

(No Model.)

2 Sheets—Sheet 1.

E. A. ROLLMAN.
TOBACCO PLANTER.

No. 537,233.

Patented Apr. 9, 1895.

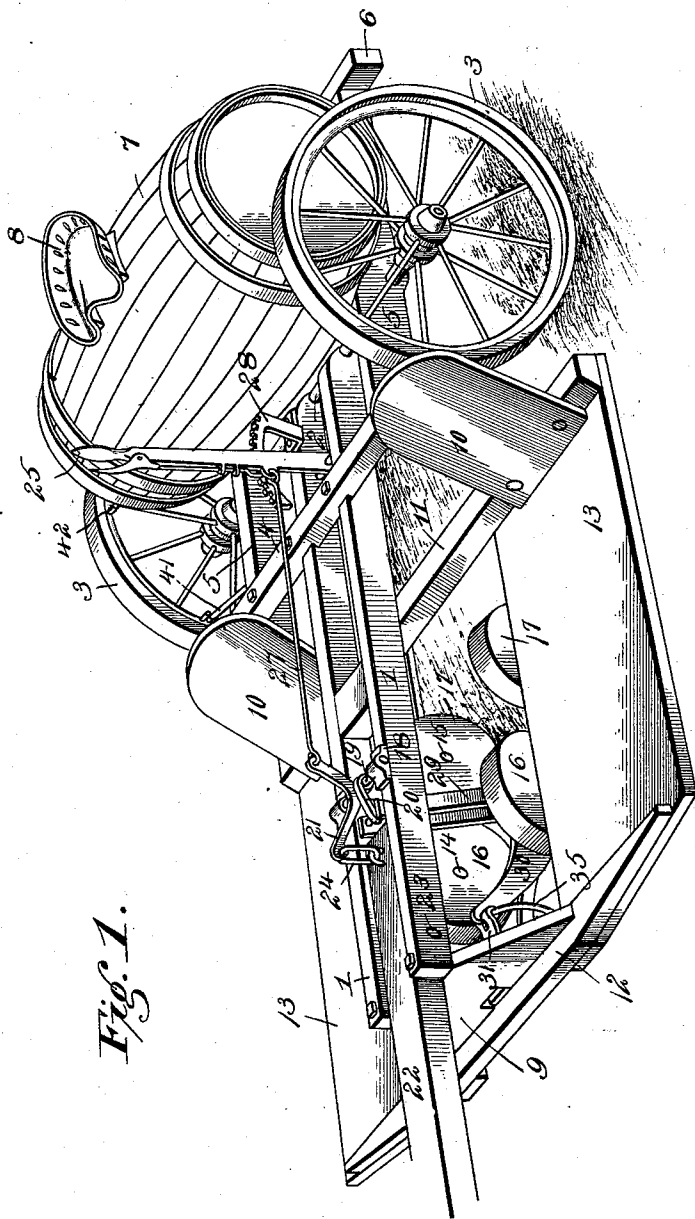


Fig. 1.

Inventor

Elmer A. Rollman.

Witnesses

John Shaw
W. S. Duval

By his Attorneys.

C. A. Snow & Co.

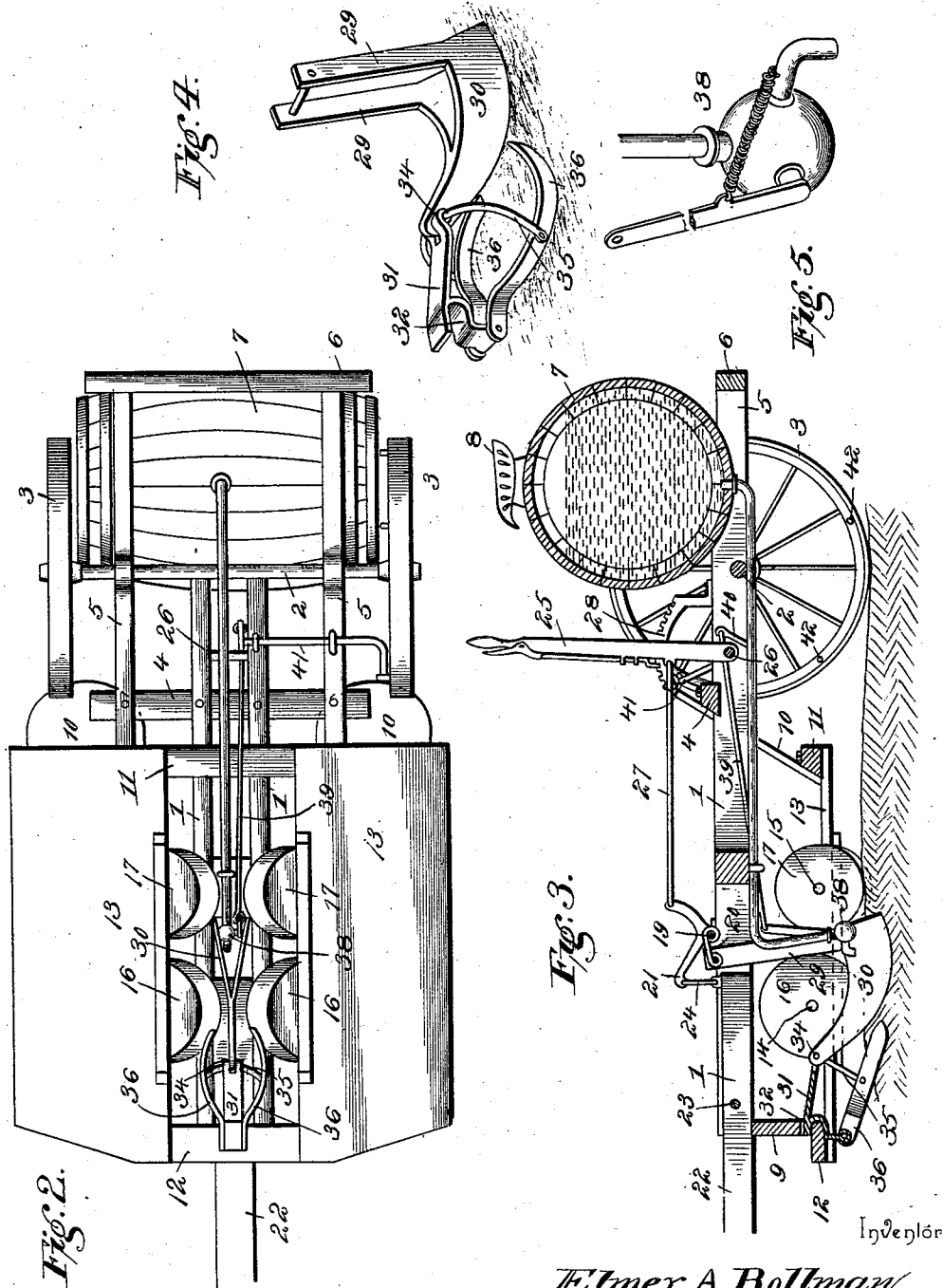
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Witnesses

John O. Shaw
W. S. Duval

By *Two* Attorneys.

Etmer A. Rollman,

Calnow & Co.

UNITED STATES PATENT OFFICE.

ELMER A. ROLLMAN, OF WEST MANCHESTER, OHIO, ASSIGNOR OF ONE-HALF
TO DANIEL A. POE, OF SAME PLACE.

TOBACCO-PLANTER.

SPECIFICATION forming part of Letters Patent No. 537,233, dated April 9, 1895.

Application filed December 9, 1893. Serial No. 493,196. (No model.)

To all whom it may concern:

Be it known that I, ELMER A. ROLLMAN, a citizen of the United States, residing at West Manchester, in the county of Preble and State of Ohio, have invented a new and useful Tobacco-Planter, of which the following is a specification.

My invention relates to improvements in tobacco-planters, the objects in view being to provide a machine of simple and durable construction adapted to produce a ridge, furrow the same for the reception of the plants, and to subsequently in one continuous operation, inject water into the furrow at the points the plants are set, and to finally pack the plants in position.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings:—Fig. 1 is a perspective view of a tobacco planter embodying my invention. Fig. 2 is a bottom plan. Fig. 3 is a vertical longitudinal sectional view. Fig. 4 is a detail in perspective of the furrow-forming shoe and the ridging-blades. Fig. 5 is a detail of a portion of the shoe and the cut-off.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I employ a pair of longitudinal beams 1 arranged parallel to each other and bolted together at suitable points. These beams are secured at their rear ends to a transverse axle 2, which has journaled on its ends the usual ground-wheels 3. A cross-bar 4 is let into and bolted upon the beams 1 and extends transverse the same and therefore parallel to the axle 2. The axle has mounted thereon a pair of opposite rest-bars 5 whose front ends are secured to the transverse beam 4 and whose rear ends are connected by a cross-bar 6. Upon these rest-bars is seated in suitable recesses a water containing barrel 7 which is surmounted by a seat 8 for the accommodation of the driver.

A transverse bolster 9 depends from the front ends of the beams, and inclined head-boards 10 are secured to the front faces of the cross-beam 4 and depend therefrom. The head-boards are connected by a cross-cleat 11 and to the under side of the bolster 9 a front cross-cleat 12 is secured, the two cleats 12 and

11 being connected by means of foot-boards 13 which are located at opposite sides of and below the beams 1 and form platforms for the accommodation of the two attendants employed for setting the plants.

The inner edges of the foot-boards 13 are inclined and are provided each with a pair of stub-axes 14 and 15 the former being in front and the latter behind.

On the front stub-axes 14 furrow-forming wheels 16 are journaled, and upon the rear axles 15 packing wheels 17 are journaled, the latter preferably being of less diameter than the former, but each provided with broad treads or peripheries, and by reason of the inclination of the several stub-axes said wheels are set at an angle with relation to the foot-boards 13, each pair converging toward its lower sides, as shown.

In transversely opposite bearings 18 located on the upper sides of the beams 1 between the wheels 16 and 17 is journaled a rock-shaft 19, the same having a rock-arm 20 and a bell-cranked rock-arm 21. A draft beam 22 is pivoted at 23 at an intermediate point between the front ends of the beams 1, and a link 24 loosely connects the rear end of the draft-tongue with the front branch of the bell-crank arm 21 of the rock-shaft 19.

A hand-lever 25 is journaled upon a suitable cross-shaft 26 between the beams 1 immediately in front of the barrel, and within easy reach of the driver, and a connecting rod 27 loosely connects the hand-lever with the rear branch of the bell-crank arm 21. Thus it will be seen that through a manipulation of this hand-lever the front of the machine may be raised and lowered and consequently the planting mechanism carried thereby depressed or elevated so that the depth of penetration thereof into the ground is regulated. The rack-bar 28 is located at one side of the hand-lever, and through the medium of the same the said hand-lever may be locked at any point.

A hanger 29 is loosely connected at its upper end to the rock-arm 20 of the rock-shaft 19, and at its lower end is secured to the lower end of a furrow-producing shoe 30.

A lever 31 is fulcrumed between its ends, as at 32, to the cleat 12 between the foot-boards 13, and at its upper end is loosely connected at 34 with the front end of the shoe 30 and also

at an intermediate point of a U-shaped bail 35. The opposite terminals of the bail are secured to a pair of curved ridge-producing blades 36, whose front ends are connected to the lower end of the lever in a rigid manner so as to move therewith. It will therefore be seen that by operating the rock-shaft 19 through the medium of the lever before described the shoe will be depressed, as will also the ridge-producing blades; or if the motion is reversed the shoe and blades will be elevated. The blades, it will be seen, are curved in opposite directions, and at their rear terminals converge toward each other, so that they gather the soil and produce a ridge, which immediately thereafter is opened by the shoe for the reception of the plant. The wheels 16 also aid the blades in the production of the ridge and smooth the same in a manner that will be obvious. The attendants upon the opposite foot-boards 13 alternately drop the plants in the furrow thus produced by the shoe, and the packing-wheels immediately set the plants by pressing the loose soil at the sides of the furrow about the roots of the same.

I locate in rear of the shoe and in advance of the packing-wheels a spring actuated cut-off 38, to the lever of which is connected a rod 39. This rod extends to the rear to a point in advance of the axle and is connected to the rock-arm 40 formed on one end of a transverse rock-shaft 41, whose opposite or outer end lies adjacent to the inner side of one of the ground-wheels and is adapted to be struck successively and tilted through the medium of a series of tappets 42 with which the ground-wheels are provided. The number of tappets may be increased or diminished and consequently the rapidity of operation of the rock-shaft and the spring-actuated cut-off regulated.

It will be seen that at the time that each plant is dropped in the furrow a discharge of water takes place so that the plant and surrounding soil is moistened and thus its growth facilitated.

From the foregoing description in connection with the accompanying drawings it will be seen that I have provided a very simple machine composed of few parts, and designed to accommodate two attendants and a driver, the former alternately setting out the plants into the furrow produced by the shoe, the production of said furrow being in a hill or ridge set up by the devices that precede the shoe, so that the operation is continuous from start to finish, and the setting out of the plants is greatly facilitated.

I do not limit my invention to the precise details of construction herein shown and described but hold that I may vary the same to any degree and extent within the knowledge of the skilled mechanic without departing from the spirit or sacrificing any of the advantages thereof.

Having described my invention, what I claim is—

1. In a tobacco planter, the combination with a framework, of an adjustable furrow-forming shoe, a pair of ridge-producing blades located in advance of the shoe, a lever connecting the adjacent ends of the blades with the shoe, and a bail depending from the shoe and supporting the blades, substantially as described.

2. In a tobacco planter, the combination of a framework, a lever fulcrumed between its ends on the framework, an adjustable furrow forming shoe loosely connected at its front end to the upper end of the lever, a pair of ridge producing blades pivoted at their front ends to the lower end of the lever, and connections between the blades and the front of the shoe, substantially as described.

3. In a tobacco-planter, the combination with the opposite beams, the depressed foot-boards, or platforms, the superimposed framework, ground-wheels for supporting the same, of the front and rear pairs of inclined stub-axles, broad-tread wheels arranged on the stub-axles, ridge-forming devices arranged in advance of the front wheels, and furrow-forming devices arranged between the front and back wheels, substantially as specified.

4. In a tobacco-planter, the combination with the framework, the ground-wheels for supporting the same and their axle, of the opposite platforms or foot-boards, the transverse rock-shaft having the rock-arm extending therefrom, a lever for operating the rock-shaft, a hanger depending from the rock-arm, a furrow-producing shoe connected to the hanger, a lever intermediately pivoted in front of the shoe and at its upper end connected loosely to the shoe, a pair of curved ridge producing blades connected to the lower end of the lever, and a bail connecting the ends of said blades with the front ends of said shoe, substantially as specified.

5. In a tobacco-planter, the combination with the opposite parallel beams, the rear framework, the axles, the wheels, the opposite platforms, the stub-axles inclined therefrom, the ridge producing and packing-wheels arranged thereon, of the opposite bearings, the transverse rock-shaft arranged therein and having a bell-cranked rock-arm, a second arm extending from the shaft, a hanger depending from the arm, a shoe carried by the hanger ridge-producing blades arranged in advance of the shoe, a draft beam pivoted between the parallel beams, a link between the same and the front branch of the bell-crank, a rear operating lever, means for locking the same, and a rod connecting said operating lever with the rear branch of the bell-crank rock-arm, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ELMER A. ROLLMAN.

Witnesses:

C. E. BARMES,
E. M. WYSONG.