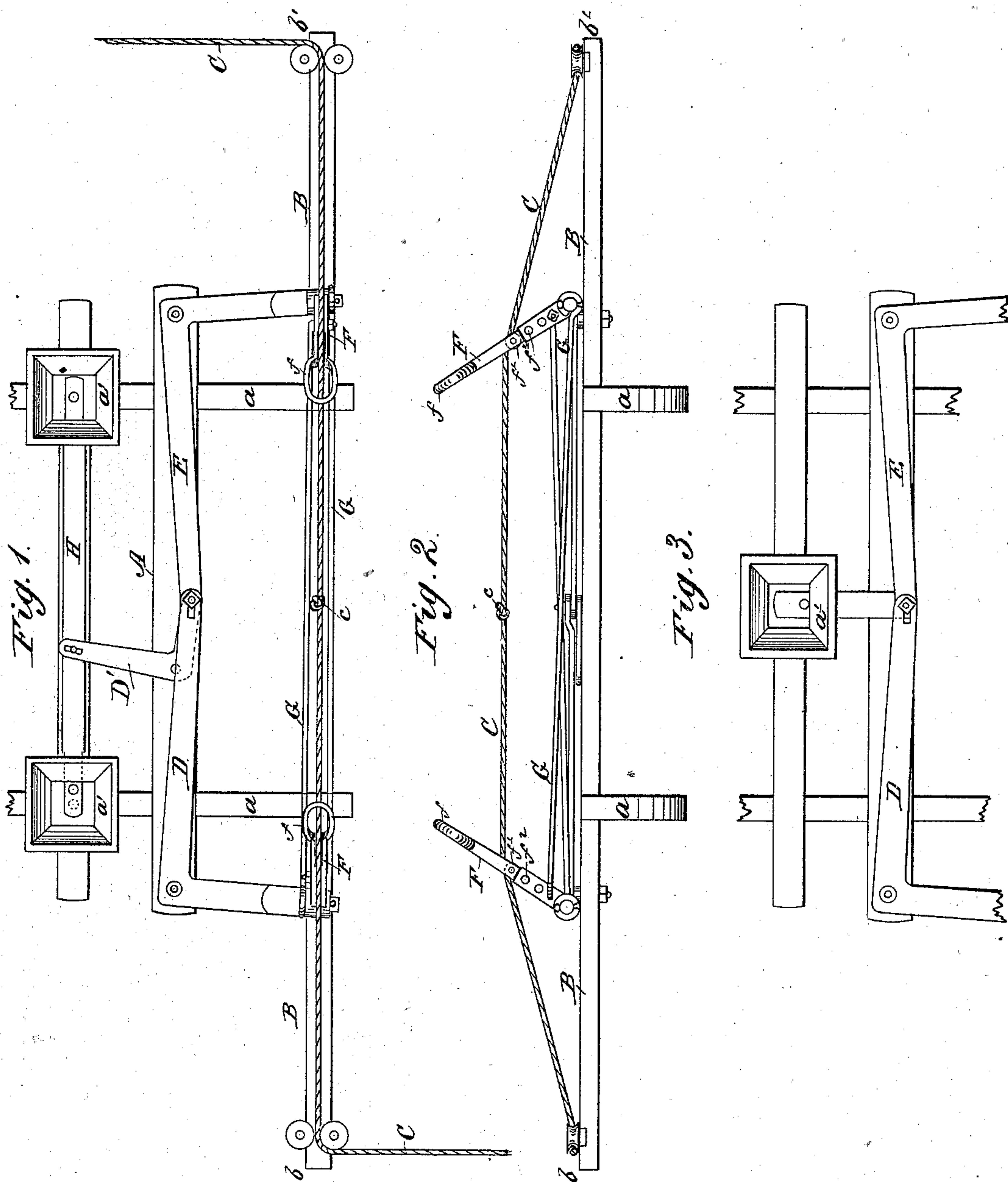


(No Model.)

O. L. HALL.
CHECK ROW PLANTER.

No. 254,961.

Patented Mar. 14, 1882.



WITNESSES:

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OLIVER L. HALL, OF PARSONS, KANSAS.

CHECK-ROW PLANTER.

SPECIFICATION forming part of Letters Patent No. 254,961, dated March 14, 1882.

Application filed December 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, OLIVER L. HALL, of Parsons, in the county of Labette and State of Kansas, have invented a new and useful Improvement in Check-Row Planters, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

This invention relates to check-row planters in which the seed-dropping device is operated by means of a cord or rope which is staked across the field; and the invention consists of a seed-dropping device composed of two crank-levers connected to a dropping-slide and provided with oscillating guide-arms and connecting-rods, and a knotted cord for operating the device, as will be hereinafter fully described.

In the accompanying drawings, Figure 1 is a plan view of a corn-planter, partly broken away, showing my improved seed-dropping device. Fig. 2 is a front elevation of the dropping device, and Fig. 3 is a modification.

A represents a portion of a corn-planter, of which *a* is the runners and *a'* the seed-boxes. Across the forward part of the planter is secured a bar, B, preferably of such a length as to reach half-way to the nearest planted row on either side, and provided at each end *b b'* with two sheaves, so arranged as to inclose the cord or wire C and to allow the knots *c* to pass freely between them.

At the rear of the bar B are two crank-levers, D E, pivoted at their elbows to a suitable support and having their adjacent ends pivoted together and their opposite ends extended forward slightly beyond the bar B. The forward ends of the crank-levers D E are provided with journals, on which are secured the hubs of the guide-arms F, so that the guide-arms shall be in line with the bar B. The guide-arms F are constructed with loops *f* at their upper ends, which loops are contracted at the bottom and provided with friction-rollers *f'*, located in the contracted portions, so that the cord C shall be allowed to pass freely through the contracted portions until one of the knots *c* is drawn against the guide-arm.

The contracted portions of the loops are designed to offer an obstruction to the passage

of the knots, so that as the planter moves forward the knots *c* of the cord which is staked across the field will be forcibly drawn against the guide-arms, and the arms will thus be made to oscillate and allow the knots to pass through the loops at their upper and larger portions. The lower ends of the guide-arms are provided with perforations *f''*, in one of which is secured the bent end of a rod, G, whose opposite end extends across the planter and is secured to the journaled end of one of the crank-levers D E. The two rods G thus cross each other at the center, and one is secured to its corresponding crank-lever inside the hub and the other outside the hub of the two guide-arms. It is evident, however, that the rods may be connected to the crank-levers in any analogous manner without changing the character of the invention, since the object is that the oscillation of the guide-arms by the knotted cord shall be communicated to the crank-levers, and their inner adjacent ends made to move to and fro on the longitudinal axis of the planter.

For operating a transverse dropping-slide, H, a third crank-lever, D', is employed, which is pivoted at its elbow to a suitable support underneath the levers D E and has one end connected to the said levers by means of their connecting-pivot, and the opposite end, which extends rearward, connected to the dropping-slide.

In planters designed for planting one row at a time the feed-box is to be placed at the center, as shown in Fig. 3, and the dropping-slide is to be connected to the levers D E, so as to be reciprocated back and forth on the longitudinal axis of the planter.

By having two sheaves at each end of the bar B the necessity of changing the rope is avoided, since in turning round at the ends of the field the planter is turned to the right and the left alternately, and the rope is thus made to bear against first one and then the other of the two sheaves at each end of the bar B.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a check-row planter, a seed-dropping device composed of two horizontal crank-levers

connected to a seed-dropping slide, and provided with vertical oscillating guide-arms and connecting-rods, and a knotted cord or wire, said parts being combined for operation substantially as specified.

2. In a check-row planter, the combination of the bar B, having two sheaves at each end, the crank-levers D E D', pivoted together and connected to a seed-dropping slide, the guide-

arms F, journaled to the said levers D E, and provided with loops *f*, and the connecting-rods G and the knotted cord C, substantially as shown and described.

OLIVER L. HALL.

Witnesses:

F. H. FOSTER,
W. H. MORRIS.