

(No Model.)

J. L. WILLIAMS.
SEED DROPPER.

No. 268,338.

Patented Nov. 28, 1882.

Fig. 2.

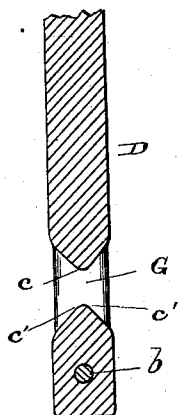
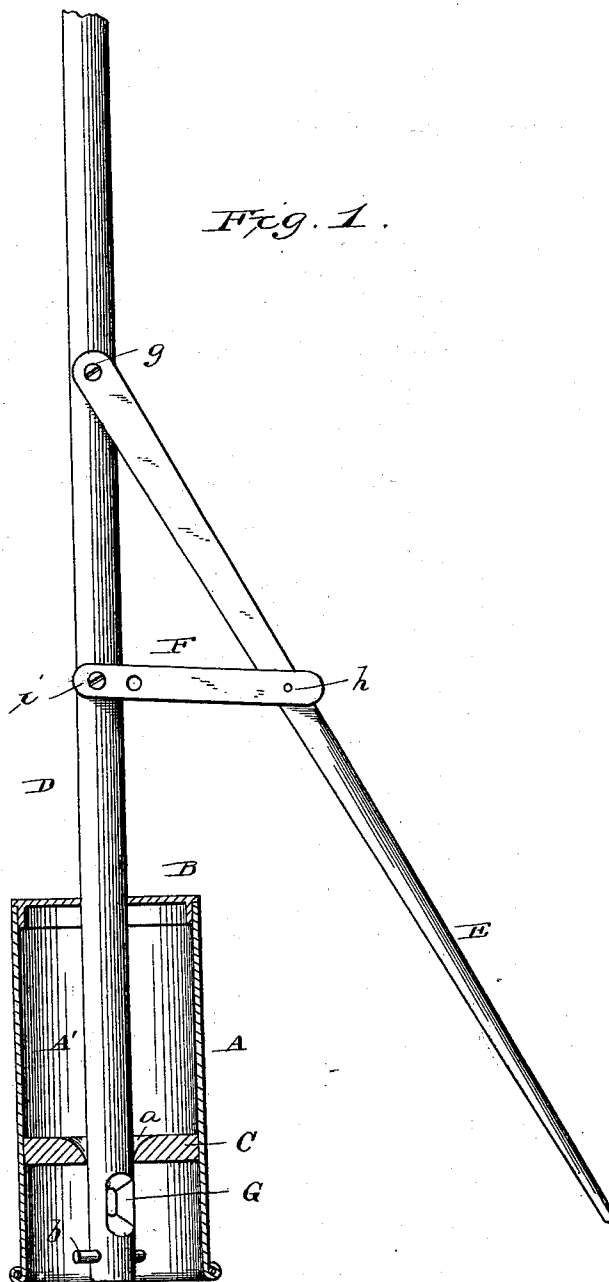


Fig. 1.



Witnesses.
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UNITED STATES PATENT OFFICE.

JAMES L. WILLIAMS, OF MAYFIELD, MISSISSIPPI.

SEED-DROPPER.

SPECIFICATION forming part of Letters Patent No. 268,338, dated November 28, 1882.

Application filed July 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. WILLIAMS, of Mayfield, in the county of Montgomery, and in the State of Mississippi, have invented certain new and useful improvements in Seed-Droppers; and I 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.

This invention relates to means for dropping seed at regular distances apart; and the nature of my invention consists in the combination, with a hand-dropper, of a check-row arm, as will be fully understood from the following description, when taken in connection with the annexed drawings, in which—

Figure 1 is an elevation or side view of the hand-dropper and a section through the cylindrical hopper. Fig. 2 is a diametrical section through the lower end of the discharging-rod.

Similar letters of reference indicate corresponding parts in both figures.

The letter A designates a cylinder, which is provided with a removable cap, B, and also with a diaphragm, C, located near the lower end of the said cylinder. The cylinder has a receptacle, A', for containing seed, which is the hopper.

The diaphragm C has a concavity, *a*, on its upper side, which affords an annular space for the passage of a hand plunger-rod, D, on the upper end of which should be a hand-hold of suitable construction.

The plunger-rod D has an opening, G, through it near its lower end, which opening is peculiarly constructed, as will be presently described. Below the said opening is a check-pin, *b*, which prevents the rod D from passing through the opening *a*. The transverse opening G is formed with a double-beveled roof, *c*, and a double-beveled floor, *c'*, thus forming a double cut-off, which, in combination with the concavity of the diaphragm, will take a charge of seed from the hopper A' and deliver it below the diaphragm. The rod D is thus made to serve a twofold purpose—to wit, it is a discharger and it is also a dibbler. The check-

pin *b* also serves to loosen the earth as the dibbler end of the rod D is retracted.

E designates a check-row rod, which is set at an angle to the rod D, and operates as the rod is depressed to mark the spot where the seed are to be next deposited, and so on throughout the operation of dropping the seed. This rod is designed to mark the spot where the charge of seed is deposited in the ground, and it is pivoted to said rod D at *g*. The brace F is pivoted at *h* to the check-row rod or marker E, and by means of a screw, *i*, or its equivalent, the brace is rigidly secured to the plunger-rod D. By making several holes through the brace F, adapted to receive the screw *i*, the marker can be adjusted and fixed at different angles.

It will be seen that I combine with a portable seed-distributer an adjustable marker; also, that I combine with a hand rod or plunger means by which the seed can be discharged from the hopper A' through a diaphragm and deposited into the earth, which is loosened and rendered mellow.

Having described my invention, I claim—

1. The combination of the cylinder A, the removable cap B, the diaphragm C, the conical depression *a* therein, the plunger-rod D, the double flaring transverse cell G, and the check-pin *b*, all constructed to operate substantially in the manner and for the purposes described.

2. In combination with a hand-planter constructed substantially as described, the marker E, pivoted to the rod D, and the bar F, provided with apertures and adapted to adjust the rod E at the desired angle, substantially as specified.

3. The combination of the hopper-box A', the rod D, the seed-distributing cell G through this rod, the marker E, and means for adjusting the same, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 27th day of June, 1882.

JAMES LEMUEL WILLIAMS.

Witnesses:

NATHAN PITTMAN,
WILLIAM CURTIS.