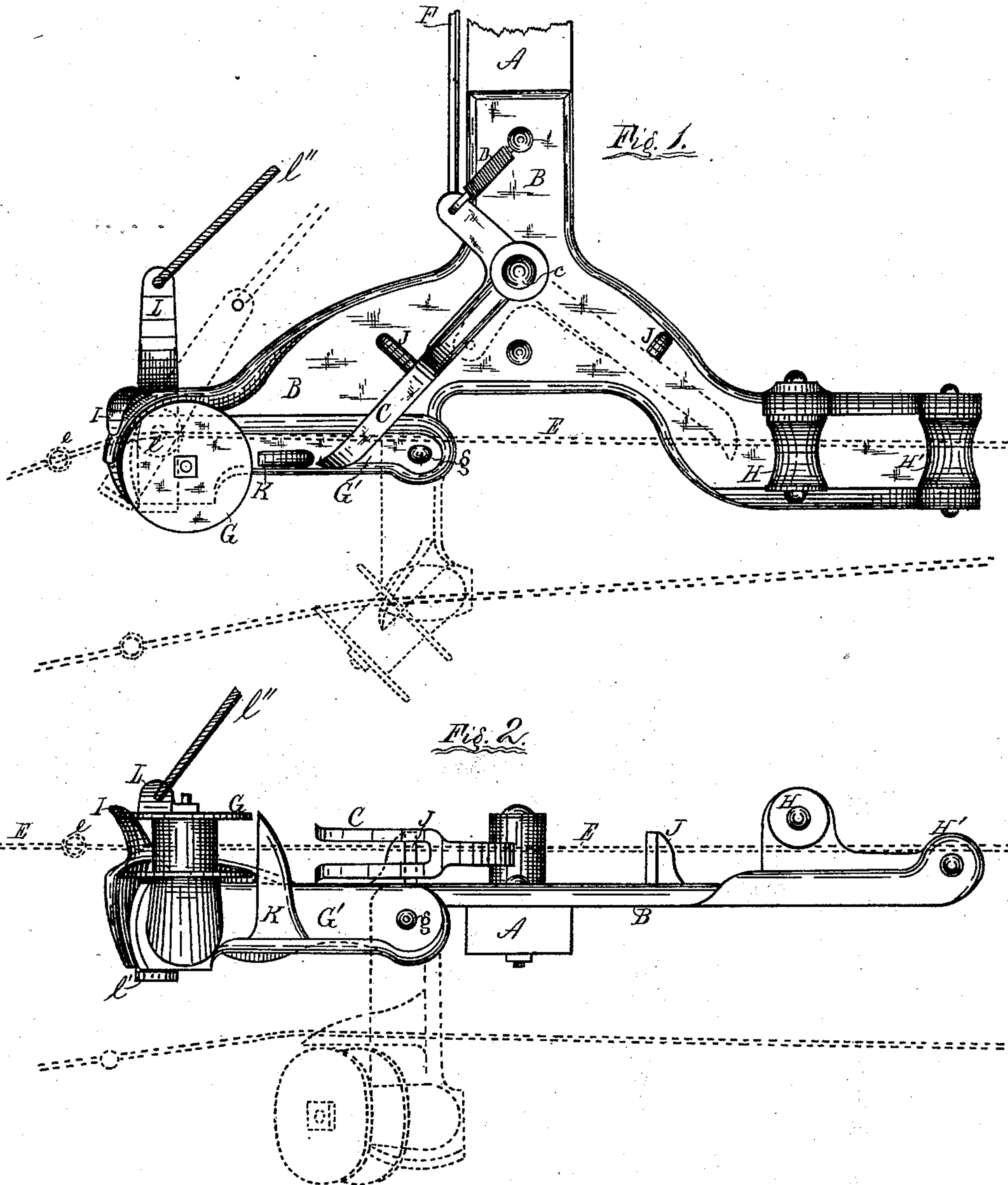


(No Model.)

L. D. BENNER.
CORN PLANTER CHECK ROWER.

No. 279,692.

Patented June 19, 1883.



Witnesses:
G. R. Richards.
Peter Peterson.

Inventor:
Lorenzo D. Benner,
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Atty.

UNITED STATES PATENT OFFICE.

LORENZO D. BENNER, OF GALESBURG, ILLINOIS, ASSIGNOR TO ALONZO C. CLAY AND GEORGE C. ALDEN, BOTH OF SAME PLACE.

CORN-PLANTER CHECK-ROWER.

SPECIFICATION forming part of Letters Patent No. 279,692, dated June 19, 1883.

Application filed January 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, LORENZO D. BENNER, a citizen of the United States, residing at Galesburg, in the county of Knox 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 that class of check-rowers for corn-planters in which a stretched tappet-wire is used as the means of actuating the check-row devices which transmit motion to the seed-slides, and in which it is necessary at the ends of the planted rows of corn to remove the tappet-wire from the planter, then turn the planter around to begin new rows, and then replace the wire on the planter; and the invention consists in improved means of doffing or freeing the tappet-wire from the machine at the ends of the rows, as hereinafter described.

In the accompanying drawings, which illustrate my invention, and in which the similar letters used as marks of reference apply to the like parts in both figures, Figure 1 is a top plan. Fig. 2 is a side elevation.

The construction and relative arrangement of the parts of the improvement and the adjacent parts of the general machine in which said improvements may be incorporated are as follows:

In the drawings it is not deemed necessary to show a corn-planter, and I have simply shown the check-row devices as used at the left-hand side of any ordinary two-row corn-planting machine, and supported on the bar A, which extends across the machine and carries a similar check-rowing device at its other end. (Not shown in the drawings.)

B is a base-plate secured to the bar A. C is a forked elbow-lever pivoted at *c* to the plate B. D is a spring for returning the lever C after it is acted on by the knots *e* on the wire E; F, the connecting-rod from lever C to

seed-slides; G, the guide-pulley in front of the forked lever, and H H' the guide-pulleys in rear of the lever; I, the guide-lug projecting from base-plate B, adjacent to front guide-pulley, and J J stops to limit the movements of the forked lever.

The parts hereinbefore described by reference-letters are parts of an ordinary check-rowing device, and may be such as shown, or may be of any desired construction, except as modified by my invention, which will now be described.

As shown in the drawings, the tappet-wire passes between the grooved pulley G and guide-lug I in the ordinary manner. The pulley G is journaled on an arm, G', which is journaled to the base-plate B at *g*, so that the arm G' may swing outward, as shown by dotted lines in both figures. As shown, the arm G' rests on and is journaled to an inclined face of the plate B, so as to swing outward and downward; but the device will be operative if journaled on a horizontal surface, so as to swing only outward.

K is a cam-lug, which projects upward from the arm G', in rear of the pulley G, and near to said pulley. The lug K is located, as shown by full lines at Fig. 1, so as to permit the passage of the tappet-wire, when in operation, without touching said lug.

L is a lever-catch pivoted at *l* to the base-plate B, and one of its ends turned to form a catch, *l'*, to engage the arm G', while a cord, *l''*, is connected with its other end, which extends to near the driver's seat.

The pulleys H H' are arranged in an ordinary manner, as shown, so that the tappet-wire may be removed by drawing it sidewise from between them.

The operation of my improvement is as follows: As the planter, moving in the direction shown by the arrow, approaches the ends of the rows to be planted, the tappet-wire is drawn to one side and against the pulley G by the ordinary anchor in front of the planter, as shown by the dotted-line plan of said wire at Fig. 1, and when the end of the rows is reached, the operator, by drawing the cord *l''*, throws the lever L into the position shown by dotted lines at Fig. 1, and thereby releases the arm G' and per-

mits it to swing outwardly, as shown by dotted lines in both figures. When the arm G' swings outwardly, the cam-lug K will force the tappet-wire out of the groove in pulley G and allow it to
 5 be drawn clear of said pulley by the lateral tension of said tappet-wire, as shown more plainly in Fig. 2, and the wire escaping from pulleys H H', as hereinbefore described, will free it from the machine. The machine may then be
 10 turned around to begin new rows, the arm G' swung into place, and lever L swung back to hold it in place.

I am aware that front guide-pulleys have been arranged to swing upwardly and permit
 15 the wire to escape from a lower pulley on which the tappet-wire was carried; and I am also aware that front guide-pulleys which carry the tappet-wire have been arranged to swing outwardly and upwardly to release the wire with-
 20 out a cam-lug or other device to force the wire from the groove in the pulley; and I am also aware that a swinging cam-lug has been used to force the wire from the groove in a fixed front pulley; and I am also aware that front
 25 guide-pulleys have been used which swing downwardly in a vertical plane, and, in connection with other devices, release the tappet-wire; but the distinction between these devices and my invention will be evident from the foregoing description, in which I have shown simple
 30 means for releasing the wire from the ordinary single front guide-pulley, when said pulley is carried on an arm, by means of which the pulley is swung outwardly in such manner that
 35 it would not release the tappet-wire therefrom without the lifter or cam-lug K; and

I claim as new—

1. In a corn-planter check-rower, in combination with a tappet-wire and forked lever for imparting movement to the seed-slides of
 40 the planter, a forward guide-pulley carried on a swinging arm, which swinging arm also carries a cam-lug adapted to free the wire from the guide-pulley as the arm and pulley swing outwardly, substantially as and for the pur-
 45 pose specified.

2. In combination, a forked lever adapted to impart movement to the seed-slides of a corn-planter, a tappet-wire, and a swinging
 50 arm carrying the front guide-pulley and a cam-lug, which cam-lug is adapted to release the tappet-wire from the swinging pulley as it swings outwardly, substantially as and for the purpose specified.

3. In a corn-planter check-rower, in combination with a tappet-wire and forked lever for
 55 imparting movement to the seed-slides of the planter, a forward guide-pulley carried on a swinging arm, which swinging arm also carries a cam-lug adapted to free the tappet-wire
 60 from the forward pulley, and pulleys H H', adapted to permit the escape of the tappet-wire, substantially as and for the purpose specified.

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

LORENZO D. BENNER.

Witnesses:

HARRY M. RICHARDS,
 SAM'L. N. GROSE.