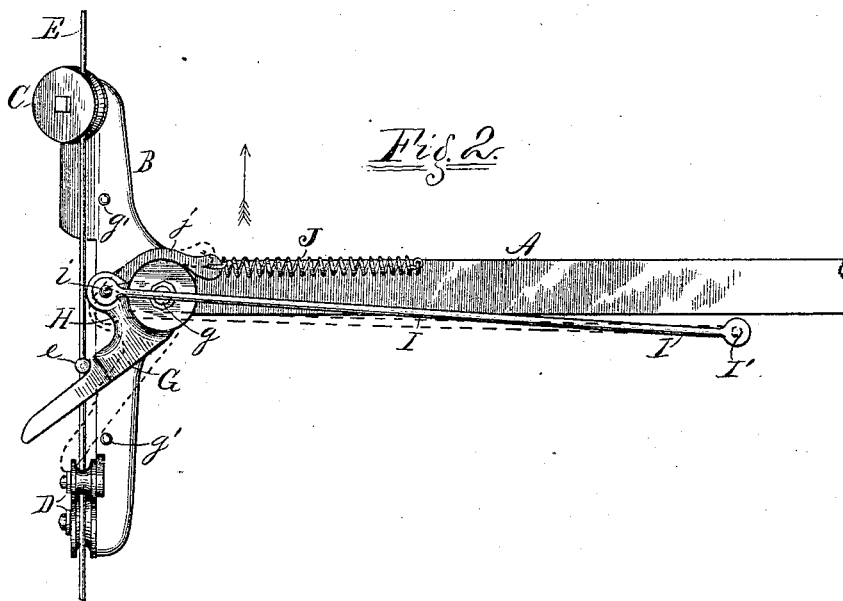
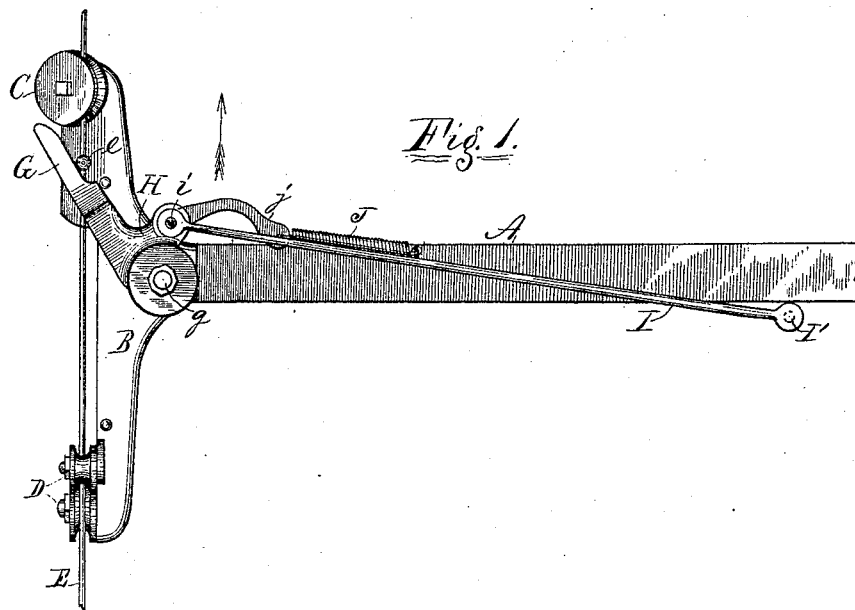


(No Model.)

J. E. BERING.  
CORN PLANTER CHECK ROWER.

No. 304,489.

Patented Sept. 2, 1884.



Witnesses:  
G. R. Richards.  
Melville W. Cox.

Inventor:  
James Edward Bering  
By W. B. Richards  
Atty.

# UNITED STATES PATENT OFFICE.

JAMES EDWARD BERING, OF DECATUR, ILLINOIS.

## CORN-PLANTER CHECK-ROWER.

SPECIFICATION forming part of Letters Patent No. 304,489, dated September 2, 1884.

Application filed April 25, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES EDWARD BERING, a citizen of the United States; residing at Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Corn-Planter Check-Rowers; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to corn-planter check-rows of that class in which are used horizontally-swinging levers, which receive motion from the tappets on a stretched tappet-wire, and impart movement to the planter seed-slides through suitable connections therewith. In check-rows of this type it is desirable to have the forked lever cease acting on the planter seed-slides before it (the lever) has completed its full throw; and to this end and object my invention consists in a novel arrangement of the horizontally-swinging forked lever and the devices connected therewith for transmitting motion to the planter seed-slides, whereby the forked lever passes through the latter part of its throw without acting on said transmitting devices, and also without any resistance to its free movement from said transmitting devices, all as herein-after more fully described, and more particularly pointed out and specified in the claims of this application.

To enable others skilled in the art to which my invention appertains to fully understand and practice the same, I will now proceed to more fully explain it by reference to the accompanying drawings, forming part of this specification, and in which I have illustrated the main features of my invention carried out in a form in which it may be used in a practical working machine, and which manner of carrying out my invention is the best now known to me, though practice and experience may indicate either to me or to others some better way of carrying the same into practical operation.

In the said drawings, Figure 1 is a top plan of so much as seems necessary to be shown of

a check-rower embracing the several features of my invention. Fig. 2 is a top plan of the same parts as shown at Fig. 1, but shown in different relative positions from what shown at said figure.

Referring to the drawings by letters, the same letter indicating the same part in the different figures, A represents one end of the ordinary bar on which the working parts of a check-rower are mounted.

B is the head, of which there is another on the other end of the bar A. (Not shown.) The heads B are provided with guide-pulleys C D, adapted to guide the tappet-wire E in the ordinary manner to the horizontally-swinging forked lever G. The lever G is forked at its outer end and journaled on the stud *g*, so as to swing in a horizontal plane in the ordinary manner. Ordinary stops, *g'*, limit the extent of movement of the lever G. An arm, H, projects laterally from the lever G.

I is a link or connecting-rod, journaled or hinged at *i* at one end to the outer end of the arm H, while its other end extends toward the mid-length part of the bar A, to where it may be connected at *I'* with any known or desired means for transmitting motion from it to the seed-slides of the planter.

J is a spring connected at one end to the bar A, and at its other end to one end of a curved arm, *j*, which is connected at its other end to the arm H. The spring J has the usual function of returning the lever G to its normal position after it has been forced backward to operate the seed-slides by means of contact with one of the tappets *e* on the tappet-wire E.

At Fig. 1 the forked lever is shown as having just come in contact with one of the tappets *e*. At Fig. 2 the forked lever is shown by full lines as forced backward a greater part of its throw by a tappet, *e*. When the forked lever has reached the position shown by full lines at Fig. 2, it will have given a full throw to the seed-slides of the planter, and the points *i*, *g*, and *I'* will be in or about in line, and hence as the lever G moves through the latter end of its throw to the position shown by dotted lines at same figure, it (the lever) will not act on the rod I; hence the lever G will move through the latter part of its throw without any resistance scarcely, and thus greatly reduce the friction, which is com-

mon between the tappets and said lever at about the time the tappets escape from the lever to permit its return movement by means of the spring J. This arrangement of the lever G and rod J will also insure more certainty in the operation of the planter seed-slides, as the contact between the tappet and the forked lever is thereby insured until the seed-slides have made a complete throw.

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

15 1. In a corn-planter check-rower, the combination, with the tappet-wire and the horizontally-swinging forked lever, of the connecting-rod I, hinged at one end to an arm projecting from said forked lever, and its other end adapted for connection to mechanism for operating

the planter seed-slides, the relation of the parts being such that the strain on the forked lever 20 is released when the rod I is in or about in line with the pivotal points *i* and *g*, substantially as and for the purpose specified.

2. In combination, the forked lever G, having arm H, and pivoted at *g* to the bar A, the 25 tappet-wire E, the rod I, pivoted to the arm H, and the spring J and bar *j*, all adapted to operate substantially as and for the purpose specified.

In testimony whereof I affix my signature in 30 presence of two witnesses.

JAMES EDWARD BERING.

Witnesses:

L. BURROWS,

L. L. BURROWS.