

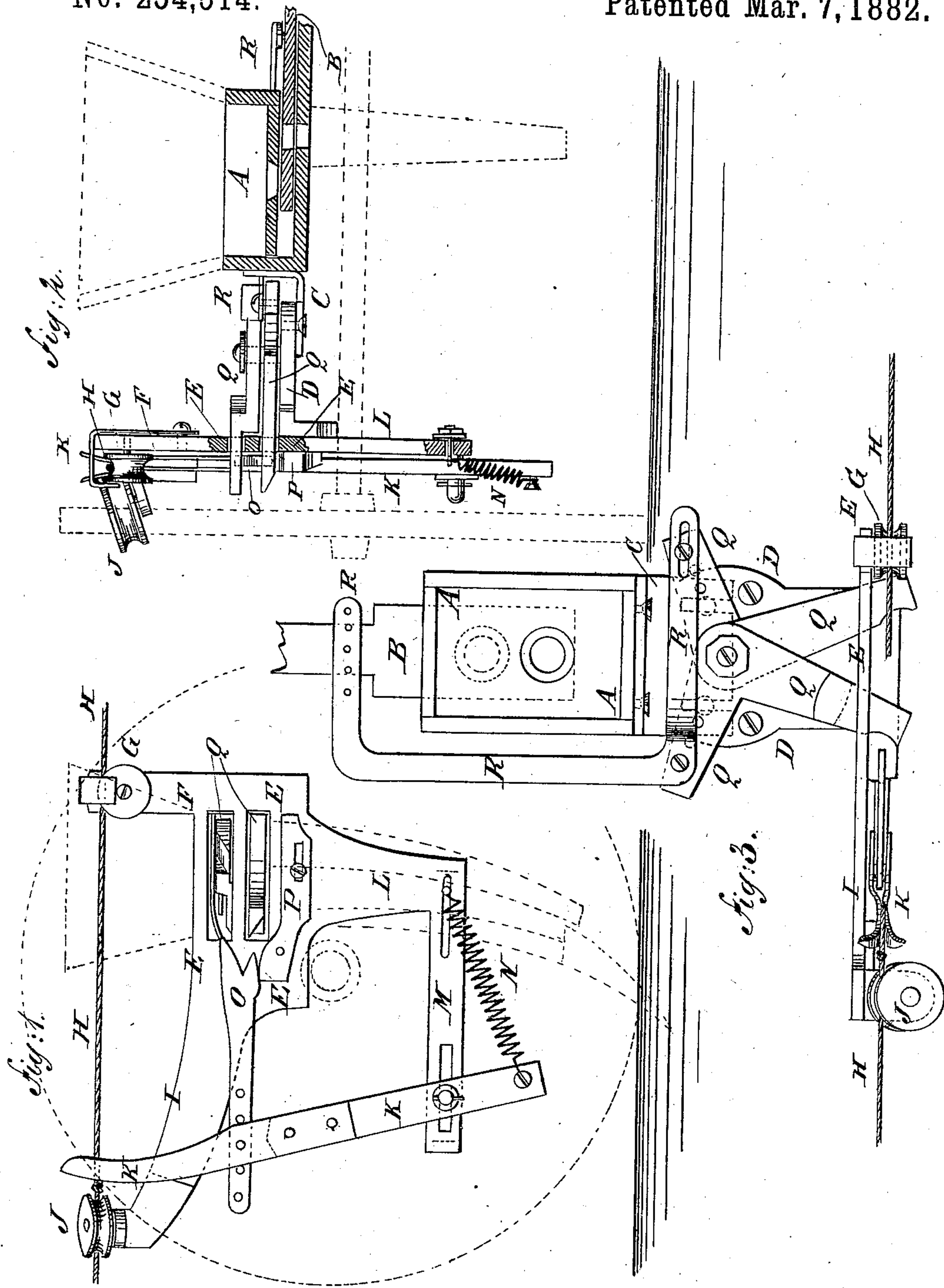
(No Model.)

C. E. SWENEY.

CHECK ROW ATTACHMENT FOR CORN PLANTERS.

No. 254,514.

Patented Mar. 7, 1882.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES E. SWENEY, OF GENESEO, ILLINOIS, ASSIGNOR TO MARY E. SWENEY AND GEORGE G. MOWRY, OF SAME PLACE.

## CHECK-ROW ATTACHMENT FOR CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 254,514, dated March 7, 1882.

Application filed July 13, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. SWENEY, of Geneseo, in the county of Henry and State of Illinois, have invented a new and useful  
5 Improvement in Check-Row Attachments for Corn-Planters, of which the following is a full, clear, and exact description.

In the accompanying drawings, which illustrate my invention, Figure 1 is a side elevation.  
10 Fig. 2 is a sectional rear elevation. Fig. 3 is a top plan, partly broken away to show working parts.

The same reference-letter indicates the same part in the different figures.

15 This invention relates to corn-planter check-rowers of that class in which is used a tappet-wire, or wire with knots upon it, stretched across the ground to be planted; and the invention consists in improvements in the construction and combinations of parts which receive motion from the stretched tappet-wire  
20 and impart movement to the seed-slides of the planter, as hereinafter described, and set forth in the claims hereto annexed.

25 Referring to the drawings by letters, A represents an ordinary corn-planter seed-box; and B the ordinary reciprocating bar, which connects with and transmits motion to the seed-slides in the hopper A.

30 To the end of the seed-box A is attached the upright part of an angular plate, C, to the horizontal part of which is attached the horizontal plate D. The upright part of the plate C is slotted to receive the fastening screws or bolts,  
35 so that the plate C can be adjusted and secured forward or rearward, as may be required. The horizontal part of the plate C is slotted to receive the fastening-bolts, so that the plate D can be adjusted and secured nearer to or farther from the seed-box, as desired.

40 To the outer end of the horizontal plate D is attached, or upon it is formed, an upright plate or frame, E. A standard, F, projects upwardly from one end of the frame E and carries an ordinary tappet-wire guide-pulley, G,  
45 and a standard, I, projects upwardly from the other end of the plate E, and also carries an ordinary guide-pulley, J, for the tappet-wire H. A standard, L, projects downwardly from  
50 the rear end of the plate E, and has an arm, M, projecting forwardly from its lower end. To

the forward end of the arm is pivoted the lower part of a forked lever, K, the upper end of which is forked to receive and discharge the  
55 tappets on the tappet-wire in the ordinary manner. The lower end of the lever K projects below the arm M, and to it is attached the end of a spiral spring, N, the other end of which is attached to the rear end of the arm M,  
60 so that the tension of the spiral spring will hold the forked lever in its normal position, as shown at Figs. 1 and 2. The horizontal arm M is slotted lengthwise of itself to receive the pivoting-bolt of the lever K, and also the fast-  
65 ening of the rear end of the spiral spring N. The slots in the arm M allow the lever K to be adjusted forward or rearward and the spiral spring N to be adjusted to preserve the proper  
70 tension required with different adjustments of the lever K. With this construction the lever K is swung rearwardly at its upper end by  
each successive tappet on the wire H, and returned or swung in the opposite direction by the spring N in the ordinary manner.

To the upper part of the lever K is pivoted  
75 a push-bar or finger, O, the free rear end of which is forked, as shown at Fig. 1. The free end of the finger O rests upon a guide-bar, P, which guide-bar is attached to the plate E and holds the forked end of the push-bar (when  
80 the push-bar is in position, as shown at Fig. 1) in proper position to engage the angle or bent levers hereinafter described. A series of holes are formed in the finger or push-bar O to receive the bolt which pivots it to the lever K,  
85 whereby the bar O may be adjusted longer or shorter, and held after adjustment so as to give the seed-slides more or less throw, as desired. The guide-bar P is slotted to receive its fast-  
90 ening-bolt, so that it can be adjusted to give the proper direction to the forked end of the finger O.

Q Q are two right-angled or bent levers, which are placed, the one above the other, with their inner ends or arms nearest the seed-  
95 box projecting in opposite directions, and are pivoted at their angles or bends to the plate D by a bolt. The outer arm of the upper lever, Q, has an offset formed in it, as shown at Fig. 2, to bring its outer end at a proper distance  
100 above the other lever Q to permit one fork of the push-bar O to pass between the levers Q



as said levers are oscillated, as hereinafter described. The outer ends of the outer arms of the levers Q pass through guide-slots in the plate or frame E, and are tapered on their edges toward the bar O, as shown at Fig. 1—the upper lever on its upper side and the lower lever on its lower side—to adapt them more readily to enter the forked end of the push-bar O, and are concaved on their ends where they come in contact with the push-bar, as shown at Fig. 3, to prevent the push-bar slipping off them.

To the ends of the inner arms of the levers Q is pivoted the outer arm of the U-shaped bar R, which bar R passes around the seed-box A, and has its other arm or end pivoted to the slide-bar B, so that the slide B will be operated by the movements of the bar R. A series of holes are formed in the inner arm of the bar R to receive the bolt which pivots it to the slide B, and to permit adjustments, as may be required. One end of the outer arm of the bar R is pivoted to the end of the inner arm of one of the levers Q, and the other end pivoted to the end of the inner arm of the other lever Q. One or both of the pivot-bolts last described may pass through a slot in the bar R, as shown at Fig. 3, to permit oscillating the levers Q in a manner to bring the points where they are pivoted to the bar R nearer to or farther from each other, and thereby impart a reciprocating lateral movement to the bar R from an oscillating movement of the levers Q.

In operation, as the finger O is moved to the rearward by the rearward movement of the lever K its forked end strikes the projecting end of the forward lever Q and pushes said end to the rearward. As the outer end of said lever Q moves to the rearward, as last described, the outer end of the other lever Q will be moved forward by means of the bar, as connected to said levers Q, and by the movement of the levers Q as last described a throw will be given to the seed-slides through the bars B and R. The forked lever will then be drawn forward at its upper end by the spring N, thereby drawing the push-bar O back to the position shown at Fig. 1. The next succeeding tappet acting on the forked lever will impart another rearward movement to the lever K and push-bar O, and the forked end of the push-bar will then engage the outer end of the other forked lever, and pushing it backward will again oscillate the levers Q, with the same results as hereinbefore stated.

It will be evident from an inspection of Fig. 1 that the enlarged forked end of the push-bar O, as held in position by the guide-bar P, will always engage the outer end of whichever lever Q is nearest to it, and will be guided when in contact with said lever Q so as not to come in contact with the outer end of the other lever Q when the outer ends of said levers pass each other.

If desired, two rods or bars R can be used for connecting the levers Q with the slide B, or it may be connected therewith by any de-

sired device. Several holes are formed in the inner ends or arms of the levers Q to receive the pivoting-pins to the bar R, so that the stroke of the bar R and the seed-slides can be regulated as desired.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a corn-planter check-rower, the combination, with the frame E, adjustably secured to the seed-box, and the bent levers Q, connected to the seed-slide, of the forked lever K, the pivoted finger O, and the spring N, substantially as and for the purpose set forth.

2. In a corn-planter check-rower, the combination, with seed-slide-connecting bar B, the forked lever K, the pivoted finger O, and spring N, of the bent levers Q and the bar R, having its inner end perforated and its outer end slotted, substantially as and for the purpose specified.

3. In a corn-planter check-rower, the combination, with the plate C, adjustably secured to the seed-box, of the plate E, adjustably secured to the plate C, and provided with the arms I F, carrying pulleys G J, and the slotted arm M, the forked lever K, and the spring N, substantially as and for the purpose specified.

4. In a corn-planter check-rower, the combination, with the plate E and the finger O, of the adjustable guide P, substantially as and for the purpose specified.

5. In a corn-planter check-rower, the combination, with the forked finger O, pivoted to the forked lever K, of the bent levers Q, connected to the seed-slide, and having their forward ends concaved on their edges, whereby they may hold the finger O in contact therewith, substantially as and for the purpose specified.

6. In a corn-planter check-rower, the combination, with oscillating bent levers adapted to actuate the planter seed-slides by means of suitable connection therewith, of a forked push-bar which acts alternately on said bent levers and receives motion from an ordinary forked lever and tappet-wire, substantially as and for the purpose specified.

7. In a corn-planter check-rower, in combination with bent levers pivoted to a base-plate and connected by a bar, whereby the movement of one of said bent levers in one direction imparts a simultaneous movement to the other bent lever in an opposite direction, a forked push-bar adapted to act alternately on said bent levers, substantially as and for the purpose specified.

8. In a corn-planter check-rower, in combination with a push-bar forked at its free end and pivoted at its other end to an ordinary forked lever, oscillating bent levers beveled at their sides to adapt them to coact with the forked push-bar and guide it while in contact with one bent lever so that it may pass the outer end of the other bent lever without coming in contact therewith, substantially as and for the purpose specified.

9. In a corn-planter check-rower, bent levers



pivoted at their bends and connected, one arm of one lever with an arm of the other lever, by a slotted bar, in combination with suitable connection with the planter seed-slides, whereby  
5 the oscillations of the levers will impart movement to the seed-slides, substantially as and for the purpose specified.

10. In a corn-planter check-rower, in combination with oscillating bent levers, a slotted

bar connecting said levers by one end of each, 10 and a pivoted forked push-bar adapted to act on the other ends of said levers, substantially as and for the purpose specified.

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Witnesses:

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