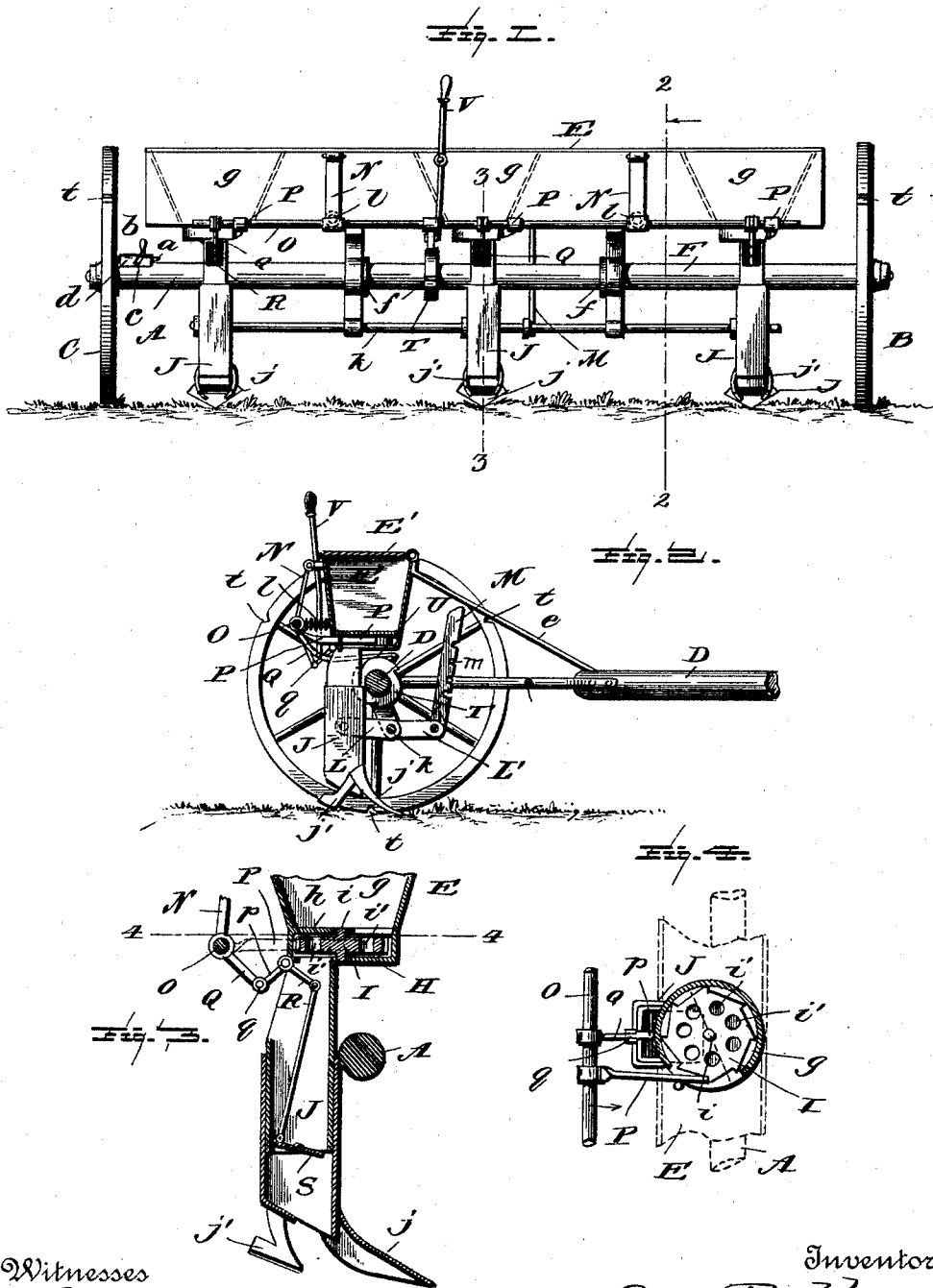


(No Model.)

O. BOLL.
CORN PLANTER.

No. 484,991.

Patented Oct. 25, 1892.



Witnesses
L. C. Mills
E. H. Bond.

Inventor
Otto Boll.
per Cha. H. Fowler
Attorney

UNITED STATES PATENT OFFICE.

OTTO BOLL, OF LEHIGH, IOWA.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 484,991, dated October 25, 1892.

Application filed June 3, 1892. Serial No. 435,408. (No model.)

To all whom it may concern:

Be it known that I, OTTO BOLL, a citizen of the United States, residing at Lehigh, in the county of Webster and State of Iowa, have invented certain new and useful Improvements in Corn-Planters; 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, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in corn-planters.

The objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a rear elevation of my improved planter. Fig. 2 is a vertical section thereof on the line 2 2 of Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 1. Fig. 4 is a horizontal section on the line 4 4 of Fig. 3.

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

Referring now to the details of the drawings by letter, A designates the axle, on which one of the wheels B is fast and the other C is loose to facilitate turning. In order to hold the loose wheel fast upon the axle when desired, I provide a catch or bolt *a*, which has a knob or handle *b*, which works in an inclined slot *c* in a housing *d* on the axle. Moving this handle in one direction causes the bolt to engage the hub of the wheel, and movement in the other direction disengages it, owing to the inclination of the walls of the slot which the handle engages in its movements.

D is the tongue or pole. It is connected with the axle and the seed-box by suitable braces *e*.

E is the seed-box, of any suitable material and dimensions. It is supported from the axle by the short arms F, which are sleeved upon the axle, suitable collars *f* being provided on the axle to prevent endwise movement. The seed-box has a suitably-hinged cover or lid E'. The seed-box is shown as having three compartments or hoppers *g*; but

of course this number may be varied at will. Each of these compartments has a partial bottom *h*, in which is journaled the upper pintle *i* of the seed-disk I, the lower pintle of which has a bearing in the plate H, which has an opening upon the side opposite the opening in the bottom *h*, as seen best in Fig. 3. This disk has a plurality of holes *i'* and is notched upon its periphery, as seen best in Fig. 4. There is one disk for each hopper of the seed-box.

J are the shoes, carrying the shovels *j* and coverers *j'*, as shown, the upper end of the shoe being under the opening in the plate H, as seen in Fig. 3. The shoe is made in two parts, one adjustable over the other, as seen in Fig. 3, the shovel and coverer being carried by the lower part, which is rendered adjustable as follows: *k* is a rock-shaft suitably journaled on hangers from the axle and from which extend the arms L, which are attached to the said lower parts of the shoes. An arm L' extends forward from the rock-shaft and at its forward end carries a lever M, which is provided with a plurality of notches *m*, as seen in Fig. 2, which are designed to engage one of the braces of the tongue to hold the shovels and coverers in their adjusted positions.

N are hangers pivotally supported on the rear of the seed-box and carrying at their lower ends a shaft O, parallel with the seed-box, and between which and the rear side of the box are arranged the springs *l*, which serve to normally hold the shaft at its farthest position from the box. From this shaft extend the arms P, which are arranged to engage the notched disks, as seen best in Fig. 4. On this same shaft are the arms Q, which are in turn pivoted, as at *q*, to the arms *p*, which are pivoted on the rear of the seed-box, as seen in Fig. 3, and which have pivotally connected therewith the pivoted arms or rods R, one of which is pivoted to one side of a valve S in the shoe, as seen in Fig. 3.

T is a notched wheel on the axle, with which engages the hooked end of the arm U, which is carried by the shaft O, as seen in Fig. 2.

V is a lever connected with this arm and arranged convenient to the seed-box, so that it may be raised to throw the hooked arm out of engagement with the notched wheel.

The operation will be readily unders

As the axle revolves the notched wheel revolves with it, and through the engagement of the hooked arm therewith it causes the shaft O to be moved to and from the seed-box, 5 thus causing the arms P to move the notched disks in the seed compartments or hoppers, and thus to alternately move the seed from the opening in the top plate of the hopper-bottom to the bottom one and thence through 10 the shoe to the ground.

The planting may be stopped by throwing the hooked arm out of engagement with the notched wheel by means of its lever.

The wheels C are provided upon their peripheries with notches *t*, as seen in Figs. 1 and 2, to aid in marking the rows and determining the dropping of the corn.

What I claim as new is—

The combination, with the hopper, the shoe in two parts, one movable over the other, and 20 means for adjusting the lower part, the horizontal notched and apertured disk, and the suspended shaft, of the arm carried thereby to engage said disk, the pivotal connections between said shaft and a valve in the shoe, 25 the hooked arm on the shaft, the lever connected with said arm, and the horizontal notched wheel on the axle, substantially as specified.

In testimony that I claim the above I have 30 hereunto subscribed my name in the presence of two witnesses.

OTTO BOLL.

Witnesses:

W. A. BALDRIDGE,
E. E. EDWARDS.