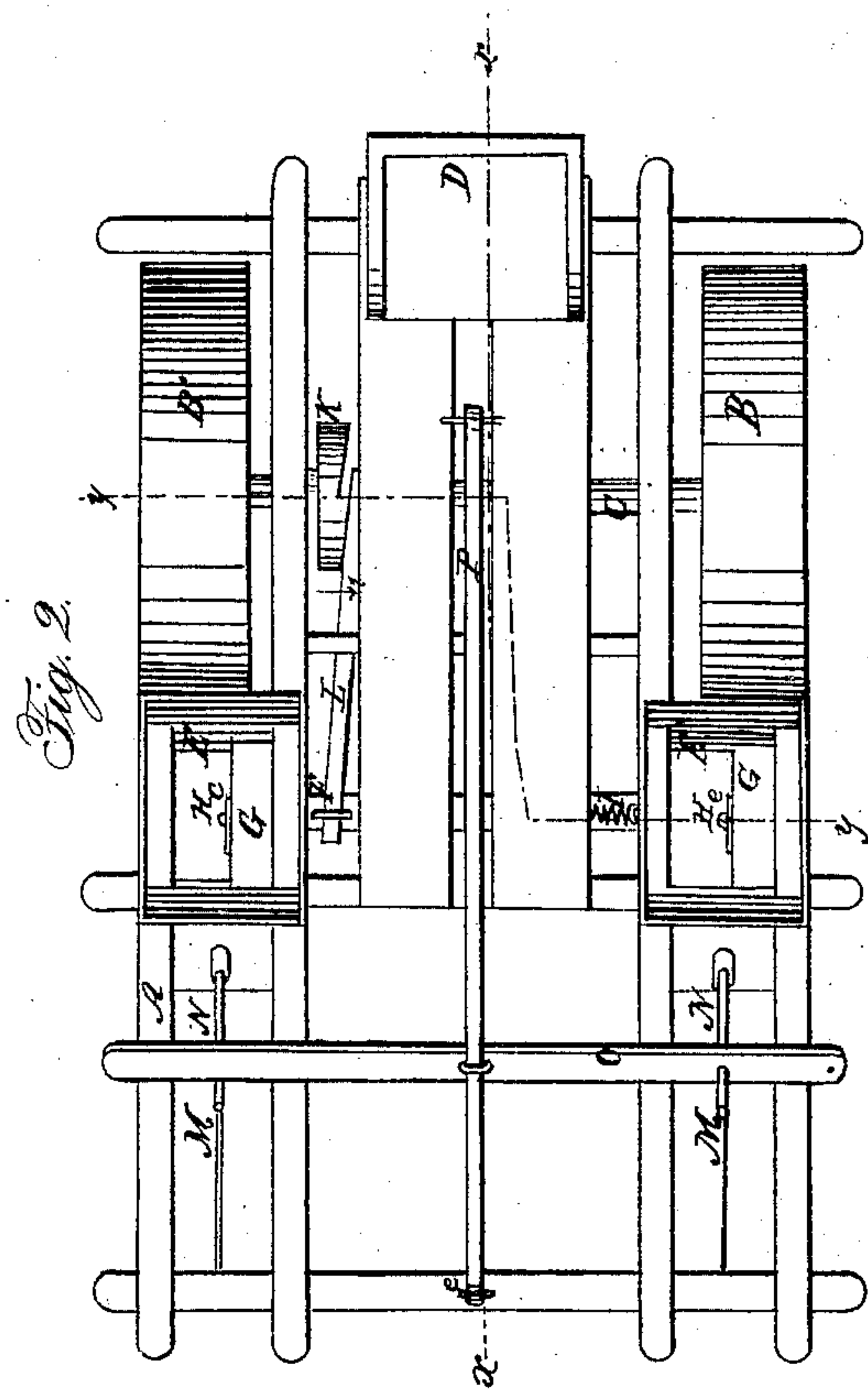
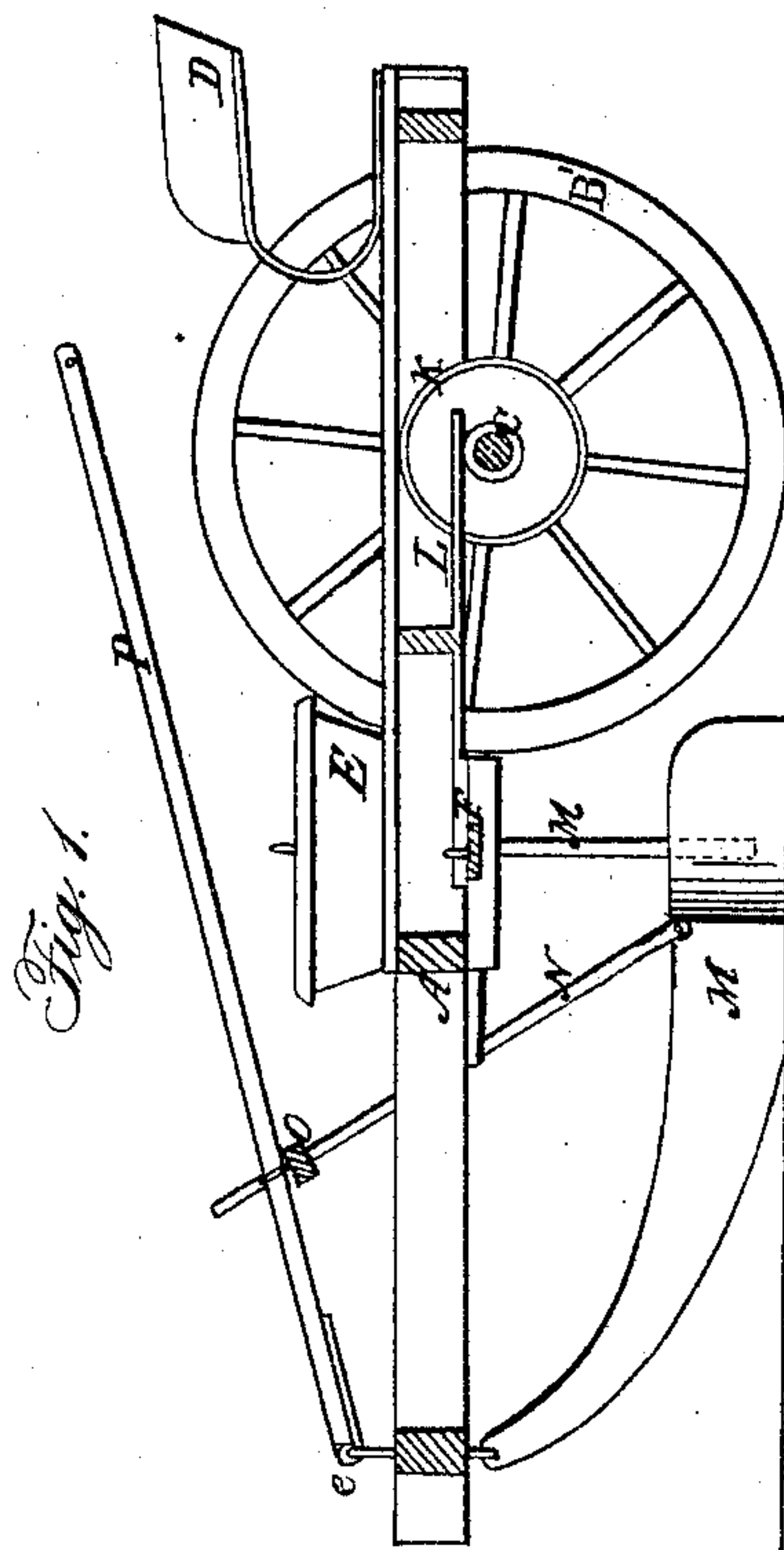
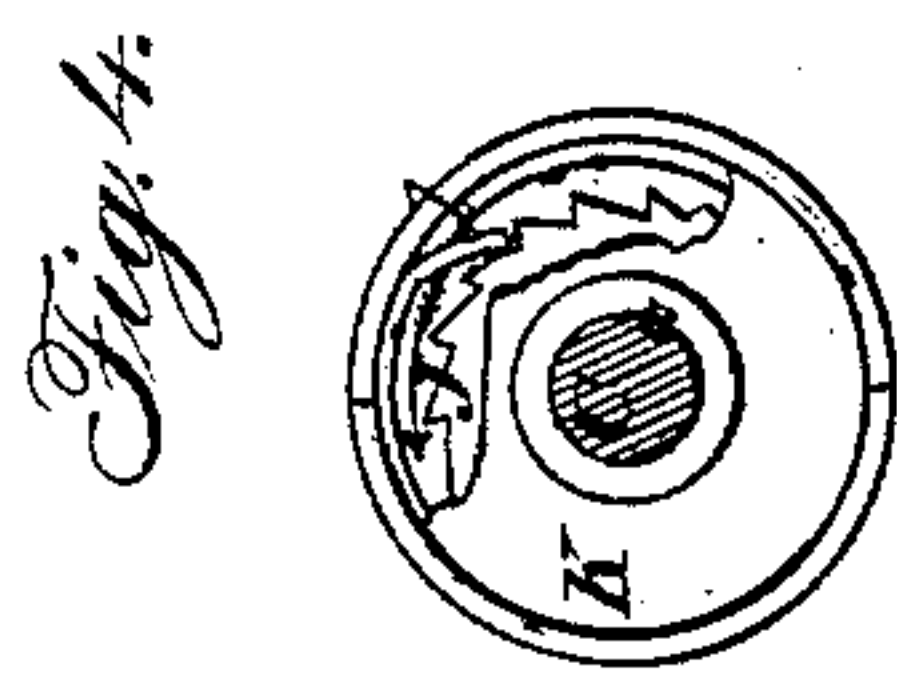
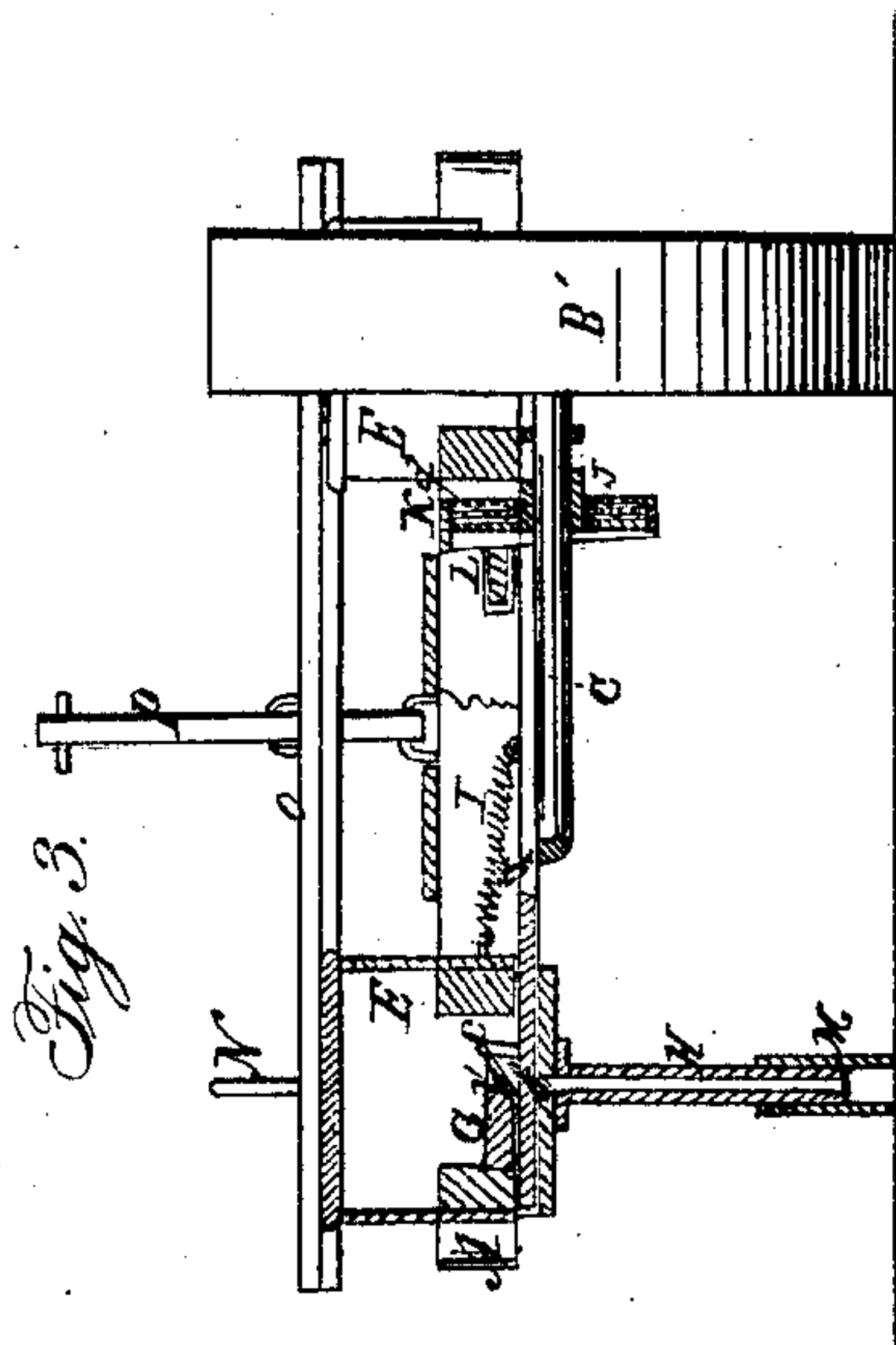


J. CONRAD.  
Corn-Planter.

No. 59,559.

Patented Nov. 13, 1866.



Witnesses:

*J. W. Huntington*  
*Wm. Ruess*

Inventor:

*J. Conrad*  
*Per Munn & Co*  
*Attorneys*

# UNITED STATES PATENT OFFICE.

JOHN CONRAD, OF CENTRALIA, ILLINOIS.

## IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 59,559, dated November 13, 1866.

*To all whom it may concern:*

Be it known that I, JOHN CONRAD, of Centralia, in the county of Marion and State of Illinois, have invented a new and Improved Corn-Planter; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to fully understand and make use of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a transverse vertical section of the same, taken in the line *y y*, Fig. 2; Fig. 4, a detached side view of a cam pertaining to the same, partly in section.

Similar letters of reference indicate like parts.

This invention relates to a new and improved implement for planting or dropping corn; and consists of an automatic device for dropping the seed and a novel arrangement of the shoes and parts applied thereto, whereby the shoes may be raised or lowered—lowered to suit the depth required for the corn to be covered, and raised when not required for use, as, for instance, in turning the machine around, or in transporting or drawing it from place to place.

A represents a rectangular frame, which is mounted on two wheels, B B', one wheel, B, being loose on its axle C, and the other, B', firmly secured upon it. D is the driver's seat, secured upon the rear part of the frame A, and E E are two seed-boxes, secured upon the frame A, just in front of the wheels B B'. F is a slide, which has a transverse position in the frame A, its ends working in the bottoms of the seed-boxes E E. This slide F is perforated with a hole, *a*, near each end, and within each seed-box there is a block, G, having a recess, *b*, made in them obliquely at one side, and a strip of rubber or other suitable elastic material, *c*, placed over said recess, (see Fig. 3,) the lower edges of the strips *c* bearing upon the upper surface of the slide F.

Each seed-box has a seed-conveying tube, H, extending down from it, and these tubes extend up through the bottoms of the seed-boxes E and communicate with the recesses *b*, it being understood that these recesses are

shut off from the seed-boxes by the elastic strips *c*.

The slide F has a spiral spring, I, attached to it, which spring has a tendency to keep the holes *a* in the slide within the recesses *b* in the blocks G.

On the axle C there is keyed a ratchet-wheel, J; and K is a hollow cam, which is fitted loosely on the axle C and encompasses the ratchet-wheel J, said cam having a pawl, *d'*, within it, with which the ratchet-wheel J engages when the machine is drawn forward and causes the cam to be rotated, the ratchet-wheel not turning the cam when the machine is backed. (See Fig. 4, in which the red arrow indicates the movement of the ratchet-wheel when the machine is being drawn in a forward direction.)

The cam K acts against a lever, L, the front end of which is connected with the slide F, the cam acting against the rear end of lever L. The cam moves the lever L in one direction, (indicated by arrow 1,) and draws the holes *a* in slide F out from underneath the elastic strips *c*, so that said holes may become filled with seed, and the spring I, after the prominent portion of the cam has passed the lever L, draws the slide F back to its original position, so that the holes *a* will come in line with the upper ends of the tubes H, and the seed contained in the holes *a* will drop through said tubes into the furrows prepared to receive it. Thus by this simple mechanism the seed is dropped automatically or without hand-labor.

M M represent two shoes or furrow-openers, which are curved similar to sled-runners, and have their front ends pivoted or connected by joints to the front end of the frame A. These shoes or furrow-openers are in line with the seed-conveying tubes H, and their rear ends are forked or divaricated, the tubes H passing down between the plates or parts forming said forks. The shoes or furrow-openers are connected by rods N N with a bar, O, which has a transverse position over the frame A, and has a lever, P, connected with it, the front end of P being attached by a joint or fulcrum, *e*, to the front end of frame A. This lever P extends back to within convenient reach of the driver on seat D, so that the driver may at any time raise the shoes or furrow-openers, or lower them. By means of this arrangement



the driver can at any time raise the shoes for the purpose of admitting the device being readily turned or drawn from place to place.

The implement may be managed and operated entirely by one person, and with the greatest facility.

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

1. Operating the perforated seed-slide F from the axle C through the medium of the lever L, cam K, ratchet-wheel J, pawl  $d'$ , and

spring I, arranged substantially in the manner as set forth.

2. The adjusting or raising and lowering of the shoes or furrow-openers M M through the medium of the rods N N, bar O, and lever P, all arranged substantially as shown and described.

JOHN CONRAD.

Witnesses:

H. M. MESSINGER,

H. G. HAND.