

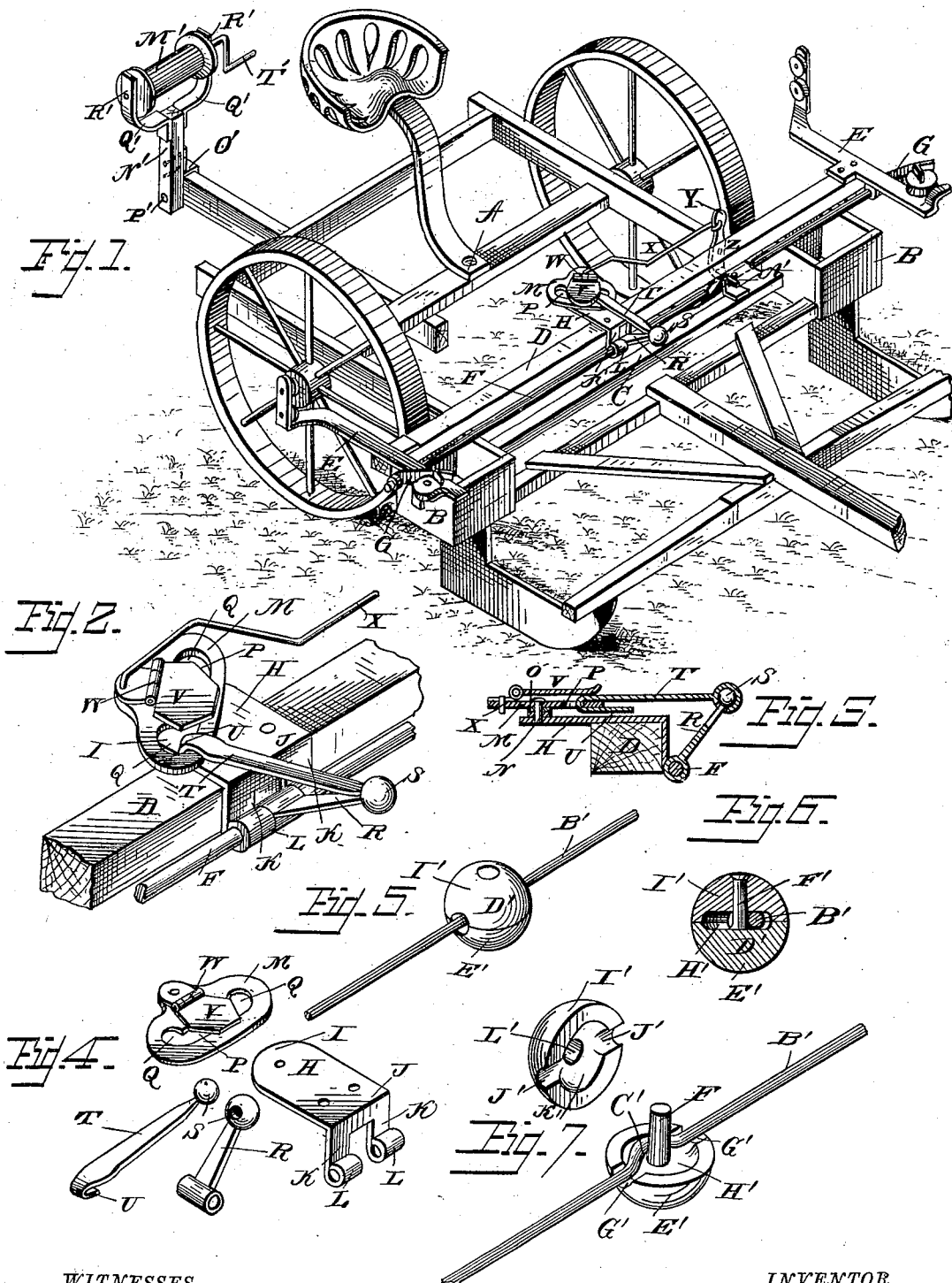
(No Model.)

L. J. ODELL.

CHECK ROWER.

No. 266,305.

Patented Oct. 24, 1882.



WITNESSES
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UNITED STATES PATENT OFFICE.

LEVI J. ODELL, OF FAIRBURY, ILLINOIS.

CHECK-ROWER.

SPECIFICATION forming part of Letters Patent No. 266,305, dated October 24, 1882.

Application filed July 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, LEVI J. ODELL, of Fairbury, in the county of Livingston and State of Illinois, have invented certain new and useful
5 Improvements in Check-Rowers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same,
10 reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to check-row corn-planters; and it consists in certain improvements in the construction and operation of the
15 same.

In the drawings, Figure 1 is a perspective view of a planter equipped with my improvements; Fig. 2, a detail perspective view of the seed-slide-actuating mechanism; Fig. 3, a
20 vertical transverse sectional view thereof; Fig. 4, a detail view of the parts of the latter detached; Fig. 5, a perspective view of a portion of the tappet-wire; Fig. 6, a transverse section taken through one of the tappets of the wire;
25 and Fig. 7, a detail view, in perspective, of the mode of attaching the tappets to the wire.

Referring to the drawings, A designates a corn-planter, which may be of any suitable construction, having the usual hoppers, B B, at
30 each side and the transverse seed-slide C.

Above the hoppers is mounted, in any suitable manner, the cross-bar D, having at each end the usual brackets, E E, carrying pulleys for guiding the tappet wire or rope, and hav-
35 ing bearings for the transverse rock-shaft F, having at its ends the forked arms G G, which are engaged in the ordinary manner by the tappets, suitable spring mechanism being provided to throw the rock-shaft forward after
40 the tappet becomes disengaged from the forked arm.

H is a base-plate, which is secured about midway on cross-bar D, its rear portion, I, being extended some distance from the bar, and
45 its front edge, J, having downwardly-extending arms K K, which are formed to provide bearings L L for rock-shaft F.

M is an oscillating top plate, which is pivoted to extension I of base-plate H by a pivot
50 pin or bolt, N, suitable washers, O O, being interposed, as shown. In front of pivot N plate M is formed with a slot, P, which may be either

straight or slightly segmental, with its ends enlarged, as at Q Q.

R is an arm projecting up from and fixed on
55 rock-shaft F between arms K K. It is connected by a ball-and-socket or universal joint, S, with a connecting arm, T, extending backward, with its rear end, U, bent over so as to engage slot P in plate M.

V is a lip or plate hinged on oscillating plate
60 M, as at W, and serves to close slot P until after the stroke is made, at which point it is raised by connecting-arm T as it passes along the slot.

To the plate M, in rear of pivot N, is pivotally attached the end of a connecting-rod, X, the other end of which is pivotally secured to the top of an angular operating-lever, Y, pivoted, as at Z, to the cross-bar D. The lower
70 end, A', of lever Y engages the seed-slide C.

B' is the tappet-wire, which is formed with curved kinks or bends C'; and D' designates one of the tappets. The latter are formed of two sections, one of which, E', is formed with
75 a centrally-projecting rivet-shank, F', from which extend grooves G' G', and are also surrounded by a groove, H', in which rests the kink C'. The other half, I', of the tappet is formed with corresponding grooves, J' J', and
80 a surrounding groove, K', around a central opening, L'. In practice the part E' is first attached to the wire, the remaining half, I', being afterward placed thereon, with the rivet F' projecting through opening L', over which
85 it is afterward clinched to secure the tappet permanently on the wire.

M' is a reel, having a shank, N', provided with a side bracket, O', by which it may be secured at rear end of the planter by a clamp-
90 ing-bolt, P'. On standard or shank N' are secured brackets or arms Q' Q', having bearings R' R' for the reel M', which is provided with a crank, T'. This reel is designed to take in or play out the tappet wire, as desired, by the
95 movement of the planter.

The operation and advantages of my invention will be readily understood. When the arm T is in one of the enlarged ends Q of slot P the arm R, by reason of the rearward move-
100 ment of the rock-shaft, forces arm T rearward, which in turn (its end U being retained in the enlarged end) forces around that end of plate M. The latter turns on its pivot, thus draw-

ing with it the connecting-rod X and causing the lever Y to turn on its pivot to operate the seed-slide. Then, when the spring mechanism forces the rock-shaft on its forward movement, the end U of lever T runs along slot P, under lip V to the opposite enlarged end, ready for the next stroke of the rock-shaft, which will cause the plate M and lever Y to move in the opposite direction.

I claim as new—

1. In a check-rower, the combination, with an oscillating plate having a slot with enlarged ends, and a hinged lip or plate extending over said slot, of the operating-arm having its end adapted to engage said slot, and the actuating-arm on the rock-shaft, as set forth.

2. In a check-rower, the combination of the actuating-arm on the rock-shaft, a connecting-arm jointed thereto, an oscillating plate having a slot with enlarged ends covered by a hinged lip, a connecting-rod pivoted to the plate, and the pivoted seed-slide-operating lever, as set forth.

3. In a check-rower, the combination of the base-plate having an oscillating plate pivoted thereto, the latter being formed with a slot having enlarged ends, and provided with a hinged lip or plate extending over said slot, the connecting-arm having its end engaging the slot, the actuating-arm on the rock-shaft, a connecting-rod pivoted to the oscillating plate, and the pivoted seed-slide-actuating lever, as set forth.

4. In a check-rower, the combination, with the cross-bar carrying a base-plate, in which are formed bearings for the rock-shaft, and to which is pivoted an oscillating plate having a slot with enlarged ends covered by a hinged lip, and the pivoted seed-slide-actuating lever, of the rock-shaft carrying the actuating-arm, the connecting-arm engaging said slot, and the connecting-rod pivoted at each end, as set forth.

5. In a check-rower, the combination, with the base-plate adapted to be secured on the cross-bar, and provided with two separated downwardly-extending arms formed with bearings for the rock-shaft, of the rock-shaft having an actuating-arm secured and fitting between said arms, as set forth.

6. In a check-rower, the combination, with the base-plate having a rear extension and front downwardly-extending arms formed with bearings, of the oscillating plate pivoted to said extension and having a slot with enlarged ends, covered by a hinged lip, the actuating-arm journaled between said downwardly-extending arms, and the connecting-arm with its end working in the slot, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

LEVI J. ODELL.

Witnesses:

GEO. DAY.

W. THOMPSON.