J. PUTMAN.

CORN-DROPPER.

No. 188,754. Patented March 27, 1877.

Fig. 1.

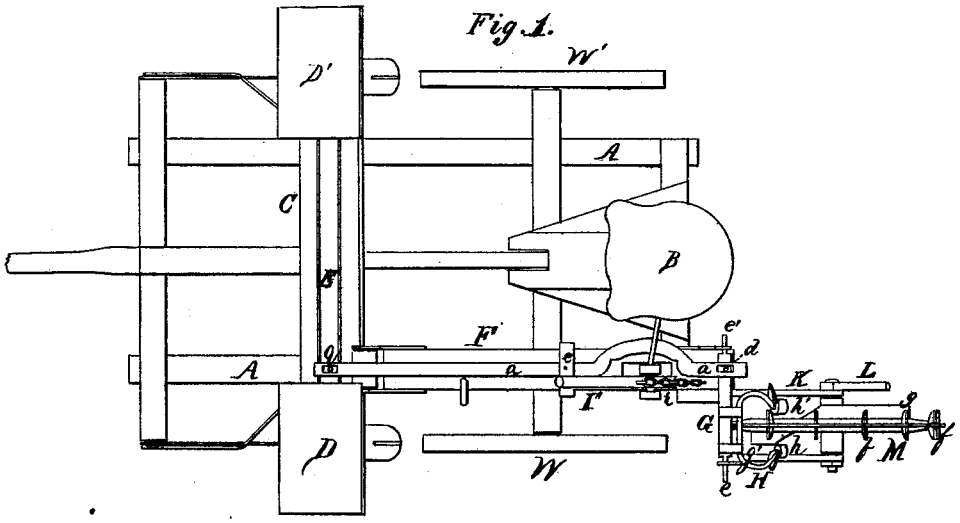


Fig. 2.

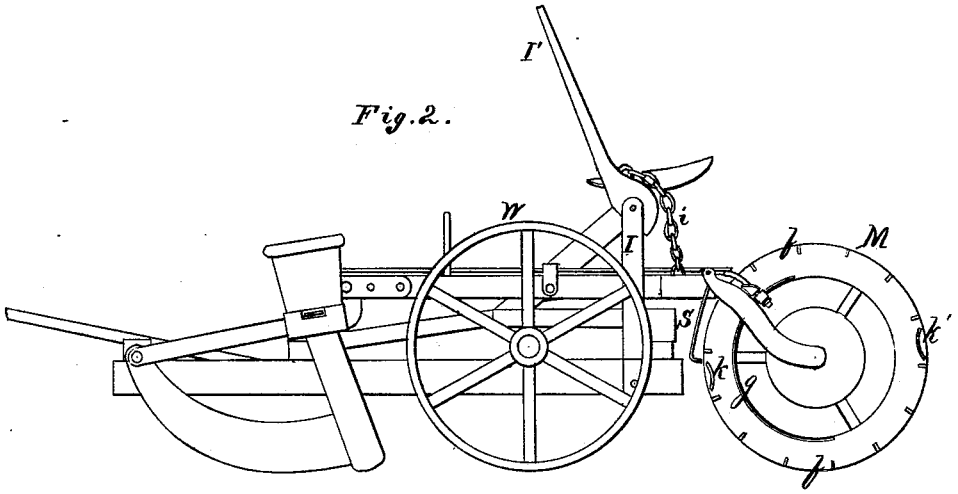
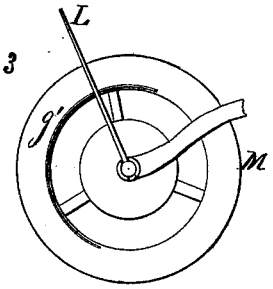


Fig. 3



WITNESSES:

H. T. Wiswall

Jno. P. Jacobs

John Putman

INVENTOR.

J. McC. Perkins

ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN PUTMAN, OF RUSHVILLE, ILLINOIS.

IMPROVEMENT IN CORN-DROPPERS.

Specification forming part of Letters Patent No. **188,754**, dated March 27, 1877; application filed December 9, 1876.

To all whom it may concern:

Be it known that I, JOHN PUTMAN, of Rushville, in the county of Schuyler and State of Illinois, have invented certain new and useful Improvements in Corn-Droppers; and I do hereby declare that the following is a full, clear, and exact description thereof, that 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 the letters and figures of reference marked thereon, which form a part of this specification.

The same letters and figures of reference are used to indicate the corresponding parts.

After describing the invention, its nature and extent will be shown in the claims.

The object of my invention is to provide a self-dropping attachment to a corn-planter, for marking the ground to enable the corn to be planted in accurate check-rows.

Figure 1 is a plan view of my invention. Fig. 2 is a side view; and Fig. 3 is a side view of the marker with the indicator attached. In Fig. 3 the side of the marking-wheel M is opposite to that shown in Fig. 2.

A is the frame of the corn-planter. B is the driver's seat. C is the head-block, fastened to the front of the planter, and on either end of which are the corn-boxes. To the head-block C is connected a strong wooden beam, F, by iron straps on either side, which are bolted to the head-block, forming a hinge, and allowing the beam to move in a perpendicular direction. The upright I on the rear of the planter prevents the lateral play of the beam by a mortise in it, through which one of the forks of the upright passes. The rear end of the beam F is supported by the marking-wheel M, which has bearings in a forked shaft bolted to the rear of the beam F. The wheel M runs in the plane of the planter-wheel. The marking-wheel is a thin disk, whose periphery is reduced almost to an edge. On either side of the wheel or disk, and near the periphery, are two lateral projections or lugs, *k k'*, whose upper surfaces are convex, and which make well-defined checks in the ground, marking the hills for corn.

Near the rim of the wheel are projecting points, which, by catching in the earth, compel the wheel to revolve, and thus prevent sliding or dragging of the wheel. At a suitable distance from the periphery of the wheel are cams, made at right angles with the plane of the wheel. Each of these two cams is on opposite sides of the wheel, and are parallel with its periphery. Each cam extends about one-half of the circumference of the wheel. The letters *g g'* show the cams, and the letters *f f* the points or ribs.

Running along the top of the beam is the lever *a*, which is fastened to the beam by a bolt, as a pivot, at the point *c*. The lever has a slot on either end. Into these slots are placed projecting pins, which are fixed on slides. The front slide is represented by E, and is the corn-planter slide, which drops the corn The slide G is at the rear end of the beam, to which slide is fixed the fork H, whose arms extend to the cams *g g'* on either side of the marking-wheel M. The terminal points of the fork H are provided with rollers *h h'*, which are struck alternately by the cams *g g'*. The terminal points *e e'* of the slide G have bearings in ears raised on the fork K, whose prongs provide bearings for the shaft of the marking-wheel M.

To the top of the upright I is fastened the hand-lever I', to which one end of a chain is attached, while the other end of the chain is attached to the rear end of the beam. By means of this lever I' the marking-wheel M is lifted clear of the ground.

Attached to the projecting shaft of the wheel M is the indicator L, which shows the exact position the marking-wheel should be placed in when a row is commenced, or when, for any reason, the wheel is lifted up and the work is commenced anew.

The driver can always tell by the marked hill when he is dropping crooked in any degree.

The operation of my marking attachment to the corn-planter is as follows: Starting to the field with the hand-lever I' in the hook, the marking-wheel M rides clear of the ground, and no dropping of the corn is allowed. When at the field and ready for commencing work, the hand-lever is slipped out of the hook, and the rear end of the beam F slides down the upright I until the wheel rests on the plowed ground. When the horses start the wheel re-

volves, and the cams alternately strike the rollers of the fork H, which is attached to the slide G. This causes the slide G to play backward and forward at right angles to the beam F, and thus the slide E, by means of the lever *a*, moves back and forth, alternately dropping the corn from the boxes D and D′; and the marking-lugs *k k′* on the wheel M having been set by the indicator L at the starting, a mark or check is made in the ground, directly over the corn in every hill in the row, so that in returning the driver can sit opposite and keep in check.

Marking of hills in checks has been done before.

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

1. The marking-wheel M, provided with the cams *g g′* and lugs *k k′*, in combination with the indicator L, substantially as described, and for the purposes set forth.

2. The beam F, pivoted to the runner-frame, and provided with the lever *a*, pivoted thereto, in combination with the lever I′ and the slide G, provided with the fork H, substantially as described, and for the purposes set forth.

3. The wheel M, provided with the indicator L, cams *g g′*, and the lugs *k k′*, in combination with the beam F, lever *a*, slides E and G, forks H and K, lever I′, and chain *i*, substantially as described, and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

JOHN PUTMAN.

Witnesses:

EDWARD P. VAIL,

GEORGE W. SCRIPPS.

2