

(No Model.)

C. BOULAY.
SULKY PLOW.

No. 400,433.

Patented Apr. 2, 1889.

Fig. 1.

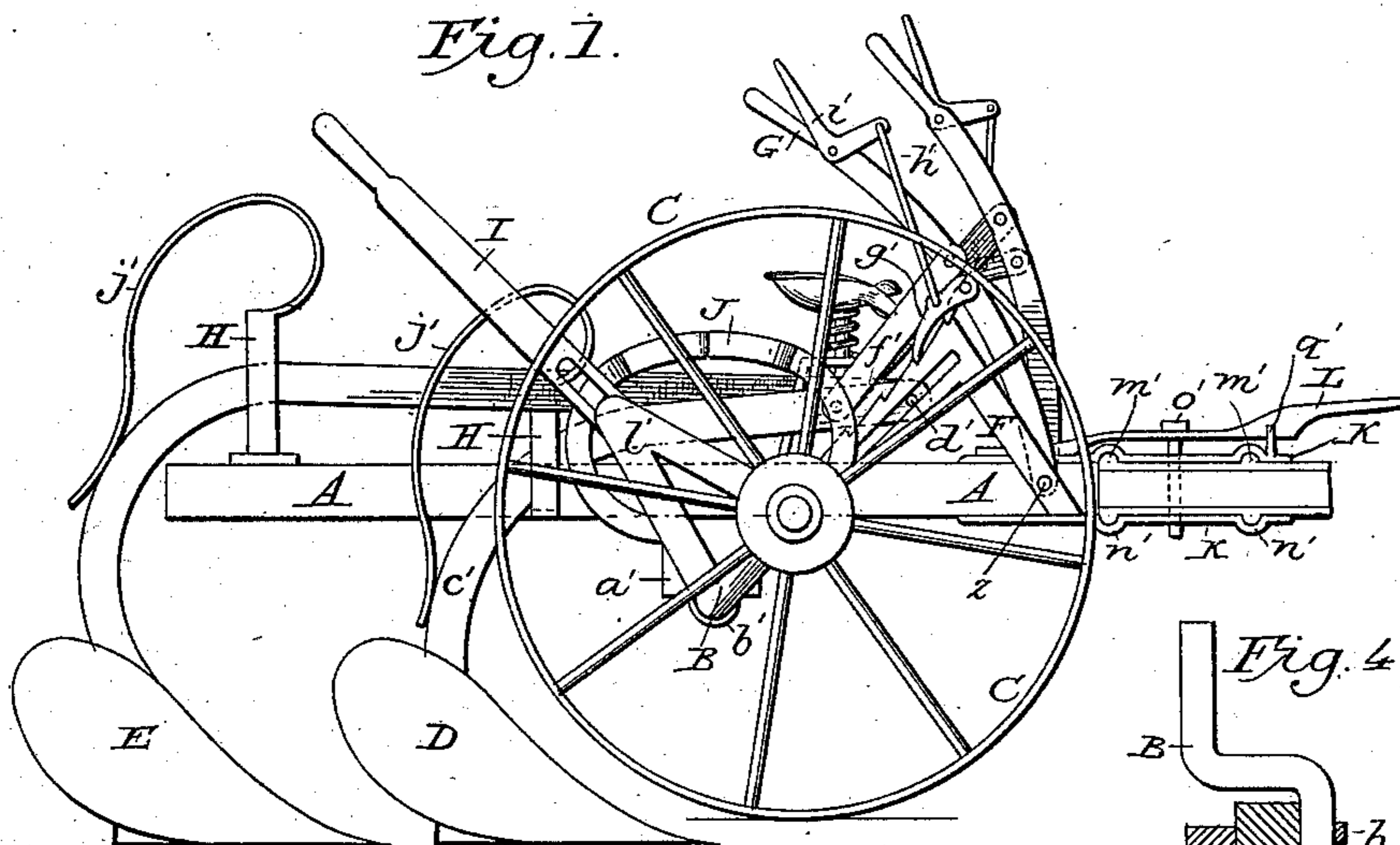


Fig. 2.

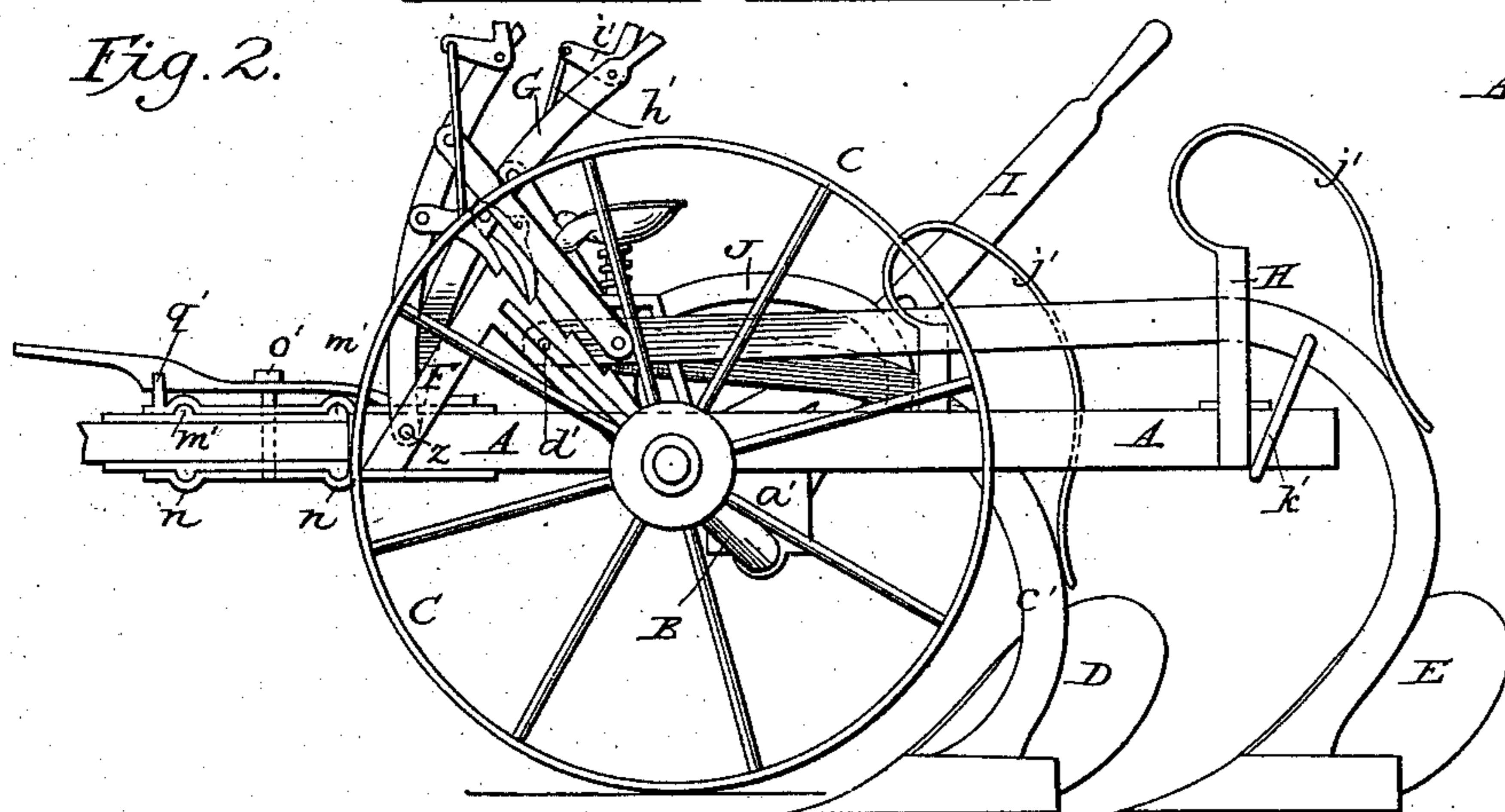


Fig. 4

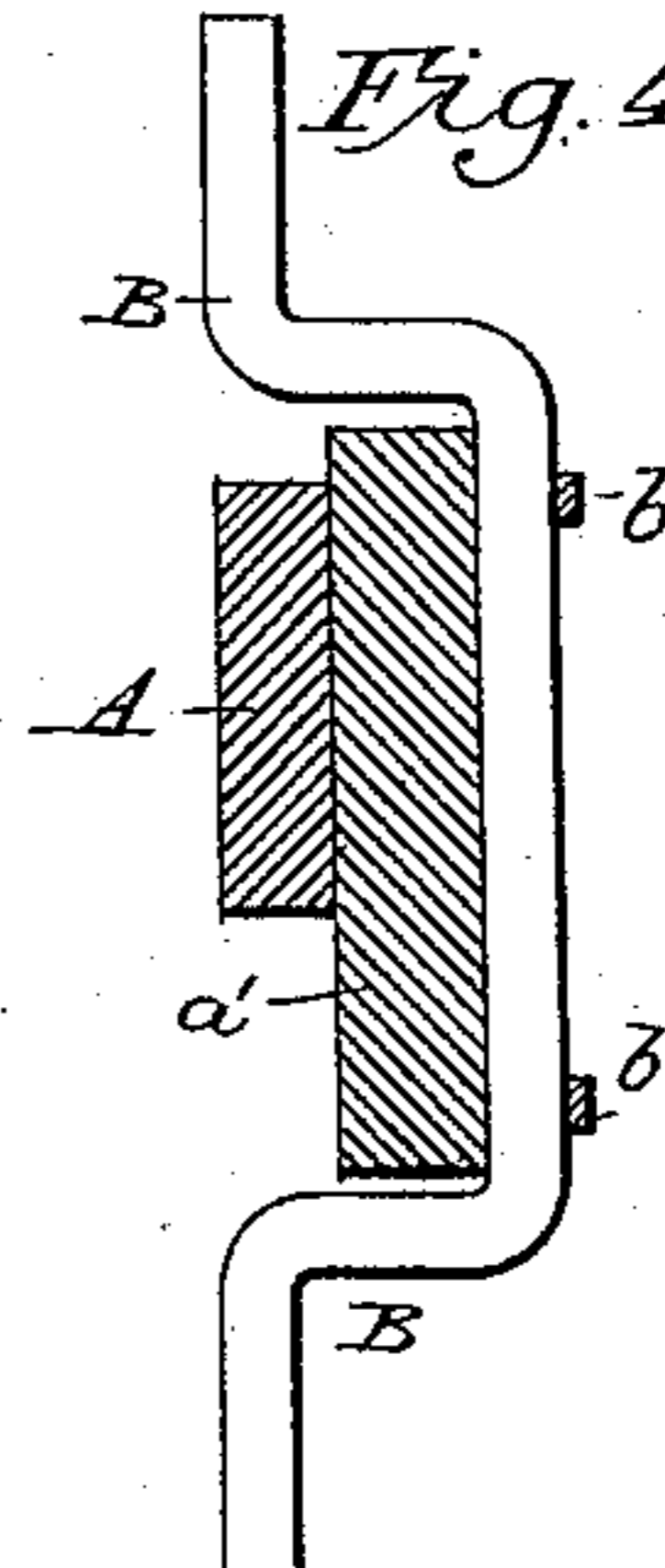


Fig. 5

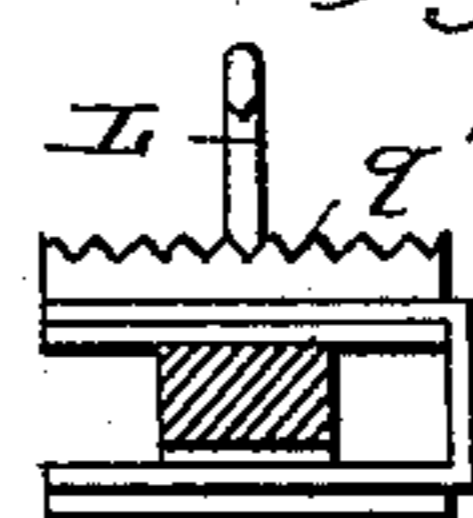
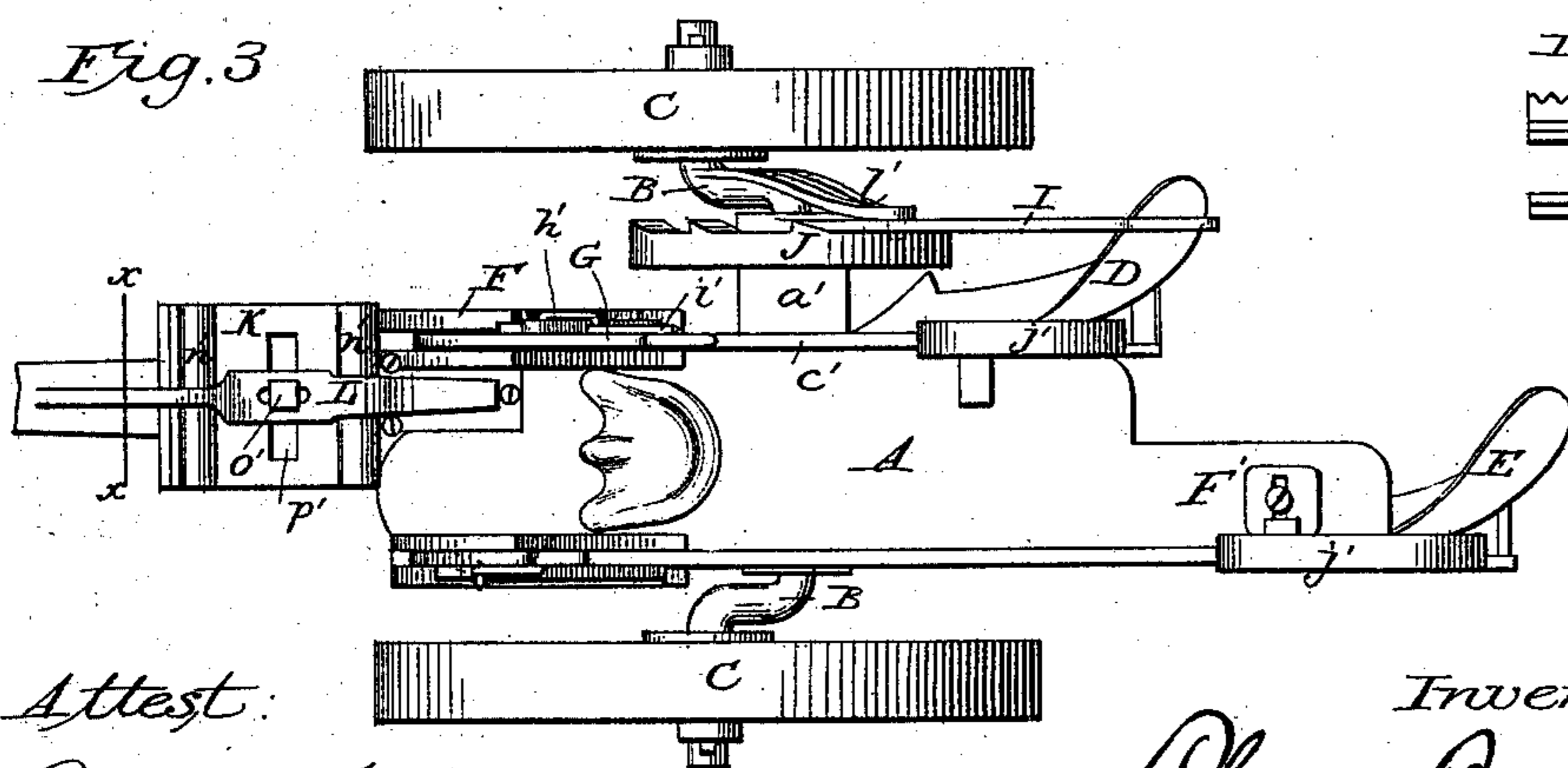


Fig. 3



Attest:

Sidney P. Hollingsworth
 Horace A. Dodge

Inventor:

Charles Boulay
by Dodge & Sons,
Attys.

UNITED STATES PATENT OFFICE.

CHARLES BOULAY, OF ST. PIE, QUEBEC, CANADA.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 400,433, dated April 2, 1889.

Application filed December 26, 1888. Serial No. 294,612. (No model.) Patented in Canada September 5, 1888, No. 29,825.

To all whom it may concern:

Be it known that I, CHARLES BOULAY, a citizen of the Dominion of Canada, residing at St. Pie, in the county of Bagot, in the Province of Quebec, a subject of the Queen of Great Britain, have invented certain new and useful Improvements in Sulky-Plows, (for which I have obtained a patent of the Dominion of Canada, No. 29,825, dated September 5, A. D. 1888;) and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to improvements in double sulky-plows or to sulky-plows provided with two mold-boards and intended to cut two furrows at one time; and it is embodied in the devices herein shown and described for raising and lowering both the body of the machine and the mold-board independently of the rest of the machine and for changing the direction of the draft. I attain these ends by means of the devices hereinafter described and illustrated in the accompanying drawings, in which similar letters of reference indicate similar parts in the different figures.

In the accompanying drawings, Figure 1 is a right-side elevation; Fig. 2, a left-side elevation. Fig. 3 is a plan view of my improved sulky-plow. Fig. 4 is a sectional view of the axle, and Fig. 5 is a detail on line *x x*.

The body A of the machine is made, preferably, of timber, and, having the cross-block *a'* secured to its under side, is held by the staples *b'* to the swinging axle B, which is supported by the carrying-wheels C, so that the turning of the axle would raise the body A. The outside mold-board, D, is attached to one side of the body A and the inside mold-board, E, to the opposite side of the body and at a short distance in rear of the plow D'. The means for raising the mold-board D are as follows:

The beam *c'* is curved forward from its junction with the plow and extends between the sides of the guide-bracket F, which steadies it laterally. A pin, *d'*, is fixed in the beam *c'* and projects through slots *e'* in the bracket F. The inclined direction of these slots gives a corresponding direction to the movement of the beam *c'* as it is raised or lowered by the

lever G, which is pivoted at Z to the body A and connected with the beam by the links *f'*. A pawl, *g'*, pivoted to the lever G and operated by a rod, *h'*, and bell-crank *i'*, takes into notches in the upper side of the bracket F and holds the lever as desired. The downward-curved part of the beam *c'* passes through a slotted guide, H, and as the curved under edge of the beam rests upon the lower end of this slot it follows that as the beam is drawn forward by the lever G its rear end, and with it the mold-board D, will be raised toward the body A. A spring, *j'*, attached to the tops of the guide H and pressing upon the beam *c'*, holds the mold-board in the ground.

The inside or rear mold-board, E, is operated similarly to the plow D, except that, instead of the rear part of the beam being raised by its coming against the bottom of the slotted guide, it is raised by a link, *k'*, pivoted to the beam and to the body A. As this beam is drawn forward, the link is caused to swing upward, and thus raises the mold-board, and means for changing the width of the furrow between the two mold-boards is provided by having the bracket F and guide H of the inside mold-board secured to the body A by bolts passing through slots in the lugs *F'* and through the body. These slots are of sufficient length to allow considerable lateral movement to the mold-board, which may be held at the desired point by tightening the bolts.

The means employed for raising the body A consists in having it supported in the swinging axle B, as shown in Fig. 4. An arm, *l'*, is rigidly secured to the axle and has in its outer end a stud-pin, which projects through a slot formed in a hand-lever, I, which is fulcrumed on the cross-blocks *a'*, so that the swinging of the lever has the effect of turning the axle, and thereby either raising or lowering the body A.

The lever I is held at any desired point by lugs formed on the arc J, which is permanently fixed to the cross-block *a'*. The device for changing the direction of the draft consists in the peculiar attachment of the draft-pole to the body A. On the broad end part of the draft-pole there are formed the ribs *m'*, which extend transversely across the

pole. This end of the pole lies between two plates, K, which are firmly secured to the body A and have formed in them the grooves n' , into which the ribs m' fit accurately. A spring hand-lever, L, pivoted in rear of the plates K, has in it a slot, in which a pin, o' , is held, and which passes through the draft-pole and through transverse slots p' in the plates K. This hand-lever passes over and drops into notches in a rib, q' , which extends across the forward part of the top plate K, and by this means the point of the draft may be considerably changed laterally, while the rib m' on the draft-pole, fitting in the grooves n' , holds the pole square with the machine.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a sulky-plow, the device for raising the mold-board, consisting of the bracket F and guide H, lever G, and link f' , and the curved beam c' , substantially as shown and described.

2. In a sulky-plow, the body A, supported by the swinging axle B, in combination with the slotted lever I, an arm, l' , secured to the axle and having a pin to engage with the lever, and an arc, J, all arranged substantially as shown.

CHARLES BOULAY.

Witnesses:

FERDINAND BLAIS,

J. C. BOULAY.