

(No Model.)

J. CARDEN, Jr.  
CHECK ROW PLANTER.

No. 313,806.

Patented Mar. 10, 1885.

Fig. 1

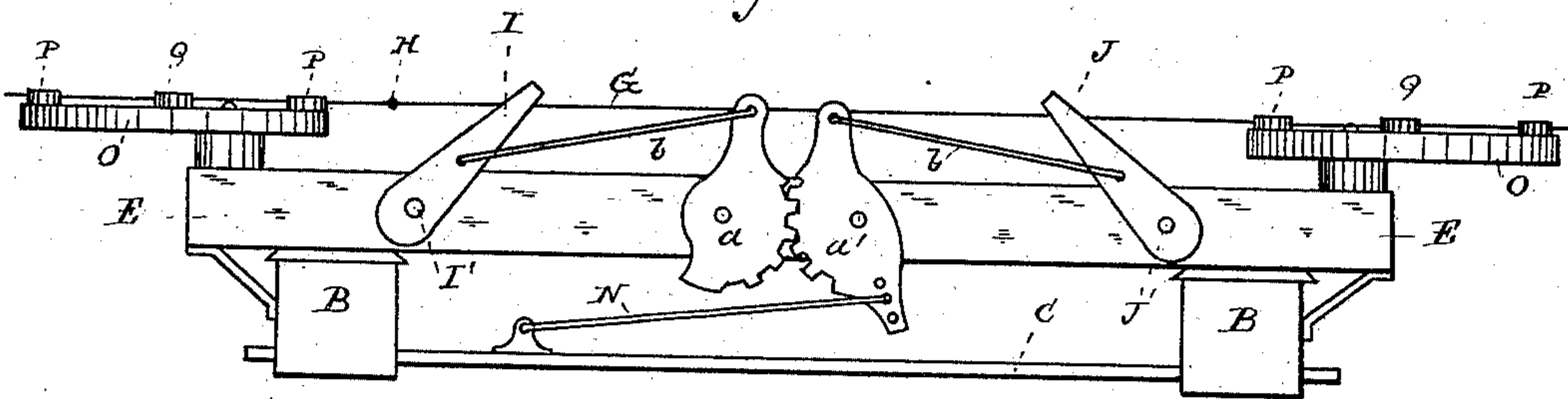
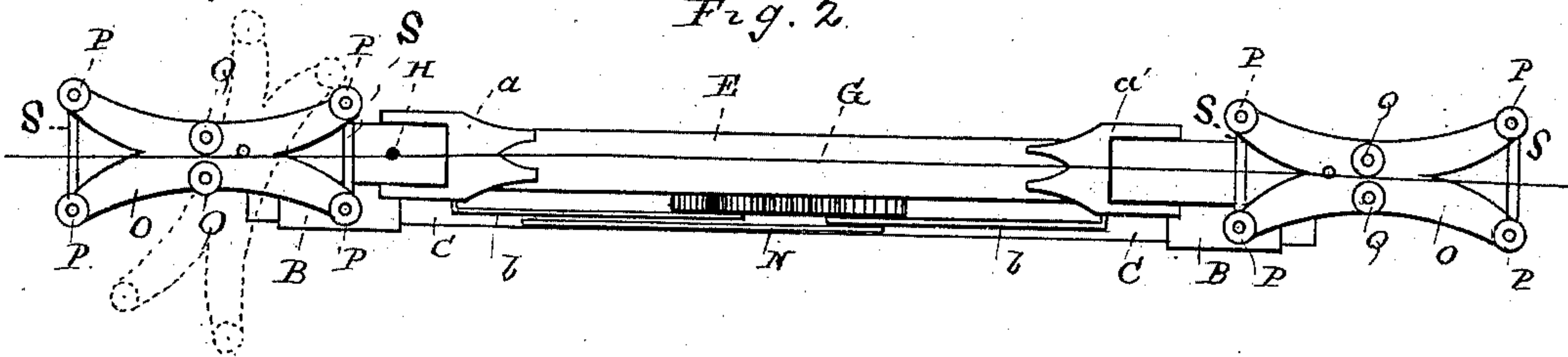


Fig. 2



WITNESSES  
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# UNITED STATES PATENT OFFICE.

JOHN CARDEN, JR., OF AFTON, IOWA.

## CHECK-ROW PLANTER.

SPECIFICATION forming part of Letters Patent No. 313,806, dated March 10, 1885.

Application filed April 1, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN CARDEN, Jr., a citizen of the United States, residing at Afton, in the county of Union and State of Iowa, have invented certain new and useful Improvements in Check-Row 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.

This invention relates to improvements in check-row planters, and has for its object to provide reversible pulleys for the purpose of taking in and paying out the knotted wire as it crosses the planter. This object is attained by the mechanism illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a rear elevation. Fig. 2 is a plan.

The letter B indicates the seed-boxes.

E is the cross-bar of the check-rower, the ends of which project beyond the planter-frame. This bar is attached to the seed-boxes, and has two segmental gear-levers,  $a$   $a'$ , pivoted to its center, and also at equal distances, on each side thereof are pivoted forked levers I J, the forked portion being at the upper ends thereof, and of such form to permit the smooth portion of the wire G to pass freely therein; but the knots thereon engage in the forks and cause said levers to turn or rock upon their pivots J' I'. The upper ends of forked levers I J and of segmental levers  $a$   $a'$  are connected to each other, respectively, by the rods  $b$  and  $b'$ . The lower end of the segmental lever  $a'$  is provided with several openings, or may be

slotted to receive the pivoting-bolt of the rod N, the upper end of which is thereby attached to the segmental lever  $a'$  in such manner that it may be adjusted nearer to or farther from the pivot of said segmental gear-lever  $a'$ , to give a longer or shorter stroke to the seed-dropping slide C, as may be required, the lower end of the said rod N being pivoted thereto.

The letter O indicates four-armed bars, one of which is pivoted to each end of the cross-bar E. Each of these four-armed bars is provided with six pulleys—one at each end of each arm, indicated by the letter P, and two others, Q, near middle thereof. Slides S connect the ends of the bars O for the purpose of sliding the wire from one side of the pulley to the other. A stop on the under side of the bar O limits its reversible movement.

G is the wire, and H the knots thereon.

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

In a check-row attachment for corn-planters, the cross-bar E, having the four-armed bars O, pivoted thereto, provided with pulleys P Q, in combination with vertical pivoted segmental levers  $a$   $a'$ , the lever  $a'$  being extended and provided with a series of vertical perforations for the adjustable connection of the feed-operating devices, rods  $b$ , forked levers I J, rod N, and slide C, substantially as described, and for the purposes set forth.

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

JOHN CARDEN, JR.

Witnesses:

THO. M. ROBINSON,  
I. F. SYP.