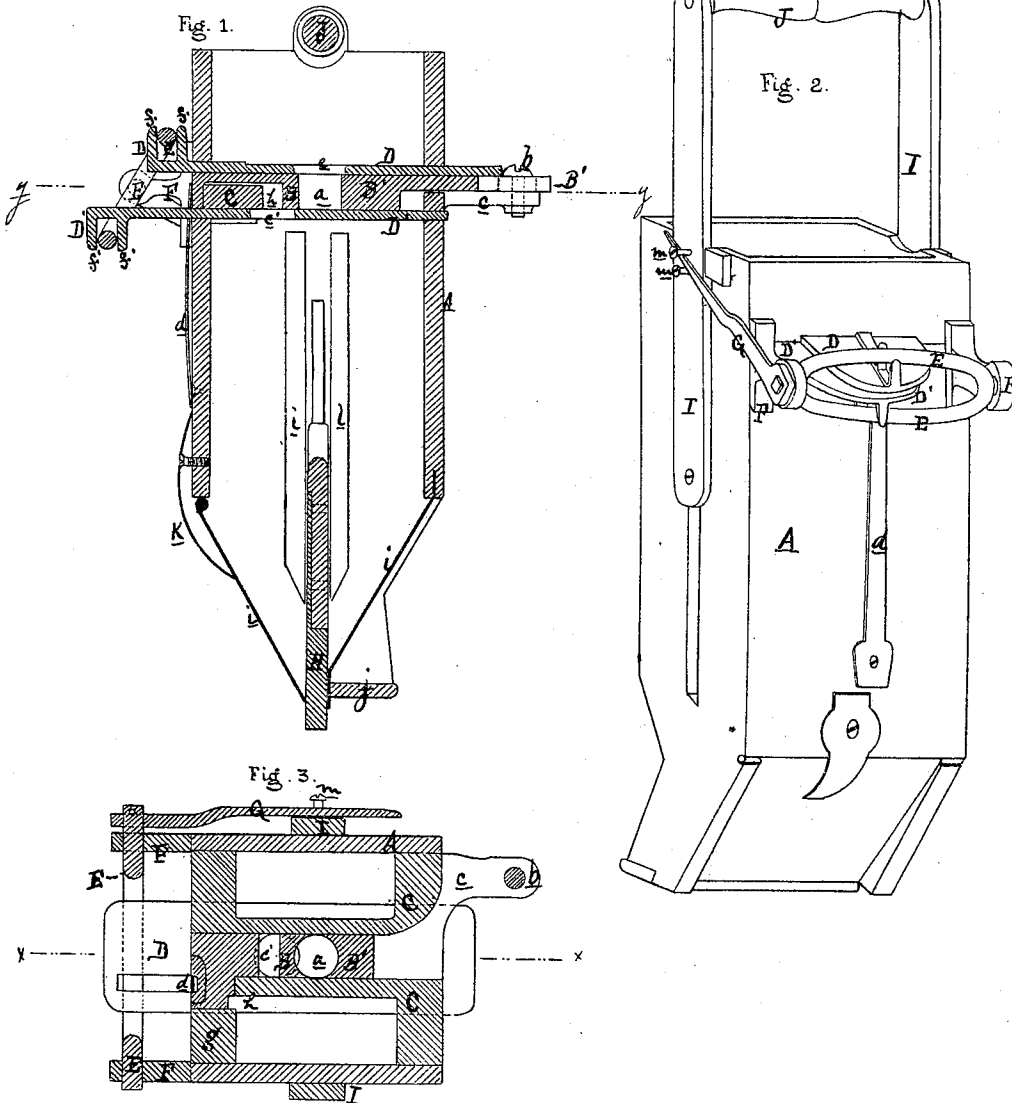


L. RUF.

Improvement in Corn-Planters.

No. 129,595.

Patented July 16, 1872.



Witnesses:  
N. S. Sprague  
H. F. Eberts.

Inventor:  
L. Ruf  
By atty  
Thos Sprague

# UNITED STATES PATENT OFFICE.

LORENZ RUF, OF ROCK FALLS, ILLINOIS.

## IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 129,595, dated July 16, 1872.

*To all whom it may concern:*

Be it known that I, LORENZ RUF, of Rock Falls, in the county of Whitesides and State of Illinois, have invented a new and useful Improvement in Hand Corn-Planters; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a cross-section of my planter on the plane  $xx$  in Fig. 3. Fig. 2 is a perspective view of the same, and Fig. 3 is a horizontal section on  $yy$  in Fig. 1.

Like letters refer to like parts in each figure.

The nature of this invention relates to an improvement in the construction of hand corn-planters, whereby the delivery of the seed will be uniformly gauged, and the action of the planter rendered more certain than heretofore, and without crushing the kernels. The invention consists in the peculiar construction of the transverse throat-plate or diaphragm, the arrangement of the perforated slides therewith, and the mechanism for operating them; also, in the general arrangement of the parts, as more fully hereinafter set forth.

In the drawing, A represents a rectangular wooden case. At the middle part of the machine, or thereabout, is a horizontal throat-plate in two parts, B B', with a circular opening,  $a$ , between them, the latter having a lateral adjustment by means of a set-screw,  $b$ , passing through a slot in a lug,  $c$ , projecting from the side of the case. The part B has a slight longitudinal movement through the side of the case, being kept in its proper position by a leaf-spring,  $d$ , on the outside of the case. The throat-plate is laid in a slot in a stationary diaphragm, C, on which is laid a slide, D, having an aperture,  $e$ , in or about the center thereof. D' is a similar plate or slide, sliding through the walls of the casing below the diaphragm C, and has a similar opening,  $e'$ . At one end of the slide D is a pair of upward-projecting studs,  $f$ , and on the same end of the slide D' is a pair of studs,  $f'$ , which project downward, and with these studs  $f f'$  a double crank in the form of an elliptic link, E, engages a trunnion at each end, being journaled

in the brackets F, which project laterally from the casing. One of its trunnions protrudes from the bracket and has keyed to it a rocker-arm, G, extending partially across one side of the casing, by the vibration of which the slides D D' are reciprocated in opposite directions. As the slide D discloses the opening in the throat-plate the latter fills with seed contained in the upper part of the casing, and a further movement of the rocker-arm causes the opening in the throat-plate to be covered by the slide D when said opening is disclosed from the bottom by the slide D', whose opening is brought coincident therewith, and thus allows the measure of seed contained in the throat-plate to fall into the lower part of the casing. In the return stroke of the lower slide D' a projection,  $g$ , thereon strikes the end of the recess  $h$  in the part B of the throat-plate just before the completion of the stroke, and draws it slightly away from the other part, to free the opening  $a$  between them from any kernels of corn which may have lodged or wedged therein, and which will fall on the return movement of the slide D'. The bottom of the planting-case resembles a wedge-shaped hopper, having one stationary sheet-metal side,  $i$ , whose lower edge is bent down behind a girt,  $j$ , at the bottom end of the casing-sides, while the other side  $i'$  is hinged to the casing at its upper edge, and is pressed against the other side at the lower edge by a spring,  $k$ , Figs. 1 and 2. Within the lower part of the case a metallic plunger, H, slides between guides  $l$  at the sides, between which a slot is cut in each, through which the side bars I I are connected therewith, their upper ends being connected by a handle, J, as shown. On one of the side bars are two studs,  $m$ , between which the rocker-arm is inserted, so that as the slides are moved up and down the slides will be reciprocated.

As the machine is lifted up the plunger is drawn up into the lower part and the measure of seed drops to the bottom of the hopper. As the operator drops it to the ground the point of the hopper enters a little way, when a push down upon the handle forces the plunger down, pushing away the movable side  $i'$ , carrying the corn before it, which is not liable to

be bruised if caught between the hopper and plunger, as the spring *k* relieves it of undue pressure.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The perforated throat-plate B B', diaphragm C, slides D D' provided with the studs *f f'*, double crank E, brackets F, and lever G, all constructed and arranged with relation to the casing A, and operated by the slide bars I,

substantially as described, for the purposes specified.

2. The adjustable self-clearing throat-plate B B' and spring *d*, substantially as shown and set forth.

LORENZ RUF.

In presence of—

E. H. WILDASIN,  
THOS. BUTTRY.