

(No Model.)

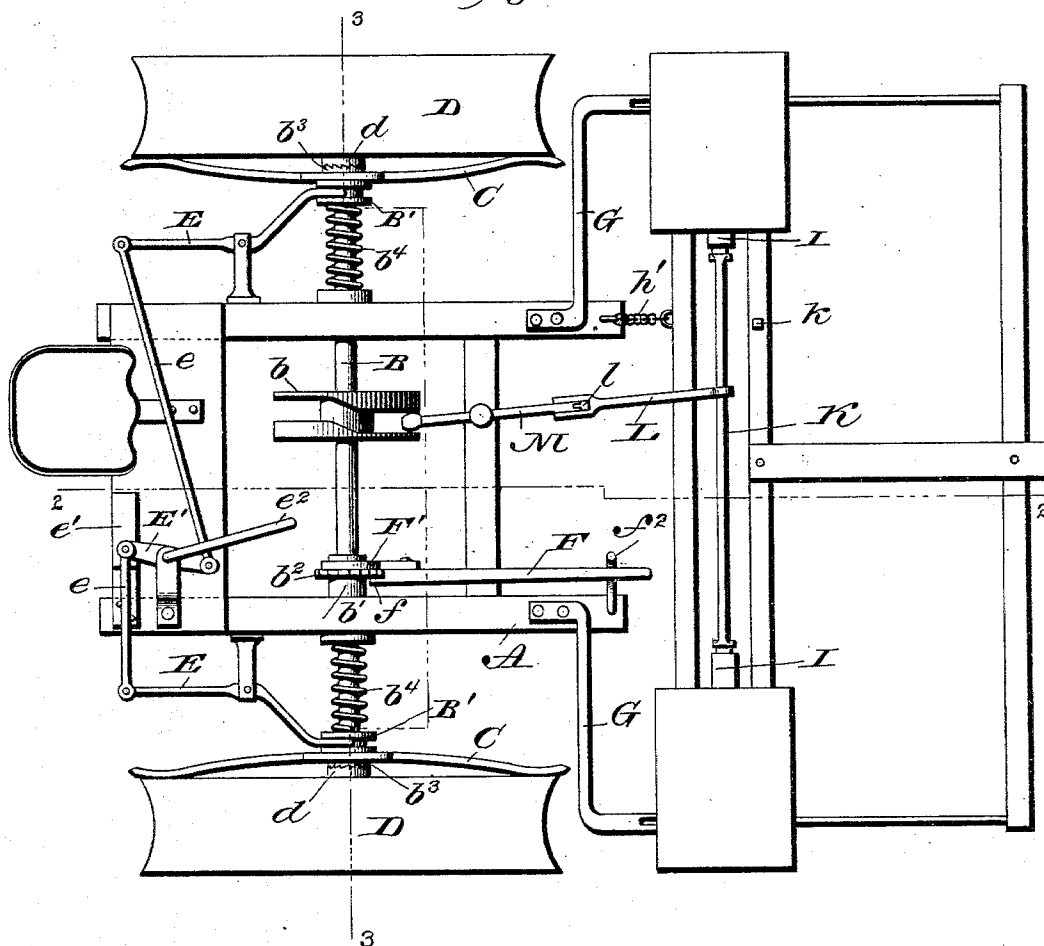
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W. H. FREEMAN.
CORN PLANTER.

No. 546,141.

Patented Sept. 10, 1895.

Fig. 1

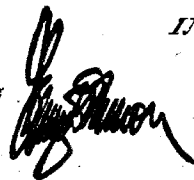


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2 Sheets—Sheet 2.

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Fig. 2.

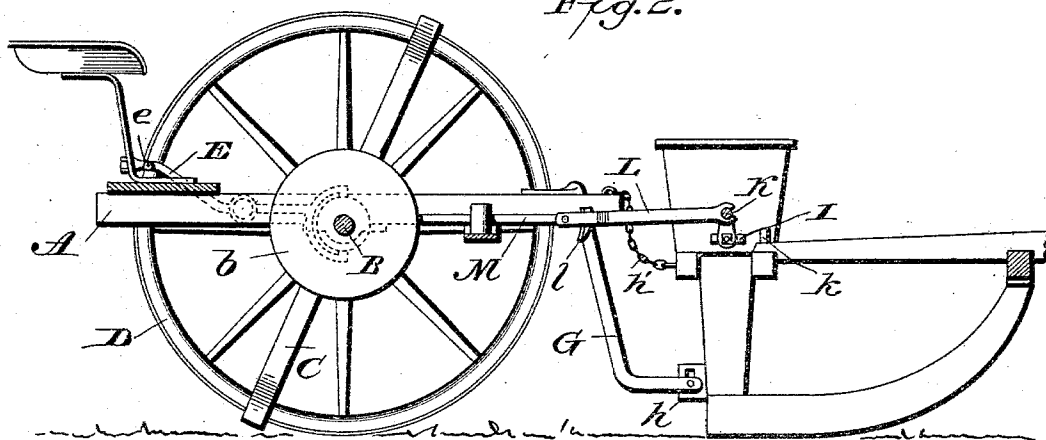


Fig. 3.

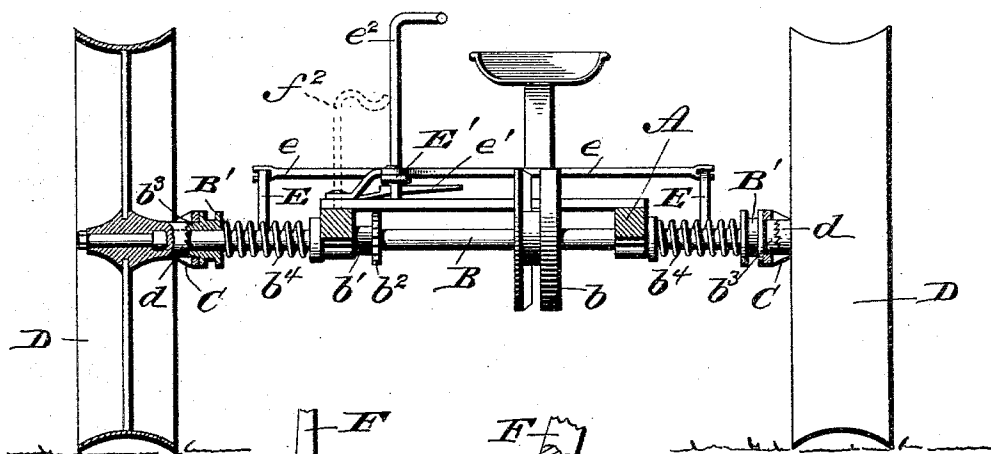


Fig. 4.

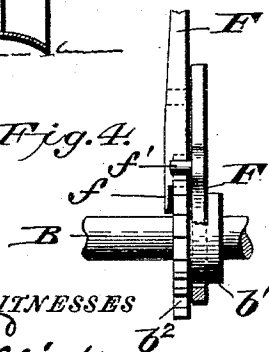
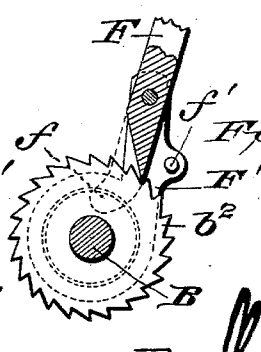
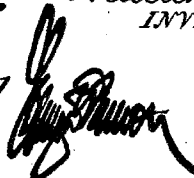


Fig. 5.



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WILLIAM H. FREEMAN, OF HEMLOCK, INDIANA.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 546,141, dated September 10, 1895.

Application filed June 6, 1895. Serial No. 551,893. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. FREEMAN, a citizen of the United States of America, residing at Hemlock, in the county of Howard and State of Indiana, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a corn-planter of improved construction which comprises a wheel-frame and runner-frame, the runner-frame being pivotally connected to the wheel-frame and provided with seed-boxes and seed-slides, the bar of the seed-slide being connected by a jointed arm to a horizontally-oscillating lever which is actuated from the axle of the wheel-frame, and the runner-frame carrying a stud or projection which is adapted to engage with the connecting-bar of the seed-slides, so as to prevent excessive rearward movement of said runner-frame.

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

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of a corn-planter constructed in accordance with my invention. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a sectional view on the line 3 3 of Fig. 1, and Figs. 4 and 5 are detail views of the lever and its mechanism for adjusting the markers carried by the axle.

A designates the wheel-frame of the planter, which is provided with an axle B, having rigidly attached thereto a cam-disk *b* and a sleeve or enlarged portion *b'*, to which is rigidly fixed a ratchet-wheel *b*². The axle B passes through suitable bearings secured to the under side of the longitudinal beams of the wheel-frame, and beyond the bearings the axle is preferably squared to receive collars B', which are adapted to slide on said axle and rotate therewith. To the collars B' are rigidly fixed markers C, which project beyond

the rim of the supporting-wheels D, the supporting-wheels being loosely mounted on the axle, and the hub of each wheel is provided with a clutch-face *d*, which engages with a clutch-face *b*³ on the adjacent collar B', and when the clutches are thrown in engagement, as hereinafter described, the axle turns with the supporting-wheels.

The collars B' are forced against the hubs of the supporting-wheels by means of helical springs *b*⁴, which encircle the axle and are interposed between said collars and the bearings for the axle. The collars are provided with peripheral grooves, with which the bifurcated ends of levers E engage, said levers being pivoted to brackets which extend from the longitudinal beams of the wheel-frame, and the ends of the levers are connected to an operating-bar E' by rods *e*, the bar being centrally pivoted and operated by a handle or lever *e*², located adjacent to the driver's seat. A spring-catch *e*³ is carried by the wheel-frame and engages with the depending end of the bolt or pin which passes through the outer end of the bar E', so as to hold the levers E against the action of the helical springs *b*⁴. The markers C are slightly bowed from end to end and are made of flat spring metal; so that they will have the required degree of resiliency, and when the clutches are in engagement the markers are held by spring-pressure against the rims of the wheels.

F designates a lever, the lower end of which is formed so as to engage with the ratchet-disk *b*², and this lever is provided with an extension *f*, which bears against one side of the ratchet-wheel. The lever is pivoted to a ring F', which encircles the sleeve *b'* and is provided with a stud *f'*, with which the projecting portion *f* of the lever engages when said lever is swung forward to rest in a support *f*², carried by one of the longitudinal beams of the wheel-frame. It will be noted that the ring F' moves loosely on the sleeve *b'*, so that the lever can be moved to engage with the teeth of the ratchet-disk, the lever being for the purpose of turning the axle so as to adjust the markers in proper position with respect to the seed-slide. Before operating the lever F to turn the axle in adjusting the markers the levers E E are operated, as hereinbefore described, to disengage the clutches.

The longitudinal beams of the wheel-frame are provided with bars G, which are rigidly attached to the forward ends thereof and extend transversely to a point on a line with the wheels D, where they are bent downwardly and then forwardly, the ends being bifurcated and apertured for the passage of bolts or pins, which engage with vertical slots in blocks *h*, attached to the lower end of the runner-frame.

This manner of connecting the wheel-frame to the runner-frame allows a vertical movement of the runner-frame, so that it can adapt itself to the inequalities of the ground. The runner-frame is also connected to the wheel-frame above its pivotal point by means of a chain *h'* or equivalent flexible connection.

The runner-frame is provided with the usual runners, seed-boxes, and spouts, the seed-boxes having reciprocating slides I.

The seed-slides are connected to each other by a bar K, which is pivoted to the seed-slides so as to have a rocking movement, and one of the transverse bars which support the seed-boxes has an upwardly-projecting stud *k*, which engages the connecting-bar K when the runner-frame is tilted, and serves to limit the rearward movement of said runner-frame, the connecting-bar being held stationary by the arm L, hereinafter described. The bar K, which actuates the seed-slides, is engaged by an arm L, the rear end of which is bifurcated and provided with a projecting portion *l*, having a segmental face which engages with the forward end of an oscillating bar M, said bar being pivoted on the wheel-frame so that its rear end will be actuated by the cam *b*, secured to the axle.

I am aware that prior to my invention it has been proposed to provide a corn-planter with a cam and horizontally-oscillating lever which is connected by a jointed arm to the seed-slide, so as to impart a reciprocating motion thereto from a cam; also that it is not broadly new to provide the supporting-wheels

of a planter with clutches and markers, and to provide means for adjusting the axle upon which the markers are mounted, and I do not therefore claim such features broadly; but

What I claim as new, and desire to secure by Letters Patent, is—

1. In a corn-planter, the combination, of the supporting wheels D loosely mounted on the axle of the wheel-frame and provided with clutch faces, sliding collars B' mounted on the axle to rotate therewith and having clutch faces which engage the clutch faces on the hubs of the supporting-wheels, markers C rigidly secured to the sliding collars, said markers being bowed so that their ends will be held in frictional contact with the rims of the wheels, and operating levers connected to the sliding collars, together with a ratchet-disk *b*² rigidly mounted on the axle and provided with a hub on one side, and a lever F having a portion F' which encircles the hub, the lever F being pivoted to the portion F' so that it will engage the teeth of the ratchet-disk, substantially as shown and for the purpose set forth.

2. In a corn-planter, the combination with the wheel-frame and runner-frame, of bars G connecting the frames to each other said bars being rigidly secured to the wheel-frame and pivotally connected to the lower ends of the runner-frame, an arched bar K pivoted at its ends to the seed slides of the runner-frame, an arm or lever pivoted on the wheel-frame and connected at its outer end to the arched bar, and a stud or projection on the runner-frame adjacent to the arched bar, substantially as shown and for the purposes set forth.

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

WILLIAM H. FREEMAN.

Witnesses:

JOHN A. TRACY,
GEORGE W. ROBINSON.