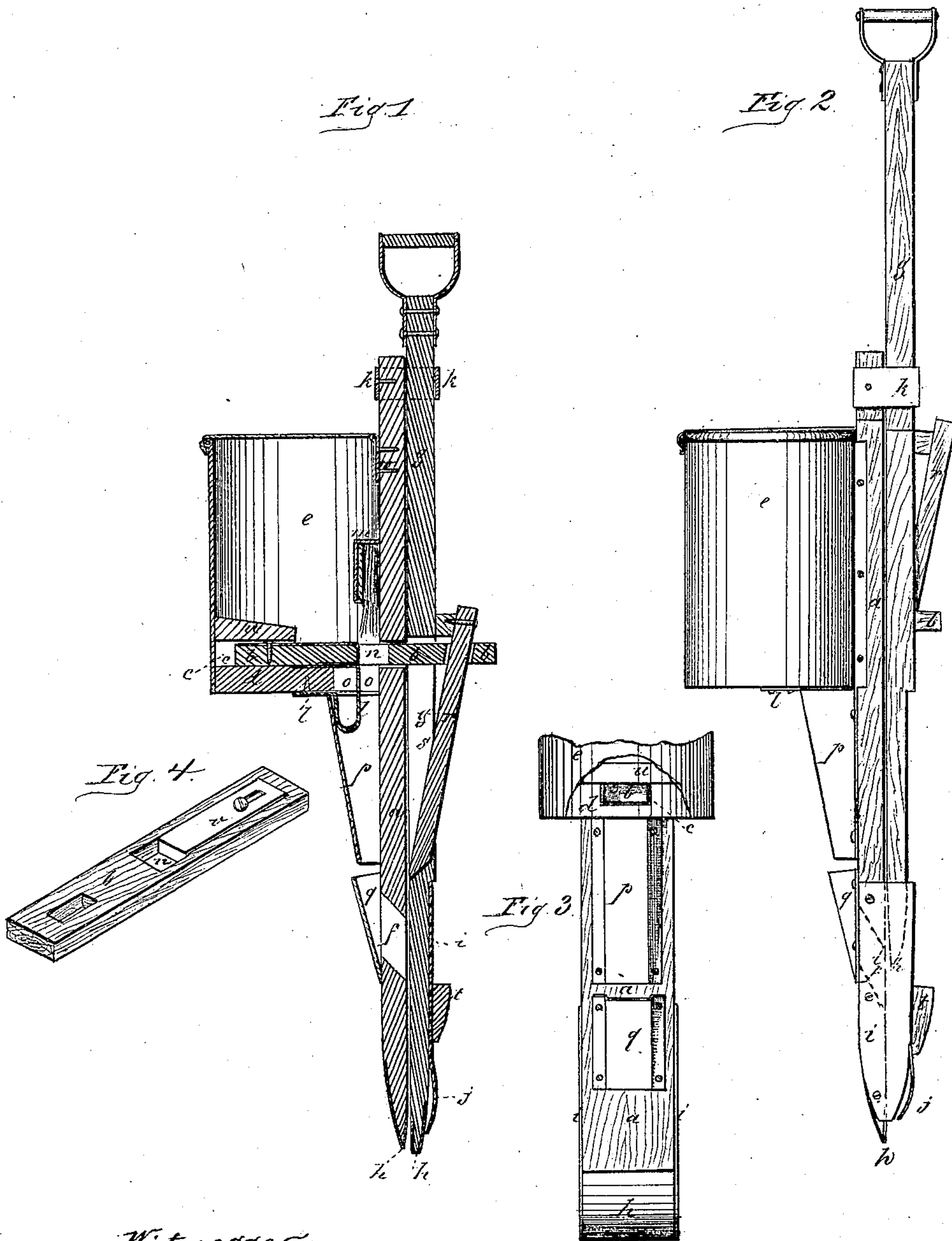


W. D. STROUD.

Corn Planter.

No. 102,611.

Patented May 3, 1870.



Witnesses.

Hugh H. Stockman
Harry Walker

W. D. Stroud, Inventor.

by Theodore Mungen.
His Attorney.

United States Patent Office.

WILLIAM D. STROUD, OF OSHKOSH, WISCONSIN

Letters Patent No. 102,611, dated May 3, 1870.

IMPROVEMENT IN HAND CORN-PLANTERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, WILLIAM D. STROUD, of the city of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Hand Corn-Planters, of which the following is a full and complete specification.

Nature and Object of the Invention.

My invention relates to the construction and arrangement of the parts of a hand corn-planter in such a manner that a sliding valve is worked between a stationary brush and an opening in the bottom of a receiver by an inclined rail or guide-bar which passes through a mortise in the valve, and is fastened to a perpendicular sliding bar, the object of the invention being to drop and cover corn in the ground in hills by one operation.

Description of the Drawings.

Figure 1 is a vertical section of the corn-planter, showing the internal construction.

Figure 2 is a side view of the planter.

Figure 3 is a view of a section of the planter, showing the end of the sliding valve and valve-seat, and the width of the upright.

Figure 4 is a perspective view of the sliding-valve.

General Description.

The upright *a* is provided with a mortise, through which the sliding valve *b* passes into the valve-seat *c* in the bottom *d* of the receiver *e*.

The upright *a* also has the opening, *f*.

The points of the upright *a* and perpendicular sliding-bar *g* are protected by metal tips *h*.

A metal sheath, *i*, having a spring, *j*, is fastened to the edges of the upright *a*, and extends from its point to a short distance above the opening *f*, incasing the point of the perpendicular bar *g*.

A metal clasp or collar, *k*, is fastened at the top of the upright *a* and incloses the perpendicular bar *g*.

A spring, *l*, is fastened to the outside of the bottom *d* of the receiver *e*, and works in the opening *o* and valve-seat *c*.

A brush, *m*, is set or wedged into a metal case, which is fastened to the upright *a* within the receiver *e*, so as to be directly above the opening *n* when the valve *b* is open; the brush *m* prevents the corn in the receiver *e* from running through the opening *n* when the valve *b* is open.

The bottom *d* of the receiver *e* is provided with the opening *o*, through which the spring *l* passes up into the valve-seat *c*, and through which the corn passes into the conductor *p* and receptacle *q*, thence through the opening *f* and sheath *i* into the ground.

The guide-bar or rail *r* passes through a mortise in

the end of the sliding valve *b*; its beveled end enters the beveled bottom of the slot *s* in the perpendicular sliding-bar *g*, and its upper end is screwed to a block which is fastened to the bar *g*. A shoulder or block is fastened to the sheath *i*.

A sweep or plate *u* is placed upon the bottom *d* of the receiver *e* to cover the valve-seat *c* when the valve *b* is open, and to cause the corn to slide into the opening *n* when the receiver *e* is nearly empty.

The sliding valve has the adjustable plate *v* for gauging the size of the opening *n*, thus regulating the quantity of corn to be deposited in each hill.

The body of the receiver *e* is fastened to the edges of the upright *a*; the hinge of the lid of the receiver is fastened to the side of the upright *a* within the receiver *e* at *w*; the fastenings at the bottom *d* of the receiver *e* are run through the upright *a* into the bottom *d*; the receiver *e* is circular in form; the upright *a* cuts off a segment the width of itself.

Operation of the Invention.

The perpendicular bar *g* works in the collar *k* and sheath *i*; when it is extended as in fig. 2, a shoulder on it, just above the top of the guide-bar or rail *r*, comes in contact with the collar *k*, and its point comes just above the opening *f*.

When the bar *g* is depressed, that portion of the guide-bar or rail *r* directly under the block to which it is screwed, is opposite the valve-seat *c*, and the valve *b* is drawn out the distance measured from the outside of the guide-bar *r* to the outside of the bar *g* at the point then opposite the valve-seat *c*.

When the bar *g* is extended, the beveled end of the guide-bar *r* is opposite the valve-seat *c*, and the valve *b* is pushed back the same distance it was drawn out by the depression of the bar *g*. Depressing the bar *g* opens the valve *b*. Extending the bar *g* closes the valve *b*.

When the valve *b* is closed, a cup is formed by the opening *n* and the valve-seat *c*; this cup fills the corn in the receiver *e*.

The bar *g* is depressed by thrusting the point of the planter into the ground. As the point enters the ground, the spring *j* closes the opening in the point of the planter; when the point of the bar *g* comes down, it forces the spring *j* back and opens the point of the planter; the valve *b* is opened at the same time by the depression of the bar *g*, and the corn drops through the opening *o* and conductor *p* into the receptacle *q*. When the bar *g* is raised just above the opening *f*, the corn drops from the receptacle *q* through the opening *f* and into the ground; the valve *b* closes, and when the planter is withdrawn the ground falls over and covers the corn.

The brush *m* is constructed so stiff as to resist the

pressure of the corn in the receiver *e* and prevent it from running out when the valve *b* is open, and it throws the corn from the opening *n* instantly.

When the valve *b* is being closed, if a grain or two of corn should catch between the edge of the opening *n* and the angle of the spring *l*, the spring will give and cause the corn to fall to the ground.

By loosening the screw that holds the plate *v* to the valve *b*, the plate *v* can be adjusted so as to gauge the size of the opening *n*, thus regulating the quantity of corn to be received in the opening *n* and deposited in each hill.

The shoulder *t* fastened to the sheath *i* prevents the planter from entering the ground and planting the corn too deeply.

The sweep *u* covers over one-half of the bottom *d* of the receiver *e*, and inclines from the center of its inner edge toward the outside, causing the corn to slide into the opening *n*.

By removing the screw at the top of the guide-bar

r and raising the guide-bar up until it is clear of the mortise in the valve *b*, the valve can be taken out of the valve-seat *c*, and the opening *n* gauged at pleasure.

Claim.

I claim as my invention—

The combination of the receiver *e*, sliding-valve *b*, spring *l*, brush *m*, guide-bar *r*, upright *a*, and perpendicular bar *g*, arranged relatively one to the other substantially as described, for the purpose hereinbefore specified.

In testimony that I claim the foregoing railroad corn-planter, as above described, I have hereunto set my hand and seal this 11th day of February, 1870.

WILLIAM D. STROUD. [L. s.]

Witnesses:

CHR. SARUN, Jr.,

A. J. MAINE,

J. H. HICKS.