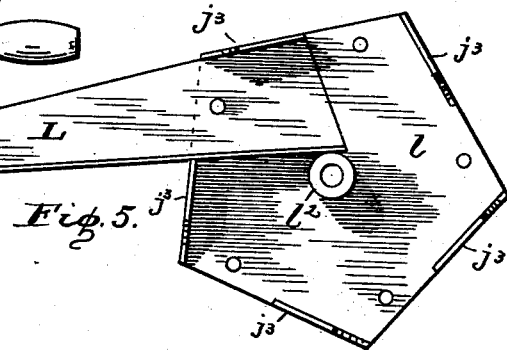
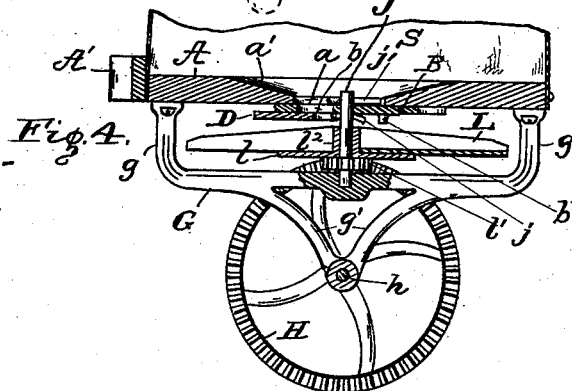
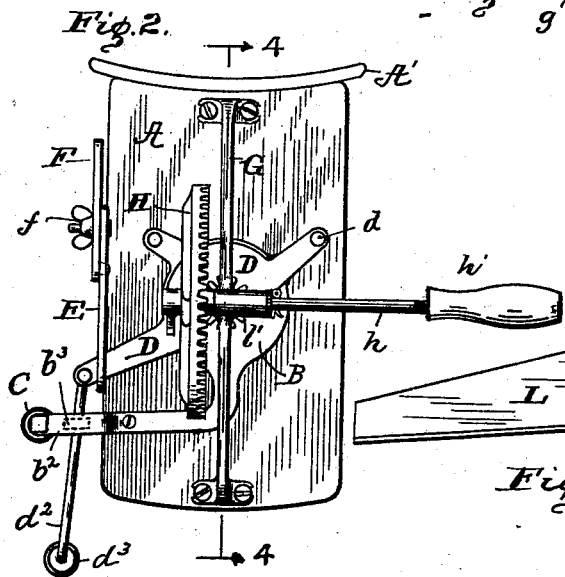
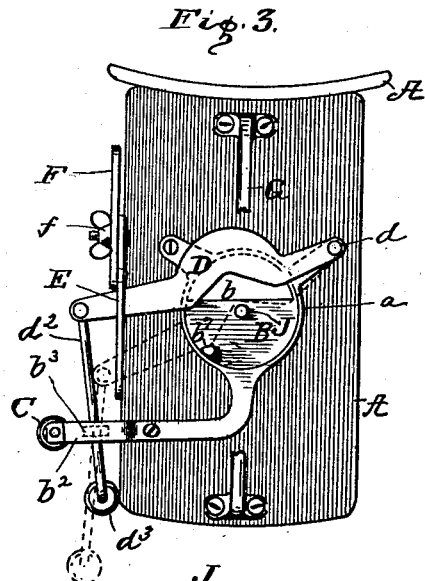
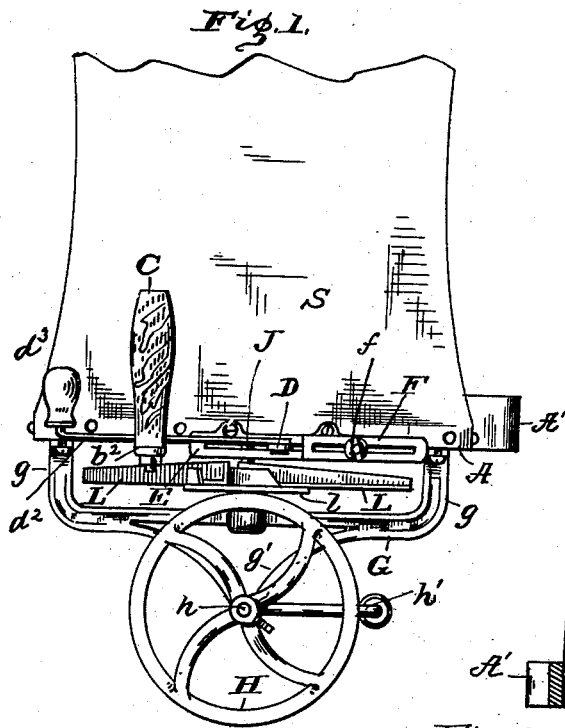


J. A. EVERITT.
HAND SEEDING MACHINE.

(Application filed Oct. 29, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES A. EVERITT, OF INDIANAPOLIS, INDIANA.

HAND SEEDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 676,182, dated June 11, 1901.

Application filed October 29, 1900. Serial No. 34,794. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. EVERITT, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Hand Seeding-Machines, of which the following is a specification.

The object of this invention is to simplify and cheapen the construction of the seed-throwing arms and to provide a compact and durable mechanism thoroughly and substantially braced for driving the same, to provide a seed-holding sack or receptacle with a hopped outlet at the middle of its bottom, and to provide means for regulating the size of the discharge-opening. The object also is to provide a machine complete in all of its parts, which while being durable can be produced and sold at small cost.

I accomplish the objects of the invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a left side elevation of my invention; Fig. 2, an under side view of same; Fig. 3, an under side view with seed-throwing arms and mechanism for driving same and frame for supporting said driving mechanism removed; Fig. 4, a vertical section of the seeding-machine on the line 4 4 of Fig. 2, and Fig. 5 a detail in plan view of the center plate with one of the grain-throwing arms attached.

Like letters of reference indicate like parts throughout the several views of the drawings.

A is the bottom of the hopper or seed-receptacle and is preferably an elongated rectangle in general shape with concaved inner and convexed outer ends, although this shape may be departed from, if desired. This bottom will be made from any suitable material, preferably wood, and at the middle of its side will have a circular opening a , passing through the bottom, leading into which from above is the hopped or countersunk portion a' . The sack S is tacked to the edge of this rectangular bottom, and the seed-throwing mechanism is attached to the under side of the latter. The curved board A' at the concave end of the bottom is for the purpose of a bearing-board against the body of the operator.

Secured to the under side of the bottom A at the opening a therethrough is plate B,

larger in diameter than the said opening a , and formed through the plate is the opening b of somewhat less than a semicircle in order to leave ample metal at the center of the plate to form a bearing for the spindle carrying the seed-throwing arms. This opening b is large enough to afford the maximum opening required, and for discharges less than this maximum I provide an adjustable cut-off D, comprising a plate hinged at one end d to an integral extension of the plate B and extending thence across the plate B and a suitable distance beyond the edge of the bottom, as shown in Figs. 2 and 3. The plate B has an integral extension b^2 , which turns and projects laterally of the bottom A to provide an attachment for the handle C. This extension-bar b^2 has an upper side lug b^3 with a perforation through which passes a controlling-rod d^2 , which is pivotally attached to the end of the cut-off D. The rod d^2 is provided with a handle d^3 and is within easy reach and control of the operator's hand at handle C. The discharge-opening in plate B is changed in size by shifting the cut-off D. The lug b^4 on the under side of plate B stops the movement of the plate B in the direction to close the outlet.

E is a bar secured to the side edge of the bottom A. It projects laterally below the bottom A and is slotted longitudinally. The projected end of the cut-off D is passed through this slot, the slotted bar E thus forming a support and guide therefor.

F is an adjustable stop which can be set to block the throw of the cut-off D at any fractional part of the length of the slot in said bar E, thereby fixing the size of the opening in plate B. The stop is set by means of the bolt and nut f .

Parallel with the bottom A and suitably below it to allow of the placing of the seed-throwing arms between it and said bottom is a bar forming the horizontal member of a frame G, and at suitable distances to afford ample clearance for the rotation of the arms between them are the integral posts g g , which attach to the bottom A. The horizontal bar or member of the frame G has a downwardly-projected hanger g' with bearing to support a crank-shaft h , having crank h' at one end and the wheel H, with side cogs, at

the other, the latter wheel being adjacent to said hanger.

J is the spindle or shaft carrying the seed-throwing arms previously referred to. Its lower end is seated in a socket in the horizontal member of the frame G and its upper end passes through the opening provided for it in the plate B. Pin *j* on the lower side of plate B and pin *j'* on the upper side of said plate prevent the displacement of the spindle, and the pin *j'* serves the additional purpose of acting as an agitator to stir up the seed and force it down through the opening.

Mounted on the shaft J is the horizontal plate *l*, having on the under side a pinion *l'*, the teeth of the latter meshing with the teeth of the wheel H, and integral with the upper side of said plate is the hub *l''*. Extending on tangents with this hub and secured upon the plate *l* are a plurality of seed-throwing arms *l*, one of which is shown in position in Fig. 5. The plate is provided with marginal flanges *j''* between the arms, which help to make the arms secure and also keep the grain from discharging from the arms too near their bases.

The grain falling through the bottom A in regulated quantity upon the bases of the arms is thrown out by centrifugal force induced by the rapid rotation of the arms. This rotary movement is produced by turning the crank *h'*, which rotates the wheel H, thereby actuating the pinion *l'*, which is a part of the seed-throwing plate carrying the arms L.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. In a hand seeding-machine, a seed-receptacle having a rectangular bottom with a central funnel-shaped outlet, a plate under said bottom closing said outlet except for an opening in the plate, a cut-off pivotally secured at one side of the plate and crossing same and projecting beyond the receptacle-

bottom on the other side of the plate from its pivotal attachment, said cut-off regulating the size of the discharge through said plate, seed-throwing arms radiating from a revolving plate, a frame secured at either end to the receptacle-bottom on opposite sides of the circle of rotation of the arms said frame passing under the said arms and supporting the plate which carries them, and means for rotating the revolving plate and arms, substantially as described and shown.

2. In a hand seeding-machine, a seed-receptacle having a rectangular bottom with a central funnel-shaped outlet, a plate under said bottom having an opening and closing the outlet save for the opening in the plate, a cut-off pivotally secured at one side of the plate and projecting beyond the receptacle-bottom from the side opposite the pivotal attachment, a handle-bar having a handle projected from the same side of the receptacle-bottom, a bar fixed longitudinally of the edge of the bottom and having a longitudinal slot through which the cut-off is projected, an adjustable stop in said slot, a rod pivotally attached to the projecting end of the cut-off and passing through an eye on the handle-bar, a frame supported at either end from the under side of the bottom, a plate having radial seed-throwing arms supported by said frame and located between the frame and bottom, a pinion attached to the plate and a crank-shaft supported by a hanger from said frame and having a hand-crank at one end and a toothed wheel at the other to engage the pinion, all substantially as described and shown.

In witness whereof I have hereunto set my hand and seal at Indianapolis, Indiana, this 24th day of October, A. D. 1900.

JAMES A. EVERITT. [L. s.]

Witnesses:

JOSEPH A. MINTURN,
JOHN B. J. FENTON.