

Corn Planter.

Patented Sept. 21, 1869.

Fig. 1.

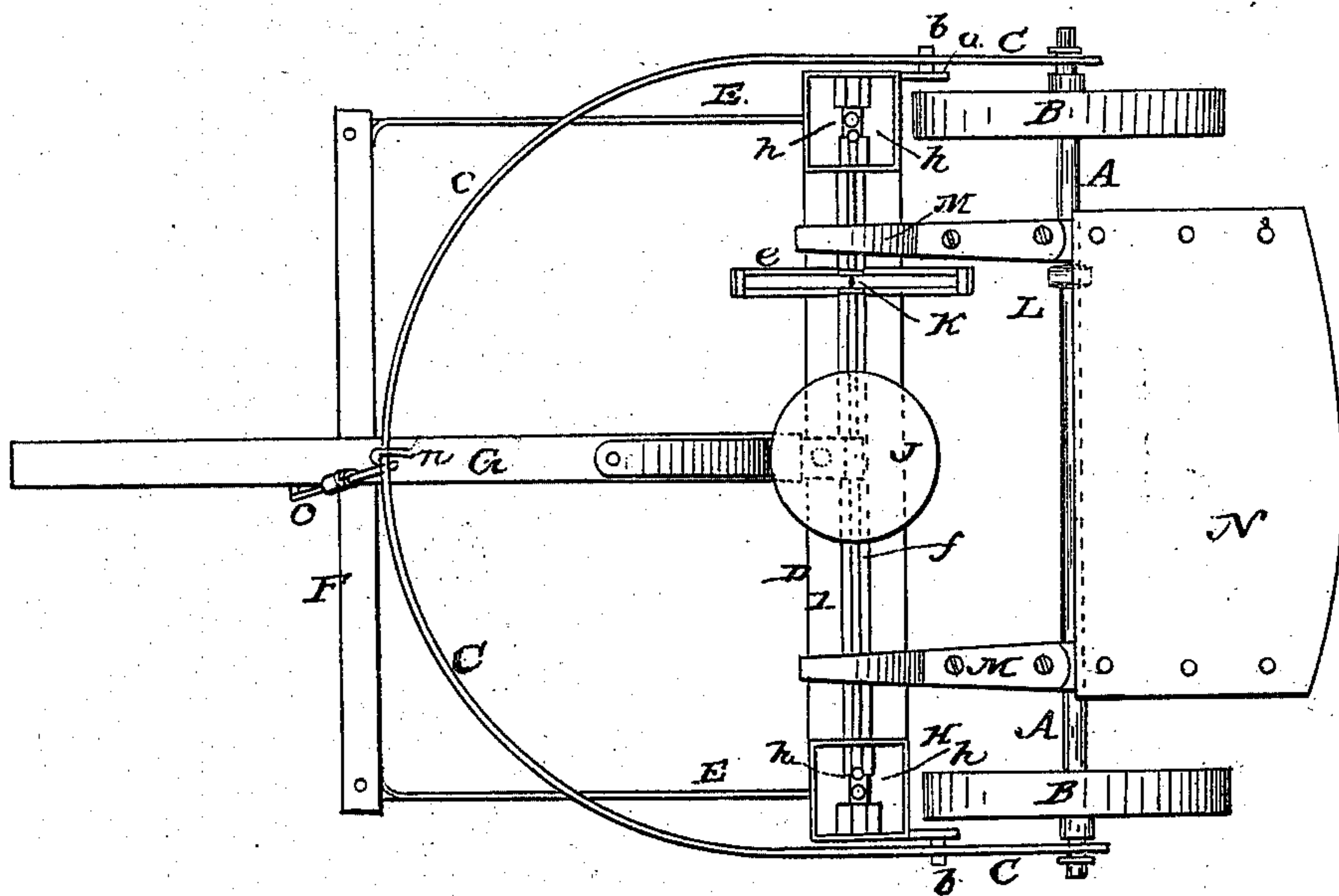
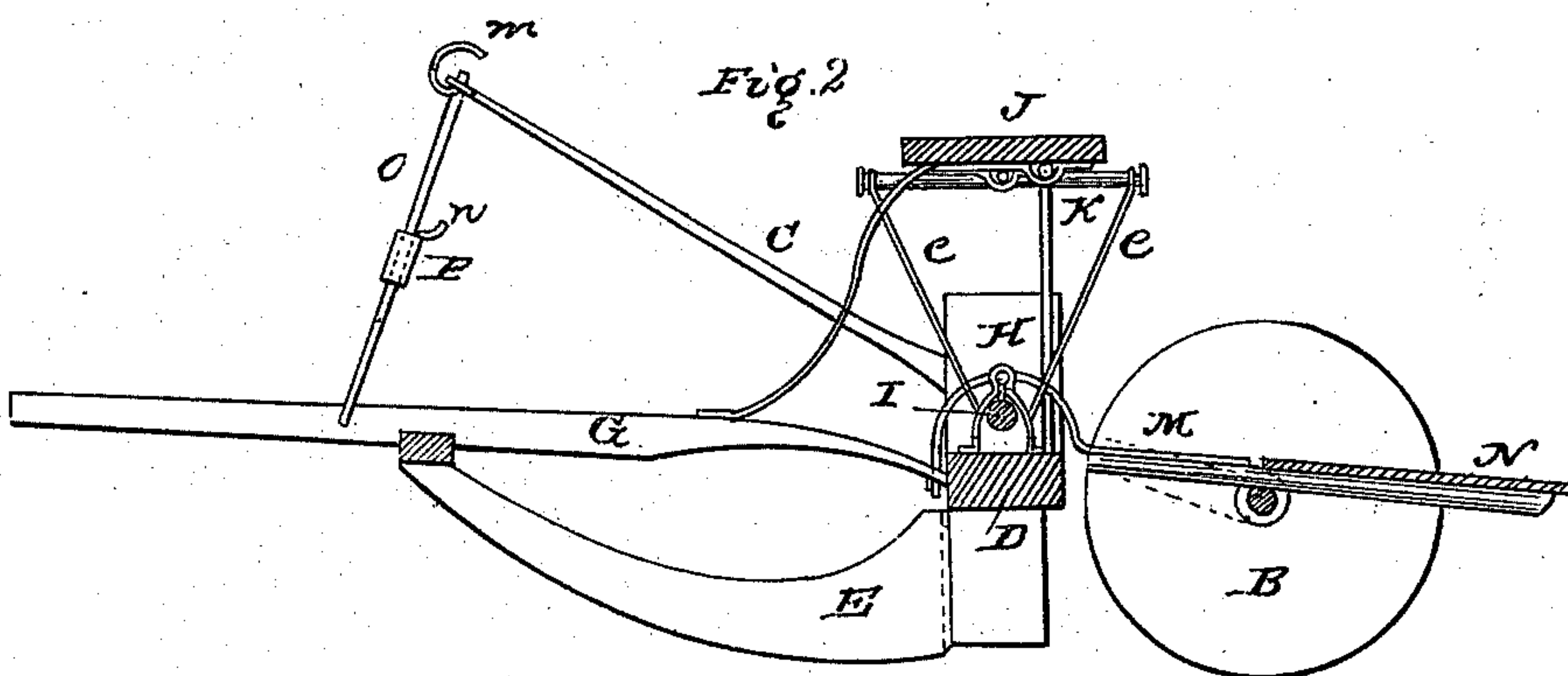


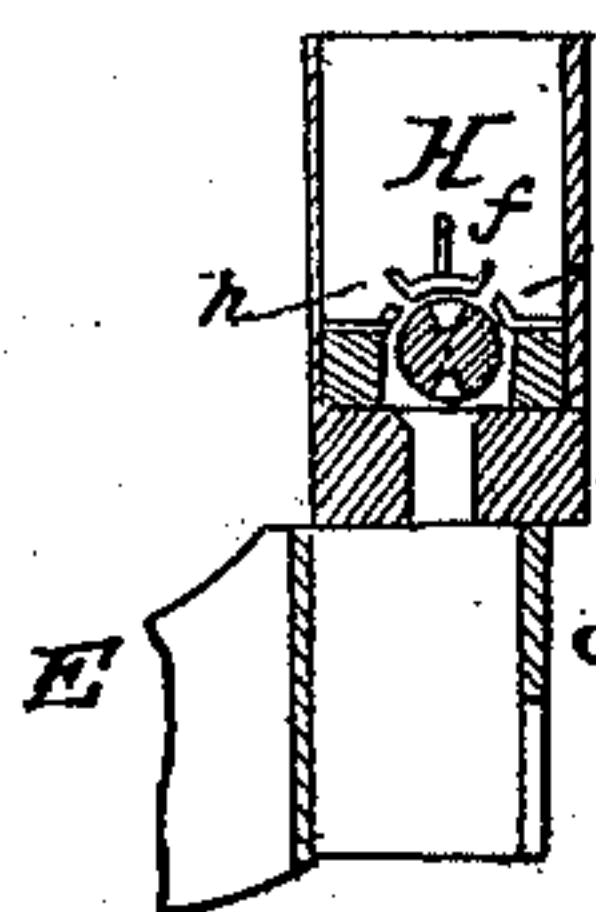
Fig. 2



Harry King.

C. L. Curtis

Fig. 3



L. S. Coen

His
Alexander Mason,
Attor.

United States Patent Office.

JAMES S. COEN, OF ATTICA, INDIANA.

Letters Patent No. 95,085, dated September 21, 1869.

IMPROVEMENT IN CORN-PLANTER.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JAMES S. COEN, of Attica, in the county of Fountain, and in the State of Indiana, have invented certain new and useful Improvements in Corn-Planters; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and general arrangement of a "corn-planter," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view, and

Figure 2, a vertical section of the machine.

Figure 3 is a vertical section of one of the corn-boxes, and

Figure 4 is a bottom view of the rear portion of one of the runners.

A represents the axle of the machine, to each end of which is secured a wheel, B. The axle A has its bearings outside of the wheels, in the ends of a large curved lever, C, which forms, as it were, a semicircle in front of the axle and wheels.

At suitable points in front of the wheels B B, in the lever C, is pivoted a bar, D. This bar is, at each end, provided with a metal plate, *a*, which is curved slightly upward at the rear end, and here, on the outer side, provided with a pin, *b*, which is inserted into a hole in the lever C, thus forming the pivots on which the bar D works.

Under each end of the bar D is secured a runner, E, which extends forward a suitable distance. The front ends of the runners E E are connected, by means of a cross-bar, F, to the centre of which the tongue G is secured, the rear end of said tongue being in some suitable manner secured to the front side of the bar D.

The runners E E are constructed in the peculiar shape shown in fig. 2, and near the rear ends they are forked, as shown, and a back-piece, *d*, put on at the upper half, forming a triangular box under the bar D, through which the corn is dropped into the ground.

At each end of the bar D, on the upper side, is placed a box, H, to contain the corn to be dropped. A shaft, or roller, I, is placed on top, along the bar D, passing into the boxes H H, and having its bearings in the same. In the centre of the boxes H H there is a hole, or recess, in the shaft I, so that a grain of corn may fall into the same, the shaft then turned around, and the corn fall through an opening

in the bar D, and through the rear part of the cutter E, into the ground.

On the opposite side of the shaft I is another similar hole, or recess, as seen in fig. 3, so that when the shaft is turned alternately, from side to side, it will deposit corn each time.

The shaft I is operated by the dropper from his seat J by the following means:

The seat J is supported on suitable standards from the bar D, and on one side of the seat a rod, *d*, projects, to the outer end of which a lever, K, is pivoted. The end of the lever K is, by a belt, *e*, connected with the shaft I, so that the operator can, by turning the lever on its pivot, from side to side, turn the shaft sufficiently to drop the corn.

To prevent the shaft I from turning too far, I provide the bar D with a pin, *i*, on each side of the shaft, and on the shaft is placed a pin, or stop, *s*, which, as the shaft is turned from side to side, alternately strikes the two pins, and stops the shaft at the proper time.

Above the shaft I, and running along the same, is placed a spring-rod, *f*, the ends of which pass into the boxes H H, and are turned slightly upward in the same. This rod *f* is so placed, that when the shaft I turns, the stop *s* on the same will cause the rod to vibrate, and consequently agitate the corn in the boxes.

If it is desired to drop the corn automatically, this can readily be accomplished by removing the belt *e* and the pins *i i*, then attaching a cross-belt from a pulley, L, on the shaft or axle A to the shaft I, when the said shaft will obtain a rotary motion.

Within the corn-boxes H H, on each side of the shaft I, is placed a cut-off, *h*, of rubber or other pliable material, with the edge nearest to the shaft curved upward, as seen in fig. 3, so that when a grain of corn catches it will be forced upward and slightly backward. By this means the shaft will work smoother and easier, with less friction, and, consequently, less wear.

On the front side of the bar D are hinged two arms, M, curved over the same, and then straight extending toward the rear, resting on the axle A, having a platform, N, secured to their upper sides, for the driver to stand on.

On the tongue G, or rather on the side of the tongue, is pivoted a rod, O, having a hook, *m*, at its upper end, in which the curved lever C is placed when the machine is in operation.

On the rod O is a slide, P, secured at any point desired by a thumb-screw, and having a hook, *n*, in which the lever may be held.

It will be seen that the runners, or furrow-openers E E can be raised out of the ground for the purpose of turning and transportation, it being done by both

dropper and driver. The driver, standing back upon the platform N, operates in favor of the dropper, raising the runners by the lever C. By this means it is not necessary for either the dropper or the driver to get off when turning, and the runners may be raised over any obstructions without stopping.

The rod O and slide P serve to hold the lever C at any desired point, so as to run the runners any desired depth in the ground.

Having thus fully described my invention,

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

1. In combination with the shaft I and boxes H H, the cut-off *h*, of rubber or other pliable material, substantially as set forth.

2. The arrangement of the bar D, runners E E, and connecting-bar F, substantially as shown and described.

3. The spring-rod *f*, constructed as described, and for the purposes set forth.

4. The arrangement, with the bar D and axle A, of the bars M M and platform N, substantially as and for the purposes herein set forth.

5. The rod O, with hook *m*, and slide P and hook *n*, constructed as described, and for the purposes set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 23d day of July, 1869.

Witnesses:

JAMES S. COEN.

ALONZO GREEN,
W. A. BROWN.