

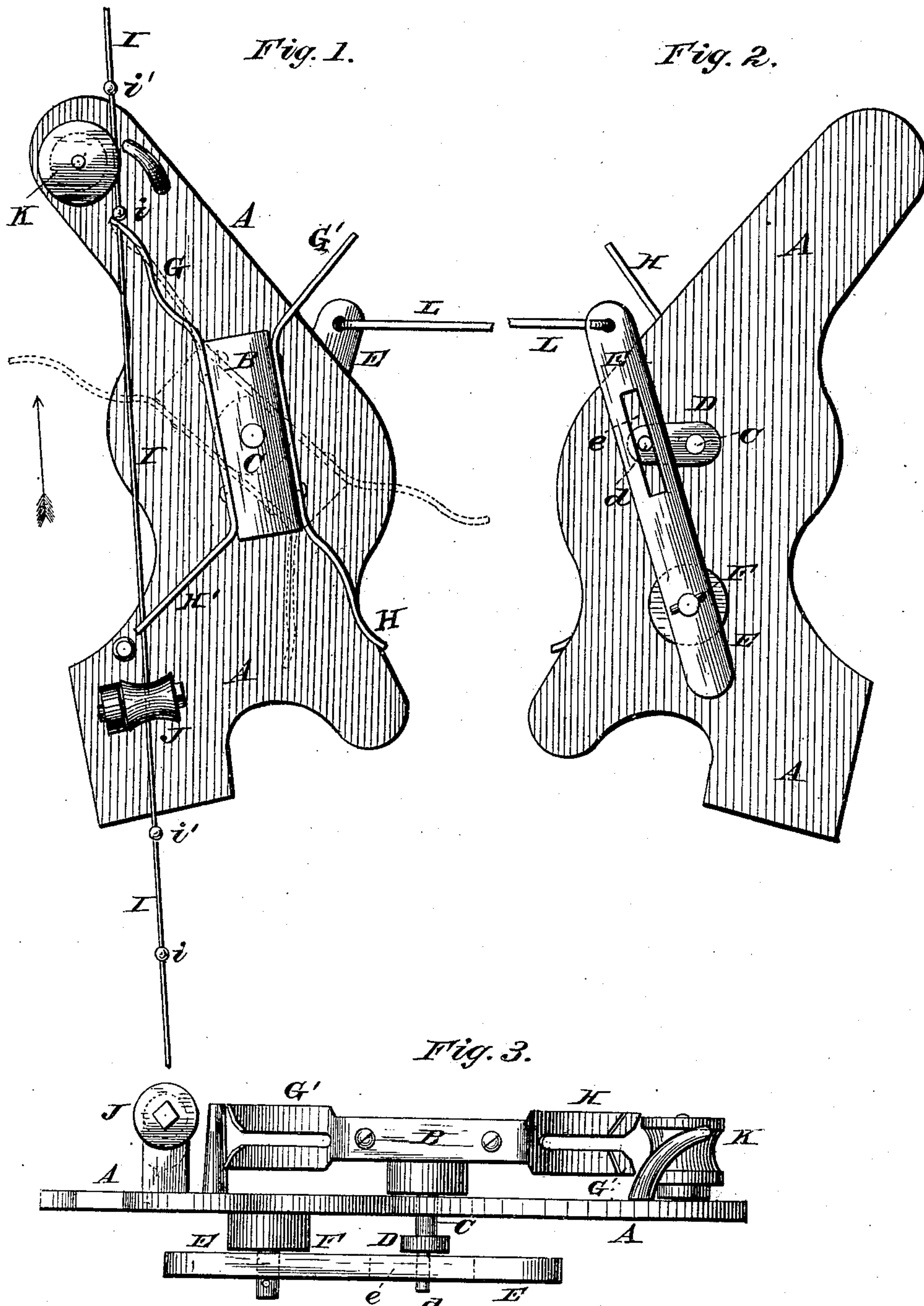
(No Model.)

L. D. BENNER.

CHECK ROW ATTACHMENT TO CORN PLANTERS.

No. 266,342.

Patented Oct. 24, 1882.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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

## CHECK-ROW ATTACHMENT TO CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 266,342, dated October 24, 1882.

Application filed August 3, 1881. Renewed July 10, 1882. (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 Check-Row Attachments to Corn-Planters; 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 check-row attachments to corn-planters; and it consists in improvements in the knotted-wire chain or cord, and also in the devices arranged intermediate between the knotted check-row chain and the seeding devices of the planter, as hereinafter described, and set forth in the claims hereto annexed.

In the accompanying drawings, which illustrate my invention, Figure 1 is a top plan of one of the check-row heads and of the knotted check-row chain. Fig. 2 is a plan, seen from below. Fig. 3 is a side elevation.

Referring to the drawings by letter, the same letter indicating the same part in the different figures, letter A represents the base-plate, on which the working parts are mounted.

B is a rotating bar, carried on a short shaft, C, which is journaled in and extends through the plate A, and has a crank, D, on its lower end.

E is an oscillating bar, pivoted at one end to a stud, F, which projects downward from the plate A. The bar E has a slot, *e*, in which the crank-pin *d* of the crank D operates, so that a rotary motion of the bar B will impart an oscillating movement to the bar E. A forked arm, G, projects obliquely from one end and side of the bar B, and an auxiliary forked arm, H, projects from the same end and the opposite side of the bar B, as shown at Fig. 1. A similar forked arm, G', and a similar auxiliary forked arm, H', project from the opposite end of the bar B, as shown at the same figure.

I is the check-row chain, having a series of knots, *i*, secured thereto at distances from each other equal to the distances between the hills of corn to be planted.

*i'* are a series of auxiliary knots on the chain

I—one to each knot *i* and at short distances therefrom.

J K are ordinary guide-pulleys for the knotted wire.

In operation the planter is drawn forward in the direction shown by the arrow at Fig. 1, and a knot, *i*, coming in contact with the forked arm G, will rotate the bar B to the position shown by dotted lines at same figure, when an auxiliary knot, *i'*, will come in contact with the auxiliary forked arm G' and carry the bar B around to complete a full half-rotation, thus permitting the knot *i'* to escape from the arm G' and bringing the arms H H' into the same positions occupied by the arms G G' before they were acted on by the knots *i i'*, as last described. The arms H H' will then be acted on by the next succeeding knot *i* and auxiliary knot *i'* in same manner as were the arms G G'. Each half-revolution of the bar B will give a half-revolution to the crank D and an oscillation or movement to the bar E, and thereby a movement to the seed-slides, which are connected with the bar E by an ordinary connecting-rod, L. The crank D stands on its "dead-point" at the end of each of its throws, and thus forms a lock to prevent accidental movement of the seed-slides; but I do not claim this feature broadly herein, as it is claimed in an application which I have pending herewith.

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

1. In combination with a bar, B, having forked arms G H and auxiliary forked arms G' H', a cord or wire having knots *i* and auxiliary knots *i'*, adapted to operate one of the main arms and one of the auxiliary arms to give a half-rotation to the bar B, and thereby a motion to the corn-planter seed-slides, substantially as and for the purpose specified.

2. In combination with the crank D and oscillating bar E, and with the bar B, having forked arms G G' on one end and similar arms, H H', on its other end, the check-row chain having knots *i* and auxiliary knots *i'*, substantially as and for the purpose specified.

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

LORENZO D. BENNER.

Witnesses:

F. C. SMITH,  
M. ANDREWS.