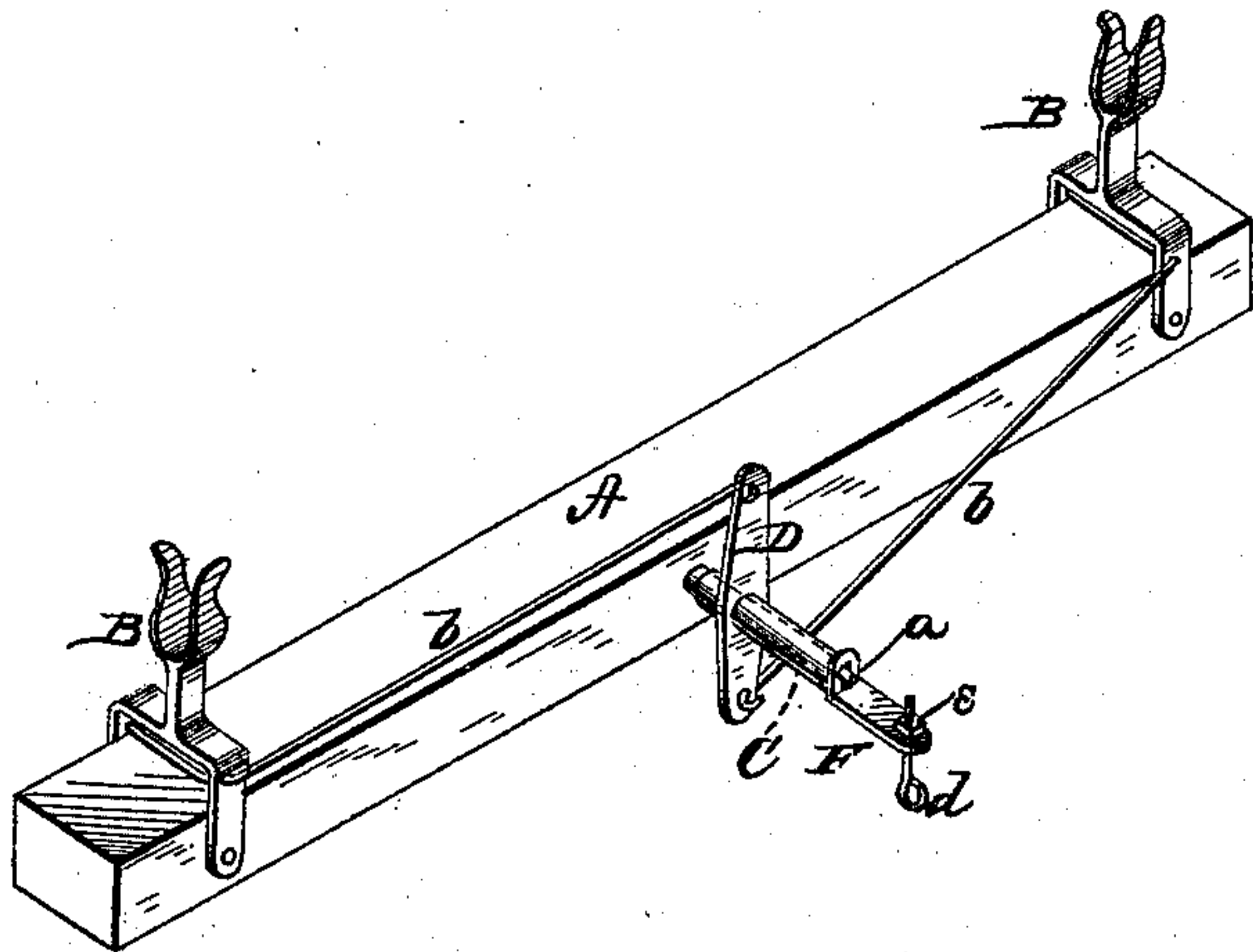


J. P. MOOS.  
Check-Rower.

No. 211,252.

Patented Jan. 7, 1879.



WITNESSES

*Francis B. C. C. C.*  
*Thurman*

By

INVENTOR

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# UNITED STATES PATENT OFFICE.

JOHN P. MOOS, OF LINCOLN, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT  
TO A. W. LLOYD, OF SAME PLACE.

## IMPROVEMENT IN CHECK-ROWERS.

Specification forming part of Letters Patent No. **211,252**, dated January 7, 1879; application filed  
May 29, 1878.

*To all whom it may concern:*

Be it known that I, JOHN P. MOOS, of Lincoln, in the county of Logan, and in the State of Illinois, have invented certain new and useful Improvements in Check-Rowers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to that class of check-row attachments for corn-planters in which a rope provided with knots or buttons is caused to operate upon levers, which are, by intermediate mechanism, connected to the dropping-slide; and the nature of my invention consists in the construction and combination of devices, 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 represents a perspective view of my invention.

A represents the wooden cross-bar, to which the check-rower mechanism is connected, and which cross-bar is to be secured upon the frame of the corn-planter in any suitable manner. Near each end of the bar A is pivoted a lever, B, the lower portion of which straddles the bar, and the upper end is forked, as shown. In the center of the bar A is a pin, *a*, projecting horizontally rearward, and upon this pin is placed a sleeve or tube, C, having near its inner end a lever, D, projecting on both sides thereof. The ends of this lever are, by rods *b b*, connected with the levers B B, respectively, and the connections of these rods with the lever D are at equal distances from the center. On the outer end of the sleeve C is an L-shaped arm, F, projecting in the same direc-

tion as the sleeve, and through the outer end of this arm is passed a pin, *d*, having an eye in its lower end, and is to be connected by means of a rod with the seed-slide. The pin or eyebolt *d* is used to adjust the length of the stroke, and a nut, *e*, is screwed on the end of said pin or bolt, which, when properly adjusted, holds the stroke steady and immovable.

In ordinary check-row attachments of this character there is usually more or less lost motion, which is the cause of the irregular dropping, the first half of the motion being lost before the lever reaches the point where it begins to move the slide that moves the plates on the inside of the corn-box. The last half of the motion is a slam, and goes so quick that the holes close before they have time to fill with corn, oftentimes cutting the grain in two.

With my construction of devices the bar begins to move from the time the button on the rope first touches the forked end of the lever, the holes begin to open, and before they are over the holes are filled by a steady, regular stroke.

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

In combination with the beam A, its forked levers B B, straddling the said beam, and the rods *b b*, the stud *a*, elongated sleeve C, lever D, and the arm F, having the adjustable pin or eyebolt for adjusting the length of the stroke, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of May, 1878.

JOHN P. MOOS.

Witnesses:

A. W. LLOYD,  
J. W. GREGORY.