

# DEERING

## TILLAGE IMPLEMENTS



# DEERING TILLAGE IMPLEMENTS



## FOREWORD

**T**HE farmer of today is rapidly becoming a more and more scientific tiller of the soil. He is inquiring into the causes and results of modern crop culture with a greater degree of intelligence than at any other period in the world's history. The marvelous results achieved are in evidence on every page of our journals of agriculture.

The farmer of today has come to realize that progress in the world's affairs depends largely on the proper advancement of agricultural methods and kindred pursuits. He appreciates that if progress is to advance as rapidly in the next decade as in the past, he must pay closer attention to the proper tillage of the soil and to the correct preparation of the seed bed. This is one of the reasons why he is particularly interested in the disk harrow. He realizes that this implement is revolutionizing farm methods and that by its proper use he can force his soil to yield its full share of the golden grain where it formerly produced little or nothing.

Deering tillage implements are designed and built along the most practical lines. The farmer is therefore enabled to do the very best work in the preparation of the seed bed, and for this reason they are the kind of tools that the farmer will take a natural liking to when they have once been put to use.

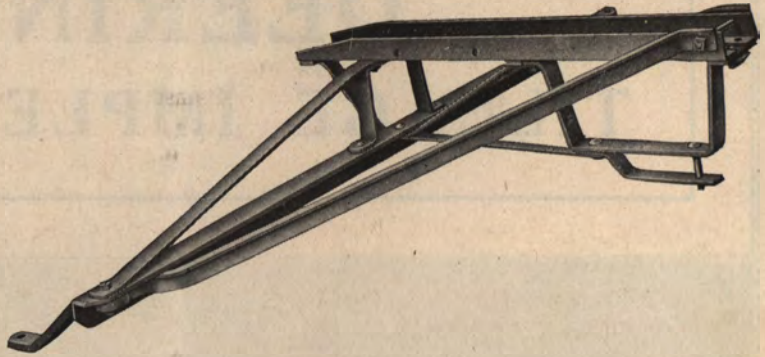
**INTERNATIONAL HARVESTER COMPANY OF AMERICA**  
CHICAGO . . . (Incorporated) . . . U S A

## Deering Bumper Disk Harrow

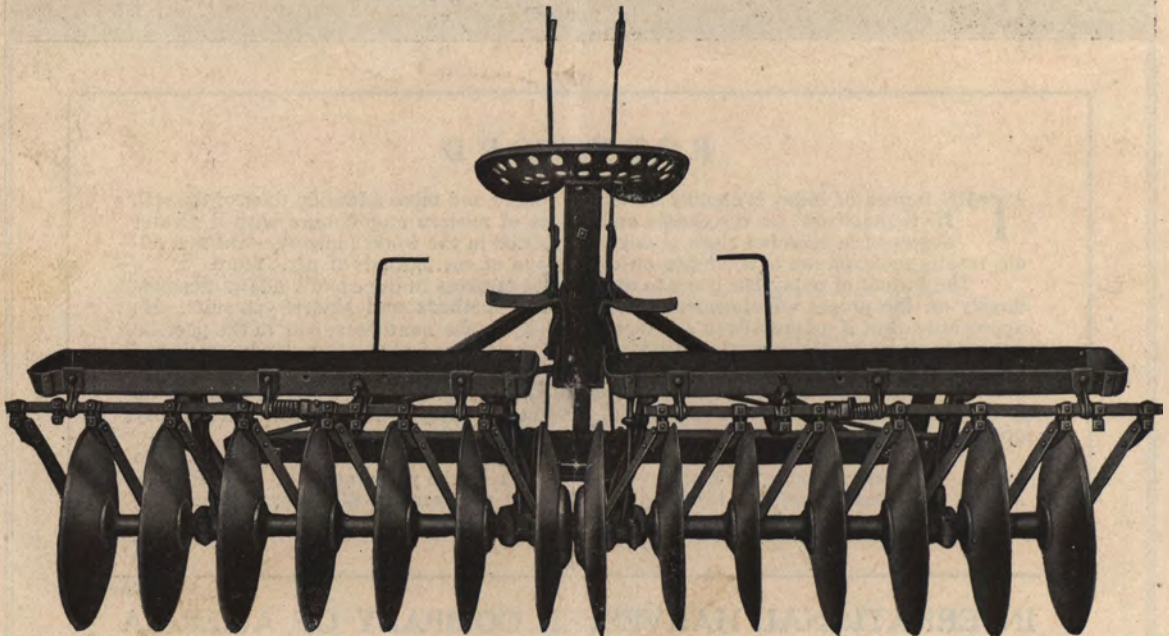
The Deering bumper disk harrow is in great contrast to the ordinary type of bumper disk harrow on account of its exceptionally strong and rigid frame and the efficient work it does. No great amount of good will be done by disking unless the soil is thoroughly stirred. A disk harrow that will not thoroughly stir the ground is a poor tool to use. It is a waste of time to disk with it.

Time and again it has been shown that the disk harrow is the most valuable implement the farmer can use. Its great value lies in its adaptability to the conservation of moisture, the destruction of weeds, the preparation of the surface soil to encourage the rapid percolation of rain water, and in thoroughly pulverizing cloddy, plowed fields to improve the physical condition of the soil. It has been proved time and again that the use of the disk harrow for the sole purpose of preventing the evaporation of moisture, and preparing the surface to receive and utilize further rain, has resulted in increasing the yield of corn as much as 20 bushels to the acre, and wheat as much as 18 bushels. These facts are well worth the serious consideration of the farmer.

The Deering bumper disk harrow will give its owner the satisfaction of knowing that his ground is being disked thoroughly, whether it is the hard work of disking stubble ground, sod, cutting up corn stalk rows, or cultivating fresh plowed ground.



This steel frame has no castings on it



Deering bumper disk harrow

## A Rigid Harrow Frame a Necessity

The Deering disk harrow main frame is constructed entirely of steel, trussed and braced to such an extent that it is impossible to spring it out of shape. Every farmer knows that to do the work properly his harrow must have a main frame strong enough to hold the gangs in their proper place, or they will yield so much that good disking cannot be done.

The frame on the Deering disk harrow has many points of superiority over the ordinary bumper disk harrow frame. The tongue braces from the ends of the frame to the pole angles are of angle steel and are made so that they rest firmly against the cross sills, making an exceptionally strong brace construction. The sill is strengthened by a truss.

The two angle steel bars, solidly fastened to the top of the truss and braces in the front, make the strongest possible frame construction. These angles take the place of a wood stub pole when the pole is set to one side for three horses and a forecarriage is used. The hitch for the double-tree is low, giving the advantage of a direct pull, and allowing the horses to be hitched close to the harrow. The draft links are made extra heavy and strong and, being curved upward, they raise the frame high, consequently there is no danger of weeds or trash catching on the harrow frame.

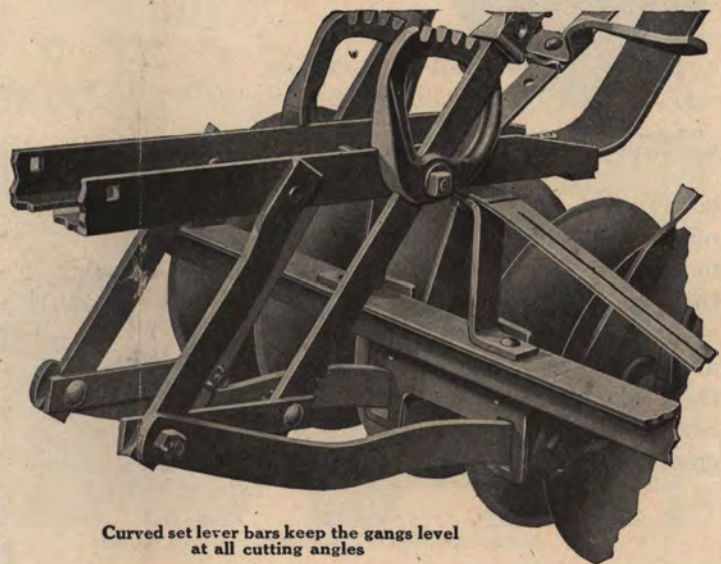
## The Draft is Light

The bearings on the Deering disk harrow are relieved of end-thrust, due to the fact that the bumpers roll together. This results in lighter draft and the harrow is relieved of many of the strains that would be put on the frame if the bearings were sustaining the end-thrusts.

Different soil conditions have a great deal to do with the draft of the harrow. It stands to reason that the deeper a harrow penetrates the harder it pulls, for the simple reason that the harrow is doing more work. This much must be said of the Deering harrow. It goes into the ground and does good pulverizing, consequently it naturally pulls harder than a harrow that does not do good pulverizing. But the Deering bumper disk harrow has as light draft as any disk harrow that does an equal amount of work.

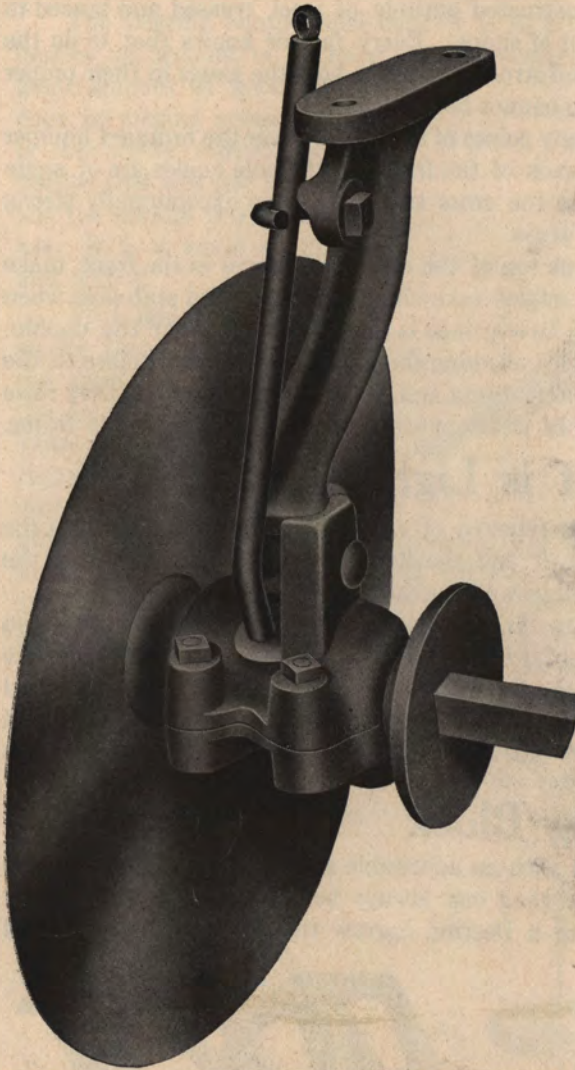
## Snubbing Block

The Deering bumper disk harrow is equipped with an adjustable snubbing block which can be set to take up any looseness or wear, so that the gang can always be adjusted to work perfectly level. This means that when a field is disked with a Deering harrow the ground is all cultivated to an even depth. The tendency of all out-throw disk harrows is to rise in the center. Level gangs are absolutely necessary to do good work under all conditions. When the harrow rises in the center the ground at the outer end of the gang is cultivated too deep and that on the inner end is not cultivated at all. The result is uneven and poor cultivation. The harrow is equipped with curved set lever bars. These bars are arranged so that when the harrow is set at a cutting angle the curve offsets the radius that would be formed if the bars were straight. Consequently the gangs are always level at whatever cutting angle the harrow may be set.



Curved set lever bars keep the gangs level at all cutting angles

## Easy to Oil



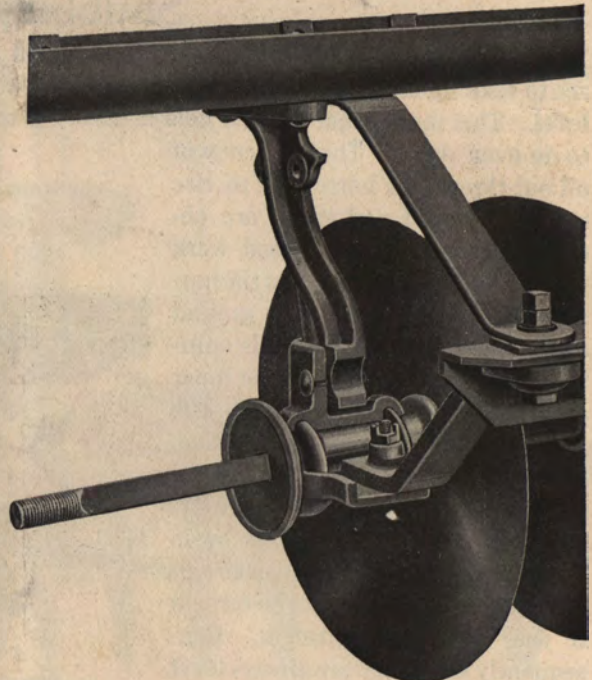
Oil pipe extends to top of bearing standard.  
Note wide flange on spool and square arbor bolt

bolts snugly. The arbor bolt is fastened with a nut, making it an exceedingly difficult matter for it to become loose. While it is not probable that the disk will ever become loose, if it should, it is impossible for it to turn on the arbor bolt, wear a large hole in the disk, or cut the arbor bolt. The edge of the spool which rests against the disk is made extra wide, giving great support and strength to the disk.

The bearings on a harrow are more or less enveloped in dust and dirt and for this reason it is essential that they should be as near dust-proof as it is possible to make them. The practical construction of the Deering disk harrow bearings is very efficient in this respect. It keeps the bearings remarkably free from dust and grit. The oil pipe extends from the bearing to the top of the standard and is closed with a stopper to keep out sand, dust, grit and dirt, giving the operator the advantage of oiling the harrow from the rear. In the event that it becomes necessary to clean out the oil hole in the bearing, the oil pipe can be quickly removed. This can also be done from the rear of the harrow. The spool which revolves in the bearing is large, giving ample bearing surface. If this bearing is kept properly oiled it will never wear out.

## The Gang is Strongly Built

The arbor bolts are square and the disk and spool have square holes which fit the arbor

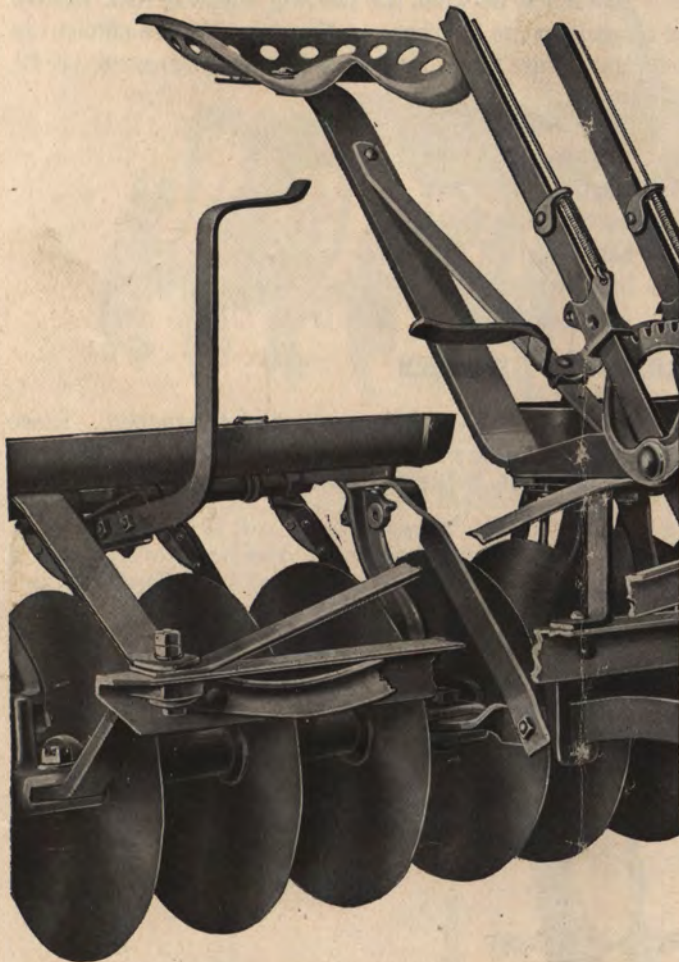


Bearing with part cut away to show collars on spool.  
This is an exceptionally strong and durable bearing

# The Disks Pulverize Thoroughly

It is possible to have a harrow disk so flat that it will penetrate very deeply, and yet do a very coarse kind of pulverizing. It is equally possible to have the disks so curved that they will

do very excellent pulverizing but will not penetrate the ground. The disks on the Deering bumper disk harrow are a happy combination of these two extremes, the result being that the disk harrow penetrates the ground and does the very best possible disking in all conditions of soil.



Brace from set lever bar to top of gang frame, makes it impossible to twist gang frame

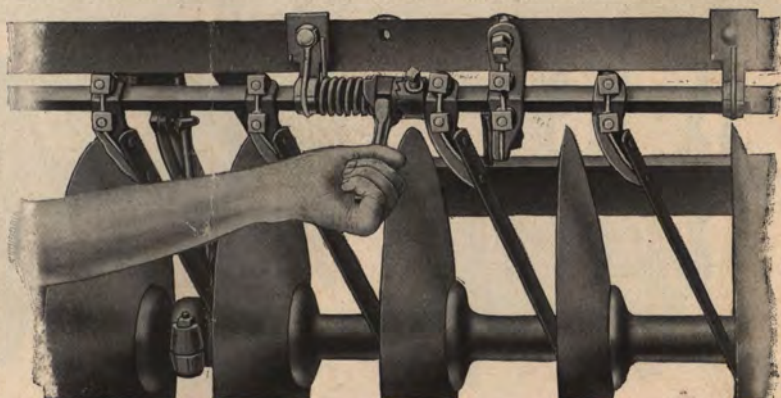
foot lever is conveniently placed and is fitted with a set-screw which can be adjusted to prevent the operator from twisting the scraper bar by putting too much pressure on the foot lever. This set-screw is adjustable so that the stroke from the scraper blade can be made long or short as the operator desires.

## The Scrapers Clean the Disks Properly

The Deering bumper disk harrow is equipped with oscillating or rocking type scrapers. These scrapers move from the center to the outer edge of the disks, cleaning themselves as well as the disks. It is impossible for trash to clog the scrapers or wind around the axles. The blades are of a high quality of steel, and are fastened so that any one of them can be removed without taking off the scraper bar or any of the blades.

## Foot Lever

The foot lever is convenient to the feet and can be adjusted to different heights, for tall or short drivers. The



More or less pressure can be put upon the scrapers

## Deering Cutaway Disk Harrow

The cutaway disk harrow has some advantages over the plain disk harrow in certain conditions of soil. It does not pulverize the ground as well as a plain disk harrow, but stirs it up, leaving it in a coarser condition. The only difference between the Deering cutaway disk harrow and the plain, is in the cutaway disks and a special type of scraper. The scrapers are efficient in keeping the disk clean. Both the plain and cutaway are furnished in the following sizes: 8, 10, 12, 14, and 16 disks—16, 18, and 20 inches in diameter.

The 8-disk harrow cuts 4 feet.

The 10-disk harrow cuts 5 feet.

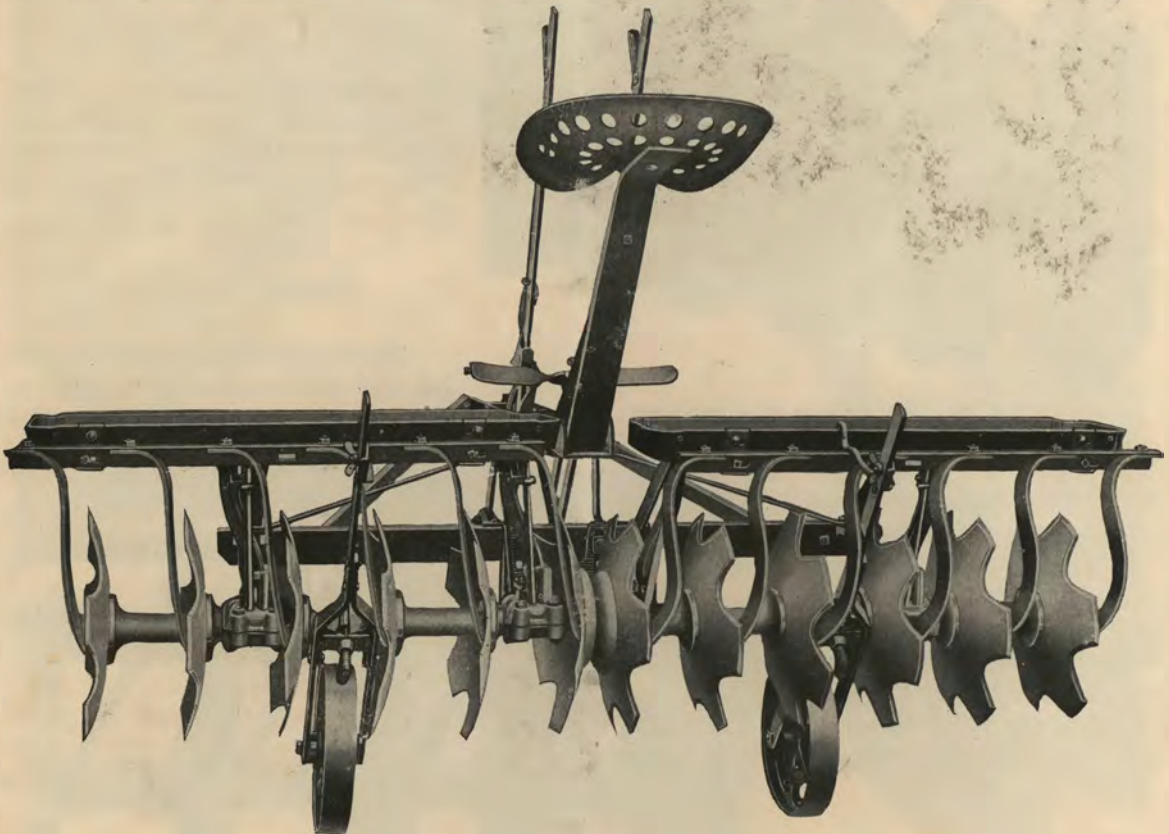
The 12-disk harrow cuts 6 feet.

The 14-disk harrow cuts 7 feet.

The 16-disk harrow cuts 8 feet.

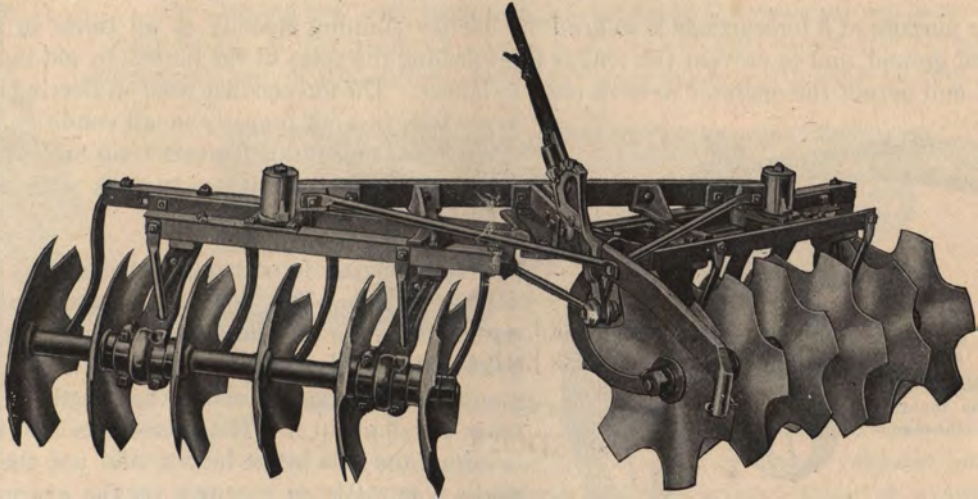
## Transport Trucks

The transport trucks for the Deering disk harrow can be easily attached and detached. These trucks protect the disks when traveling over hard and stony roads, and make it an easy matter to transport the harrow from one field to another. This truck is furnished only on special order at a small additional expense.



Deering cutaway disk harrow on transport trucks

## Deering Double Disk Harrow

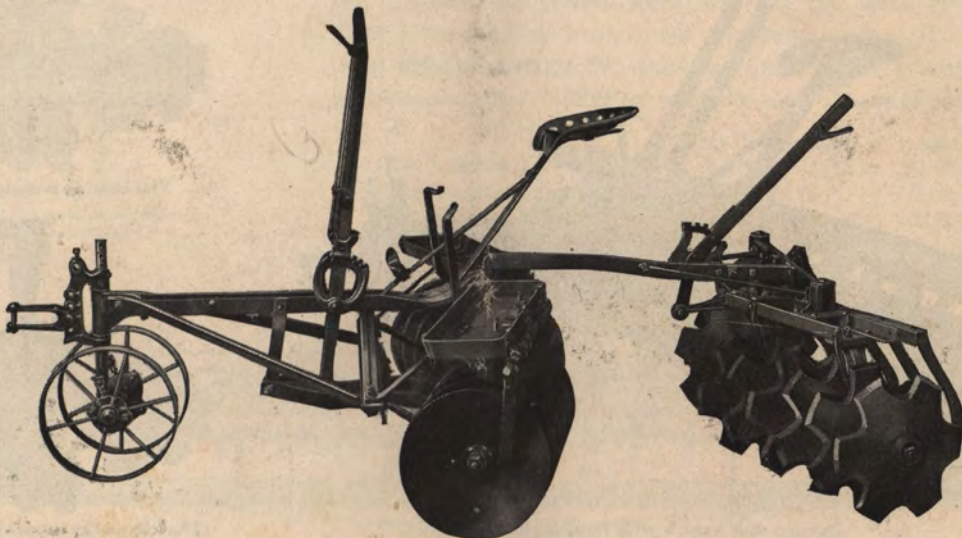


Rear attachment for Deering double disk harrow

A popular combination much used is a Deering double disk harrow, consisting of an out-throw disk harrow in front and an in-throw harrow behind. This harrow is furnished regularly with plain disks in front and cutaway in the rear. The front harrow is the same as the regular Deering harrow and has all its excellent features. A great benefit to be derived from a harrow of this kind is that the rear gangs level the ground and leave it in excellent condition. In some localities the farmers sometimes prefer cutaway gangs both in the front and the rear. This harrow will be furnished in this manner when so ordered.

An advantage of this combination of harrows is that the rear gangs can be removed and the front harrow used as a regular disk, if the farmer desires. The rear attachment is fastened in a socket at the back of the seat of the front harrow, making it an exceedingly simple and easy matter to remove the rear gangs. Both gangs of the rear harrow are controlled by one lever, convenient to the driver's hand. The snubbing blade in the center keeps the gangs working level at all times and in all conditions of ground. The gang frame is solidly made. The oiling facilities are convenient, the oil pipe reaching to the top of the bearing standard.

This harrow is furnished in 5, 6 and 7 foot cuts.

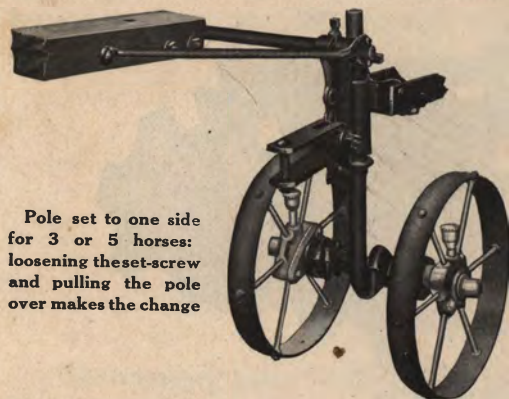


Deering double disk harrow

# Deering Disk Harrow Forecarriage

*Feb. 12 30  
Mr. Moody  
Somerville*

The purpose of a forecarriage is to keep the harrow running steadily at all times in all conditions of ground, and to prevent the tongue from lashing the sides of the horses; to aid in turning corners, and permit the operator to work close to fences. The forecarriage used on Deering harrows never fails to work properly in all conditions of soil. It has more adjustable features than any other forecarriage. It can be adjusted to work with any size of disks to do the best work.



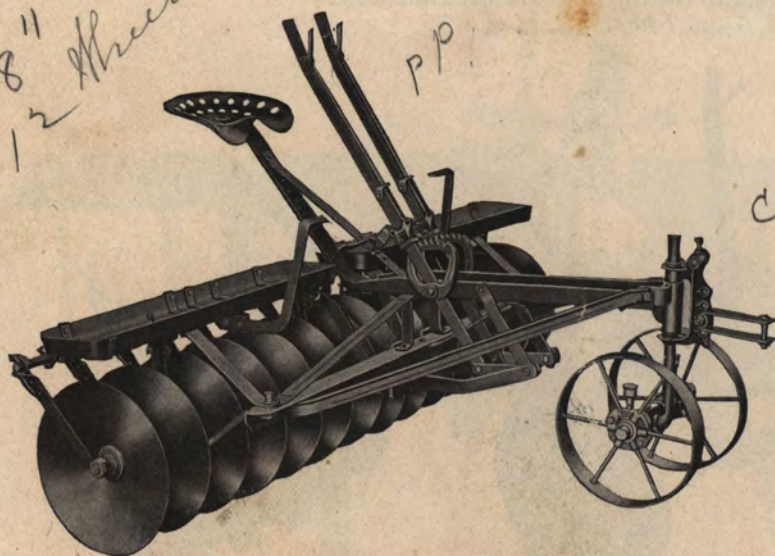
Pole set to one side for 3 or 5 horses: loosening the set-screw and pulling the pole over makes the change

The Deering forecarriage can be used with or without a pole. This pole can be attached in the center for two or four horses, or to the right or left hand side for three or five horses. These adjustments can be made in about the length of time it takes to tell about it. The operator is also enabled to adjust the pole to the horses, and not the horses to the pole, as is so common on the average forecarriage. The pole is furnished with the forecarriage

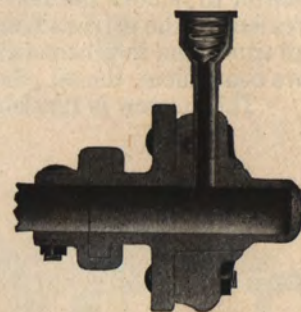
only on special order and at a slight additional expense. The pole of the harrow is bored for the forecarriage pole irons. Consequently, a farmer having a harrow and desiring to equip it with a forecarriage does not need to order an extra pole. If the forecarriage is purchased with the harrow, the pole is not furnished unless especially ordered.

Hard oilers are used on the forecarriage bearings. These bearings are dustproof—a great point, as the wheels on a forecarriage are generally enveloped in dust while in operation in dry fields.

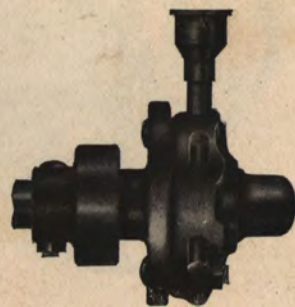
The forecarriage is regularly furnished.



Deering disk harrow with forecarriage



This bearing is dustproof

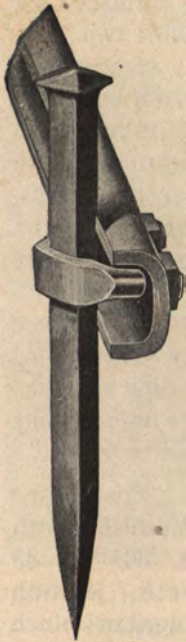


The hub on the outside is closed

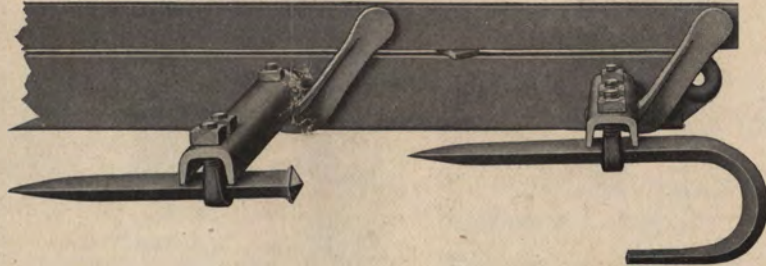
*Bumper steel scraper recd.  
6' Sp. 9977 B.*

# Deering Peg Tooth Harrow

The Deering peg tooth harrow is without doubt the strongest peg tooth harrow made today. It is a peg tooth harrow which can be used satisfactorily in all kinds and conditions of ground, and for all purposes where a peg tooth harrow is used,



The tooth is held with a steel forged clip fastened with two nuts. The tooth does not slip



Showing runner tooth and how harrow folds for transportation

without springing the tooth bars out of shape. It is a very valuable harrow in every way, and is well worthy of serious consideration and thorough examination by any farmer needing this particular kind of a tillage implement.

The Deering peg tooth harrow will give good service long after the ordinary harrow is worn out. The reason for the great strength of this harrow is that the strengthening bars, one on each side of the section, distribute the strain equally to all the tooth bars when one of the teeth strikes an obstruction; thus using the strength of the entire section to withstand the strain on a single tooth. Without these bars it is as strong, if not stronger, than the ordinary harrow.

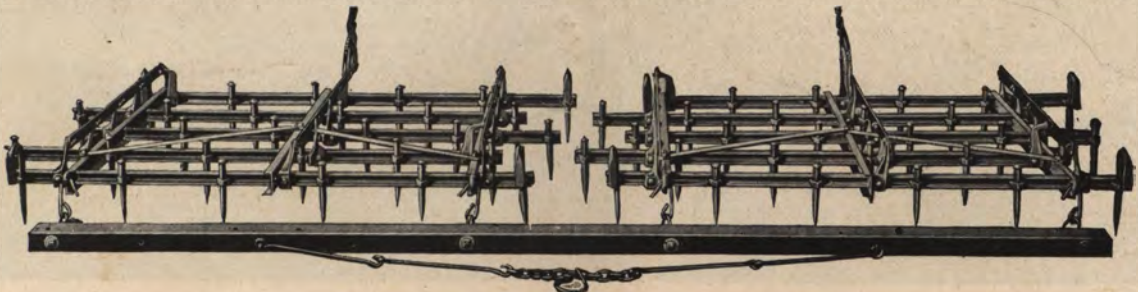
Each section is equipped with five U-bars. The bars are rolled from high carbon steel, and are thicker in the center than they are on the edges, which gives strength where strength is required, and does not give additional weight to the bar.

The teeth have a wide range of close adjustment, giving the operator the advantage of working the teeth at the right slant to do the best work in all conditions of ground. The sections are fastened to the draw bar only, giving a very flexible harrow—one that conforms with the unevenness of the ground.



Tooth, steel clip and nuts unassembled

|                           | 25-tooth     | 30-tooth     | 35-tooth     |
|---------------------------|--------------|--------------|--------------|
| The 2-section harrow cuts | 8 ft. 3 in.  | 9 ft. 11 in. | 11 ft. 8 in. |
| The 3-section harrow cuts | 12 ft. 5 in. | 15 ft.       | 17 ft. 6 in. |
| The 4-section harrow cuts | 16 ft. 8 in. | 20 ft.       | 23 ft. 5 in. |

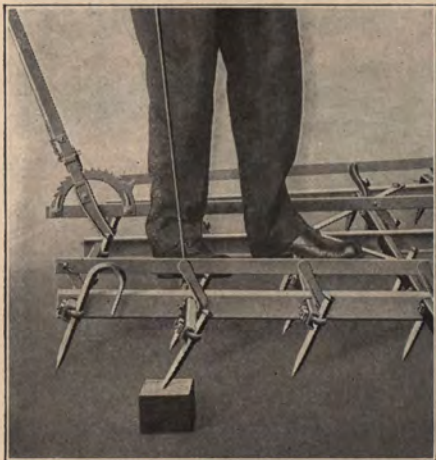


Deering peg tooth harrow, front view

One section, or as many as desired, can be used as one harrow. Draw bars are furnished for two, three and four sections. The tooth clips are of forged steel and are fastened with two nuts, making an exceptionally strong fastening. The teeth are made of a special quality of steel and have upset heads to prevent dropping through the clips if they become loose. Each section is

equipped with four runner teeth to act as transports for the harrow. They protect the meadows and save the trouble of loading the harrow onto a stone boat or wagon.

This harrow is furnished with 25, 30, or 35 teeth,  $\frac{1}{2}$ -inch square, or  $\frac{5}{8}$ -inch diamond shape.



A harrow equipped with a strengthening bar will not sag even under the weight of a heavy man



Showing what will happen to a harrow not equipped with strengthening bar under same conditions  
Note that the pressure of only one foot will cause sagging

## Riding Attachment for Deering Peg Tooth Harrow

Labor saving devices of every description on the farm are very much appreciated by the farmer. One device that will relieve his labor considerably is the riding attachment for Deering peg tooth harrows. It is certainly less tiresome to ride behind the peg tooth harrow all day than to walk behind it in the soft soil.

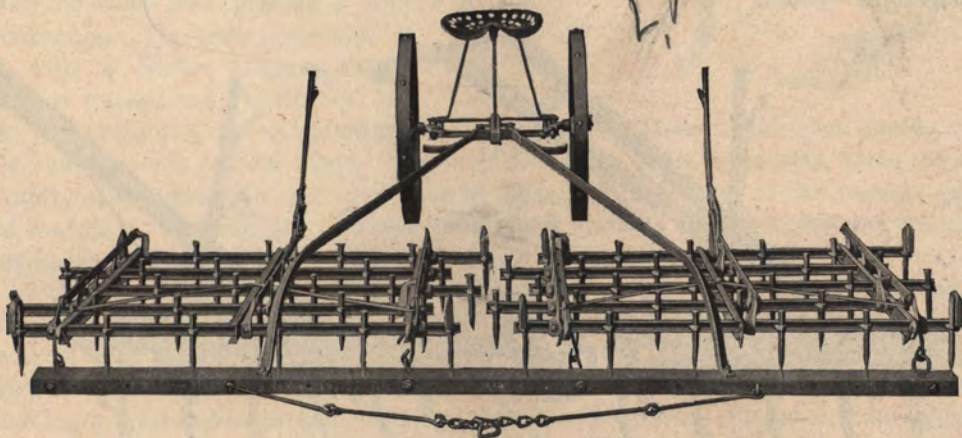




The Deering riding attachment is connected directly to the draw bar so that it does not interfere in any manner with the good work of the harrow. It follows along the line of draft; therefore, does not cause the harrow teeth to trail. The wheels are strong, with spokes set staggered, and are equipped with hard oilers.

The seat is balanced over the axle and places the driver high, so that he is well out of way of the dust. The wheels turn automatically when corners are turned, preventing them from tipping up or coming in contact with the harrow. As can be seen in the illustration, the riding attachment is very light and adds very little to the draft of the horses.

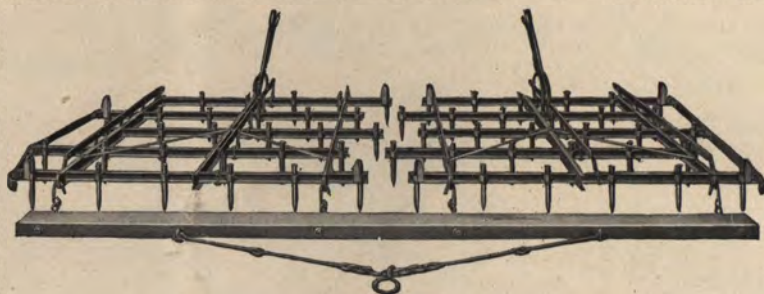
This riding attachment is furnished only on special order at a slight additional cost.



Deering peg tooth harrow with sulky attachment

## Orchard Guards

Guards to place on the outside of the harrow to prevent the ends of the U-bars from coming in contact with trees, stumps, posts, etc., will be furnished on special order at a slight additional expense. These guards also keep weeds and trash off the ends of the U-bars.



Deering peg tooth harrow with orchard guards

## Deering 14-tooth Cultivator

Where deep cultivation, without stirring the ground, is desired, the Deering 14-tooth cultivator will be found a particularly good implement to use. It is equipped with an expanding lever device, which enables the operator to cultivate between rows of different widths without stopping the horse to make different adjustments. It is therefore of special value to fruit growers and trucksters, when cultivating among strawberries, raspberries, gooseberries, blackberries, vineyards, etc. The expanding device has a double locking latch, which insures a rigid cultivator, whether the frames are extended or closed. The special feature of this expanding device is that when closing the cultivator, the adjustments can be made close, giving the operator the advantage of cultivating close to the plants if he desires. The depth of cultivation can be controlled by the wheel jack and single tree hook. The single tree hook has a locking device which prevents the single tree from falling out when backing the horse.

The Deering 14-tooth cultivator is furnished with a zig-zag or a straight bar frame; with or without lead wheels and with expanding lever or thumb-screw extensions. The tooth clip permits different slants of the tooth, so that the operator can cultivate deep or shallow, as he desires.

On special order, a reversible curved end tooth will be furnished at a small additional cost. This gives the advantage of two sets of teeth in one, which practically doubles the length of service of the cultivator.



Deering 14-tooth cultivator, zig-zag frame

Deering 14-tooth cultivator, straight bar frame

# Deering Cultivators

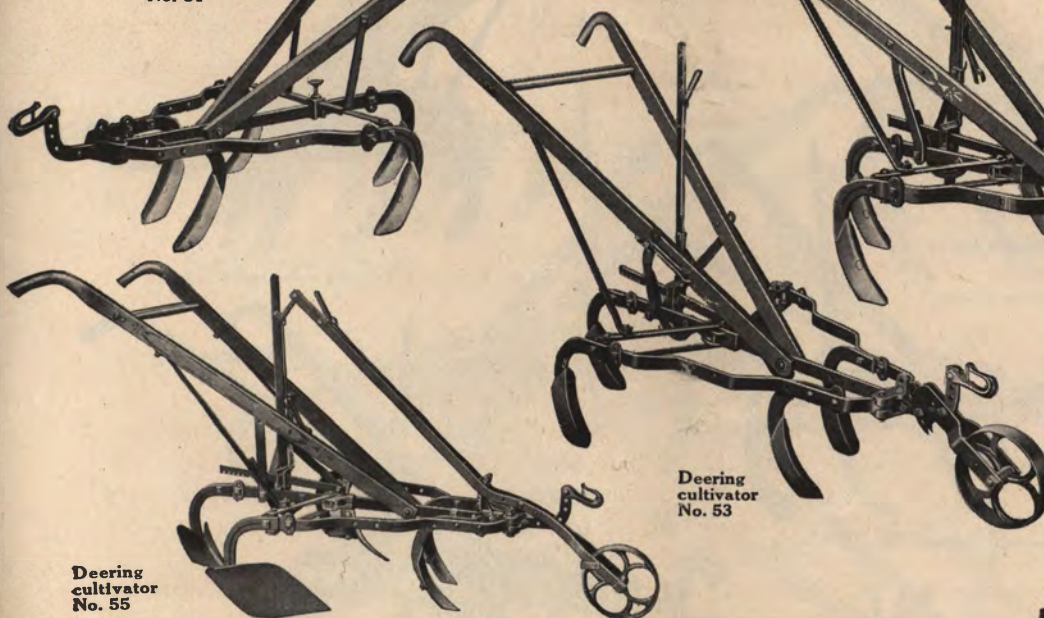
Deering  
cultivator  
No. 51



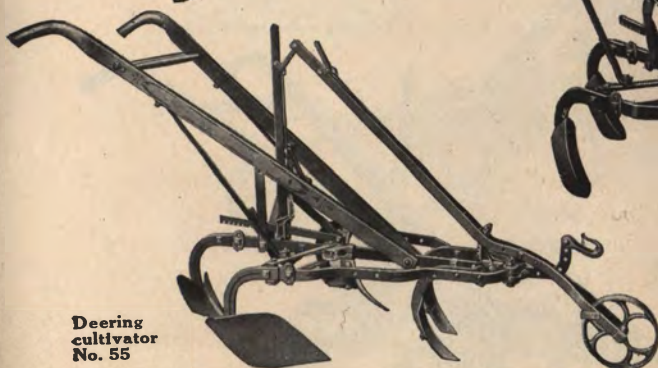
Deering  
cultivator  
No. 52



Deering  
cultivator  
No. 53



Deering  
cultivator  
No. 55

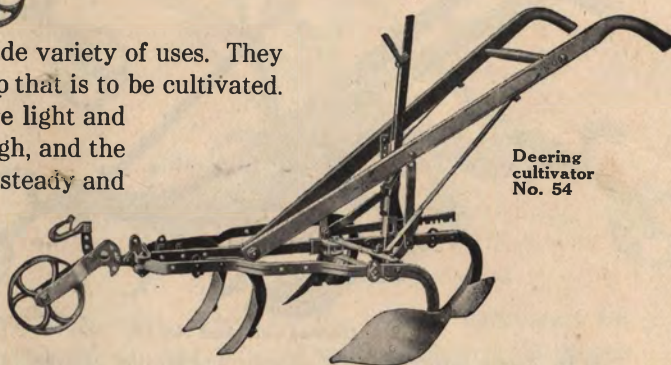


Deering cultivators can be adapted to a wide variety of uses. They meet the many conditions common to each crop that is to be cultivated. These cultivators are very strong, yet they are light and compact. The frames are made of steel, are high, and the shanks are shaped so that the cultivator runs steady and clears itself of trash easily.

The expansion lever is equipped with double bars on each side, making a very rigid construction. The lever quadrant is equipped with a double latching device which insures exceptional rigidity in the cultivator. A special feature of advantage on the expansion lever is that when closing the cultivator close adjustments can be made. This is of particular value, because it gives the operator an opportunity of adjusting the cultivator close to plants. This feature of the Deering cultivator is in great contrast to the ordinary cultivator, and is one that will be appreciated by a farmer who is exacting in his cultivating.

The shovel shanks are steel and can be adjusted to put more or less slant upon the shovels. The shovels are reversible, giving the advantage of the wear of two shovels in one. These shovels are made extra thick in the center and thin on the edges, so that they retain a sharp point until they are completely worn out. The shape of the shovel on the back is such that it fits the shank closely, making it impossible for the shovel to twist on the shank. The hole in the center of the shovel for the bolt is made extra deep and square so that the bolt which holds the shovel to the shank never comes loose or turns when taking the shovel off or tightening the bolt. This feature

Deering  
cultivator  
No. 54

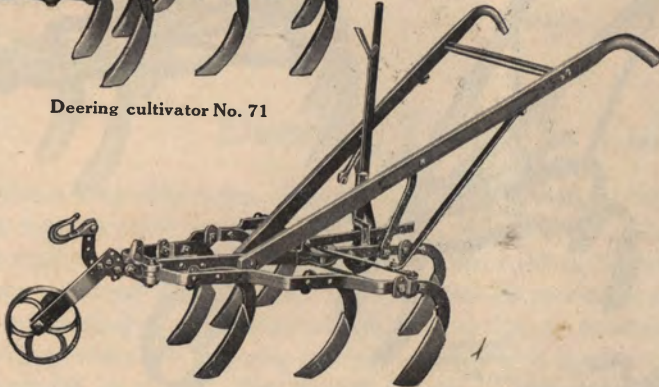


# Deering Cultivators

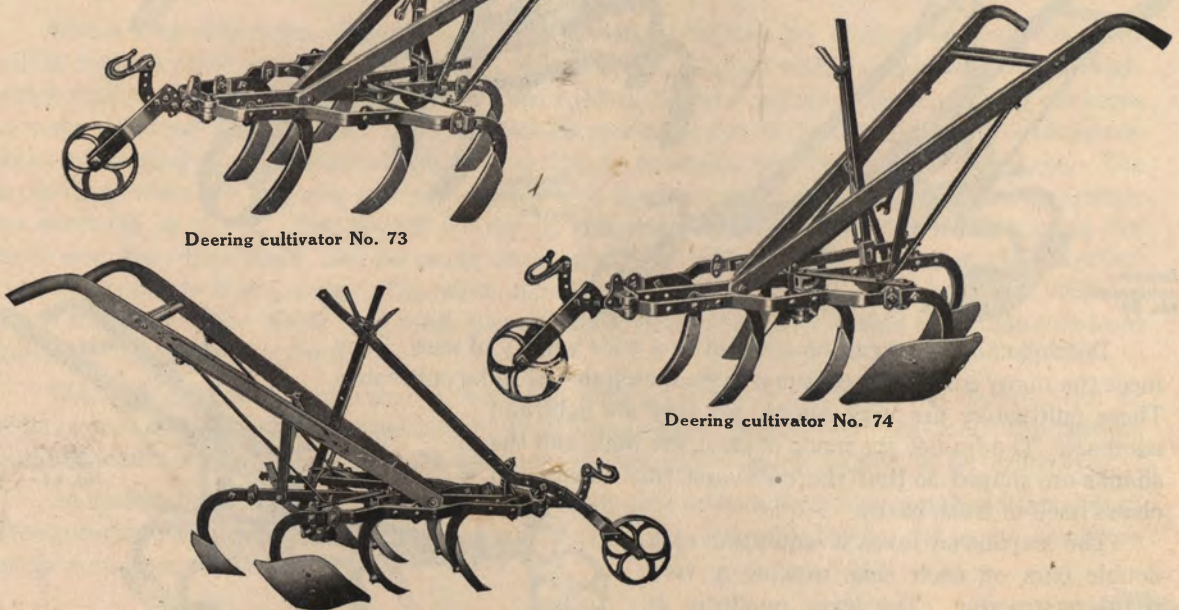


Deering cultivator No. 71

Deering cultivator No. 72



Deering cultivator No. 73



Deering cultivator No. 74

Deering cultivator No. 75

is in great contrast to the ordinary shovel construction. The mold boards are made similar to the mold board and point of a plow. They can be adjusted to throw dirt towards or away from the plant. The horse hoe is made on the same plan as the shovels; that is to say, it is thicker in the center than it is on the edges, giving the advantage of a sharp point until it is completely worn out.

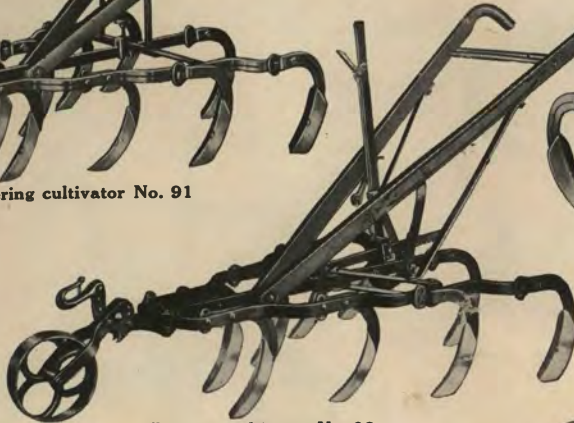
Deering cultivators are made in three series—Nos. 51, 52, 53, 54 and 55, the first; 71, 72, 73, 74 and 75, the second; 91, 92, 93, 94 and 95, the third. The difference in these cultivators is that the 50 series is equipped with five shovels, the 70 series with seven shovels, and the 90 series with nine shovels. Cultivators Nos. 51, 71, and 91 are equipped with a thumb-screw expansion device. This cultivator is the simplest and will particularly appeal to those farmers who want a cultivator that cannot get out of adjustment through ignorance or carelessness on the part of the operator. Cultivators 54 and 55, 74 and 75, and 94 and 95, are of particular advantage in cultivating growing crops where hilling is necessary and the rows are of different widths because of the ease with

# Deering Cultivators



Deering cultivator No. 91

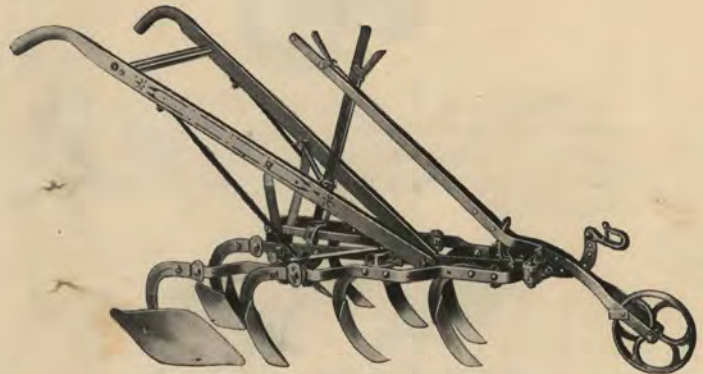
Deering cultivator No. 92



Deering cultivator No. 93



Deering cultivator No. 94



Deering cultivator No. 95

which both depth and width of cultivation can be changed. They are the kind of cultivators for gardeners and farmers who want their tools set exact so that they can cultivate close to the plants.

The 50 series of cultivators can be expanded from 12 to 25 inches; the 70 series can be expanded from 12 to 25 inches; and the 90 series from 19 to 38 inches.

- Cultivator No. 51 is furnished with five shovels and expansion screw.
- Cultivator No. 52 with five shovels and expanding lever.
- Cultivator No. 53 with five shovels, expanding lever, and wheel jack.
- Cultivator No. 54 with five shovels, expanding lever, wheel jack, 2 mold boards, and 1 horse hoe.
- Cultivator No. 55 with five shovels, expanding lever, wheel jack, 2 mold boards, and 1 horse hoe.
- Cultivator No. 71 is furnished with 7 shovels and expansion screw.
- Cultivator No. 72 with 7 shovels and expansion lever.
- Cultivator No. 73 with 7 shovels, expanding lever, and wheel jack.
- Cultivator No. 74 with 7 shovels, expanding lever, wheel jack, 2 mold boards, and 1 horse hoe.
- Cultivator No. 75 with 7 shovels, expanding lever, wheel jack, 2 mold boards, and 1 horse hoe.
- Cultivator No. 91 is furnished with 9 shovels and expansion screw.
- Cultivator No. 92 with 9 shovels and expansion lever.
- Cultivator No. 93 with 9 shovels, expanding lever, and wheel jack.
- Cultivator No. 94 with 9 shovels, expanding lever, wheel jack, 2 mold boards, and 1 horse hoe.
- Cultivator No. 95 with 9 shovels, expanding lever, wheel jack, 2 mold boards, and 1 horse hoe.

## Deering Cultivators



Double locking double bar expansion lever makes the cultivator very rigid. When this expansion lever is put on cultivators Nos. 51, 71, and 91, they become Nos. 52, 72, and 92, respectively.



Wheel jack is strong and the depth to be cultivated can be regulated by it. When this jack is attached to cultivators Nos. 52, 72, and 92, they become cultivators Nos. 53, 73, and 93, respectively.



Horse Hoe and Mold Board. The mold boards are reversible; when these are attached to cultivators 53, 73, and 93 in place of the three rear shovels, these cultivators become Nos. 54, 74, and 94.



Wheel Lever and Quadrant. When this wheel lever and quadrant are attached to cultivators 54, 74, and 94, they become Nos. 55, 75, and 95.



Depth regulator to be attached to cultivators Nos. 55, 75, and 95. This regulator permits the shovels to work in the ground at an even depth.



Cultivator No. 93 expanded full width. Note the extreme width of cut and that all the ground is cultivated.



Cultivator with rear shanks transposed so that the rear shovels fill in the furrow made by the outer shovel.

