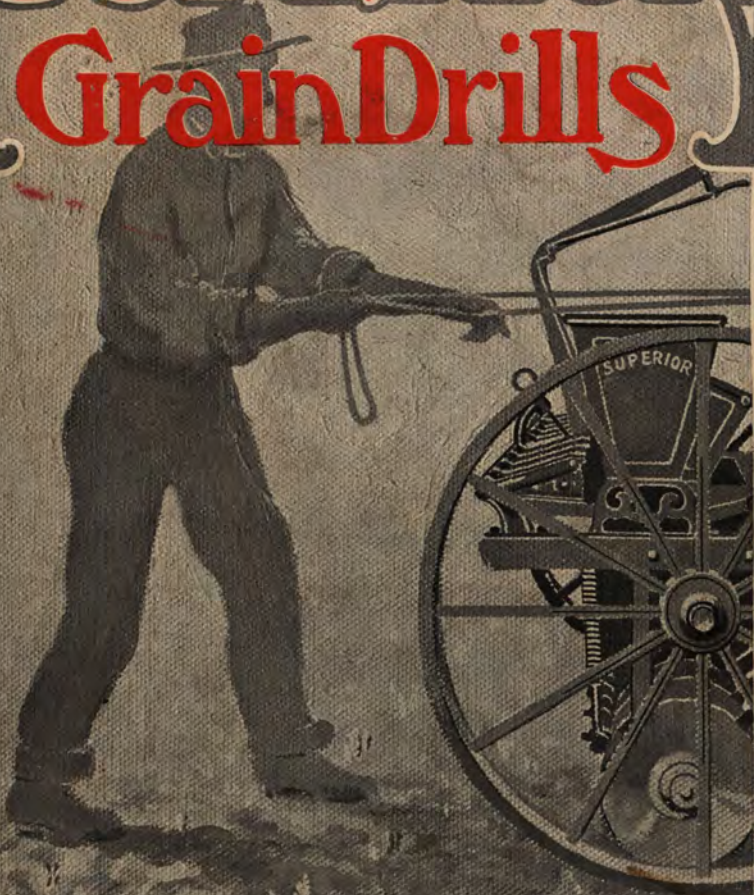


SUPERIOR Grain Drills



Manufactured by
The American Seeding Machine Co.
Incorporated
Springfield, Ohio, U.S.A.



*Where Superior Grain Drills, Corn Planters, Corn Drills, Potato Planters,
Beet Drills, Wheel Disc Harrows and Broadcast Lime
and Fertilizer Sowers are made.*

The Name Tells a True Story

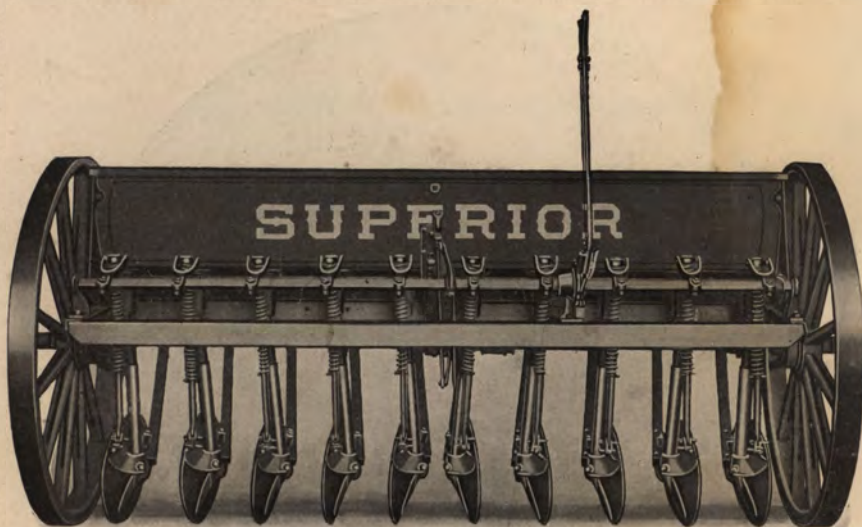
SUPERIOR Grain Drills.

Plain Grain and
Combined Grain
& Fertilizer Styles.

One Horse Disc and
Hoe Drills, Broadcast
Seeders and Sowers,
Beet Drills, Superior
Corn Planters, One-
Horse Corn Drills,
Superior Wheel Disc
Harrows, Superior Broad-
cast Fertilizer Sowers.

Manufactured by
The American Seeding Machine Co.
Incorporated
Springfield, Ohio, U.S.A.

Superior Grain Drills



Superior 10x8 Single Disc Plain Drill with 4-foot Wood Wheels.

SUPERIOR FEATURES:

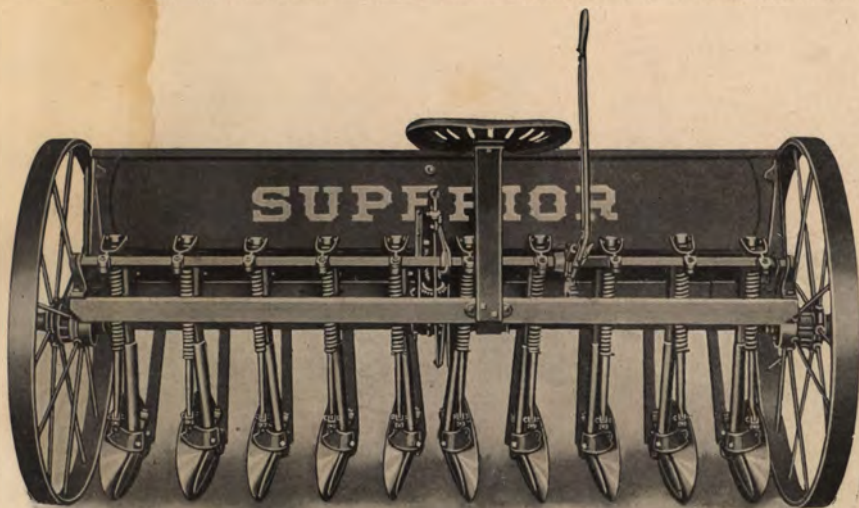
- Double Run Force Feed. Tested and known to be accurate.
Never skips, clogs or chokes.
- Adjustable Disc Shields enable user to keep Shields snug to Discs.
- Double Drive Ground Wheels. Both right and left-hand wheels drive all the feeds.
- Oscillating Draw Bar Heads. Provide greatest clearance.
- Discs sow around obstacles—not over them. Get all the seed in the ground.
- Solid Steel Telescoping Grain Tubes. Impossible to knock out of boot. Last a life-time.
- Folding Safety Lifting Lever. Handy in storing drill.
- Disk Wheel and Sliding Pinion. Change of quantity instantly made without change of parts.
- Tubular Steel Pressure Rods fit the Pressure Springs.
Springs can't buckle or kink
- High-Carbon Angle Steel Frame. Strong and Solid Foundation.
- I-Beam Steel Bed Rail. Hopper does not sag.
- Universal Axle Boxings insure true-running axle.
- Highest-class Heavy Broad-tired Wood Wheels.
- For detailed construction, see pages 18 to 31.

STANDARD SIZES—PLAIN DISC DRILLS.

- 8, 10, 12, 14 and 16 Discs, 8 inches.
- 9, 10, 11, 12, 14, 16, 18, 20 and 22 Discs, 7 inches.
- 10, 12, 14, 16, 18, 20 and 22 Discs, 6 inches.

Superior Grain Drills

*'The Name Tells
a True Story'*



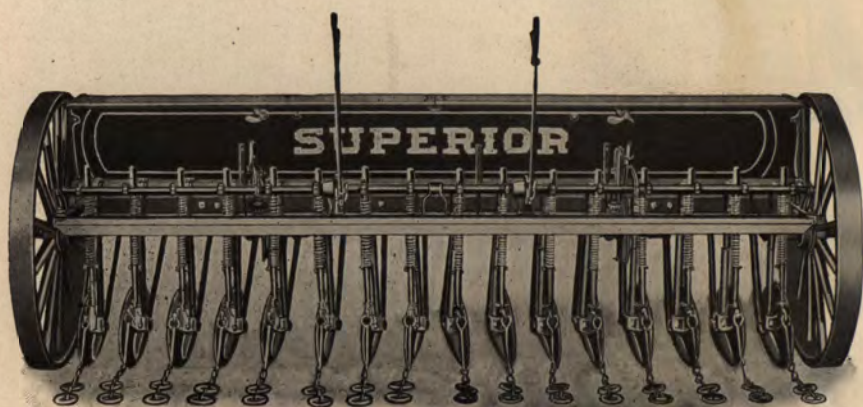
Superior 10x7 Single Disc Plain Drill with Seat and 4-foot Steel Wheels.

SUPERIOR FEATURES:

- Double Run Positive Force Grain Feeds. Sow all known seeds—none too large; none too small.
 - Adjustable Disc Shields take up wear. Prevent trash from catching between disc and shield.
 - Both right and left-hand Ground Wheels drive all the Feeds.
 - Twenty-six Ratchets in each wheel hub. No lost motion to Feeds.
 - Heavy Staggered-Spoke Steel Wheels with long bearings.
 - Force Feed Grass Seeder—has great range of quantity.
 - Comfortable Steel Seat.
 - Grain Tube Tops permit connection of Grass Seed Spouts so grass seed can be sown in rows.
 - Reducing Plates for Alfalfa, Millet, Flax, etc.
 - Angle Steel Frame, reinforced with I-Beam Steel Bed Rail.
 - Hoppers of large carrying capacity.
 - Oscillating Draw Bar Heads—give greatest clearance for trash.
 - Disk Wheel and Sliding Pinion for change of quantity.
 - Land Measure or Surveyor.
 - Folding Safety Levers. Take up least room in storing.
 - Two-Part Axle Hangers. Not necessary to strip axle in case of accidental breakage.
- For detailed description, see pages 18 to 31.

STANDARD SIZES—PLAIN DISC DRILLS

- 8, 10, 12, 14 and 16 Discs, 8 inches.
- 9, 10, 11, 12, 14, 16, 18, 20 and 22 Discs, 7 inches.
- 10, 12, 14, 16, 18, 20 and 22 Discs, 6 inches.



Rear View Superior 16x7 Single Disc Plain Drill with 4-foot Wood Wheels.

Divided Hopper Lids are furnished on all Superior Drills having
14 or more furrow openers.

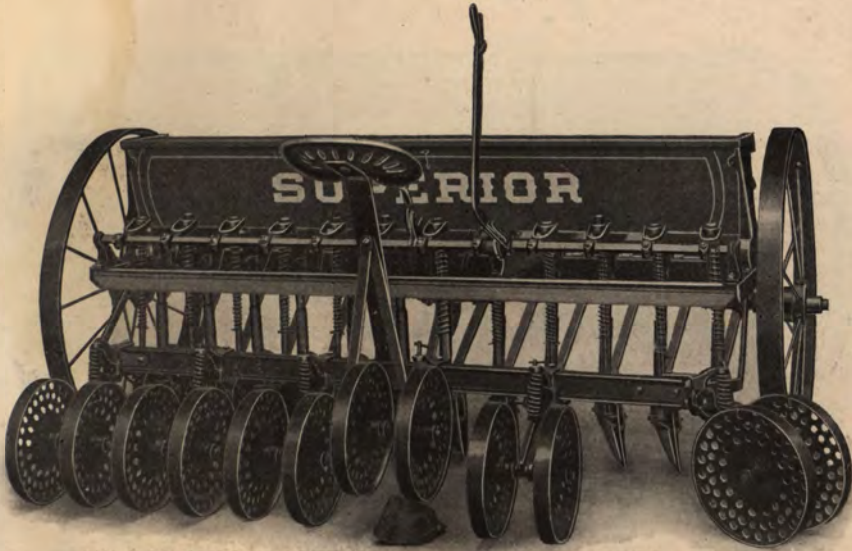
All Superior Drills having 14 or more discs or shoes are supplied with
two Folding Safety Levers.

Superior Drills with 14 or more discs or shoes have two Disk
Wheels and Sliding Pinions.

All Superior Features mentioned on pages 2 and 3 will be found on
large size Superior Single Disc Drills.

For detailed description of Superior Drills, see pages 18 to 31.

It is economy to purchase large size drills, for the reason that more acres can be seeded in a given time; thus saving labor and lessening expense. In sections where corn is cut 10, 12, 14 and 16 hills square, the 12x7 is a very popular size as the seeding is finished evenly between the shock rows. In sections where the corn is not cut, the 12x7 size covers two $3\frac{1}{2}$ foot corn rows or 7 feet. The 18x7 size cuts out three $3\frac{1}{2}$ foot corn rows or $10\frac{1}{2}$ feet. It is more convenient to use the corn rows as a guide than to follow a wheel track.



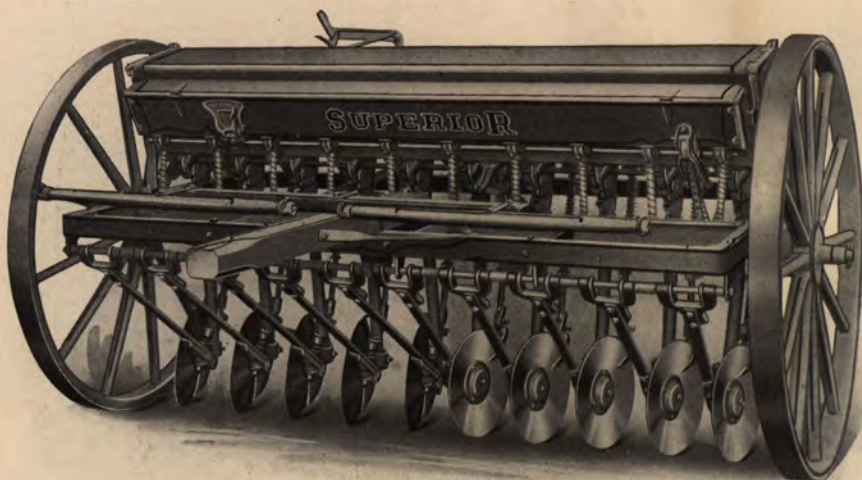
Superior 12x7 Single Disc Plain Drill with Gang Press Wheel Attachment.

The Superior Features enumerated on pages 2 and 3 will also be found on this Superior Drill.

For detailed description of Superior Drills, see pages 18 to 31.

Superior Gang Press Wheel Attachments are very popular in all sections of the country where it is desired to conserve the moisture in the soil. As will be seen from the above illustration, the Press Wheels are in pairs. Each pair of wheels is supplied with independent spring pressure. These wheels track in the furrows made by the discs, and are so constructed that they do not gather or drag trash. As will be observed, the Seat is a part of the Gang Press Wheel Attachment. Any Superior Drill having an even number of discs or shoes can be equipped with Gang Press Wheels. This Attachment can be easily and quickly put on or taken off the machine. This attachment is strongly recommended to farmers who need a Press Drill at certain times and at others have use for a regular high-wheel drill, as it combines the features peculiar to both styles.

Superior Grain Drills



Front View Superior 10x8 Single Disc Fertilizer Drill with 4-foot Wood Wheels.

All the Superior Features enumerated on pages 2 and 3
will be found on this machine.

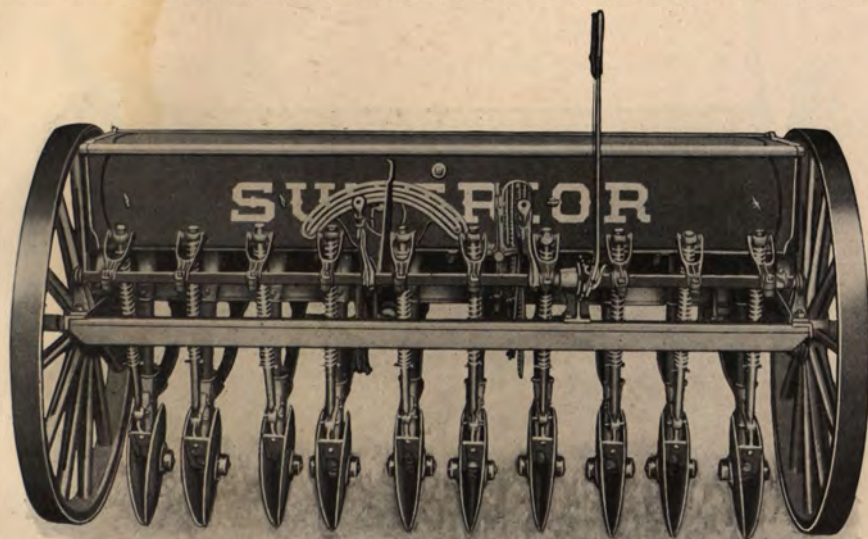
Note the Force Feed Grass Seed Attachment, the two-horse hitch and the manner of attaching the draw bars high up on the draft rail, which does away with catching and dragging corn stalks and trash.

Especial attention is directed to the Superior Force Finger or Star Fertilizer Feed, illustrated and described on pages 22 and 23. This feed is guaranteed to sow the most obstinate standard brands of commercial fertilizers in wide range of quantities. The drive for this feed is provided by means of the Superior Disk Wheel and Sliding Pinion. Simple and easy to keep clean.

For detailed description of Superior Drills, see pages 18 to 31.

STANDARD SIZES—FERTILIZER DISC DRILLS

6, 8, 9, 10 and 12 Discs, 8 inches.
9, 10, 11, 12 and 14 Discs, 7 inches.



Rear View Superior 10x7 Fertilizer Double Disc Drill.

The Double Disc Furrow Opener is especially adapted to light, loose or sandy soils, also to wet fields and for work on hillsides. The Double Disc is especially light draft and opens a V-shaped furrow similar to the work of a shoe. See page 28.

Telescoping Steel Grain Tubes cannot be furnished on drills equipped with Double Discs. Ribbon Steel or best grade Rubber Tubes can be furnished at option of purchaser.

Single Discs and Shoes are interchangeable with Double Discs on Superior Drills.

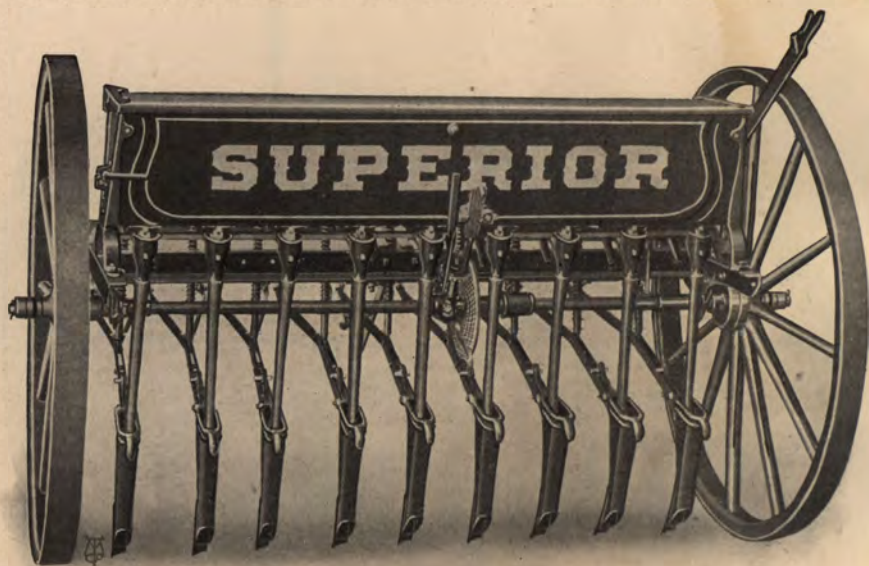
Superior Double Disc Combined Grain and Fertilizer Drills have the Superior Double Run Force Grain Feed, illustrated and described on pages 24 and 25. Also the Superior Force Finger or Star Fertilizer Feed. See pages 22 and 23.

For detailed description of Superior Drills, see pages 18 to 31.

STANDARD SIZES—FERTILIZER DISC DRILLS.

- 6, 8, 9, 10 and 12 Discs, 8 inches.
- 9, 10, 11, 12 and 14 Discs, 7 inches.

Superior Grain Drills



Superior 9x7 Plain Pin Hoe Drill.

SUPERIOR FEATURES:

- Angle Steel Frame, reinforced with solid I-Beam Steel Bed Rail.
- Double Run Positive Force Grain Feed. See pages 24 and 25.
- Double Drive Ground Wheels. Ratchets in both wheels.
- Ample Zigzag for Hoes gives greatest clearance for trash.
- Pin-break or Spring-break Hoes. See page 29.
- Double Pointed Hoe Points. Equivalent of two sets of single pointed hoes.
- Disk Wheel and Sliding Pinion provides change of quantity without change of parts.
- Universal Boxing in each Axle Plate prevents "axle biting." See page 20.
- Land Measure or Surveyor.
- Force Feed Grass Seed Attachment.
- Note shape of Hoe Points. Open perfect furrows with least draft.
- For detailed description of Superior Drills, see pages 18 to 31.

STANDARD SIZES—PLAIN HOE DRILLS

- 8, 10, 12, 14 and 16 Hoe, 8 inch.
- 9, 10, 11, 12, 14, 16 and 18 Hoe, 7 inch.
- 10, 12, 14 and 16 Hoe, 6 inch.

Superior Grain Drills

*"The Name Tells
a True Story"*



Superior 9x7 Fertilizer Spring Hoe Drill.

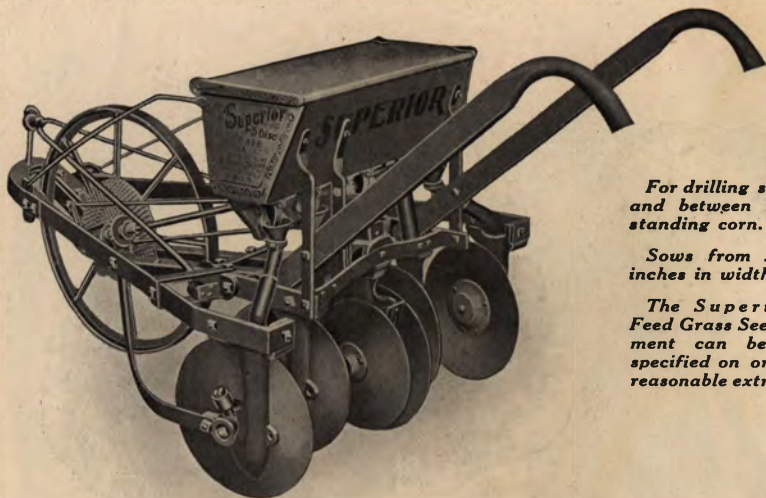
SUPERIOR FEATURES:

- Superior Force Finger or Star Fertilizer Feed. See pages 22 and 23.
- Double Run Positive Force Grain Feed. See pages 24 and 25.
- Spring-break Hoes. Can be supplied with Pin-break.
- Double Drive Ground Wheels. Both wheels are drivers.
- Strongest Frame ever placed on a grain drill.
- Disk Wheels and Sliding Pinions for changing quantity of both grain and fertilizer.
- Force Feed Grass Seed Attachment on special orders.
- Double Pointed Hoe Points. Equivalent of two sets of single pointed hoes.
- Note shape of Hoe Points. Make perfect seed trenches with least draft.
- Universal Boxing in each Axle Plate prevents "axle biting" See page 20.
- Hoppers of large carrying capacity.
- For detailed description of Superior Drills, see pages 18 to 31.

STANDARD SIZES—FERTILIZER HOE DRILLS

- 6, 8, 9, 10 and 12 Hoe, 8 inches.
- 9, 10, 11 and 12 Hoe, 7 inches.

Superior Grain Drills



*For drilling shock rows
and between rows of
standing corn.*

*Sows from 24 to 34
inches in width,*

*The Superior Force
Feed Grass Seed Attach-
ment can be had, if
specified on order, at a
reasonable extra charge.*

Superior Five Disc, One Horse, Plain Drill with Bale Hitch.

The double discs in the center and the single discs on the sides insure even draft and steady motion. The single discs throw the soil toward the center, thus leveling the field and covering the center completely, also cultivating the ground.

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

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.

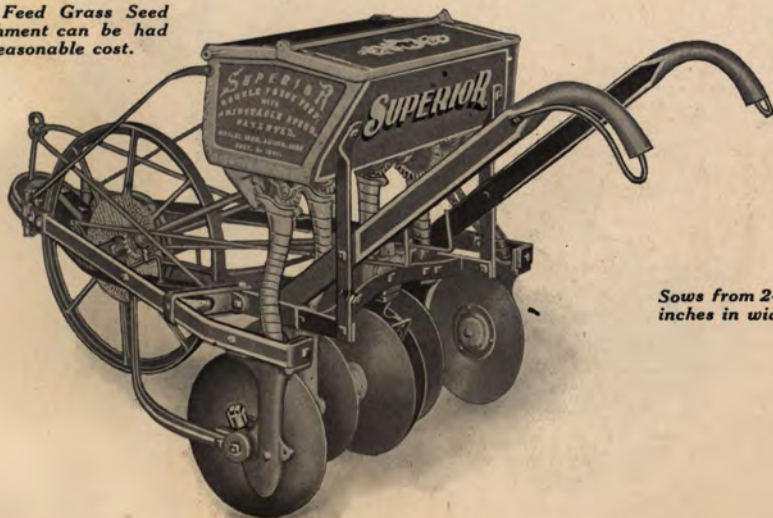
When ordered we furnish a special feed for sowing beans and peas. This is a thoroughly reliable feed and does its work perfectly. This special feed in no manner effects the efficiency of sowing small grains.

The description on the opposite page also applies to this drill, with the exception of the Fertilizer Feed.

Superior Grain Drills

*"The Name Tells
a True Story"*

*Force Feed Grass Seed
Attachment can be had
at a reasonable cost.*



*Sows from 24 to 34
inches in width.*

Superior Five Disc, One Horse, Fertilizer Drill with Bale Hitch.

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 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 bolt, 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.

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

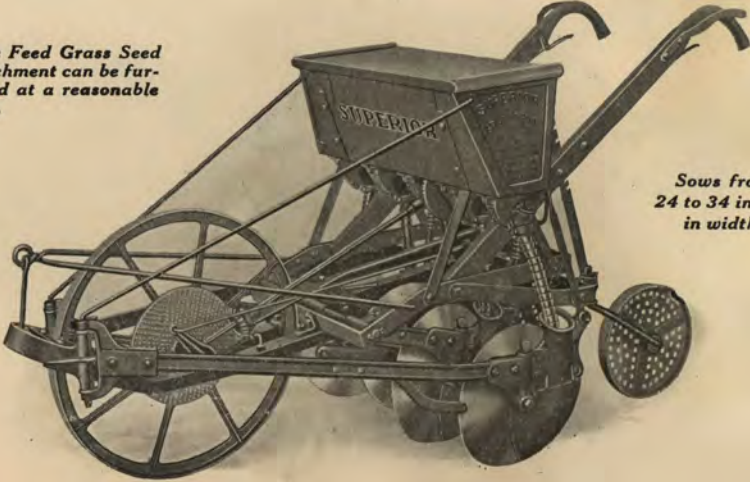
Chilled Removable Disc Bearings—hard and smooth as glass. Provided with Dust-Proof Oilers.

The Fertilizer Feed is the Celebrated Superior Force Feed and sows every known brand of standard fertilizer in the most approved manner.

The description on the opposite page, also applies to this Drill.

Superior Grain Drills

**Force Feed Grass Seed
Attachment can be fur-
nished at a reasonable
price.**



**Sows from
24 to 34 inches
in width.**

Superior Five Disc, One-Horse, Plain Grain Drill with Gauge Wheels.

This machine is the same in principle as the Superior One-Horse Five Disc Drill illustrated and described on page 10, except that it has gauge wheels and a channel-bar steel frame.

FEATURES:

Sows Peas and Beans.

Sows Soy Beans.

Gauge wheels that are caster wheels.

Independent vertical movement of three middle furrow openers.

Automatic lateral movement toward center of outside bars.

Fixed limitations to outward movement of outside bars.

Discs can be lifted clear of ground, transporting on gauge wheels.

Spring pressure on discs.

A positively sure tracker; easy to guide.

Disc furrow openers and shields same as largest drills.

Superior Grain Drills

*"The Name Tells
a True Story"*

Superior Plain Five Hoe Drill.
*Sows from 27 to 39 inches
in width.*



For description of
Grain Feed, see
pages 24 and 25.

Wings can be
spread in and out
a distance of 8
inches.

Wings work in a
space as narrow as
27 inches, and can
be spread so out-
side hoes will be
about 39 inches
apart.

**Force Feed
Grass Seed
Attach-
ment
at slight
advance
in price.**

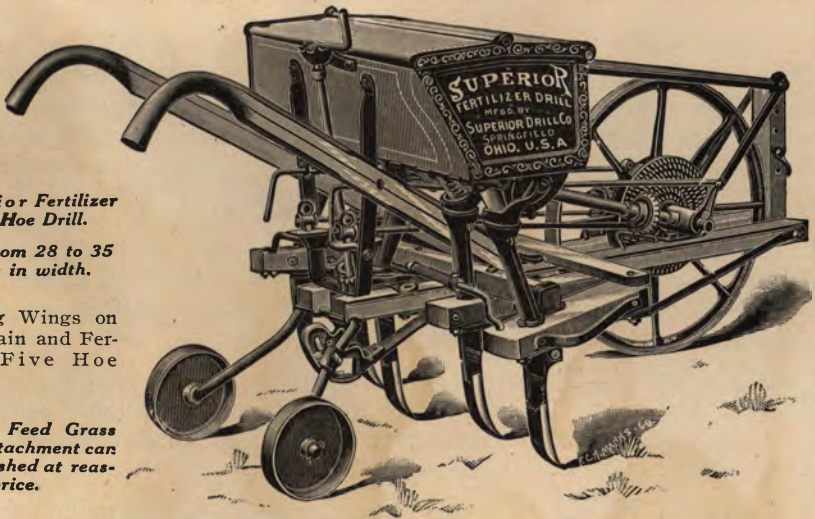
The feeds on both plain and fertilizer Five Hoe Drills are driven by the famous Superior Disk Wheel, which is part of the Drive Wheel.

**Superior Fertilizer
Five Hoe Drill.**

*Sows from 28 to 35
inches in width.*

Spring Wings on
both Plain and Fer-
tilizer Five Hoe
Drills.

**Force Feed Grass
Seed Attachment can
be furnished at rea-
sonable price.**



These Drills are equipped with feeds the same in principle as are used on two-horse Superior Grain Drills. Nothing but choicest material used in construction. Guaranteed in every way.

The Superior Four-Row Beet Drill



WE MANUFACTURE the Superior Beet Drill in two styles—Plain and Fertilizer. As will be seen from the following detailed description, the Superior is admirably adapted to the needs of the sugar beet grower.

The Superior is an adjustable four-row machine—that is, it will sow four rows at one time, 20, 22 and 24 inches apart.

FRAME—The frame is of solid steel, bent cold at the corners. It has one steel bar running parallel with the front rail at the center, which is further reinforced by crossbar. This construction gives a very strong and durable frame.

HOPPERS—There is a separate hopper for the seed and also one for the fertilizer. The fertilizer hopper can be quickly and easily attached or detached. These hoppers are made of well seasoned lumber, nicely finished and well painted.

GRAIN FEED—The grain feed is especially adapted to beet seed, and is driven by a sprocket chain direct from the axle. Change of quantity is regulated by a lever located on the front of the hopper, which can be set at any desired amount by simply shifting the lever. Agitators are furnished with all drills, which effectively prevent the seed from bridging over the feeds.

The Superior Four-Row Beet Drill

FERTILIZER FEED—The Fertilizer Feed is of the improved Superior Finger Feed style. Change of quantity can be made while the team is in motion by use of a lever conveniently placed at the end of hopper. This feature enables the operator to sow large or small quantities at any time. The construction of the hopper is such that all the fertilizer can be sown out. All parts are easy to get at and keep clean. The fertilizer feed can be thrown out of gear independent of the grain feed by means of the shifting lever. Grain feed is thrown out by raising the shoes, which also throws out the fertilizer.

MARKER—The marker is so arranged that it can be operated from the rear of the machine, and can be easily and quickly changed for the proper spacing of the different width rows.

FURROW OPENERS—The Superior Beet Drill is furnished with furrow openers of the most approved pattern which are adjustable to 20, 22 or 24 inches apart. These adjustments are so simple and easily made that any boy can make them. We furnish spacing bars with each machine, which enables the user to make the desired spacing without the aid of measuring instruments. These spacing bars also hold the furrow openers in their proper places. All rows are an exact distance apart, which insures easy cultivation. Pressure for the furrow openers is obtained by the use of pressure springs, and depth of planting is gauged by open face press wheels, adjustable to any desired depth. The press wheels are used rigid to act as gauge wheels.

LIFTING DEVICE—The lifting lever is very conveniently arranged in front of the hopper and out of the way. It is a bent lever with side grip, and easily reached from the rear of the machine by the operator while standing on the ground. This lifting device automatically throws the feeds in or out of gear when used for raising or lowering the furrow openers.

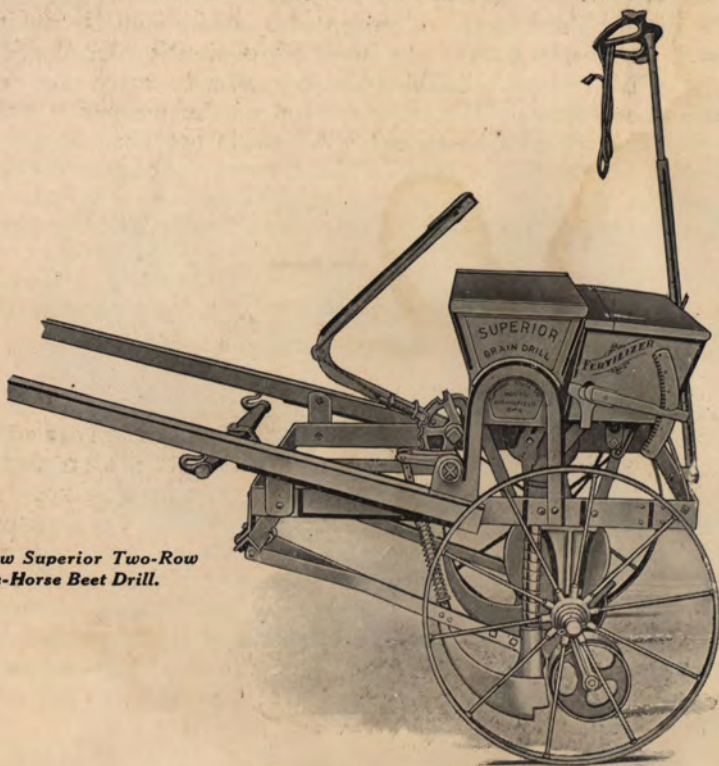
STEEL WHEELS—The wheels have 3-inch face oval tire, having twelve $\frac{7}{16}$ -inch round spokes, staggered; the hubs are slotted for linch pins. This construction gives a very strong wheel.

AXLES—The axles are of cold rolled steel shafting, $1\frac{1}{8}$ inches in diameter; one continuous axle.

HITCH—The Superior Beet Drill is furnished with pole for two horses. The equipment includes neckyoke and doubletree with two singletrees.

With each drill we send complete setting up and operating directions, also sowing tables and proper tools

The Superior Two-Row Beet Drill



*Side View Superior Two-Row
One-Horse Beet Drill.*

The Superior Two-Row One-Horse Beet Drill is made in two styles—Plain and Fertilizer. The Superior is an adjustable two-row machine—that is, it will sow two rows at one time, 18, 20, 22, 24, 26 or 28 inches apart.

GRAIN FEED—The Grain Feed is especially adapted to beet seed, is of the internal type, quantity changed by means of the Superior Disk Wheel and Sliding Pinion; the feed being especially adapted to corn, peas and beans, making the One-Horse Beet Drill one of the most useful implements on the farm.

FERTILIZER FEED—The Fertilizer Feed is of the improved Superior Finger Feed style.

FURROW OPENERS—The Superior Two-Row One-Horse Beet Drill is furnished with furrow openers of most approved pattern, which are adjustable to 18, 20, 22, 24, 26 or 28 inches apart. We furnish spacing bars with each machine which enable the user to make the desired spacing without the aid of measuring instruments. These bars also hold the furrow openers in their proper places. Pressure for the furrow openers is obtained by the use of pressure springs, and depth of planting is gauged by open-face press wheels, which can be adjusted for any desired depth.

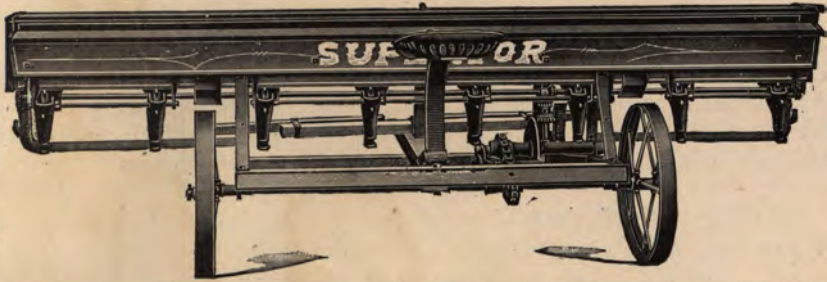
FRAME—The frame is of solid steel, very substantial and strong.

HOPPERS—There is a separate hopper for the seed and also one for the fertilizer, and the fertilizer hopper can be quickly and easily attached or detached.

MARKER—The marker is arranged to be operated from the rear of the machine, and can be easily and quickly changed for the proper spacing of the different width rows.

Special folder sent on request.

Superior Broadcast Sowers



Superior Junior Sower.

Solid Steel Frame, Steel Wheels, Spring Steel Seat, Grass Seed Attachment on special orders. Disk Wheel for changing quantity, Famous Superior Double Run Force Feed, Seed Box of well seasoned lumber and of large carrying capacity. Guaranteed in every way.



Superior Senior Sower.

The Superior 11-foot Sower is furnished with Steel Wheels, Cold Rolled Steel Axle, Solid Steel frame, Disk Wheel for changing quantity by change of speed. Famous Superior Double Run Force Feed. Furnished with or without Grass Seed Attachment. The Superior guarantee goes with every machine we make.



The New Climax Seeder.

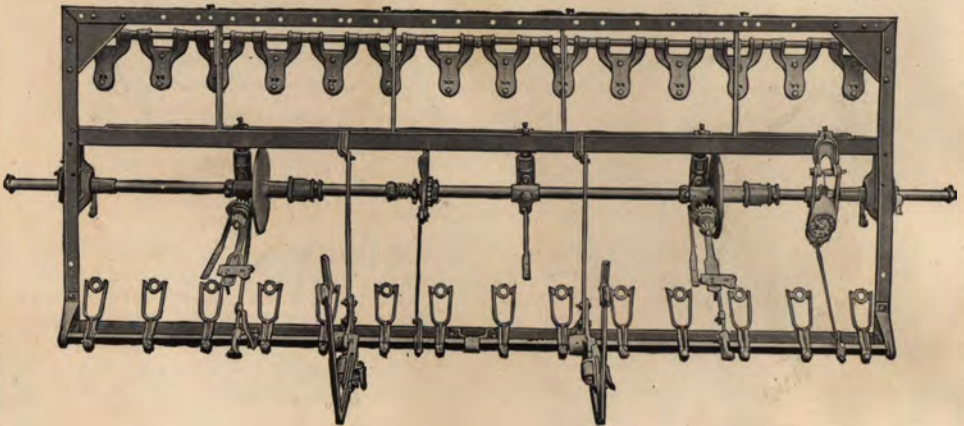
This Seeder has Steel Bottom and Slide; Feed Holes in Slide and Bottom are accurate; Seed Box of large carrying capacity; adjustable pipe box through which axles revolve produce a flexible bearing. It is an 11-foot machine with steel wheels. Absolutely guaranteed.

We also manufacture the *Superior Broadcast Seeder* with Cultivator Teeth in three sizes: 12, 14 and 16 Pin or Spring Bar. Has Flexible Scattering Tubes, Spring Pressure Attachment and other desirable features. Send for Special Circular.

Construction of Superior Drills

On this and the following pages we describe and illustrate the general construction of Superior Grain Drills. We have endeavored to make everything clear and explain their many features of excellence truthfully and without exaggeration. Should prospective purchasers desire further information, we shall be pleased to furnish it, assuring them that it is no trouble for us to answer their questions.

SUPERIOR FRAME—If a grain drill does not have a frame that will not sag, or if the frame is not sufficiently strong and rigid to prevent twisting, good work in seeding is an impossibility. The illustration shows the Superior Solid Steel Frame, which is used on all Superior Grain Drills—Disc, Hoe and Shoe.



Superior Solid Steel Frame.

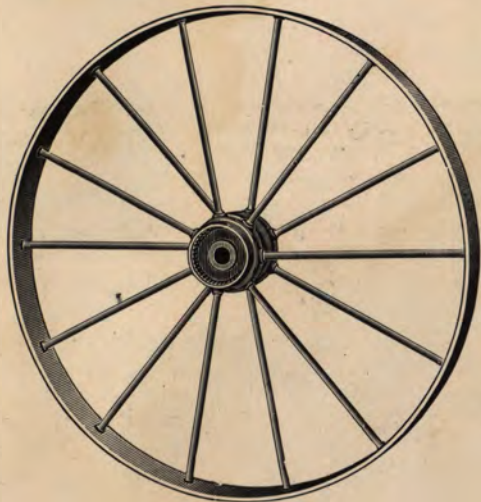
Superior Frames are made of one piece of heavy, high-carbon angle steel, bent cold at the corners which are then reinforced with heavy steel corner plates. The steel is not heated, because it would become decarbonized and soft. A heavy I beam steel bed rail is placed in the center of the frame. This construction makes the Superior Steel Frame as strong as a railroad bridge, and yet it does not add an ounce of surplus weight. By making the Superior Frame with an angle, the hopper and all other attachments are fastened direct without employing extra castings. This can be readily seen from the above illustration which shows the Axle, Axle Plates, Disk Wheels and Two-part Axle Hangers. The construction of the Superior Frame is acknowledged to be the best and strongest used on any grain drill.

Construction of Superior Drills

SUPERIOR WHEELS—These illustrations show the Wood and Steel Wheels furnished with Superior Grain Drills, and either style is optional with the purchaser. These wheels are made of the very choicest materials and no pains are spared to make them the best that carefully selected stock and good workmanship can produce. The wood wheel is extra heavy and strong; largest mortise spoke ever driven in a drill ground wheel hub; wide and thick steel tire set cold by hydraulic pressure. The Steel Wheel, as will be seen from the illustration, has staggered spokes and thick tire; the spokes being half-inch in diameter, making a most substantial steel wheel, and one that will stand up under the most severe strains. The Superior broad and



Wood Wheel

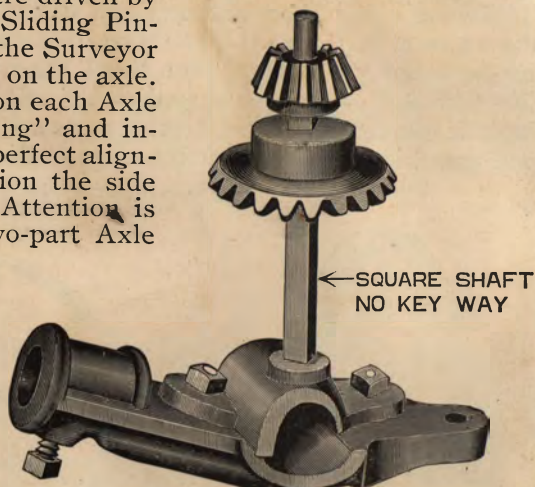


Steel Wheel

liberal guaranty goes with every wheel we make. The bearings in the hubs are extra long. The length of the bearings prevents the wheels from "wobbling." Every Superior Wheel has a large number of ratchets in the hub, which engage two pawls on the pawl flange located on each end of the axle just outside the drill frame. The pawl flanges are fastened securely to the steel axle, which runs in Universal Axle Boxes of extra length. There are two pawls on each plate, and the ratchets in the wheel hubs, being close together, give quick and positive action to the feeds. In other words the moment the drill wheels start forward, that instant the drill begins to sow. This is why the Superior never "skips." Both wheels drive the feeds. Should one wheel stand still as in turning, the other wheel operates as effectively as though both were running; no matter whether the turn is made to the right or left.

Construction of Superior Drills

SUPERIOR AXLE—Axles are of large diameter, made from the choicest cold-rolled steel. These axles run true, and perform a very important part in the work. The axle on a Superior Grain Drill is as important as the line shaft in a machine shop. All the mechanism on a Superior Grain Drill is driven direct from the axle. The feeds are driven by means of the Disk Wheels, Sliding Pinions and Bevel Gears, and the Surveyor by Worm Gear—all located on the axle. A Universal Box is placed on each Axle Plate, which prevents "biting" and insures the axle being held in perfect alignment, no matter what position the side rails of frame may take. Attention is called to the Superior Two-part Axle Hanger, Sliding Pinion and Bevel Gear, shown in the accompanying illustration. The Axle Hanger, being in two parts, can be removed without stripping the axle. It will be noticed that the shaft upon which the Sliding Pinion works is square, and that it has no key way.



Two-Part Axle Hanger.

All the running parts are provided with convenient oilers which convey the oil direct to the bearings. Note the depth and strength of all gears. The directly-gearied shaft drive on a grain drill was originated on the Superior and has many imitators. The drive on a grain drill should be most perfect. The Superior has it.



Disk Wheel and Sliding Pinion for Changing Quantity of Grain.

SUPERIOR DISK WHEEL—The quantities of both grain and fertilizer are changed by means of our Superior Disk Wheel, and the Sliding Pinion which meshes accurately in various rows of cogs on the Disk Wheel, and is obtained by changing speed of the feeds. The speed of the team has no effect on the quantity sown. There are no loose gear wheels to get lost or cause annoyance. Everything is in its proper place ready for instant use. By

Construction of Superior Drills

means of the Grain Disk Wheel—which is in reality a number of cog wheels of different sizes cast upon a solid plate, different quantities can be sown from each side of the Superior Double Run Force Grain Feed. In other words, the smallest and largest quantities of every kind of grain can be sown. A Shifting Lever is used to throw the Disk Wheel and Sliding Pinion out of gear, and by means of this Shifting Lever the furrow openers may remain in the ground and change of quantity be made, or the feeds stopped or started, without raising the furrow openers. All the feeds are also thrown out of gear simultaneously by raising the furrow openers. The illustration on preceding page shows the Grain Disk Wheel, Sliding Pinion, Bevel Gear, Shifting Lever, Two-Part Axle Hanger and sections of the Superior I-Beam Steel Bed Rail and Cold Rolled Steel Axle. The Shifting Levers also permit the operator to sow either grain or fertilizer separately. At the top of this illustration will be seen the Bevel Gear, which transmits the driving power to a broad-faced gear located on the square steel feed shaft that drives the feed wheels in the Superior Double Run Grain Feeds. There is no lost motion and the drive is direct and positive.



Superior Telescoping Steel Grain Tube used on Superior Single Disc Drills only.

SUPERIOR SEED TUBES—On the right is shown the Superior Telescoping Steel Grain Tube which always provides a direct, positive drop for the seed. No buckling, kinking, bending or col-

lapsing. No cornstalk—not even the kick of a mule—can knock one of these tubes out of the boot.

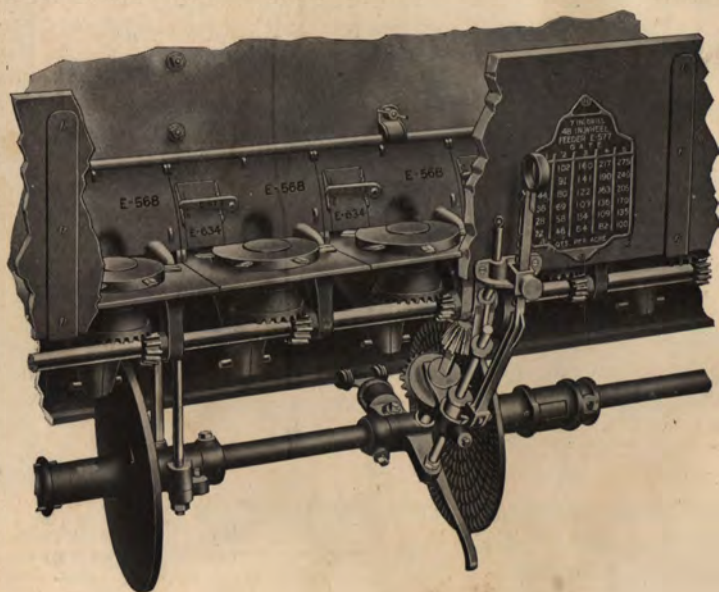


Superior Ribbon Steel Grain Tubes, used on Double Disc, Hoe and Shoe Drills.

The cut to the left gives a very good idea of the Superior Ribbon Steel Grain Tubes, used on Superior Double Disc, Hoe and Shoe Drills. These tubes are swiveled into the tube tops and cannot kink or buckle. The wear is also evenly distributed by this construction. Therefore they give better and longer service than similar tubes that do not have this feature. Purchaser has the option of Ribbon Steel or best grade rubber tubes.

Construction of Superior Drills

SUPERIOR FINGER OR STAR FERTILIZER FEED. After thirty years manufacturing of fertilizer feeding devices, we have adopted the present improved device as being eminently better adapted to the distribution of commercial brands of fertilizer than anything we have heretofore made or tested. Smallest and largest quantities perfectly sown.



No fertilizer feeds ever made sow with such regularity. Easy to clean. Opening of sufficient size to make it impossible to get stopped up, while the quantity is regulated by change of speed. No bunching distribution, all feeds sowing alike—a *Positive Force Feed*. Crushes the lumps; easy to clean and take apart. Thoroughly tested and honestly made. The best of fertilizer feeds we have ever manufactured.

Fertilizer sowing devices that attempt to sow commercial fertilizer by weight are not reliable, for the reason that no two brands or grades weigh the same per bushel. Superior Drills sow by measure—not by weight. Commercial fertilizers weigh from from 2 to 2½ pounds per quart, and if a farmer wishes to know how many pounds of fertilizer he is putting on one acre of ground, all he has to do is weigh a quart of fertilizer. Commercial fertilizers vary greatly as to their consistency. Some brands are absolutely dry; another brand may be "pasty," wet or damp; then there is the lumpy variety. The fertilizer feed to be a success, must be able to sow with reasonable accuracy fertilizer of these types. The Superior Fertilizer Star or Finger Feed successfully handles all known standard brands of commercial fertilizers.

Construction of Superior Drills

Change of quantity is by change of speed in the same manner as in sowing grain, which is by means of the Superior large-tooth Disk Wheel and Sliding Pinion. In the bottom of the fertilizer hopper there are a number of fertilizer feeders—one feeder for each grain feed, or in other words as many fertilizer feeds as there are grain feeds. These Star or Finger Feeds revolve and are provided with gears under the bottom plates into which pinions mesh. One revolution of a fertilizer feeder forces out a given quantity of fertilizer; two revolutions twice as much, and so on. In this manner is measured what is being sown. To sow a greater amount of fertilizer simply turn the feeder faster, and to decrease the quantity the feeder is made to revolve more slowly. This motion is absolutely sure and each and every feed travels at the same rate of speed, because the gear wheels are driven by a continuous square steel shaft which passes through every pinion. The square steel shaft is driven direct from the axle by means of the large-tooth Disk Wheel and Sliding Pinion. The motion of this Disk Wheel is positive and is driven by both ground wheels, there being rachets in each wheel hub. Should one wheel stop or slip backward on an obstruction, or in turning, it makes no difference in the even and continuous sowing of either fertilizer or grain. There is no cutting out of teeth on the Disk Wheel as it is provided with adequate means of true adjustment to mesh correctly in all the rows of teeth on the Disk Wheel. The Bevel Pinions and Gears are especially broad faced and deep, which insures greatest strength and reliability under extraordinary strains. Proper means of lubrication are provided for the bearings of the Superior Fertilizer Feed, by a smooth steel oil conduit, conveniently located on the back of the hopper and leading direct to the bearings. It is easy to get at and the oil goes straight to the spot that needs the lubricant. This is a very important feature, and one that will not be found on the machines of our competitors. All running bearings need oil.

As before stated, change of quantity is obtained by change of speed, also by increasing or diminishing the discharge opening. No loose wheels to change. Every part in its place. Nothing to get lost. Its operation can be readily understood. Changes quickly made.

Note the Indicator Plate. On this plate there are five columns of figures, indicating quantities that may be obtained when cut-off gate is placed in notches respectively 1, 2, 3, 4 and 5. With the gates in these positions, quantities as indicated in columns are obtained by change of gear on Disk Wheel.

Quantities that can be sown with the Superior Drill range from 9 to 622 quarts per acre on 7 inch drills, and from 8 to 544 quarts per acre on 8 inch drills. Quantities being obtained by feeders as follows:

7 INCH DRILLS

Feeder E-579, 9 to 130 quarts per acre
Feeder E-607, 10 to 144 quarts per acre
Feeder E-577, 22 to 275 quarts per acre
Feeder E-712, 55 to 380 quarts per acre
Feeder E-578, 94 to 622 quarts per acre

8 INCH DRILLS

Feeder E-579, 8 to 126 quarts per acre
Feeder E-607, 9 to 126 quarts per acre
Feeder E-577, 19 to 240 quarts per acre
Feeder E-712, 50 to 335 quarts per acre
Feeder E-578, 82 to 544 quarts per acre

Construction of Superior Drills

SUPERIOR GRAIN FEED—The cut on this page shows the Superior Double Run Force Grain Feed. As will be seen, this is in reality two feeds in one—one side being adapted to small grains and the other to large seed. The Superior construction has proven that there is one size of channel or throat best adapted for sowing small grain such as wheat, and another for sowing the coarser seeds like oats, peas, beans, barley, beet seed, etc.

The throat should be of correct area to handle and compress certain size grain.

Having provided this, quantity is changed by change of speed. In the center of this feed cup there is a feed wheel having ribs cast to the inside rim. A continuous square steel feed rod passes through each one of these feed wheels, which insures each and every feed

wheel turning at the same rate of speed. One revolution of this feed wheel carries out a given amount of seed; two revolutions twice as much and so on. The Superior Feed Wheel gets under its load and carries it out; it does not get on top of the load and kick it out. The feed is really the most vital part of a

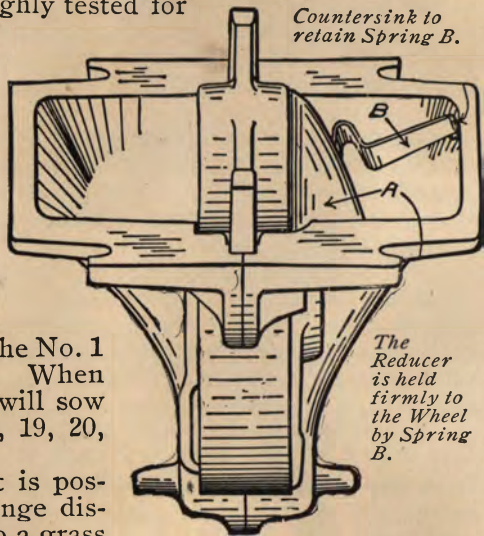
*The Superior
Double Run
Force Grain
Feed*



grain drill, because upon the feed depends the accurate sowing of the grain. Extraordinary care is used in manufacturing the Superior Grain Feed, each being thoroughly tested for the slightest variation in quantity sown and discarded if not accurate. They must be right before we allow them to go out. The Superior Feed will not bunch the seed. It sows all kinds of seeds in just the quantities desired (cow peas, corn and beans included) without cracking the seed.

The outline cut on this page shows Reducer E-618 for sowing Alfalfa and Millet through the No. 1 opening of Grain Distributors. When this Reducer is used, the drill will sow 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 or 22 pounds per acre.

By the use of this device, it is possible to convert the internal flange distributor type of grain feed into a grass seed feed, yet when thus converted it must be borne in mind that the ribs of the grain feed wheel do not then act to force the seed through, as is the case with the coarse grains. The ribs merely act in this instance as conveyors only.



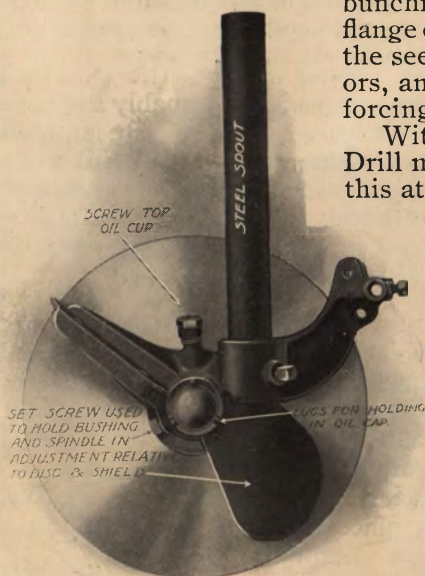
*Countersink to
retain Spring B.*

*The
Reducer
is held
firmly to
the Wheel
by Spring
B.*

Construction of Superior Drills

The vertical web of the grain feed wheel becomes the means of forcing the seed through the hopper and measuring channel. The reducing device is of skeleton form and provides a new measuring channel, which is so arranged within the wheat distributor that the sides deflect the seed against the feed wheel in a manner that insures proper distribution and provides a constant flow of seed without bunching or stoppage. The ribs on the flange of the wheel cannot possibly injure the seed, as they simply act as conveyors, and are not in this device used as a forcing element.

With No. 2 equipment any Superior Drill made since 1900 may be fitted with this attachment.



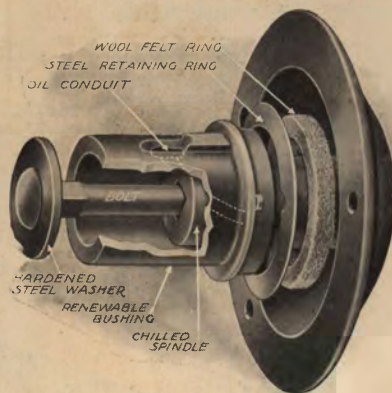
SUPERIOR SINGLE DISC BEARINGS—Strong and reliable, built for hard work. Provides adequate means for adjustment of the grain shield relative to the disc, should the shield become worn.

The spindle, felt washer, retaining ring, bushing, hardened steel washer and bolt are all first fitted by careful workmen in readiness to attach to malleable shank on drag bar.

This is done easily and quickly. Simply slide the bushing (already fitted to the spindle) into the opening of the malleable shield, adjust as close to the shield as free turning of the disc will permit, then fasten with one-half inch steel set screw.

In devices of this character it is very important to have adequate means for adjusting the shield to or from the back of the disc, for the reason that the efficiency of the work done by these parts depends upon their being held in close proximity to each other.

It is a well known fact that after a disc furrow opener has been in use for a season, the wear of the parts, caused mostly by impingement or passing between the inner edge of the shield and back of disc of grit or trash, causing wear and consequent open space, render the parts inefficient for the purpose intended, especially if the shields are of non-yielding material.



Construction of Superior Drills

The construction of the Superior *Hard Work* disc bearing with a bushing having its outer diameter made to fit the opening in the support as lateral movement is made for adjustment to or from the shield insures the greatest efficiency of the work of all parts, since the shield may be adjusted closer to the disc as wear progresses.

This is a Superior feature found only on Superior Disc Drills equipped with malleable boots and solid steel telescoping grain tubes.

On the Superior *Hard Work* furrow openers the spindle is of parallel form and chilled. This feature is unquestionably a substantial adjunct in the makeup of Superior bearings, as moderate end play is secured without the possibility of looseness and consequent wobbling of the disc. An examination of this *exclusive Superior feature* will convince any prospective customer of its great value. We also make a steel capped narrow ring bearing for special purposes—descriptive matter of which will be sent on request.

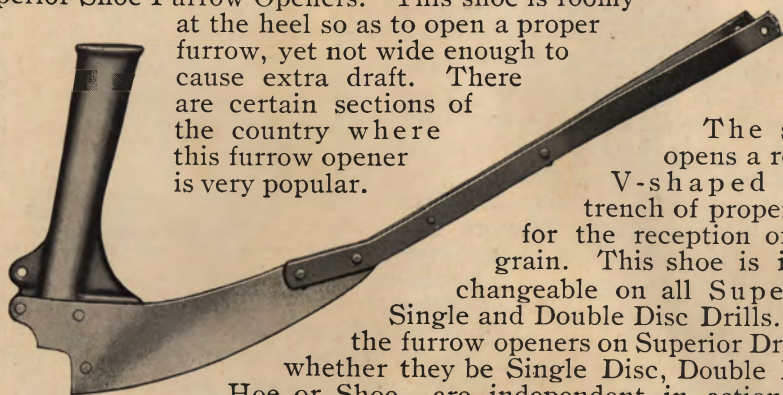
OILING—The wool felt washers and steel retaining ring most effectually retain the lubricant, which should be thick, heavy oil (like castor oil), and after the machine's first oiling, which should completely fill each reservoir, the second oiling will then keep the bearings thoroughly lubricated for several days' work. Thick oil we have demonstrated to be better in every respect than so-called hard oils, tallow mixtures and cheap axle grease. The outer end of the bearing tightly capped with steel, held in place by three malleable lugs bent over after insertion of cap, prevents escape of oil.

This bearing has been most thoroughly tested on thousands of bars during the past four seasons, and because of its greater durability and completeness, performs with eminent satisfaction the hard work of the rough fields.

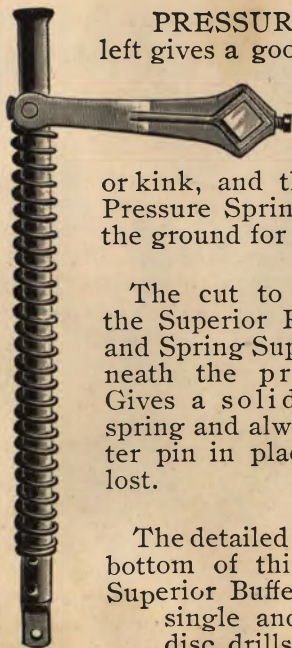
SUPERIOR SHOE—As will be seen from the accompanying illustration, nothing but the choicest materials are used in making the Superior Shoe Furrow Openers. This shoe is roomy

at the heel so as to open a proper furrow, yet not wide enough to cause extra draft. There are certain sections of the country where this furrow opener is very popular.

The shoe opens a roomy V-shaped seed trench of proper size for the reception of the grain. This shoe is interchangeable on all Superior Single and Double Disc Drills. All the furrow openers on Superior Drills—whether they be Single Disc, Double Disc, Hoe or Shoe—are independent in action and automatically conform to all irregularities in the soil.



Construction of Superior Drills



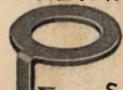
Pressure Bar and Spring.

PRESSURE BAR AND SPRING—The illustration to the left gives a good idea of the Superior Tubular Steel Pressure Bar and Malleable Lifter Arm. This device is used on all 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 various depths of planting.

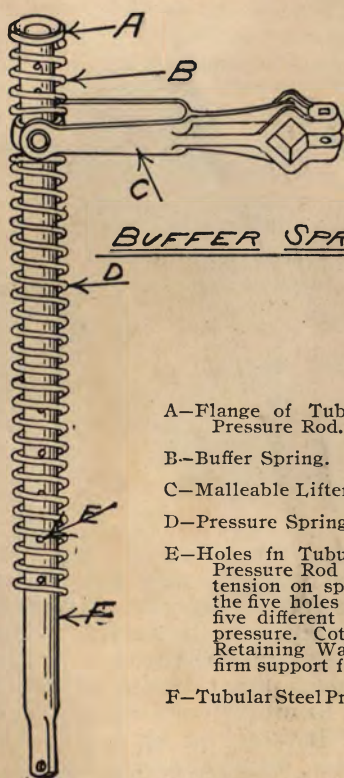
The cut to the right shows the Superior Retaining Washer and Spring Support to go underneath the pressure springs. Gives a solid support for the spring and always keeps the cotter pin in place. Cannot get lost.

The detailed illustration at the bottom of this page shows the Superior Buffer Spring used on single and double disc drills to prevent the discs from running too deep in light, loose sandy soil. This spring attachment is only necessary when the soil is so light that the discs run deeper than required, therefore these Buffer Springs are not sent out unless specially ordered.

**DON'T SPREAD
COTTER.
WASHER
RETAINS IT.**



**SEE
THE
POINT**



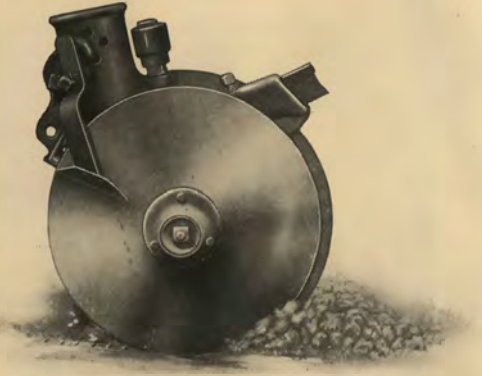
BUFFER SPRINGS

- A—Flange of Tubular Steel Pressure Rod.
- B—Buffer Spring.
- C—Malleable Lifter Arm.
- D—Pressure Spring.
- E—Holes in Tubular Steel Pressure Rod to regulate tension on spring. Note the five holes which give five different degrees of pressure. Cotter Pin and Retaining Washer make firm support for spring.
- F—Tubular Steel Pressure Rod.

FOLDING LEVERS—The Superior Folding Levers, used exclusively on all Superior Disc Drills, has several advantages. The safety feature is one that should not be overlooked, for when folded back should the pawl slip out of notch on arc, the lever will not move, hence cannot effect damage. Good to use in such manner when the drill is being transported over a rough road, or when the pressure is on when working in the field. This folding feature is very convenient in storing the drill as it takes up less room.

Construction of Superior Drills

SUPERIOR DOUBLE DISC—The illustration herewith shows the Superior Double Disc Furrow Opener and Drag Bar, which is interchangeable on either a Superior Single Disc or Shoe Drill. In other words, an owner of a Superior Disc Drill can change style of furrow openers at any time by purchasing the furrow openers, drag bars and grain conduits. The Double Discs open V-shaped furrows, similar to a shoe, and do most excellent work on hill sides and in loose, sandy soils. They are not recommended for extremely hard ground. But for soils adapted to the double disc, there is no furrow opener ever invented that will do as good work. The double disc also works well in wet soils, trash or foul ground. The bearings are of correct design, smooth and hard. They are perfectly lubricated and dust-proof.



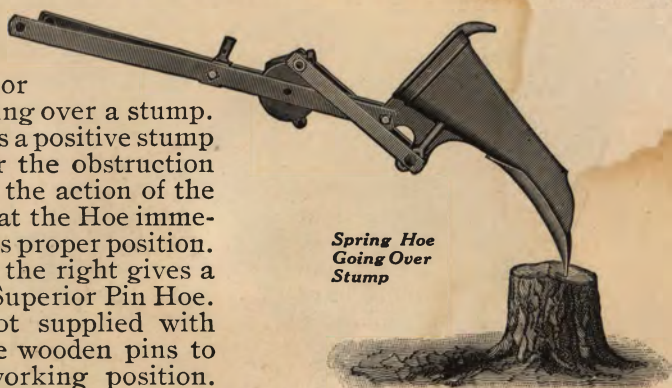
*Note
Felt
Washer.*

The accompanying illustrations show the Superior Double Disc Trunnion Tube and parts. Note the screw for holding the adjustable inside scrapers up to the discs in muddy seeding. See the long slot on bottom of spindles through which the oil flows to lubricate bearings; also the gas pipe oil tube with its screw cap compression oiler, which permits of oiling both hubs from a position on top of the drag bar. Felt washers are at both ends of the spindles, making the bearings dust-proof, oil tight and noiseless.

Construction of Superior Drills

SUPERIOR HOES—The

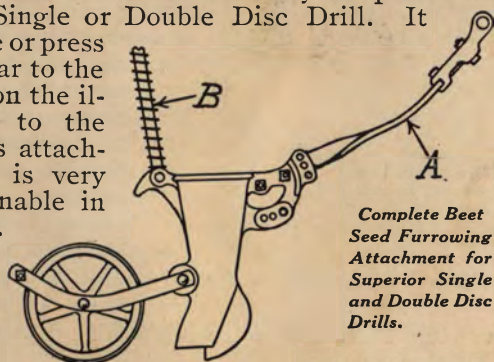
cut to the right shows the Superior Spring Hoe passing over a stump. The Spring Hoe is a positive stump jumper, and after the obstruction has been passed, the action of the spring is such that the Hoe immediately resumes its proper position. The lower cut to the right gives a good idea of the Superior Pin Hoe. Pin Hoes are not supplied with springs, but have wooden pins to hold them in working position. Should a solid obstruction be encountered, the only damage sustained is the breaking of a small wooden pin. Both styles of hoes have our Reversible Hoe Points, which are equivalent of two sets of points. The form of the hoe point has much to do with the opening of a proper seed trench as well as the draft of the 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, while the opening in the hoe must be large enough to allow the grain and fertilizer a free and unobstructed passage to the seed bed. Superior Hoe Points have absolutely true curves, which permit them to cut the ground like a wedge, lifting up the soil as the trench is opened. Some styles of hoes are abrupt—almost blunt—thereby breaking and compacting the soil in their forward movement, which causes heavy draft.



*Spring Hoe
Going Over
Stump*

The cut to the left shows Superior Split Press Wheel used on Hoe Drills by beet growers. These press wheels are an extra attachment, furnished only on special orders, a reasonable additional charge being made for same.

The outline cut below shows the Superior Beet Seed attachment for Single and Double Disc Drills. It is furnished complete as illustrated and may be placed on any Superior Single or Double Disc Drill. It has a split gauge or press wheel similar to the one shown on the illustration to the left. This attachment is very reasonable in price.



*Complete Beet
Seed Furrowing
Attachment for
Superior Single
and Double Disc
Drills.*

Construction of Superior Drills



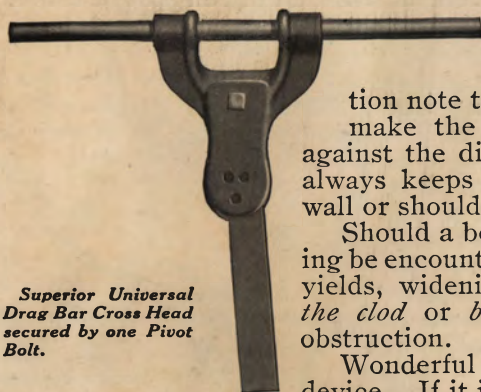
This illustration shows the Superior Grass Seed Attachment. Note the different positions the seed may be sown—through the grain tubes, in the rear or in front of the furrow openers.

SUPERIOR GRASS SEEDER—The Superior Force Feed Grass Seeder can be attached to any Superior Two-Horse Grain Drill.

The Grass Seed Spouts are hinged and the seed can be sown either in front or rear of furrow openers, by the use of flexible Ribbon Steel Grass Seed Tubes, or the seed may be conducted through the grain tubes direct to the furrows. The Superior Grass Seed Attachment is guaranteed to do satisfactory work. The quantity is easily and quickly regulated. The range of quantity is from two to sixteen quarts to the acre.

SUPERIOR HOPPERS—The hoppers are large and of ample carrying capacity, and nothing but the best seasoned lumber is used in their construction. The hopper on fertilizer drills is made double—one side being used for fertilizer and the other for grain.

SUPERIOR SEAT—On page 3 will be found an illustration of a Superior Disc Drill fitted with a comfortable Steel Seat. The seat is not a part of the regular equipment. The seat is sent only on special orders, a reasonable extra charge being made for same.



Superior Universal Drag Bar Cross Head secured by one Pivot Bolt.

SUPERIOR UNIVERSAL OSCILLATING DRAW-BAR HEAD—In this illustration

note that but one bolt is employed to make the connection pivotal. Pressure against the disc, due to opening the furrow, always keeps the drag bar against the stop wall or shoulder.

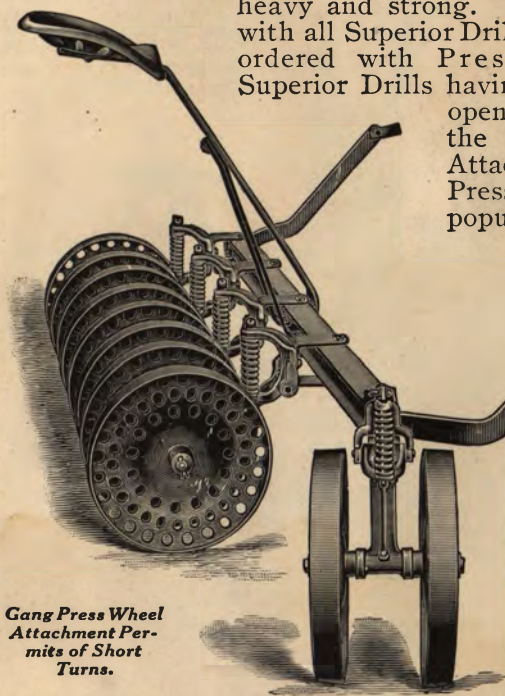
Should a boulder wider than the drill spacing be encountered, *then and then only* the bar yields, widening the space, planting *around the clod or boulder*, and not on top of the obstruction.

Wonderful results secured by means of this device. If it is desired to make the draw-bars rigid a bolt may be placed in one of the lower holes.

SUPERIOR SURVEYOR—Every Superior Two-Horse Grain Drill is equipped with a Surveyor or Land Measure.

Construction of Superior Drills

SUPERIOR COVERING DEVICES—All Superior Drills are equipped regularly with Covering Chains. The Covering Chains are heavy and strong. Covering Chains are shipped with all Superior Drills, except Press Drills or drills ordered with Press Wheel Attachments. All Superior Drills having an even number of furrow openers can be readily fitted with the Superior Gang Press Wheel Attachment. The Superior Gang Press Wheel Attachment is very popular. The Press Wheels are in



*Gang Press Wheel
Attachment Per-
mits of Short
Turns.*

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 castings. See illustration. The wheels being solid, they will not clog

in trash. These press wheels track in the furrow in a satisfactory manner. This is an extra attachment and is only furnished on special orders and at an additional, but reasonable, price.

SUPERIOR HITCHES—The description of the hitches found below will enable the purchaser to know the exact hitch equipment that is furnished regularly on all Superior Disc, Hoe and Shoe Drills. The various hitches have many points of merit, such as equalizers, etc., and will be found to give good satisfaction.

Two-Horse Hitch—Consisting of neck-yoke, two single-trees and two-horse evener is furnished regularly on all Superior Disc, Hoe and Shoe Drills up to and including 12x6 sizes. Larger hitches can be supplied for these drills at a slight advance in price.

Three-Horse Hitch—Comprising one three-horse evener, one two-horse evener, three single trees, one stub tongue and one standard neck-yoke, is sent regularly with all 12x7, 12x8, 14x6, 14x7 and 14x8 sizes Superior Disc, Hoe and Shoe Drills. Larger size hitches can be furnished for the above sizes on special orders at an additional price.

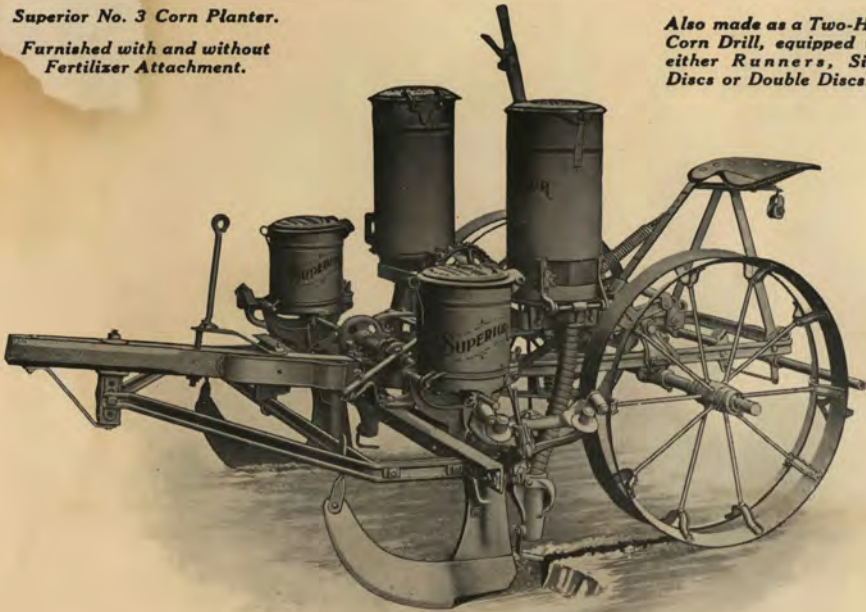
Four-Horse Hitch—Has two neck yokes, two double-trees and pulley hitch for two poles. This equipment is regular on all Superior Disc, Hoe and Shoe Drills having 16 or more furrow openers. We can furnish this hitch with one pole for above size drills on special orders.

Six-Horse Hitch—Can be furnished on special orders, but we do not recommend this hitch for anything smaller than an 18 size drill.

Superior No. 3 Corn Planter

*Superior No. 3 Corn Planter.
Furnished with and without
Fertilizer Attachment.*

*Also made as a Two-Horse
Corn Drill, equipped with
either Runners, Single
Discs or Double Discs.*



The Superior Runner Fertilizer Corn Planter.

In the small space of two pages, it is not possible to tell all that you ought to know about Superior Corn Planters. Therefore send for the Superior Corn Planter Catalogue, which is profusely illustrated and will tell you many things about the Superior that are of vital interest,

Superior Corn Planters are furnished with *both flat and edge drop plates*. With the Superior *it is up to the farmer at last*, for we give him a choice of both systems; *both are his for the one cost*. The Superior edge drop plates are *different* than other makes; not particularly in the cell structure, but the *means for gathering and filling* the cells with corn is new, and produces most satisfactory results.

WIDTH OF ROW—In this respect we have produced a standard of our own, so to speak, making adjustments as low as 28 inches, and then, in steps of 2 inches, other different widths, the last being 4 feet—a very wide range of widths, surely.

STANDS—Valve stands are made different than other planter stands—purposely so. Of proper height to clear obstructions; yet low enough to insure steadiness,

STOP MOTION—The stop motion device for checking possesses new and highly effective features, working in perfect harmony with the *Superior Variable Drop Device*, by which device 2, 3 or 4 kernels may be deposited in a hill without change of plates or stopping of team.

Superior No. 3 Corn Planter

*When the end of the row is reached,
the marker is automatically raised
from the ground.*

*Note how the Reel for wire is braced
to frame of Planter.*



The Superior Runner Plain Corn Planter.

VALVE SPOUTS—The steel spouts bring best results; clean cut and sensible—neatest ever put on a machine. Straight as a gun barrel.

GRAIN SHAFT—The square shaft for bell cranks and other fittings to prevent slipping or lost motion must not be overlooked.

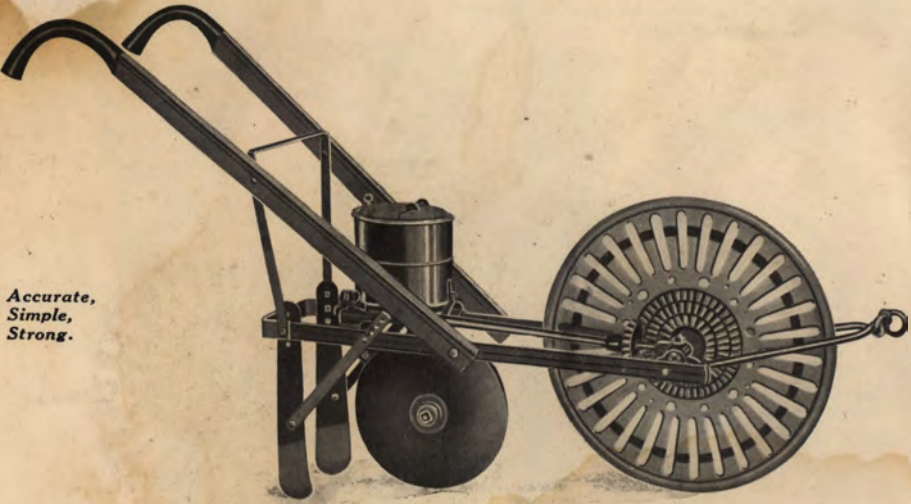
SEED HOPPERS—Superior Seed Hoppers have double hinge back bottom for changing plates or examination of same without spilling corn.

ADJUSTMENT OF FURROW OPENERS—Highly effective arrangement for adjusting furrow openers relative to the check or knot on wire, the only planter that can adjust *independently* each furrow opener. With other planters, both must be changed. Often one furrow opener is right, the other one not. Superior method of adjustment brings both right with knot.

LIFTING LEVER—The throw-out lever is highly effective. Can be locked as a floating lever.

FERTILIZER ATTACHMENT—The fertilizer attachment requires no additional sprocket wheels, collars, springs or clutches (just an extra chain) to make the attachment, that when once placed the adjustments as to widths thereafter become automatic. An independent fertilizer drive, strongly appealing to the sensible side of the user. Then again the fertilizer hopper is made of very great capacity and of galvanized material. It is a tilting hopper. Throws back when necessary to examine same.

Superior Corn Drills



*Accurate,
Simple,
Strong.*

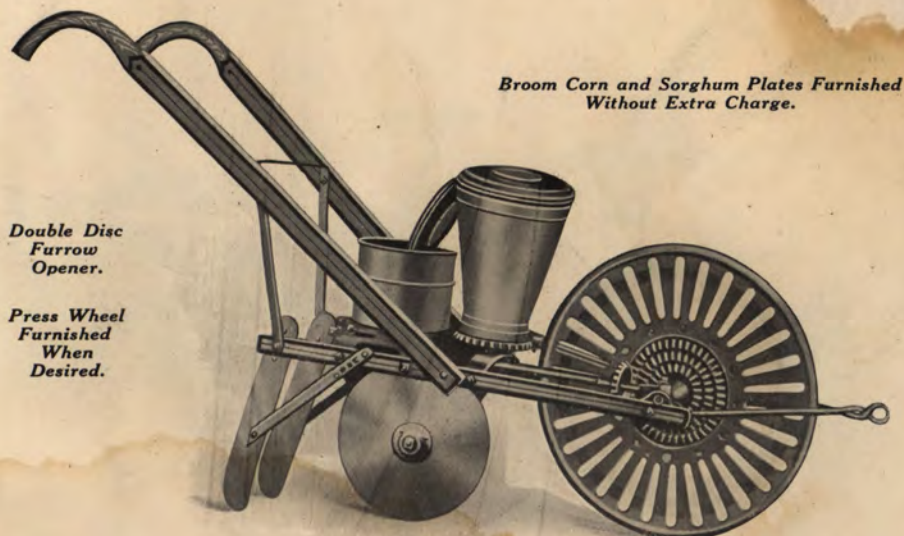
Superior Plain One-Horse Corn Drill with Blade Coverers.

The cuts on this and the next page give a very good idea of the Superior Plain and Fertilizer Corn Drills.

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 hold 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 and at a reasonable price.

Superior Corn Drills



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

*Double Disc
Furrow
Opener.*

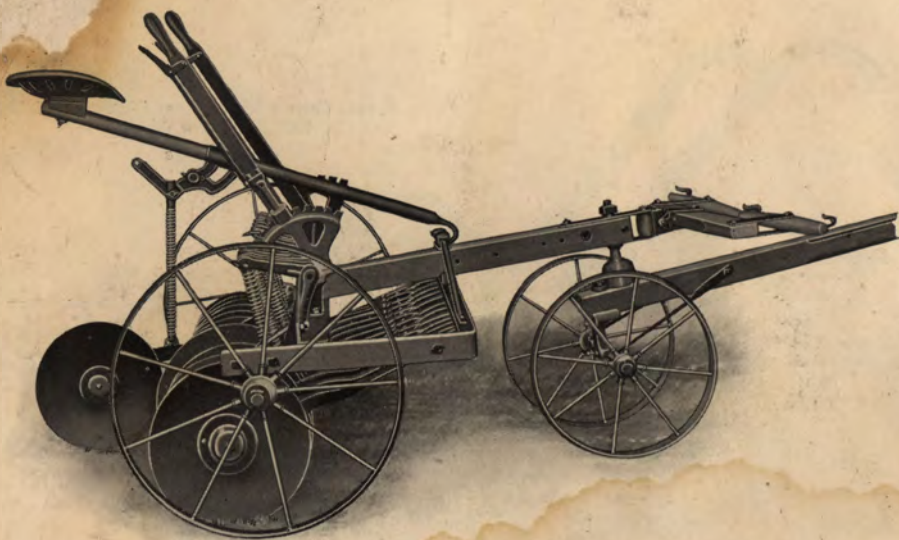
*Press Wheel
Furnished
When
Desired.*

Superior One Horse Fertilizer Corn Drill with Blade Covers.

In parts of the country where it is desirable to use commercial fertilizer we furnish a Superior Fertilizer Attachment, which, as made by us, affords the best and most simple arrangement. It is positive in its handling of the many brands of standard 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 disk 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.

We also manufacture an attachment, at a very reasonable price, for sowing Peas and Beans from the Fertilizer Hopper of the Superior Corn Drill, thus enabling the farmer to sow cow peas or soy beans at same time corn is planted.

Superior Wheel Disc Harrows



*Superior Wheel Disc Harrow with Front Truck and One Pole.
Also Made With Single Caster Wheel Truck.*

Hitch your team to the Superior Wheel Disc Harrow just the same as you would to a road wagon. It rides on its own wheels. You can take it anywhere, without loading it on a wagon or sled, and not dull the discs. One man or boy can manage it anywhere under all conditions. No more lame backs. No more accidents. Stumps and rocks make no difference. Every available foot of space receives perfect cultivation. Manufactured in two styles; with Front Truck and without Front Truck. Two wheels or Single Caster Wheel Truck.

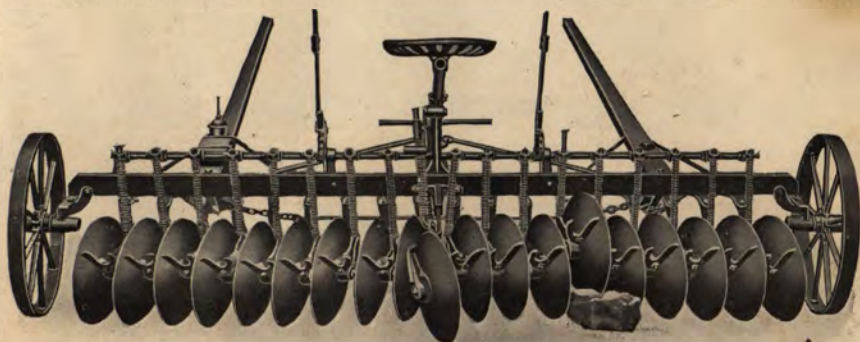
MATERIAL—It is practically a solid steel harrow with heavy angle steel frame, steel seat and steel wheels. All castings subject to strain of malleable iron. The very best workmanship.

ANGLE OF DISCS—The angle of the discs never changes. This makes it light draft and insures the best work.

INDEPENDENT DISCS—Each disc is attached independently to each bar. They are not in gangs.

PRESSURE—We don't use "stone boxes" on the Superior. The levers and pressure springs, together with the weight of the 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.

Superior Wheel Disc Harrows



The Superior 18 Disc Wheel Harrow With Two Poles and Pulley Hitch

CENTER CUT DISC—Cuts out the center. Self-locking in ground and out.

SAVES TIME—It will do more work than any other harrow, because it cultivates a wider strip, and leaves the field level. No time is lost in loading and unloading.

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 neck weight.

FRONT TRUCK—We furnish the Superior Disc Harrow on Wheels with and without Front Truck. This truck makes turning easy. Absolutely no neck weight. Guides perfectly. Front Truck pivoted, thus preventing biting or binding—always works free and easy. There is no side draft whatever. The Front Truck is not furnished with Superior Wheel Disc Harrows having more than one pole. Two, three and four horse hitch can be furnished for Superior Harrows with one pole and Front Truck. Single Caster Wheel Truck, if desired.

MADE IN SIX SIZES

Width of Cut		Width of Cut	
8 Discs for 2 Horses	4 feet	14 Discs for 4 Horses	7 feet
10 Discs for 2 Horses	5 feet	16 Discs for 4 Horses	8 feet
12 Discs for 3 Horses	6 feet	18 Discs for 4 Horses	9 feet

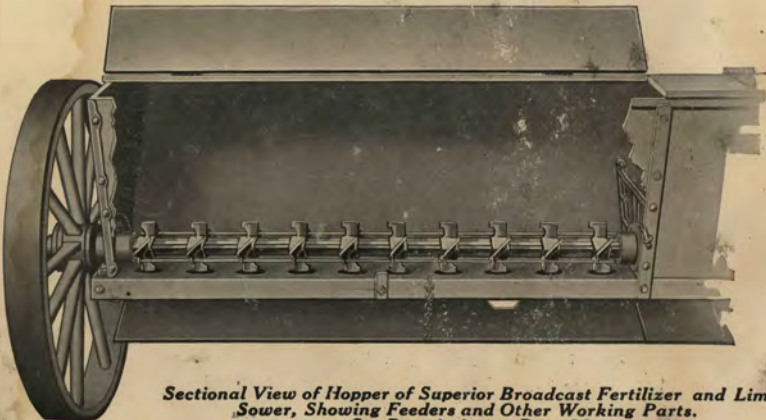
Superior Broadcast Fertilizer and Lime Sower



*Rear View Superior Two-Horse Broadcast Fertilizer and Lime Sower,
Width, 10 Feet. Hopper Capacity, 13 Bushels.
Range of Quantity, 75 to 3000 Quarts Per Acre,*

THE SUPERIOR BROADCAST FERTILIZER AND LIME SOWERS—Both one and two horse—illustrated on this and the following page are admirably adapted to sowing all brands of Standard Commercial Fertilizers, Nitrate of Soda, Land Plaster, Calcium Chloride, Marl, Dry Wood Ashes, etc. These machines are very simple and durable, have great range of quantity and distribute the materials sown very evenly and uniformly. The hoppers have large carrying capacity and can be quickly and thoroughly cleaned whenever desired. These machines are fully guaranteed to do all we claim for them.

The Superior Broadcast Fertilizer and Lime Sower is mounted on strongest wood wheels having broad tires which prevents them from sinking into the ground, even when the hoppers are filled. The scattering board is so close to the ground that it insures the even distribution of the materials being sown without interference from winds.



*Sectional View of Hopper of Superior Broadcast Fertilizer and Lime
Sower, Showing Feeders and Other Working Parts.
See Description on Page 39.*

Superior Broadcast Fertilizer and Lime Sower

The illustration at the bottom of page 38 shows a sectional view of the Superior Broadcast Lime and Fertilizer Sower Hopper. Attention is directed to the manner of attaching the Fertilizer Feeders to the $1\frac{1}{4}$ -inch square steel axle, no bolts being used for this purpose, and no gears or cogs are employed for driving them, which is another proof of simplicity and great strength. On the two-horse sower this steel axle is divided in the middle—a separate shaft for driving the feeders in each side of the machine. This plan enables the user to shut off the feeds on either side of the Sower and use one-half of the machine. This is accomplished by means of two levers on the front of the Sower within easy reach of the operator. The Superior Quantity Gauge is so constructed that the feeds may be shut off entirely when it is not desired to fertilize certain parts of a field, and when sowing is resumed it is not necessary to readjust the gauge, as the machine will sow the amount for which it was originally set. The feeds will sow all of the material out of the hopper without crowding or pushing it to either end.

Every bearing may be easily oiled without removing a single part.

The hopper is mounted on an Angle Steel Base and possesses such strength that the hopper can be turned over and thoroughly cleaned.



Rear View Superior One-Horse Broadcast Fertilizer and Lime Sower

The cut on this page gives a very good idea of the Superior One-Horse Broadcast Fertilizer and Lime Sower. The descriptive matter on this and the opposite page fully describes both the Superior One- and Two-Horse machines. The One-Horse Superior Sower does not have a divided Feed Axle, for the reason that the One-Horse Superior is only one-half the width of the two-horse machine. The width of the Superior One-Horse Broadcast Fertilizer and Lime Sower is 5 feet, and the hopper has a capacity of 6 bushels.

CHAS. E. WINKLER, PRINTER
SPRINGFIELD
OHIO