

S T. HOLLY.
CORN-PLANTER.

No. 172,566.

Patented Jan. 25, 1876.

Fig. 1

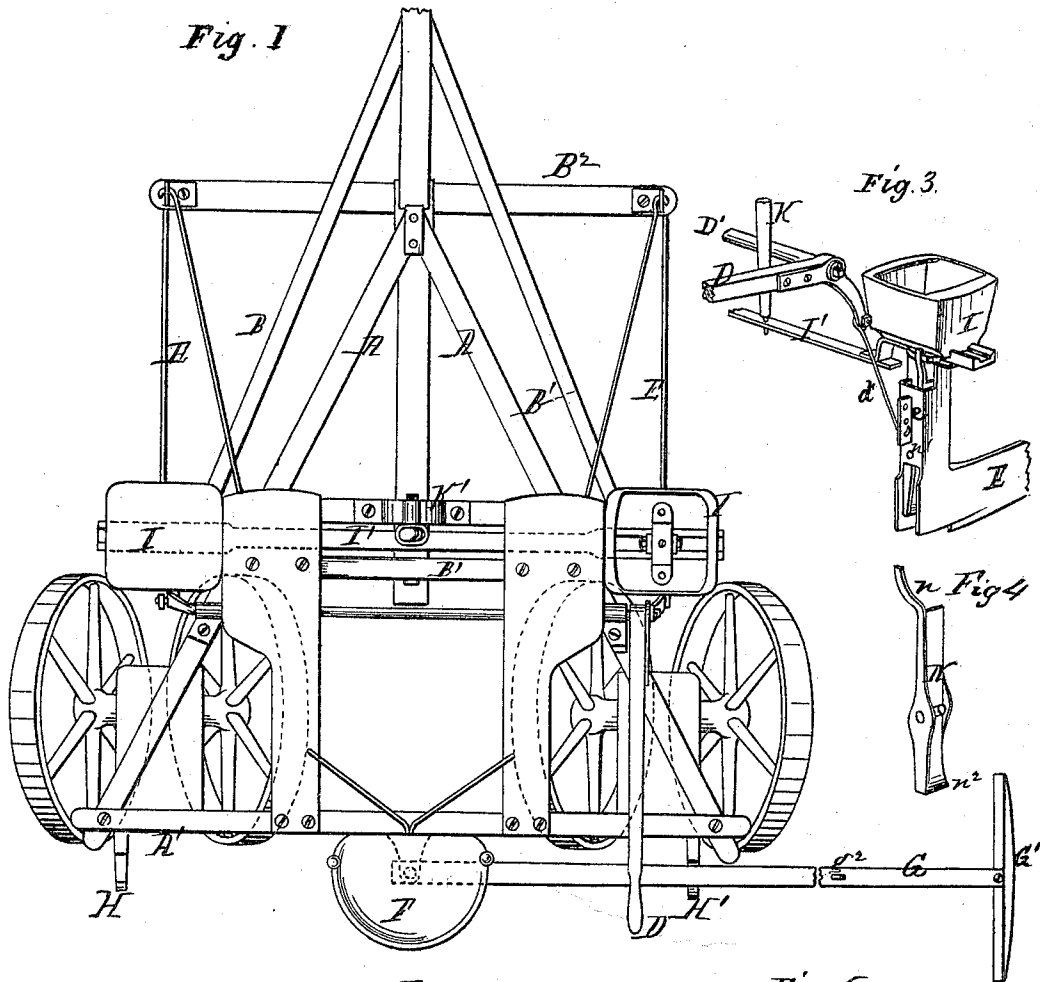
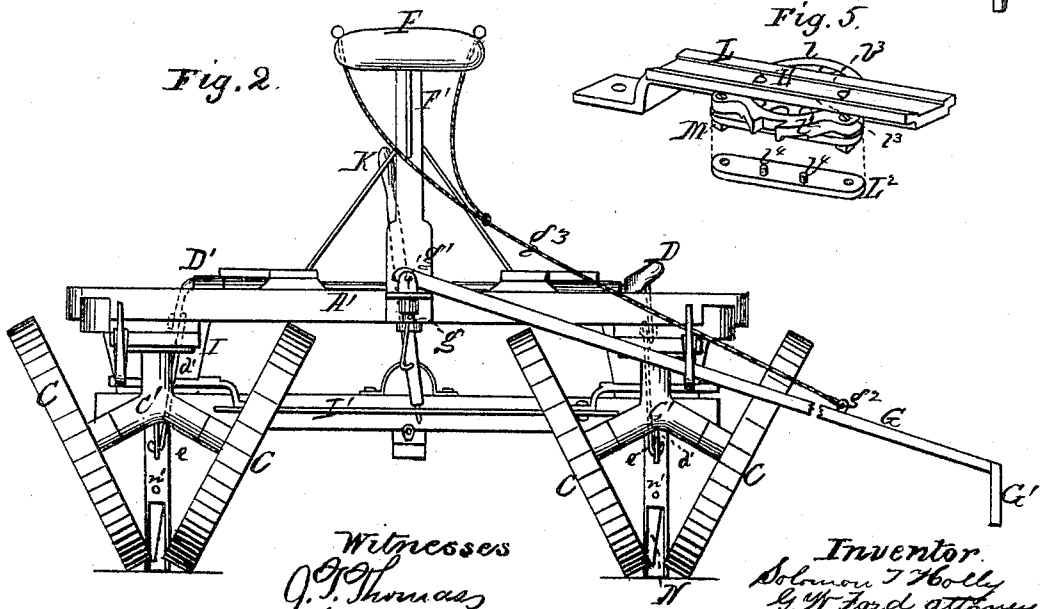


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **172,566**, dated January 25, 1876; application filed August 7, 1873.

To all whom it may concern:

Be it known that I, SOLOMON T. HOLLY, of Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Corn-Planters; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure 1 is a plan or top view of my improved corn-planter. Fig. 2 is a rear view of the same. Fig. 3 is a perspective view of the seed-box and a portion of the shoe and runner. Fig. 4 is a perspective view of the dropper valve or lever; and Fig. 5 is a perspective view of the seed-distributer and slide, showing the different-sized openings for regulating the delivery of the seed.

This consists in the construction and arrangement of the parts of the machine, as will be fully hereinafter described.

In the accompanying drawings, A A' represent the wheel and seat-frame, made in triangular form; and B B¹, the tongue, runner, and seed-box frame, also made in triangular form, with a transverse bar, B², at the front, corresponding in length to the rear bar B¹ of said frame. C are the wheels, two on each side of the machine, both pairs being mounted upon separate axles, and those of each pair inclining inward toward each other at the bottom. C' is the axle, the upper end or shaft of which is secured to the frame by a flange cast with it on the top, which is perforated to receive bolts, which pass through it and the frame. The shaft extends down and branches out into two prongs or arms, forming the inclined spindles upon which the wheels are mounted. D is a lever, connected to a rock shaft or rod, D', running transversely of and having its bearings in the wheel-frame. The rod at one end is bent into crank form, and is connected to the rear face of the runner or shoe through a connecting-link, d', the rear face of said runner being provided with a projecting lip or flange, e, perforated along its length, for the purpose of changing or gaging the depth at which the opening-runner and dropping-tube shall be below the tread of the covering-wheels. C, by changing the link d' in flange e into different holes in the flange, whereby the

wheels that support the machine become the gage for the depth at which the grain shall be covered, or the depth of the furrow opened by the runner; and by the position of the link with relation to the flange on the runner, and the crank on the rock-shaft to be in line or nearly in a line, the runner or opener is kept at all times at the same depth below the tread of the wheels, and is prevented from rising unless the lever is raised at its rear end. The lever is firmly secured to the other end of the rod, so as to turn it in its bearings, and its lower end is extended down and at an angle corresponding to the angle at which the opposite end of the rod is bent, and is connected to the shoe in front of it, in the same manner as the crank is upon the opposite side, so that the runners shall be lifted together. The lever is provided upon its rear face with a stirrup or foot-piece, by which the driver can control the lever by his foot without using his hand, or both may be used at the same time. E is the runner or shoe, connected to the forward bar B² of the tongue-frame, and at its rear upper end with the bar B¹. The runner is formed in the usual manner, except that its heel or open end extends back beyond the tube, so that the earth will not fall into the furrow until the seed is deposited. F is a seat, and F' the seat-standard, secured to the bar A' about midway of its length. At the lower end of this seat-standard is secured a bracket, which has formed upon its projecting lip a tubular bearing, into which a pin, g, on the end of the marker, hereinafter described, is placed. G is a rod or arm, which has secured to its outer free end a shoe or runner, G', these two parts forming the marker. The other end of this arm is pivoted in two upright lips, g¹, formed on the head of the pin g, above referred to, in such manner as to allow the marker to rise and fall. About midway of the length of the rod G is secured a staple, g², to which a single cord, g³, is connected, this cord extending toward and within a short distance of the seat, where it divides, and one part is carried to one side of the seat, and the other part to the opposite side of said seat, and passed through perforations formed in the seat. These ends of the cord are secured to any desired form of handle or rings. To the rear side of

the frame-bar A' are secured loop-brackets H H', one at each end, into one of which the marker is dropped—that is, if the next row is to be to the left, it is dropped into the one H; if to the right, in the one H'. These braces are for keeping the marker in line and preventing backward thrust.

The marker, it will be seen, is entirely under the control of the driver, it being so pivoted that the driver, by simply pulling on the handle farthest from the free end of the marker, can lift it out of its sustaining-bracket H or H', and throw it to the other side of the machine. I are the seed-boxes, one at each side of the machine, and secured to the bar B² of the tongue-frame. The slides or feeders are connected together by means of a bar or slide, I'. This bar receives its motion through a lever, K, pivoted or otherwise secured to it about midway of its length. This lever K extends up, and is pivoted in bearings in an upright, K', secured to the bar B² of the tongue or seed-box frame; or it may be held in place by an eyebolt, through which it passes, and pivoted to the upright K'.

The dropping-slide is formed in three parts, L L¹ L², the main part L having cast with it a central enlargement on its sides, forming semicircular flanges l¹ l², and it is also cut away in its center, leaving an annular opening crossed by two ribs or rails, l³, which abut against the opposite sides of the bottom of the hopper, the space thus cut from the center and the flanges l¹ l² forming upon its under side an inverted circular cup or dish, into which the disk L¹ is placed, and which is held up against the ribs l³ by means of a brace or bar, L², having pins or spurs l⁴ formed upon its face, which fit into perforations formed in the under side of the disk L¹. This brace or bar is secured to the part L by means of bolts M passing through the flanges l² and through said plate. The disk is provided around its outer face with semicircular openings of different sizes, the ones opposite each other being of the same size, so that when the plate is in position two holes of the same size shall be open for the passage of the seed.

To increase or diminish the quantity of seed deposited in each row the bar L² is loosened by removing the nuts on the bolt M and turning the disk L¹ around until the required openings are brought between the two rails or bars l³ l³, when the bar L² is replaced and the bolts secured in position.

N is a swinging valve, pivoted about midway of its length in the seed-tube, and dividing the same into two compartments. The upper end of this valve at one side has an arm, n, projecting from it, and bent out so as to fit into a notch formed in the flange l² of the seed-slide L, so that as the slide L is vibrated by the lever K back and forth the valve is vibrated upon its pivot n¹. The lower end of the valve is curved out in both directions, forming lips n², which, when the valve is thrown to one side the lip, close one of the compartments in the tube. As the seed-slide is vibrated back and forth the openings in the slide are brought alternately over one or the other of the compartments in the seed-tube, and as seed is allowed to escape from the box into one of the compartments the valve is vibrated, and allows the corn to escape which was deposited in the other compartment, and also, by this movement, closes the bottom of the compartment into which the last seed was dropped.

By this arrangement it will be seen that the flow of seed is not only regulated at the hopper, but also at the bottom of the tube.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a machine for planting corn, having two diverging covering-wheels, C, the combination of the lever D, transverse rock-shaft D', crank d, link d', flange e, having adjusting-holes, and opening-runner E, constructed and operating as and for the purposes substantially as described.

2. The disk L, provided with the different-sized openings, arranged in pairs diametrically opposite each other, and made adjustable in the reciprocating seed-slide, substantially in the manner and for the purpose described.

3. The marker G G', hinged as described, in combination with the cord and handles arranged as described, whereby the driver can control said marker in his seat on the machine, as set forth.

This specification signed and witnessed this 18th day of July, 1873.

SOLOMON T. HOLLY.

Witnesses:

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