R. A. KNOX.

TOBACCO-PLANT PLANTER.

No. 191,601. Patented June 5, 1877.

Fig. 1.

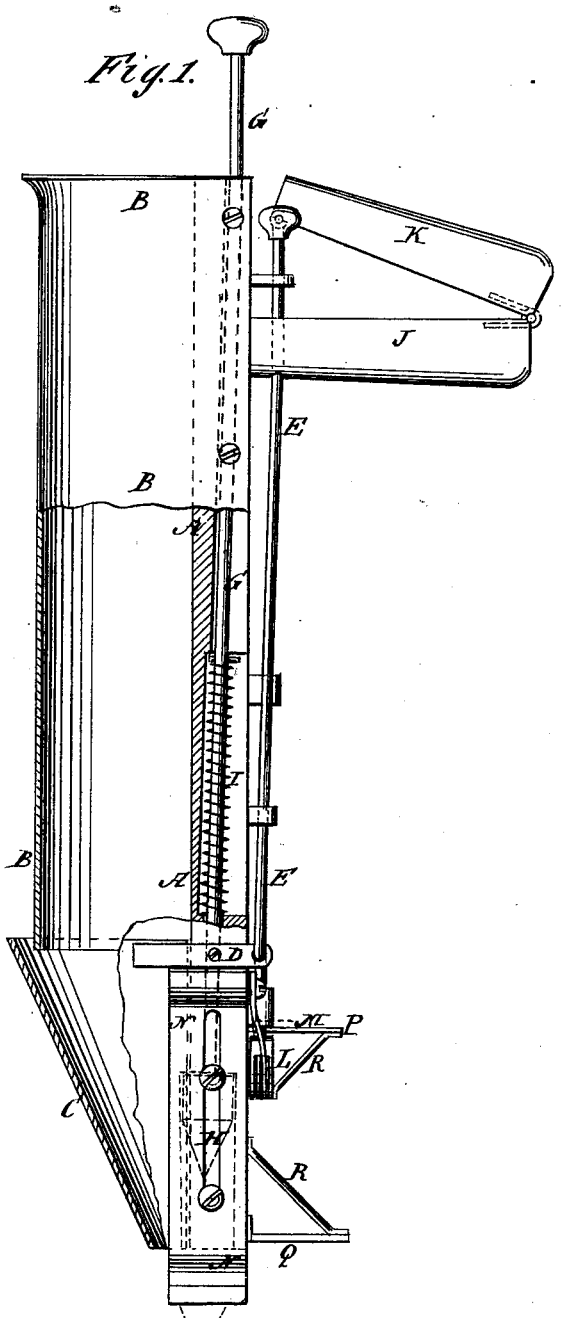
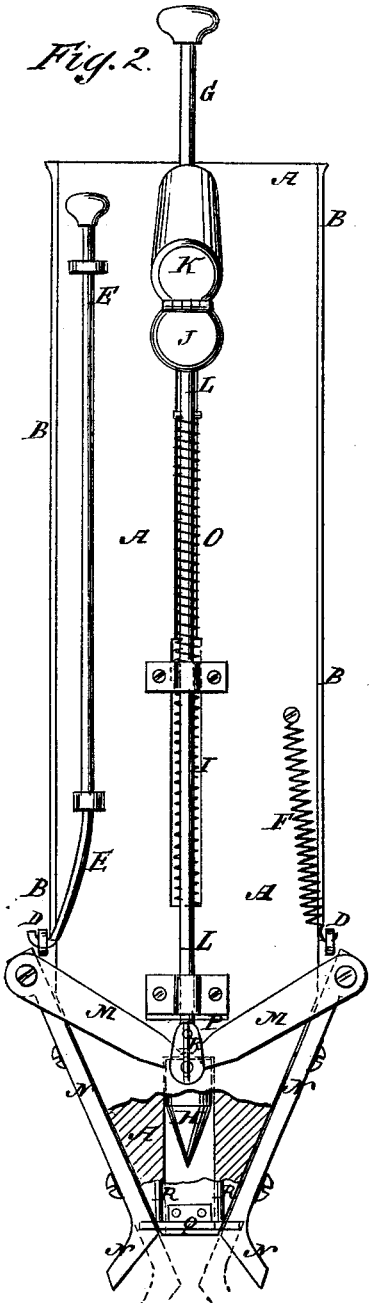


Fig. 2.



WITNESSES:

E. Wolff

J. A. Scarborough.

INVENTOR:

R. A. Knox

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT A. KNOX, OF GHENT, ASSIGNOR TO HIMSELF AND DARNALL BROTHERS, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN TOBACCO-PLANT PLANTERS.

Specification forming part of Letters Patent No. **191,601**, dated June 5, 1877; application filed March 19, 1877.

To all whom it may concern:

Be it known that I, ROBERT A. KNOX, of Ghent, in the county of Carroll and State of Kentucky, have invented a new and useful Improvement in Tobacco-Plant Planter, of which the following is a specification:

Figure 1 is a side view of my improved machine, partly in section, to show the construction. Fig. 2 is a rear view of the same, part being broken away to show the construction.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved hand-machine for setting out tobacco-plants, which shall be so constructed as to open a hole to receive the plant, guide the plant into said hole, and press the soil around it, and which shall be simple in construction, convenient in use, and reliable in operation, doing its work quickly and well.

The invention consists in the construction and combination of parts, which will be hereinafter more fully described, and then pointed out in the claims.

A is a plate or board of suitable length and breadth, and to the side edges of which are attached the side edges of a plate, B, bent into semi-tubular form. The lower corners of the board A are beveled off, and the plate B extends only to the upper end of said bevels. C is a plate bent into the form of an inverted semi-cone, and to the corners of which are attached short arms D. The arms D are pivoted to the side edges of the board A, and to the rearwardly-projecting end of one of said arms D is pivoted the lower end of the rod E. The rod E passes up through keepers attached to the board A, and has a knob attached to its upper end for convenience in operating it. To the rearwardly-projecting end of the other arm D is attached the lower end of a spiral or other spring, F, the upper end of which is attached to the board A. In the rear side of the middle part of the board A is formed a groove to receive the rod G, which is kept in place by keepers attached to the said board A, and to the lower end of which is attached a conical head, H. The groove in the board A is tapered to bring the head H below the opening between the lower ends of the board A and the plate C. The rod G is held up by a spiral spring, I, placed upon it. To the middle upper part of the board A is rigidly attached a handle, J, to the outer end of which is hinged the outer end of the handle K. To the inner end of the handle K is pivoted the upper end of the rod L, which passes down through keepers attached to the board A, and to its lower end are pivoted the lower ends of two connecting-bars, M. The upper ends of the connecting-rods M are pivoted to the upper ends of the bars N, which are placed upon the beveled edges of the lower part of the board A, and are slotted longitudinally to receive the screws by which they are secured to said beveled edges. The lower ends of the sliding bars N are bent outward to form feet to press the soil around the plants. The sliding bars N are raised and held up by a spiral spring, O, placed upon the rod L.

In using the machine, it is carried by the handle J, and is placed upon the spot where the plant is to be planted, and the other hand is pressed down upon the knob of the rod G, which forces the head H into the soil and opens a hole to receive the plant. The operator then removes his hand from the rod G, allowing the head H to be withdrawn from the ground by the spring I, takes a plant from a sack that he carries around his neck, and drops it root downward into the spout B C, the semi-conical plate C guiding it into the hole opened by the head H. The operator then presses the handles K J together, which forces the sliding bars N downward and presses the soil around the plant. The handles K J are then released, allowing the spring O to raise the bars N, and with the thumb of the hand that grasps the handles J K the operator presses the rod E, which swings the lower part of the plate C back, and allows the machine to be raised, leaving the plant standing in the ground.

To the lower part of the rod L is attached a small plate or arm, P, so that the foot can be used for forcing the head H into the ground.

To the lower end of the board A is attached a small horizontal plate, Q, to serve as a stop to prevent the machine from sinking too deep in soft soil.

The plates P Q may be strengthened by short inclined braces R, if desired.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the rod G, conical head H, and spring I with the board A, plate B, and hinged plate C, to form a hole to receive the plants, substantially as herein shown and described.

2. The combination of the hinged handle K, the rod L, the pivoted connecting-bars M, the sliding bars N, and the spring O with the stationary handle J, the board A, and the plates B C for pressing the soil around the plant, substantially as herein shown and described.

3. The combination of the pivoted arms D, the rod E, and the spring F with the board A and the semi-conical plate C, for swinging the said plate C back to allow the machine to be raised, substantially as herein shown and described.

ROBERT A. KNOX.

Witnesses:
WM. HOWARD,
D. M. O'NEAL.