

(No Model.)

E. FALK.
SULKY PLOW.

No. 338,834.

Patented Mar. 30, 1886.

Fig. 1.

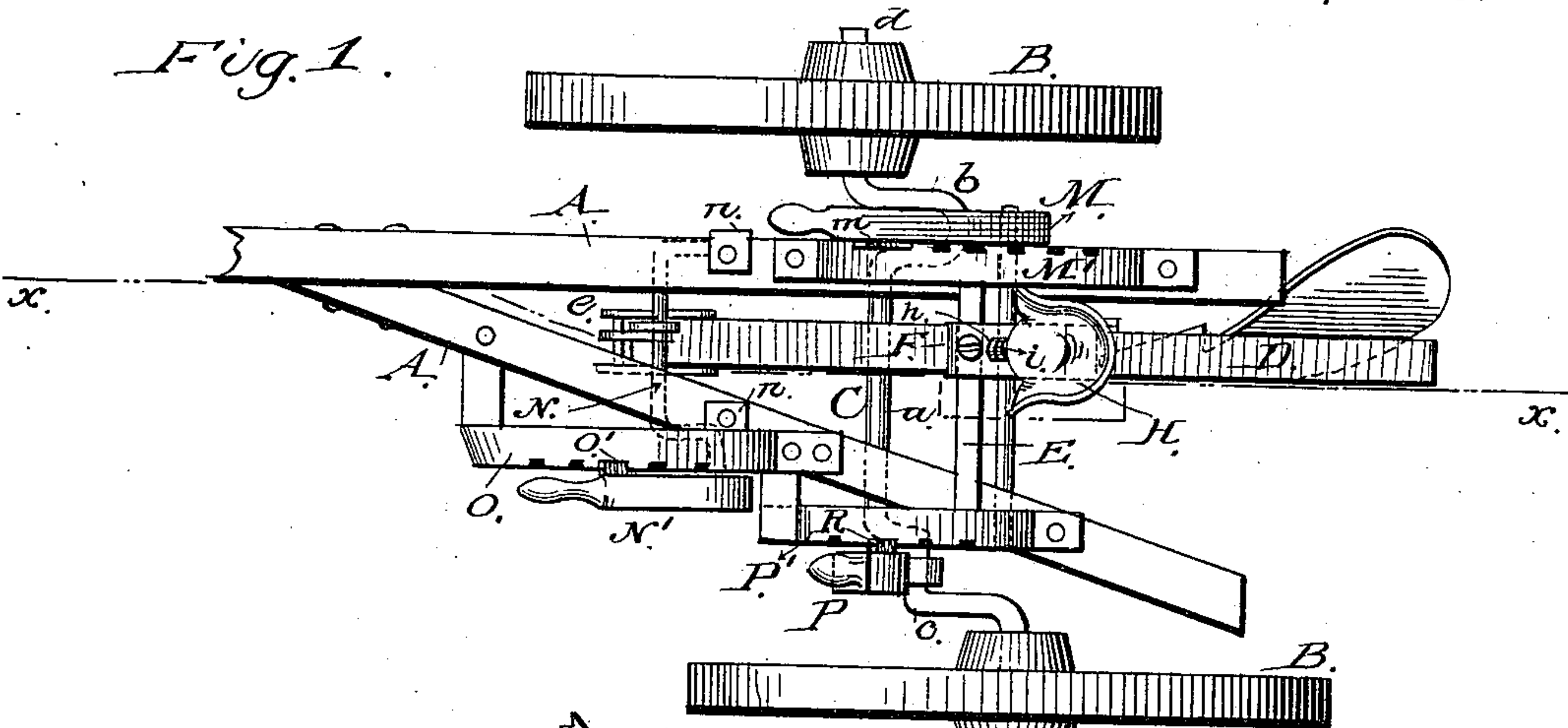


Fig. 2.

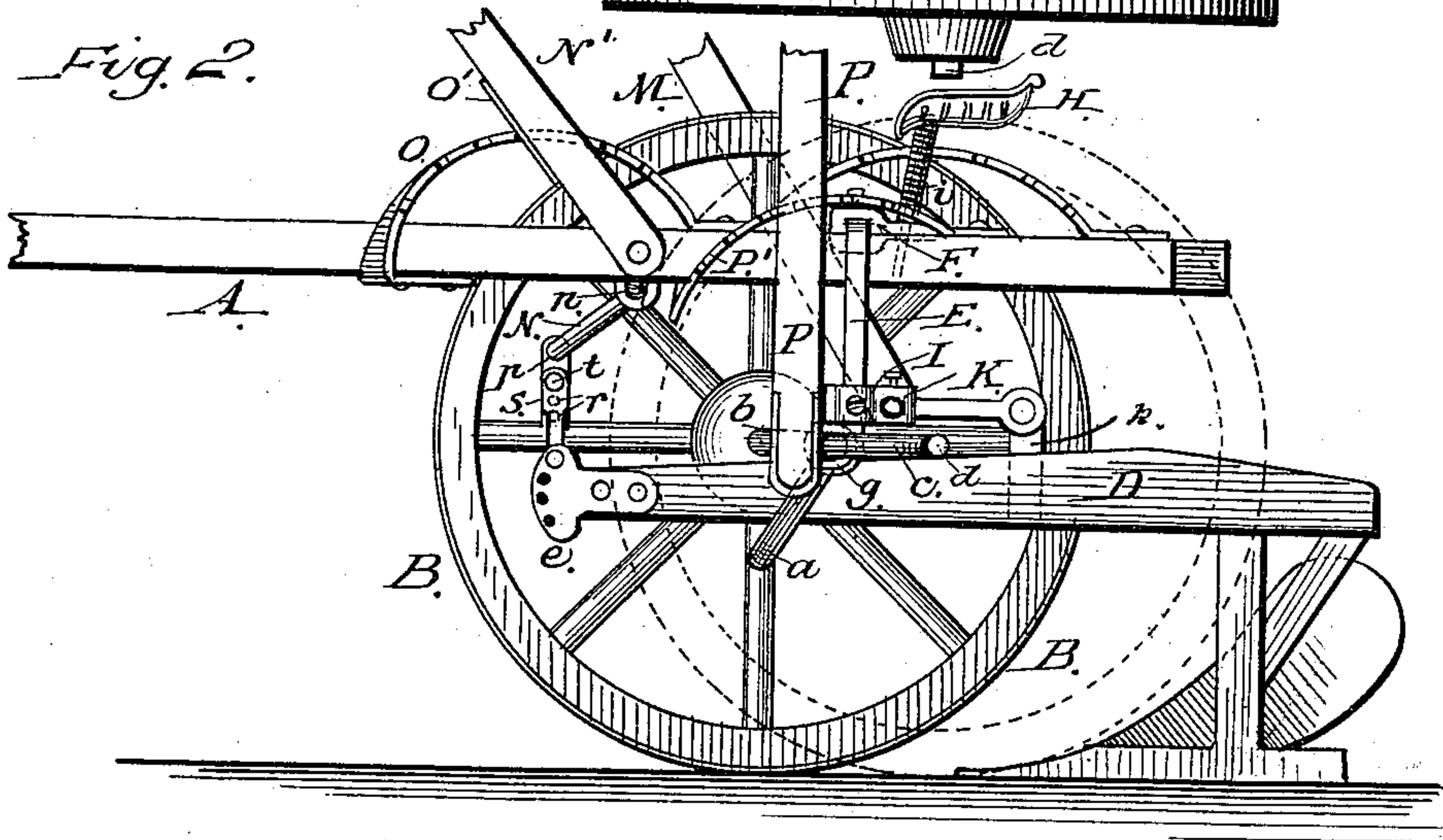
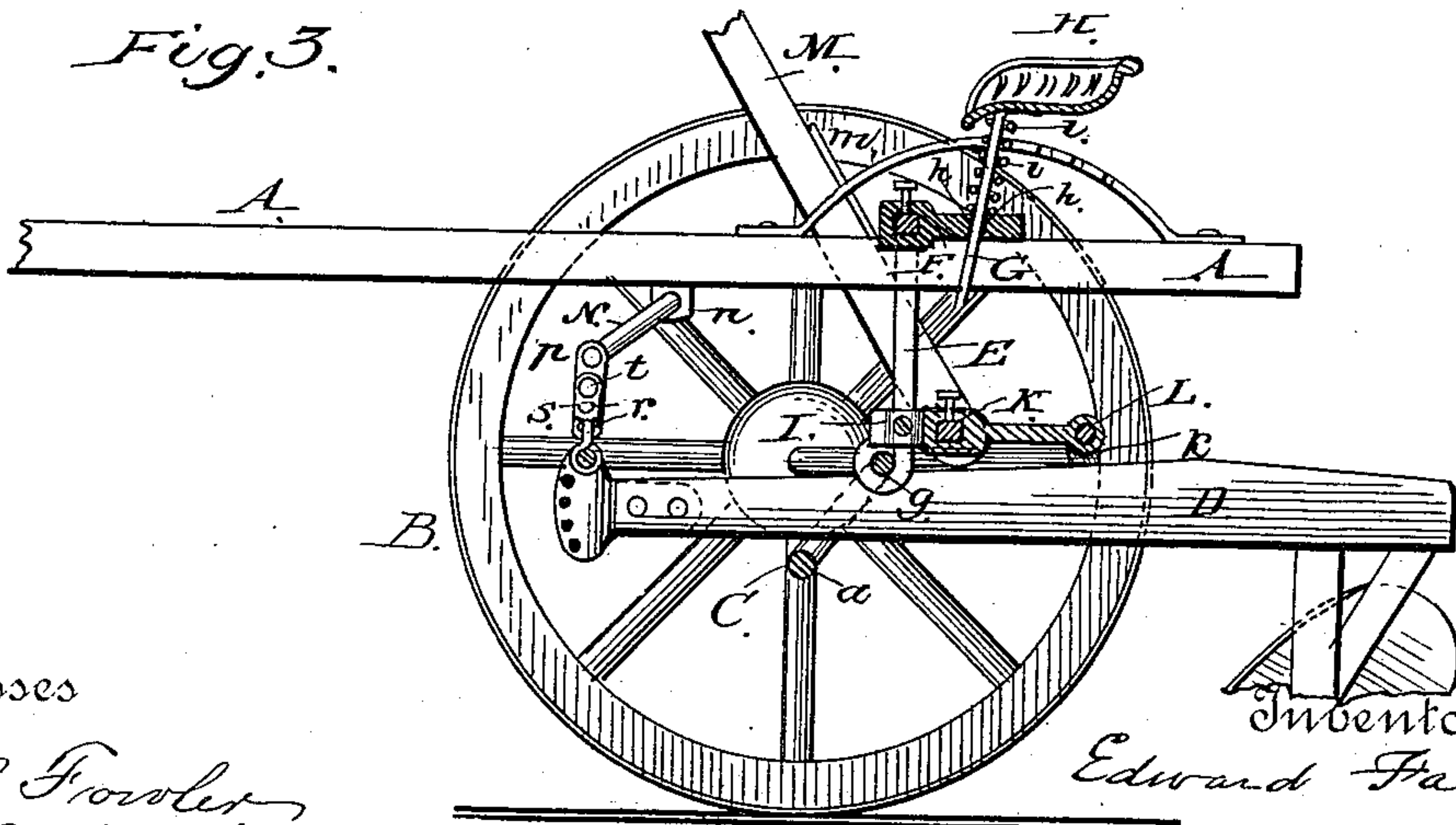


Fig. 3.



Witnesses

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EDUARD FALK, OF GILBERTVILLE, IOWA.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 338,834, dated March 30, 1886.

Application filed February 2, 1886. Serial No. 190,586. (No model.)

To all whom it may concern:

Be it known that I, EDUARD FALK, a citizen of the United States, residing at Gilbertville, in the county of Black Hawk and State of Iowa, have invented certain new and useful Improvements in Sulky-Plows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a plan view of a sulky-plow embodying my improvements. Fig. 2 represents a side elevation of the same with one of the supporting-wheels removed. Fig. 3 is a longitudinal sectional view of the same on the line *xx* of Fig. 1.

My invention relates to sulky-plows, and the same consists in the construction and several combinations of devices, which I shall hereinafter fully describe, and specifically point out in the claims.

To enable others skilled in the art to which my invention appertains, I will now describe its construction and the manner in which I have carried it out.

In the said drawings, A represents a main frame, of any suitable construction, designed to support the working portions of my device.

B are the main supporting-wheels, and C is the main axle or shaft. This axle is provided with a series of crank portions, *ab* and *c*, and has the customary spindles, *d*, upon which supporting-wheels are mounted. This axle is so arranged that the crank-arms *b* and *c*, which carry the spindles, extend toward the front and rear of the main frame, and therefore the supporting-wheels are placed out of line with each other. This construction enables the operator to turn a short corner, the wheels rotating forward and backward during this movement. In addition to this feature, the arrangement of the supporting-wheels as described enables the said wheels to ride over obstacles without materially disturbing the position of the plow.

The plow-beam D is provided with any suitable design of plow, and carries at its forward end a clevis, *e*, as shown.

Secured to the upper portion of the main frame A is a yoke, E, composed preferably of metal, square or approximately square in cross-section, having eyes or perforations *g* in its lower ends, which are designed to be attached

to the main axle C at the crank portions *b* and *c*, respectively. The upper portion of the yoke is provided with a sliding block, F, having an aperture corresponding to the cross-sectional configuration of the yoke, and capable of lateral adjustment thereon by means of a set-screw or equivalent device. The rear portion of the sliding block F is provided with an opening, *h*, through which is passed the shank G of the seat H, the said shank having a spring, *i*, coiled around it between the block and seat, whereby a vertically-yielding swiveled seat is obtained. Suitable blocks, I, are attached to and have a vertical adjustment upon the side portions of the yoke E, and have mounted in their outer ends a transverse rod or shaft, K, upon which is mounted a laterally-adjustable arm, L, whose outer end is attached to the plow-beam by means of an arm, *k*, secured on the side thereof and pivotally attached at one side to the outer end of the arm. One end of the shaft K extends beyond one of the blocks I, and has rigidly attached to said shaft an upwardly-extending lever, M, which operates the rod or shaft K and permits the arm L to raise the plow out of the ground. This lever during the operation of the plow is left loose to permit the plow to readily pass over stones or other obstacles. To secure this lever in a locked position with the plow out of the ground, I employ a notched segment, M', and a latching-plate, *m*, projecting from the lever. A crank-shaft, N, mounted in suitable bearings, *n*, projecting from the main frame and in the front portion thereof, has rigidly secured to one end a lever, N', whose adjusted position is maintained by reason of a notched segment, O, and latching-plate O', as shown in Fig. 1. The main portion of the crank-shaft N has depending therefrom a laterally-adjustable arm, *p*, having a slot or series of openings, *r*, formed therein, and the plow-clevis has attached to it an arm, *s*, having an adjusting screw or bolt, *t*, which is designed to engage the slot or openings *r* in the adjustable arm *p*, whereby the operator by moving the lever N' adjusts the position of the plow in the ground, the adjustment being aided by the vertically-moving blocks I on the side portions of the yoke.

Upon the crank portion *c* of the main crank-shaft is attached another lever, P, which levels

the plow when in the furrow or on the highway, and which, when the plow is in operation, permits the furrow to be thrown a greater distance or entirely over, the said lever being held in its adjusted position by a notched segment, P', and locking-plate R, as shown.

From the foregoing construction it is evident I am enabled to construct a sulky-plow wherein the several adjustments of the plow are accomplished essentially by the three levers, which are located within close proximity to the driver's seat, thereby enabling the driver to effect either one or more of said adjustments without leaving his seat and without the removal of bolts or other devices.

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

1. In a sulky-plow, a main frame, a main crank-shaft, and the supporting-wheels mounted thereon, in combination with a yoke secured to said shaft, a laterally-adjustable block mounted upon said yoke and having an opening corresponding to its cross-sectional configuration, an opening in the outer end of the block, a seat having a shank loosely

mounted in said opening, and a spring around the shank between the seat and block, substantially as herein described.

2. In a sulky-plow, a main frame, a main crank-shaft, and the supporting-wheels mounted thereon, in combination with the yoke E, the vertically-adjustable blocks I, mounted thereon, a transverse rod or shaft, K, journaled in said blocks, an arm, L, laterally adjustable on said shaft and connected with the plow-beam, and a lever, and locking mechanism for operating the shaft, and arm to raise the plow, substantially as herein described.

3. In a sulky-plow, a main frame, a crank-shaft, and the supporting-wheels, in combination with a second crank-shaft, N, mounted in bearings *n* on the main frame, a plow and plow-beam provided with a clevis, an arm, *p*, depending from the shaft N and having slots or openings formed therein, and an arm, *s*, attached to the clevis, and arm *p*, whereby the plow is adjusted in the ground, substantially as herein described.

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Witnesses:

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