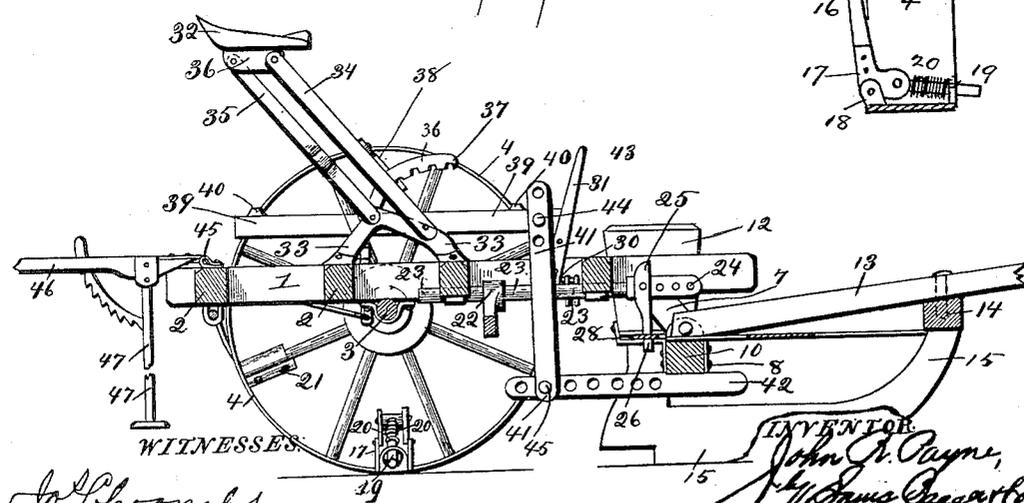
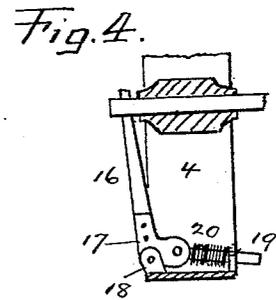
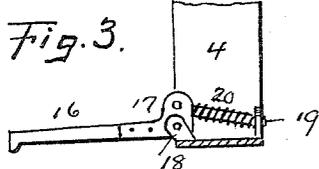
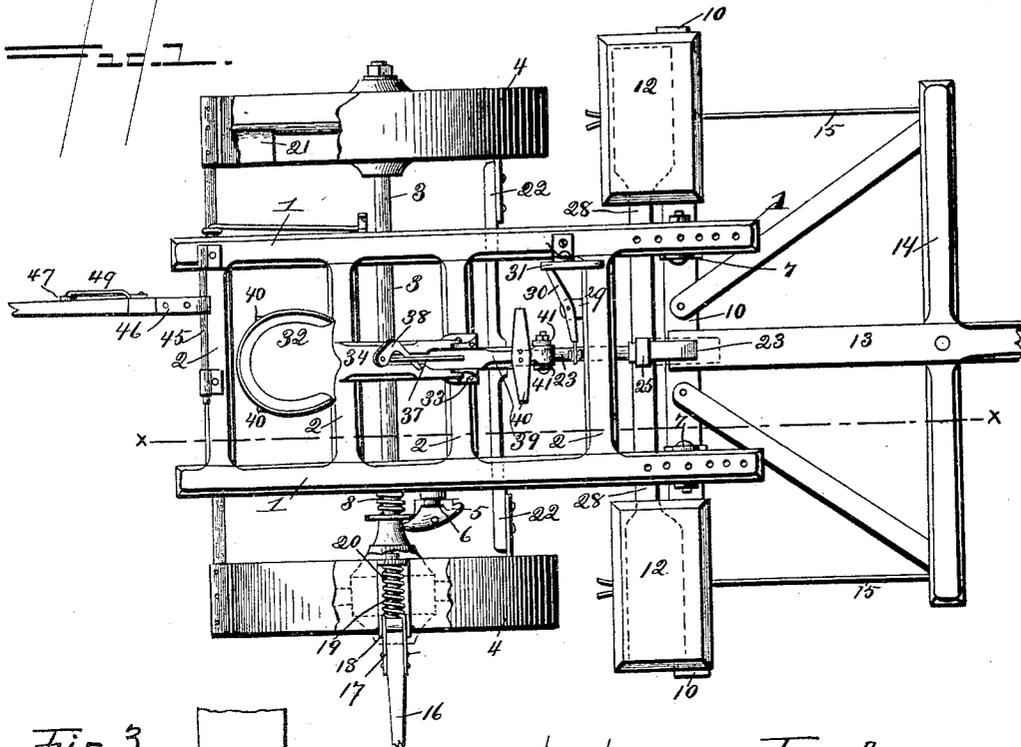


(No Model.)

J. R. PAYNE.
CORN PLANTER.

No. 454,378.

Patented June 16, 1891.



WITNESSES:
H. L. Bloombs
C. H. Stewart

INVENTOR
John R. Payne,
J. Davis Coggart,
 Attorneys.

UNITED STATES PATENT OFFICE.

JOHN R. PAYNE, OF FREEDOM, INDIANA, ASSIGNOR OF ONE-HALF TO ISRAEL LIGHT, OF SAME PLACE.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 454,378, dated June 16, 1891.

Application filed December 3, 1890. Serial No. 373,446. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. PAYNE, a citizen of the United States, and a resident of Freedom, in the county of Owen and State of Indiana, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in corn-planters.

The object of the invention is to provide a machine of the above character which can be employed as a check-row planter, a drill, or a hand planter, as may be desired, and contemplate improvements in general construction whereby advantages and results are attained which will be apparent to those skilled in the art or who are familiar with the practical working of such implements.

The invention consists in the novel construction and combination of parts hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of a corn-planter constructed in accordance with my invention, one of the wheels being broken away to show the construction of the check-row marker, while the other wheel is broken away to show the lugs for actuating the feed-bars and connections. Fig. 2 is a section of the same on the line *xx*. Fig. 3 is a detail view showing the check-row marker in operative position. Fig. 4 is a similar view showing the check-row marker folded up as when not in use.

In the said drawings the frame of the machine consists of side bars 1 and cross-bars 2, the side bars resting upon the axle 3, having supporting-wheels 4. One of these wheels is securely fixed to the axle, while the other is loosely mounted thereon and adapted to engage with a spring-actuated clutch 5, having an operating-lever 6, the object being to allow the wheel to be thrown out of gear with the clutch, so that in turning it will not rotate with the axle. The front ends of the

side bars are provided with downwardly-depending lugs 7, which are pivoted to similar lugs 8 on the upper side of a cross-bar 10, which carries the seed-boxes 12 at its ends. To said cross-bar is attached the tongue 13, having a cross-bar 14, to which are secured the front ends of the runners 15, the rear ends of the latter being secured to the under sides of the seed-boxes.

Each of the supporting-wheels is provided with a check-row marker consisting of an arm 16, provided with an angular extension 17, pivoted in lugs 18, secured to the inner face of the rim. The other end of the extension 17 is provided with a pivoted bar 19, which passes through a loop or eye on the opposite edge of the wheel-rim and is embraced by a coiled spring 20.

When in use as a check-row marker, the arm 16 is extended outward, as shown in Fig. 3, so that at each revolution thereof a mark or indentation will be made in the ground, which subsequently serves as a guide, as is well understood, the coiled spring 20 keeping the arm in its extended position and forming a yielding bearing therefor. For the purpose of clearing trees, stumps, and other obstructions the arm may be turned upward, as seen in Fig. 4, with its upper end bearing against the end of the axle. The wheels are also provided on their inner sides with one or more lugs or studs 21, which are adapted to strike the ends of a tilting lever 22, and by means of its connections hereinafter described actuate the seed-bars to drop the seed. When used as a corn-planter only, one stud or lug is used on each wheel, but when employed as a drill a number are to be placed thereon. The tilting lever is secured to a horizontal rock-bar 23, journaled in the cross-pieces of the frame, which is provided at its front end with a series of holes or apertures 24, by which the vertical arm 25 is secured by means of a pin 26, which passes through a slot in the seed-slides 28. The seed-slides can thus be laterally reciprocated by rocking the bar 23, and is provided near each end with feed-openings communicating with openings in the seed-boxes, as usual.

Pivoted to a lug 29 on one of the cross-bars 2 is a lever 30, connected at its inner end

with the rock-bar 23, and at its outer end connected with an operating-lever 31, pivoted in one of the side bars 1. The object of these devices is to throw the tilting lever in and out of engagement with the studs or lugs on the wheels by horizontally reciprocating the rock-bar 23 by means of said lever.

The seat 32 is adjustably connected with brackets 33, secured to the inner cross-bars 2 2, and is supported by means of the standard 34, pivoted thereto and to the bracket 33, being bifurcated at each end. In rear of the upright or standard 34 is a bent bar 35, pivoted to one of the brackets at its lower end and to the center of the seat at its upper end. By elevating or depressing this bar and the standard the seat can be adjusted, it being held in place by means of a segment 36, provided with rack-teeth 37, secured to one of the brackets 33, and a pivoted pawl 38, carried by the standard, which is adapted to engage with said teeth.

Pivoted in the brackets 33 at its center is a horizontal lever 39, having foot-pieces 40 at each end. At its forward end this lever is adjustably connected with vertical bars 41, connected at their lower ends with a horizontal bar 42, secured to the cross-bar, to which the tongue and seed-boxes are secured. The bar 41 is provided with a series of holes or apertures 43, by which it is adjustably connected with lever 39 by means of pin 44, and bar 42 is provided with a similar series of holes for connecting it by means of pin 45 with the bars 41. The object of this arrangement is to enable the runners to be elevated by depressing the rear end of lever 39. The runners can be lowered by depressing the front end of said lever, as will be obvious.

Secured to the rear cross-bar of the frame is a rod 45, to which is pivoted a lever 46, having a support 47, pivoted thereto near its connections with said rod. This arrangement is to provide means for elevating the frame for removing the wheels or for correcting inaccuracies in the check-rows, or for other purposes, forming, as it were, a wagon-jack. When not in use, the lever 46 occupies a horizontal position on the frame with its free end

pointing toward the front of the apparatus and the support 47 lying thereon. When it is to be employed as a jack, the lever 46 is swung over projecting outwardly from the frame, when the support 47 will drop down and its free end rest upon the ground. By bearing upon the free end of the lever the frame and wheels can be elevated, the support 47 serving as the fulcrum. The support is provided with a notched segment 48, pivoted thereto and working in a guide consisting of a rod 49, having its ends bent at right angles and secured to the lever 46. In operation the notched segment will fall by gravity and engage with the outermost bent end of the guide, whereby the support is held in position.

From the above description, taken in connection with the drawings, the operation of the implement will be readily understood, and its advantages will be apparent.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a corn-planter, the combination, with the supporting-wheels, of an arm having an extension pivoted to a lug on the inner face of the wheel-rim, a pivoted rod connected with said extension and passing through an eye or loop on the said rim, and a coiled spring embracing said rod, substantially as described.

2. In a corn-planter, the combination, with the frame, the wheels, and the axle, of the jack consisting of a lever pivoted to a bar secured to the rear cross-bar of the frame and provided with a guide having angularly-bent ends, the support pivoted to the lever, and the notched segment pivoted to the support, adapted to fall by gravity and engage with one of the bent ends or arms of the guide, substantially as described.

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

JOHN R. PAYNE.

Witnesses:

ARMSTED DYER,
JAMES W. MCINDOR.