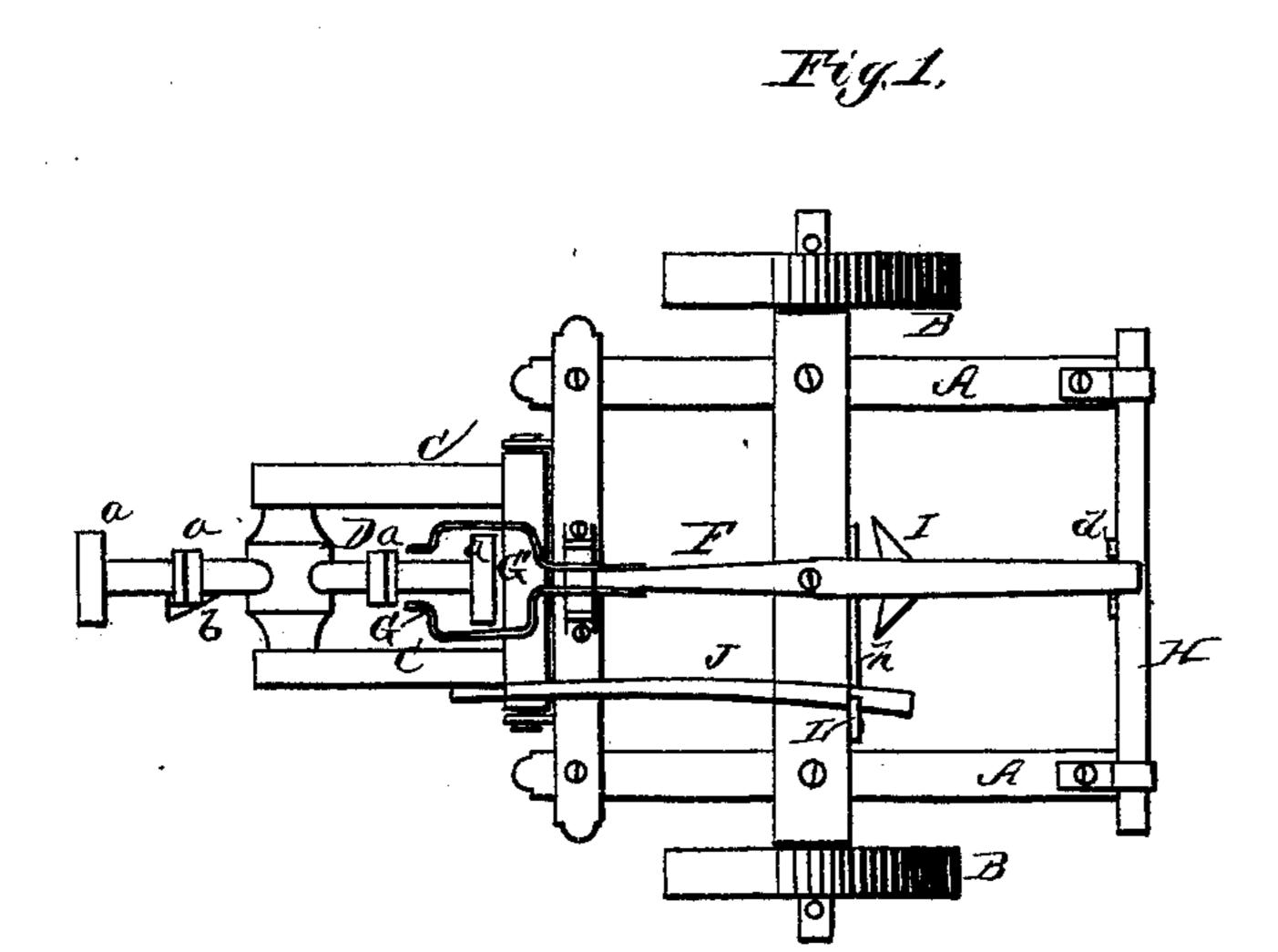
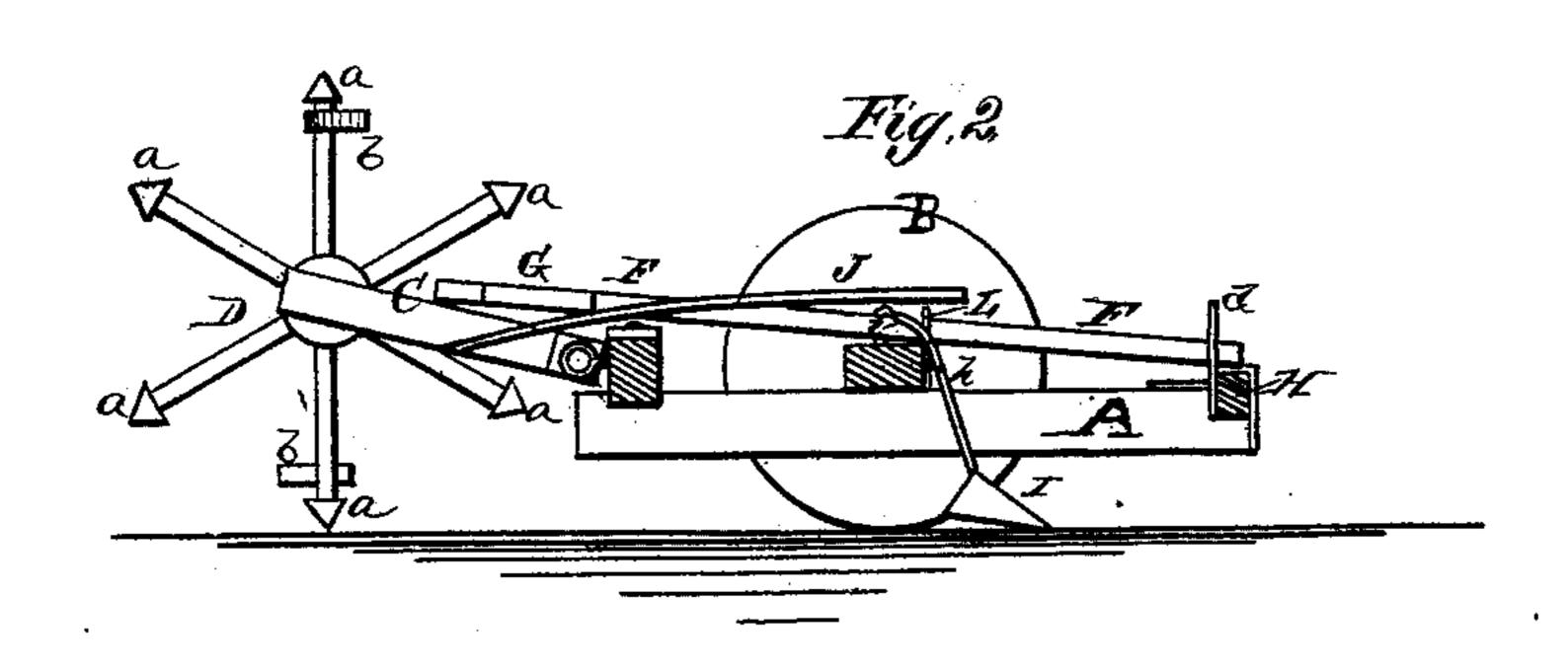
## J. A. & J. J. STEPHENSON. Corn Dropper and Marker.

No. 213,788

Patented April 1, 1879.





Witnesses! MbMghui

Inventors, Sames a Stephenson and John Lette themson

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## UNITED STATES PATENT OFFICE.

JAMES A. STEPHENSON AND JOHN J. STEPHENSON, OF MORMONTOWN, IOWA.

## IMPROVEMENT IN CORN DROPPER AND MARKER.

Specification forming part of Letters Patent No. 213,788, dated April 1, 1879; application filed January 8, 1879.

To all whom it may concern:

Be it known that we, James A. Stephenson and John J. Stephenson, both of Mormontown, in the county of Taylor and State of Iowa, have invented certain new and useful Improvements in Corn Dropper and Marker; and we 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, which form part of this specification.

The nature of our invention consists in the construction and arrangement of a corn-dropping and check-rowing attachment for corn-planters, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to construct and apply our machine, we will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view, and Fig. 2 a central vertical section. Fig. 3 is a detail view of the opener.

A represents the frame of a corn-planter, mounted upon wheels B B. On the back of the frame A is hinged a frame, C, in which is mounted a spoke-wheel, D. On the end of each spoke of this wheel is secured a block or marker, a, two of which are made longer than the others. These two long blocks are designed to strike the ground exactly in line with the hills of corn as they are dropped by the planter, thereby checking the rows of corn across the field.

On two arms or spokes of the wheel D are attached two wedge-shaped or cam blocks, b b, which are on opposite sides of the wheel, and, as the wheel revolves, work the lever F from side to side to make the drop. The lever F is pivoted on the axle of the planter-frame, and its rear end provided with a fork, G, through which the spokes of the wheel pass, and against the prongs of which the blocks b operate to work the lever from side to side.

This lever may be either straight or curved, as may be required to suit the style of planter, and its forward end lies in a fork, d, attached to the slide H of the planter. The fork d allows the lever F to play up and down to suit the movement of the planter.

To the front of the axle of the planter-frame is hinged a scraper or leveler, I, which at the top is provided with a side arm, h, having a best forcer is at its and

bent finger, i, at its end.

To the side of the hinged frame C is attached a lever, J, which extends forward over the finger i. By pressing down the lever J the frame C is raised sufficiently to lift the wheel D off the ground, and at the same time said lever presses down on the finger i, and lifts the scraper or leveler I also out of the ground. A catch or latch, L, is arranged to hold the lever J in this position. When the wheel D is thus raised up from the ground, the blocks b will pass through an enlargement, G', in the fork G, and thus stop the dropping. The markers a always pass through this enlargement.

The scraper or leveler I is arranged to slide in front of the wheel D and smooth the ground for the wheel to run on, so that there may not be any variation in the action of the wheel on account of hard clods and uneven ground.

Having thus fully described our invention, what we claim as new, and desire to secure by

Letters Patent, is—

The combination of the hinged frame C, carrying the wheel D, and provided with the lever J, and the scraper I, having arm h, with finger i, substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

> JAMES A. STEPHENSON. JOHN J. STEPHENSON.

Witnesses:

A. F. SEVERNS,

J. M. Dennis.