A. R. BIDDLE.
Check-Rower

No. 205,466. Patented July 2, 1878.

Fig. 1.

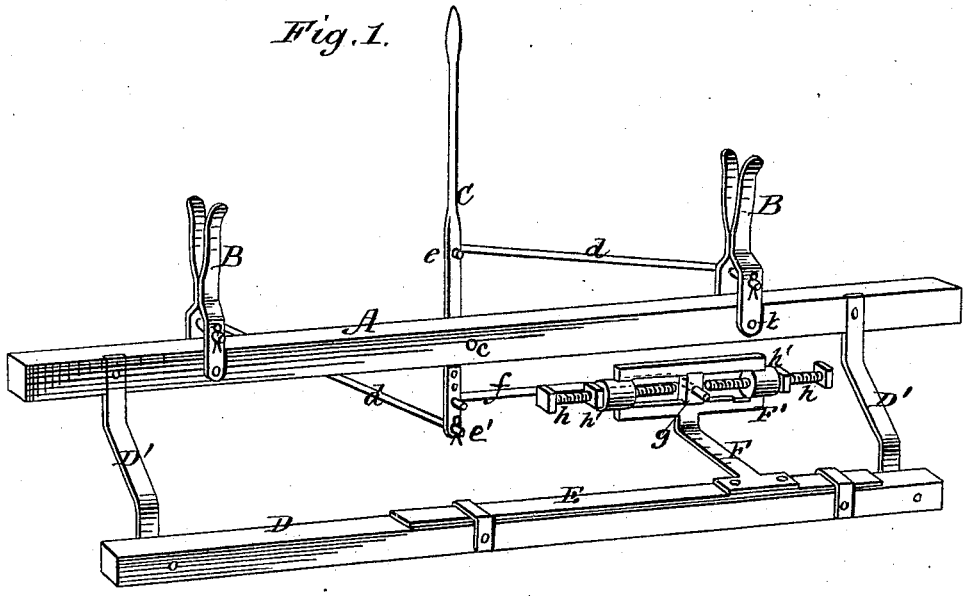


Fig. 2.

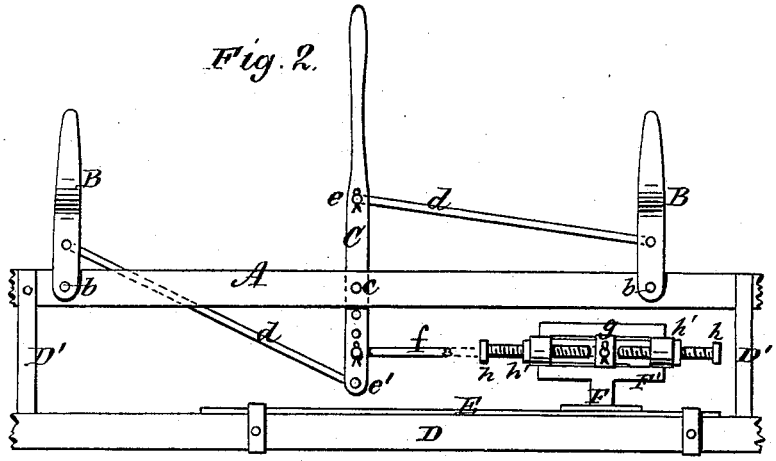
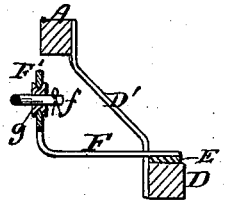


Fig. 3.



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UNITED STATES PATENT OFFICE.

ALFRED R. BIDDLE, OF MAROA, ILLINOIS.

IMPROVEMENT IN CHECK-ROWERS.

Specification forming part of Letters Patent No. **205,466**, dated July 2, 1878; application filed June 12, 1878.

To all whom it may concern:

Be it known that I, ALFRED R. BIDDLE, of Maroa, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Check-Rowers; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a perspective view of the attachment to be applied to corn-planters. Fig. 2 represents a rear view, and Fig. 3 a vertical section, of the same.

My invention relates to an attachment for that class of corn-planters in which the slide for the seed-boxes is operated by a rope fastened at each end of a field, and having knots at regular intervals engaging with forked levers upon the planter's attachment, and by which reciprocating motion is transmitted to the seed-box slide.

My invention consists in the combination of devices for taking up and compensating for the wear and for the proper adjustment of the parts by means of set-screws and jam-nuts placed upon an intermediate frame attached to the seed-slide and carrying a sliding block connected to a pivoted hand-lever, and through suitably-located rods to the forked levers, by which means the inclination of each forked lever to take up the rope can be "set," and the sliding block having the desired play against the end of either set-screw, the seed-box slide is thus operated by a quick short stroke, so essential in the correct dropping of corn.

In the drawing, A represents a bar, which may be attached to any corn-planter. It carries the forked levers B, to which they are pivoted at *b*. About half-way between these forked levers the hand-lever C is also pivoted to the bar A at *c*. Each forked lever is connected to the lever C by means of a rod, *d*, one of which is hinged to it at *e* above the pivot *c*, and the other under it at *e'*, so that the forked levers move in opposite direction under any impulse given to them by the knotted rope passing through them or by the hand-lever. The knotted rope, being fastened to one side of a field, passes, as usual, around a sheave at one end of the bar A to one of the forked levers and incline both toward the center, and then through the second lever, returning both levers in their former position, then around another sheave to the opposite side of the field.

The seed-boxes can be mounted upon the bar D, or otherwise, this bar being attached to the bar A by two straps, D'.

The sliding valve or gate placed under the seed-boxes is represented at E. It is connected to the hand-lever and forked levers by means of an arm, F, and a rod, *f*; but, to admit of proper adjustment and compensate for the wearing of the parts, the arm F carries an intermediate frame, F', having a rectangular opening, in which a grooved block, *g*, can slide upon angular ways in the opening and be set and retained at each end by set-screws *h* passing through the ends of the frame, and additionally controlled by jam-nuts *h'*. This block *g* receives one end of the rod *f*, and thus controls the motion imparted from the pivoted hand or forked levers and rod *f* through it to the seed-slide, and, by leaving a little play between the block *g* and the end of either set-screw, I am enabled to give to the seed-slide a quick short stroke, and thus produce a correct and even delivery or dropping of the corn.

I am aware that the operation of the hand-lever and forked levers has been made adjustable by means of a number of holes in the lower end of the hand-lever, and that the lower end of the forked levers has been united by adjustable screw-bolts; but I am not aware that such arrangement can compensate with nicety for the wearing of the parts and change or make a full stroke of the seed-slide in the seed-boxes.

Having now fully described my invention, I claim—

1. In combination with the seed-slide of a corn-planter and forked levers and rods, through which power is transmitted, the intermediate arm and frame F', carrying a sliding block controlled by set-screws abutting at each end, substantially as and for the purpose described.

2. In combination with the bar A, carrying forked levers and a handle-lever pivoted to it, the rod *f* and sliding block *g*, controlled by set-screws in a frame attached to the seed-slide, substantially as and for the purpose set forth.

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