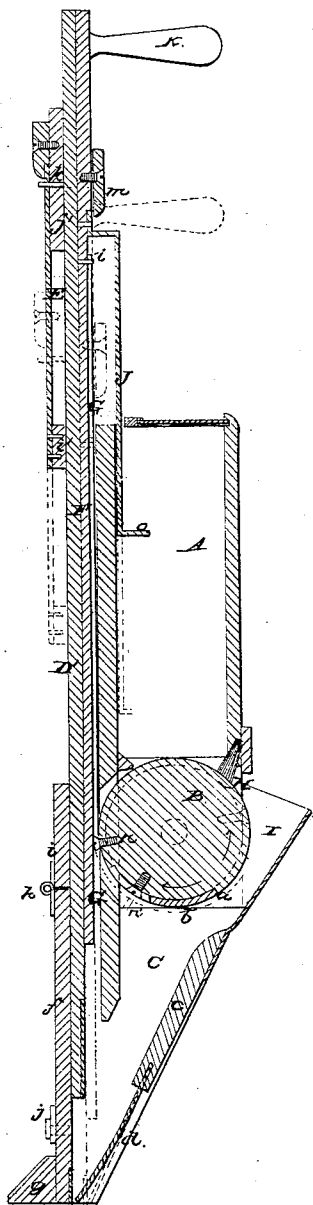


Hand-Seeder.

Patented Oct 13, 1863.

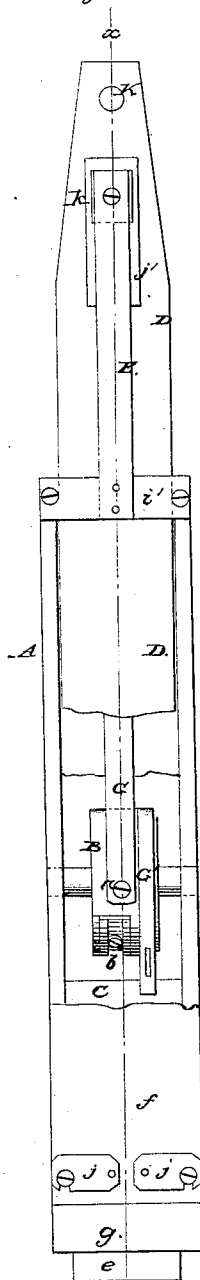
Fig. 1.



Witnesses.

J. W. Coombs
Geo. W. Reed

Fig. 2.



Inventor,

H. F. Butcher
per Minus & Co
attorneys

UNITED STATES PATENT OFFICE.

H. F. BATCHELLER, OF STERLING, ILLINOIS.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 40,233, dated October 13, 1863.

To all whom it may concern:

Be it known that I, H. F. BATCHELLER, of Sterling, in the county of Whiteside and State of Illinois, have invented a new and Improved Hand Corn-Planter; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a side elevation of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to a new and improved device for planting corn by hand, such as are commonly termed "hand-planters."

The invention consists in an improvement on a hand corn-planter for which Letters Patent were granted to me bearing date March 9, 1858.

The invention refers to a strip and rod arranged or applied in the manner and for the purposes hereinafter set forth.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a quadrilateral box, which forms the hopper or seed-box of the device; and B is a roller, which is fitted in the lower part of the box A, and has a recess or seed-cell, *a*, made in its periphery, the capacity of which may be regulated by a slide, *b*.

Below the roller B there is a chamber, C, one side, *c*, of which is inclined, and has an elastic metal plate, *d*, attached to its lower end, which bears against a rigid pendent plate, *e*, attached to the lower end of the vertical and opposite side, *f*, of the chamber C. To the lower end of the side *f* there is secured a lateral plate, *g*, which serves as a age. The side *f* of the chamber C is attached at its upper end by hinges *h* to a cross-bar, *i*, on the box A, and the lower part of said side is secured in position or in a closed state by means of catches *j*.

D represents a plunger, which works between the cross-bar *i* and a cross-bar, *i'*, at the upper part of the box A and within the side *f* of the chamber C. The downward movement of this plunger is determined by a stop, *j'*, on the plunger, and its upward movement is deter-

mined by a leather strap, E, one end of which is attached to the plunger at *k* and the opposite end to the cross-bar *i'*.

The above-described parts are substantially the same as those described in the specification of my patented device previously referred to.

To the inner side of the plunger D there is attached a thin strip, F, by means of a pin, *l*, which is attached to the plunger, and is fitted in a hole in the strip F, the strip F being secured on the pin by a button, *m*. To this strip F, near its upper end, a strap, G, of leather or other suitable material, is attached, and the lower end of this strap is attached to the roller B, as shown at *n*. Another strap, G, is attached to the lower part of strip F and to the roller B at *n'*, as shown in red, Fig. 1.

H is a cut-off brush, which bears against the roller B at the lower end of the box A. The roller B, it will be seen, forms the bottom of the box A, and at the lower end of said box and at the upper end of the chamber C there is a hopper, I, which receives the corn from the cell in the roller and conveys it to chamber C.

To the strip F there is attached a rod, J, which extends down within the box A, and is bent horizontally at its lower end, as shown at *o*. To the upper end of the plunger D there is attached, at right angles, a handle, K.

The operation is as follows: The box A is supplied with a requisite quantity of corn, and at the commencement of the operation the plunger D is shoved down and the strap G' rotates the roller B in the direction of the red arrow, causing the seed-cell *a* to be turned up within the box A, and underneath the lower bent end *o* of the rod J, which bent end, in its descent, causes the cell *a* to be filled with corn. The plunger D is then raised, and the roller B rotated in the opposite direction, as indicated by the black arrow, by the strap G, so that the seed contained in the cell *a* will be discharged into the hopper I and conveyed from thence down into the chamber C, where it is retained in consequence of the elastic plate *d* bearing against the rigid plate *e*. The device is then placed vertically over the spot where the corn is to be deposited, and the plunger D again forced down, the roller B being turned as be-

fore, so that the seed-cell *a* will be filled and the lower end of the plunger forcing outward the plate *d*, and pressing the corn previously dropped into chamber *C* into the earth. The plunger *D* is then raised, which causes a succeeding dropping of seed to be discharged into *C*, and the device is placed over the next spot where corn is to be planted and the plunger *D* again forced down. The rod *J* effectually insures the cell *a* being filled with seed or corn at each downward movement of the plunger, and that is an important feature, as otherwise the planting might be very irregular in consequence of many hills being missed or no corn planted in them.

The plunger *D* may be removed at any time by simply detaching the strip *F* from it, which is done by turning the button *m*, and in case of any dirt or obstruction getting into the chamber *C* it may be readily removed by raising the side *f*. The strap *E* serves as a stop to determine the upward movement of the

plunger *D*. It effects this result without any jarring of the device or violent concussions.

I do not claim the seed-distributing roller operated by straps and a plunger-rod, for that has been previously used and arranged substantially the same as herein shown and described, as will be seen by referring to the Letters Patent previously granted to me and herein alluded to; but

I do claim as new and desire to secure by Letters Patent—

1. The strip *F*, attached to the plunger and connected with the roller *B* by the straps *G G'*, substantially as and for the purpose set forth.

2. The rod *J*, attached to the plunger *D*, when used in combination with the roller *B*, as and for the purpose specified.

H. F. BATCHELLER.

Witnesses:

E. G. ALLEN,
D. P. JONES.