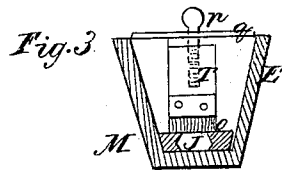
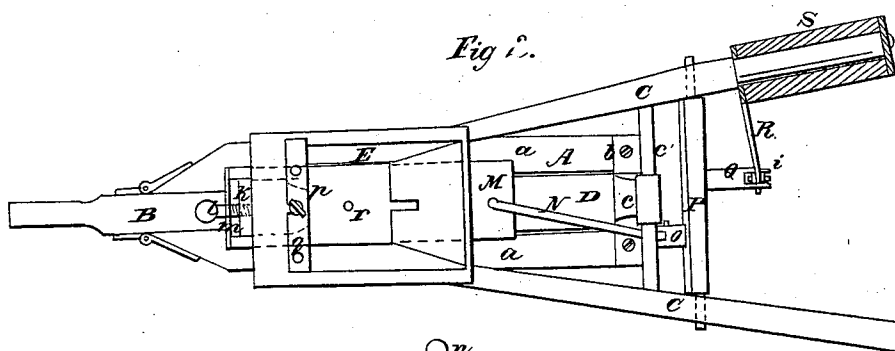
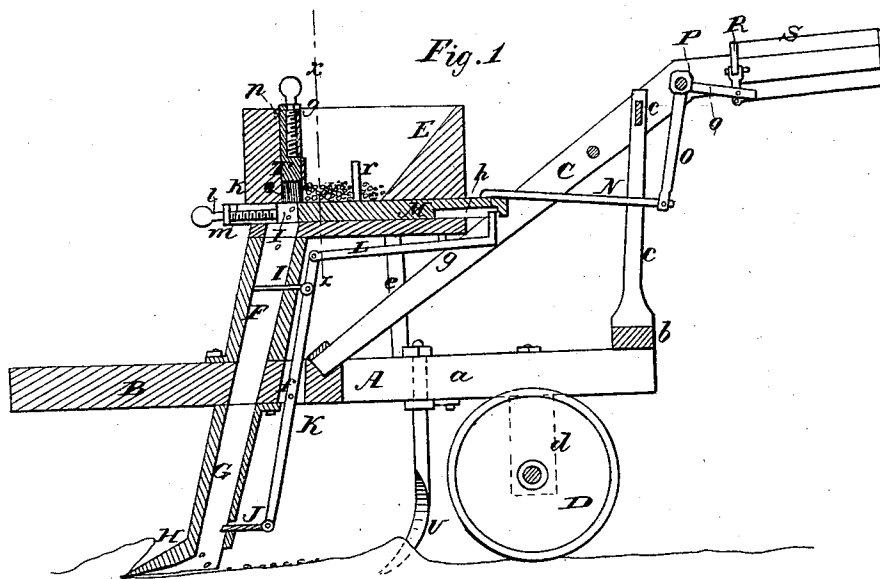


S. F. JONES.

Seed-Planter.

No. 20,643

Patented June 22. 1858



UNITED STATES PATENT OFFICE.

SAML. F. JONES, OF ST. PAUL, INDIANA.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. 20,643, dated June 22, 1858.

To all whom it may concern:

Be it known that I, SAML. F. JONES, of St. Paul, in the county of Decatur and State of Indiana, have invented a new and Improved Seeding-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side central section of a seeding-machine constructed according to my invention. Fig. 2 is a plan or top view of the same. Fig. 3 is a transverse vertical section of the seed-box, taken in the line *x x*, Fig. 1.

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

This invention consists in a novel arrangement of the parts composing the seed-distributing device, as hereinafter fully shown and described, whereby the operator has full and perfect control over the same without regard to the draft movement of the machine, and whereby the seed may be deposited at precise spots desired by the operator.

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

A represents a horizontal frame, which is composed of two parallel bars, *a a*, between the front ends of which the tongue B is secured. The back ends of the bars *a a* are connected by a traverse-bar, *b*, to the center of which an upright, *c*, is attached, said upright serving as a brace to the handles C C, which are of the usual form employed for plows, cultivators, and like implements, the upper end of the upright being attached to a cross-bar, *c'*, of the handles. To the back part of the frame A two pendants, *d*, are attached, and a wheel, D, is fitted between these pendants, said wheel supporting the back part of the frame.

E is a seed-box, which is secured at a proper distance above the frame A. The back part of the seed-box is supported by uprights *e*, and the front end is supported by a tube, F, the lower end of which communicates with a tube, G, which is attached to the under side of the frame A, said tube being slightly inclined and having a furrow-share, H, formed on its lower end. (See Fig. 1.)

In the upper part of the tube F a slide, I, is placed, and a slide, J, is placed in the lower part of the tube G. These slides work through

the backs of the tubes, and are connected one to the upper and the other to the lower end of a rod, K, which is pivoted in the frame A, as shown at *f*. To the upper end of the rod K a rod, L, is pivoted, the latter rod working in a guide, *g*, attached to the bottom of the seed-box. The outer end of rod L is curved or bent upward, and is fitted in an oblong slot, *h*, in the under side of a slide, M, which works in the bottom of the seed-box and through its back end.

N is a rod which is attached to the back part of the slide M, and the outer end of this rod is connected to a pendant, O, which is attached to a rock-shaft, P, which is fitted between the outer ends of the handles. To the shaft, and at right angles with the pendant O, an arm, Q, is attached, and to the outer end of this arm a bar or plate, R, is connected by a link, *i*. The bar or plate R is attached at right angles to a tube, S, which is fitted loosely on one of the handles C.

The slide M has an oblong longitudinal slot, *j*, made in it, and an adjustable plate or slide, *k*, is fitted in said slot, said plate or slide having a set-screw, *l*, fitted in its outer end, the set-screw passing through a plate, *m*, secured to the outer end of the slide M. By adjusting the plate or slide M the slot *j* may be made in the slide M of greater or less capacity, as occasion may require.

In the front end of the seed-box E a vertical slide, T, is placed. This slide has a brush or cut-off, *o*, attached to its lower end, and in the upper end of the slide T a set-screw, *p*, passes, said screw passing through a plate, *q*, attached to the upper end of the box. The brush or cut-off *o* is directly over the path of the movement of the aperture *j*, and it may be raised or lowered, so as to be at a greater or less distance from said aperture, by adjusting the screw *p*. A vertical pin, *r*, is attached to the slide M, and two covering devices or shares, U, are attached to the under side of the frame A, in front of the wheel D.

The operation is as follows: The seed to be planted is placed in the box E, and the machine is drawn along in the usual manner. The attendant grasps the handles C, the right hand being on the tube S, and by turning said tube on the handle—that is, half rotating it, first one way and then the other—a reciprocating motion is given to the slide M through the medium of the shaft P, pendant O, and rod N, and the

seed will be carried from the hopper and discharged into the upper end of the tube F by the slot or aperture *j*, which may be graduated as occasion may require or according to the quantity of seed to be deposited in a hill. The seed, as it is discharged into the upper end of the tube F, does not immediately fall into the furrows. It is arrested by the slide I, which is shoved inward just previous to the termination of the forward movement of the slide M in consequence of the back part of the slot *h* striking against the end of the rod L. When the slide M is drawn outward from the hopper for the aperture *j* to be refilled the slide I is drawn outward from the tube F, said slide being actuated just before the termination of the stroke of slide M, and the seed falls upon the slide J, which is within the tube G, when the slide I is out of tube F, and when the slide M is again shoved forward the seed on the slide J will be deposited in the furrow, as the slide J is withdrawn from tube G as the slide I is shoved into tube F. The slides I J, it will be seen, are actuated simultaneously in opposite directions, and they are only moved just previous to the termination of the movements of the slide M. This effect is due to the slot *h*, in which the outer end of the rod L is fitted.

The brush or cut-off *o* may be adjusted higher or lower, according to the size of the seed to be planted.

The covering-shares U cover the seed and fill up the furrow made by the share H, and the wheel D serves as a roller.

By this invention the seed is dropped from the lower end of the tube G, and consequently simultaneously with the turning of the tube S, as the seed at its last movement has but a short distance to fall. The operator therefore can deposit the seed at desired spots without any difficulty whatever.

I do not claim separately any of the parts, or, when viewed irrespective of the arrangement herein shown and described for attaining the desired end; but

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

The slides M I J, arranged respectively within the box E and tubes F G, and operated through the medium of the tube S, shaft P, pendant O, and rods N L K, as herein shown and described, for the purpose set forth.

SAMUEL F. JONES.

Witnesses:

A. L. UNDERWOOD,
A. J. HUNGATE.