

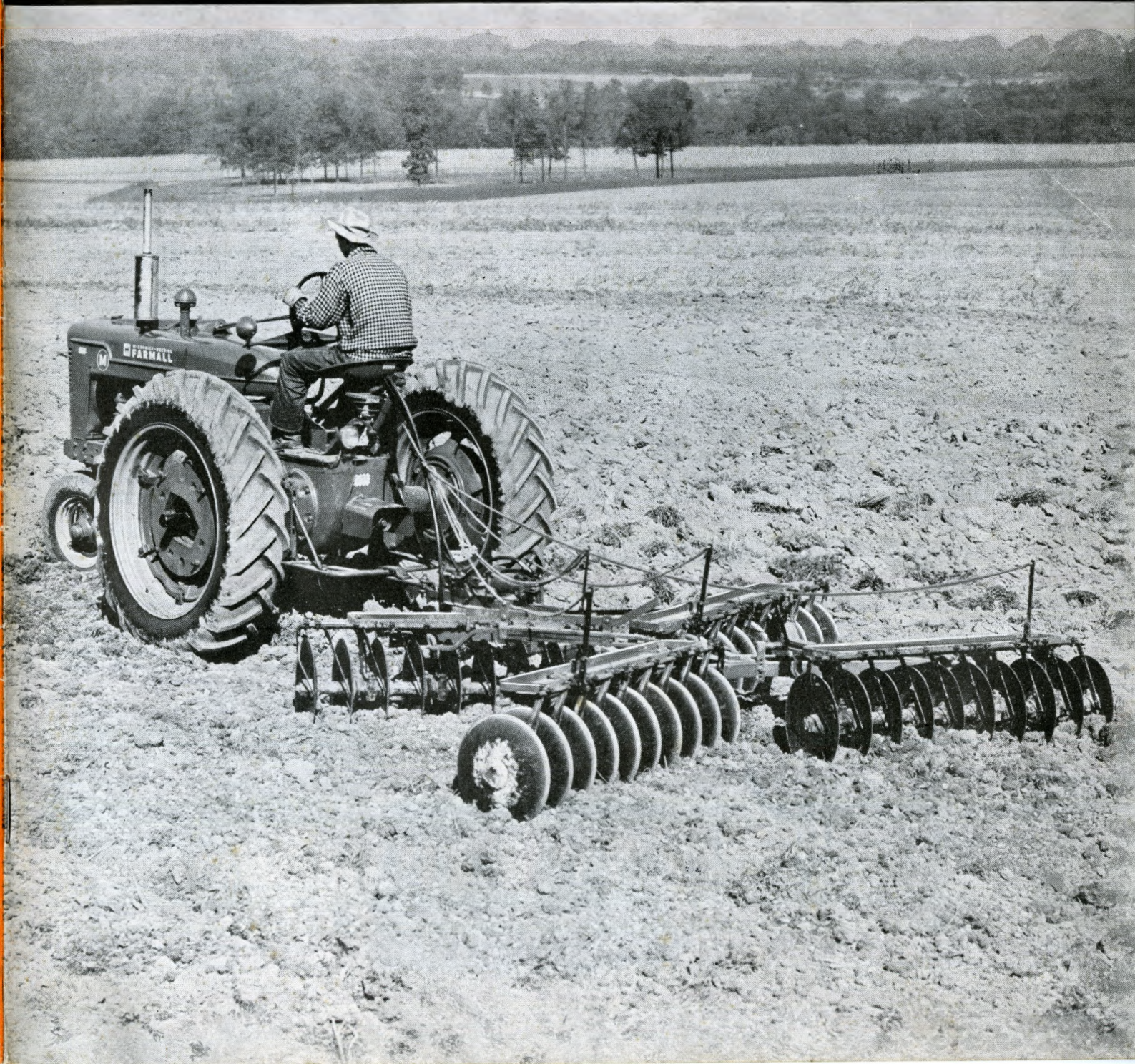
MCCORMICK-DEERING

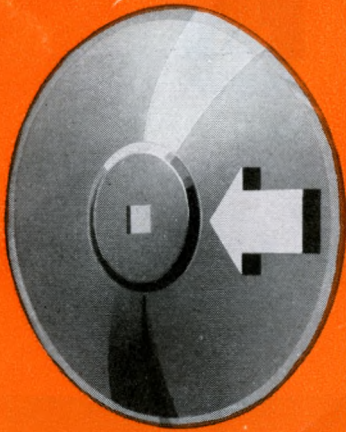
tillage tools

FOR EVERY FARM AND EVERY CROP



**INTERNATIONAL
HARVESTER**





ALL **M**CCORMICK-DEERING DISKS

Have **HEAT-TREATED, CRIMPED-CENTER**

and **VERTICALLY GROUND CUTTING EDGES**

A SURE WAY to tell the difference between an ordinary disk harrow and an up-to-date McCormick-Deering disk harrow is to look at the center of the disks. If you see a crimp in the center you can be sure it is a McCormick-Deering harrow, for only McCormick-Deering disks have this crimp. It is there for two important reasons: First, it provides a strong reinforcement for the disk in the center where, as in a wheel, there is the greatest strain. It acts as a shock absorber and stands strains that would crack or damage the ordinary disk. Second, the flat surface of the crimped center makes it possible to use flat-surfaced spacing spools between the disks. Careful grinding of the spools makes for an extremely close fit and prevents the looseness and breakage so often encountered in ordinary disk harrows after a few seasons of use.

McCormick-Deering disks are now ground on the inside edges rather than on the outside. This sharpens them in the natural, *vertical* direction of pressure, resulting in considerably more effective cutting of stalks, roots, etc.

McCormick-Deering disks are made of heavier gauge steel than many harrow disks and they are heat-treated to

hold an unusually good cutting edge. You can hurl one of these disks to a concrete floor without damaging its edge. You can bend it out of shape in a vise and it will spring back to its normal shape. You can hit it with a sledge—and be surprised at how hard it is to dent.

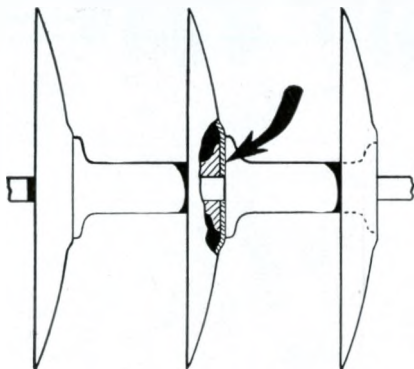
In other McCormick-Deering tillage tools you will find similar quality features which put McCormick-Deering tools in a class by themselves not only in the quality of the work they do but in their economical operation and the length of their useful life.

More than a century of farm machine experience has gone into their design. McCormick-Deering tillage tool factories today command an engineering skill and manufacturing experience unequalled in tillage tool history. The result has been a succession of improvements recently that are entirely new to the man who has not purchased new McCormick-Deering tillage tools in recent years.

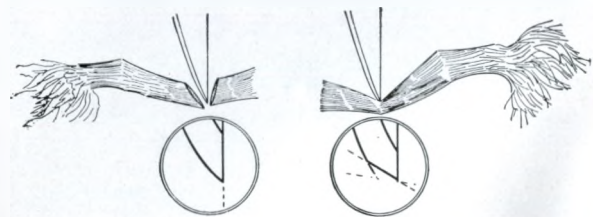
Study the tillage tools in this booklet. Complete details are available from International Harvester dealers. See the dealer nearest you. You will find him ready to give you reliable information about the tillage tools suited to your requirements.

All illustrations and descriptive matter in this publication apply to International Harvester products sold under either the McCormick-Deering or McCormick trade name.

Sectional view of McCormick-Deering disk gang assembly. The center disk is cut away to show how the flat surface of the crimped center (note arrow) makes possible an extremely close fit between the disk and the spacing spools on both sides. This firm contact reinforces the arbor bolt extending through the spools, and makes for a positive, uniform gang assembly.



All McCormick-Deering disks are ground vertically on the inside edges (see illustration at left) rather than on the outside edges (right). Vertical grinding sharpens the blades in the natural vertical direction of pressure. Stalks and roots are *cut* rather than just *bent*.



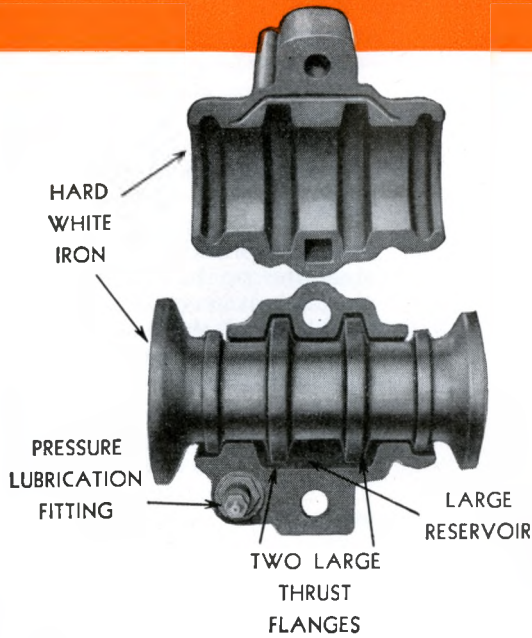
LONG-LIFE, DOUBLE-RING

Thrust Bearings

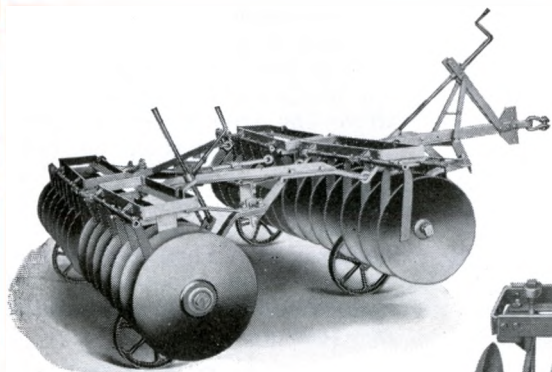
OF HARD WHITE IRON

McCormick-Deering bearings are built for many years of trouble-free service. They are made of long-wearing, hard white iron with double-ring thrust flanges. The pressure of the disks is carried almost entirely on these wide, heavy flanges. Grease, entering the bearing through a pressure lubrication fitting, passes to a large reservoir between the flanges at the front of the bearing and near the bottom, where there is the least amount of pressure. From this point the grease is readily distributed to all parts of the bearing.

Trouble-free bearings on this No. 9-A harrow make for easy pulling on the tractor.

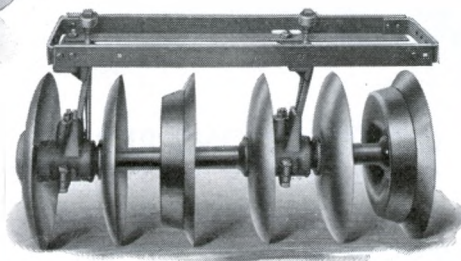


Detail of a bearing on the No. 10-A tractor disk harrow. Other McCormick-Deering tractor disk harrows are similarly equipped.



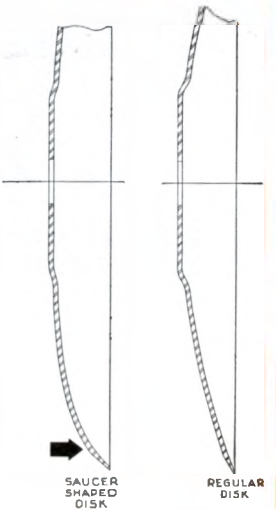
This roller-bearing transport truck is helpful in moving McCormick-Deering tractor harrows from one field to another, especially on hard roads. Available on order.

A big help in extremely sandy soil is the use of one or more depth gauges on each gang. Available on order for all McCormick-Deering disk harrows.



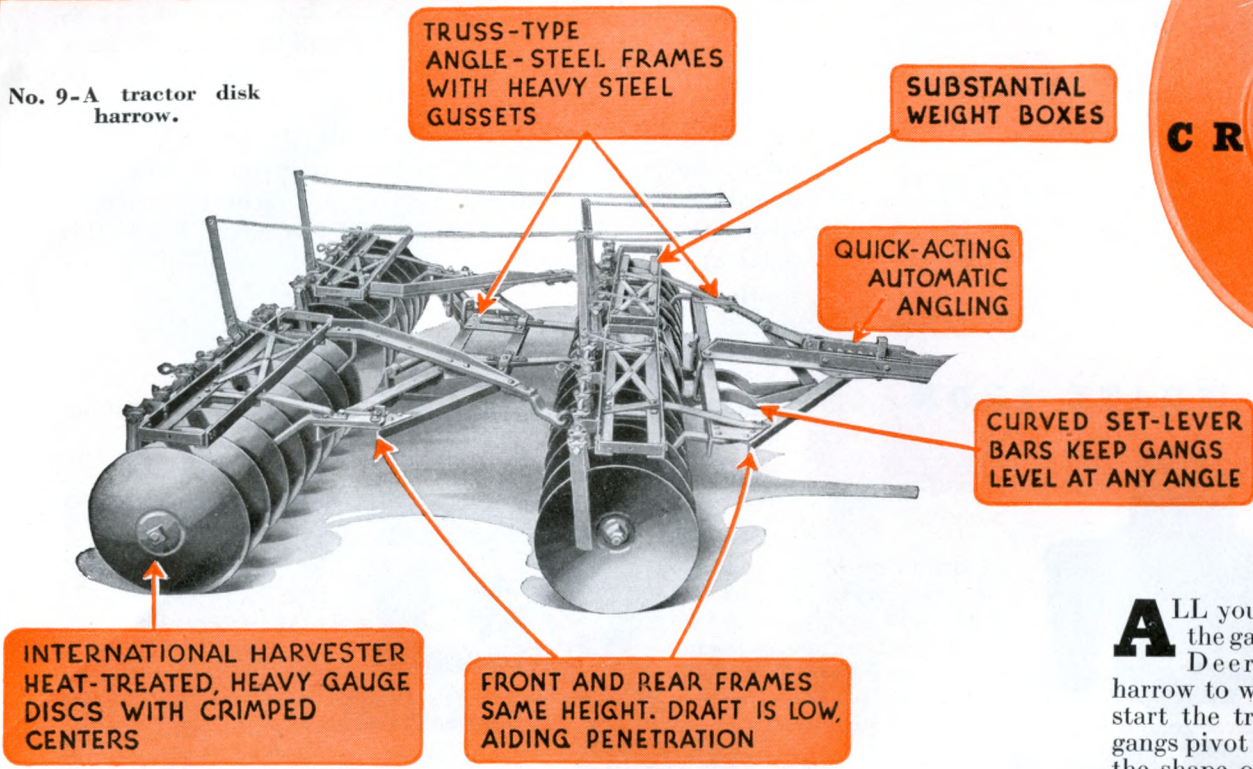
YOUR CHOICE OF THREE TYPES OF DISK

The Auburn-type saucer-shaped disk (shown here beside plain disk) is rounded near the edge to prevent sinking too deep in soft soil (note arrow). Cut-out type disks (see page 7) are also available for all McCormick-Deering tractor disk harrows.



MCCORMICK-DEERING

No. 9-A tractor disk harrow.



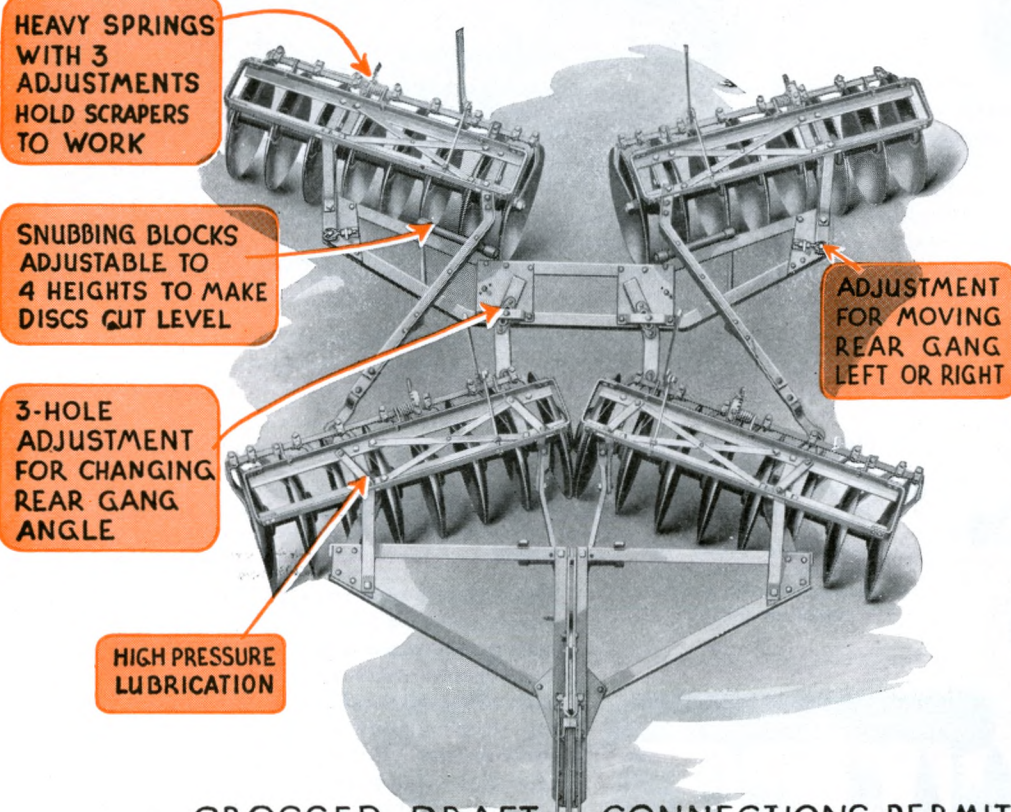
ALL you need to do to angle the gangs of a McCormick-Deering tractor disk harrow to working position is to start the tractor. Because the gangs pivot in conformance with the shape of the disks, there is no pushing against the outside face of the disks—no tendency on the part of the rear gangs to straighten out and “lose the angle” to which they are set. The gang-angling mechanism locks firmly in place after the gangs are at any one of six angles for which the device can be set.

Compare this ease of angling with harrows whose disks are pulled against the outside faces when angling, and which therefore create considerable effort in pulling the harrow forward far enough to bring the gangs to working angle.

Mark a spot on the ground next to one of the end disks of the McCormick-Deering. Then drive the tractor forward just far enough to let the gangs take the angle. You will find that *while the disks are taking angle, the harrow itself moves forward hardly at all.* Then back up the tractor. You will find that *the disks straighten just as easily as they take angle.*

Accurately Disked Ridges

Much of the value of double-disk harrowing is lost if the rear disks of a tractor disk harrow fail to cut out accurately the ridges formed by the front disks. The work done by many inaccurately adjusted tractor disk har-



CROSSED DRAFT CONNECTIONS PERMIT EACH GANG TO TILT SEPARATELY WITHOUT STRAIN ON THE FRAME AND COMPEL REAR GANGS TO FOLLOW CORRESPONDING FRONT GANGS PROPERLY AT ALL TIMES.

DRAFT CONNECTIONS MAKE POSSIBLE

Quick Angling and Accurate Trailing

rows is just "getting by," simply because their owners are not aware of the presence of undisked ridges under the surface of the soil.

Owners of McCormick-Deering *crossed-draft* tractor disk harrows can be assured of accurately disked ridges. The inner ends of the rear gangs, while the outer ends of the front gangs, are connected to the outer portion of the front gangs, while the outer ends of the rear gangs, through the rear frame, are drawn from the inner ends of the front gangs. These crossed-draft connections cause each rear gang to follow its corresponding front gang and

prevent the rear disks from skidding to one side when turning a corner or when encountering peculiar soil conditions.

Adjustment is provided on the rear frame for moving either or both of the rear gangs to the left or right with relation to the front gangs. This McCormick-Deering feature makes it a simple matter to get the proper setting for hard or soft soil conditions, regardless of the diameter of the disks.

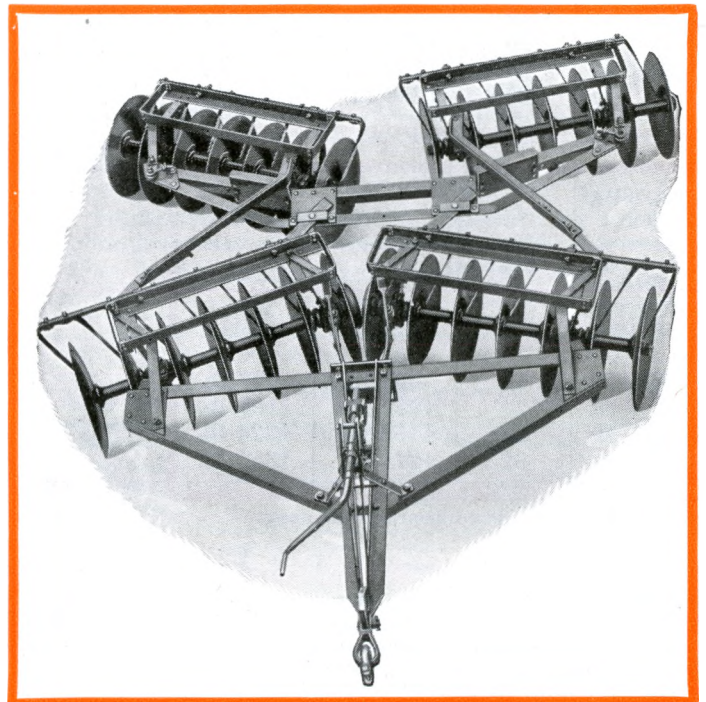
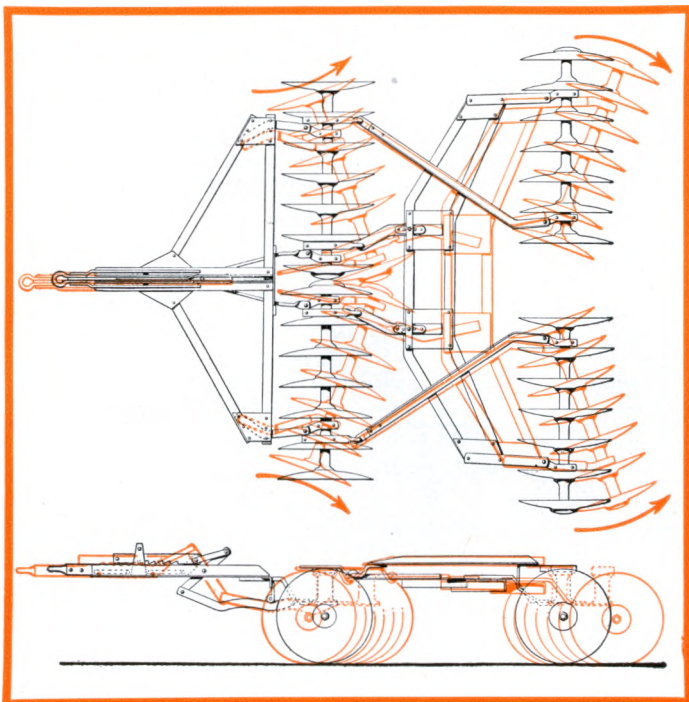
Where soil conditions make it advisable for the rear disks to have a slightly different angle from that of

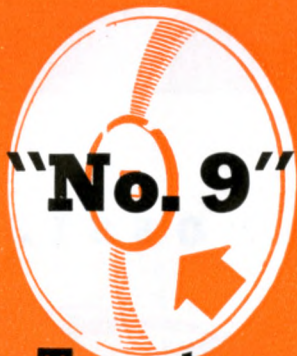
the front disks, either or both of the rear gangs can be set to any one of three different angles by means of adjustments on the rear frame.

The frame construction provides for a wide range of flexibility. Each gang can be tilted separately at quite a sharp angle and readily follow the shape of ditches and levees. A uniform job of disking is assured, no matter how irregular the contour of the field. Any of the gangs can ride over a good-sized stone, stump, or similar obstruction without strain on the frame.

Shown in black is the position of a McCormick-Deering tractor disk harrow before it is angled. The position of parts which move upon angling is indicated in color. Arrows show how the gangs are pivoted in conformance with the shape of the disks. Note that the first forward movement of the tractor causes both the *inside* ends of the front gangs and the *outside* ends of the rear gangs to be pushed back.

The crossed-draft connections also assure accurate trailing of the rear gangs. The entire rear section does not skid to one side when turning a corner or when encountering unusual soil conditions. Each rear gang follows its corresponding front gang, the rear disks cutting out, with an unusual degree of accuracy, the ridges formed by the front disks.





"No. 9" Tractor Disk Harrows



Complete and uniform tillage in heavy soil is the rule with the No. 9-A harrow.

STRONG HARROWS IN FIVE TO TEN-FOOT SIZES

SPECIFICATIONS

No. 9-A 6 $\frac{5}{8}$ -in. Spacing	No. Disks	Weight	
		16-in. Disks	18-in. Disks
5 ft.	20	885 lb.	937 lb.
6 ft.	24	948 lb.	1014 lb.
7 ft.	28	1087 lb.	1148 lb.
8 ft.	32	1189 lb.	1264 lb.
9 ft.	36	1294 lb.	1377 lb.
10 ft.*	40	1432 lb.	1522 lb.

No. 9-B 9-in. Spacing	No. Disks	Weight	
		16-in. Disks	18-in. Disks
5 $\frac{1}{2}$ ft.	16	873 lb.	915 lb.
7 ft.	20	1021 lb.	1069 lb.
8 $\frac{1}{2}$ ft.	24	1139 lb.	1195 lb.
10 ft.*	28	1259 lb.	1336 lb.

No. 9-BA 9-in. Spacing in Front 6 $\frac{5}{8}$ -in. Spacing in Rear	No. Disks	Weight	
		16-in. Disks	18-in. Disks
5 $\frac{1}{2}$ ft.	18	880 lb.	929 lb.
7 ft.	24	1050 lb.	1104 lb.
8 $\frac{1}{2}$ ft.	28	1158 lb.	1224 lb.
10 ft.*	32	1274 lb.	1354 lb.

*The 10-foot sizes have 3 bearings per gang.

The McCormick-Deering No. 9-A 8-foot tractor disk harrow is regularly equipped with automatic, tractor-operated gang-angling device. A manual angling device is available on special order. Rocking scrapers are regular equipment.

HERE is a disk harrow that will stand up under severe conditions of tractor operation—take the strains resulting from rough fields and gullies—and go right on working for many years to come.

The "No. 9" can be supplied in three ways with regard to disk spacing—the No. 9-A with 6 $\frac{5}{8}$ -inch spacing, the No. 9-B with 9-inch spacing, and the No. 9-BA with combination spacing.

The No. 9-B disk harrow, because of its wider spacing, permits greater penetration of the disks in the soil. It is, therefore, preferable for use in gumbo, bottom land, or where cornstalks are to be cut, or where a harvester-thresher has left a high grain stubble. Heavily-manured lands, trash, weeds, cotton land, and cover crops also usually respond better to disking when the disks are far apart.

On no sizes of wide-spaced McCormick-Deering harrows are there more than two disks outside the frame bearing on any gang. This reduces the strain on the bearing and arbor bolt.

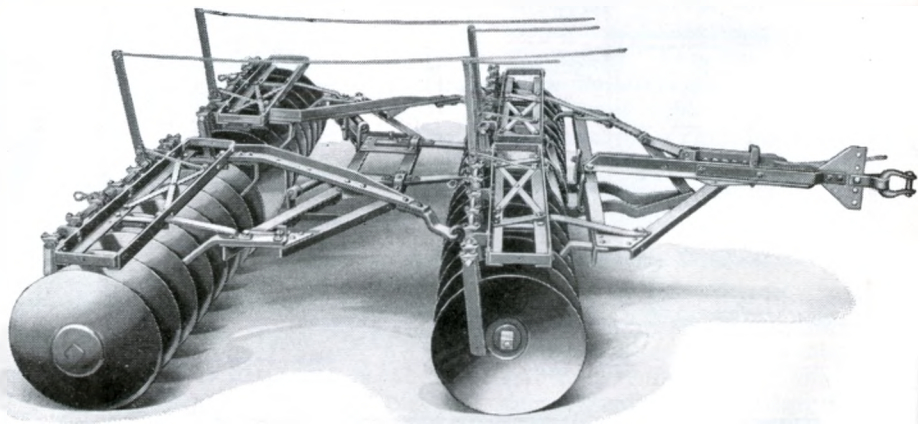
The 9-BA is a combination of the wide and narrow spacing between the disks. The front section has 9-inch spacing and the rear section 6 $\frac{5}{8}$ -inch spacing.

There are three bearings per gang on the 10-foot sizes; two bearings per gang on the smaller sizes. Vertical height adjustment on hitch. Rocking scrapers, weight boxes, and 1 $\frac{1}{8}$ -inch arbor bolts are regular equipment.

Extra Equipment

Hydraulic de-angling device. Independent gang-angling attachment for the 9-A Manual angling device. Double set lever bar pressure rollers for Nos. 9-A and 9-B. Rigid-type, full-blade scrapers. Center tooth. Auburn-type (saucer-shaped) disks. Depth gauges. Extra length arbor bolts for use with Auburn-type disks and depth gauges. Cut-out disks. Hitch for trailing an implement. Roller bearing transport truck.

Nos. 9-AF and 9-BF single-action harrows are described on page 12.

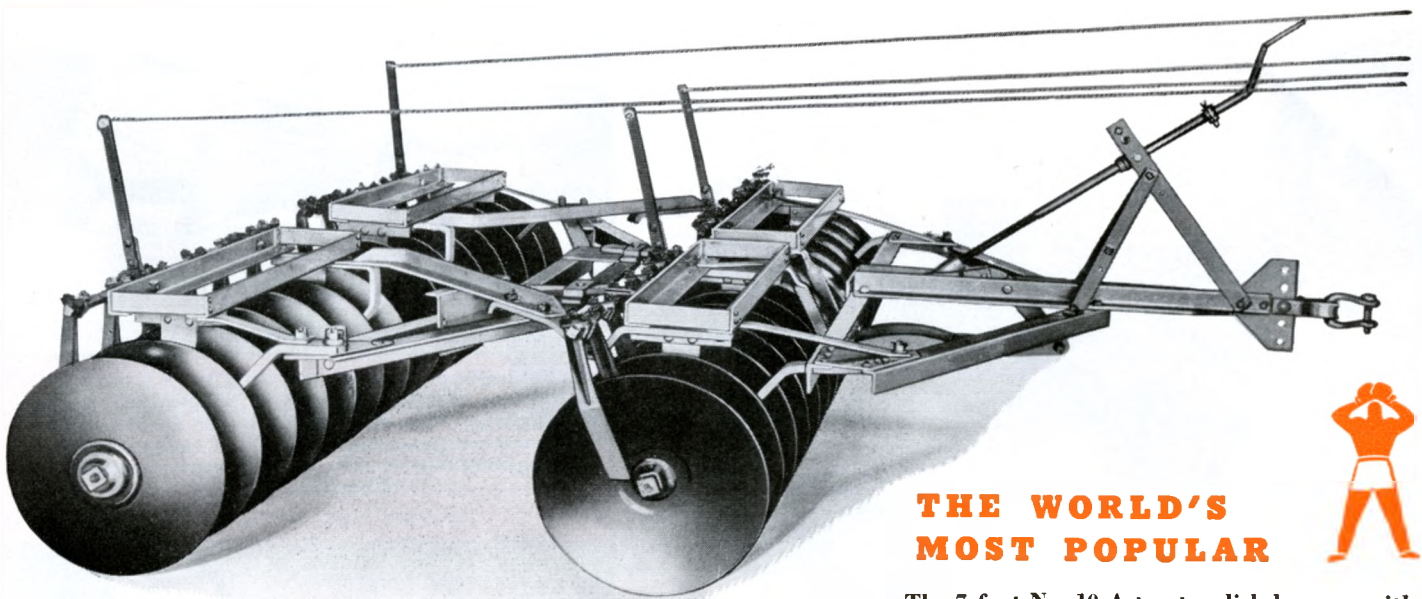




Farmall-A tractor pulls a No. 10-A, specially equipped with automatic angling device and depth gauges.



Tractor Disk Harrow



**THE WORLD'S
MOST POPULAR**



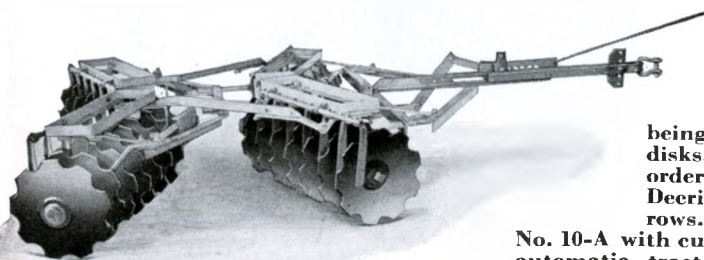
The 7-foot No. 10-A tractor disk harrow, with regular manual angling device.

The No. 10-A tractor disk harrow is built for many years of trouble-free service. Its lighter weight adapts it well for use with smaller tractors.

It is regularly equipped with a manual angling device, but an automatic, tractor-operated, gang-angling device, similar to that regularly supplied with the No. 9 series harrows, may be obtained on special order. The hitch permits vertical height adjustment. Either stationary adjustable scrapers or rocking scrapers may be obtained, as ordered. Deduction will be made for scrapers not taken. Arbor bolts are $\frac{7}{8}$ inches in diameter.

Other extra equipment includes: Hydraulic de-angling device. Independent gang-angling attachment. Auburn-type (saucer-shaped) disks. Depth gauges. Extra-length arbor bolts for use with depth gauges and Auburn-type disks. Cut-out disks. Center tooth attachment. Roller bearing transport truck. Hitch for trailing another implement behind harrow. Special long gang-angling crank for use with Farmalls H and M.

The No. 10-AF single-action harrows are described on page 12.



Cut-out disks cut stalks more effectively than the conventional type and tend to prevent uncut stalks from being pushed ahead of the disks. Available on special order with all McCormick-Deering tractor disk harrows. Shown here is the

No. 10-A with cut-out disks and with automatic, tractor-operated angling device, available as special equipment.

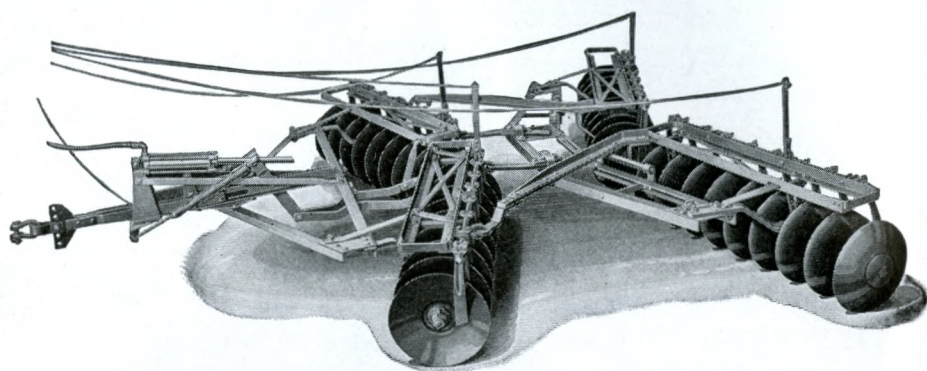
SPECIFICATIONS

Size	No. Disks	Weight (Pounds)		
		16-in. Disks	18-in. Disks	Deduct for Scrapers not taken
5 ft.	20	677	736	38
6 ft.	24	747	804	47
7 ft.	28	822	897	53
8 ft.	32	888	968	60

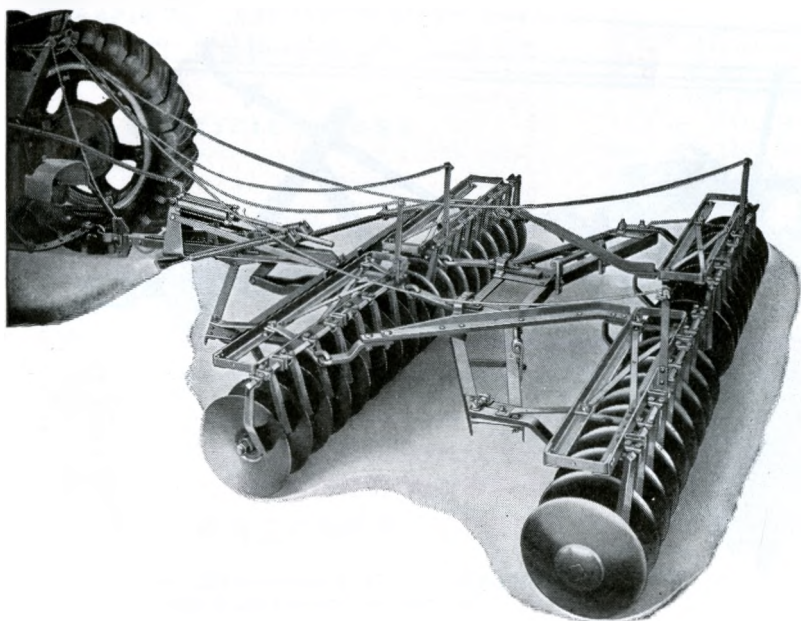
Weights based on stationary adjustable scrapers. Weights of rocking scrapers slightly higher.

Hydraulic De-Angling

**ATTACHMENT
For No. 9 Series
and No. 10-A Harrows**



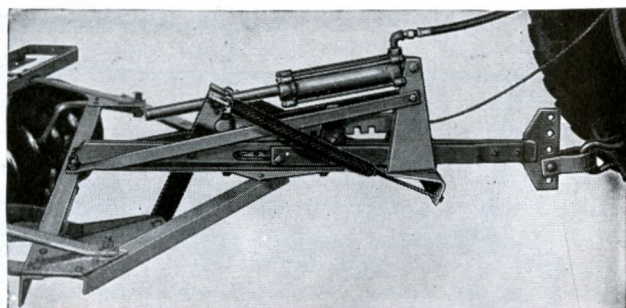
No. 9-A harrow equipped with hydraulic de-angling device as it appears in normal working position.



Hydraulic pressure from the Lift-All unit on the tractor straightens the gangs of this No. 9-A harrow equipped with the de-angling device. The gangs automatically resume their working angle with the continued forward movement of the tractor after releasing the Lift-All control.

THE hydraulic de-angling attachment, for use with Farmalls H, M and MD equipped with hydraulic Lift-All, is a mighty handy timesaver when working in hilly land and in fields where it is necessary to leave certain areas uncut to prevent erosion. The hydraulic cylinder is mounted on the harrow and makes it possible to straighten the gangs with the machine either in motion or standing still—an important feature when crossing ditches and when working in wet ground. A harrow with the de-angling attachment can also be operated mechanically when hitched to a tractor not equipped with a Lift-All unit.

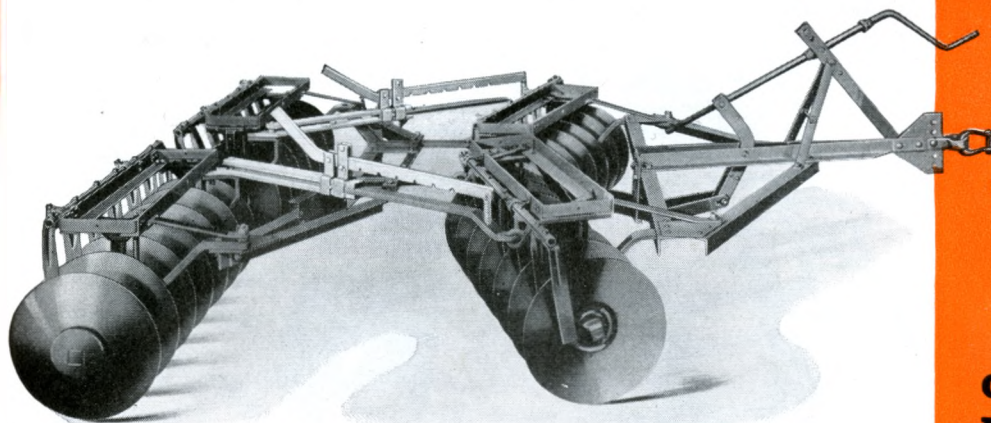
The attachment is available for Nos. 10-A, 9 series, and 7 series harrows equipped with either automatic or manual gang-angling. To use the device it is necessary that the tractor be equipped with the Lift-All attachment.



De-angling device for use with No. 9-A harrows having regular power-set (automatic) gang angling. The de-angling device for use with power-set gang angling on No. 7 series harrows (regular) and on No. 10-A harrows (special) is of similar design.



Detail of hydraulic de-angling unit for use with No. 10-A harrows equipped with manual-set (screw-type) gang angling. Nos. 9 and 7 series harrows with manual-set gang angling (special) can be provided with similar equipment.



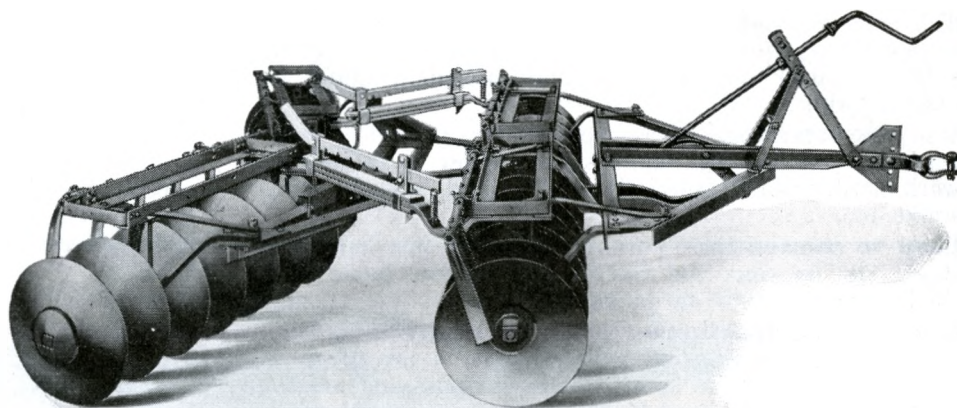
No. 10-A tractor disk harrow equipped with independent gang-angling attachment showing front gangs angled and rear gangs in straight position.

Independent Angling

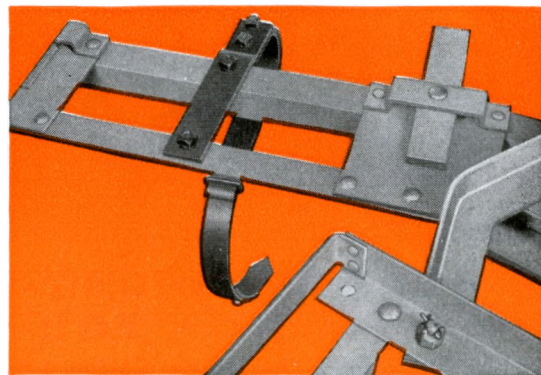
**OF REAR GANGS ON
NO. 10-A AND NO. 9-A
HARROWS**

WHEN it is desired to operate the rear gangs of a No. 10-A or a No. 9-A tractor disk harrow at a different angle from that of the front gangs, this may be accomplished by means of an independent gang-angling attachment, available on special order. The attachment is especially helpful for filling in dead furrows, and leveling back furrows, washouts, etc.

The attachment consists of telescoping, flat steel, rear harrow outer drawbars with notched control and handle for independently adjusting the cutting angle of the rear harrow gangs. Available for all sizes of the Nos. 9-A and 10-A. When ordering, specify harrow size.



No. 10-A tractor disk harrow equipped with independent gang-angling attachment showing front gangs in straight position and rear gangs in angled position. Similar equipment is available for the No. 9-A harrows.



It is a simple matter to attach a center tooth to the rear frame of any McCormick-Deering disk harrow (extra equipment).



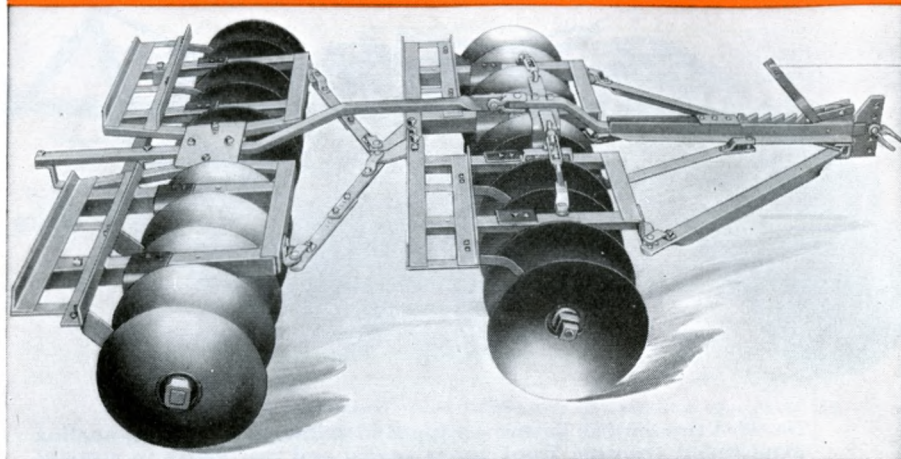
This No. 10-A, pulled by a Farmall-B tractor, has the regular manual angling equipment and rocking scrapers.



No. 15-B

**Tractor
Disk Harrows**

The 15-B 8-foot tractor disk harrow is regularly supplied with solid disks and full-blade scrapers.



A HEAVY-DUTY HARROW FOR THOROUGH TILLAGE

The McCormick-Deering No. 15-B heavy-duty, tandem disk harrow possesses such distinct advantages as ease of maneuvering; quick, effortless power angling; backing with no danger of jackknifing; and accurate trailing—no undisked ridges.

Deep penetration—Heavy construction gives deep penetration of the soil and enables the harrow to thoroughly work hard ground, especially cotton land, stubble, corn-stalks, etc.

Easy to maneuver—Turning radius of this harrow is short. In backing, the tractor and harrow move as a single compact unit—no jackknifing.

Rugged construction—Frames are rigidly welded together. Disk bearings of hard white iron are pressure-lubricated. Disks are spaced 9 inches apart and are the well-known International Harvester type. Vertical grinding on the inside edges assures that these disks will cut roots and stalks.

Quick, power angling—To adjust the angle of the gangs, the operator need merely disengage the control

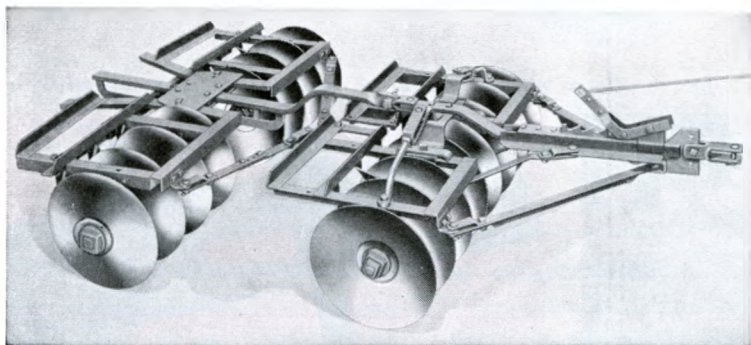
lever and move the tractor forward to increase the angle or backward to decrease it. A range of 0 to 20 degrees is possible.

Choice of Two Sizes and Various Equipment

The No. 15-B is regularly available as shown in the specifications with solid disks spaced 9 inches apart and full-blade scrapers. Special equipment includes cut-out disks, a center tooth, and transport trucks.

Specifications

Size	No. of Disks	Net Weight—Approx. (Pounds)		
		18-in. Disks	20-in. Disks	22-in. Disks
6½ ft.	16	1174	1330	1303
8 ft.	20	1305	1375	1466



**No. 23-A
TANDEM
DISK HARROW**

← The No. 23-A Disk Harrow showing adjustable tractor hitch and 5-position angling adjustment bar with lever engaged.

A STURDY, LIGHT-WEIGHT TANDEM DISK HARROW FOR SMALL TRACTORS

The McCormick-Deering No. 23-A is a relatively light-weight, 4-foot tandem disk harrow for use with small tractors, such as the Farmall Cub or the Farmall Super-A. It possesses all the advantages of the No. 15-B such as (1) maneuverability; (2) accurate backing with no jackknifing; (3) quick, easy power angling and straightening; (4) accurate trailing. The No. 23-A is available with either 14 or 16-inch disks spaced 6⅝ inches apart on sturdy ⅞-inch arbor bolts.

Reach unproductive land—Because of its small size

and great maneuverability, this tandem disk harrow can reach patches not heretofore utilized. The No. 23-A is ideal for the small acreage farmer as well as for the large acreage farmer who needs a small harrow for jobs where large equipment is not suitable. This harrow is especially suited to truck gardeners.

Heavy-duty construction—Many years of dependable service are assured by the sound, sturdy construction present in the frames, the 16 disks, and the pressure-lubricated bearings.

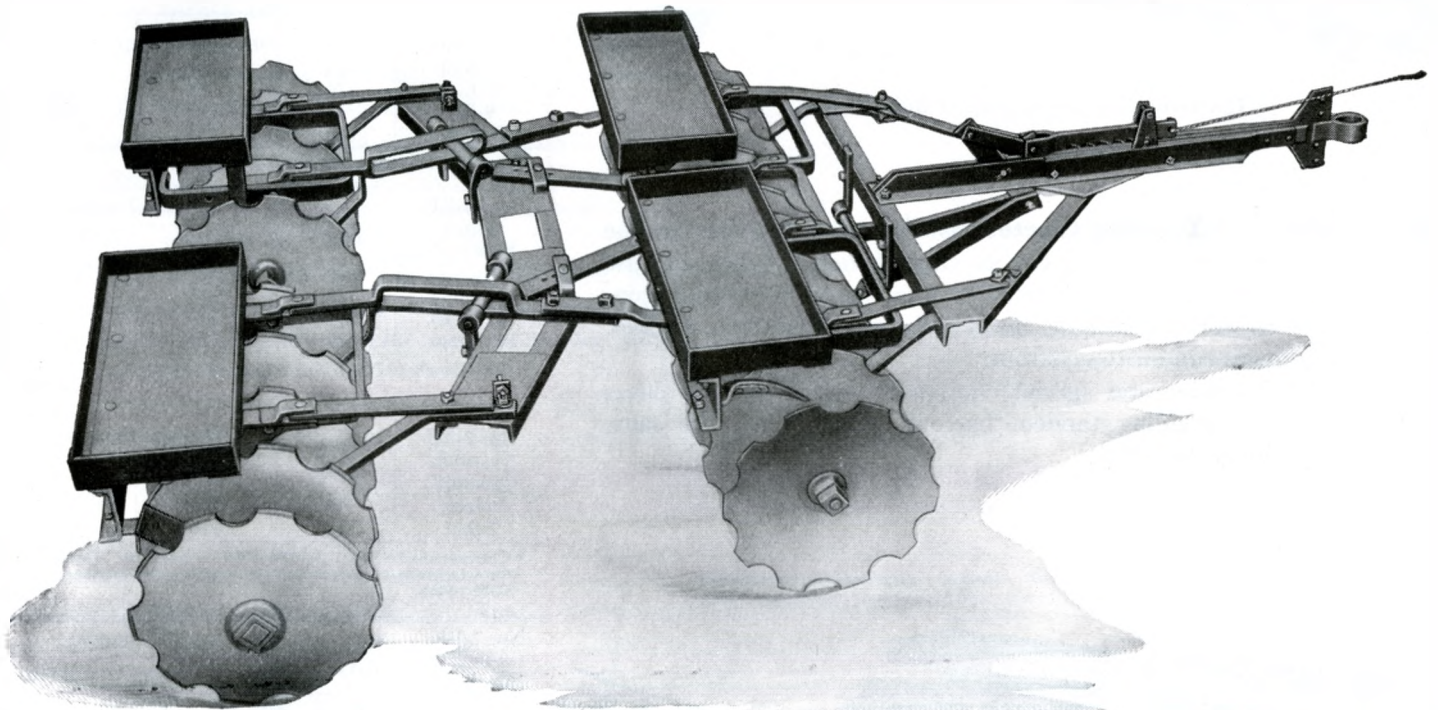
A HEAVY-DUTY HARROW FOR HEAVY-DUTY WORK

THE McCormick-Deering No. 19-B tractor disk harrow is strongly built with extra-high weight boxes located directly over the disks. It is available in 6½ and 8-foot sizes with 9-inch spacing between the disks, and with rigid, full-blade scrapers and 20 or 22-inch disks. Its heavy construction, wide spacing and scrapers, adapt it well to sticky soil conditions, cotton land, heavily-manured fields and for disking under cover crops. Allowance is made for scrapers not taken. Automatic angling device, vertical height adjustment, and 1½-inch arbor bolts are regular equipment.



SPECIFICATIONS

Size (9-inch Spacing)	No. Disks	Weight (Pounds)		
		20-in. Disks	22-in. Disks	Deduct for Scrapers Not Taken
6½ ft.	16	1271	1373	30
8 ft.	20	1443	1563	42



McCormick-Deering No. 19-B tractor disk harrow.
Cut-out disks are regular equipment.

Extra Equipment

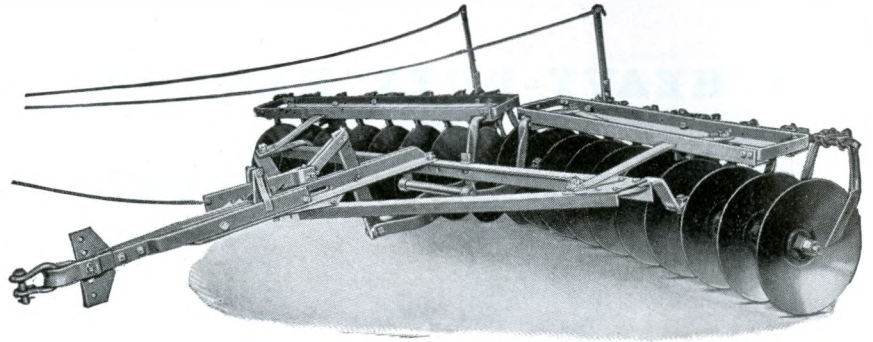
Manual gang angling. 20 and 22-inch plain disks. Center tooth attachment. Hitch for trailing another implement behind the harrow. Transport truck.

The No. 19-BF single-action, light bush and bog harrow is shown on page 12.

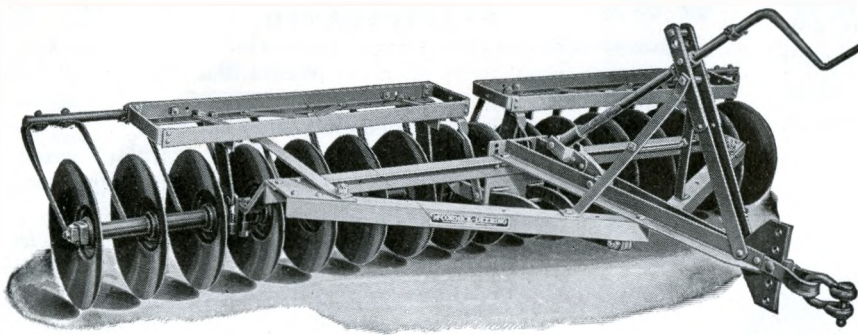




Tractor Disk Harrows



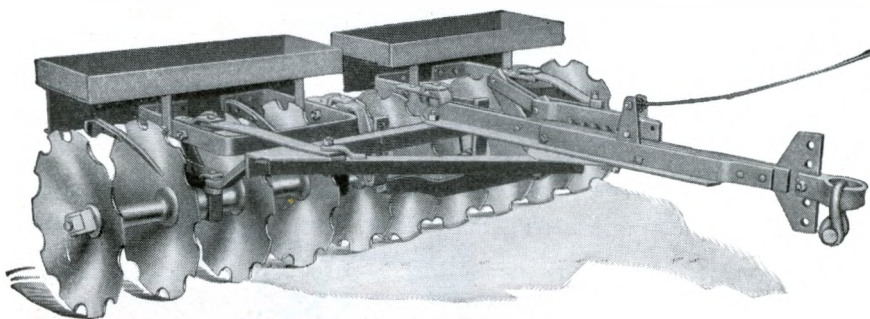
No. 9-AF, 9-foot tractor disk harrow.



The 8-foot No. 10-AF tractor disk harrow.

The **McCormick-Deering tractor disk harrows** described on the foregoing pages are also available as single-action harrows for use with the smaller sizes of tractors or to meet special operating conditions, such as working in light, sandy soils, excessive trash, ditches, levees, or terraces run on the contour.

Listings of regular and special equipment appear on the pages devoted to corresponding tandem harrows, which have the same gang and hitch construction.



The light bush and bog tractor disk harrow. The corresponding tandem, or double-action harrow is the No. 19-B, described on page 11.

SPECIFICATIONS

No. 10-AF 6 $\frac{3}{8}$ -inch Spacing*	No. Disks	Weight (Pounds)	
		16-in.	18-in.
5-foot	10	335	365
6-foot	12	360	395
7-foot	14	400	440
8-foot	16	435	480

* Corresponds to No. 10-A, described on page 7. Deduction for scrapers not taken is half the weight given for tandem of same width.

No. 9-AF 6 $\frac{3}{8}$ -inch Spacing*	No. Disks	Weight (Pounds)	
		16-in.	18-in.
5-foot	10	445	465
6-foot	12	485	515
7-foot	14	540	580
8-foot	16	590	625
9-foot	18	610	680
10-foot	20	705	750

* Corresponds to No. 9-A, described on page 6.

No. 9-BF 9-inch Spacing*	No. Disks	Weight (Pounds)	
		16-in.	18-in.
5 $\frac{1}{2}$ -foot	8	435	480
7-foot	10	500	555
8 $\frac{1}{2}$ -foot	12	555	585
10-foot	14	630	650

* Corresponds to No. 9-B, described on page 6.

No. 7-AF 6 $\frac{3}{8}$ -inch Spacing*	No. Disks	Weight (Pounds)	
		18-in.	20-in.
6-foot	10	570	590
7-foot	12	610	660

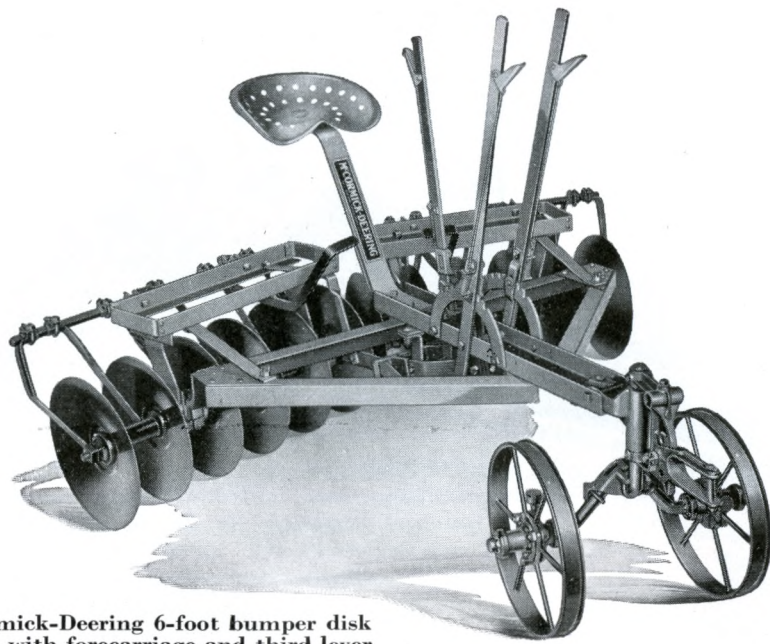
* Corresponds to No. 7-A, described on page 10. Deduction for scrapers not taken is half the weight given for tandem of same width.

No. 7-BF 9-inch Spacing*	No. Disks	Weight (Pounds)		
		18-in.	20-in.	22-in.
6 $\frac{1}{2}$ -foot	8	580	600	640
8-foot	10	620	660	710

* Corresponds to No. 7-B, described on page 10. Deduction for scrapers not taken is half the weight given for tandem of same width.

Light Bush and Bog 9-inch Spacing*	No. Disks	Weight with 22-in. Disks (Pounds)
6 $\frac{1}{2}$ -foot	8	678
8-foot	10	776

* Corresponds to No. 11-B, described on page 11. Deduction for scrapers not taken is half the weight given for tandem of same width.



McCormick-Deering 6-foot bumper disk harrow with forecarriage and third lever attachment, which regulates the depth of penetration.

No. 17

**Bumper
Disk Harrows**

McCormick-Deering bumper disk harrows are built to stand hard work. All sizes except the 4-foot have double-ring thrust bearings of hard white iron of the same design as on the well-known No. 10-A tractor disk harrows. The 4-foot size has hard, oil-soaked reversible wood bushings with grease-cup lubrication.

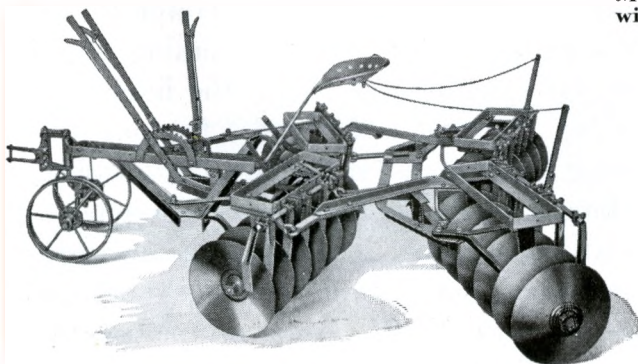
The main frame is of angle steel and securely braced with gusset plates. The steel stub tongue comprises two angle steel bars solidly fastened to the hounds. The whole forms a frame that is very strong.

Available attachments include tandem, third lever attachment, forecarriage, neckyoke, center tooth (for either harrow or tandem), special eveners, tractor hitch, and a transport truck.

SPECIFICATIONS

Size	No. Disks	Hitch	Approximate Weight*		
			16-in. Disks	18-in. Disks	Less Scrapers
4 ft.	8	2-horse	370 lb.	392 lb.	31 lb.
5 ft.	10	2-horse	370 lb.	398 lb.	34 lb.
6 ft.	12	3-horse	434 lb.	468 lb.	39 lb.
7 ft.	14	4-horse	514 lb.	553 lb.	43 lb.
8 ft.	16	4-horse	560 lb.	603 lb.	49 lb.
9 ft.	18	4-horse	596 lb.	647 lb.	55 lb.
10 ft.	20	4-horse	633 lb.	689 lb.	60 lb.

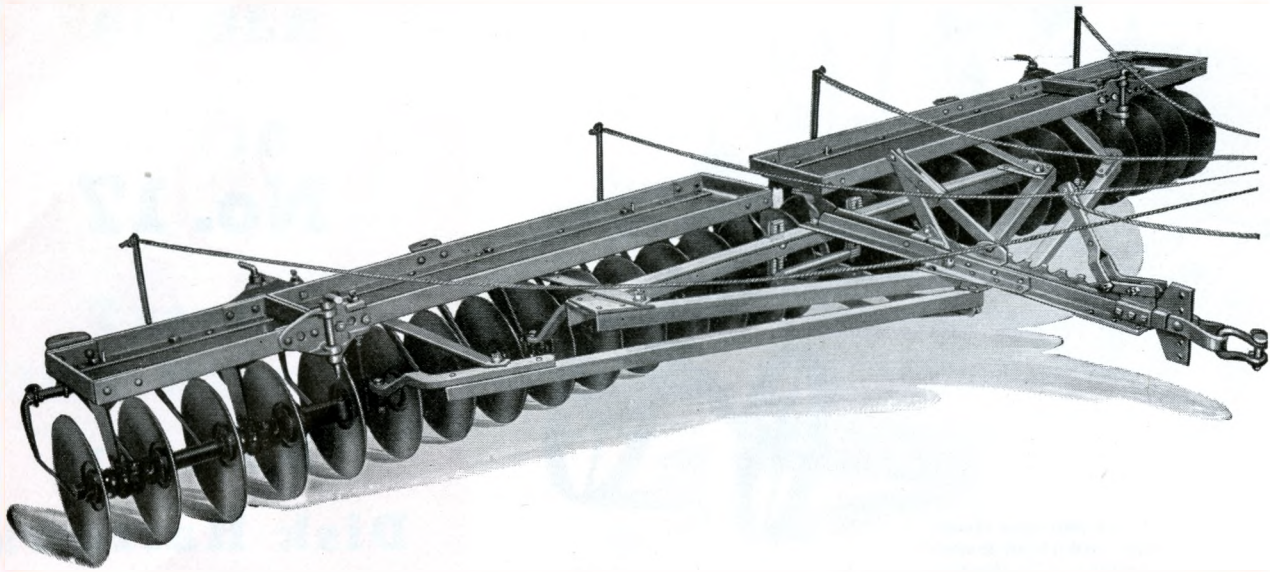
* Add 24 lb. for third lever (special).



McCormick-Deering 6-foot bumper disk harrow with tandem, forecarriage, and third lever attachments.



This tractor hitch, supplied on special order, makes the bumper disk harrow into a combination horse and tractor harrow. It bolts to the steel angles in place of the tongue and forecarriage.



The 15-foot No. 18-A wide-type disk harrow. If the going is tough the harrow can be quickly converted into a 10-foot by removing two hinge pins on each side. The 18-foot is of similar construction.

WIDE-TYPE disk harrows are well liked for their efficiency as quick weed killers on large acreages. Under favorable conditions, they make it possible to prepare a good seedbed and keep down all weeds by repeated redisking right up to the time of planting.

No. 18-A wide-type harrows come in 11½, 15, and 18-foot sizes. The 15 and 18-foot have removable end sections which are joined to a 10-foot center section by heavy, malleable hinges of simple construction. Removal of one hinge pin on each side releases the end sections for passage through a standard 12-foot gate. When both hinge pins are pulled out the end sections are completely uncoupled, reducing the harrow to 10-foot width.

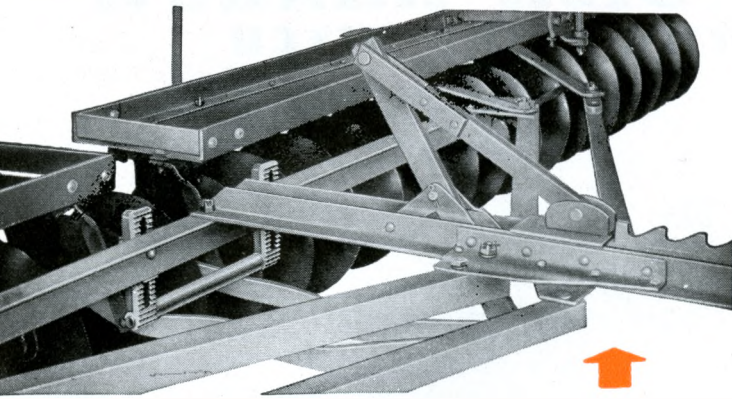
These harrows have ample provision for keeping the gangs level under all conditions. Center gangs are raised or lowered at their inner ends by means of a cast iron snubbing block which has a sturdy, free-acting

roller. End sections on the 15 and 18-foot harrows are leveled up to the center gangs by means of slotted adjustments on the hinges.

The frame of each of the wide-type disk harrows is of heavy angle iron with heavy steel gusset plates riveted at all frame joints. The weight boxes are large and form part of the frame, thus contributing to the rigidity of the gangs. There are six double-ring thrust bearings on the 11½-foot harrows and ten on the 15 and 18-foot.

Fully automatic gang-angling is regular equipment. It enables the operator to set the harrow to the desired working angle simply by raising a lever on the hitch and moving the tractor forward. Backing the tractor straightens the gangs. Adjustable rocking scrapers are also regular equipment.

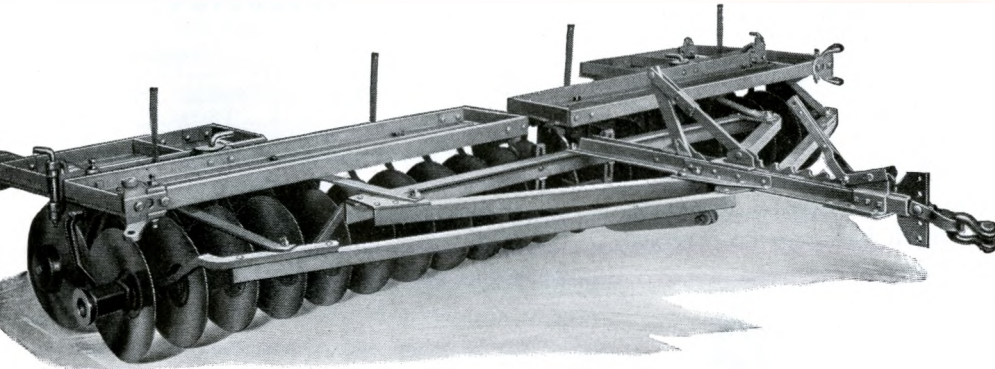
Extra equipment includes a center tooth attachment, spring-type or shovel-type, as ordered; cut-out disks; Auburn-type (saucer-shaped) disks; and a transport truck.



Serrations on the snubbing block supply a wide range of adjustments for raising or lowering the inner ends of the gangs. The curved set lever bars keep the harrow cutting level regardless of the angle of the gangs.

No. 18-A WIDE-TYPE DISK HARROWS

That Fold Easily for Passing Through Gates

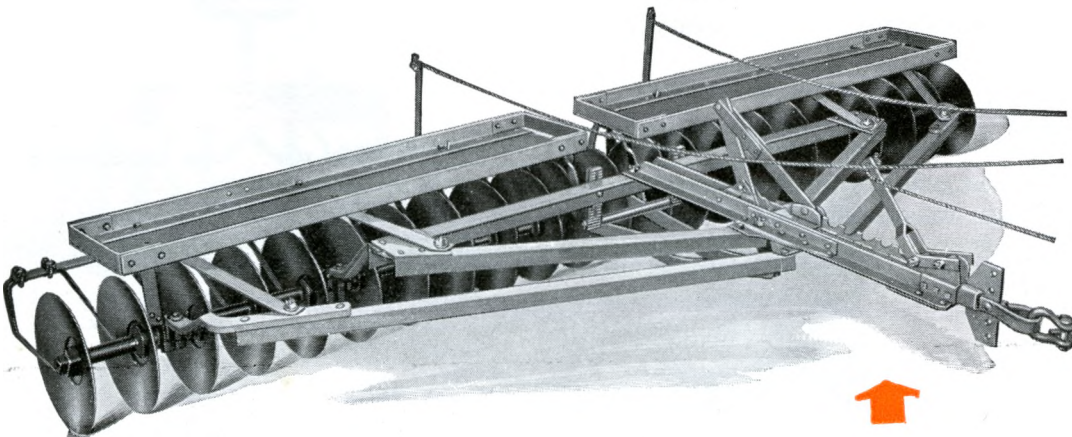


A single hinge pin on each side releases the end sections for passage through a standard gate. There are no gangs to lift. Just drive the tractor forward—the end sections swing around automatically. The center section is 10 feet wide on both the 15 and 18-foot (illustrated).

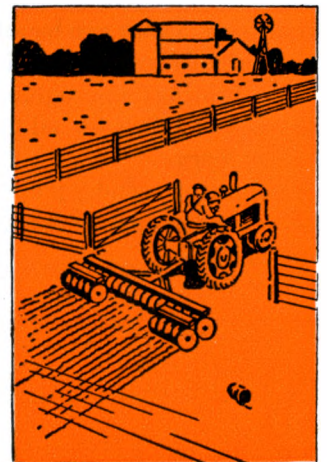
SPECIFICATIONS

Size	No. Disks	Weight*	
		16-in. Disks	18-in. Disks
11½-foot	22	868 lb.	930 lb.
15 -foot	28	1132 lb.	1211 lb.
18 -foot	32	1216 lb.	1306 lb.

* All weights are approximate.

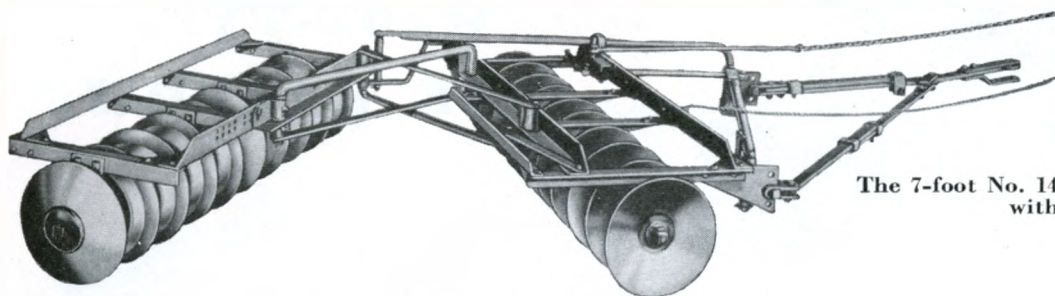


The 11½-foot No. 18-A wide type, which has 22 disks. For single-action harrows in narrower widths see page 12.



No. 14-A OFFSET DISK HARROW

LOW FRAME . . . TWO-POINT HITCH



The 7-foot No. 14-A tractor disk harrow shown with two-point hitch.

No. 14-A harrows are well suited for work in orchards and groves where it is desired to disk close to the trees, yet keep the tractor out in the open.

When the operator wishes to throw the soil to the trees, the rear gang can be moved 9 inches to the left by changing the position of three bolts. This permits all the soil from the outer disks to be thrown against the trees.

The hitch is trip-rope controlled. Any one of a wide range of working angles of the gangs can be instantly obtained with the first forward movement of the harrow. The gangs are straightened out just as quickly by pulling the rope and backing the tractor. The harrow may be hitched directly behind the tractor for general field work, or if desired, it may be offset to the left instead of the right. The hitch bars can be reversed for operation in extreme left-hand offset position.

Equipment

Regularly equipped with saucer-shaped (Auburn-type) disks and depth gauges for operation in light soils. Stationary, full-blade scrapers and rear weight box can be supplied when ordered.

SPECIFICATIONS

Size Ft.	No. Disks	Weight (Lbs.)*	
		16-in. Disks	18-in. Disks
6	20	907	962
6½	22	940	1000
7	24	972	1038

*Approximate weight equipped with saucer-shaped disks and depth gauges (less scrapers, hitch and rear weight box).

REVERSIBLE DISK HARROW

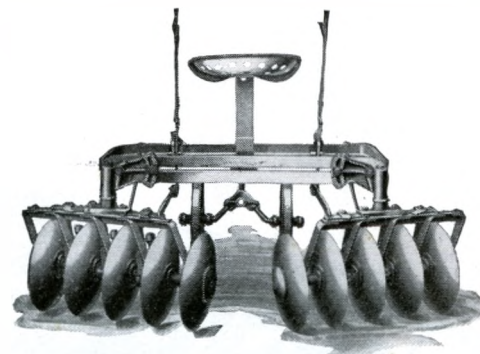
The McCormick-Deering reversible disk harrow is especially suited to cultivating row crops whether they are planted level, on beds, or in furrows. It is easy to reverse the disks for out or in-throw; and in row-crop cultivation they can be set out to straddle the rows. It is also easy to tilt the disks to conform to ridges or trenches.

The bearings are equipped with oil-soaked hardwood bushings, which are reversible for additional wear, and can be replaced at small cost when worn.

Equipment includes plain disks, scrapers, pole and two-horse hitch, or shafts. Also available are cut-out disks, forecarriage, neckyoke and 3-horse hitch.

SPECIFICATIONS

Size	No. Disks	Extreme Width		Weight		
		In-Throw	Out-Throw	16-in. Disks	18-in. Disks	Less Scrapers
3 ft.	6	68 in.	55 in.	340 lb.	362 lb.	19 lb.
4 ft.	8	68 in.	68 in.	391 lb.	421 lb.	34 lb.
5 ft.	10	81 in.	68 in.	414 lb.	450 lb.	27 lb.



The 5-foot reversible disk harrow with tongue truck.



Farmall-M with wide front axle operating an 18-foot weeder-mulcher in a 75-acre field of potatoes.

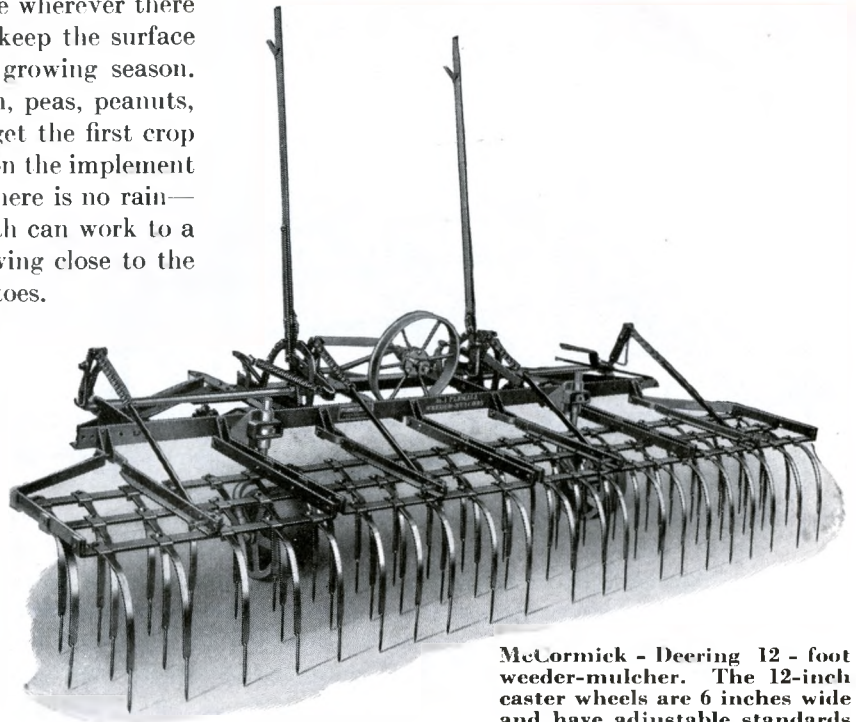
No. 1 Weeder- Mulchers

**Easily Transported
Endwise
Through Gates
and Narrow Lanes**

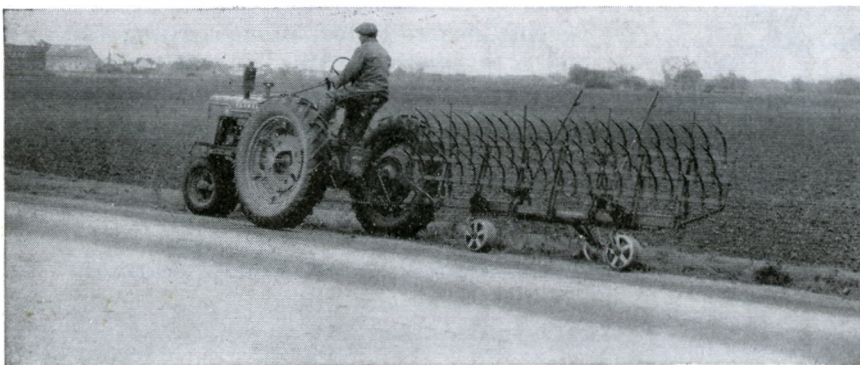
The No. 1 weeder-mulcher is a splendid tool to use wherever there are crusts to be broken and where it is desirable to keep the surface well mulched and free from weeds throughout the growing season. It is well liked in crops such as potatoes, corn, cotton, peas, peanuts, beans, onions, cabbages, etc. where the finger teeth get the first crop of tiny weeds while they are easy to kill. From then on the implement is used after every rain—every seven to ten days if there is no rain—until the plants are a foot high. In potatoes the teeth can work to a depth of 2 to 2½ inches to keep the roots from growing close to the surface; this reduces the number of sunburned potatoes.

The machine is carried on two wide-faced caster wheels and is attached to the drawbar by a two-point hitch. In turning at the ends of rows the weeder-mulcher can thus be maneuvered as readily as if it were carried on the tractor itself. Only two hitch pins are used in attaching the implement. Two levers are provided for regulating the depth of the teeth, and spring pressure rods assure uniform penetration.

In transport the machines are pulled endwise from a hitch bar provided at one side of the frame. The transport wheel is quickly lowered and gangs are raised without changing a single bolt, nut, or cotter pin.



McCormick - Deering 12 - foot weeder-mulcher. The 12-inch caster wheels are 6 inches wide and have adjustable standards for either flat or ridged cultivation.



Pulled endwise and with gangs raised, the width of either size of weeder-mulcher is less than 5 feet.

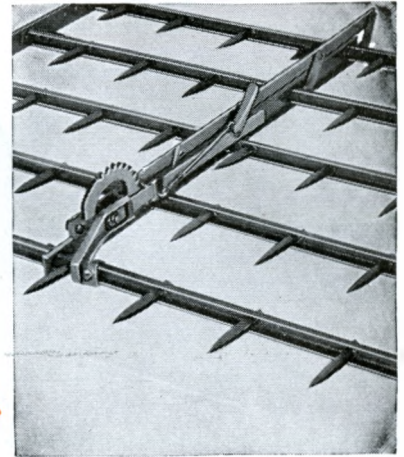
SPECIFICATIONS

12-foot weeder-mulcher 633 lb.
 18-foot weeder-mulcher 803 lb.
 Two 3-foot extensions for
 converting 12-foot machine
 into an 18-foot 170 lb.

EASY-FOLD PEG-TOOTH HARROWS

ALL TYPES AND SIZES

McCormick - Deering Easy - Fold peg - tooth harrows have folding levers as regular equipment. There is no need to uncouple the sections when going through a 12-foot gate with an Easy-Fold drawbar—just lay the end sections over onto the center sections and go on through! Easy-Fold harrows stack neatly in storage and save lots of space. Ratchet-type quadrants engage quickly when the levers are pulled up into working position.



The lever of a No. 4 Easy-Fold harrow shown in folded position. →

NO. 2 OPEN AND CLOSED-END

OPEN-end harrows have three strengthening bars and two diagonal braces to each section. These distribute the strains over the entire harrow when one of the teeth strikes a stone. Tooth bars are made of heavy U-bar steel and the teeth are bolted to the bars for easy replacement and for taking up wear. The corner teeth of each section have runner extensions which carry the harrow off the ground when in transport.

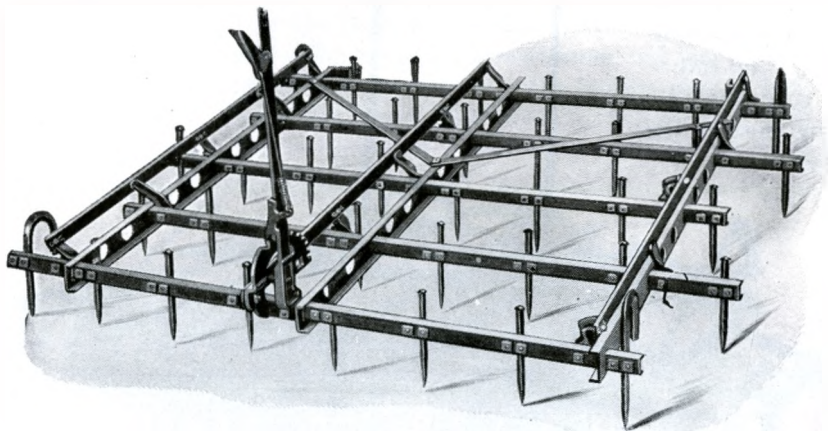
Open-end harrows are supplied in 1 to 6-section sizes. Each section has approximately a 5-foot cutting width and either 30 or 40 teeth, as ordered. Also available are 35-tooth sections in 1 to 4-section sizes, each section having approximately a 5-foot, 10-inch cutting width.

THE NO. 2 CLOSED-END

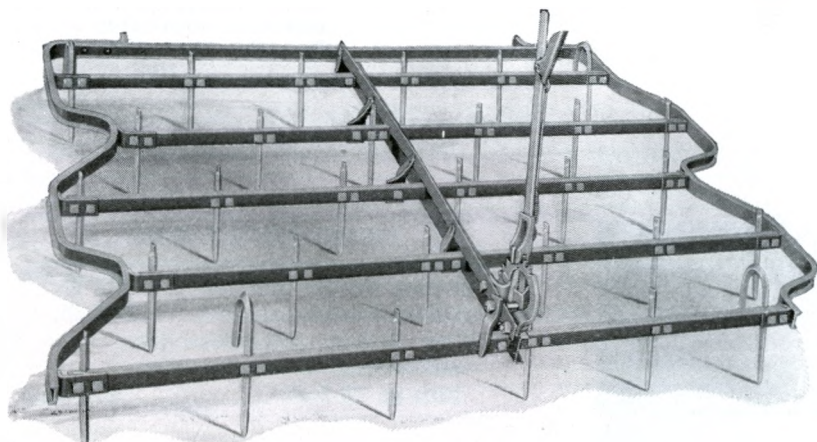
is similar to the open-end except that the outside cross bars are at the ends of the tooth bars. These act as guards to prevent the ends of the tooth bars from damaging trees or vines when working in orchards or vineyards. The outside cross bars of adjacent sections interlock to provide uniform spacing of teeth.

Sizes available: 1 to 6-section with 30 teeth per section (4-foot 10-inch to 29½-foot cutting width); 1 to 4-section with 25 teeth per section (4-foot 1 inch to 16-foot 10-inch cutting width); and 1 to 4-section with 35 teeth per section (5-foot 8-inch to 23-foot 9-inch cutting width).

The No. 2 closed-end single section harrow. Shown with folding lever, which is regular equipment.



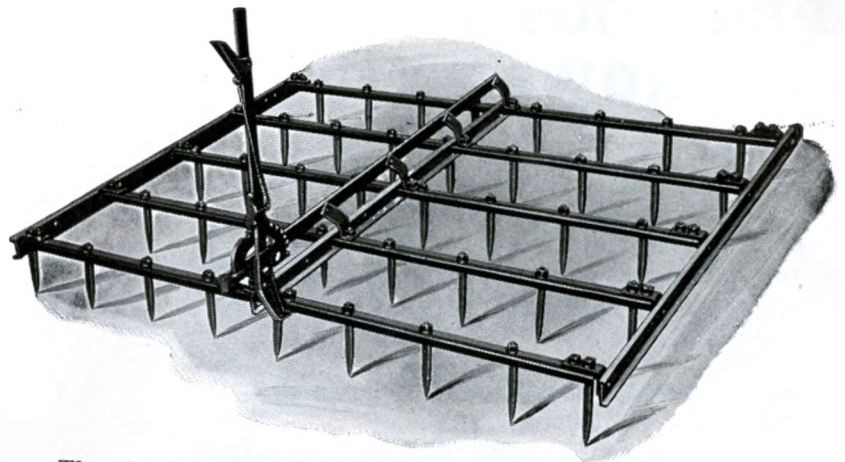
The No. 2 open-end Easy-Fold peg-tooth harrow.



WITH FOLDING LEVERS

THE NO. 4 EASY FOLD

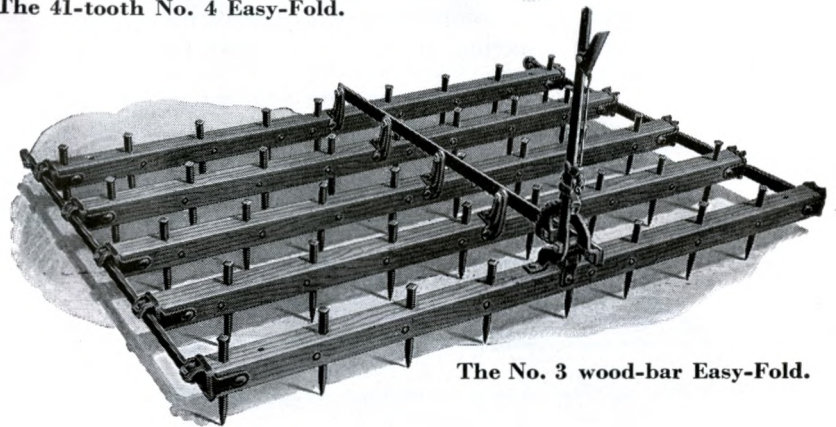
The No. 4 is a flexible, compact steel harrow for average soil conditions. The teeth are attached to U-shaped tooth bars with locknuts and washers, making it a simple matter for the operator himself to replace a damaged tooth. The bars are reversed to keep them from collecting dirt. They are supported on the ends and in the middle by sturdy cross bars which distribute strains and provide for ample flexibility on uneven ground. In transport the cross bars serve as runners. Each section has 41 teeth and is 4 feet 9 inches wide. Wood drawbars are supplied for 2-section and over.



The 41-tooth No. 4 Easy-Fold.

THE NO. 3 WOOD-BAR

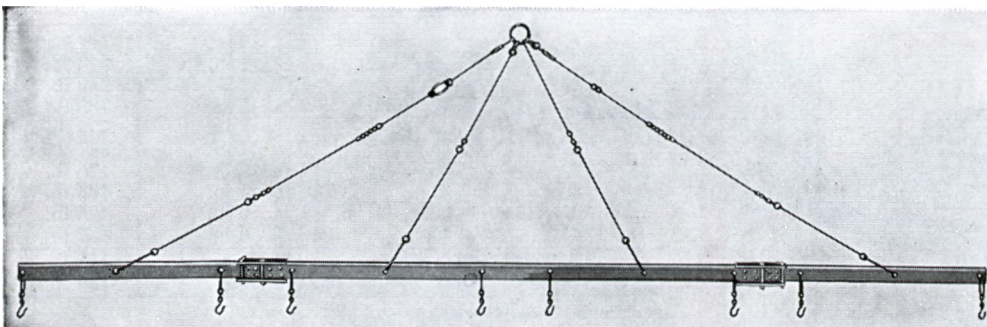
The wood-bar harrow is popular wherever a high degree of pulverization is desired. The tooth bars are made of heavy, square, well-seasoned lumber and are bound into a rigid whole by steel bars at the ends. The teeth are $\frac{9}{16}$ of an inch square, 9 inches long, and set in the tooth bars $7\frac{1}{2}$ inches apart. A rivet through the tooth bar at every tooth prevents the bars from splitting. Each section is 4 feet 9 inches wide and has 41 teeth. Wood drawbars are supplied for 2-section and over.



The No. 3 wood-bar Easy-Fold.

EASY-FOLD
Four-Section Steel
FOLDING DRAWBAR

THE Easy-Fold steel folding drawbar is a great time-saver when transporting a 3 or 4-section harrow through a standard 12-foot gate or down a narrow lane. The outer drawbails have turnbuckles to provide equalized draft. The shackles which attach the single outer sections to the double center section have removable pins, thus making it easy to convert a 4-section drawbar for use as a 3 or 2-section. A special 18-inch hitch extension can be furnished to provide clearance in turning when the tractor is equipped with large wheels. Sizes are available to fit the 25-tooth (117 lb.), the 30 and 40-tooth (130 lb.), the 35-tooth (156 lb.), and the 41-tooth harrows (142 lb.). The drawbar is also available in 3 or 2-section only, when ordered. Steel drawbars available either as extra or in lieu of wood, as ordered.

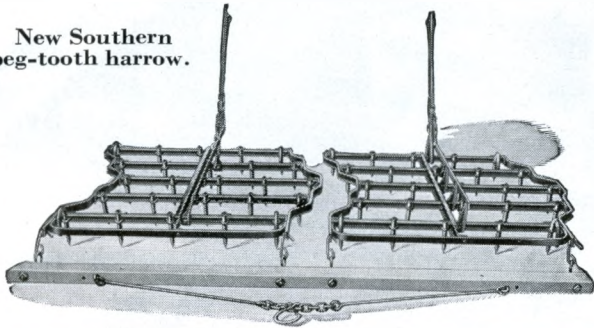


NEW SOUTHERN PEG-TOOTH HARROWS

THE New Southern harrow is somewhat lighter in construction than the regular line of harrows and is especially suited to the requirements of Southern farms, both for regular field work and for harrowing and smoothing off the tops of beds. The construction of the tooth bars is the same as that of the No. 2 open and closed-end harrows but there are no reinforcing bars. The end cross bars cover the ends of the tooth bars, adapting the harrow to use in orchards.

Built in 1, 2, and 3-section, with 25 or 30 teeth to the section. Sizes range from 3 feet 4 inches for the 25-tooth 1-section, to 13 feet 5 inches for the 90-tooth 3-section.

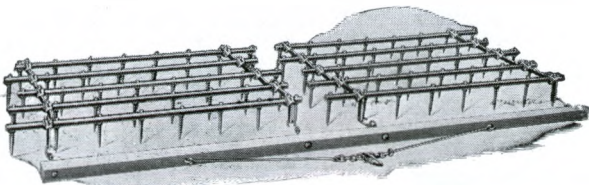
New Southern
peg-tooth harrow.



FLEXIBLE HARROWS

The flexible pipe-bar harrow is especially suited to stubble land in the Northwest, and to stony ground. The heavy, round pipe bars are flexibly linked together. The connecting links prevent the bars from moving from side to side and causing the teeth to trail each other, yet, give the necessary flexibility up and down to permit the teeth to conform to the surface of rough ground.

When less of an angle to the teeth is desired, the drawbar can be hooked up to the rear of the harrow. This changes the teeth from their normal vertical position to an angle of about 45 degrees. If desired, the harrow can be rolled up like a carpet when it is to be carried in a wagon. Made in 1 to 6-section sizes with 40 teeth to the section, each section being 5 feet wide.



The flexible peg-tooth harrow.

Horse-Drawn SPRING-TOOTH HARROWS



THE spring-tooth harrow is the ideal implement for deep tillage. It will work to a depth of 5 or 6 inches, thoroughly stirring the soil and bringing the large lumps to the surface where they can be thoroughly pulverized. To hasten the warming of the soil in the spring there is nothing better. It is also the harrow for stony soil or ground that is infested with pest grasses.

The frame of a McCormick-Deering spring-tooth harrow gauges the depth of the teeth. The runners are shod with removable shoes which can be replaced at small cost when worn. The levers can be set at the back of the harrow when using horses, or at the front when using a tractor.

Regular construction is with pipe bars. The teeth are mounted on pipe bars with a strong spanner hitch that puts all the strain on the pipe and none on the bolt. Channel bar construction can be supplied at the same price on special order; the teeth are mounted with U-bolts and nuts.

Spring-tooth harrows can be furnished with single-point teeth, reversible-point teeth, alfalfa teeth, or special quack grass teeth.

Extra Equipment

Riding attachment for 15, and for 17 and 23-tooth harrows (2-section). Bent levers. Drawbars for 2, 3, and 4-section.

To cope with extreme conditions a special wide-spaced harrow for rank vegetation can be supplied in the following sizes: 9-tooth 1-section, with handles (147 lb.), or without handles (133 lb.); 19-tooth 2-section (320 lb.); or 28-tooth 3-section (485 lb.).

SPECIFICATIONS

No. Sections	No. Teeth	Cultivating Width	Approx. Weight
1	9	2 ft. 10 in.	117 lb.*
2	15	5 ft. 1 in.	228 lb.
2	17	5 ft. 8 in.	240 lb.
2	23	7 ft. 6 in.	303 lb.
3	23	7 ft. 8 in.	355 lb.
3	25	8 ft. 4 in.	367 lb.
3	35	11 ft. 6 in.	476 lb.
4	31	10 ft. 4 in.	483 lb.
4	33	11 ft. 0 in.	495 lb.
4	47	15 ft. 6 in.	652 lb.
8-Tooth center section—no drawbar			111 lb.
12-Tooth center section—no drawbar			150 lb.

* Without handles, which weigh 13 lb.

FOR ALL SOILS AND PURPOSES

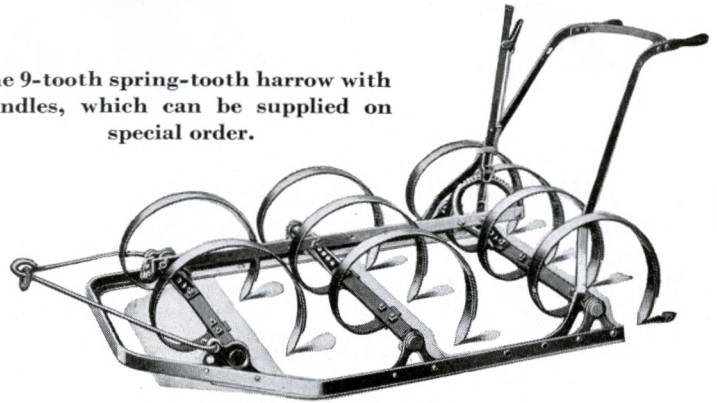


No tool beats a spring-tooth harrow at the work for which a spring-tooth is intended. It goes deep—five or six inches—and brings clods to the surface where they can be pulverized. It helps warm the soil in the spring. It is ideal for ground where there are stones or pest grasses.

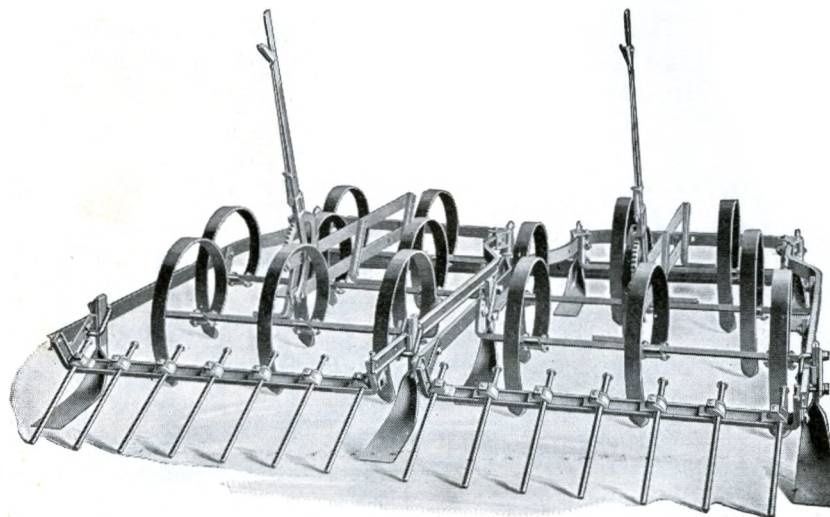


McCormick-Deering 2-section, 17-tooth spring-tooth harrow with pipe bars.

The 9-tooth spring-tooth harrow with handles, which can be supplied on special order.



COMBINATION HARROWS



Rear view of the combination harrow equipped with gauge shoes, which are supplied on special order.

WHERE an exceptionally good job of pulverization without packing is desired, there is nothing that will quite equal the combination harrow. In addition to the spring teeth, the row of heavy trailing teeth breaks up the clods brought out by the spring teeth, thoroughly pulverizing them.

Combination harrows can be furnished with single-point teeth, reversible-point teeth, alfalfa teeth, or special quack grass teeth.

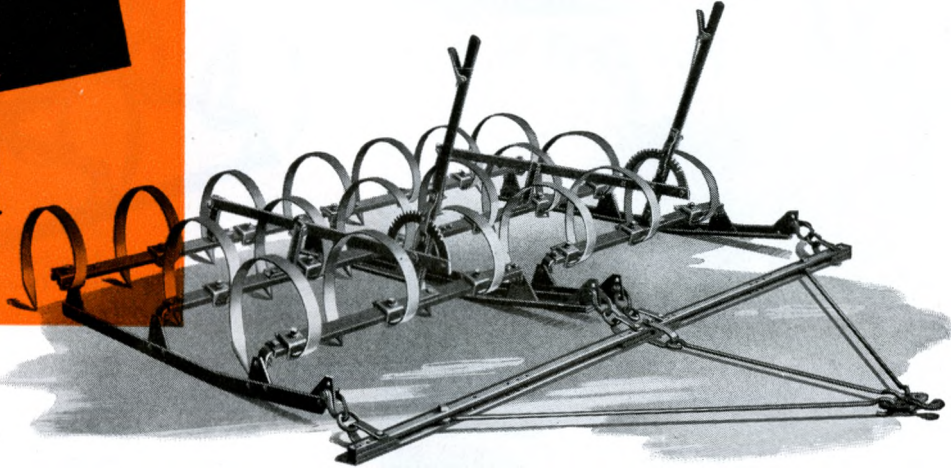
SPECIFICATIONS

No. Sections	No. Teeth	Width	Weight
1	8	2 ft. 6 in.	119 lb.
2	16	5 ft. 6 in.	255 lb.
3	24	8 ft. 5 in.	391 lb.
4	32	11 ft. 0 in.	535 lb.

SELF-CLEANING

Tractor SPRING-TOOTH HARROWS

McCormick-Deering 2-section tractor spring-tooth harrow No. 1 with a 93-inch cutting width. Other sizes range from 54 to 195 inches. The levers can be reversed so the harrow can be used conveniently with horses.



McCORMICK-DEERING Nos. 1 and 2 tractor spring-tooth harrows are of heavy, durable construction to withstand the strains of tractor operation, and are so designed that they readily clear themselves of trash.

The bars on which the teeth are clamped are connected to the side drag bars by means of pivots which cause them to make irregular movements forward and backward. Each section can thus take on an oscillating action within itself, which greatly facilitates shaking the harrow free of trash.

In addition, an extra large amount of clearance is provided below and between the tooth bars. The teeth are spaced wider apart than the teeth of ordinary spring-tooth harrows and have a larger coil.

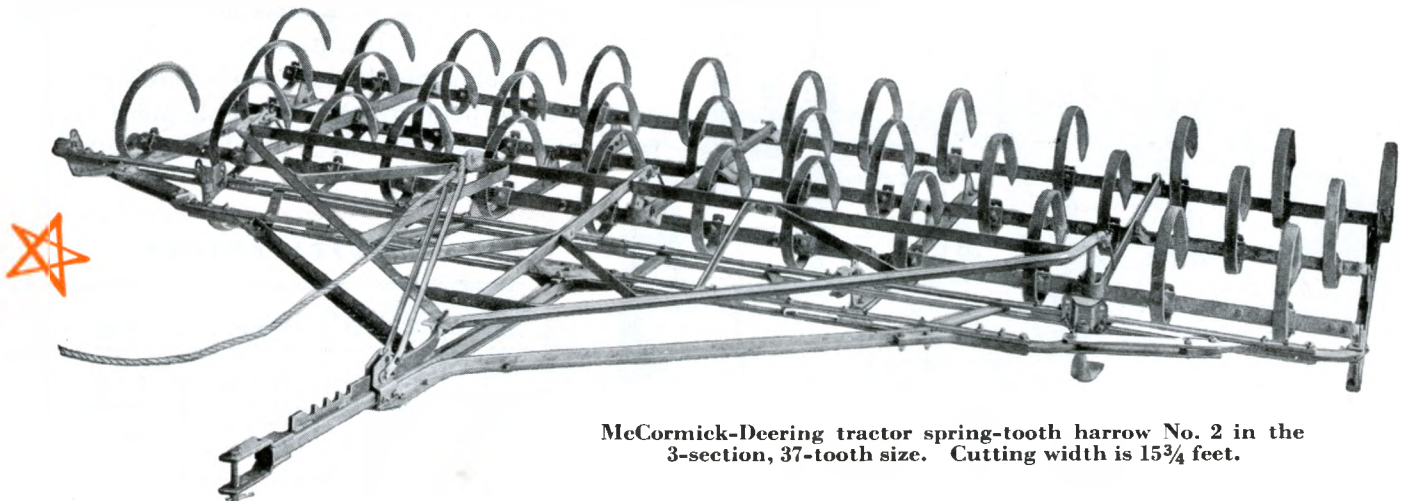
These self-clearing features adapt either of these harrows for work in fields infested with quack or other pest grasses. And the strong construction and wide spacing

between the teeth permit harrowing deeper than is possible with the ordinary spring-tooth harrow.

On the No. 2 tractor spring-tooth harrow the position of the teeth is controlled by a locking latch lever operated by a rope from the tractor seat. The teeth are placed in working position by backing up the tractor until the desired setting is obtained, at which point the locking latch automatically locks the harrow without attention from the operator.

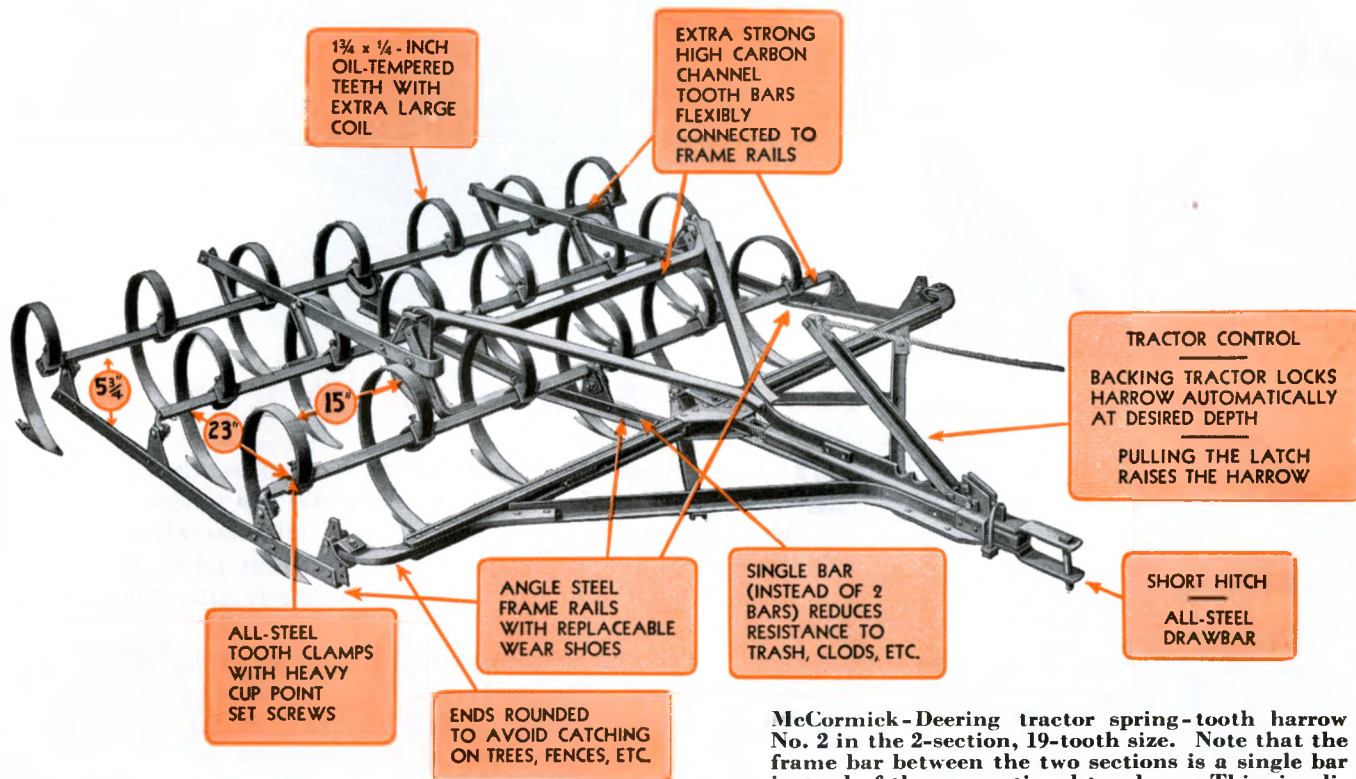
The teeth are raised for transport or for clearing trash by pulling the latch rope, without stopping the tractor. The harrow then can be backed up to the point where the trash has been dumped, leaving no uncultivated ground. This feature also permits backing the harrow into corners or next to fences.

The teeth on both the No. 1 and No. 2 harrows are $1\frac{3}{4} \times \frac{1}{4}$ -inch size, but extra-heavy teeth in $1\frac{3}{4} \times \frac{5}{16}$ -inch size may be obtained if desired.



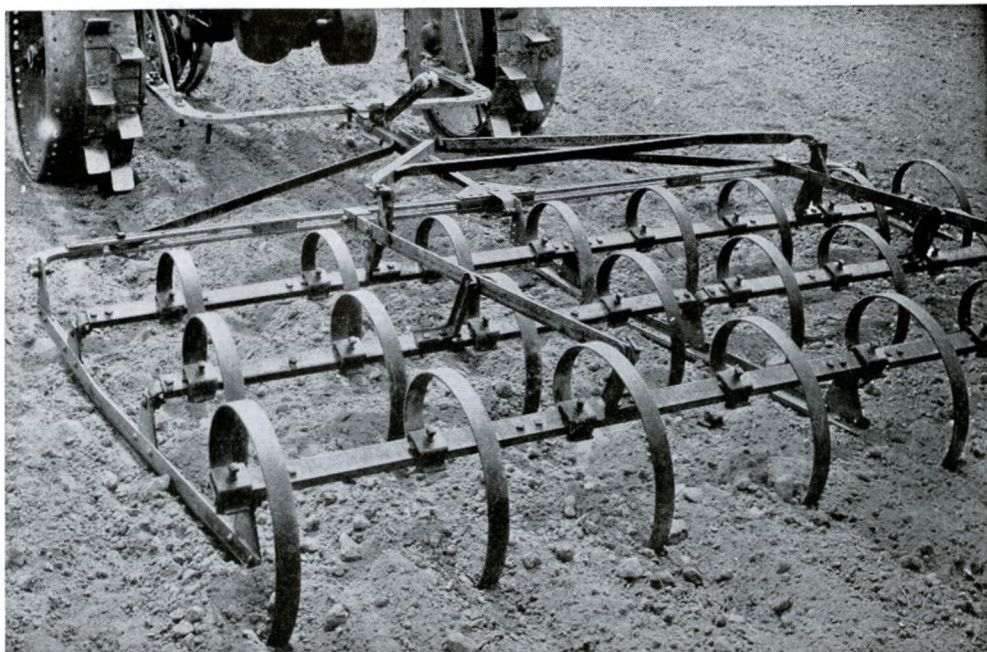
McCormick-Deering tractor spring-tooth harrow No. 2 in the 3-section, 37-tooth size. Cutting width is $15\frac{3}{4}$ feet.

HARROWS OF GREAT STRENGTH



McCormick-Deering tractor spring-tooth harrow No. 2 in the 2-section, 19-tooth size. Note that the frame bar between the two sections is a single bar instead of the conventional two bars. This simplified construction reduces the resistance of trash, clods, and other obstructions.

Rear view of the No. 2 in the 2-section, 25-tooth size. Tooth clamps are all steel and locked in position with heavy cup-point set screws, thus avoiding the necessity of drilling and weakening the tooth bars. Teeth can be moved in or out on the clamps to compensate for wear and to keep a uniform cultivating depth. →



SPECIFICATIONS

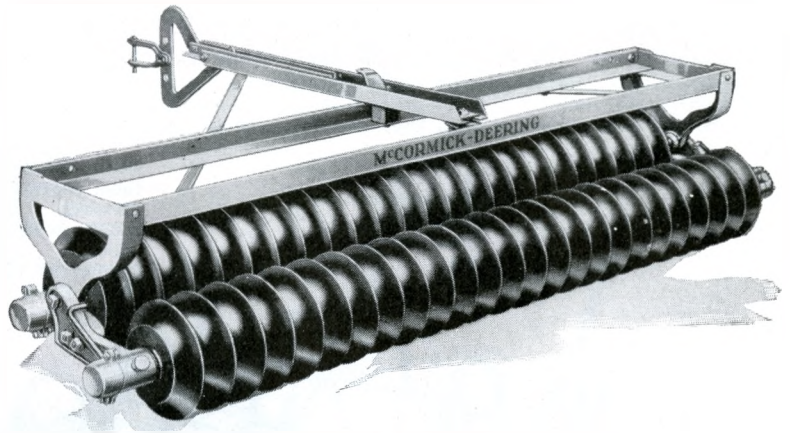
No. Sections	No. Teeth	Cultivating Width No. 1	Cultivating Width No. 2	Approx. Weight (Lb.)	
				No. 1	No. 2
1	10	4 ft. 6 in.	*	201	*
1	13	5 ft. 8 in.	*	257	*
2	19	7 ft. 9 in.	8 ft. 3 in.	397	448
2	25	10 ft. 2 in.	10 ft. 9 in.	511	573
3	28	11 ft. 10 in.	12 ft.	669	744
3	37	16 ft. 3 in.	15 ft. 9 in.	839	955

*Not furnished in these sizes.

SOIL PULVERIZERS

**It's easy to break clods
and crust . . . this way**

McCormick-Deering 49-wheel double-gang soil pulverizer with tractor hitch.



MORE THAN A LAND ROLLER . . .

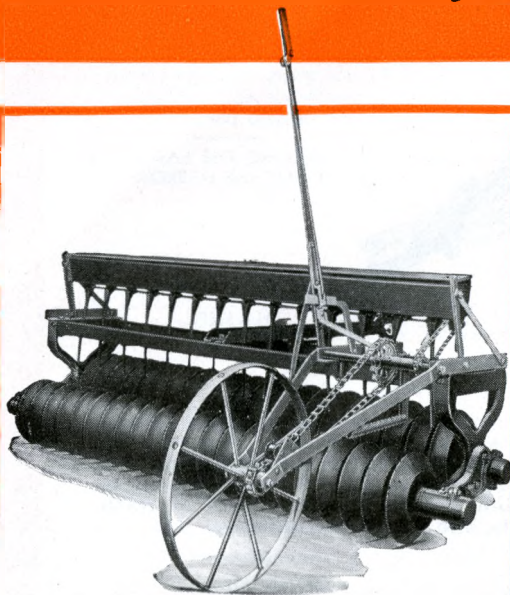
THE double-gang soil pulverizer is much more than a mere clod crusher. It packs loose soil, eliminates air spaces, reduces soil blowing, prevents winter killing, and cultivates wheat, alfalfa, or other crops. It can be used for many different jobs. It repays its cost in the seed it will save if used immediately after the grain drill or seeder.

There is a size of McCormick-Deering soil pulverizer to meet every power requirement. The one-horse size has a rolling width of 39 inches. The larger sizes have rolling widths as follows: 51, 62, 73, 85, 97, 114, and 121 inches. The extension gang attachment, which can be supplied, adds 100 inches. The front wheels are 15 inches in diameter, the rear wheels 12 inches.

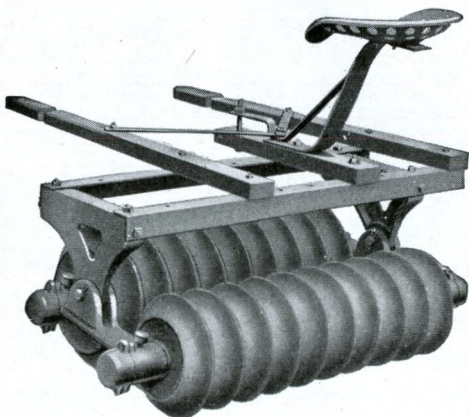
Soil pulverizers can be supplied either with steel stub tongue, with or without tongue truck, and with horse or tractor hitch. A long tongue can be supplied. The seat is regular equipment when the soil pulverizer is ordered with a horse hitch.

The end brackets are detachable, making it easy to take them off and remove two pairs of wheels and slide the remaining wheels toward the ends, leaving the center open to straddle corn and other row crops (spacer collars available on special order). The outside wheels are closed to prevent dirt from working back into the wheels.

The extension gang is available as an attachment and costs extra. An orchard attachment also can be supplied, comprising two pairs of wheels and parts for attaching a pair to each end of the soil pulverizer to work the soil back of the ends of the regular gang axles.

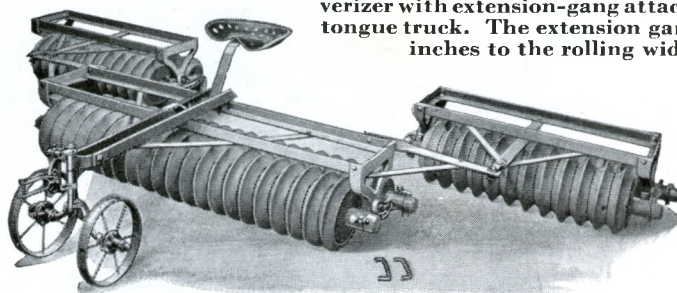


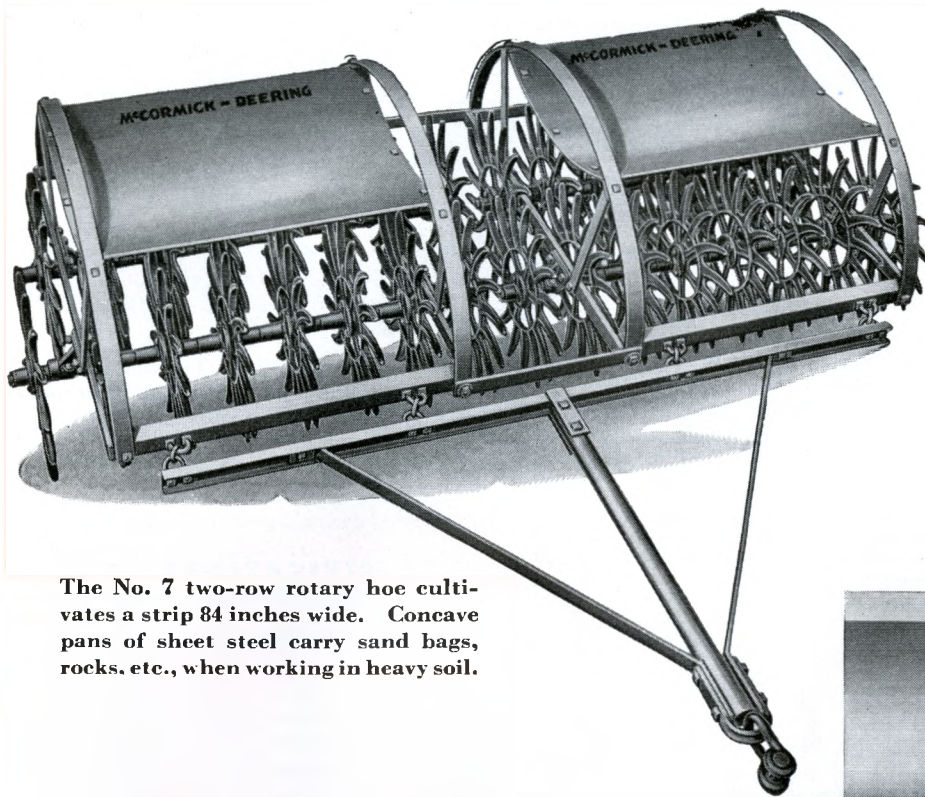
When desired, a McCormick-Deering grain drill grass seed attachment with drive wheel can be used as shown here with a double-gang soil pulverizer with 85 to 121-inch cutting width. This deposits alfalfa, clover, or other grass seeds between the front and rear gangs of the pulverizer, the front gang preparing the soil and the rear gang lightly covering the seed and firming the soil to conserve moisture and hasten germination.



One-horse pulverizer especially adapted to use on small farms and truck gardens.

McCormick-Deering double-gang soil pulverizer with extension-gang attachment and tongue truck. The extension gangs add 100 inches to the rolling width.





The No. 7 two-row rotary hoe cultivates a strip 84 inches wide. Concave pans of sheet steel carry sand bags, rocks, etc., when working in heavy soil.

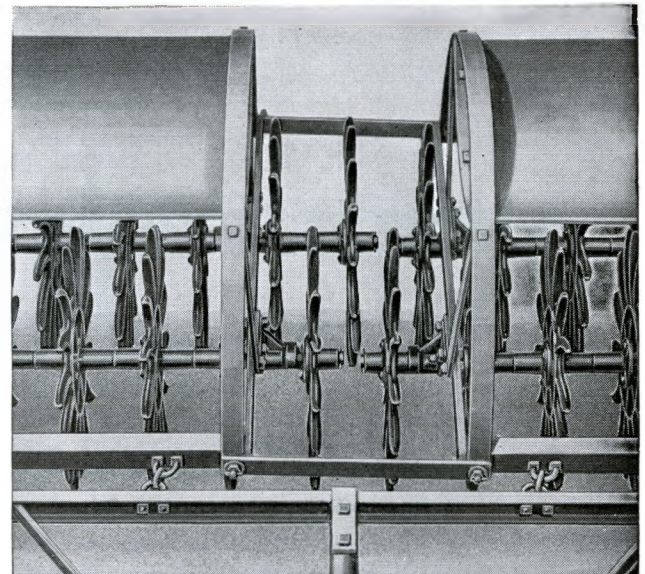
THE YOUNG-CROP CULTIVATOR

As a crust breaker and for blind cultivation in corn, wheat, oats, soybeans, potatoes and many other crops the rotary hoe has no equal. It cultivates right in around the young and tender plants long before any other implement can be used, stirring the soil close to the roots and allowing air and sunlight to thoroughly warm the seedbed. Early use of the rotary hoe makes it possible to expose millions of white sprouts to the sun, effectively killing them before they have a chance to put down their tap roots. Here, truly, is a machine for fast work to leave time for the many other important jobs of spring and early summer.

The No. 7 rotary hoe is a simple, flexible machine, newly designed for high-speed tractor operation. It is of all-steel construction, with separate units to follow the contour of each row. Each point of the malleable spider wheels bears straight down on entering the soil, piercing it without dragging or shoving chunks sidewise. As the soil is wedged between the points it is gently crushed and thus thoroughly pulverized.

**No. 7
ROTARY
HOES**

**Get the weeds
before they come up**

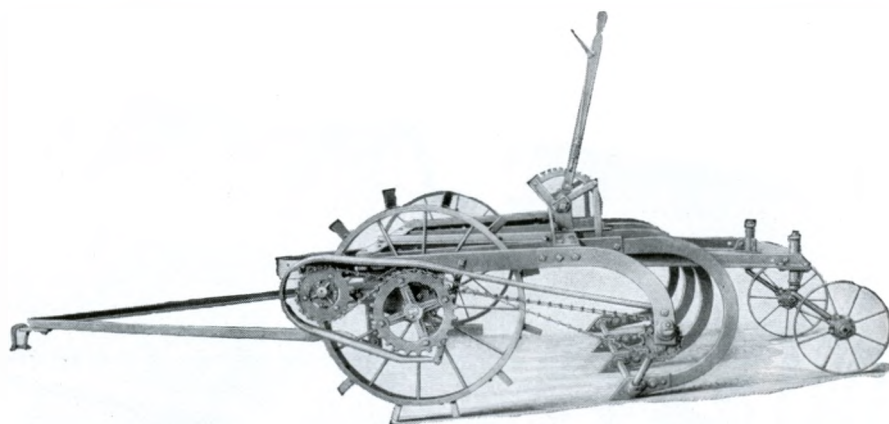


Detail showing continuous arrangement of spider wheels—not a weed can get by.



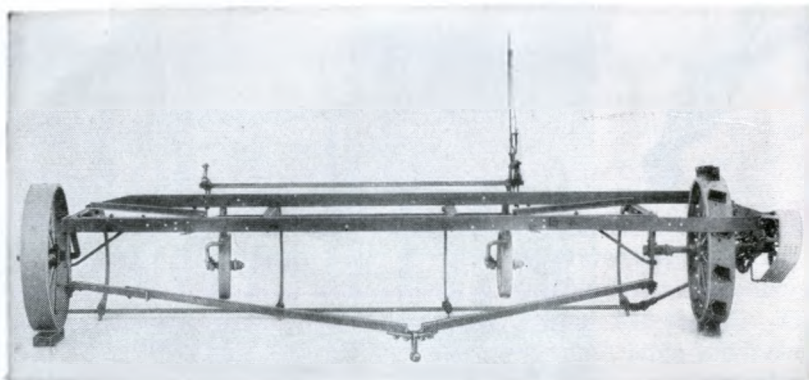
Most weeds get their start near the surface. By using the rotary hoe as soon as the weeds begin to sprout, such weeds are easily dislodged and exposed to the sun.

No. 5 ROD WEEDERS



Side view of 12-ft. rod weeder showing simple, positive drive. The weeder rod is located 37 inches back from the wheel center to provide ample trash clearance. The transport, regularly supplied, has 17 x 3-in. steel spoke wheels.

The 12-ft. single-section No. 5 rod weeder, as regularly equipped with plain tractor hitch, transport frame and wheels, and lever-type depth regulator. The high-clearance frame is well adapted for work under difficult conditions.



SPECIFICATIONS

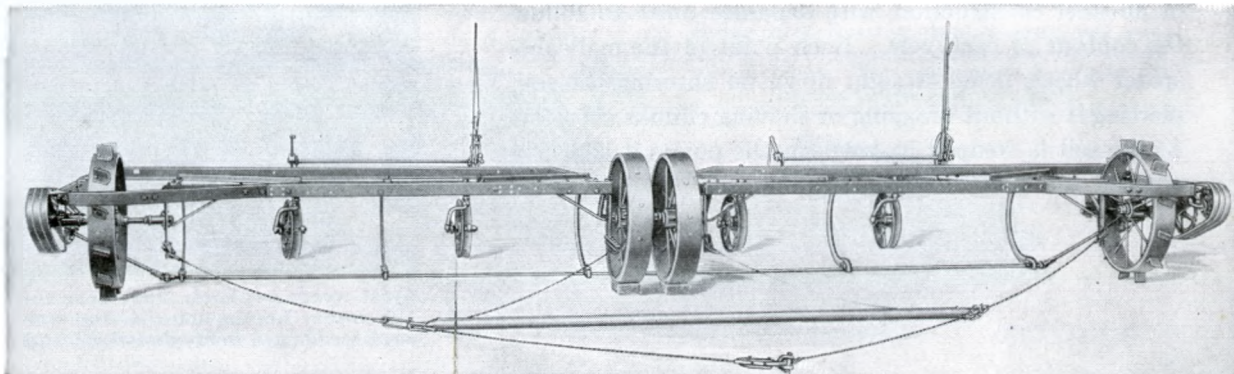
Size	Description	Weight (Approx.)*
9-ft.	single	825 lb.
10-ft.	single	844 lb.
12-ft.	single	946 lb.
18-ft.	duplex	1745 lb.
20-ft.	duplex	1793 lb.
24-ft.	duplex	1999 lb.
30-ft.	triplex	2610 lb.
36-ft.	triplex	2923 lb.

*With plain tractor hitch and transport on single-section; cable hitch and transport on duplex and triplex.

McCormick-Deering rod weeders are well known for their ability to do a quick and thorough job of weeding. They get out roots and all and leave a trash-covered surface well protected against soil blowing. The rod, which revolves slowly to keep it from gathering weeds, is pulled just under the surface through the entire field—it gets all the weeds.

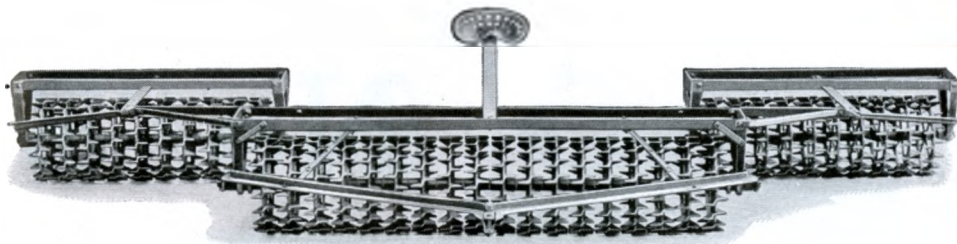
The frame, which has a 22½-inch vertical clearance, is rigidly braced with rail steel angle iron. The weeder rod is 37 inches behind the center of the wheels to allow extra trash clearance. The simple drive mechanism is built for light draft and efficient service. The sturdy main wheels have 6-inch tires.

The 24-ft. duplex rod weeder, which comes with cable hitch.

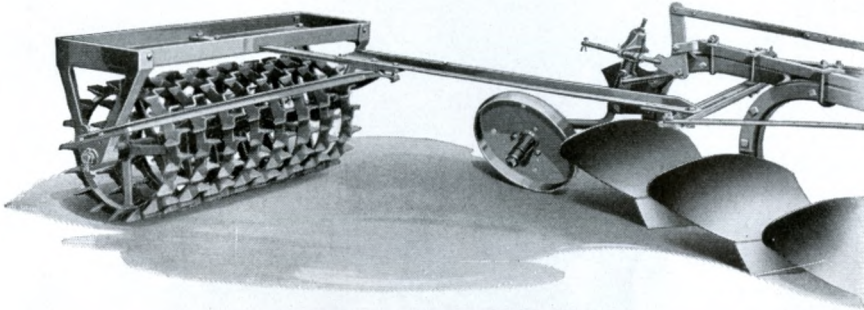


Regular equipment: Transport (frame and wheels). Lever depth regulators. Angle lugs on drive wheels. Plain tractor hitch on 9, 10 and 12-ft. single section machines. Cable hitch on 18, 20 and 24-ft. duplex, and on 20 and 36-ft. triplex. Round or square weeder rod, as specified, with adjustable points.

Available are: Seat and footboard attachment for single section. Platform plank. Tractor type spade lugs for drive wheels (12 to a set). 10-tooth sprocket for universal joint shaft to increase speed of weeder rod. Endwise transport attachment.



McCormick-Deering 19-foot land packer.



The McCormick-Deering trailing plow packer packs the soil while it is still fresh.

LAND PACKERS

**A good way to
conserve moisture
and stop soil drift**

MOISTURE is the grain grower's most valuable asset, and it is important that as much of it as possible be saved and retained. Freshly plowed ground loses its moisture very rapidly because of the air spaces left between the furrow slices. Either the McCormick-Deering land packer or the trailing plow packer will more than repay its cost the first season in the moisture it will lock in the soil.

The lugs and rims of McCormick-Deering packer wheels are wedge-shaped with the point of the wedge entering the soil first. This action packs the subsoil in all directions and fills air spaces. As the wheel leaves the soil the lugs have a tendency to form a mulch and to throw out on top small lumps of moist earth which dry in the form of little clods. Scattered over the field, these clods act as a very effective barrier to the action of the wind and

materially reduce soil drifting. In sticky or moist soil, where it is not desired to use the regular lugged type of wheel, the V-type of wheel can be obtained on special order.

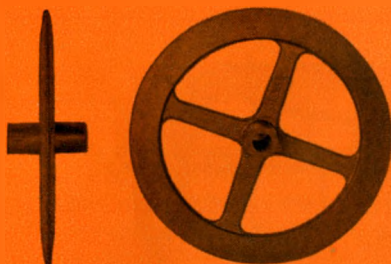
Land packer sizes are as follows:

- 9-foot—one section with 18 wheels.
- 15-foot—three sections with 30 wheels.
- 17-foot—three sections with 34 wheels.
- 19-foot—three sections with 38 wheels.

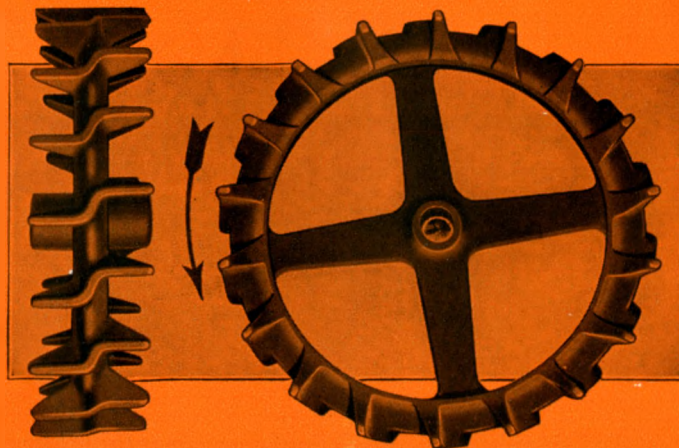
They are available with a tractor hitch or with a forecarriage and suitable hitch—2-horse hitch for the 9-foot size, 4-horse hitch for the 15 and 17-foot sizes, and 6-horse hitch for the 19-foot size.

Plow packers are built in three sizes:

- The 6-wheel for 2-furrow plows.
- The 7-wheel for 3-furrow plows.
- The 9-wheel for 4-furrow plows.

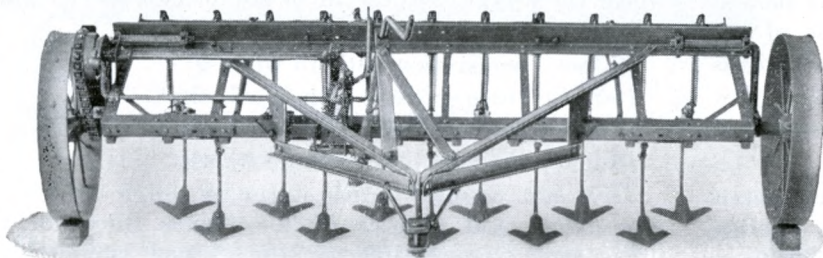


End and side views of V-type of wheel supplied on special order for use in sticky soils.

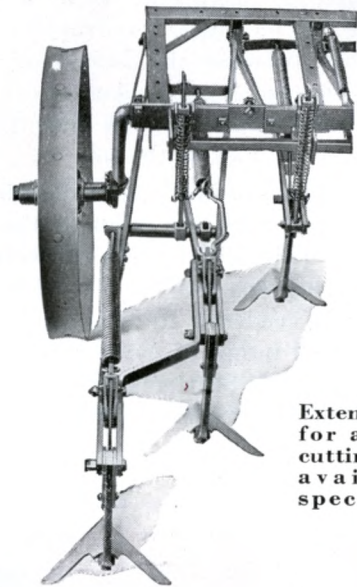


Side and rim views of packer wheel regularly furnished. The arrow indicates the direction of travel. The wedge-shaped lugs compress the soil in all directions.

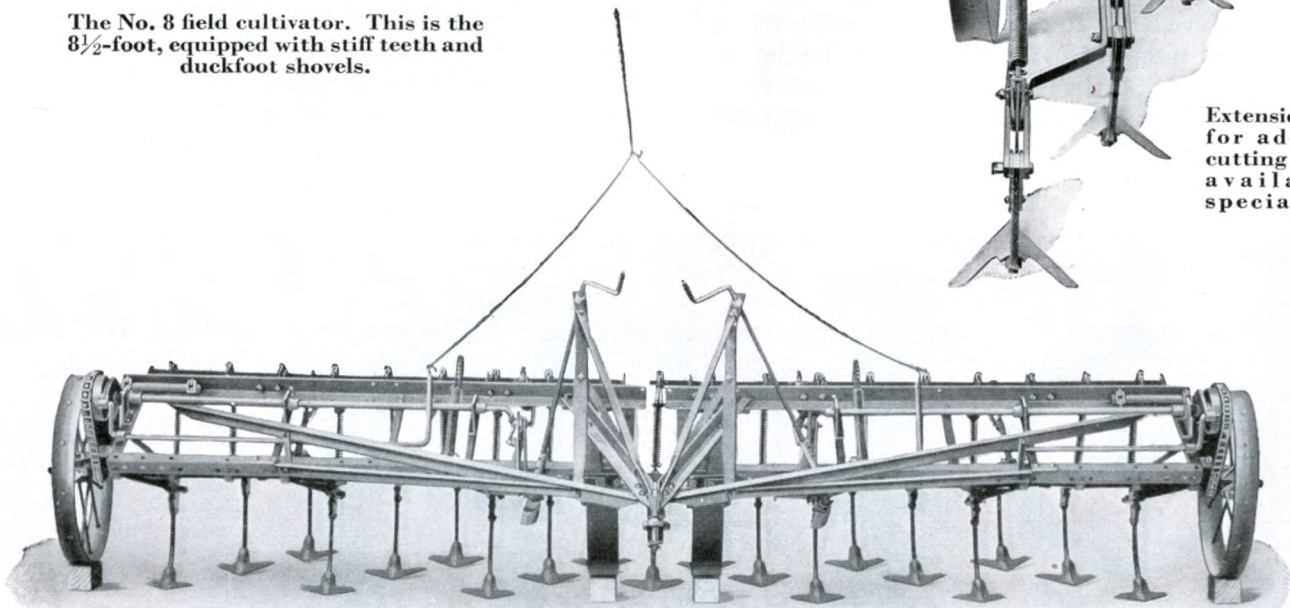
No. 8



The No. 8 field cultivator. This is the 8½-foot, equipped with stiff teeth and duckfoot shovels.



Extension gangs for additional cutting width are available on special order.



The 14-foot duplex field cultivator. A flexible connection at the center assures uniform work in irregular ground.

Field Cultivators

ONLY early, frequent and persistent cultivation will kill noxious weeds such as quack grass, Johnson grass, creeping Jenny, leafy spurge, etc. For low-cost eradication of these weeds the No. 8 field cultivator is unsurpassed. In regions of low average rainfall it not only kills weeds quickly but leaves a roughened, cloddy surface that holds snow, absorbs moisture, and effectively retards evaporation. Under most conditions, even though the surface soil may be quite dry and pulverized, the teeth of the No. 8 dig deep enough to bring clods to the surface. The valuable loose topsoil sifts down below the clods where there is much less possibility of its being carried away either by heavy winds or sudden floods of rain.

When equipped with spring teeth the No. 8 is very effective in preparing seedbeds. The lifting action of the spring teeth is particularly beneficial in a late, cold spring, breaking big clods and stirring the soil deeply so that air can circulate throughout the seedbed. This work can often be done in soil that would not permit the use of other tillage tools.

Gang Equipment

The machine can be supplied with gangs carrying light or heavy spring teeth, stiff teeth, or wide-spaced subsurface sweeps. Spring-tooth gangs are generally preferred for tillage work and soil mulching, especially in light and mellow soils, and for their effectiveness in eradicating such perennials as quack grass and couch grass. The stiff-tooth gangs have automatic trips to protect them against breakage when rocks or other objects are encountered. Heavy spring teeth or stiff teeth interchange on the same gangs. The man who needs stiff teeth for summer fallow and weed eradication and spring teeth for general tillage can thus use the same machine for both purposes.

For use where trash conditions are severe the field cultivator can be supplied with stiff-tooth gangs in three ranks. The additional clearance thus provided permits easy passage of trash and prevents clogging. Extension gangs to mount teeth behind the cultivator wheels for working close to fences are available on special order for the 5½, 7, 8½ and 10-foot sizes.

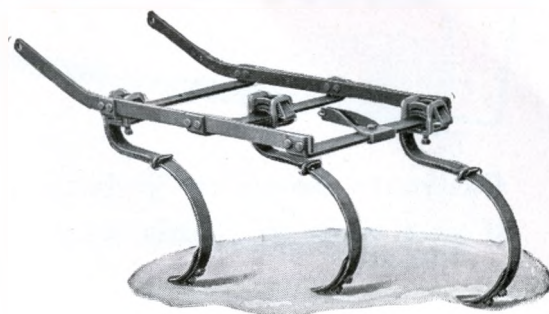
The subsurface tillage gangs and sweeps enable the user to cultivate the soil thoroughly without turning it over or burying any of the crop residues. By keeping the trash on the surface the soil is well protected against blowing and water run-off. Absorption of water is greatly increased and there is greater storage capacity because of reduced evaporation. Subsurface gangs are spaced 18 inches apart in two ranks, with 20-inch sweeps on the forward gangs and 24-inch on the rear.

Sizes

No. 8 field cultivators for tractor operation come in 5½, 7, 8½, 10, and 12-foot single section and 14-foot duplex, and are regularly equipped with depth regulator and power lift. The 10-foot can also be had with double power lift and two depth regulators. Horse-drawn machines are supplied in 5½, 7, 8½, 10, and 12-foot and are regularly supplied with hand lift and seat, and either with or without tongue truck; power lift and depth regulator are available when ordered.

For both tractor and horse-drawn machines the purchaser has the choice of light spring teeth at 6-inch spacing in three ranks (two-rank available on special order), heavy spring teeth at 6-inch spacing in three ranks, or 9-inch spacing in two ranks and stiff teeth at 9-inch spacing in two ranks. Three-rank spacing for stiff-tooth gangs can be had on special order. Also available are gang extensions for 5½, 7, 8½, and 10-foot stiff-tooth machines. Wheel scraper attachments may be had for all sizes.

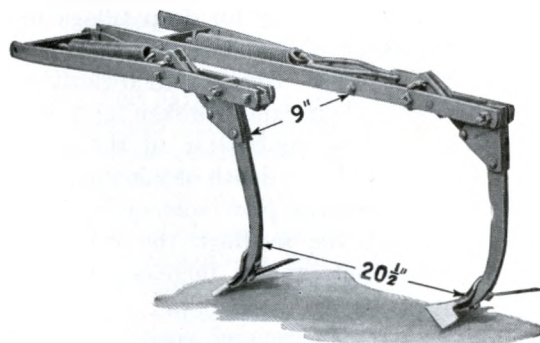
Tractor-drawn machines with subsurface gangs and sweeps come with depth regulators and power lift and are supplied in 5½, 7, 8½, and 10-foot sizes.



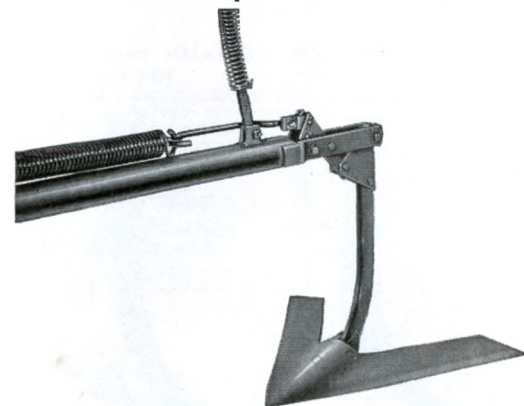
Light spring-tooth gangs for use in light soil conditions, for mulching the soil and for removing quack and other noxious grasses.



Heavy spring teeth hold rigidly to the desired depth of cultivation. The springs are adjustable to compensate for wear of the points. Available in either 6-inch spacing (shown above) or in 9-inch.



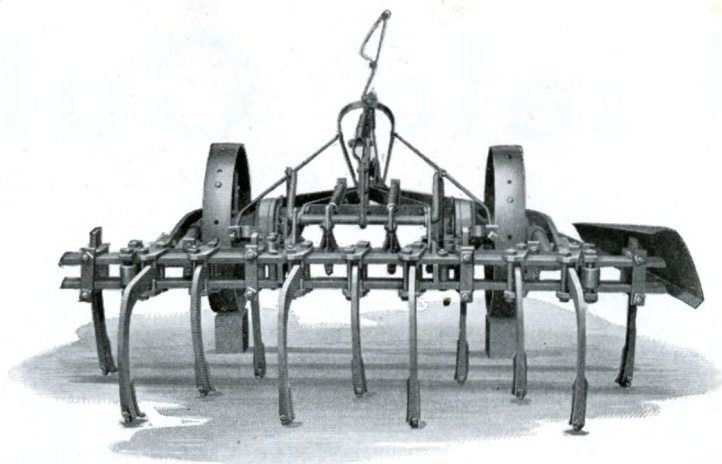
Two-rank stiff-tooth gangs have ample trash clearance. Pressure is controlled by a heavy spring. Sweeps are adjustable for trip and pitch.



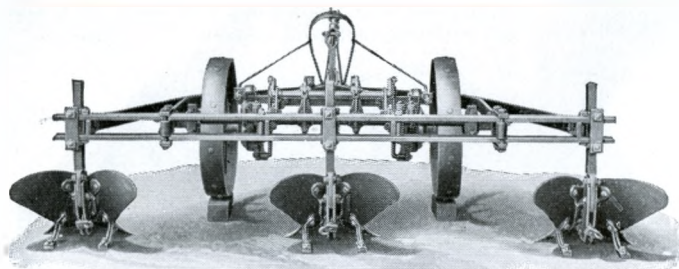
The subsurface sweeps are bolted to small frogs welded to narrow shanks. This construction produces a very level job and a minimum of trenching.

TRACTOR CULTIVATORS

Cultivate down to **9 inches** if you wish to . . . this way . . .



McCormick-Deering No. 2 tractor cultivator.



No. 2 tractor cultivator with middlebuster attachment.

THE McCormick - Deering tractor cultivator was designed originally for deep tillage in orchards and vineyards, and is extensively used for that purpose. It will dig into any tillable soil regardless of conditions and create a thoroughly broken and mellow seedbed. It will go clear to the bottom of the seedbed or deeper, loosening the soil to a depth of 9 inches.

Where a so-called plow sole or layer of hard soil or shale underlies the seedbed, the tractor cultivator will break it up and greatly increase the moisture-holding ability of the soil.

In Pennsylvania, several years ago, it was discovered

that the cost of preparing potato ground could be greatly reduced by using the tractor cultivator and in some cases not even plow the ground. But whether the ground is plowed or not, the tractor cultivator is worked to a depth of 8 or 9 inches, thoroughly loosening the seedbed and leaving it in ideal condition for potatoes. Those who use the tractor cultivator for this purpose claim that they have produced larger yields and better potatoes, due to the loose condition of the seedbed.

The sizes are 5, 6, 7, and 8 foot. There is a power lift on both sides of the machine, assuring a square lift. The teeth are set in three ranks, and there is an ample amount of trash clearance between them. The front standards are adjustable for depth independently of the others. The 5-foot cultivator can be supplied with all teeth adjustable, making it especially suited to orchards and vineyard work. The wheel tread on all sizes is 40 inches.

Irrigating tool bars can be supplied in 6 and 9-foot sizes. Other extra equipment includes middlebuster attachments, light and heavy subsoil attachments, a border-disk attachment, a spring-release hitch attachment, heavy-duty shovels and sweeps, and alfalfa points.

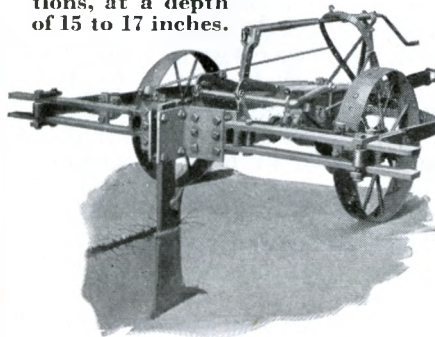
Detail of special light No. 1 subsoil attachment.



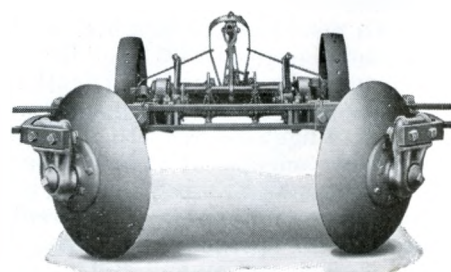
Alfalfa renovator tooth.



No. 2 tractor cultivator with No. 2 subsoil attachment, which can be set to work, under favorable conditions, at a depth of 15 to 17 inches.



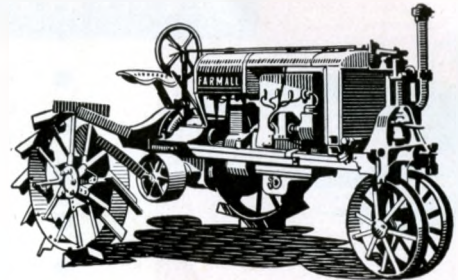
No. 2 tractor cultivator with border-disk attachment.



Since 1923, the Farmall System of Farming Has Set the Pace

IN 1923 came Farmall, the first successful all-purpose tractor. Here was something new—farm power designed from the soil up, a tractor that started from the implement end. International Harvester built this first Farmall and developed a unique system of power farming out of a wealth of experience with the varied machine requirements of farmers everywhere.

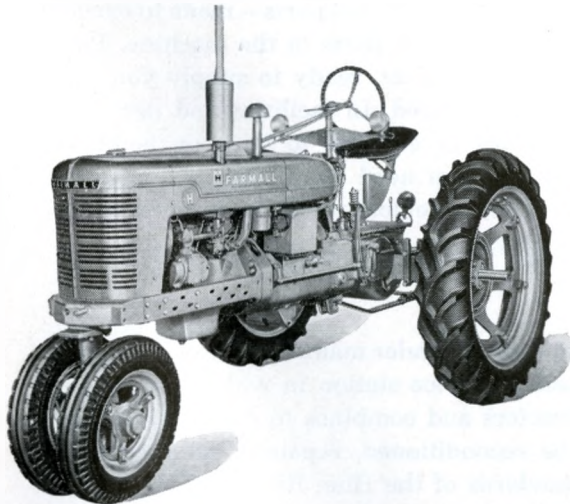
For two decades the Farmall idea has been the foundation for all experiments in all-purpose tractor design and attaching equipment. It is this Farmall System that has made automotive farming practicable and thus helped keep young leadership in agriculture. Not long after the first Farmall was built there were a hundred thousand and then a half-million Farmalls at work.



The Original Farmall—Born 1923

There's a proud record of progress between the old "Original" of 1923 and the streamlined red Farmalls of today, with endless improvements in power and machines. A new generation has grown up since that date to hail the Farmall System of Farming.

The complete line of Farmall tractors and the machines built for direct attachment to them are abundant assurance that your selection of McCormick-Deering equipment will be right!



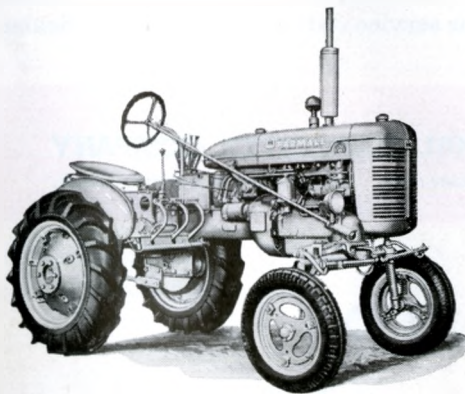
Farmall H is the tractor for the average diversified 120 to 160-acre farm. Rear wheels are adjustable for 44 to 80-inch treads. A choice of gasoline or distillate engine is available. Largest is Farmall M for 160 to 240-acre farms, also available with a Diesel engine — the Farmall MD.

FARMALL TRACTORS

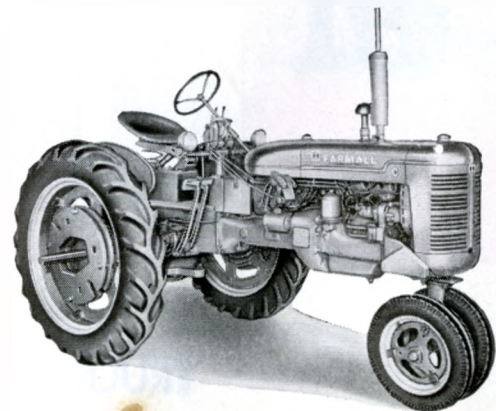
There is a type and size of Farmall for every farm. Smallest is the Farmall Cub, suited for diversified farms up to 40 acres. Farmall Super-A, twice as powerful as the Cub, is also a four-wheel, one-row tractor. Both have "Culti-Vision," a feature providing the operator an unobstructed view ahead.

Farmall C is a two-row, all-purpose tractor and will pull one large bottom or two small plow bottoms. Both the Farmall Super-A and Farmall C can be equipped with Touch-Control, permitting the operator to raise, lower, or adjust any of the direct-connected implements with a "fingertip touch" of a small lever.

The medium-sized Farmall H will pull two 14-inch plow bottoms or a two-row middlebuster and may be fitted with the hydraulic Lift-All. Farmall M will supply the extra power required by the larger plows, a four-row cultivator or any of the larger size implements. Also available is a full line of standard wheel-type tractors, orchard and grove tractors, and crawler tractors.




Farmall Super-A will plow 6 to 7 acres a day in average soil. It supplies economical power for cultivating one row of corn, cotton or similarly spaced crops, and up to six rows of vegetables. Wheel treads are adjustable from 40 to 68 inches.



Farmall C will cultivate two standard crop rows. Like other Farmalls, it may be equipped with a variety of matched, quick-change implements. It also makes an economical second tractor for the larger farm for planting, cultivating, mowing, hauling, and other tasks.


The IH Dealer Serves You in 3 Ways

EQUIPMENT




FIRST, in his attractive place of business the IH dealer displays and stocks a full line of modern tractors and farm equipment suitable for use *in your locality*. He knows the crops you grow, the soil and climatic conditions you must contend with, the farming methods you prefer -- and he arranges to supply you with just the types and sizes of machines and attachments you need to perform your seasonal operations quickly, efficiently, and at minimum cost. He is experienced and well-informed. He stands ready to discuss your production problems and to demonstrate, on your own acres, any equipment in which you are interested. He is a farm equipment specialist whom it will pay you to consult.

PARTS



SECOND, the IH dealer stocks and supplies all commonly needed replacement parts for the machines he sells and can supply the less commonly needed parts on short notice. He sells only genuine International Harvester engineered parts -- made to exactly the same specifications as the original parts in the machine. Parts men are alert, obliging, and competent, ready to supply you with whatever part or accessory you need. In facilities and personnel the IH dealer spares no effort or expense to have on hand the parts you need at the moment you need them. Delays due to the breakage or wearing-out of parts seldom occur when your equipment carries the IH monogram.

SERVICE



THIRD, the up-to-date IH dealer maintains a well-equipped, competently staffed service station in which any type of farm equipment, from tractors and combines to disk harrows and cream separators, can be reconditioned, repaired, or overhauled according to the high standards of the Blue Ribbon Service code. He places at your disposal a large investment in shop space, tool equipment, and skilled personnel in order that your farm tractors and machines may be maintained in first-class operating condition. Avail yourself of the opportunity to keep your equipment in top-notch condition by having it repaired or overhauled--*before the season of use*--in the service station of your local IH dealer.



INTERNATIONAL
HARVESTER

INTERNATIONAL HARVESTER COMPANY

180 NORTH MICHIGAN AVE. CHICAGO 1, ILLINOIS, U.S.A.

TRUCK & FARM SUPPLY LTD.

phone 1721

128 CHURCH ST. BELLEVILLE