

SUPERIOR DRILLS



"I PLANTED THAT FIELD WITH
DAD'S SUPERIOR DRILL."

MANUFACTURED BY
AMERICAN SEEDING-MACHINE CO.
SUPERIOR DIVISION.

Factory :
SPRINGFIELD, OHIO.

General Offices :
SPRINGFIELD, OHIO.

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Alum

SUPERIOR

Disc, Hoe and Shoe
Grain Drills,

With and Without Fertilizer Attachment.



One-Horse Wheat and Corn Drills

Broadcast Seeders

Beet Drills Cider Mills

Superior Disc Harrows on Wheels

Manufactured by
American Seeding-Machine Company,
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Introductory

ON THE FOLLOWING PAGES we have endeavored to clearly illustrate the many features of recognized merit found in Superior Grain Drills.

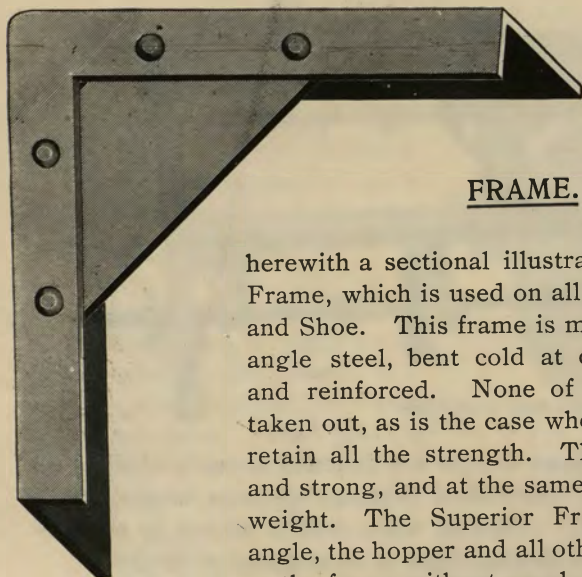
There is nothing to hide. We are proud of every feature, because we know from experience that every device will do exactly what we claim for it.

There is nothing experimental in the make-up of the Superior. Every device has been thoroughly tested in actual work, and we unhesitatingly guarantee every implement to do all that we say it will do.

Superior implements are successfully used in every section of the grain-raising world by the best and most progressive farmers, who heartily and honestly endorse and recommend them.

We are always ready to answer questions. It is no trouble. Should prospective purchasers desire more information than is contained in this catalogue, we will esteem it a great privilege to have them write us. Prompt and courteous attention is always given to all inquiries.

General Construction of Superior Drills



Corner Section Solid Steel Frame.

A SOLID FOUNDATION is of much importance in the construction of a grain drill. This foundation may be properly called the Frame. We show

FRAME.

herewith a sectional illustration of the Superior Steel Frame, which is used on all Superior Drills—Disc, Hoe and Shoe. This frame is made of one piece of heavy angle steel, bent cold at corners, thoroughly braced and reinforced. None of the carbon in the steel is taken out, as is the case where the steel is heated. We retain all the strength. This makes the frame rigid and strong, and at the same time does away with extra weight. The Superior Frame, being made with an angle, the hopper and all other attachments are fastened to the frame without employing extra castings, as will be seen from complete illustration of Frame, Bed-Rail, Axle, Disc Wheels, etc., shown on next page.

WHEELS.

Superior Drills are furnished with either Wood or Steel Wheels, made of the very best material, and great care is used in the selection of stock. The Wood Wheel is stronger and heavier than formerly used. It is the best Wood Wheel that it is possible to make. We also furnish, when so ordered, a Steel

Wheel with three-inch faced tire, and one-half inch staggered spokes. In all, this is the strongest Steel Wheel ever made, and it will stand up under the most severe strains. The bearings are extra long, which prevents the wheels from "wobbling." Each wheel has a ratchet in the hub, which engages a pawl flange, located on the axle just outside the

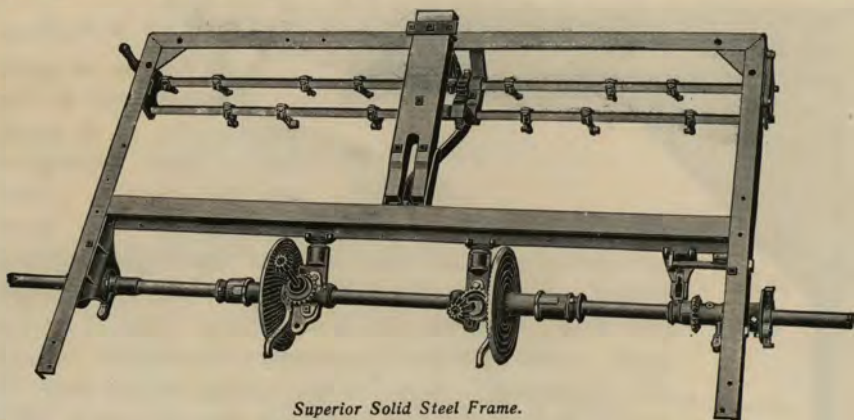


Wood Wheel.



Steel Wheel.

General Construction of Superior Drills

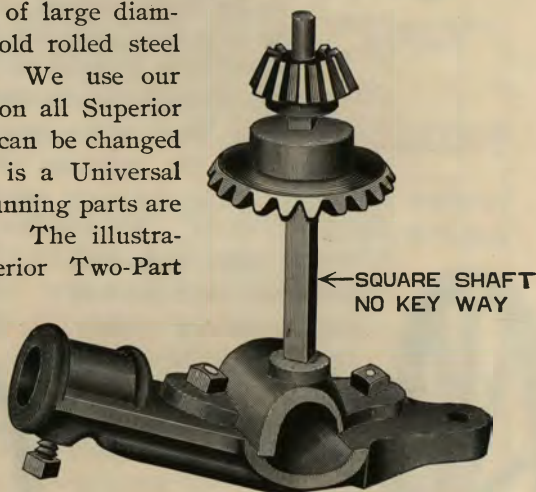


Superior Solid Steel Frame.

frame on each side. These pawl flanges are fastened securely to the steel axle, which runs in properly constructed bearings of extra length. This makes "both wheels drivers." That is, when drill is turned to right or left, as in passing around corn shocks, there is no stopping of the feed.

AXLE. The Superior Axle is of large diameter and made from cold rolled steel of the best quality. We use our

celebrated two-part axle hanger on all Superior Drills; in case of breakage they can be changed without stripping axle. There is a Universal Boxing in Axle Plate, and all running parts are provided with convenient oilers. The illustration herewith shows the Superior Two-Part Axle Hanger and the Square Upright Grain Shaft and Sliding Pinion. Bear in mind that this shaft is *square* and that it has no key-way. It does not need one, being much more secure and rigid than it is possible to make a round shaft with key-way.



Two-Part Axle Hanger.

DISK WHEEL.

The illustration shows a section of the Superior "I" Beam Steel Bed-Rail, with the Two-Part Axle Hanger, a section of our Steel Axle, together with the matchless Superior Disk Wheel and Sliding Pinion for changing quantity. By the use of this Disk Wheel and Sliding Pinion, we are enabled to make change of quantity without change of parts. There are no cog wheels to get lost and no removable gears of any kind. With the

General Construction of Superior Drills

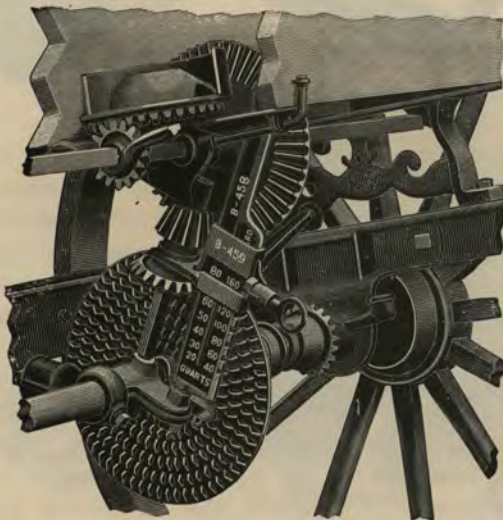
Superior Disk Wheel and Sliding Pinion, which is practically thirteen wheels of different sizes, cast upon a solid plate, thirteen different quantities can be sown from each side of the distributor wheel; or, in other words, thirteen half-peck changes can be made, sowing from two to eight pecks of wheat and from four to sixteen pecks of oats to the acre. The feed is thrown in and out of gear by raising or lowering the small lever shown in illustration. The feed is also automatically thrown out of gear when discs, hoes or shoes are raised from the ground, or it can be thrown out of gear by means of convenient pull rods.



Disk Wheel for Changing Quantity.

FERTILIZER FEED.

This illustration of the mechanism of the Superior Fertilizer Feed also shows the manner in which the sliding pinion works on the square upright shaft. This Superior Fertilizer Feed is so well and favorably known that extended comment is unnecessary. B-458 is the indicator plate for the Fertilizer Feed. This plate is made of malleable iron.



Fertilizer Feed and Disk Wheel.

There are no parts to get out of place; it is easy to adjust, can be easily operated with one hand, and can be set to sow any desired quantity while the drill is in motion. This indicator plate has four rows of figures—two rows on each side—to indicate the amount sown with each sized cone. Note the columns—half, standard, double and triple. There is no guess work about this feed. The arrow on the plunger boss points to the number of quarts sown. The grain and

General Construction of Superior Drills

fertilizer disk wheels are all on the axle, under the hopper, so located as to be easy of access and will do this work in the best possible manner. Change of quantity of grain or fertilizer is instantly obtained without change of parts. With this Fertilizer Feed all kinds of commercial fertilizers can be sown without clogging. The Superior never fails to do the work required of it. It is also very handy to clean. Any quantity of fertilizer can be sown, from 20 to 480 quarts per acre, by using the four sets of cones.

One-half quantity cone will sow	20 to	80 quarts per acre.
Standard " " " "	40 " 160	" " "
Double " " " "	80 " 320	" " "
Triple " " " "	120 " 480	" " "

Standard quantity cones, which sow from 40 to 160 quarts per acre, are furnished with every drill. Additional sets of cones are sent on special orders only, a slight additional charge being made for each extra set.

We sow by measure, rather than by weight, because it is difficult to find any two fertilizers that weigh the same per bushel. There is no cutting out of teeth on the speed disk, as it is provided with jam-nuts at the lower end, which admits of true adjustment to mesh correctly in all rows of teeth on the disk wheel. Notice the specially broad-faced bevel pinion and gear. This insures strength and reliability under extraordinary strains. It is oiled conveniently by means of our smooth steel oil conduit.



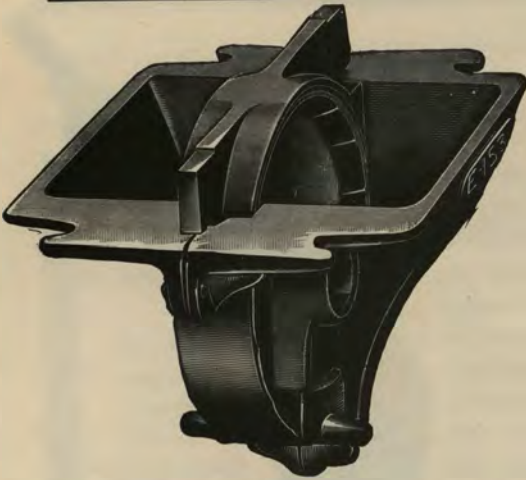
FERTILIZER DRILL HANGER.

This illustration shows the Hanger used on all Superior Fertilizer Drills—Disc, Hoe and Shoe. We call special attention to the Smooth Steel Oil Conduit which conveys the oil to the spool and top gear on the upright shaft. A similar conduit and hanger is also used for the grain feed. The oil holes are very easy of access and are protected from grit and dust.

GRAIN FEED.

The heart of a grain drill is its feed. It is really the most vital part. Upon the reliability of the feed depends the accurate sowing of the grain. The illustration herewith shows the Superior Double Force Feed which is used on all Superior Drills and Seeders. Remember, that all devices for

General Construction of Superior Drills

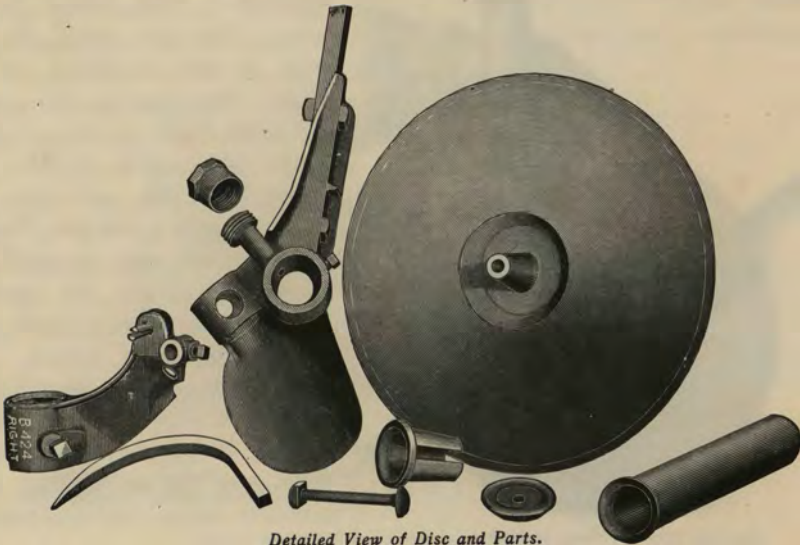


Double Force Feed.

sowing grain measure the seed and do not sow by weight, hence the slight variations from indicated amounts, unless standard, or medium sized, wheat is used for seed. There are two openings—one for wheat and small grain, the other for oats, peas, beans, barley, beet seed, etc. Each revolution of the speed wheel is certain to deliver the same amount of grain from each distributor. This feed never bunches the seed. It sows all kinds of seed in just the quan-

tities desired (cow peas, corn and beans included) and it does not crack the seed. Cracked seed will not grow.

THE DISC. Much depends upon the Disc, Shield and Grain Conduit. The illustration shows the Superior Disc, Shield, Chilled Tapered Boxing, Compression Oil Cup for Disc Bearing and Steel Grain Tube or Conduit. The removable chilled boxing never wears out. There are over 800,000 now in use, and not one case of "wear out" has come to our notice. Even though one should wear out, we renew it at the cost of one dime. Both the spindle and removable box are "chilled," which makes two hardened "smooth-as-glass" running

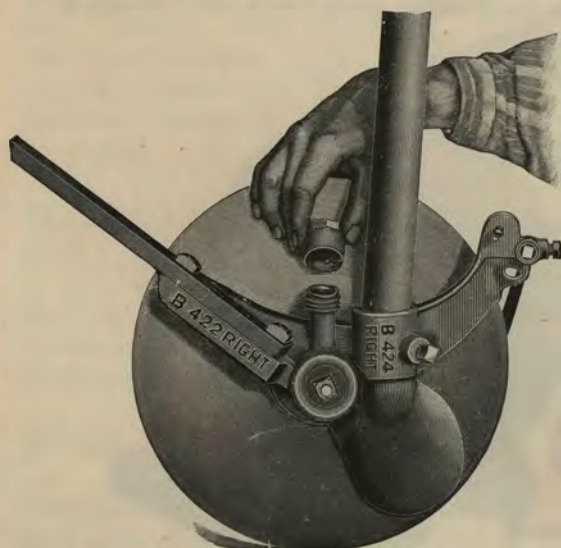


Detailed View of Disc and Parts.

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surfaces, and gives the castings a very tough interior. In addition to this, each disc bearing is provided with one of our Compression Oil Cups, an illustration of which we show herewith. This oil cup holds a quantity of hard oil of about the same consistency as axle grease. Should the farmer run out of the hard oil, he can use axle grease. These oil cups are conveniently located and easy to get at. They can be turned with the fingers, and this compression forces the hard oil down on to the center of the disc bearing, and the oil works from the center out. This method makes the bearings absolutely

dust and grit proof. We have examined disc bearings lubricated in this manner with one filling of cup, after same had been used in planting two hundred acres of ground, and the bearings were still well lubricated. With this combination of chilled "smooth-as-glass" disc bearings and the scientific manner in which they are lubricated, it is easy to see that wear is impossible, and that noisy, rattling discs are not a feature of the Superior construction. The accompanying illustration shows the Disc and its component parts put together. We have said that "much depends

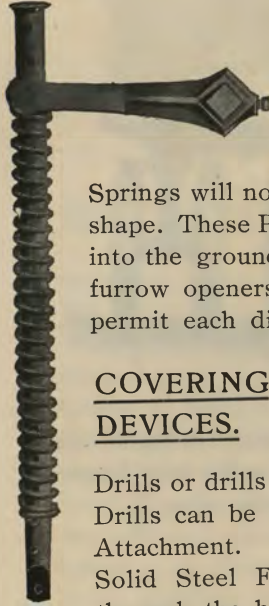


Showing Hard Oil Compression Cup.

upon the disc, shield and grain conduit." This cannot be denied. The disc opens the furrow for the reception of the seed. The Superior Disc, being set at an angle to line of draft, opens up a correct furrow. The shield holds the soft earth and trash in such a manner that no dirt is mixed with the seed, and nothing prevents the seed or obstructs its passage to the bottom of the seed trench. The steel grain conduit conducts the seed from the feed cups down to the bottom of the furrow. The seed is all planted at a uniform depth, covered evenly,

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and the earth compacted just enough to retain the moisture. This means that the young plants will all come up at the same time, that the roots are well protected, that the grain will ripen uniformly and grade better.



Pressure
Bar and
Spring.

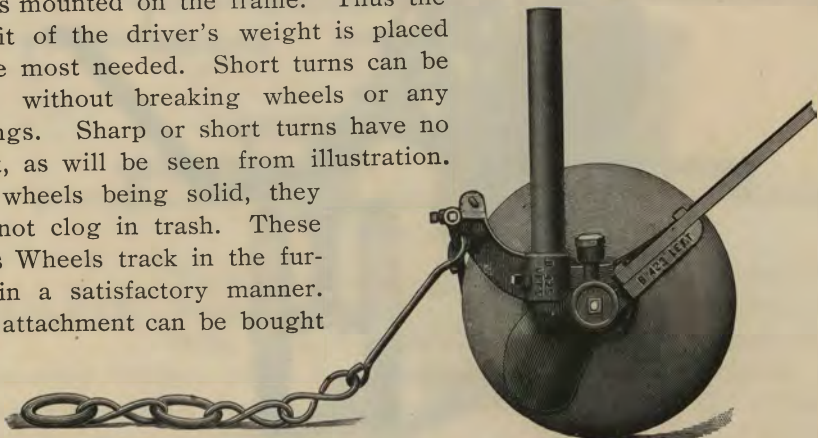
PRESSURE BAR AND SPRING.

Superior Drills—disc, hoe and shoe. This Pressure Bar cannot bend or break. The Pressure Springs will not buckle or kink, and they always retain their proper shape. These Pressure Springs are used to force the furrow openers into the ground for shallow or deep planting, and also allow the furrow openers to conform to the inequalities of the ground and permit each disc, hoe or shoe to be independent in action.

COVERING DEVICES.

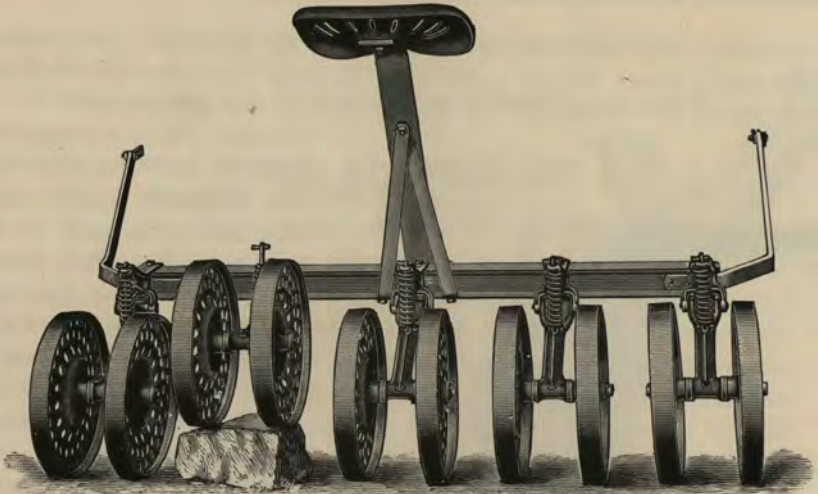
We herewith show the Superior Covering Chains and Gang Press Wheel Attachment. The Covering Chains are heavy and strong. We send Covering Chains with all Superior Drills, except Press Drills or drills ordered with Press Wheel Attachments. All Superior Drills can be readily fitted with the Superior Gang Press Wheel Attachment. There is a hole drilled in each end of all Superior Solid Steel Frames, and all that is necessary is to put the bolts through the holes and tighten up the nuts. The Superior Gang Press Wheel Attachment is very popular. The Press Wheels are in pairs and attached to steel frame, as shown. Pressure Springs are provided for each pair of Press Wheels. These springs insure flexibility and evenness of pressure. As will be seen, a comfortable seat is mounted on the frame. Thus the benefit of the driver's weight is placed where most needed. Short turns can be made without breaking wheels or any castings. Sharp or short turns have no effect, as will be seen from illustration. The wheels being solid, they will not clog in trash. These Press Wheels track in the furrow in a satisfactory manner. This attachment can be bought

This cut shows the Superior Tubular Steel Pressure Bar and Malleable Lifter Arm. This device is used on all



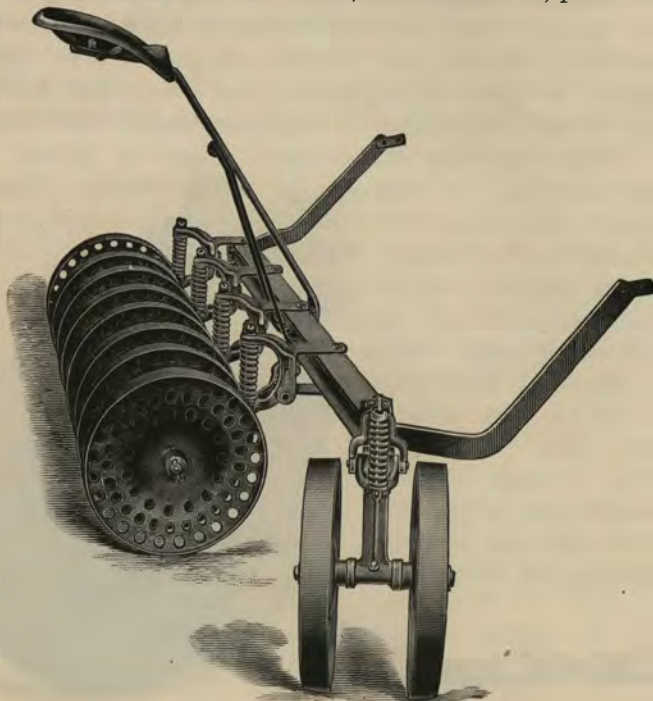
Showing Manner of Attaching Chain Coverer to Disc.

General Construction of Superior Drills



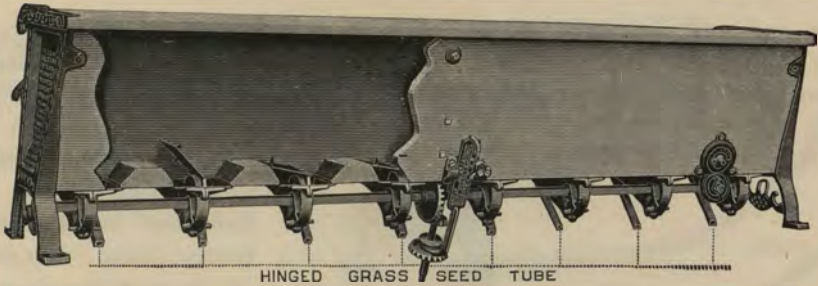
Showing Independent Feature of Press Wheels.

at any time and can be attached to any Superior Disc Drill made during the past four years. This is an extra attachment and is only furnished on special orders and at an additional, but reasonable, price.



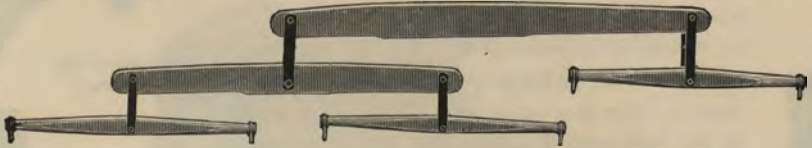
Gang Press Wheel Attachment. Permits of Short Turns.

General Construction of Superior Drills



THE HOPPER.

The accompanying illustration gives a good idea of the Superior Hopper and its general construction. This Hopper is large, and nothing but the best seasoned lumber is used in its construction. The sectional view shows the interior arrangement of the grain feeds and the manner in which the reversing plates are operated. In this illustration will also be seen the hinged grass seed tubes, which permit the operator to sow grass seed either in front or rear of furrow openers. The Superior Grass Seed Attachment is guaranteed to do satisfactory work. It is constructed upon the "hour glass" principle, and is equipped with chain agitator. The hour glass is a well-known device whereby time is kept by gravitation. Its accuracy has never been disputed. The quantity is regulated by opening or closing the openings in bottom of Hopper. There are as many openings as furrow openers. For instance: An eight-disc drill has eight grass seed spouts and eight openings; a ten-disc, ten openings and spouts, and so on.



Three-Horse Hitch.



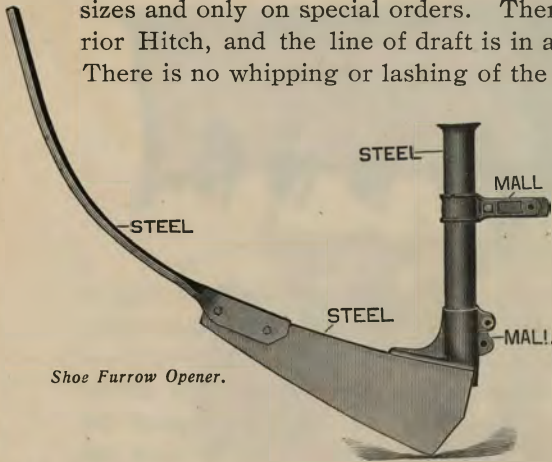
Four-Horse Hitch.

HITCHES.

These illustrations show the Superior Three and Four-Horse Hitches that are regularly supplied on large size drills. The Three-Horse Hitch shows the Superior Compensating Evener, which has given such universal satisfaction. The Four-Horse Hitch shown here is the one regularly supplied, but we furnish the pulley and chain evener at a slight additional cost on the larger

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sizes and only on special orders. There is a peculiarity about the Superior Hitch, and the line of draft is in a direct line with horses' shoulders. There is no whipping or lashing of the tongue and no neckweight.



Shoe Furrow Opener.

The runners on all SHOES. Superior Shoe Drills are independent in action. Each and every shoe is entirely independent. The construction of the Superior is such that the press wheels and shoes are wholly independent of each other. This enables both shoes and press wheels to follow uneven trenches and press the soil with evenness and regularity.

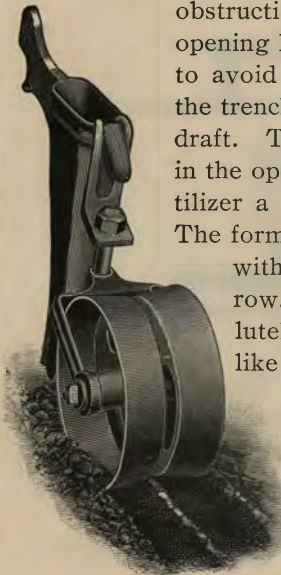
As will be seen from the illustration, the Superior Shoe and all its attachments are either steel or malleable iron.

We show herewith an illustration of the Superior Spring Hoe. HOES. Superior Hoe Drills are supplied either with Pin Hoes or Spring Hoes. The Superior Spring Hoe is a positive stump jumper, and the action of the spring is such that the hoe immediately resumes its proper position after an



Spring Hoe Going Over Stump.

obstruction is passed. The furrow opening hoe must be narrow enough to avoid unnecessary friction in opening the trench in order to do away with extra draft. The hoe must also be large enough in the opening to allow the grain and fertilizer a free and unobstructed passage. The form of the hoe point has much to do with the proper opening of the furrow. Superior Hoe Points are reversible, and have absolutely true curves which permit them to enter the ground like a wedge, lifting up the soil as the trench is opened. They are, therefore, unlike many others which embody abruptness, thereby breaking and compacting the soil in their forward movements and making extra heavy draft. The illustration to the left shows the Superior Split Press Wheel Attachment for Hoe Drills only, and is used exclusively by beet raisers,

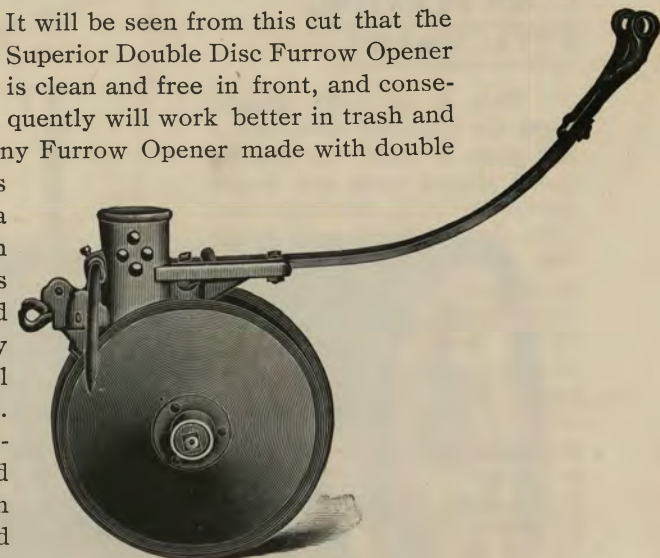


Split Press Wheel for Hoe Drill.

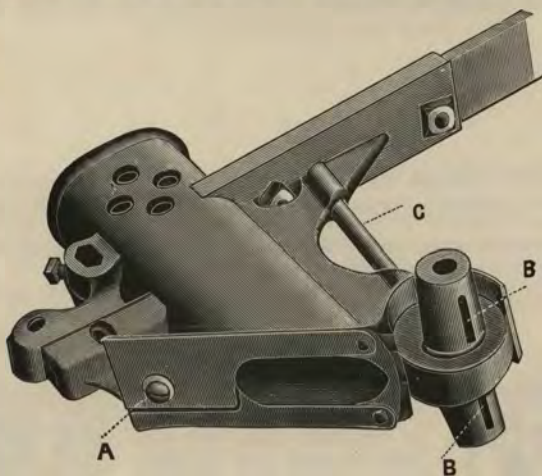
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DOUBLE DISC FURROW OPENER.

all kinds of ground than any Furrow Opener made with double bars. Experience proves that the double bars are a nuisance and positive trash collectors. The cut shows the Superior Pointed Scraper, which is the only kind of scraper that will not add friction to the disc. The Superior Double Concave Discs by the forward traction press together on front side of hubs, and always run right and work right. The discs rolling, pass over stones, etc., with far less friction and wear and tear than a shoe can, and they never stop up with trash or foul ground.



Double Disc Furrow Opener.



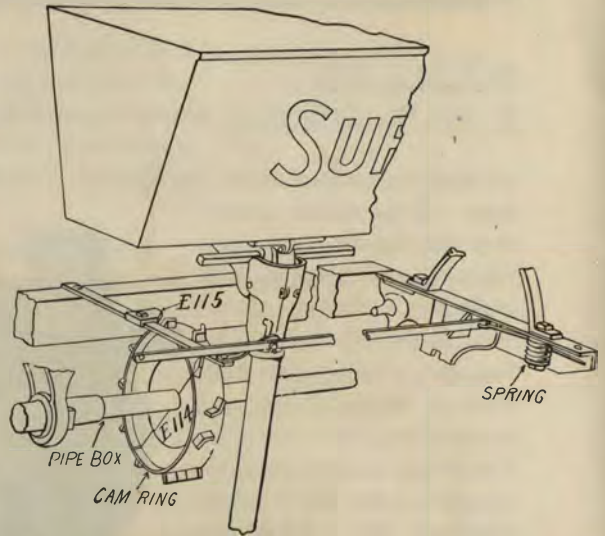
Cut Showing Construction of Double Disc Trunnion Tube.

A—Screw to hold adjustable inside scrapers up to discs in muddy seeding. *B*—Long slot on bottom of spindles through which the oil flows to lubricate the bearings. *C*—Gas pipe oil tube in front of the grain tube, which permits oiling both hubs from a position on top of the drag bar.

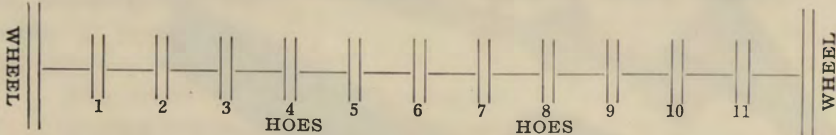
General Construction of Superior Drills

CORN PLANTING ATTACHMENT.

This is an extra attachment for planting corn, beans and peas in hills. It can be easily placed upon any Superior Grain Drill. We make two Cam Rings—E111 and E112. The price is very reasonable, being only 50 cents for each Cam Ring. Superior Grain Drills are equipped with ground wheels 42 and 48 inches high. Cam Ring E111, when used on drills equipped with ground wheels 42 inches high, will plant in hills 19 or 33 inches apart, while Cam Ring E112 will plant in hills 14 and 26 inches apart. Drills having ground wheels 48 inches high will plant, with Cam Ring E111, 22 and 38 inches apart, and with Cam Ring E112, 17 and 30 inches apart. This attachment is thoroughly reliable and will do satisfactory work.



SOWING CORN, PEAS AND BEANS WITH DRILL.



THE SUPERIOR is largely used for the drill planting of field crops for cultivation, such as corn, peas and beans, the rows of which can be made to stand any distance apart desired within the limit of range in your drill, as shown in diagram. For instance, using an 11-hoe drill, and planting only from Nos. 3 and 9, if the hoes are 7 inches apart in the drill, the rows of seed will be $3\frac{1}{2}$ feet apart, the wheel track serving as a guide for the return bout. Two rows of corn are generally planted with drills of these sizes.

Any size drill can be used by providing a simple guide or marker for driving. With our fertilizer drills the most desirable method is to run one stream of fertilizer into the row with the seed, and an additional stream through one hoe or disc on each side. This is more beneficial than when the entire amount of fertilizer is sown with the seed. *Be careful not to plant too much seed.*

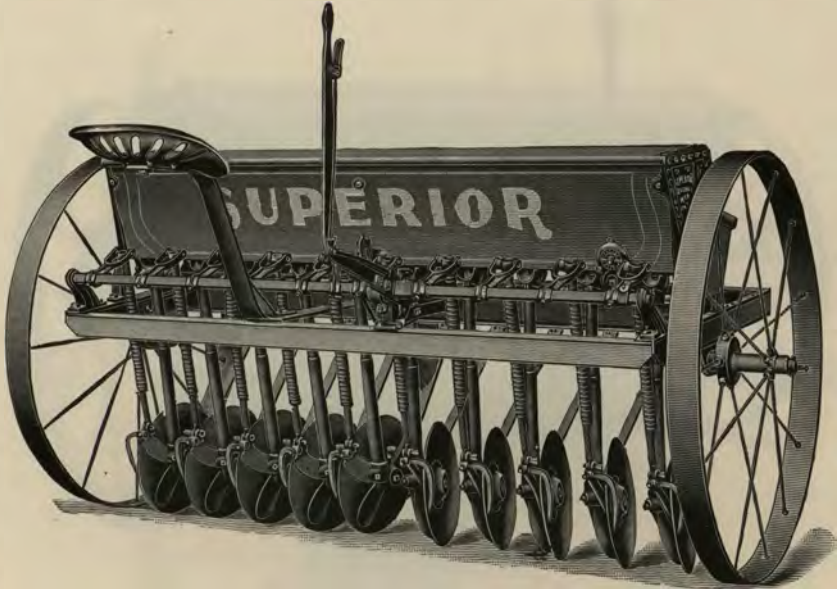


Drill-Planted Corn for Field Crop by Old Method.



Corn Planted by New Method.

The Superior Single Disc Drill



*REAR VIEW SUPERIOR SINGLE DISC DRILL
WITH STEEL WHEELS AND SEAT.*

THIS CUT shows the Superior Single Disc Drill equipped with steel wheels and seat. The seat is not furnished unless specially ordered, an extra but reasonable charge being made for same.

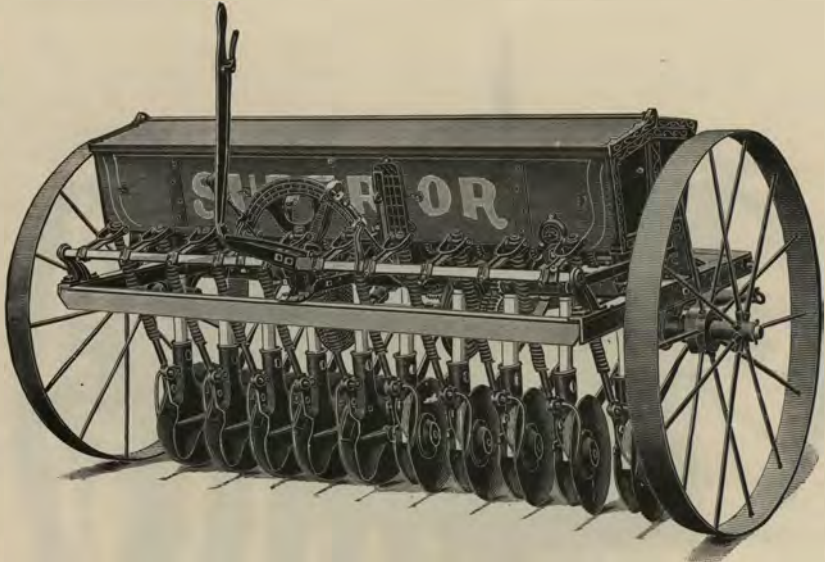
We also furnish, at a reasonable additional cost, a first-class agitator attachment for sowing bearded or rust-proof oats.

The construction is the same as all other Superior Disc Drills. See pages 3 to 14.

STANDARD SIZES :

- 8, 10, 12 and 14 Discs, 8 inch.
- 9, 10, 11, 12, 14 and 16 Discs, 7 inch.
- 12, 14, 16, 20 and 22 Discs, 6 inch.

The Superior Single Disc Drill



REAR VIEW SUPERIOR FERTILIZER SINGLE DISC DRILL.

THE SUPERIOR Combined Grain and Fertilizer Single Disc Drills sow all kinds of seeds and commercial fertilizers accurately.

Every seed is placed upon a broad flat seed bed at any depth required and in any quantity.

The fertilizer is sown in any quantity and in such a manner that it will do the greatest amount of good.

None of the seed or fertilizer is wasted when sown with the Superior.

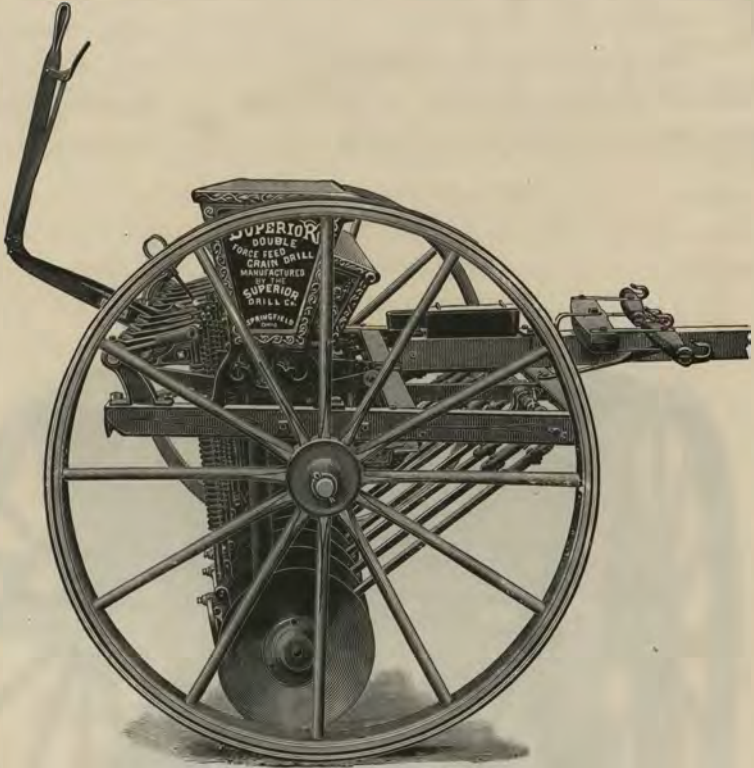
For detailed description, see pages 3 to 14.

STANDARD SIZES:

6, 8 and 10 Discs, 8 inch.

9, 10, 11 and 12 Discs, 7 inch.

The Superior Single Disc Drill



END VIEW SUPERIOR SINGLE DISC DRILL.

THE ABOVE ILLUSTRATION of the Superior Single Disc Drill shows its clean-cut and symmetrical appearance. Notice the manner in which the straight high-carbon steel drag bars are attached high in front. There is no place for corn-stalks or trash of any description to lodge or drag. The compact, strong construction of the Superior has always pleased farmers who value honest, scientific workmanship and highest grade material.

The Superior Single Disc Drill

THE CUT herewith shows the Superior Fertilizer Single Disc Drill (6-disc size). This drill is used exclusively in the Southern States, where small teams are used, and in mountainous or hilly sections. It is in all respects the same as the larger size Superior Single Disc Drills, detailed construction of which will be found on pages 3 to 14.



REAR VIEW SUPERIOR FERTILIZER SIX-DISC DRILL.

Owing to its extreme light draft, the good work that it does on hillsides and level ground, and the satisfactory manner in which it sows all kinds of small grain, rust-proof oats and all commercial fertilizers, the Superior Six-Disc Drill is in great demand among farmers who require a drill of this size.

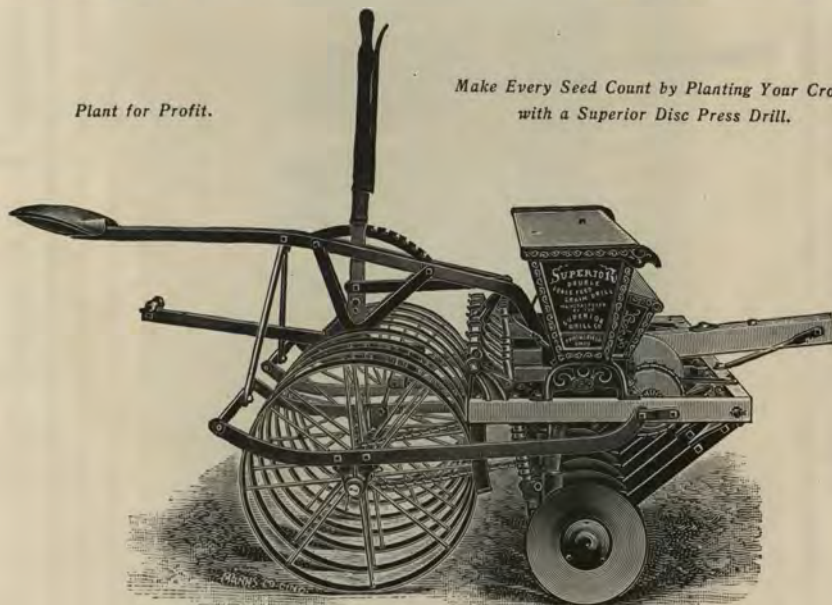
The Superior Disc Press Drill

THE SUPERIOR DISC PRESS DRILL was designed with a special view to simplifying the methods of operation. The frame is strong and well proportioned. It is made of specially rolled angle steel, and it has successfully stood the most severe tests for eleven years. It possesses great strength and lightness.

The drag bars to which the furrow openers are attached are close under the front rail of the frame, and not attached to drop braces. The drag bars are made of the best quality of high carbon steel, guaranteed to withstand any lateral strain. Not one, in over 400,000 in actual use, has ever bent or twisted out of shape.

Plant for Profit.

*Make Every Seed Count by Planting Your Crops
with a Superior Disc Press Drill.*

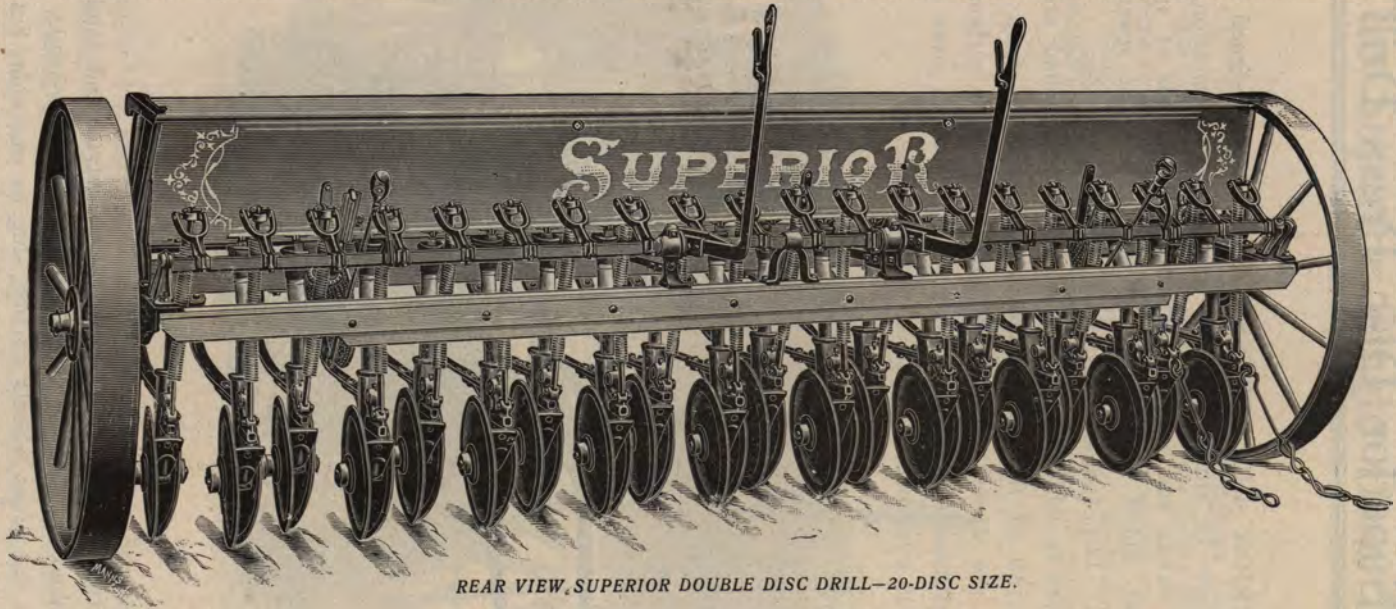


It can be fitted with double discs for light alluvial and sandy soils, or can be furnished with shoes, attaching to same cross-head.

On hillsides the press wheels do not slue to one side, but follow the furrow made by the discs.

The Superior Double Disc Drill

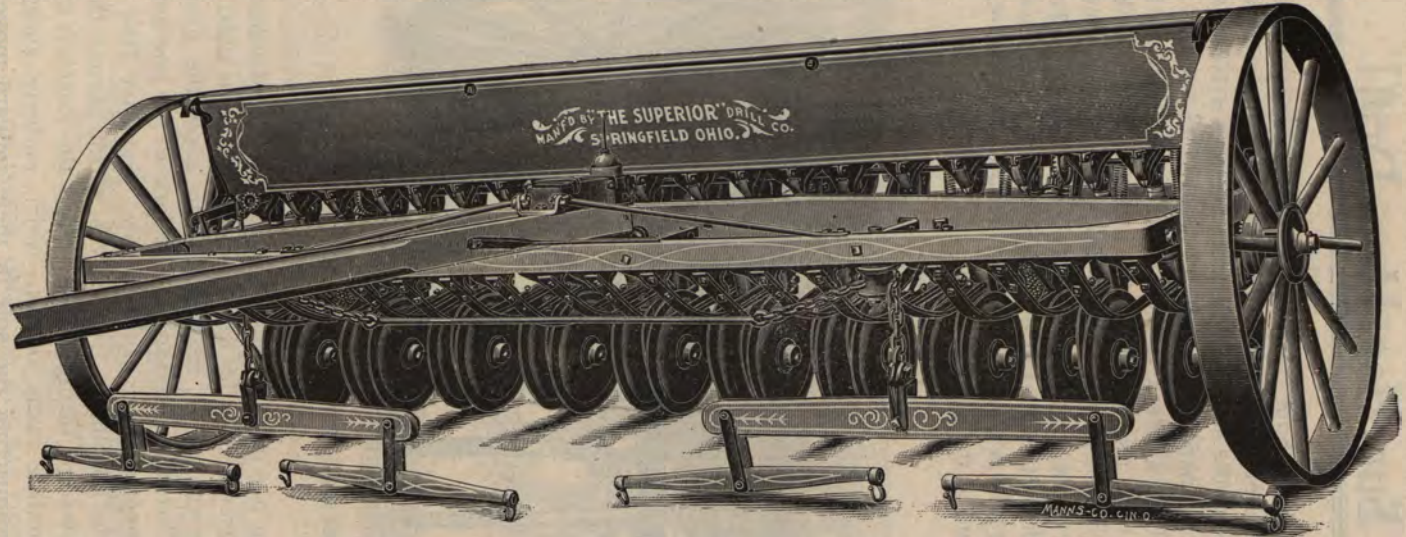
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REAR VIEW, SUPERIOR DOUBLE DISC DRILL—20-DISC SIZE.

THE CUTS on these two pages show the large size Superior Disc Drills with Double Disc Furrow Openers. We can supply this same drill with Single Discs or Shoes, as the purchaser may desire. All sizes are furnished with either Double Discs, Single Discs or Shoes, and in both plain grain and combined grain and fertilizer styles. To change from one to the other it is only necessary to remove draw-bars and discs. The bars bolt to the front of frame. This cut shows drill with two lift levers. All our drills of 14-disc size and larger have two lift levers. For detailed description of Superior Grain Drills, see pages 3 to 14.

The Superior Double Disc Drill



FRONT VIEW SUPERIOR DOUBLE DISC DRILL, SHOWING PULLEY HITCH.

Each team pulls its share of the load.

SIZES SINGLE LIFT:

8 Discs, 8 inch.
9, 10 and 11 Discs, 7 inch.
12 Discs, 6, 7 and 8 inch.

SIZES DOUBLE LIFT:

14, 16, 20 and 22 Discs, 6 inch.

SIZES FERTILIZER:

(All Single Lift)
6 and 8 Discs, 8 inch.
9, 10, 11 and 12 Discs, 7 inch.

The Superior Hoe Drill

THERE are farms throughout the United States that are peculiarly adapted to the use of the Hoe Drill on account of the flat slate or stony conditions of the soil. To farmers needing a Hoe Drill we cannot too strongly recommend the Superior.

The construction (see pages 3 to 14) is the same as our famous Superior Disc Drill. It has the same feed, the same time-tried disk wheel for change of quantity, the same strong one-piece steel frame, the same large hopper, the same extra large steel axle. While the ground wheels are slightly larger in diameter, they are equipped with the longest and best bearing in the hub that is possible to put on any drill wheel. The lever is placed at the end of the machine.



REAR VIEW SUPERIOR PLAIN HOE DRILL.

The furrow opening hoe must be narrow enough to avoid unnecessary friction in opening the trench in order to do away with extra draft. The hoe must also be large enough in the opening to allow the grain and fertilizer a free and unobstructed passage. The form of the hoe point has much to do with the proper opening of the furrow. Superior Hoe Points are reversible, and have absolutely true curves which permit them to enter the ground like a wedge, lifting up the soil as the trench is opened. They are, therefore, unlike many others, which embody abruptness, thereby breaking and compacting the soil in their forward movements, and making extra heavy draft.

The Superior Hoe Drill

Ample zigzag capacity is provided for on Superior Hoe Drills to permit clods and surface trash to pass between the hoes.

The drag bars attached to the hoes are of equal length, and the roller bars with drag bar connecting arms are so constructed that, when found necessary to zigzag, the proper pitch or angle of the hoes, as they enter the ground, is not changed.

We were the first to introduce the adjustable double-tree hitch, in order to prevent undue neckweight and compensate for different size teams. This feature provides a certain means of bringing the line of draft in a direct line from point of hoes to hame of collar.



REAR VIEW SUPERIOR FERTILIZER HOE DRILL.

Superior Hoe Drills are made in the following sizes in both plain grain and combined grain and fertilizer styles:

STANDARD SIZES—PLAIN HOE DRILL

8 Hoe, 8 inch.

9, 10, 11, 12, 14, 16 and 18 Hoe, 7 inch.

12, 14 and 16 Hoe, 6 inch.

STANDARD SIZES—FERTILIZER HOE DRILL:

6, 8 and 10 Hoe, 8 inch.

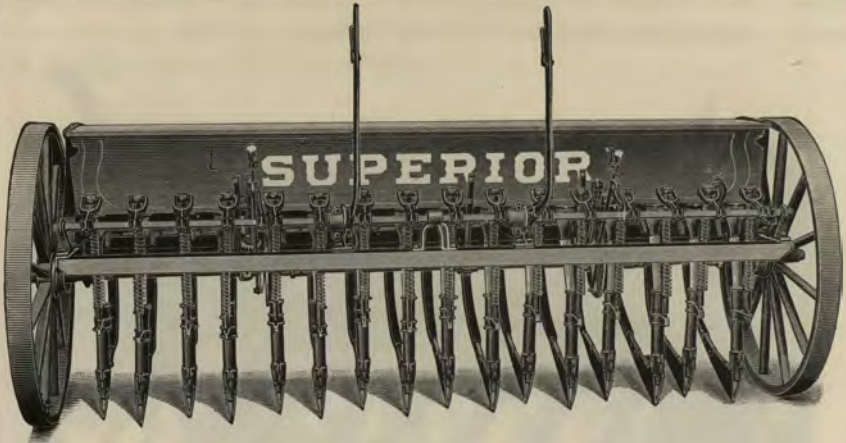
9, 10, 11 and 12 Hoe, 7 inch.

ODD SIZES, ONLY ON SPECIAL ORDER:

10, 12 and 14 Hoe, 8 inch.

The Superior Shoe Drill

THE construction of the Superior Shoe Drill is fully up to the Superior standard. It was among the first to enter the field. It took the lead at once and has always kept the lead. It is equipped with every Superior device of merit, as will be seen from the "General Construction," pages 3 to 14.



REAR VIEW SUPERIOR PLAIN SHOE DRILL.

Superior Shoe Drills are made in the following standard and special sizes :

STANDARD SIZES OF SINGLE LIFT.

6 and 8 Shoes, 8 inch.	10 Shoes, 7 inch.
12 Shoes, 6 inch.	13 Shoes, 5 inch.

SPECIAL SIZES :

10 Shoes, 6 inch.	10 Shoes, 8 inch.
12 Shoes, 8 inch.	

STANDARD SIZES OF DOUBLE LIFT :

14, 16, 20 and 22 Shoes, 6 inch.

SPECIAL SIZES :

14 Shoes, 7 inch.	16 Shoes, 7 inch.
14 Shoes, 8 inch.	

The Superior Broadcast Seeder



SIZES:

12 Bar, 14 Bar, 16 Bar, 18 Bar.

TO FARMERS who desire to sow their grain broadcast we unhesitatingly and conscientiously recommend the Superior Broadcast Seeder. The New Superior Broadcast Seeder is mounted upon 42-inch wheels, either wood or steel, bringing the hopper within easy reach for filling. Both ground wheels are drivers. This seeder is furnished with our double force feed distributors and disk wheel for changing quantity without change of parts. Pin-break or spring-break teeth and detachable grass seeder. The lever is on the inside of frame, away from wheel, a convenience which will be appreciated by operators. *No side gear wheels of any kind on this machine.* Flexible scattering tubes, cold-rolled steel axle, *spring pressure attachment upon every machine.* The spring tooth attachment is furnished on Superior Seeders at a moderate extra cost.

Superior 5-Disc One-Horse Grain Drill



*For Drilling Between Rows
of Standing Corn, the
Superior 5-Disc One-Horse
Drill will be Appreciated
by Farmers Who Want a
Thoroughly Reliable Drill.*

Material. The Superior Five-Disc Drill is constructed of the best material obtainable, high-grade steel and malleable iron being employed, with special reference to strength and durability.

Arrangement of Discs. The placing of the discs in a zigzag line easily allows all trash to pass between them, and effectually prevents clogging. The double discs in the center and the single discs on the sides insure even draft and steady motion. All side thrust is thus equalized. The single discs throw the soil toward the center, thus leveling the field and covering the center completely, also thoroughly cultivating the ground.

Self-Adjusting Wings. The outside discs are mounted on an extra long wing bar, pivoted near front of machine, permitting of great range of movement without changing the angle of the discs. The outward pressure or side thrust forces these wings to always cut at the extreme limit in width and yet remain sufficiently flexible to automatically close up in narrow places and dodge heavy corn roots and other obstructions without any change of adjustment or without the use of springs.

Disc Bearings. The discs run on chilled bearings, and are set at an angle to line of draft, which causes them to open a perfect furrow. The boxes will outwear the balance of the drill. Notice the Superior Hard Oil Compression Cups. They are simple and very effective, and exude heavy oil, making all joints absolutely dust and grit proof, because there is no place for dirt to get in. The hard oil works from the center of bearing out and makes a dust and grit proof seal at all joints.

Steel Frame. The Superior Steel Frame is perfect in every way. It is triangular in shape, heavy and thoroughly cross braced, and its arrangement is such that trash and tall weeds cannot lodge before the discs.

Clearance. Particular attention is called to the great clearance or space between discs. Farmers whose fields are trashy will appreciate this feature.

Beans and Peas. On special orders only, we furnish a special feed for sowing beans and peas. This is a thoroughly reliable feed and does its work perfectly. This special feed in no manner effects the efficiency of sowing small grains.

Superior 5-Disc One-Horse Grain Drill



CONDENSED FACTS.

Discs same size as on large Superior Drills.

Angle Steel Frame, well-braced, triangular in shape. No place for weeds and tall grass to lodge.

Largest and strongest Hopper ever made.

Outside Drag Bars pivoted from the extreme front of machine. This gives automatic adjustment without perceptible change of angle.

The Side Bars are limited in their movement by the simple use of a bolts, thus adapting themselves to various widths of rows.

The Bale Hitch is an entirely new feature, and the most satisfactory hitch ever placed on a one-horse implement. It is attached to a point near the discs, which causes the ground wheel to keep snug down to the earth. It never slips, and the most accurate and best results in sowing are assured.

Double Force-Feed Grain Distributors—the Superior—change of quantity by change of speed. Sows every known kind of grain perfectly. Sows two to eight pecks of wheat and four to sixteen pecks of oats per acre.

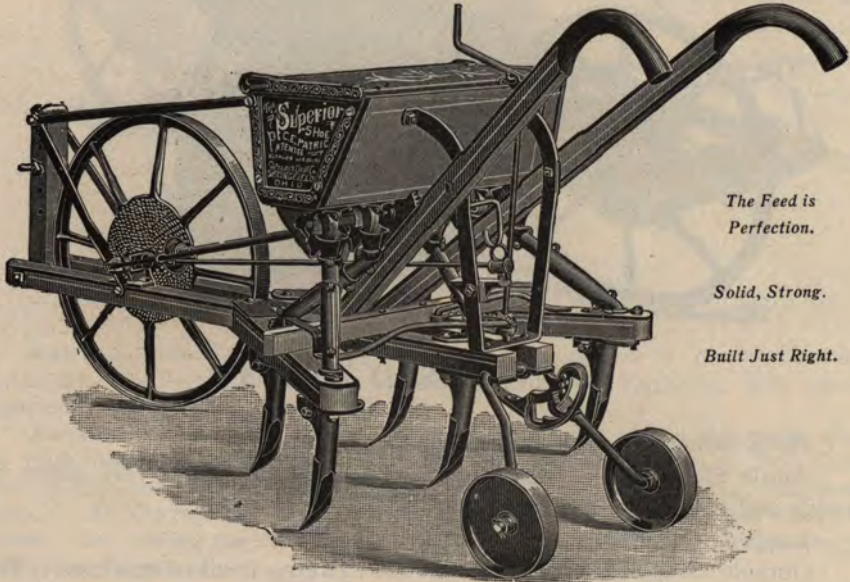
Agitators can be furnished for rust-proof oats.

Zigzag arrangement of discs allows all trash to pass between the discs, without clogging.

Chilled Removable Disc Bearings—hard and smooth as glass—never wear out.

Superior One-Horse Five-Hoe Plain Drill

A WONDER IN STANDING CORN.



*The Feed is
Perfection.*

Solid, Strong.

Built Just Right.

THE SUPERIOR FIVE-HOE DRILL is supplied with all the modern improvements that are found on our latest two-horse drills. The Plain Drill has our Double Force Feed Distributers, and the Marks Force Feed Fertilizer Attachment, improved, is used on the Fertilizer style. This machine is furnished with spring wings. The hoes are lifted out of the ground by the use of a simple caster-wheel in the rear. The wings work in a space as narrow as 30 inches, and can be spread so the outside hoes will be about 44 inches apart. The Five-Hoe Fertilizer Drill is a separate and distinct machine from the Five-Hoe Plain Drill.

For drilling wheat in standing corn, the Superior One-Horse Five-Hoe Drill is a prime favorite. It is accurate and certain in its operation, and is a great saver of time.

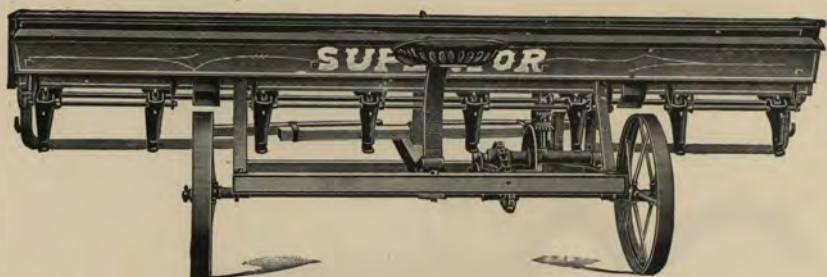
Superior Fertilizer Five-Hoe Drill

SOW YOUR SHOCK ROWS WITH
THE SUPERIOR FIVE-HOE.



THE SUPERIOR FERTILIZER FIVE-HOE DRILL is made extra strong. Special attention has been given to the parts subjected to great strain. The wings are made of choice material and are so braced and riveted that they will not break, as is so often the case with many other five-hoe drills. This drill is easy to manage, does not stand high above ground and is not top heavy. The feeds for both grain and fertilizer are the same as used on our regular two-horse drills. The feeds are driven by the famous Superior disk wheel device, which is a part of the drive wheel. This drill is furnished with spring wings, and the wings can be spread in and out a distance of eight inches.

Superior Junior and Senior Sowers.



SUPERIOR JUNIOR SOWER.

THE SUPERIOR JUNIOR SOWER is furnished with spring seat. Grass Seed Attachment furnished when specially ordered. The disk wheel is used for changing quantity. Our famous double force feed grain distributor is also used. It has a solid steel frame. The seed box is made of the best seasoned poplar, and has very large carrying capacity. Steel wheels are furnished with all Junior Sowers. In every respect the Junior is the most satisfactory machine.



SUPERIOR SENIOR SOWER.

THE SUPERIOR SENIOR ELEVEN-FOOT SOWER is furnished with either wood or steel wheels. It has a continuous cold-rolled steel axle and a solid steel frame; our famous disk wheel device for changing quantity by change of speed, and our double force feed grain distributors, which sow all kinds of large and small grain. The machine is furnished with or without Grass Seed Attachment.

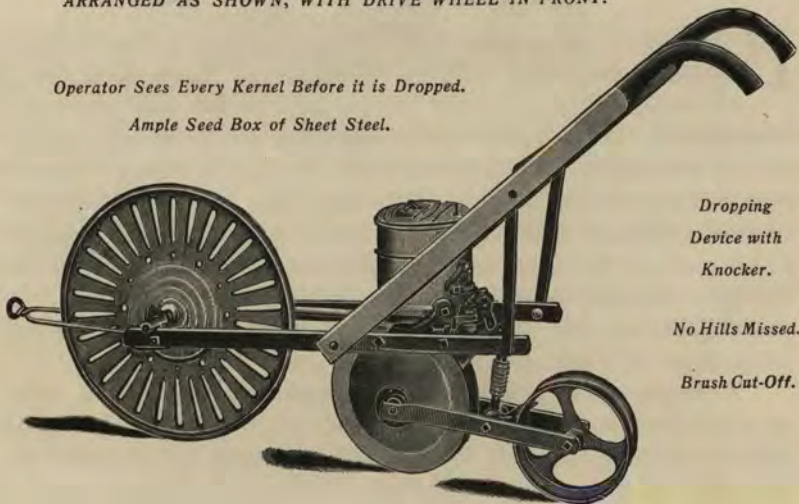
The Superior Twin Disc Corn Drill



*Will Not Slip
or Carry up
Stalks or Trash.*

*Broom Corn and Sorghum Plates
Furnished Without Extra Charge.*

ARRANGED AS SHOWN, WITH DRIVE WHEEL IN FRONT.



*Operator Sees Every Kernel Before it is Dropped.
Ample Seed Box of Sheet Steel.*

*Dropping
Device with
Knocker.*

No Hills Missed.

Brush Cut-Off.

DRILL WITH PRESS WHEEL ATTACHMENT.

FFRAME is exceedingly strong and of very neat appearance. Is furnished with a perfectly reliable brush cut-off. Positively no liability of breaking the seed. Twin discs are employed as a means to open up the furrow, same as used on celebrated Superior Grain Drills. The convex sides of the discs press upon the furrow as the drill is moved forward, making a seed bed as perfect as could be desired.

By using the Superior Double Disc Corn Drill no ditch or trench is made for water to stand in during the rainy season. The result is that corn can be cultivated sooner after a rain when the Superior is used to put in the seed.

Superior Fertilizer Attachment

FOR THE SUPERIOR ONE-HORSE CORN DRILL

*Best Fertilizer Attachment Ever Used on a Drill.
Positive Force Feed.*



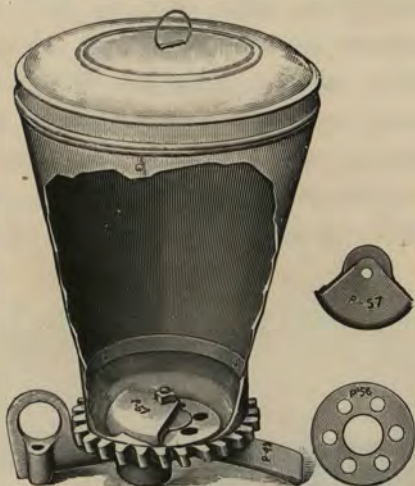
IN PARTS of the country where it is desirable to use commercial fertilizer we furnish a Fertilizer Attachment made upon the "Marks" principle, which, as made by us, affords the best and most simple arrangement. It is positive in its handling of the many brands of commercial fertilizers. It is a force feed. It will not clog. Distributes an even and continuous stream. Regulates the quantity absolutely correct by means of gears cast upon a disc which never becomes detached or lost. Every piece of the Fertilizer Feed may be taken apart and put together in less than one minute by removing only one brass thumb-nut. Levers for throwing in and out of gear are convenient to operate; can be used in conjunction with the corn dropping, or alone, as desired.

Twin discs are employed as a means to open the furrow, same as used on celebrated Superior Double Disc Grain Drills, which consist of two steel discs, mounted upon chilled journals, which are attached to the tube that receives the seed. The convex sides of the discs press open the furrow as the drill is moved forward, making a seed bed as perfect as could be desired. The seed, after dropping from the plate in full view, is conducted down through the cast spout or tube and is deposited between the discs at the bottom of the furrow. Every kernel, by this means, is in plain view of the operator until it lies at rest at the bottom of the trench. The operation of the discs in opening the furrow is very satisfactory, as, in performing its work, "*Nothing is dragged out of the ground. Nothing is displaced on the surface.*"

We send out with each machine one dropping plate having 13 holes, which will plant 7, 9, 10, 12, 13 and 18 inches apart. A dropping plate having 6 holes will plant 16, 21, 22, 29, 30 and 42 inches apart. It is furnished on special order only and at a reasonable price.

Superior Pea and Bean Attachment

SOWS PEAS AND BEANS PERFECTLY.



THIS interior view of the hopper shows the Superior Attachment for sowing peas or beans with the fertilizer compartment of a Superior Corn Drill. This attachment is made for the purpose of planting peas or beans at the same time the corn is being planted with the grain hopper.

Superior One-Horse Fertilizer Corn Drills are always sent out with a cone in hopper for sowing fertilizer, unless otherwise ordered.

Directions for Operating.

The distance apart that the seed will be dropped depends largely on the size of the seed being sown. The plate P-56 was made to drop peas, sown largely in Tennessee and Missouri, and will drop about six peas to each hole in plate.

The following table is based on six peas being dropped from each hole as it passes over the discharge opening.

When the sliding pinion is set in the inside row of disc on ground wheel, it will drop 26 inches apart.

On second row from the inside, 20 inches apart.

On third row from the inside, 16 inches apart.

On fourth row from the inside, 13 inches apart.

On fifth row from the inside, 11 inches apart.

On sixth row from the inside, 10 inches apart.

The plate P-56 may be removed, and seed sown in a continuous row, in large quantities, if desired.

Superior Beet Drills

WE MAKE a first-class Beet Drill. Prices and general information regarding same may be had on application. The advancement in beet culture has necessitated many changes in the construction of beet drills for 1904. We have a beet drill built on new lines, and one that we know will, in every way, be superior to anything on the market. Superior Beet Drills are used with success wherever sugar beets are grown. It is our aim to keep Superior Beet Drills up to the high standard of other Superior Drills.



H. W. Pasewalk, Norfolk, Neb., says: "I used one of your Beet Drills last year and planted 90 acres with it. I think it is the best drill I have ever seen. I used the ----- Beet Drill the year before, but it did not do well, therefore, I bought one of yours. I think you have the best Beet Drill made. It will feed anything and will not clog. I consider you have the only perfect Beet Drill on the market."

Superior Disc Harrow on Wheels

HITCH your team to the Superior Disc Harrow on Wheels, just the same as you would to a road wagon. It rides on its own wheels.

You can take it anywhere without loading on a wagon or sled. The discs are always sharp, because they never come in contact with the pike. It saves time, because one man, or a boy, can manage it anywhere under all conditions. No more lame backs. No more accidents. It is the twentieth century Harrow. There are none like it. None so good.



Stumps and rocks make no difference in the good work the Superior Disc Harrow on Wheels will do every day in the year. Every available foot of ground receives perfect cultivation. Hollows and ridges are all cut out. The center-cut disc or the center-cut tooth cuts out all the center.

The Superior Disc Harrow on Wheels

8 Discs, for 2 Horses.
10 Discs, for 2 Horses.
12 Discs, for 3 Horses.

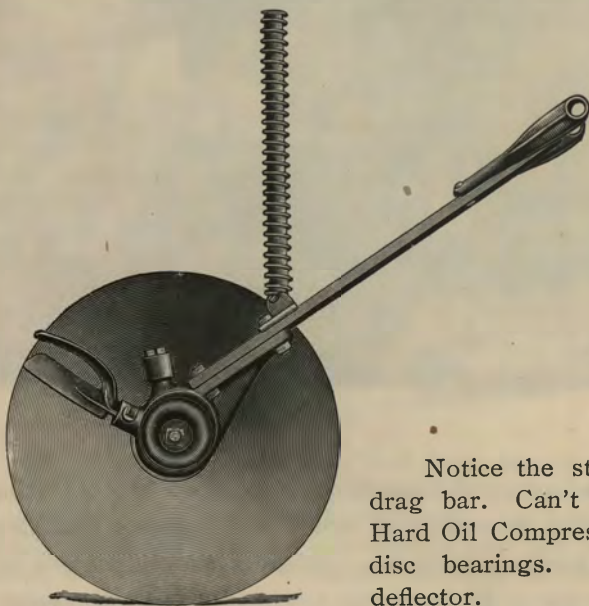
*The Superior Disc Harrow
on Wheels is Made
in Six Sizes:*

14 Discs, for 4 Horses.
16 Discs, for 4 Horses.
18 Discs, for 4 Horses.

All 16-inch Discs.



REAR VIEW SHOWING COMPACT CONSTRUCTION OF CENTER DISCS.



Notice the straight high-carbon steel drag bar. Can't bend or twist. See the Hard Oil Compression Cup for lubricating disc bearings. Also scraper and sod deflector.

The Superior Disc Harrow on Wheels

UNDENIABLE FACTS.

Rides on Its Own Wheels. Therefore is as easy to manage as a road cart. No loading on wagon or sled. No one hurt in moving it. No time lost. One man or a boy can manage it anywhere under any circumstances. There is lots of hard work connected with the old-style gang harrow and mighty poor results to reward your labor.

Material. It is practically a solid steel harrow. Heavy steel frame, steel seat, steel wheels. Everything possible is made of steel. The very best workmanship. Every harrow carefully inspected and tested before it leaves the factory.

Angle of Discs. The angle of the discs never changes. This makes it light draft and ensures the best work.

Independent Discs. Each disc is attached independently to each bar. They are not in gangs.

Hard Oil Compression Cups for Disc Bearings. These cups hold a large quantity of hard oil of about the consistency of axle grease. The hard oil is forced by compression on to the center of disc bearings and the hard oil works from the center out. It forms a dust and grit-proof seal at all joints. Dust and grit cannot work in. This is a new feature in disc harrows. It prolongs the life of the harrow by protecting the bearings. The discs run smoothly and do not "squeal." Each cup holds sufficient hard oil to thoroughly lubricate the bearings in discing 100 acres.

Pressure. We don't use "stone boxes" on the Superior. The levers and pressure springs, together with the weight of harrow and driver, secures all the pressure that is necessary for any depth of cut. Contrast this with the old-style stone-weight gang harrow.

Perfect Cultivation. Every available foot of space is cultivated—hollows and ridges—owing to each disc being independent in action. If one disc strikes a stone or other obstruction, it affects that one disc only. The disc rises up, clears the obstruction and resumes its work immediately. The old-style gang harrow is tilted up, and not only throws all the discs out of the ground, but is liable to injure the team as well as the driver. Our work is as level as a barn floor. There are no gullies or ditches, as is the case with all old-time gang harrows. The Superior Disc Harrow on Wheels *cultivates all the space between the discs* owing to compact or close construction of center discs. But no other disc harrow will do it, because the angle is taken out of the discs whenever it is desired to cultivate shallow.

Center Cut Disc. Cuts out all the center. Self-locking in ground and out. Foot lift. Superior Disc Harrows are furnished with center cut disc, or with center cut shovel, spring trip; or without either.

Saves Time. It will do more work than any other harrow, because it cultivates a wider strip, and it does better work. No time lost in loading and unloading. A boy can take it anywhere.

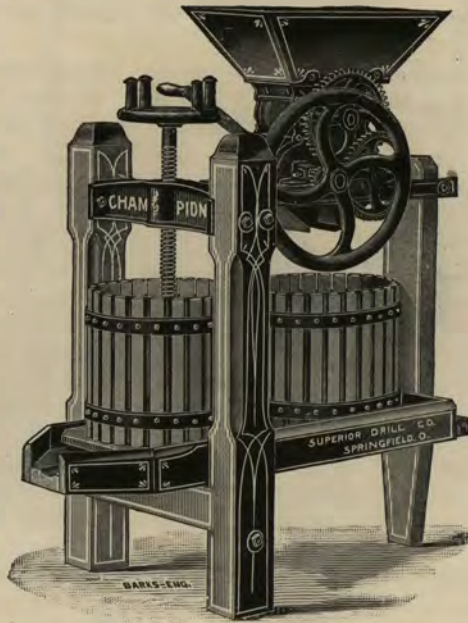
Easy to Turn. The ground wheels make turning easy. There is no lashing or whipping of the tongue. It is, therefore, easy on both man and team, and there is no neckweight. If you value your team and your own strength, you won't buy anything but a Superior.

Starts to Work from the Scratch, like the contestants in a foot race at the county fair. You can back it into a fence corner, or turn it anywhere without breaking your back to lift it around. But you can't do it with any other disc harrow.

Champion Cider Mill

FEWER JOINTS AND BEARINGS
THAN IN ANY OTHER MILL.

*Adjustable Throat
and Grinding Rollers.*



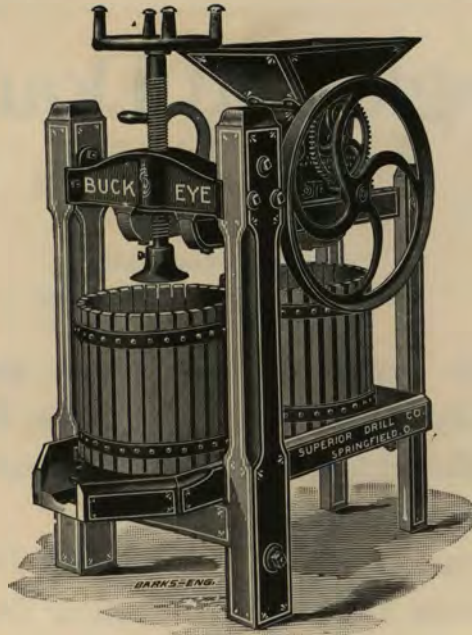
*Three Sizes:
Junior,
Medium,
Senior.*

IN THE CONSTRUCTION of the grinding apparatus there is no difference in the capacity of the Buckeye and the Champion Mills.

The Champion Mill has three legs and the Buckeye four. The Champion is preferred by some users, who find a three-legged mill is more readily leveled on uneven ground. Three sizes of each style mill are made—Junior, Medium and Senior. The Junior Mill will answer for a small orchard with a limited quantity of cider to make; the Senior will make as much cider as anyone will care to grind and press on a hand-power mill; the Medium is adapted to ordinary wants, being a size midway between the other two. All mills are furnished with iron beams and screws, adjustable throat, adjustable grinding rollers; two slatted, well-made tubs go with each machine. The strainer board under the tub allows the cider to pass off freely from the pulp.

Buckeye Cider Mills and Presses

LATEST IMPROVED ADJUSTABLE THROAT
AND GRINDING ROLLERS.



*Guaranteed to do
as Good Work and to
Have as Large Capacity
as Any Hand-Power
Mill Made.*

*Attractive in
Appearance.*

*Three Sizes:
Senior,
Medium,
Junior.*

Easily Worked.

BUCKEYE CIDER MILLS are all made with strong iron beams. The throat is adjustable, adapting it perfectly to all kinds and sizes of fruit. The grinding rollers are adjustable. This mill also has a most perfect grinding apparatus, having serrated ribs on one roller working against the straight ribs on the other, thus giving a shearing cut and grinding finer than any other mill. The strainer board under the tub allows the cider to pass freely from the pulp.

No other mills are so easily worked or so attractive in appearance. We guarantee this mill to grind as many apples in a given time and produce as much cider from a given quantity of apples as any other hand-power mill made, and do it with less labor. The strong iron beam and screw are warranted to stand the severest application of the lever.

We Manufacture

Single and Double Disc Drills

Both Plain Grain and
Combined Grain and Fertilizer

Hoe Drills

Shoe Drills

5-Disc Drills

5-Hoe Drills

Broadcast Seeders and Sowers

End-Gate Seeders

Corn Planters

Corn Drills

Cotton Drills

Rice Drills

Beet Drills

Cider Mills

Superior Disc Harrows on Wheels

Spike - Tooth and Spring - Tooth
Lever Harrows

Gardeners' Harrows

Disc Harrows

Evans' Potato Planters

Write for Catalogues and Information

American Seeding-Machine Company
Springfield, Ohio

