

SURE DROP PLANTERS

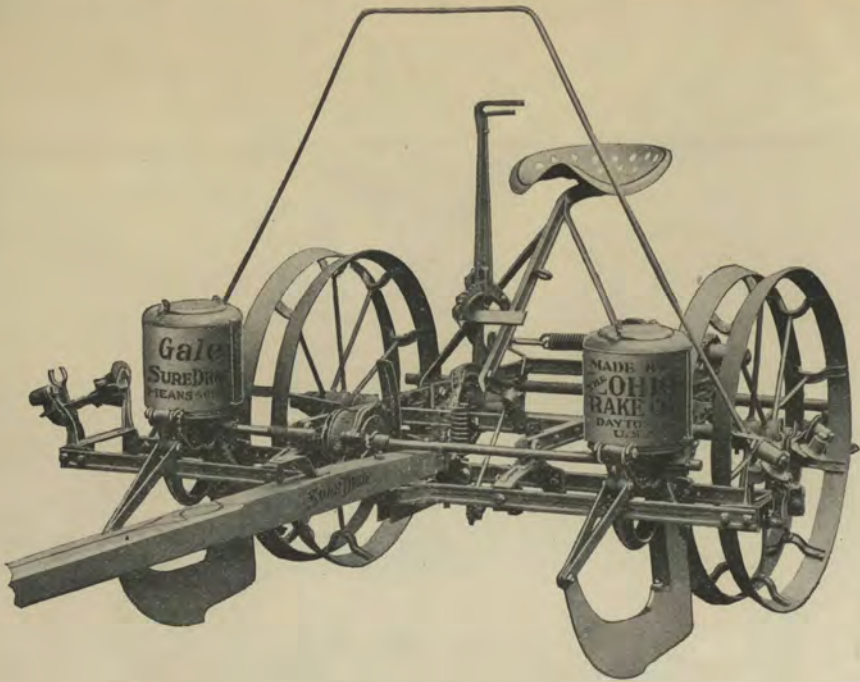


FORMERLY MADE BY
GALE MANUFACTURING CO., ALBION, MICH

Now Owned and Manufactured By
THE OHIO RAKE CO.,
DAYTON, OHIO

Makers of

Agricultural
Implements



SURE DROP TWO-HORSE PLANTER

The "Sure Drop" is a light, strong, durable hill and drill Planter, built along thoroughly modern lines. Any style shown in this circular can be furnished either Edge or Flat Drop. The manner in which it is built insures perfect and accurate work. It is our latest and best planter, every detail having been worked out with a precision seldom equalled.

It has large hoppers, combined foot and hand lever for raising the runners out of the ground, adjustable pole and adjustable steel seat.

It is fitted with hinged hoppers so the plates can be changed without removing the seed, with a combined foot and hand drop device, and an automatic reel, and is adjustable to the following widths between the rows: 3 ft. 2 in., 3 ft. 4 in., 3 ft. 6 in., and 3 ft. 8 in. The electric welded wheels are 30 inches high and of superior quality hard steel; the frame is of high carbon channel bar steel.

We make a special frame for this planter that can be narrowed from 3 feet 8 inches to 28 inches, for beans and other narrow rowed crops. This frame is furnished on special orders only.

THE SURE DROP—Is the most accurate dropper.

THE SURE DROP—Is an accurate checker and does not scatter corn.

THE SURE DROP—Does not break corn—a cracked or broken kernel does not germinate.

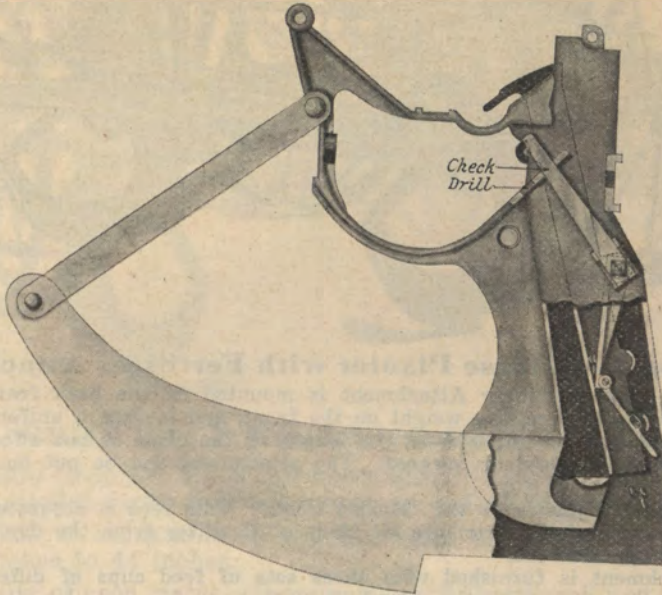
THE SURE DROP—Is equipped with plates that will handle the greatest variety of corn.

THE SURE DROP—Has the simplest and best clutch—never makes trouble—it does not wear out in two or three years.

THE SURE DROP—Can also be fitted with a simple and effective Variable Drop Clutch.

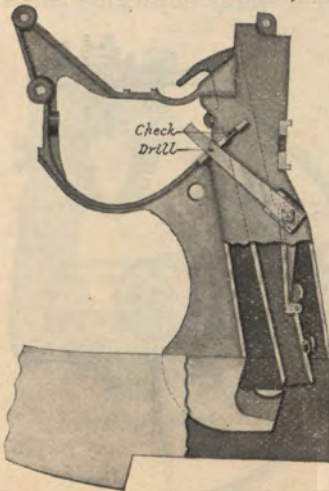
VALVES

At the same time that the rocker shaft, acting upon the clutch, puts the seed shaft into motion, it is also operating the valves in the shank. As the knot in the wire pulls the fork backward, the upper valve opens and drops the seed that rests upon it, to the intermediate valve. From here it is dropped to the table of the lower valve, as the fork is released by the knot and returns to position:



Coincident with this action of the upper valves, the lower valve pushes the seed that was delivered to it by the previous operation, backward and downward into the ground, then returns to position for the reception of the seed for the next hill, which is about to be delivered to it by the intermediate valve.

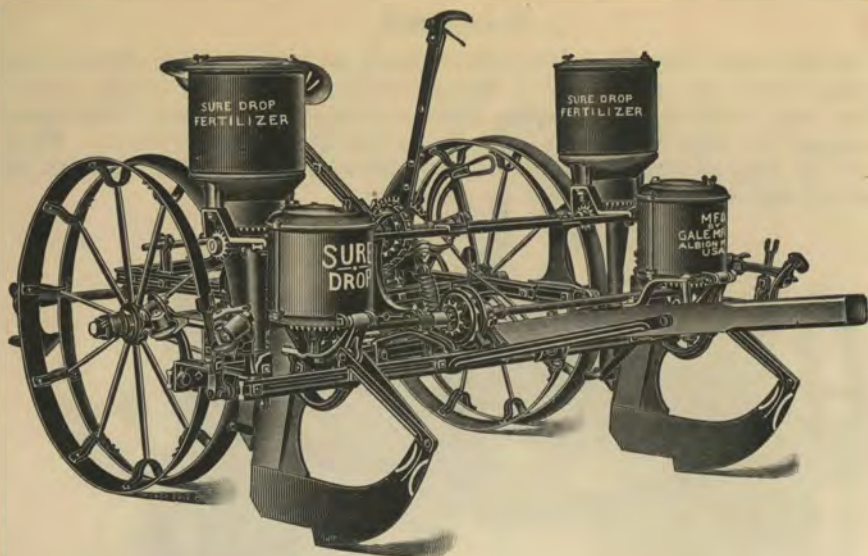
The valves are so timed that it is impossible for the seed of two hills to become mixed, even though the planter be moved very slowly or be stopped while the valves are in operation. This is an important feature, because it prevents the seed for two hills being dropped into one hill, followed by no seed at all in the next hill.



No attachments or tools are required to change from hill planting to drilling or vice versa; the valves can be instantly changed by means of a small lever on the side of the runner shank.

Above cut shows valve set for checking. To drill simply set the indicator strap on each shank to the position marked "Drill" as indicated by the cut at the left.

The valves are of the kick back type.



Sure Drop Two Horse Planter with Fertilizer Attachment

The Sure Drop Fertilizer Attachment is mounted on the back frame of the planter, which avoids excessive weight on the front, and insures a uniform tension on the fertilizer drive chain; that is, the length of the chain is not affected when the planter front is raised or lowered. The attachment can be put on any Sure Drop Planter.

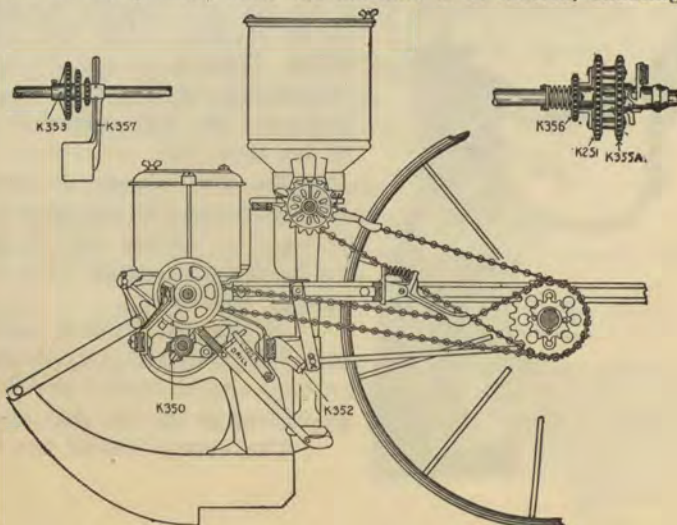
We use what is known as the "Mark's Feed." This feed is accurate and positive and will successfully distribute all kinds of fertilizer from the dry bone dust to the wet stringy seaweed.

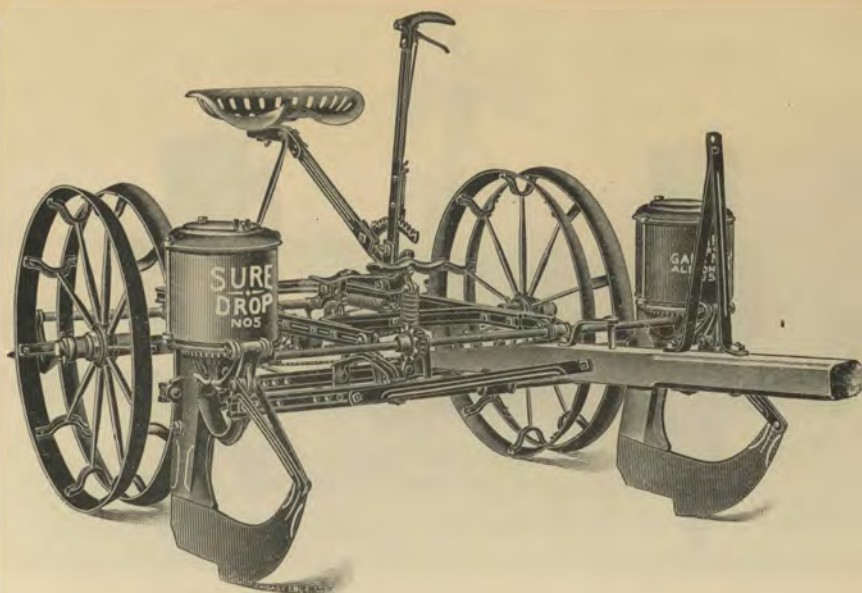
The attachment is furnished with three sets of feed cups of different sizes and these, in connection with the adjustments that can be made by means of the sprockets, on which the drive chain travels, admits of eighteen (18) variations of the quantity of the fertilizer dropped.

In turning around at the ends, the attachment is stopped automatically. It is thrown out of gear when the planter is raised and thrown into gear again when the planter is put back into the ground.

The attachment is also equipped with a hand lever with which it can be stopped independently of the rest of the planter while the machine is in motion, enabling the operator to distribute the fertilizer only on parts of the field, if he desires to do so.

The accompanying detailed cut shows the arrangement of the sprockets, drive chains and chain tighteners on the planter with fertilizer attachment. Complete directions for setting up and operating accompany each machine. Weight of fertilizer attachment for complete planter—134 pounds.





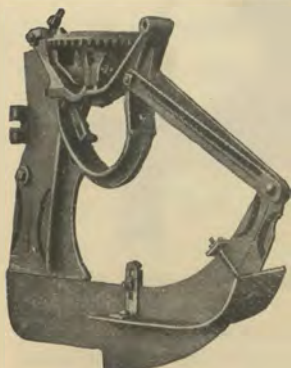
SURE DROP NO. 5 TWO-ROW DRILL

The Sure Drop No. 5 is a two-horse machine for drilling corn, beans and other similar crops that are grown in drilled rows.

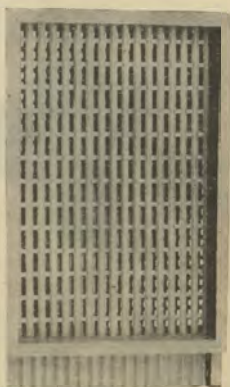
The drill is adjustable to the following distances between rows: from 28 inches to 44 inches.

Six pairs of seed plates—three pairs with “medium” and three with “small” cell are regularly furnished, and these, in connection with the change of speed by means of a three step sprocket wheel on the seed shaft, admit of nine variations of the distances apart that seed can be dropped, ranging from $6\frac{1}{2}$ to 22 inches. A special sprocket can be furnished for dropping closer than $6\frac{1}{2}$ inches.

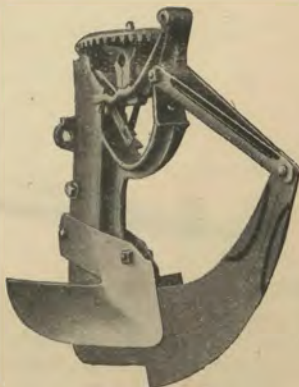
Special plates for sweet corn, pop corn, kaffir corn, broom corn, cane, sorghum, sugar beet seed, etc., can be furnished.



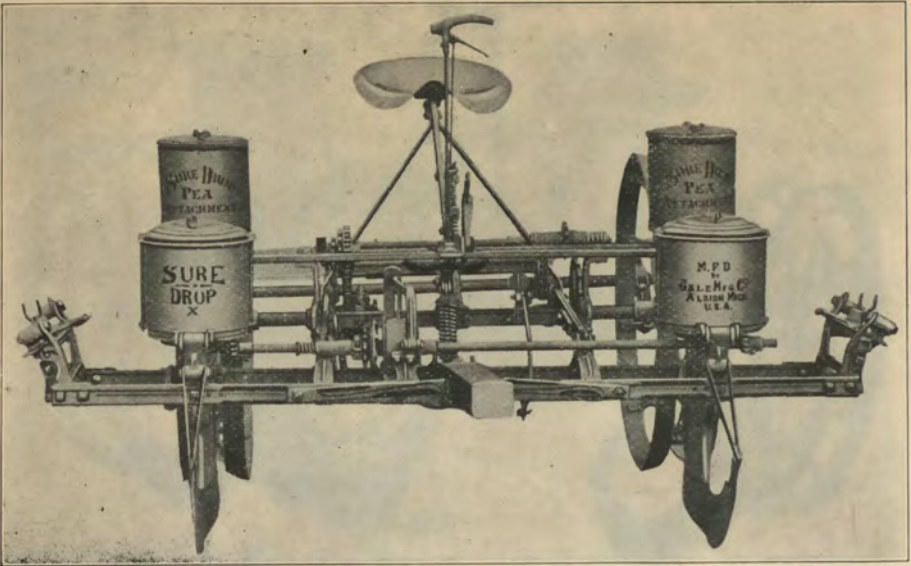
Gauge Shoe



Double Screen
Corn Grader



Shovel Furrowers

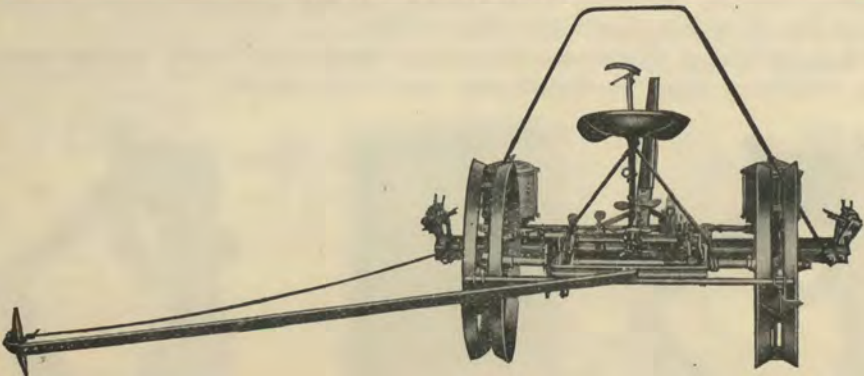


Sure Drop Planter with Soy Bean and Cow Pea Attachment

This attachment is the same as our fertilizer attachment with the exception of the hopper and the gears. It is built throughout of high carbon steel, and what is said of the construction of our fertilizer attachment is equally true of this attachment.

Among its superior features, we have only room here to point out the fact that by means of a dummy plate the hopper will handle successfully the greatest variety of peas. This is accomplished by simply reversing the dummy plate, one side of which is smooth and other grooved, being equivalent to a thick and a thin seedplate.

DISC MARKER



This is a rear view of our No. IX Sure Drop Planter equipped with Disc Marker

The new Adjustable Revolving Disc Marker will make a plain mark in ground where the drag marker does not work well. In weedy or soddy ground the disc is superior to the drag, because it will not clog up—the disc rolls over obstructions of all kinds and keeps on marking. Above we show details of this marker, demonstrating that it is simple, well made, and adjustable.

STYLES OF SURE DROP PLANTERS

	Weight
No. 1—30-inch Sure Drop, complete with check rower, automatic reel and marker, edge drop.....	456
No. 1X—30-inch Sure Drop, complete with check rower, automatic reel and marker, variable edge drop.....	456
No. 33—30-inch Sure Drop, complete with check rower, automatic reel and marker. This planter for round hole plates only. Flat drop.....	452
No. 4—30-inch Sure Drop, complete with check rower, automatic reel and marker; adjustable to 28-inch for beans, Edge Drop.....	454
No. 43—30-inch Sure Drop, complete with check rower, automatic reel and marker; adjustable to 28-inch for beans, Flat Drop.....	454
No. 5—30-inch Sure Drop, Drill only edge drop.....	330
No. 53—30-inch Sure Drop. Drill only, Flat Drop.....	330
Pea or Bean Attachment.....	
Fertilizer attachment, for complete Sure Drop.....	129
Fertilizer attachment for Drill only Sure Drop.....	129
Automatic Spring Lift Marker Attachment (as an extra).....	
Shovel Furrowers, per set.....	11
Gauge Shoes, per set.....	11
Two horse evener and neck yoke.....	23
Disc Furrowers, per pair (11 inch discs).....	
Fodder or ensilage attachment.....	9
Hand Drop attachment.....	6
Special Plates, extra per pair.....	2
Pinchers	1
Wire in 10 rod bundles, per rod.....	5½
80 Rod Wood Spool of wire.....	54
Double Screen Corn Graders, per dozen.....	

N. B.—When ordering planters always specify the distances between the runners or what is commonly termed the "set," also state if the knots in the wire are to be 3 foot, 2 inches—3 foot, 4 inches—3 foot, 6 inches—or 3 foot, 8 inches, and be sure to state if the wheels are to be concave, or open center.

In 1905 BG - "Sure Drop"
Planters listed as being made by
Dale Mfg Co. Albion, Mich.

Ohio Rake Co then listed
as making "Black Hawk" planters

In Corn Planter Lid
Collector book - a Sure Drop lid
is shown w/ Avery & Sons as maker
Both Black Hawk & Sure Drop
Planters listed as still being
made in 1911-1912 ITS Buyers
Guide

The Ohio Rake Co. Cat N^o 12
and their Cat. N^o 15 both show the
Union Victor Planter & Bulls Eye
Planter