

J. H. JONES.
Hand Planter.

No. 107,056.

Patented Sept. 6, 1870.

Fig.1

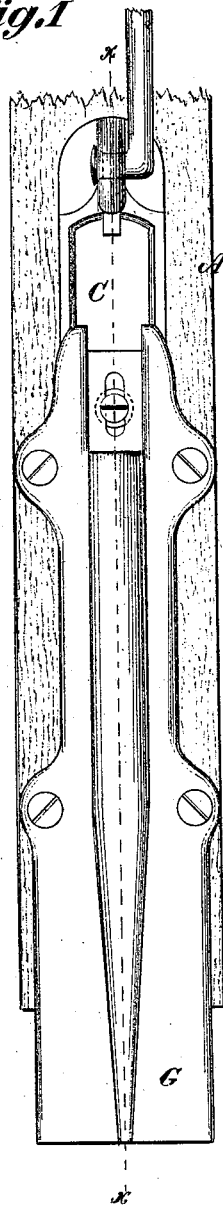


Fig.2

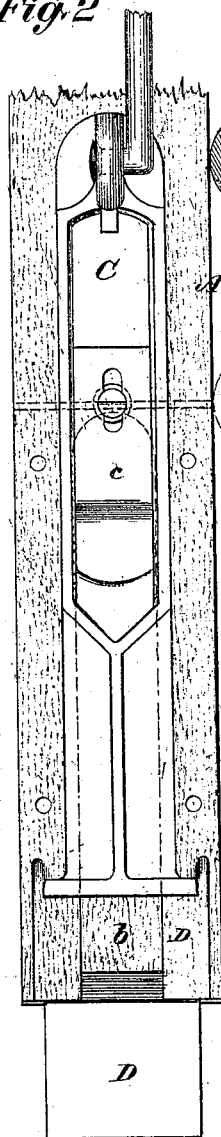


Fig.3

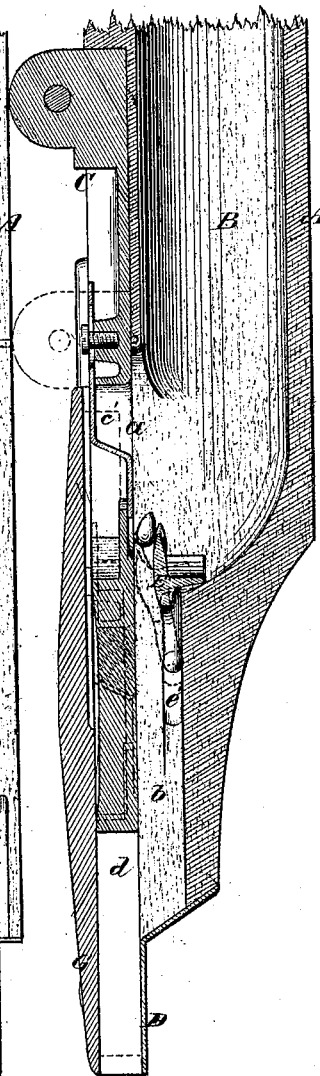
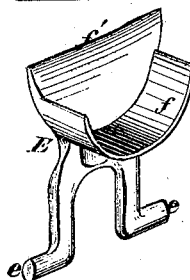


Fig.4



Witnesses
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J. HERVA JONES, OF ROCKFORD, ILLINOIS.

Letters Patent No. 107,056, dated September 6, 1870.

IMPROVED SEEDING-MACHINE.

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, J. HERVA JONES, of Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Seeding-Machines, of which the following is a specification.

The objects of my invention are to secure the regular dropping of the seed and to increase the efficiency and durability of the machine, and this I do by substituting for the brush heretofore used a cut-off of metal actuated by its own gravity and that of the seed.

In the accompanying drawing I have shown my improvements as adapted to the hand seed-planter, for which Letters Patent of the United States have been granted to me respectively, dated August 26, 1856, and April 9, 1867. It is, however, obvious that my improved cut-off might be adapted to planters of a construction somewhat different from that shown in the drawing.

Figure 1 represents an elevation of so much of my seeding-tubes as is necessary to illustrate the improvement herein claimed, with the back plate in position ;

Figure 2, a similar view with the back plate removed ;

Figure 3, a vertical central section through the line *x x* of fig. 1 ; and

Figure 4, a view in perspective of my improved cut-off detached.

The seeding-tube A is provided with a chamber, B, to contain the seed, having an opening, *a*, in one side for the escape of the seed into the cup *c* of a slide, C, which moves endwise in a groove or guide-way, *d*, in the tube.

A chamber, *b*, in the tube leads from the chamber B to the nose D of the tube.

A plate, G, holds the slide in place.

A cut-off, E, of the form shown in fig. 4, is placed loosely in the tube in the position shown in fig. 3.

The lugs *e* of this cut-off move freely in vertical slots, *e'* in the tube A.

The lip *f* of the cut-off rests upon the bottom of the chamber, while the flange *f'* ordinarily rests against the side.

In operating as a hand seed-planter, two tubes are ordinarily connected together at top, so as to lie in the same vertical plane, and to diverge from each other at an acute angle, as shown in my patent of April 9, 1867, above mentioned.

The planter first shoves the slides down into the nose D to prevent the escape of the seed, and then inserts the nose into the ground to open a hole in which to deposit the seed.

The seed which escaped into the cup *c*, when the slide was up, descends into the chamber *b* as soon as the cup passes below the cut-off, and, as soon as the slide is drawn up again, escapes through the nose D into the hole in the ground. This operation is repeated every time the seed is planted.

The weight of the grain in the chamber B acting upon the cut-off keeps it pressed against the slide C, as shown in dotted lines in fig. 3 ; but, in case seed should get between the slide and cut-off, the latter would yield until the grain had passed and would then immediately be forced back to its normal position by the pressure of the seed above it in the chamber, (see fig. 3.)

My cut-off being of metal is, of course, as desirable as any other part of the machine, while its perfect freedom of movement enables it to perform all the functions of the elastic cut-offs heretofore used.

Moreover, the seed acts as a spring to my cut-off, and thus aid its operation instead of being a detriment, as it is with an elastic cut-off, which is constantly being worn away and disarranged by the grain.

I claim as my invention—

1. The metal cut-off, working loosely in the seeding-tube, and held in place by the static pressure of the grain contained therein, substantially as hereinbefore set forth.

2. The cut-off, constructed with a lip to receive the downward pressure of the grain, and a flange to receive the lateral pressure of the grain, substantially as hereinbefore set forth.

3. The cut-off, constructed with lugs, which move in slots or guides in the tube, and on which the cut-off swings, substantially as hereinbefore set forth.

4. The combination of the cut-off and slide, these parts being constructed for joint operation, substantially as hereinbefore set forth.

In testimony whereof I have hereunto subscribed my name.

J. HERVA JONES.

Witnesses:

JOHN FAXON,
S. NORTON TALCOTT.