

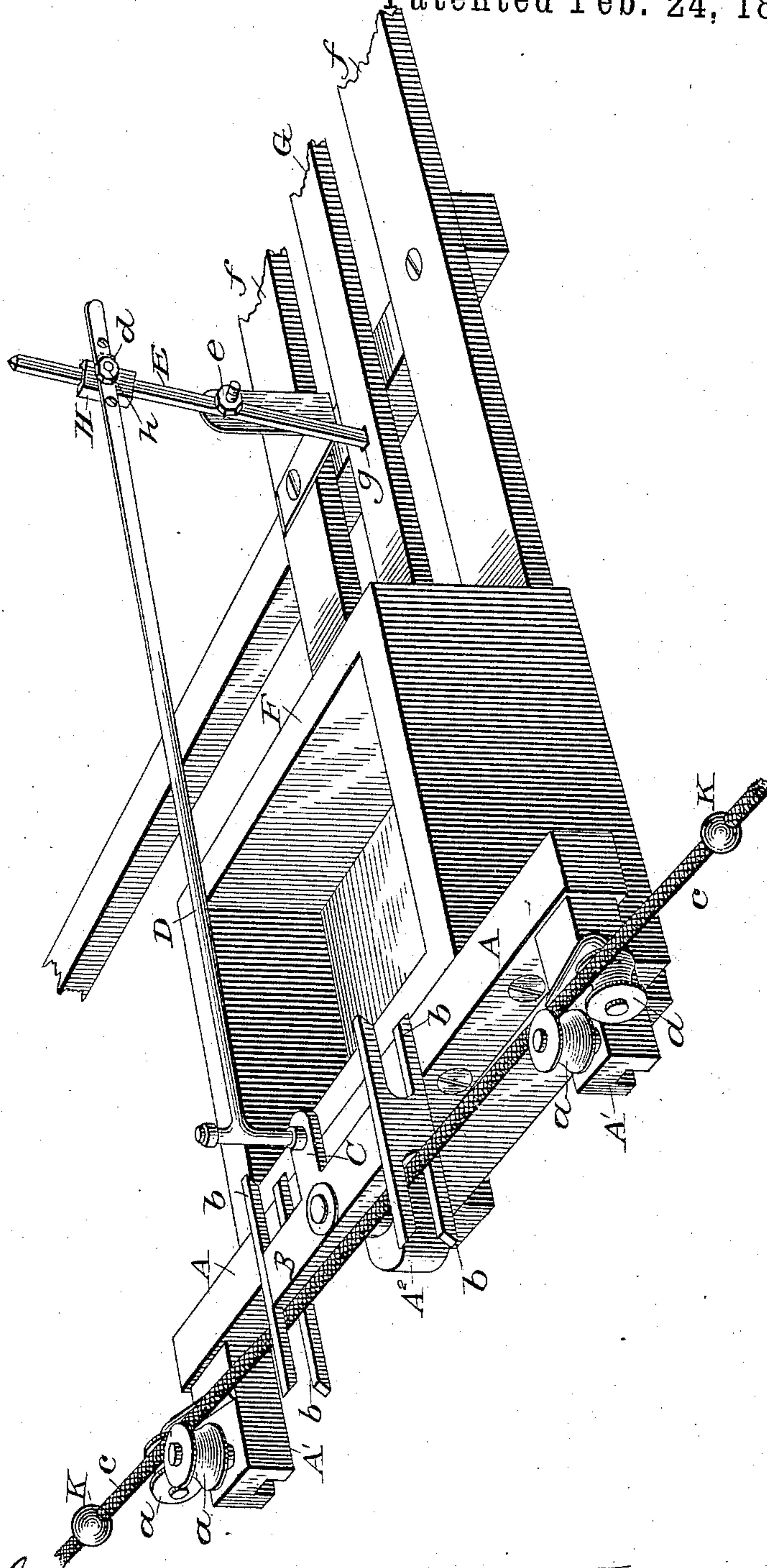
(Model.)

N. E. CROTHERS.

CHECK ROWER FOR CORN PLANTERS.

No. 312,977.

Patented Feb. 24, 1885.



Witnesses:  
M. H. Creed  
M. B. Swisher

Inventor  
Noble E. Crothers



# UNITED STATES PATENT OFFICE.

NOBLE E. CROTHERS, OF PAXTON, ILLINOIS.

## CHECK-ROWER FOR CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 312,977, dated February 24, 1885.

Application filed September 15, 1884. (Model.)

*To all whom it may concern:*

Be it known that I, NOBLE E. CROTHERS, a citizen of the United States, residing at Paxton, in the county of Ford and State of Illinois, have invented a new and useful Check-Rower to Corn-Planters, of which the following is a specification.

My invention relates to improvements in that class of check-rower attachments to corn-planters in the operation of which the usual rope or wire with knots or balls at uniform distances apart thereon is used; and the objects of my improvements are to furnish a check-rower simple and compact in its construction, and which operates upon the lever of the dropper-slide directly through a single rod, rendering unnecessary the use of springs and a complication of levers or other machinery, which tend to render the machine liable to rapid wear and breakage, and which by my invention can be dispensed with to advantage. I attain these objects by the mechanism illustrated by the accompanying drawing, which gives a top view of the check-rower attached to the grain-box of the planter, and a section of so much of the planter as is necessary to show the manner in which the machine is operated.

The letters A A' A' A<sup>2</sup> represent the frame of the check-rower; A' A', two horizontal arms extending outward from the planter, which carry upon proper bearings the pulleys a a a a.

A<sup>2</sup> is a horizontal arm extending in the same direction as the arms A' A', and has a vertical bearing at the outer end. The driver B is journaled upon the bearing A<sup>2</sup>, and is supplied at its two ends with bifurcated hooks or forks b b b b. It is pierced at its center with a vertical hole to receive the vertical stud B' and arm A<sup>2</sup>, upon which it turns. The arm C' extends from the center of the driver B at right angles, and at its junction therewith is raised slightly, that it may pass over the rope or wire c without touching. It is pierced at its outer end by a vertical hole to receive the lower branch of the T-shaped end of the rod D. The rod D is the connection between the arm C' of the driver B and the lever E. The outer end of the rod D is divided into two branches in the shape of a T, and at its inner

end flattened vertically, and provided with several horizontal holes to receive the bearing on the slide H. These holes are used to shorten or lengthen the connection between the check-rower and the lever of the dropper-slide as the width of the planter used may require. The lever E is adjusted to the planter by a bearing attached to the metal upright, which is attached to the frame of the planter, substantially as shown by the drawing; or it may be adjusted in the manner now commonly in use on planters. The lever E should be of metal. Its lower end enters a socket in the center of the slide of the dropper, and its upper end is supplied with a metallic slide, H. The slide H moves readily upon the lever E, so that it may be easily adjusted to the proper height to equalize the stroke of the lever with the stroke of the rod D. It is supplied upon one side with a set-screw, d, by which it can be readily fixed at the proper place on the lever, and also by a bolt or bearing, h, upon which the rod D is attached to the lever E. The rope or wire c is a rope or wire now commonly used in operating check-rowers to corn-planters, the knots or balls K upon which are to be placed the distance apart required by the operator in planting, one knot or ball for each cross-row. The rod D and dropper-lever E are to be attached and adjusted substantially as shown. The rope or wire c is to be stretched across the field to be planted in the direction in which the planter is to be moved, and is to be placed on the horizontal pulleys a a and on the planter side of the vertical pulleys, and is to be drawn between the hooks or forks at each end of the outside of the driver B. As the planter is moved forward, the ball or knot strikes the hooks or forks at the forward end of driver B, and, being too large to pass between these hooks, it throws the front end of the driver B outward and backward one half-revolution, throwing the other end of the driver B forward, the hooks of which are ready to receive the next approaching ball or knot. Each half-revolution of the driver B and its arm C, acting upon the lever E through the rod D, moves the dropper-slide of the planter, and the droppers act.



In turning at the ends of the field the rope or wire is transferred to the check-rower on the opposite grain-box. The T-end of the rod D is lifted out of the hole in the arm C and  
5 thrown over and dropped into the hole in arm C on the opposite side of the planter.

It will be seen that the check-rower can be operated in either direction, and that but one is operated at the same time.

10 While operating on smooth or level ground the outside or horizontal pulleys may be removed, if the operator desires, as their use can be dispensed with without disadvantage.

What I claim as my invention, and desire  
15 to secure by Letters Patent, is—

1. In a check-row attachment for corn-planters, the revoluble driver centrally pivoted to the planter-frame, the outer ends of the main arm of said driver being provided  
20 with bifurcated right-angled projections, said arm being also provided with an arm extending centrally at right angles to the longitudinal plane thereof, in combination with the rod D, pivoted lever E, and the slide G, substantially as described, and for the purposes set  
25 forth.

2. In a check-row attachment for corn-planters, the revoluble driver centrally pivoted to the planter-frame, the outer ends of  
30 the main arm of said driver being provided with bifurcated right-angled projections, said arm being also provided with an arm extend-

ing centrally at right angles to the longitudinal plane thereof, said centrally-extending arm being provided with an opening on its  
35 outer end, in combination with the rod D, lever E, and slide G, the outer end of said rod being provided with a T-head adapted to engage in the opening in the centrally-extending arm, and removable therefrom at pleasure,  
40 substantially as described and set forth.

3. In a check-row attachment for corn-planters, the driver having the arms and bifurcated ends, substantially as herein specified, in combination with the rod D, pivoted  
45 on its outer end to the driver, and also pivoted at its inner end to the slide H, said slide being longitudinally adjustable on the slide-actuating lever E, substantially as described, and for the purposes set forth. 50

4. In a check-row attachment for corn-planters, the driver having the arms and bifurcated ends, substantially as herein specified, in combination with the rod D, pivoted  
55 on its outer end to the driver, and also pivoted at its inner end to the slide H, and provided on said end with a series of openings, substantially as described, and for the purposes set forth.

NOBLE E. CROTHERS.

Witnesses:

MILTON B. SWISHER,  
I. J. SUTTON.