

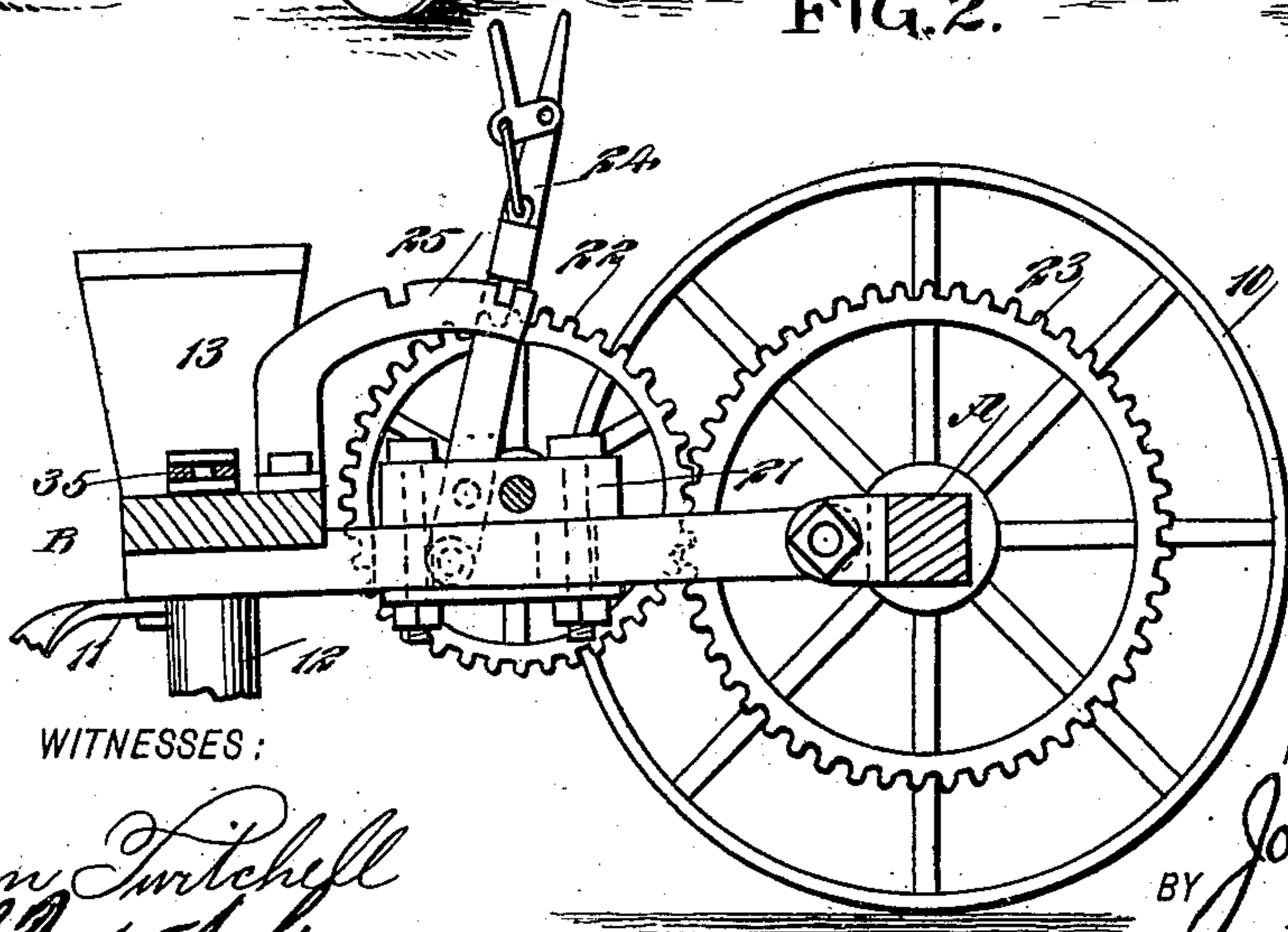
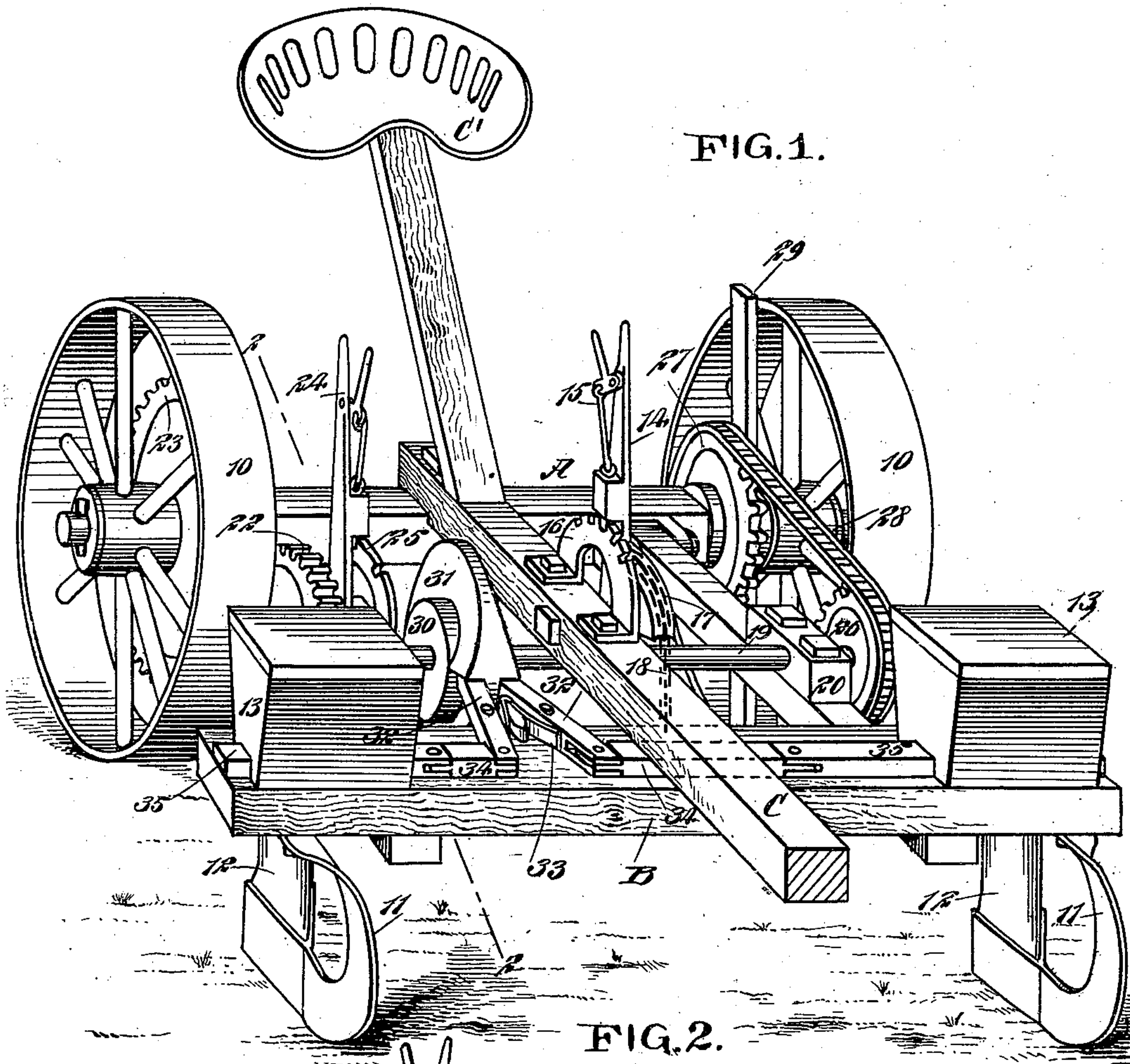
No. 660,890.

Patented Oct. 30, 1900.

J. COLBY.
PLANTER.

(Application filed Feb. 20, 1900.)

(No Model.)



WITNESSES:

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JOHN COLBY, OF VISALIA, CALIFORNIA.

PLANTER.

SPECIFICATION forming part of Letters Patent No. 660,890, dated October 30, 1900.

Application filed February 20, 1900. Serial No. 5,916. (No model.)

To all whom it may concern:

Be it known that I, JOHN COLBY, a citizen of the United States, and a resident of Visalia, in the county of Tulare and State of California, have invented a new and Improved Planter, of which the following is a full, clear, and exact description.

The invention relates to machines employed for planting corn and other seed; and its purpose is to simplify the construction of such machines, especially the construction of the seed-dropping mechanism, and to provide a marker which will be operated simultaneously with the seed-dropping mechanism, which marker can be placed between the supporting-wheels of the machine.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both figures.

Figure 1 is a perspective view of the improved machine, and Fig. 2 is a vertical section taken practically on the line 2 2 of Fig. 1.

The supporting-wheels 10 are mounted to turn on an axle A, and the frame B of the machine is pivotally connected with the axle, as shown in both of the figures. The frame is provided with the usual runners or furrow-openers 11 and seed-conductors 12, which latter receive the seed from boxes 13, one of which is located at each side of the forward portion of the frame B. The tongue or pole C carries the driver's seat C', and the said tongue or pole is attached to the axle A and is usually given an upward inclination in direction of its free end, so that the frame B of the machine, over which the pole or tongue extends, may be readily raised and lowered. This adjustment of the frame B is accomplished through the medium of a lever 14, the lever being fulcrumed at one side of the tongue or pole C, and it is provided with the usual thumb-latch 15, adapted to engage with a rack 16, secured on the upper surface of the pole or tongue. Preferably a segmental projection 17 is formed upon the forward edge of the lever 14 near its bottom, and a chain 18 is passed over this projection, being attached

to the upright portion of the lever at one end and to the frame B at its opposite end.

A shaft 19 is journaled transversely near the forward portion of the frame B in boxes 20 and 21. The right-hand box 21 is adjustably mounted on the frame, as shown in dotted lines in Fig. 2, and the shaft 19 carries a gear 22 at its right-hand end, which meshes with a larger gear 23, secured either to the hub or to the spokes of the right-hand supporting-wheel of the machine. The smaller gear 22 can be carried to or from the larger driving-gear 23 by shifting the box 21, and this is preferably accomplished through the medium of a lever 24, pivoted at its lower end to the frame and attached to the box 21, the lever being provided with the usual thumb-latch to engage with a rack 25, also carried by the frame. Thus it will be observed that the shaft 19, which is a driving-shaft for the seed-dropping mechanism, may be readily thrown into or out of gear with the main driving mechanism.

A sprocket-wheel 26 is secured to the left-hand end of the shaft 19, and this sprocket-wheel carries a belt 28, which is also passed over a larger sprocket-wheel 27, mounted on the axle A, preferably between a shoulder on the axle and the left-hand supporting-wheel 10. This larger sprocket-wheel 27 carries one or more arms 29, which are of sufficient length to extend beyond the periphery of the left-hand supporting-wheel, and as the machine advances and is in working condition the arms 29 serve as markers, indicating the position of the hills or rows of hills.

A disk 30 is secured on the driving-shaft 19, and this disk is provided with a tapering peripheral flange 31, the contracted portion of which flange meets the wider portion, as shown in Fig. 1. This flange 31 is adapted to travel between the rear ends of levers 32. These levers 32 are fulcrumed upon the forward portion of the frame B, and their rear ends are held quite close together by a spring 33, introduced between the said levers, as shown in Fig. 1, so that the inner ends of the levers 32 will always accommodate themselves to the thickness or width of the flange 31, and as the wider portion of the flange 31 passes between the levers 32 the forward ends of the levers are drawn together to a greater or a less

extent. The forward ends of the levers are connected in a pivotal manner by links 34 or their equivalents with the seed-drop slides 35, and when the wider portion of the flange 31 enters the space between the levers 32 the seed-drop slides are drawn inward and the seed is dropped.

The planter is very simple, is easily managed, and is accurate in its dropping mechanism, and none of the parts are liable to become disarranged or broken under ordinary conditions of use.

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

1. In a planter, the combination with seed-boxes, and drop-slides therefor, of a drive-shaft, a disk secured to the drive-shaft and having a tapering peripheral flange, levers 20 pivoted adjacent to each other, and between which the flange of the disk is adapted to travel, a spring between the levers, and links connecting the levers with the drop-slides, substantially as described.

2. In a planter, the combination with an axle, supporting-wheels, a frame pivoted to the axle, and means for raising and lowering the frame, of a shaft mounted in the frame and driven from one of the supporting-wheels, 30 a disk secured on the shaft and having a tapering peripheral flange, pivoted levers arranged adjacent to each other and between which the flange of the disk is adapted to travel, a spring between the levers, seedboxes, 35 drop-slides therefor, and links connecting the slides with the levers, substantially as described.

3. A planter, comprising an axle, supporting-wheels, a frame pivoted to the axle, means 40 for raising and lowering the said frame, a drive-shaft carried by said frame, and driven from one of the supporting-wheels, seedboxes, drop-slides therefor, pivoted and spring-pressed levers mounted upon the frame adjacent to each other and connected with the 45 seed-drop slides, a disk secured upon the drive-shaft and provided with a circumferentially-tapering flange on its periphery arranged to travel between the inner ends of the said levers, a marking-wheel mounted on

the axle, a driving connection between the drive-shaft and marking-wheel, and means for carrying the drive-shaft into and out of gear with its driving mechanism.

4. In a planter, the combination with the 55 axle, supporting-wheels, a frame pivoted to the axle, a tongue secured to the axle, and a connection between the tongue and frame, of a drive-shaft having one end mounted in a sliding box, means for shifting the box, a 60 gear-wheel on the shaft, a gear-wheel on one of the supporting-wheels, seedboxes, drop-slides in the boxes, and means for operating the drop-slides from the said shaft, substantially as described. 65

5. A planter, comprising an axle, supporting-wheels, a frame pivoted to the axle, a tongue secured to the axle, a connection between the frame and tongue for raising and lowering the frame, a drive-shaft driven from 70 one of the supporting-wheels, seedboxes, drop-slides in the seedboxes, means for operating the drop-slides from the said shaft, a wheel mounted on the axle adjacent to one of the supporting-wheels, an arm secured to said 75 wheel and projecting beyond the periphery of the supporting-wheel, and means for operating the wheel carrying the arm from the drive-shaft, substantially as described.

6. A planter, comprising an axle, supporting-wheels, a tongue secured to the axle, a connection between the tongue and frame, a drive-shaft operated from one of the supporting-wheels, seedboxes, drop-slides for the 80 boxes, means for operating the slides from the drive-shaft, a sprocket-wheel mounted on the axle adjacent to one of the supporting-wheels, an arm secured to the sprocket-wheel and projecting beyond the periphery of the supporting-wheel, a sprocket-wheel on the 85 drive-shaft, and a belt passing over said sprocket-wheels, substantially as described. 90

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN COLBY.

Witnesses:

WILLIAM K. ADAMS,
J. S. CLACK.