L. F. KING & H. M. FUNK.

CORN-PLANTER.

No. 193,766. Patented July 31, 1877.

Fig. 1.

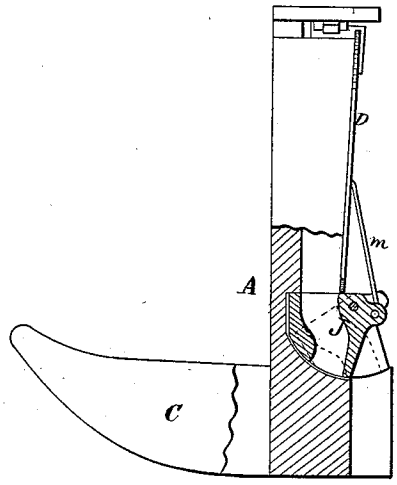


Fig. 2.

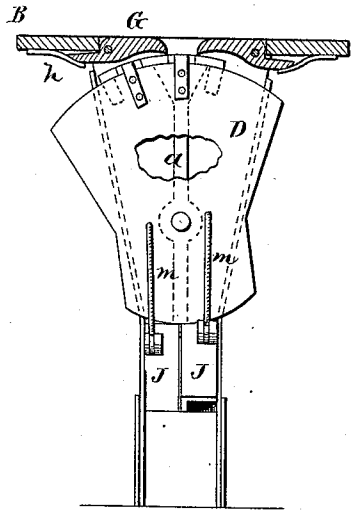


Fig. 4.

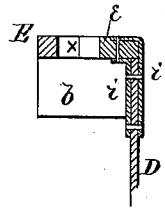


Fig. 3.

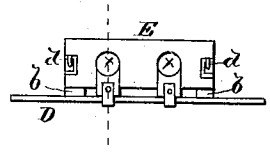
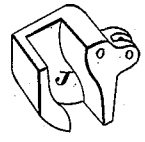


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

LURANUS F. KING AND HENRY M. FUNK, OF POLO, ILLINOIS.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **193,766**, dated July 31, 1877; application filed January 15, 1877.

To all whom it may concern:

Be it known that we, LURANUS F. KING and HENRY M. FUNK, of Polo, in the county of Ogle, and in the State of Illinois, have invented certain new and useful Improvements in Corn-Planter, Drop, and Cut-Off; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the construction and arrangement of a drop and cut-off for corn-planters, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view, partly in section, of our invention. Fig. 2 is a rear elevation of the same. Figs. 3, 4, and 5 are detailed views of parts thereof.

A represents the conductor attached to the under side of the bottom B of the hopper. This conductor is solid at its lower end, and provided with the furrow-opener C, having its sides extending a suitable distance in rear of the solid lower end of the conductor. The upper portion of the conductor is, of course, hollow, and is made of triangular form, increasing gradually in width upward, and is provided with an interior central partition, *a*, running vertically through the conductor. To this partition is pivoted a plate, D, which forms the back of the conductor. To this plate D are attached two lugs, *b b*, on the inner side, at the upper edge, a suitable distance apart, and to these lugs is fastened the cut-off E by means of turn bolts or buttons *d d*, entering slots in the ends of the cut-off.

The cut-off E is formed with two dropping-holes, *x x*, extending through the rear edge of the cut-off, and part of these holes are filled with pieces, *e e*, connected to the plate D by metal strips *i i*. By adjusting the cut-off E on the lugs *b b* the said holes *x x* may be enlarged or diminished, as required, to drop more or less corn. Above this cut-off are two cut-offs, G G, pivoted in a slot in the hopper-bottom B, and each actuated by means of a spring, *h*, secured to the under side of said bottom.

The plate D is, by two rods, *m m*, connected with two drops, J J, constructed as shown in Fig. 5. These drops are pivoted, one in each channel of the conductor at the lower end thereof, and they operate alternately, opening and closing said channels.

In the operation of this corn-dropper the motion of the corn is backward, thereby counteracting the forward motion of the machine, allowing an accurate deposit of the grain in the check-row, and enabling the operator to see just where he is dropping the corn.

The plate D is rocked upon its pivot by any suitable mechanism, either by hand or by connection with the driving-wheels of the planter. As this plate rocks the cut-off E is brought to the left, depositing the grain in the left passage of the conductor. The drop J at the lower end of this passage being closed, the grain is stopped thereby at that point until the reverse motion of the rocking plate D, when the cut-off E deposits grain in the right passage of the conductor. This motion opens the left drop J, allowing the grain held thereby to fall into the furrow, while the grain that falls into the right passage is stopped by the right drop, and so on, alternately supplying the necessary amount of grain to one passage of the conductor, while at the same time the grain in the other passage is dropped backward into the furrow.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the rocking plate D with lugs *b b*, the adjustable cut-off E, with slots or holes *x x*, and the stationary filling-pieces *e e*, attached to the plate by the metal strips *i i*, substantially as and for the purposes herein set forth.

2. The cut-offs G G, with springs *h h* arranged in the hopper-bottom B, in combination with the rocking cut-off E, substantially as and for the purposes herein set forth.

3. The combination of the rocking plate D, rods *m m*, and pivoted drops J J, substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands.

LURANUS F. KING.
HENRY M. FUNK.

Witnesses:
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