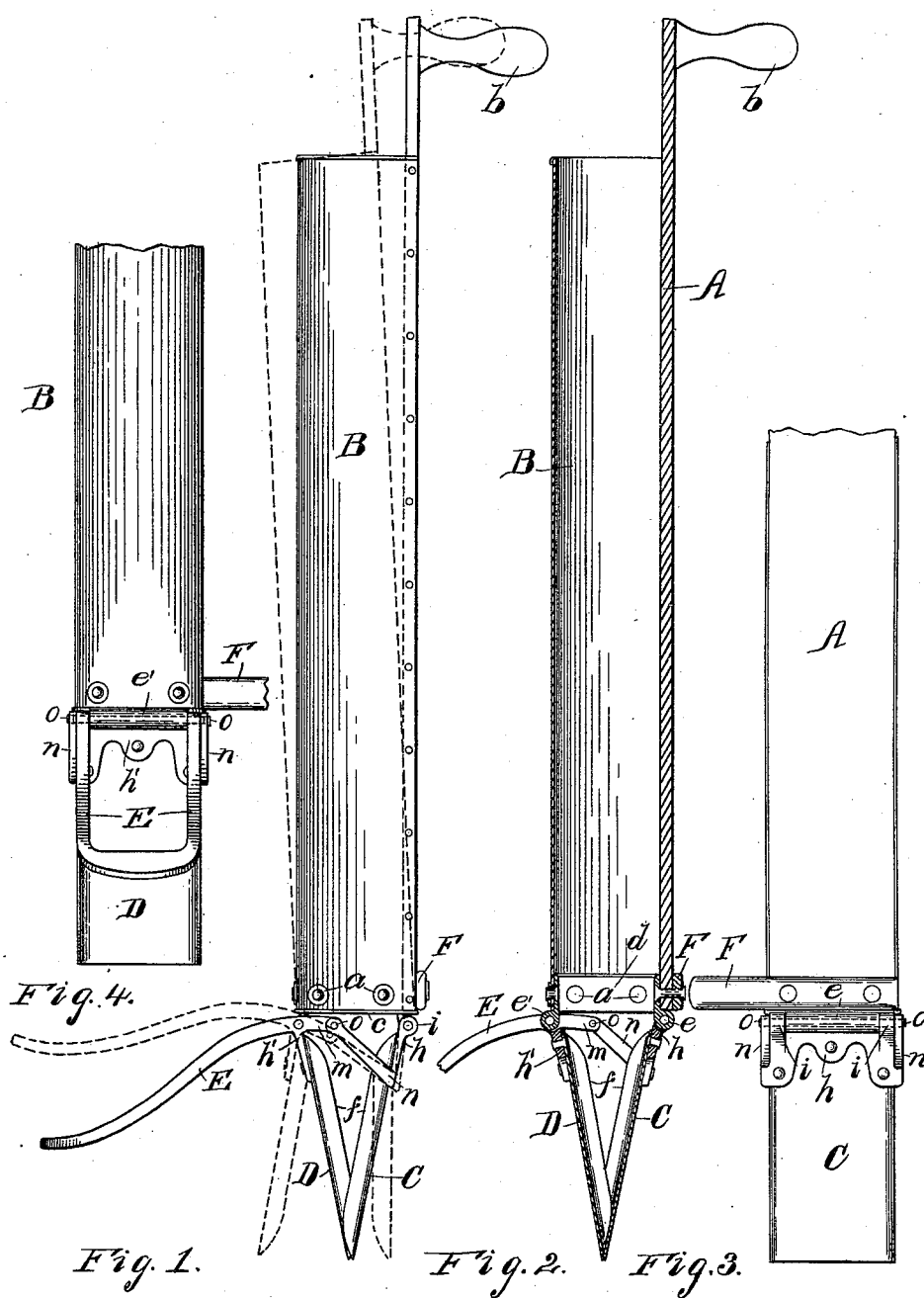


(No Model.)

D. H. MOORE.
PLANTER.

No. 540,752.

Patented June 11, 1895.



WITNESSES
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UNITED STATES PATENT OFFICE.

DELMER H. MOORE, OF GREENVILLE, MICHIGAN.

PLANTER.

SPECIFICATION forming part of Letters Patent No. 540,752, dated June 11, 1895.

Application filed February 2, 1895. Serial No. 537,142. (No model.)

To all whom it may concern:

Be it known that I, DELMER H. MOORE, a citizen of the United States, residing at Greenville, in the county of Montcalm, State of Michigan, have invented certain new and useful Improvements in Planters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

15 This invention relates to new and useful improvements in planters especially designed for planting potatoes and other sets, and consists in the construction and arrangement of parts, as hereinafter fully set forth and claimed.

20 The object of the invention is to provide cheap, simple and effective means for readily planting sets in which the arrangement is such as to provide for an easy insertion of the planter into the soil and perfect discharge of the set therefrom and covering the same and the ready withdrawal of the planter after the set shall have been deposited, which object is attained by the device illustrated in the accompanying drawings, in which—

25 Figure 1 is a side elevation of my improved planter. Fig. 2 is a central vertical section through the same. Fig. 3 is an elevation of the rear side of the planter, a portion of the spout being broken away; and Fig. 4 is a front elevation of the same.

30 Referring to the letters of reference, A designates a strip of wood of suitable length and width, to the upper end of which is attached a handle *b*.

35 B designates a spout made preferably of sheet metal the sides of which are secured to the edges of said strip A forming a spout or chute open at each end. Located within said spout at its lower end is a metal ring *d* which is secured thereto by suitable rivets *a* passing through the wall of said spout and through said ring which is provided on its under edge with a right angle flange *c* upon which the lower end of the spout rests. Formed integral with said ring and depending therefrom, on opposite sides thereof, are the oblong eyes

e, e' which are apertured for the reception of the pintle of the hinge.

40 C, D indicate the retaining and depositing jaws of the planter which are formed preferably of rectangular sheet metal plates and are provided with right angle flanges *f* on the opposite vertical edges thereof. Secured to the upper end of the jaw C is a leaf *h* of a hinge which is provided with the extending apertured lugs *i* which embrace the depending eye *e* and through which, and said eye, is passed a pintle; whereby said jaw is hinged to the lower end of the spout. To the upper end of the jaw D is secured a like hinge leaf *h'* from opposite sides of which at the top extends a looped arm E which curves outward and downward and which, at its point of union with the hinge leaf *h'*, is adapted to embrace the depending eye *e'* of the ring *d* and is apertured to receive a pintle which passes through the sides of said arm and through said eye, thereby hinging the jaw D to the lower end of said spout opposite the jaw C, by which construction said jaws are independently hinged to the lower end of said spout on the opposite sides thereof. The free ends of the looped arms E extend beyond the point of the hinge or pivot thereof and project inwardly on each side of the jaw D forming the short end *m* of a lever the fulcrum of which is the hinge *h'*. Formed integral with the hinge leaf *h* and extending inwardly and upwardly on each side of the jaw C, are the arms *n*, the free ends of which are pivoted at *o* to the ends of the lever *m*, by which arrangement a sort of a toggle coupling is provided between said jaws, whereby they are caused to move simultaneously toward or from each other by the operation of the arm E.

45 In the normal condition of this improved planter, the jaws C, D remain closed, as shown in Figs. 1 and 2, the side flanges of the jaw C embracing those of the jaw D in which position they are retained by the weight of the extended arm E. In the operation of this improved device the set is placed in the upper end of the spout through which it falls to the jaws C, D and is retained therein. These jaws are then forced into the earth the requisite distance by bearing downward upon the handle *b* until the free end of the arm E strikes the surface of the ground when by tilting the

upper end of the spout slightly forward, said jaws will be opened to discharge the seed through the medium of the arm E and the connecting lever and arm *m, n* the spout tilting upon the fulcrum of the hinge *h'*, as clearly shown by dotted lines in Fig. 1, when the jaws are withdrawn leaving the seed deposited in the ground. As the planter is raised, the weight of the extending arm E will cause said jaws to again close in position for a succeeding operation. By hinging the jaws to the spout independently and so connecting them as to transmit motion from one to the other, but a slight movement of the upper end of the spout is necessary to open the jaws sufficiently to deposit the seed, so that neither of them stand at a great angle to a vertical plane, whereby a withdrawal of the jaws from the ground is made comparatively easy and the danger of picking up the seed after it has been deposited is obviated. The triangular opening between the sides of the jaws enables the dirt to fall onto the seed from the sides, thus enabling a perfect covering thereof.

To provide for forcing the jaws into the ground where the soil is too hard to enable this to be done by means of the handle *b*, there is employed a step F which is suitably secured to the rear face of the spout and projects from the side thereof upon which the foot may be placed to assist in forcing the jaws into the ground.

Having thus fully set forth my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a planter, the combination of opposed jaws hinged independently, the operating handle, the outwardly extending actuating arm mounted on one of said jaws and the means connecting said jaws for causing them to recede and approach in unison.

2. In a planter, the combination of the spout and handle, the opposed jaws hinged independently to the lower end of said spout the extended actuating arm mounted on one of said jaws, and the means connecting said jaws for causing them to act in unison as said arm is actuated.

3. In a planter, the combination of the spout and handle, the opposed jaws hinged to the lower end of said spout and adapted to close beneath the opening therein, the lateral arm mounted on one of said jaws, and the inwardly extending arms fixed to said jaws, their inner ends being pivoted together.

4. In a planter, the combination of the spout and handle, of the opposed jaws hinged to the bottom of said spout the lower ends of said jaws meeting but leaving an opening between the sides thereof, the extended actuating arm mounted on one of said jaws, and the jointed coupling connecting said jaws whereby they are caused to act in unison through the operation of said arm.

In testimony whereof I affix my signature in presence of two witnesses.

DELMER H. MOORE.

Witnesses:

W. W. SLAWSON,
GEORGE R. SLAWSON.