

J. NITKEY.  
Corn-Planters.

No. 137,563.

Patented April 8, 1873.

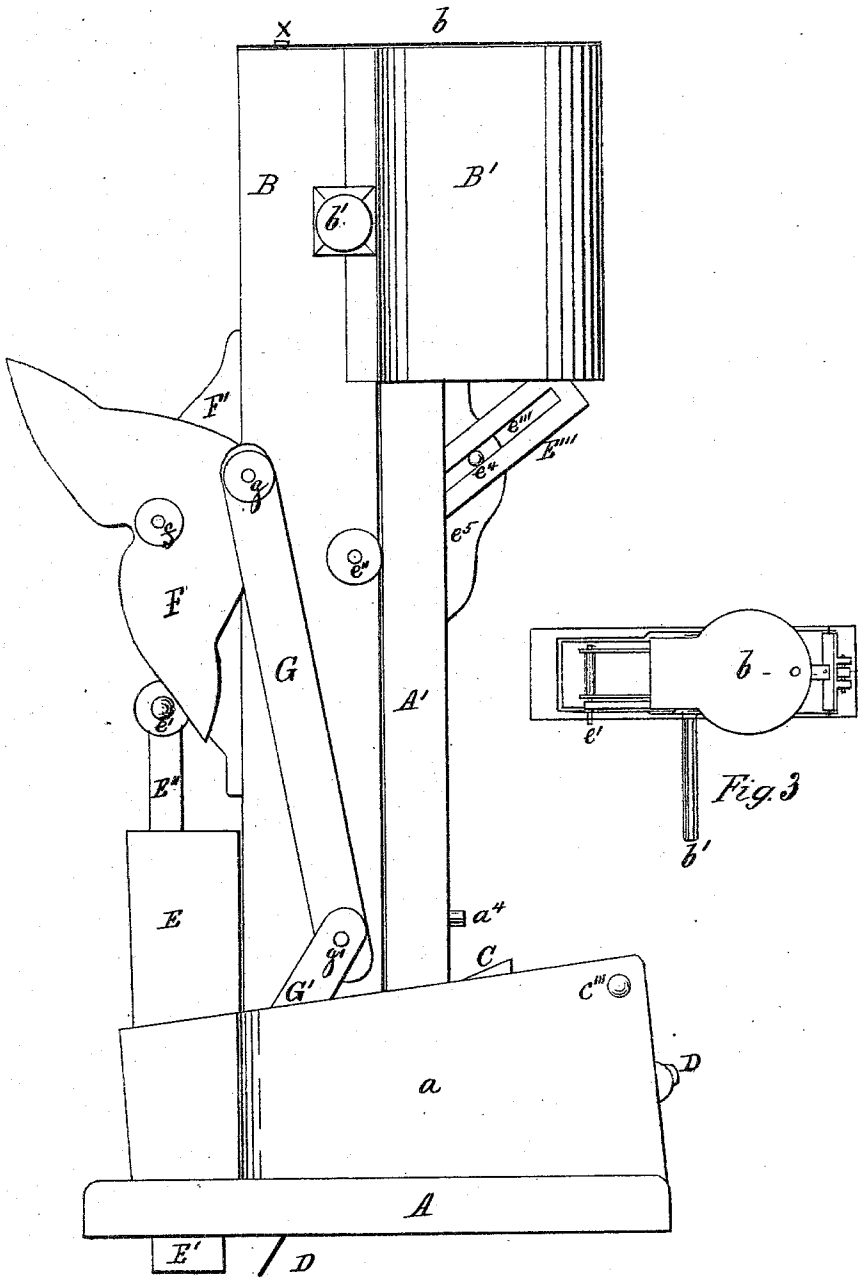


Fig. 1

Fig. 3

Witnesses.  
*J. A. Lowndes*  
*Thos. J. J. J. J.*

Inventor  
*John Nitkey*  
By *A. Cranford*  
att'y.

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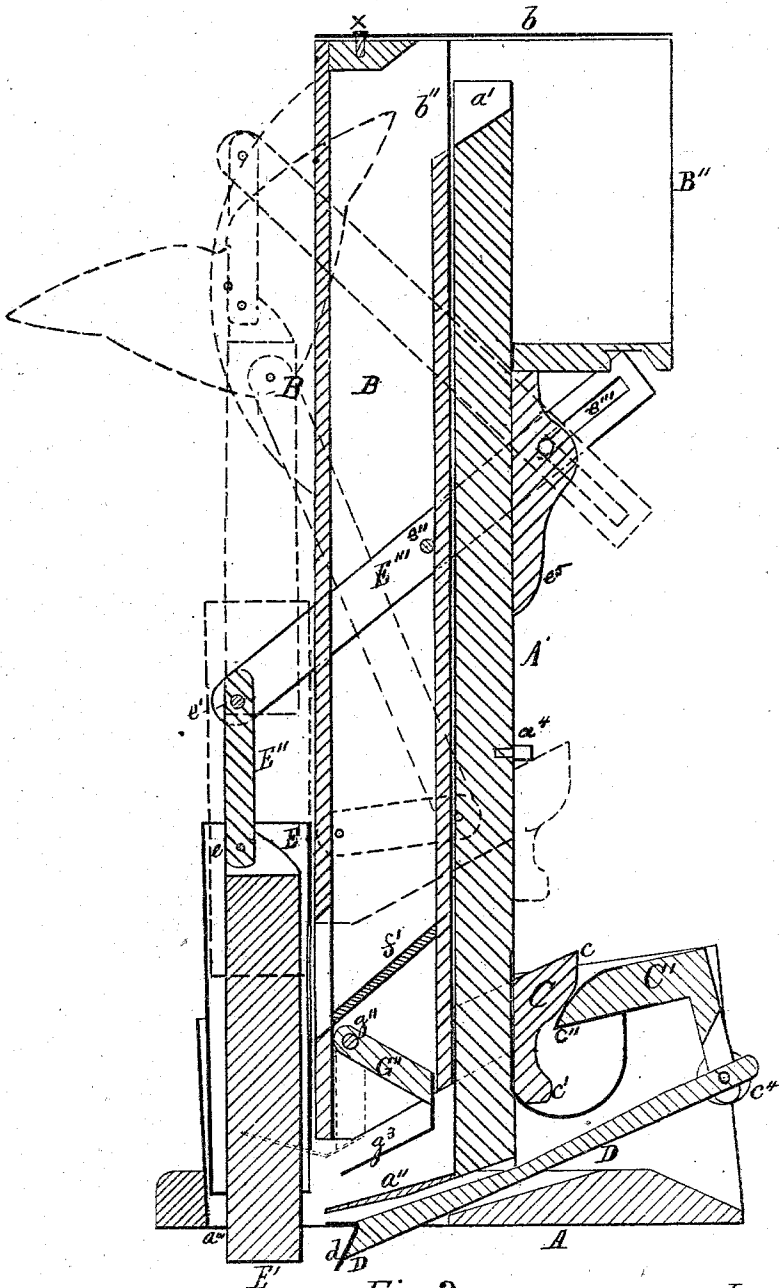


Fig. 2

Witnesses.

*J. H. Loomis*  
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# UNITED STATES PATENT OFFICE.

JOHN NITKEY, OF MINNEAPOLIS, MINNESOTA.

## IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 137,563, dated April 8, 1873; application filed September 16, 1872.

*To all whom it may concern:*

Be it known that I, JOHN NITKEY, of Minneapolis, in the county of Hennepin, in the State of Minnesota, have invented certain Improvements in Corn-Planters, of which the following is a specification:

The invention consists in the construction and arrangement of the parts that compose the planter, as will be more fully hereinafter described.

In the drawing, Figure 1 is an upright side view of the planter; Fig. 2, an upright sectional view; and Fig. 3, a top view.

A represents the base or bottom of the planter, with the fixed upright A' thereon, and having the sides *a* fast thereto, and aperture *a'''* through the base for some of the operating parts to pass through and do their work. *a'* is a cup at the top of the standard A', and surrounding three sides of the top of the standard, with an opening at the side next the sliding part of the machine. The top of standard A' is inclined, which forms the bottom of the cup, so that when the cup is filled with the proper number of kernels and the moving or sliding part is raised the corn will freely slide out of the cup into the open shaft of such sliding part. *a''* is an inclined bottom underneath the upright opening and fast on the standard A', and extends far enough from the standard to cover or nearly cover the opening in the sliding part. *a'''* is an opening in the bottom or base of the planter to admit the corn to pass out, and to admit some of the operating parts of the planter to protrude and do their work. *a<sup>4</sup>* is a stop on the side of standard A', to stop the sliding part at the proper place and prevent it from rising too high. B is a hollow sliding shaft, having the longitudinal opening B' therein. B'' is the hopper for receiving the supply of corn, and is firmly attached to sliding shaft B and around the standard A', so that the hopper and shaft can freely slide upon the standard and not be detached from each other. C is a projecting bracket of peculiar shape, firmly attached to the lower part of the sliding shaft B, and forms a part of the slide that surrounds the standard A', and also stops the slide in its upward reciprocation by striking against stop *a<sup>4</sup>*, and has projecting parts *c* and *c'*. C' is a right-angled

arm or lever pivoted at *c'''* to the sides *a* of base A, and at *c<sup>4</sup>* to an inclined reciprocating coverer, D, that projects at an angle through the aperture in the bottom of the planter. The projecting point of coverer D is armed with an angular piece of metal, *d*, to prevent wear on the wood by its action upon the earth in moving a sufficient quantity to cover the corn. E is an upright hopper fast to the sliding hollow shaft B, and reciprocates with it, and has on the side next the shaft B an aperture that corresponds with an aperture in the side of the hollow shaft B, and is open at both ends. E' is a pusher or ram reciprocating within the hopper E. E'' is a link or lever pivoted at its lower end to the pusher E', and to the upper end to a slotted, sliding, and pivoted arm by the projecting pin *e'*. E''' is a pivoted and slotted arm attached to link E'' at its lower end, pivoted to the sliding hollow shaft B at *e''*, and the slots *e'''* working on guide-pin *e<sup>4</sup>* that projects on either side of bracket *e<sup>5</sup>* that is fast on standard A'. F is a fly-cam or carrier pivoted at *f* to bracket F' that is fast on sliding shaft B. *f'* is a chute near the bottom end of the hollow shaft B, and gives direction to the corn at the proper time. G is a connecting-rod pivoted at its upper end to the fly-cam F at *g*, and at its lower end to link or arm G' at *g'*. The arm G' is fast on rock-shaft *g''* on the outside of the sliding shaft, and arm G'' is fast on the same rock-shaft upon the inside of the sliding shaft B, and at the lower end of arm G'' is a bent metal plate, *g<sup>3</sup>*.

### *Operation.*

The hopper B' being filled with corn up to the lower edge of the delivery-opening, the operator takes hold of the handle *b'* and raises the hopper, and with it the sliding hollow shaft B and hopper E, and in doing so the hopper B' and the corn within it is raised above the cup *a'*, which is of the size to hold the proper number of kernels to be dropped, and the several parts of the machine are now in the position as seen in dotted lines in Fig. 2, when the operator bears down the handle, when the parts assume the position shown in full line in Figs. 1 and 2, and the corn has fallen out of the cup *a'* through discharge-aperture *b''* at the upper end of the sliding

shaft B and upon chute  $f'$ , where it is held by the pusher  $E'$  until the sliding shaft B is again raised, and with it the pusher  $E'$ , so that its lower end will come above the opening in hopper E just above the lower end of chute  $f'$ , when the corn falls into hopper E, and is held from dropping out by the metal plate  $g^3$  until the downward movement of the hollow shaft B and pusher  $E'$ , when the metal plate  $g^3$  will be forced back, the corn drop out, followed by the pusher, which forces the kernels into the ground, when the reciprocating coverer D is brought into action by the cam-block C striking in its downward reciprocation against the arm  $C'$ , which serves to reciprocate it outward, and point  $c$  of block will hold it in position. When the cam-block is again raised the projection  $c'$  will take hold of the under side of arm  $C'$  at  $c''$  and raise it, which will reciprocate the coverer in the reverse direction, and the operation is completed by its covering the corn with the earth that it moves as the pusher is raised.

The hopper  $B'$  may be covered by the cover  $b$  and pivoted at  $x$ .

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

1. The combination of the sliding hollow shaft B having chute  $f'$ , pivoted slotted arm  $E'''$ , projecting pin  $e'$ , fly-cam F, connecting-rod G, link  $E''$ , sliding hopper E, and reciprocating pusher  $E'$  with the arm  $G''$  and metal plate  $g^3$ , constructed to operate substantially in the manner and for the purpose described.

2. The combination of the sliding hollow shaft B, cam-block C having projecting points  $c$  and  $c'$ , and arm  $C'$  with projecting points  $c''$ , and pivoted at  $c'''$ , with the coverer D, constructed and operating substantially in the manner described.

3. The three-sided cup  $a'$  with inclined bottom, in combination with a reciprocating hopper and hollow shaft, substantially in the manner described.

JOHN NITKEY.

Witnesses:

CHAS. H. WOODS,  
GEO. W. CHOWEN.