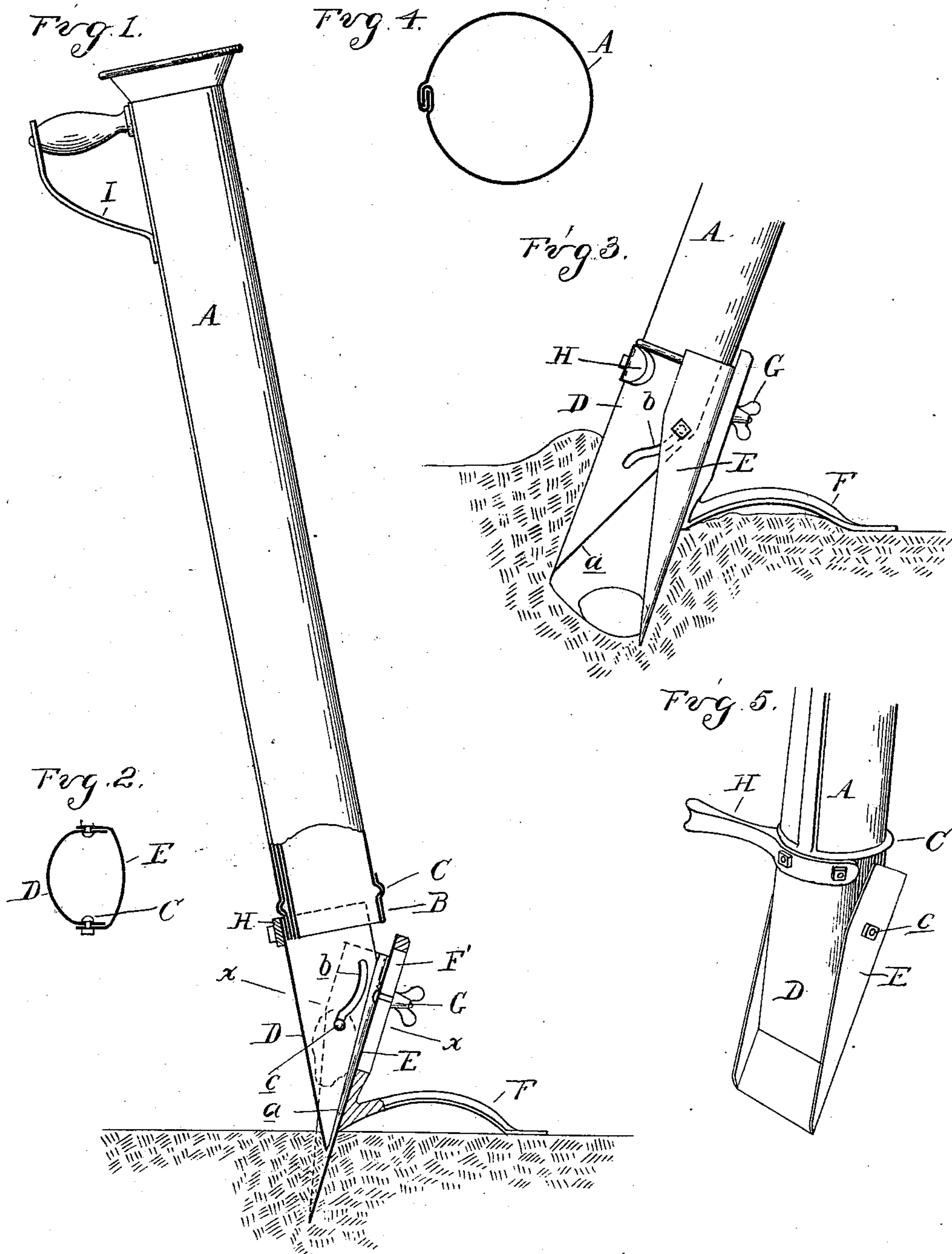


(No Model.)

C. N. CHOATE.
POTATO PLANTER.

No. 556,134.

Patented Mar. 10, 1896.



Witnesses
M. M. Hurlbert
P. M. Hurlbert

Inventor
Charles N. Choate
By *W. S. Sprague* Atty.

UNITED STATES PATENT OFFICE.

CHARLES N. CHOATE, OF GREENVILLE, MICHIGAN, ASSIGNOR TO ADONIRAM J. COLBURN AND THE GORDON HOLLOW BLAST GRATE COMPANY, OF SAME PLACE.

POTATO-PLANTER.

SPECIFICATION forming part of Letters Patent No. 556,134, dated March 10, 1896.

Application filed October 8, 1895. Serial No. 564,993. (No model.)

To all whom it may concern:

Be it known that I, CHARLES N. CHOATE, a citizen of the United States, residing at Greenville, in the county of Montcalm and State of Michigan, have invented certain new and useful Improvements in Potato-Planters, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in potato-planters; and it consists particularly in the construction, arrangement and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a sectional elevation of my improved planter. Fig. 2 is a cross-section thereof. Fig. 3 is an elevation of the lower end thereof, showing the beak in the ground and the jaw open to discharge the potato. Fig. 4 is a cross-section of the tube, and Fig. 5 is a perspective view of the lower end of the device.

A represents a tube, preferably formed of a sheet of metal bent into tubular form, with the edges seamed together, as shown in Fig. 4. Before forming this sheet into the tube I reinforce the lower edge by turning back the reinforcing-flange B, and at the upper edge of this flange I form the rib or bead C.

At the lower end of the tube is secured a beak composed of the stationary jaw D, its upper edge secured to the reinforced lower portion of the tube and its lower portion being preferably flattened, as shown, and the movable jaw E. The stationary jaw has the edges formed on an incline or bevel α , or in other words is cut to a point.

In the sides of the stationary jaw are the curved or cam slots b , in which engage the bolts or pins c , which engage therethrough and through the sides of the movable jaw which overlap the sides of the stationary jaw. These parts are so arranged that the movable jaw may be opened by being pivotally moved on the stationary jaw, and the movable jaw has a sliding movement on the stationary jaw. In its lower position the cam-slots and the bolts therein act to draw the movable jaw tightly against the bevel face of the stationary jaw. The bolts being intermediate the

length of the jaws with bearings above and below lock the movable jaw against opening from pressure within, but allow it to open easily and quickly by pressure applied to the point. It will be seen that a seed-potato dropped into the tube and lodging in the beak between the jaws has no tendency to open them, but on the contrary rather tends to lock them the more tightly.

An arm F is attached to the movable jaw by means of a bolt G, passing through a slot F' in said arm, to vertically adjust the same. H is a foot-rest, reversibly attached by bolts to the upper part of the fixed jaw or to the lower part of the tube, preferably the reinforced portion.

I is a handle on the top portion of the tube.

The operation is as follows: The operator drops a potato into the top of the tube, and then thrusts the beak into the ground as far as the arm F will permit. This movement slides the movable jaw up until the bolts c are at or near the top of the slots. The operator then rocks the upper part of the planter, which opens the jaws, as shown in Fig. 3, and allows the seed-potato to drop out free from the jaws.

The advantage of the reinforced lower end of the tube is that it prevents liability of breaking of the tube under the constant leverage to which it is subjected, and which without this reinforcement is of frequent occurrence, unless the tube is made of such heavy material as to make it unwieldy.

I believe I am the first to construct such a hand-planter of the type having a fixed and a movable jaw, the movable jaw being pivoted to and having a longitudinal movement upon the stationary jaw.

I believe I am the first to lock the jaws together in such a manner that they cannot be opened by pressure from the inside, but are unlocked by being thrust into the ground.

What I claim as my invention is—

1. In a planter, a beak having a fixed jaw and a movable jaw pivoted to said fixed jaw, and also longitudinally movable relative thereto, substantially as described.

2. In a planter, the combination of a tube, a fixed jaw secured to the same, having par-

allel sides, and slots in the said sides, a movable jaw engaging said fixed jaw, and having pivot-bolts engaging and traversing said slots, substantially as described.

5 3. In a planter, a beak consisting of a fixed jaw, having parallel sides, having curved slot-
 10 ted openings, a movable jaw having parallel sides embracing the parallel sides of said fixed jaw, and angles engaging the sides thereof, and pivot-bolts connecting said fixed and
 15 movable jaws and traversing said slots, substantially as described.

4. In a planter, the combination of a tube, a fixed jaw attached to the same having parallel
 15 sides, having slots, a movable jaw, having parallel sides and angles engaging the sides and edges of said fixed jaw, and pivot-
 20 bolts connecting said fixed and movable jaws and traversing said slots, and an adjustable arm attached to said movable jaw and pro-
 25 jecting therefrom, substantially as described.

5. In a planter, a beak having a fixed and a movable jaw, said movable jaw being movable outward from and longitudinally with
 25 respect to said fixed jaw, and an arm attached to said movable jaw and engaging the ground, substantially as described.

6. In a planter, the combination of the fixed

and movable jaw, of a lock for the movable jaw in its closed position to hold it against
 30 opening by interior pressure, but free to release it upon insertion of the beak into the ground.

7. In a planter, the combination of the fixed and the movable jaw hinged together, of a
 35 lock for the hinge-joint of the movable jaw, and means for releasing said lock as the beak is inserted into the ground.

8. In a planter, the combination of the tube of sheet metal, an external reinforcing-flange
 40 B at the lower edge thereof and the beak secured to the reinforced portion of the tube, substantially as described.

9. In a planter, the combination of the sheet-metal tube the flange B turned back upon the
 45 lower edge of the tube to form a reinforcement thereon, the beak secured to the reinforced portion, and the bead C in the reinforced portion at a point directly above the end of the
 50 beak, substantially as described.

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

CHARLES N. CHOATE.

Witnesses:

JAMES WHITTEMORE,
 M. B. O'DOHERTY.