

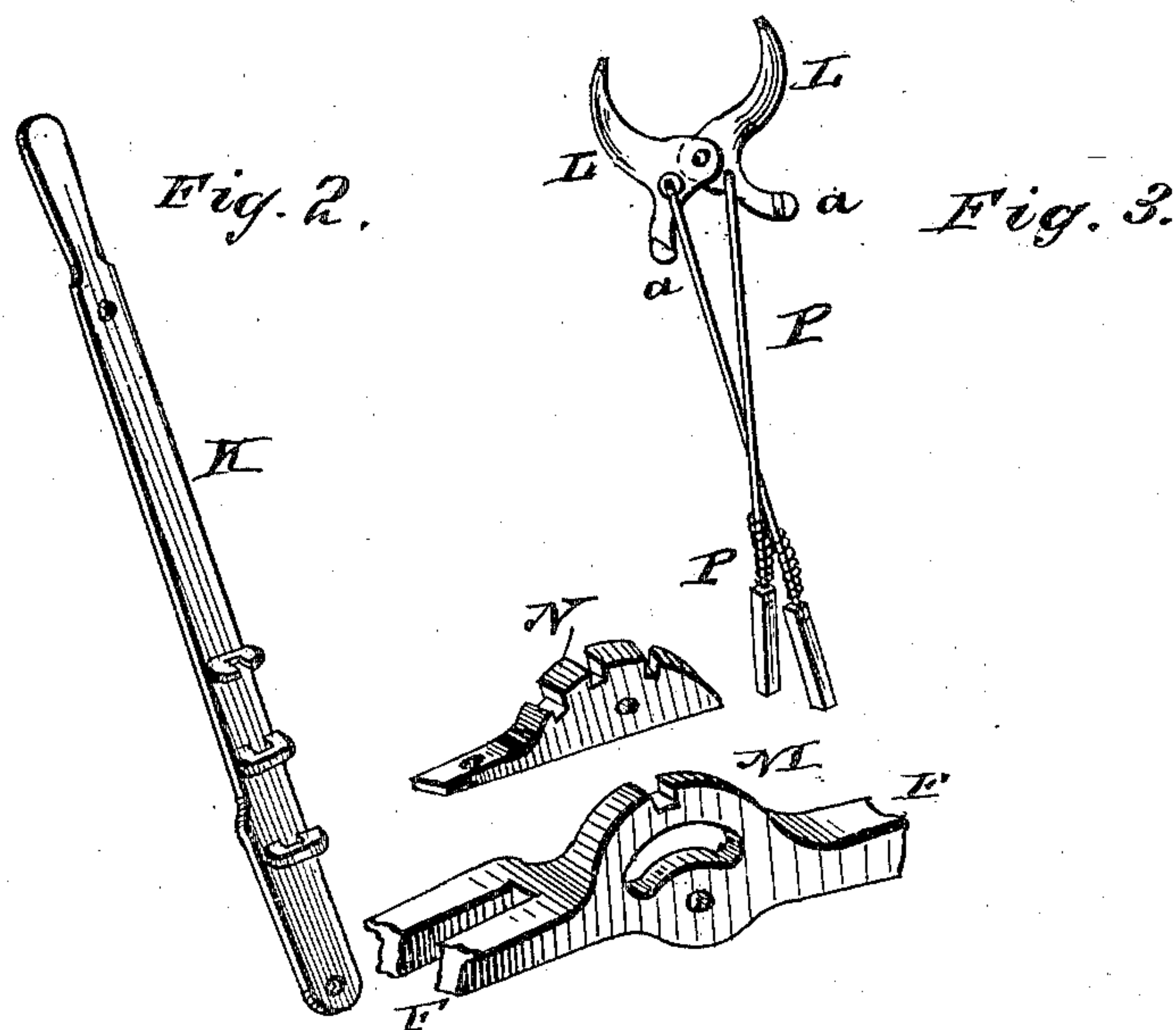
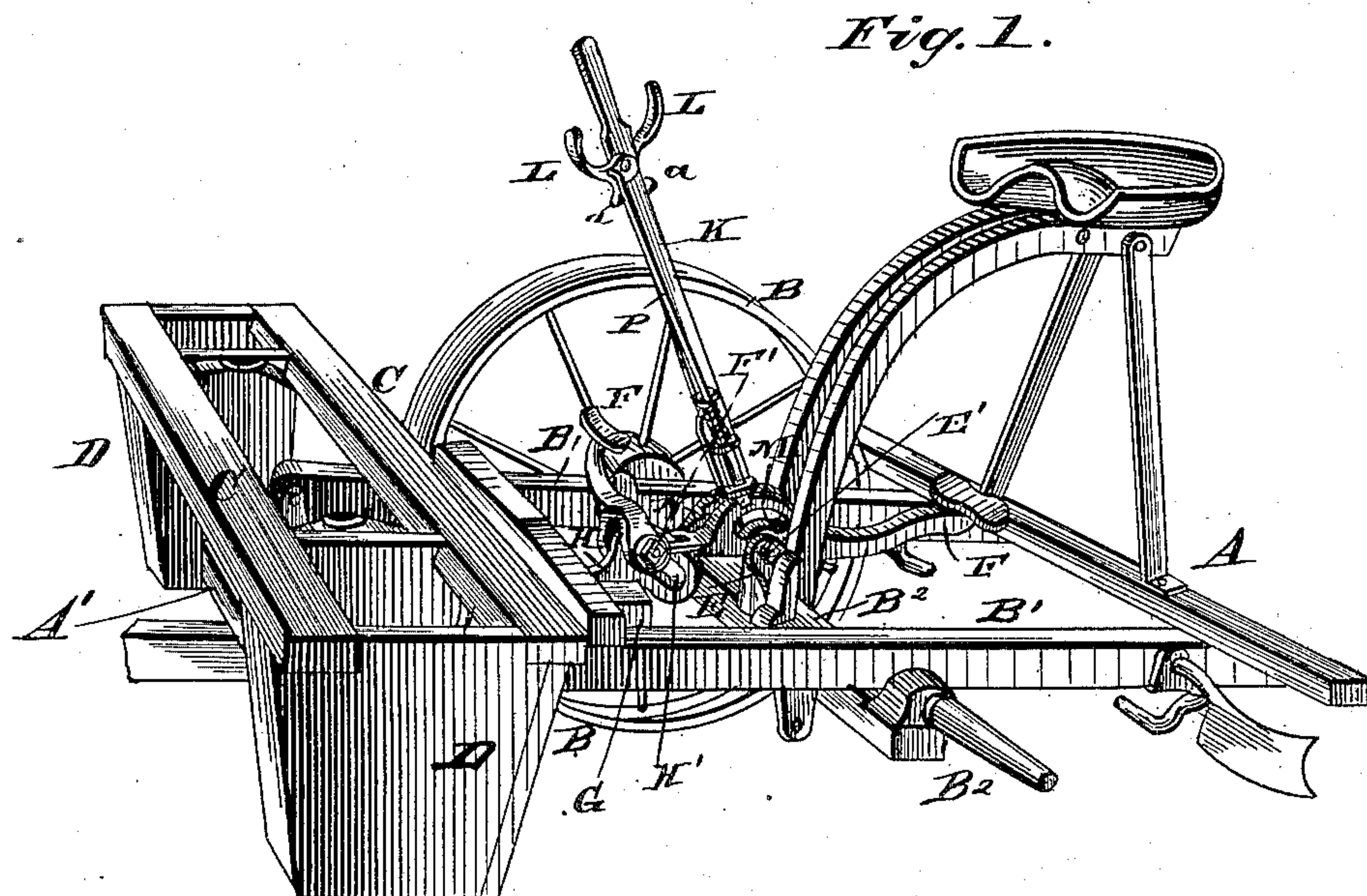
(No Model.)

W. F. JOHNSON.

CORN PLANTER.

No. 313,596.

Patented Mar. 10, 1885.



WITNESSES

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# UNITED STATES PATENT OFFICE.

WILLIAM F. JOHNSON, OF ROCK FALLS, ASSIGNOR TO THOMAS A. GALT  
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## CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 313,596, dated March 10, 1885.

Application filed December 15, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM F. JOHNSON, a citizen of the United States, residing at Rock Falls, in the county of Whiteside and State of Illinois, 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 or figures of reference marked thereon, which form a part of this specification.

My invention belongs to that class of two-horse corn-planters which plant two rows at a time and are constructed of a forward frame supported on two runners or furrow-openers and provided with seed-hoppers, and a rear frame carried on two covering-wheels, the two frames being suitably hinged or jointed together, so that there may be changes effected in their relative attitudes. The variation in the density of the ground makes it necessary to sometimes force the seed-runners into the ground, and at other times to gage the depth of planting by adjusting the height of the rear end of the front frame upon the rear frame. Again, in turning at the ends of the rows and in transporting the planter to and from the field some mode of suspending the runners above the ground, and thereby carrying the planter on the covering-wheels and the front end of the tongue, is essential.

In the drawings, Figure 1 is an oblique side elevation of a machine embodying my invention. Fig. 2 is a detached view of the hand-lever and ratchet-disks. Fig. 3 is a detached view of the spring-pawls used for locking the hand-lever to the ratchet.

As the usual parts of a corn-planter—such as of which my invention is an improvement—are well known, I do not deem it necessary to show or describe the same particularly or further than will render intelligible the location and operation of my said invention.

A is the rear frame, carried on the covering-wheels B B.

C is the front frame, to which the rear frame is pivotally connected by means of the longitudinal bars B' B', which at their forward ends

are pivotally seated in clutches on the transverse plank A', which supports the seed-hoppers D D.

On the center of the axle B<sup>2</sup> of the carrying-wheels B B is suitably affixed the fulcrum E, in which, by means of the bolt E', is fulcrumed the foot-lever F, the latter being provided at each extremity with foot-rests, so as to be readily operated by the driver's feet.

On the center of the plank A', and extending toward the rear, is rigidly affixed the short horizontal beam G, to the rear end of which is attached the short bar H, provided with the obliquely-vertical slot H' therein.

The lever F, about midway of its front portion, is bent upward, as shown, and at such bend is slotted vertically to receive the slotted end of the bar H, and a bolt, F', is passed transversely through the lever F and slot H', which in the vertical oscillations of such lever traverses such slot.

It is obvious that the driver, by placing his feet on the rear end of the lever F and bearing downward, can raise the front frame, C, and by placing his foot on the front end of such lever can force the seed-runners of the front frame into the ground.

The actions just described have no specific limitation, and the mechanism involved therein affords no means of sustaining the frames A and C at any one relative altitude.

In order to accomplish both of the last-named results, and as either an independent or supplementary mode of effecting the results hereinbefore ascribed to such foot-lever F, I provide the hand-lever K, the lower end of which is pivoted on the bolt E', and the upper end of which is placed within convenient reach of the driver and has its line of movement parallel with the sides of the machine. On each side of the hand-lever K are provided independently-acting spring-pawls L, one of which engages a ratcheted disk, M, formed by an upward bend of the upper side of the foot-lever F over the fulcrum E, and the other of which pawls engages a ratcheted disk, N, rigidly affixed at the opposite side of such lever K to the axle B'.

The pawls L L at their lower ends are controlled by guides and springs in the usual way,



while at their upper ends they are withdrawn and held from engagement with the disks by mechanism which I will now describe.

P P are short levers pivoted reversely to the respective sides of the lever K, and shaped at their upper ends so as to be readily clasped with the lever K. The upper end of the pawl L is pivoted to the outer side of the lever P, between the free end of the latter and its fulcrum, but near such fulcrum. To disengage the pawls L, the free end of the lever P is caused to pass over the fulcrum until the pivoted point at the upper end of the pawl has passed over and slightly beyond the fulcrum of the lever P. A lug, *a*, is formed on the inner face of the lever L, which at this point in the movement of the latter engages the side of the lever K and prevents any further movement of the lever L. As the pivoted end of the pawl P has passed beyond the dead-point, the spring prevents it from returning and the lug *a* prevents it from progressing farther, and the pawl P is thereby held from engagement with the ratchets. Thus each of the pawls P can be readily thrown and held out of use. When it is desired to use either of the pawls P, the lever L, attached thereto, is thrown back into its first position, when the springs force the lower end of such pawl into the contiguous disk whenever brought opposite the ratchets in the latter.

My invention is operated as follows: By withdrawing and suspending the pawl P, which engages the stationary disk N, and permitting the opposite pawl P to engage the disk M, formed on the foot-lever F, the hand-lever K is used simply to actuate such foot-lever F, and thus raise the front frame, C, or force the seed-runners into the ground. When by this means, either alone or conjointly with the pressure of the driver's feet upon the foot-lever F, the front frame is either raised or depressed to the point desired by bringing the

other pawl, P, into play and allowing it to engage the stationary ratchet-disk N, the foot-lever F is locked in such desired position and the relative altitude of the frames A and C maintained. When it is desired to have the frames A and C entirely flexible, the pawl which engages the disk M is withdrawn therefrom and suspended, while the pawl which engages the disk N is allowed to remain therein, and thus the lever K is held free from the incessant oscillations of the foot-lever F. That part of the bolt F' included in the slot H' is furnished with a friction-roller. By the construction shown the lever K is placed directly in front of the driver's seat.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. In an agricultural implement, the combination of the pawls P, levers L, and lever K, such pawls being respectively pivoted to the levers L eccentrically to the fulcrum of the latter, and such levers L being respectively provided with the lugs or stops *a*, substantially as shown and for the purpose described.

2. In an agricultural implement, the combination of an oscillating ratchet-disk, M, stationary ratchet-disk N, pawls P P, respectively pivoted eccentrically to the fulcrum of the levers L L and arranged, respectively, to engage such disks, lever K, and levers L L, the levers L being provided with the stops *a* and being independently fulcrumed to the lever K and adapted to be respectively withdrawn and to hold the pawl P from engagement with its adjacent ratchet-disk, substantially as shown, and for the purpose mentioned.

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

WILLIAM F. JOHNSON.

Witnesses:

WALTER N. HASKELL,  
J. S. STUART.