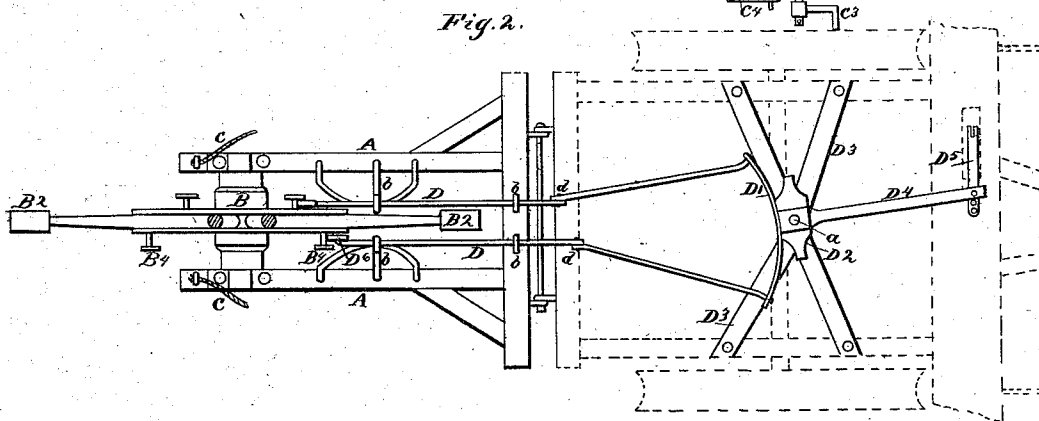
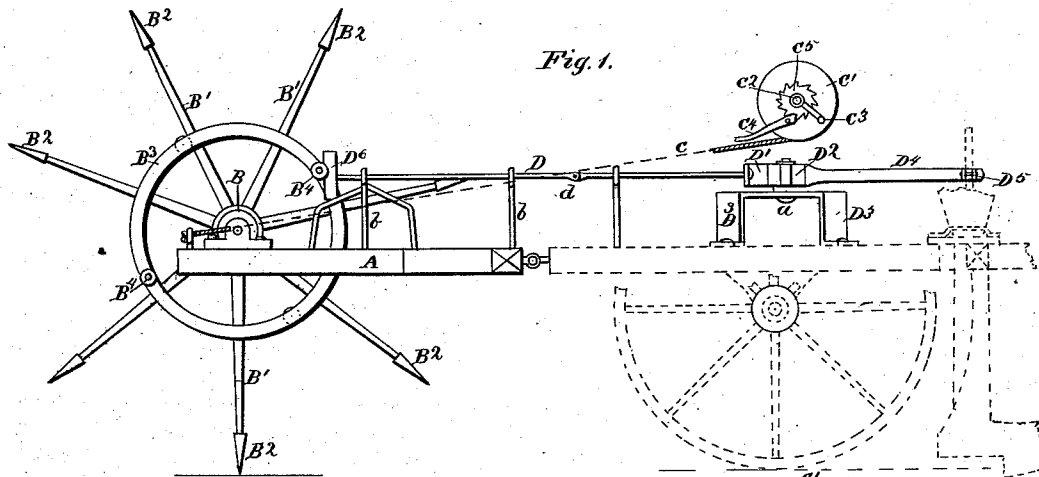


F. M. SIDERS.
Corn-Planters.

No. 154,965.

Patented Sept. 15, 1874.



Witnesses:
Henry W. Miller
Thomas. Payne

Inventor
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UNITED STATES PATENT OFFICE.

FRANCIS M. SIDERS, OF DENMARK, KANSAS.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **154,965**, dated September 15, 1874; application filed March 20, 1874.

To all whom it may concern:

Be it known that I, FRANCIS M. SIDERS, of Denmark, in the county of Lincoln and State of Kansas, 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 thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a check-row and self-dropping attachment for corn-planters, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which forms a part of this specification, and in which—

Figure 1 is a side elevation, and Fig. 2 a plan view, of my invention, showing the same attached to a corn-planter, the planter being represented in dotted lines.

A represents the frame of my attachments, to be connected to the frame of a wheeled corn-planter by means of suitable hinges. In the rear part of the frame A is hung the propelling-wheel consisting of the hub B with seven (more or less) radiating spokes or arms, B¹, at equal distances apart, each spoke being at its outer end provided with a spade-shaped pointer, B². The rear end of the frame A is raised by two cords or chains, C C, connected with two pulleys, c¹ c¹, mounted upon a shaft, c², which is intended to be arranged on the corn-planter frame under the driver's seat, and this shaft is at one end provided with a crank, c³, by means of which the frame A may be raised, so as to suspend the wheel and prevent its touching the ground while going to and from the field, and in turning at the ends of rows, the wheel being held in such suspended position by means of an ordinary pawl, c⁴, and ratchet-wheel c⁵. Upon each side of the wheel is attached an annular ring, B³, from which project two pins, B⁴ B⁴, directly opposite each other; but the pins upon one side of the wheel are directly opposite the center of the space between the pins on the other side. The pins B⁴, when the machine is in operation, alternately operate two rods, D D, the front ends of which are attached to the ends of a spring, D¹. This spring is secured in the center to a

bar, D², which rocks or oscillates on a center-pin, a, secured on a frame, D³, and this frame is to be fastened to the frame of the corn-planter. From the center of the bar D² projects forward an arm, D⁴, in the front end of which is pivoted a rod, D⁵, to connect with the slide or dropper of the corn-planter.

It will readily be seen that the pins B⁴, acting alternately upon the rods D D, give to the bar D² a rocking or oscillating motion, and, through the connections D⁴ D⁵, give the sliding dropping-bar of the planter the required reciprocating motion.

The rear ends of the rods D are provided with shoes D⁶, against which the pins B⁴ work to push the rods forward. These rods are supported in suitable guides b b, and are jointed at d by a loose joint. The object of these loose joints is to accommodate the unevenness of the ground over which the planter may pass. The object of the spring D¹ interposed between the rods D and the bar D² is to insure the regular striking of the pins B⁴ when the wheel rises and falls by the irregularities in the ground, and also to save the gearing from breaking in case the planter should get choked.

The pins B⁴ in a full-sized machine will be provided with friction-rollers to turn around in striking the shoes D⁶ of the rods D.

This attachment may be applied to any corn-planter now in use.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a corn-planter, of the hinged frame A carrying a check-row wheel, the rods or chains c, pulleys c¹, and shaft c² with crank and pawl and ratchet, all substantially as and for the purposes herein set forth.

2. The check-row wheel B B¹ B², provided with pins B⁴, in combination with the jointed rods D, spring rocking bar D², arm D⁴, and connecting-rod D⁵, substantially as and for the purposes herein set forth.

3. In a corn-planter, the spring D¹, in combination with the rods D D, and rocking bar D², substantially as and for the purposes herein set forth.

FRANCIS M. SIDERS.

Witnesses:

ANDREW SIDERS,
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