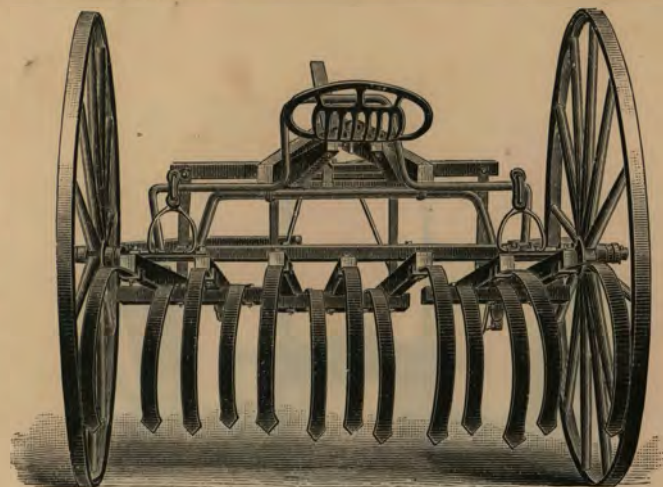
A center section of 5 Teeth is quickly and easily attached, making a complete substantial Harrow which cuts a space nearly six feet wide. The manner of attaching this section is simple and easy. It is not necessary to remove the outside sections, but simply slide them apart, and bolt the center into place.

The flexibility of the teeth, and the lever arrangement for locking them down or allowing them to float, adapts this harrow for almost any conditions of soil, mellow, hard, or stony. We believe its capability of adjustment to widely differing conditions is one of the reasons for its great popularity, and are confident that the immense advantage it has over the old stiff Harrow will be readily seen and appreciated by all practical farmers.

The telescope axle provides the most convenient method of adjusting the width of track. It is long enough so that the wheels can be set to straddle three rows of beans or other narrow row crops, which allows the cultivation of two rows at one time, and also allows the wheels to be brought close together for use in vineyards or in the cultivation of hops. The axle is arched at a point near the hub of the wheel, which gives the machine a very high lift, and ample clearance between the section and the ground. This is specially useful in turning at the ends of the rows, and in passing obstructions.



Center Section.

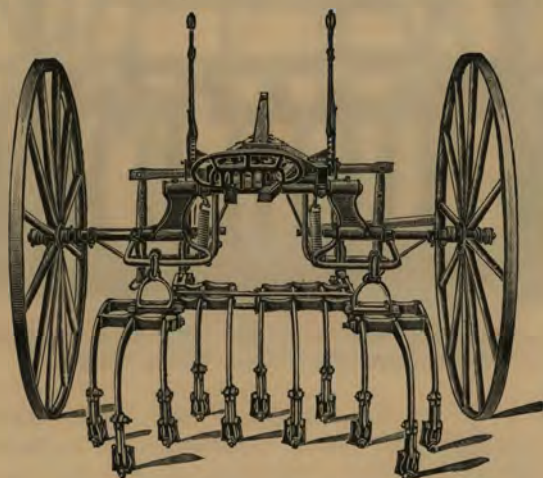


New American as a Harrow, Arch or Single Lock Lever, Regular Axle, Flat Teeth, Reversible Points, Wood Wheels.

IN place of the regular double lock levers the NEW AMERICAN can be equipped with a single lock lever. With the single lever both sections are operated simultaneously, and it is so constructed that no more effort is required to raise both sections than to raise one on an ordinary cultivator. With the single lever the sections can be locked in a number of positions the same as with the double lever, but neither section can be raised or lowered without the other. With the double levers one section can be raised to pass an obstruction without in any way interfering with the operation of the other, and on hilly ground one section can be locked higher or lower than the other, and still both do excellent work.

A clevis arrangement at the rear end of the pole enables the operator to adjust the machine to run level with any size team. Some of the important features embodied in the NEW AMERICAN are:—

DOUBLE LOCK LEVERS,
ARCH OR SINGLE LOCK LEVERS,
CHAIN AND FOOT LEVERS,
TELESCOPE ARCHED AXLE,
ONE PIECE AXLE,
CRIMPED SPRING TEETH WITH PATENT
REVERSIBLE POINTS,
REVERSIBLE OR SINGLE END SHOVELS,
HIGH OR LOW SEAT,
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HILLERS, SHIELDS, ARCH & WRENCH.

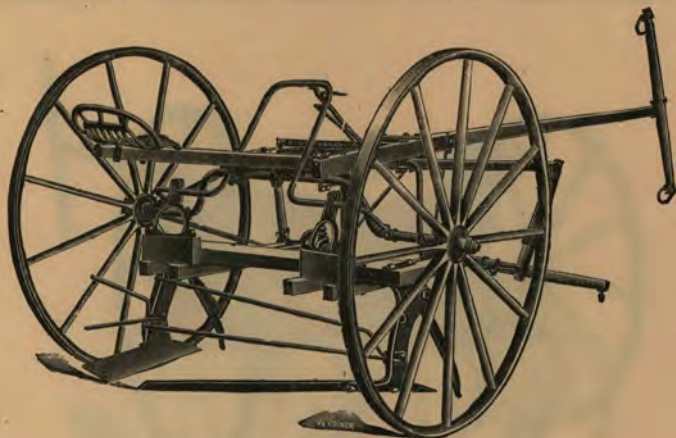


THE NEW AMERICAN is primarily a spring tooth machine, but for those who prefer shovels to spring teeth, we make steel beam sections for shovels.

The shovel sections will work equally well on any style cultivator, and the same features which make the New American an Ideal Spring Tooth Cultivator tend to make the New American Shovel Cultivator an excellent machine.

This machine can be equipped with 4, 5, 6, 7, 8, 9, or 11 shovels, either $2\frac{3}{4}$, $3\frac{1}{2}$ or 5" wide, pin or spring break.

New American with Bean Harvester Attachment.



The New American as a Bean Harvester.

The NEW AMERICAN Bean Harvester is sold as an attachment for the NEW AMERICAN Cultivator, or as a complete independent machine. The attachment can be put on any NEW AMERICAN whether that machine has been in use one or a dozen years, and regardless of the kind of levers.

No more successful BEAN HARVESTER could be constructed. The levers give the operator absolute control of the knives and the clevis arrangement at the end of the pole enables him to set them at any desired pitch. By means of the locking device all vibration is avoided, a most essential quality for the successful operation of a Bean Harvester, as it does away absolutely with the whipping and shelling of the beans.

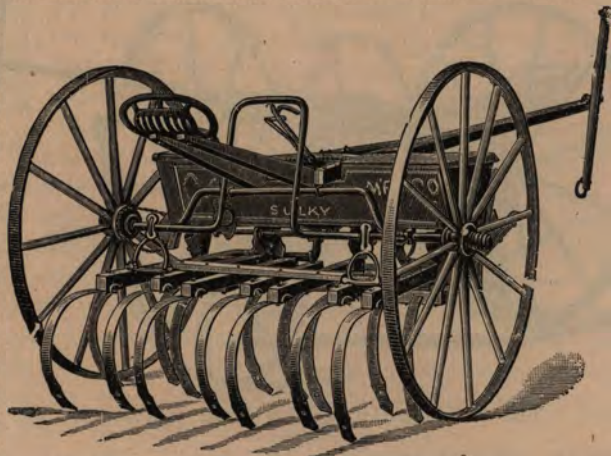
The New American is equipped with coulters which clear the way and protect the knives, and at the same time lift up the vines and bring them in position for the knives. The knives are long and set to cross the rows at a slight angle so that they pull all the vines easily and without tearing them. The advantage of these knives over short ones set abruptly can be readily seen and appreciated.

One of the strongest testimonials for this attachment is the fact that many bean growers have bought the New American for this purpose alone, giving it preference over other machines designed exclusively for this purpose.

The NEW AMERICAN pulls two rows at one time, and leaves them in an even windrow.

Harvests 12 to 18 acres per day.

New American with Grain Seeder Attachment.



New American Harrow with Grain Seeder Attachment, Arch Lever, Wood Wheels, Flat Teeth.

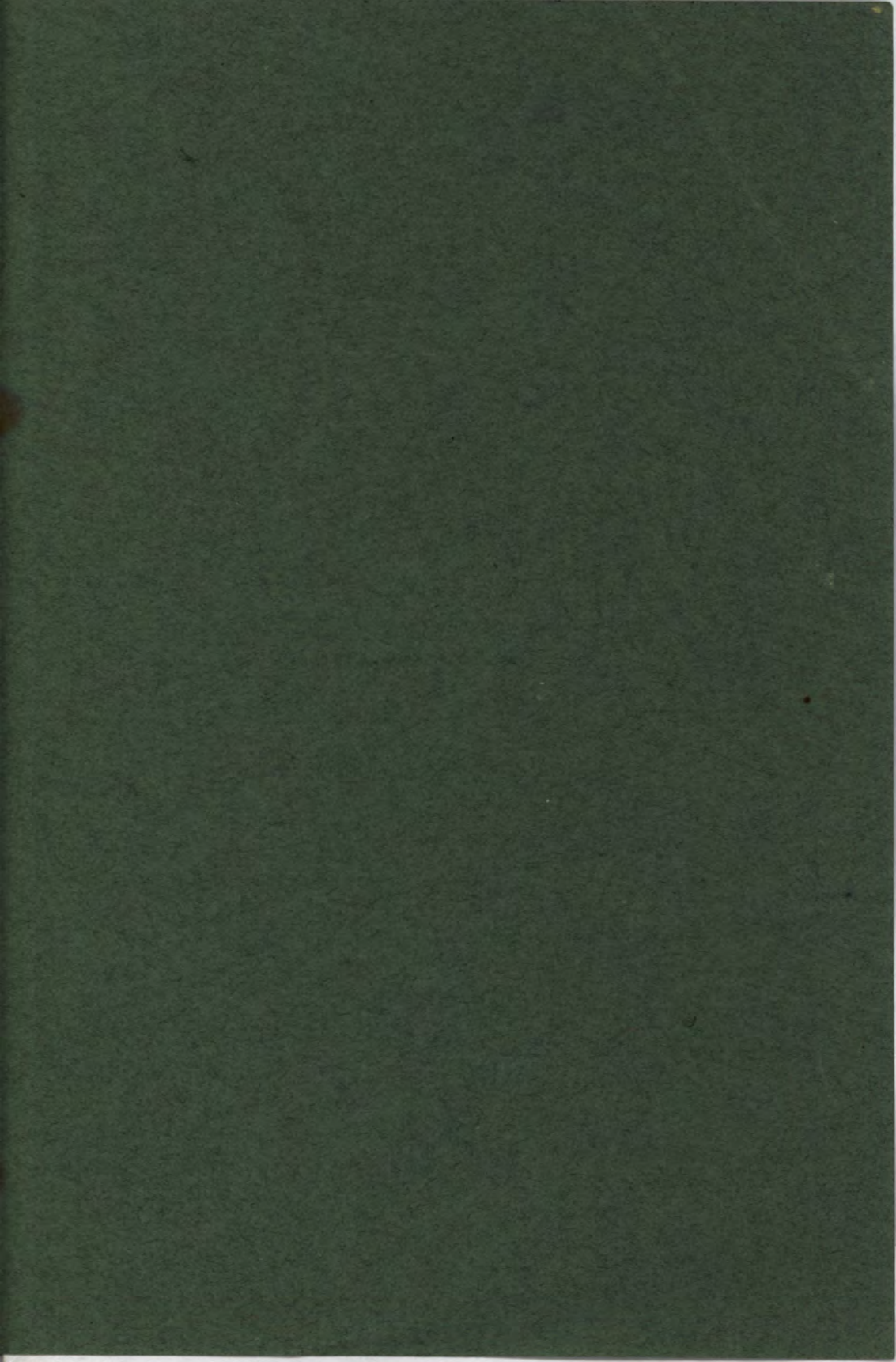
The NEW AMERICAN with Seeder Attachments is a combined machine that no progressive farmer can afford to be without. Our seeders sow broadcast, which is the way Nature intended that sowing should be done. We use the celebrated Hoosier Force Feed acknowledged to be the best of their class, and in addition to sowing all kinds of grain our improved feed adapts the seeder to the perfect sowing of Corn, Peas, and Beans.

In simplicity, durability, ease of management, and range of quantity, our seeder has neither superior or equal. No change of gear wheels is necessary to change the quantity, but simply move the lever.

The Grain Seeder is operated by means of a sprocket from the main wheel, and the grass seeder by gear wheels from the grain seeder.

Both the grain and grass seeders fit under the frame out of the way, and yet are easily accessible. Both can be attached or detached in a moment's time without any trouble.

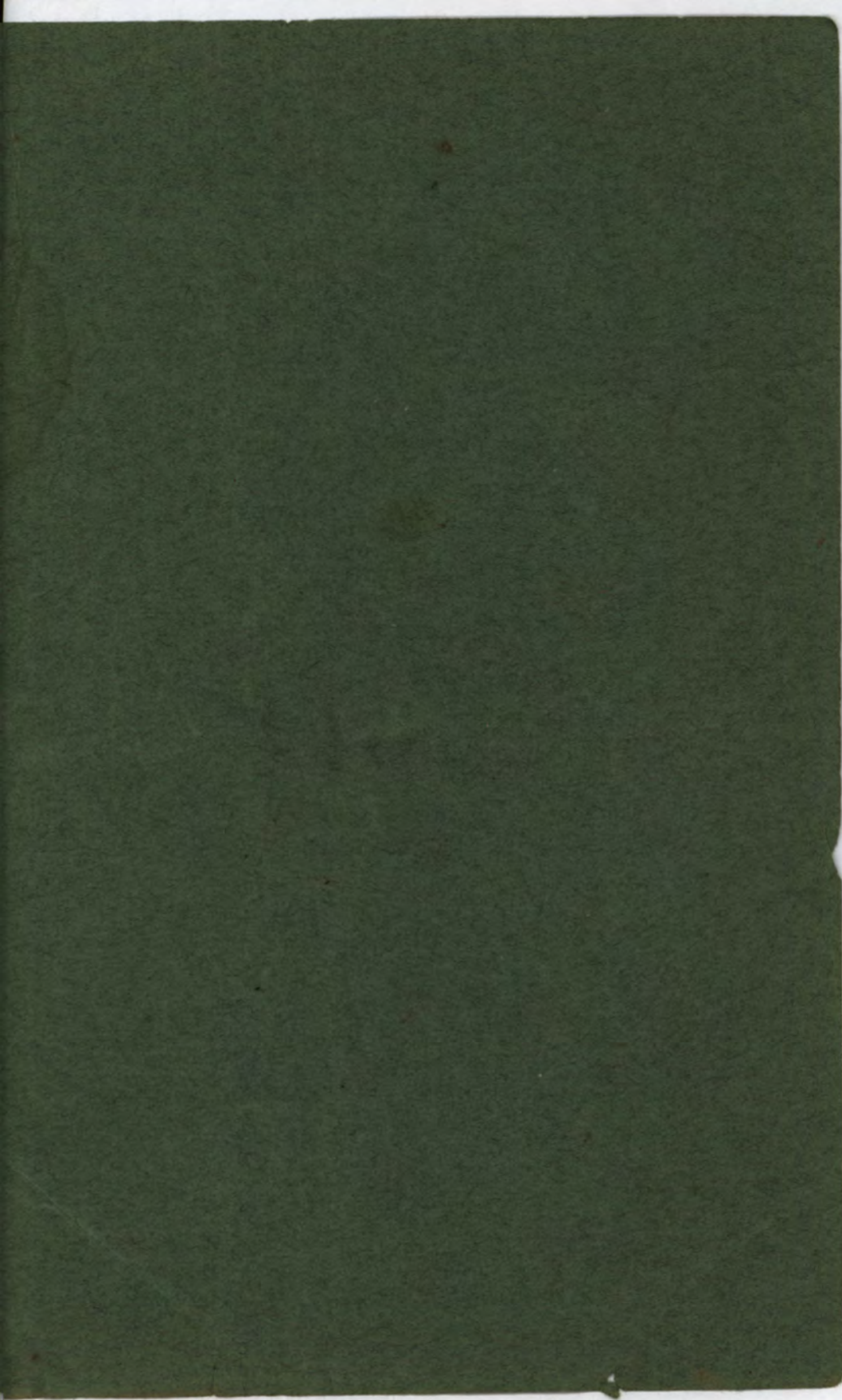
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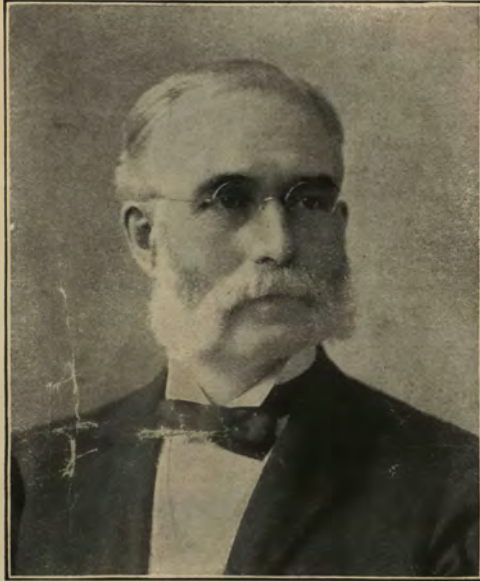




American Harrow Co.
DETROIT, MICH.







D. M. FERRY

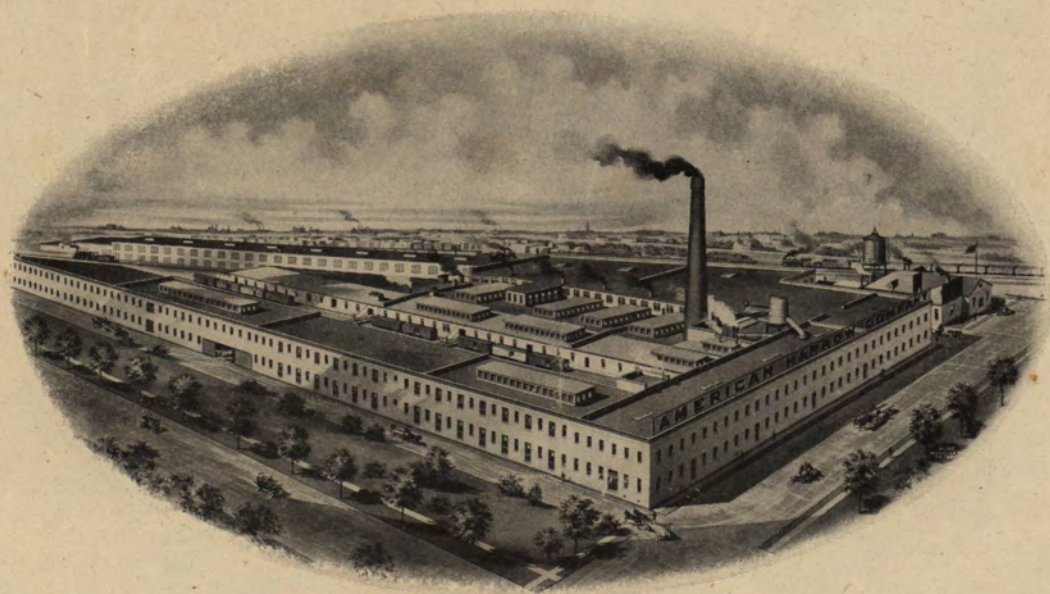
AMERICAN HARROW COMPANY

DETROIT, MICH.

D. M. FERRY
President

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Sec'y and Treas.



A BRIEF DESCRIPTION
of the celebrated

New American Harrow

AND CULTIVATOR

WITH ITS ATTACHMENTS

TREATISE ON

Shallow vs. Deep Sowing of Wheat

BROADCAST SEEDING
TRUTHS

AMERICAN HARROW COMPANY

DETROIT, MICH.

Introductory.

NEARLY a quarter of a century ago we introduced to the farming public our first Farm Implement. Being a new creation, its very novelty naturally denied to it the reception it deserved. Farmers while filled with the spirit of progress, were then cautious even to the point of distrust.

We wisely bided our time, fully aware of what we had to cope with, but took advantage of every opportunity to place our new departure wherever an opening offered, relying confidently on its *merits* to accomplish what endless talk and printers' ink could not do.

Gratifying returns encouraged us. As time went on and results grew beyond our expectations it began to dawn on us that we were the pioneers of a great revolution in soil-working machinery. From a modest but correct beginning we have reared a business that now supplies the farmers in every cultivable section of this country with the highest grade implements in existence.

The Famous
New American Cultivator and Harrow
belongs to the Spring Tooth Family.

T has long been conceded by leading authorities and progressive agriculturalists that cultivation which leaves a level surface (whether deep or shallow) is the best. Where the ground is worked level, instead of being left in hills or ridges, it absorbs *all* the moisture and longer retains it; and the most valuable lateral roots of the plant are not disturbed or broken.

It has been likewise proven that flat surface cultivation can only be accomplished by use of *Spring Tooth Implements*, which, instead of injuring the plants and leaving the ground in clods and ridges thoroughly pulverize and distribute the soil evenly so that the warmth of the sun acts upon all parts uniformly. The Spring Tooth Cultivator shakes the weeds out on the surface of the ground, where they wither and die.

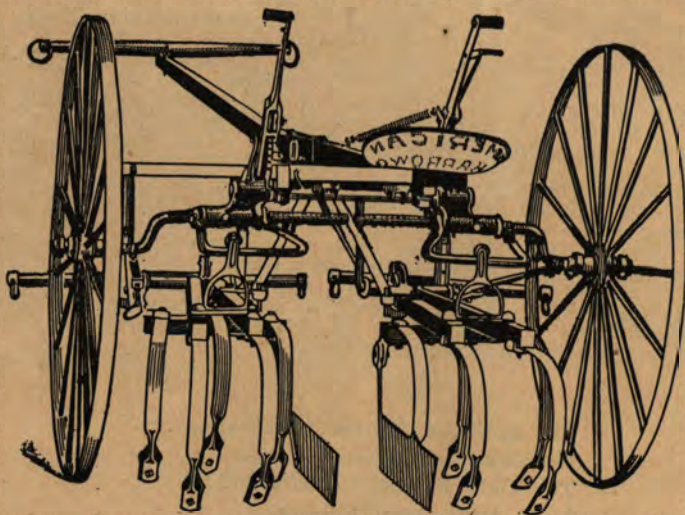
The following eminent authorities (and hundreds of others could be mentioned) have demonstrated by actual tests—not theories—the advantages of a flat surface cultivation:

The Michigan Farmer (Publication).
Missouri Agricultural College.
The Ohio Farmer (Publication).
Iowa Agricultural College,
New York Exposition Station.
Agricultural College, Oklahoma Territory.

The New American Cultivator.

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New American Cultivator Double Lock Lever, Telescope Arched Axle, Steel Wheels, Central Section removed. Patent Reversible Points on the Teeth.

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The Spring Teeth (or shovels) are set in the ground to any desired depth, and the Lock Levers hold them securely in that position whether in sand, gravel or clay, hard or soft ground. No "loading" or standing on the sections is ever necessary to force them in, no matter how hard the ground is. And a perfectly uniform tillage is always obtained.

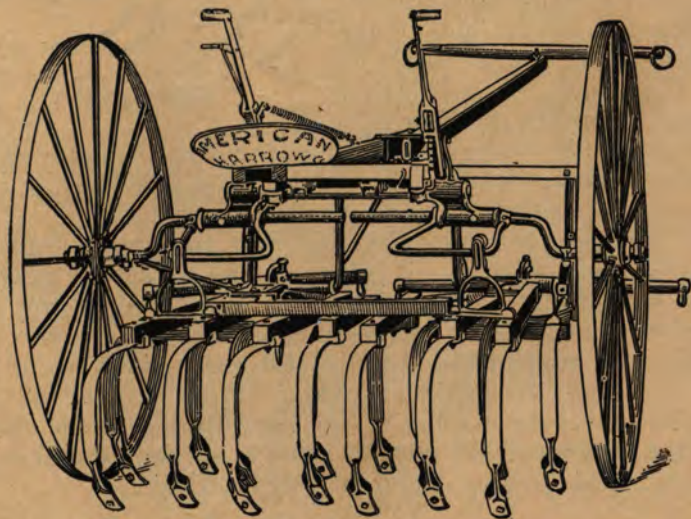
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When it comes to the guiding part, the NEW AMERICAN is perfection itself. The sections are hung on rollers that travel on a horizontal bar, and a very slight pressure will swing them from one side to the other. It will be noted also that because they travel on a



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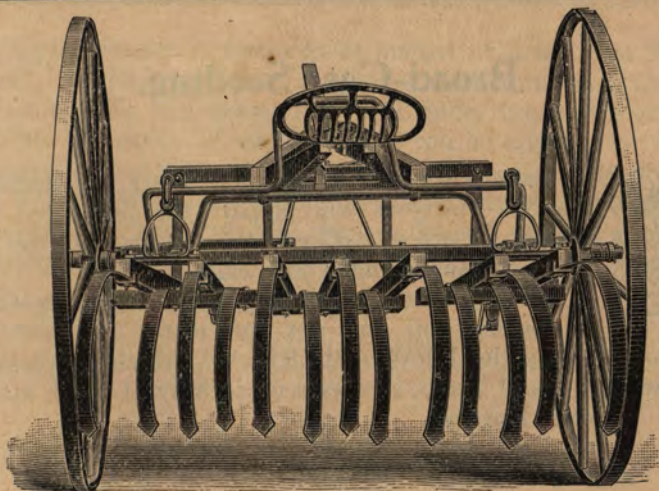
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REVERSIBLE OR SINGLE END SHOVELS,
HIGH OR LOW SEAT,
WOOD OR STEEL WHEELS,
HILLERS, SHIELDS, ARCH & WRENCH.

Broad-Cast Seeding.

THE experience of the past few years has demonstrated that no Harrows will prepare the Seed Bed so thoroughly, or are so well adapted for covering the Seed, as those of the Spring Tooth class.

The objection that they cover unequally—too deep in mellow soil and not sufficiently on hard land—is entirely obviated in the NEW AMERICAN, which by reason of its adjustable Frame and Teeth, secures a uniformity of depth attained by no other sectional Harrow.



New American Harrow with Grain Seeder Attachment, Arch Lever, Wood Wheels, Flat Teeth.

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Shallow vs. Deep Sowing of Wheat.

WE copy, by permission, from the columns of the Michigan Farmer (a leading agricultural authority) the following interesting article upon "The growth of the wheat plant." The facts have also the endorsement of such eminent agriculturalists as Prof. Kedzie, Dr. V. M. Metcalf, Prof. Will W. Tracy, and others.

This information will be of service to such farmers as have not already discovered, by experience, the facts set forth; and we feel fully warranted in stating that, after a number of years' actual tests, backed by the testimony of many experts, the New American Harrow and Seeder, with its perfect adjustments, completely fills the requirements of the practical and experienced farmer.



Two wheat plants are here exhibited for the purpose of showing the advantages of shallow over deep planting. These two plants, No. 1 and No. 2, are of equal age; they grew in ground of equal fertility, and all the circumstances connected with their planting and growth were similar, except that No. 1 was sown deep and No. 2 shallow. The result is that No. 1, or the deep plant, has two sets of roots, connected by a long, thin stem, which is likely to be broken by the heaving of the ground in freezing weather, thus causing the plant to lose more than half of its roots; while No. 2, or the shallow plant, has both sets of roots together, or so near together that the danger of their becoming separated by the frost is very slight. It can readily be seen that the shallow plant, No. 2, has a larger stalk, more leaves, and stronger roots, and is, in every respect, a much better plant.

An examination of the accompanying figures will illustrate the wheat plant in its early stages of growth.

No. 1 is a young wheat plant drilled in deep. No. 2 is a young wheat plant sown shallow. No. 3 shows the action of the frost on wheat drilled deep, as in cut No. 1.

The wheat plant has two sets of roots; the first starts out from the seed, penetrating the soil in all directions, providing nourishment for the new plant. The plant, during germination, grows towards the surface of the ground, sending up a single stem or tube, and at about one-half an inch below the surface the stem swells out into a small bulb. A peculiarity of the plant is, that no matter whether the seed be deep or shallow, this bulb



Figure 1. Young wheat plant, drilled in deep.

Figure 2. Young wheat plant, sown shallow.

Figure 3. Shows action of frost on wheat drilled deep, as in figure 1.

is always found near the surface. From this bulb there starts out a second set of roots, drawing nourishment from the surface soil. The roots of this second set are not fully developed in the fall of the year, but the plant lives chiefly upon the lower set during the winter, and in the meantime the second set are pushing out and getting into condition for nourishing the plant in the spring, and during the formation of the seed.

This habit of the wheat plant is important, as explaining a fact that is not generally understood. Farmers, for instance, frequently complain that their wheat looked thrifty in the fall, and sometimes in the early spring, and then began to die in the drill rows, until they could go along the rows and gather the dead grain by handfuls. The explanation is that, where wheat is sown deep, as in Fig. 1, the first set of roots is formed in the fall, deep in the soil, while the second set is immature until late in the spring. The ground during the winter or early spring freezes on the surface, and the frozen earth clasps the wheat plant near the surface of the ground, and, expanding upwards, breaks the connecting tube that unites the upper part of the plant with the lower roots, as in Fig. 3. The consequence is, that the plant, now with a large top and great evaporating surface, is cut off from its supply of food (the germ); the upper set of roots being as yet imperfectly formed, are unable to sustain the drain of the luxuriant top, and the plant starves to death.

When grain is sown broadcast near the surface with an adjustable implement, any desired depth may be obtained, according to the requirements of the soil. This is best known to the farmer who is a chemist, not only in theory but by practical experience. Both sets of roots are near together, as in Fig. 2, forming a mat near the surface, so that when the ground freezes and thaws, both sets of roots are lifted and settled together like a timothy sod, and the connecting tube between the upper and lower sets of roots is not broken, and the plant starts off in the spring with two full sets of roots.

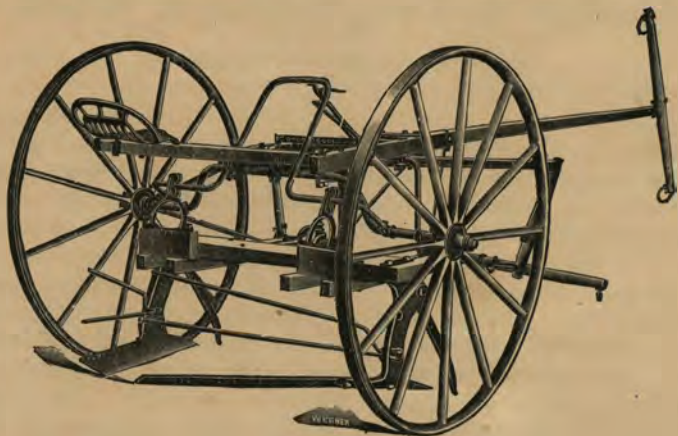
Shallow vs. Deep Sowing of Wheat.

(From the Michigan Farmer).

Since the foregoing article, which appeared in the Farmer, was written, we had the pleasure of a call from Dr. V. M. Metcalfe, of Hopkinsville, Ky., who has made the chemistry of soils a study, and, in the course of the conversation, the soils best adapted to wheat growing, the best methods of preparing the soil, fertilizers, mode of sowing, etc., were discussed. He had a large number of specimens of the soils of various Southern States, and exhibited analyses of them to show wherein some excelled others for growing wheat, and what was lacking in others. He regards the soil near Lexington, Ky., as the finest he had analyzed for producing wheat, and which furnishes the "blue grass" pastures for which that State is famous. Yet 75 per cent. of that soil, when its component parts are separated, is found to be silica, or pure sand.

The Doctor had with him, in his collection, a fac-simile of a grain of wheat, about a foot in length, and made up in proportion. This was so arranged as to show the coverings which nature has prepared for the preservation of the grain, the layer of gluten immediately under them, and the starchy articles which make up the body of the grain. At one end is the germ, perfectly protected, and at the other is a tuft of hair-like roots. The germ remains unchanged until brought into contact with moisture, and the office of this tuft, which is a spongy substance, is to absorb moisture and bring it into contact with the gluten in the grain, thus starting fermentation. The Doctor said seed grain was frequently spoiled by having the tuft broken off. When the fermentation is set up it starts the germ, and its growth is stimulated by the fermentation of the gluten and starch, upon which it feeds, until the plant has reached the surface of the ground, from which time over 90 per cent. of its growth comes from the atmosphere. And here is where the question of DEEP vs. SHALLOW SOWING comes in. If the seed is sown too deeply the supply of nutriment is exhausted before the plant reaches the surface, and there is a halt, the plant throwing out new roots, and finally struggling up to the light and air. This has caused loss of time, and left too long a distance between the main root and the plant, which the first frost is liable to snap in two. When this happens the plant turns yellow and sometimes dies; but frequently it recovers and matures, although the resulting crop is always a light one. IT WOULD THUS APPEAR THAT THE DEPTH OF SOWING IS A PRIME FACTOR IN DETERMINING THE SUCCESS OR FAILURE OF A WHEAT CROP.

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The NEW AMERICAN pulls two rows at one time, and leaves them in an even windrow.

Harvests 12 to 18 acres per day.

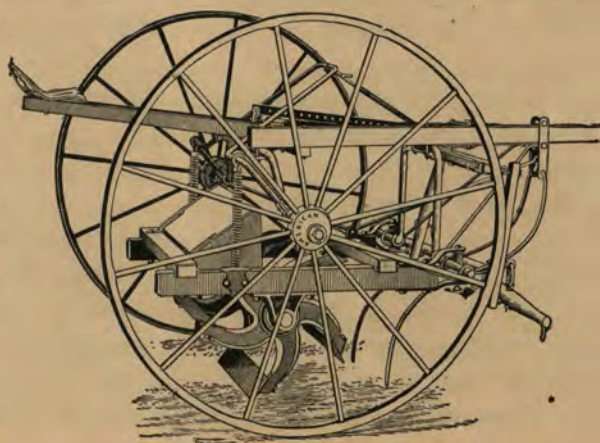
Stalk Cutter Attachment.

THE NEW AMERICAN STALK CUTTER is attached in the same manner as the Bean Harvester. It is used for chopping into short pieces corn and cotton stalks, that they may be plowed under and converted into valuable fertilizer.

The knives are held securely in position by the Lock Lever. All jar is received by the springs, making the machine comfortable for riding. Knives are covered to afford safety. The Stalk hooks work automatically, gathering the stalks and bringing them down into position for the knives.

It is indispensable in any country where it is the custom to leave stalks of any kind standing in the field.

New American with Stalk Cutter Attachment.



Frame locks down to any pressure. All jar on springs.

Summary.

The NEW AMERICAN is the only Sectional Wheel Cultivator operated with positive Lock Levers.

The Sections can be locked down or permitted to float.

It has an adjustable Axle.

The Broadcast Seeder is attached under the frame, out of the way.

The only Cultivator with Stalk Cutter Attachment.

The only Cultivator with Bean Harvester Attachment.

No other Bean Harvester Knives can be held in place without vibration.

No other Stalk Cutter is so free from jar.

All material used is the best that money can buy.

The workmanship is of the highest order.

It is the finest appearing and most complete machine on the market.

It is easily handled.

The adjustments are perfect.

Sections run level at any depth.

Machine can be perfectly balanced.

The width can be changed to accommodate any kind of row cultivation.

The work it does is a sufficient guarantee of its worth.

It is the favorite of the Spring Tooth family.

Those who try it buy it.

Those who use it praise it.

We are anxious to have every farmer examine carefully and critically the NEW AMERICAN HARROW, SEEDER, GRASS SEEDER, CULTIVATOR, BEAN HARVESTER, and STALK CUTTER, and to compare them with others. But above all and fairer than all and better than all, we desire to show the practical working in the field of this machine, being confident that the superior merit which we claim for it will be recognized.

Directions

For Setting up the New American Harrow and its Attachments.

1. Bolt on the tongue; put the bolt in the center hole of the clevis. This clevis is for leveling the teeth. If it is desirable to have the front teeth dig deeper, lower the back end of the tongue and put the bolt through the second hole from the top. If the back teeth are cutting too shallow, raise the back end of the pole and put the bolt through the fourth hole.

2. Oil the axle well and fasten on the wheels.

3. Bolt the teeth to the sections. See that the nuts on the tooth bolts are always tight.

4. Fasten the forward ends of the sections to the frame; be careful to place the coupling No. N-2 forward of the spool. The nut on the long bolt which passes through No. N-1 and No. N-2 should always be kept tight. Before tightening the nuts on the loop which fastens No. N-2 in place see that the outside teeth are equally distant from the wheels.

If the Broadcast Seeder is to be used at once, attach it to the frame according to the directions tacked on the inside of the lid before attaching the front end of the sections, then proceed as above.

5. Remove the staples and top rollers from the stirrups; drop the lever into the stirrups and replace the top rollers and staples; oil the rollers well, and also the working parts of the levers.

6. Bolt the seat in place and adjust it to suit the rider.

7. Bolt the double-tree in place, fasten the standards to the draw hooks. Bolt the neck-yoke on top of the tongue and the machine is in shape for work.

TO ADJUST THE MACHINE FOR CULTIVATING ROW CROPS.

Remove the center section; loosen the staples in casting No. N 2 and adjust the forward ends of sections to suit rows. Put the Corn Arch in place and adjust the width so that the sections will run parallel. Bolt the corn shields to the under side of the inside ends of the long cross-pieces.

THE SEEDER ATTACHMENT.

When using the Seeder Attachment, lower the single-tree to the bottom hole in the standard to remove the draft from the neck-yoke.

Directions for attaching the Seeder Box will be found on the inside of the Seeder lid. Throw the lever back till wheels rest clear of ground, remove one wheel (or both), tip seeder so that broad side points to the rear, and slide it under frame. Right the box, see that sprocket wheels are in line, and bolt firmly.

THE STALK CUTTER.

Before the Stalk Cutter can be attached, the harrow sections must be removed. To remove these sections, take out the two bolts that pass through castings N 1 and N 2, also remove the loop casting N 11 from the foot stirrups. The forward end of the Stalk Cutter beams attach to castings N 2, the same as the harrow sections.

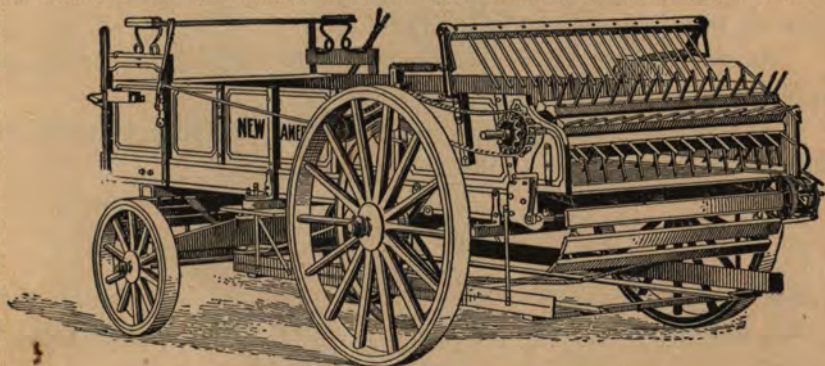
To attach the lifting rods, remove the ends of the earch lever from the castings N 22, replacing them again when the rods are in place, put the coil springs on the shifting rods, pass the lower ends of the rods through castings N 64, and turn the nuts tight.

The stalk hooks clamp to the pole close to the frame. To get a greater pressure on the hooks, move the clamp forward on the pole. Before putting on the clamp, the bar that raises the hooks should be put in place between the clamp and afterwards bolted at the other end to casting N 63.

THE BEAN HARVESTER.

To attach the Bean Harvester, remove the Harrow sections, as with the Stalk Cutter, except that the foot stirrups N 8 and N 9 should be left on the Arch Lever; then attach the forward ends of the Bean Harvester sections according to direction 4 for the harrow and fasten the foot stirrup to the blocks at the back of sections, as on the harrow.

New American Manure Spreader.



New American Manure Spreader No. 3—100 bushels capacity.

The NEW AMERICAN MANURE SPREADER is stronger in construction, lighter in draft, simpler in operation, and more thorough in its work than any other manure spreader on the market.

The power is derived from a large sprocket and chain which is generally conceded to be the best method of power transmission for use on any kind of farm implements. The sprocket is so arranged that the power never runs idle, but as soon as the load is discharged and the bottom returned to place all the working parts are at rest.

This sprocket adjusts itself to the jolt of the wagon, and is not liable to breakage. It is stronger than gear wheels, and is not affected by either rust or dirt.

The action of the bottom is entirely automatic, running out with the load and back to place without any attention from the operator. It is equipped with a head end board which insures steady and uniform feed. No other spreader has such a bottom.

The feed is regulated by means of a lever at the side of the driver's seat, and can be changed instantly from light to heavy or to any intermediate quantity without in any way interfering with the operation of the machine.

By means of another lever the machine is thrown into and out of gear so that all changes are made without the driver leaving his seat.

No end board is needed to hold the load away from the cylinder, as it has ample power to start at any time.

The team stops and starts just the same with the machine in operation as in hauling an ordinary load.

As soon as the load is deposited the bottom trips and winds back to place.

As soon as the bed is fully in place the machine is automatically thrown out of gear and is ready for another load.

DIMENSIONS AND CAPACITY.

No. 2—13 ft. long, 23 inches deep, 42 inches wide, Hold 60 bushels.

No. 02—10½ ft. long, 23 inches deep, 56 inches wide, Holds 70 bushels.

No. 3—13 ft. long, 23 inches deep, 56 inches wide, Holds 100 bushels.

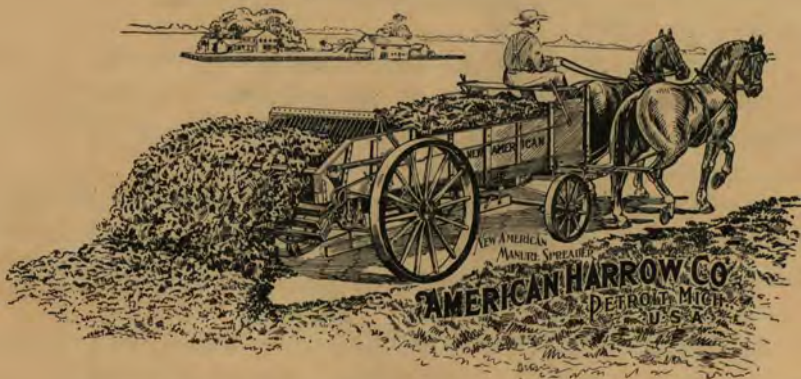
EQUIPMENT.

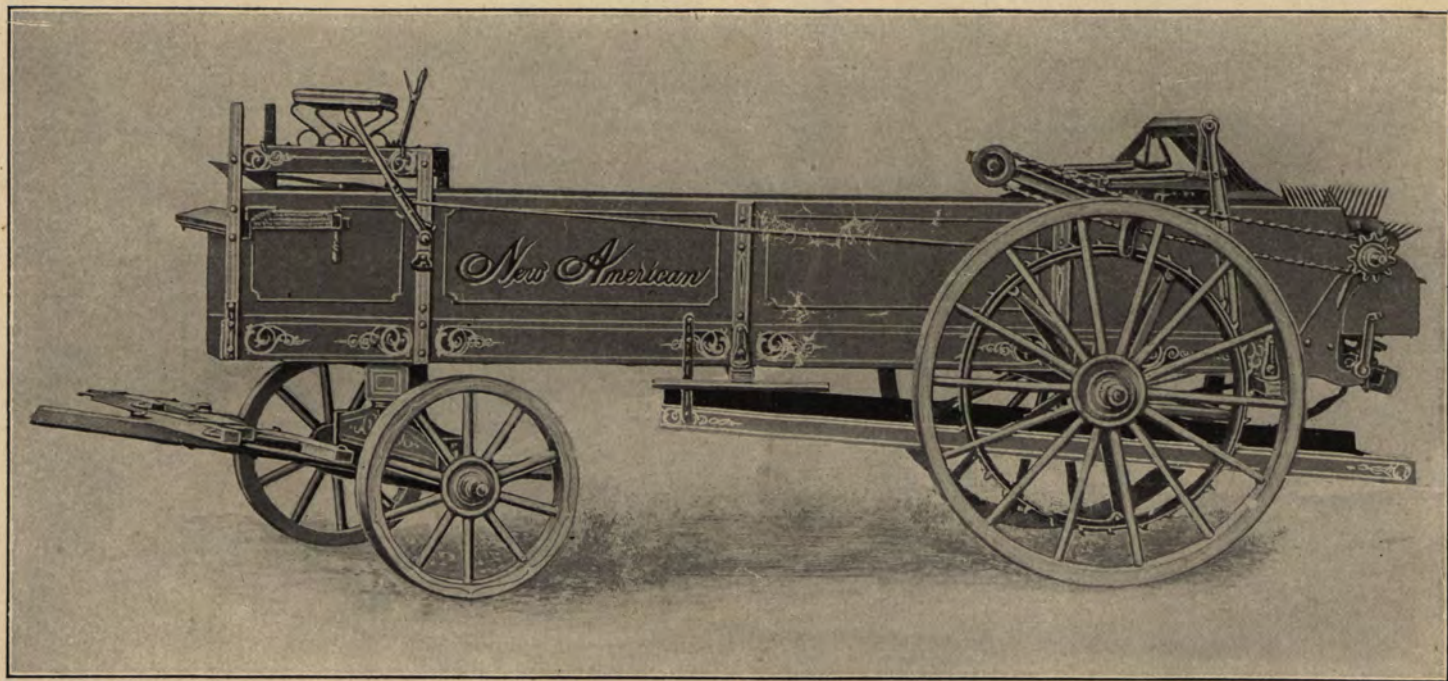
Nos. 2, 02, and 3, are furnished with non-detachable trucks, and equipped as follows:

No. 2—44 inch rear wheel, 4 inch tire, 2 H. H., Single Pole.

No. 02—48 inch rear wheel, 4 inch tire, 3 H. H., Single Pole.

No. 3—48 inch rear wheel, 5 inch tire, 3 H. H., Double Pole.





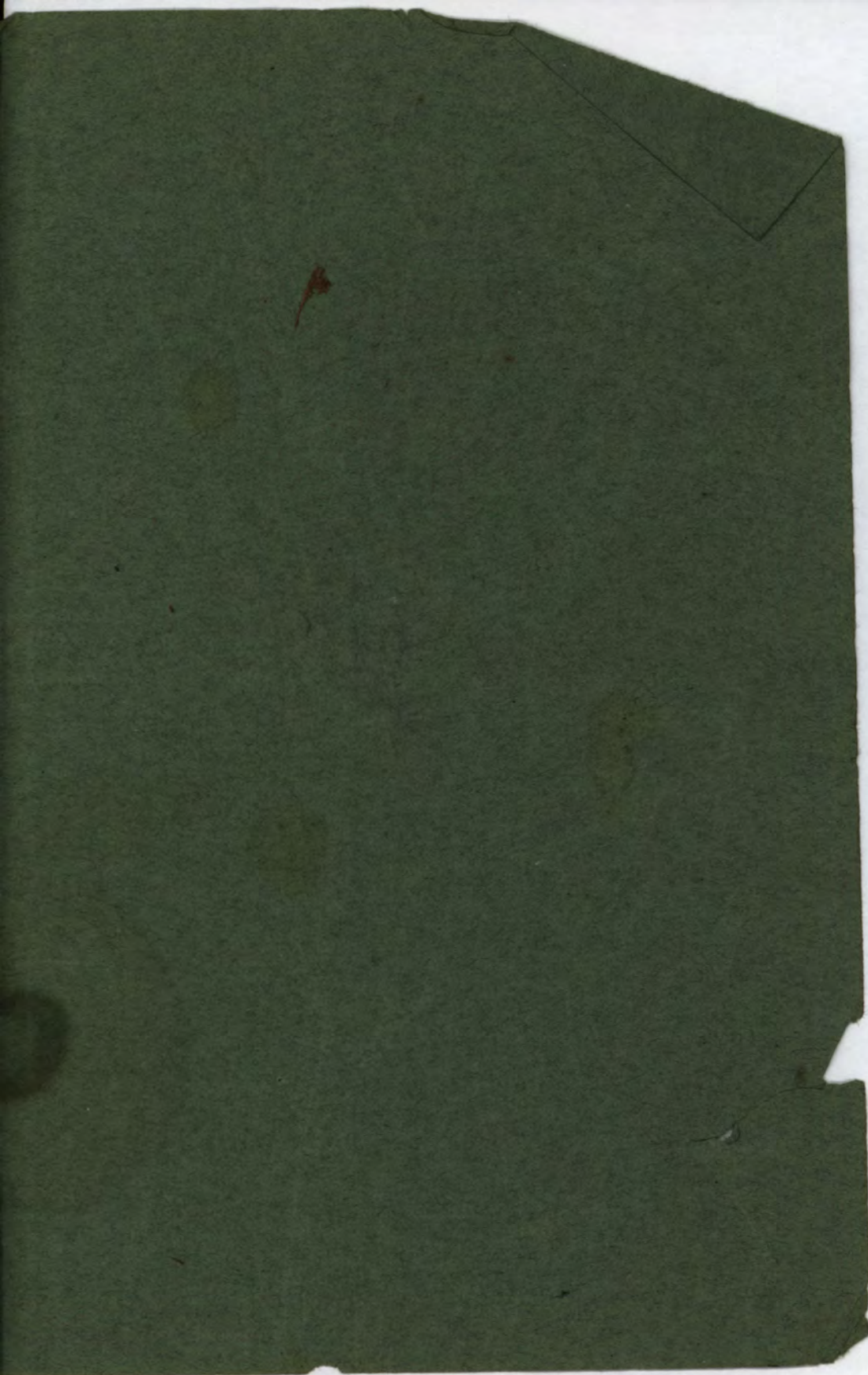
NEW AMERICAN MANURE SPREADER.

No. 2—Capacity, 60 Bushels.



NEW AMERICAN MANURE SPREADER.

No. 3—Capacity, 100 Bushels.



Wm. Graham Printing Co., Detroit.