

(No Model.)

W. L. CASADAY.

WHEEL PLOW.

No. 323,496.

Patented Aug. 4, 1885.

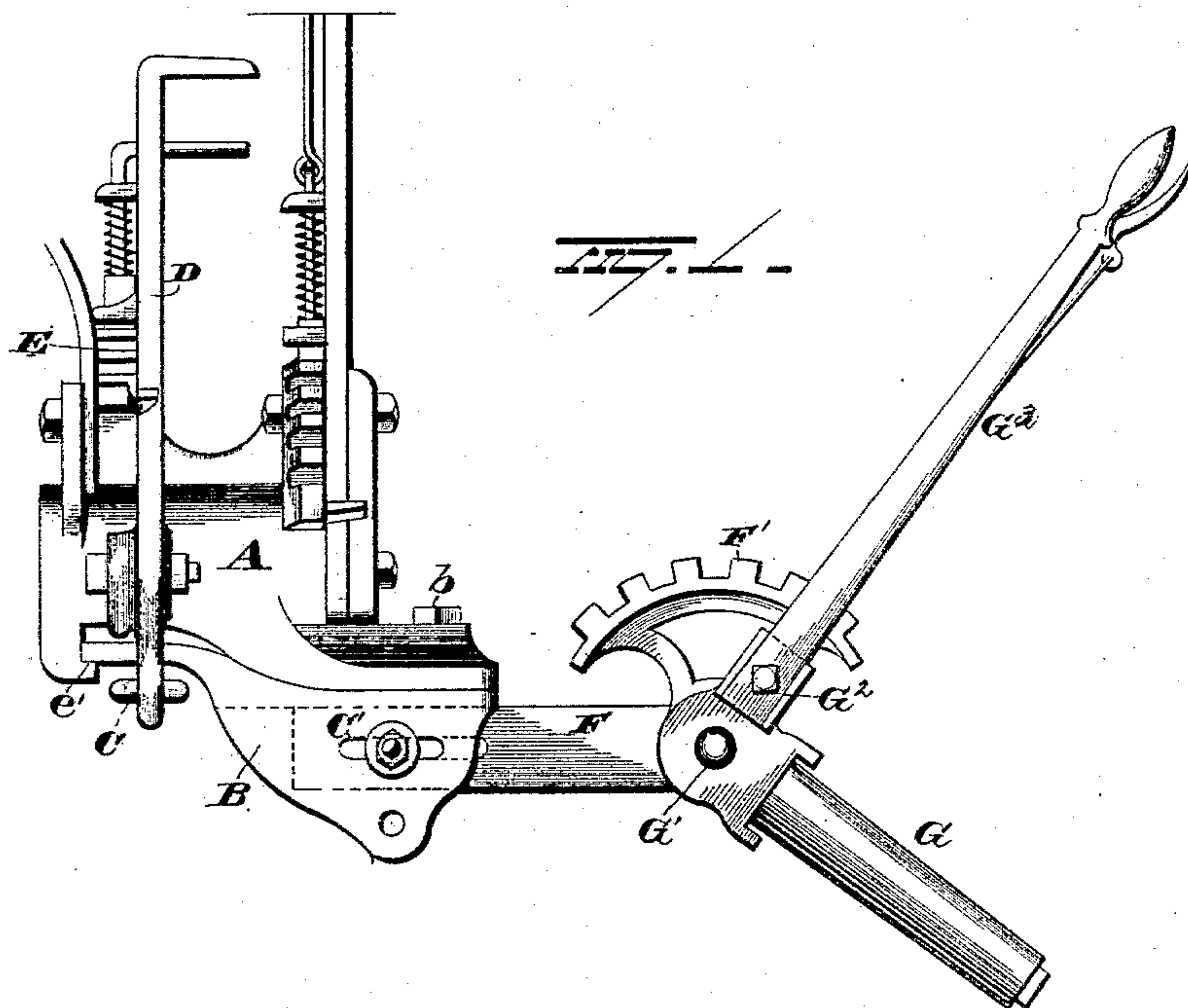


FIG. 2.

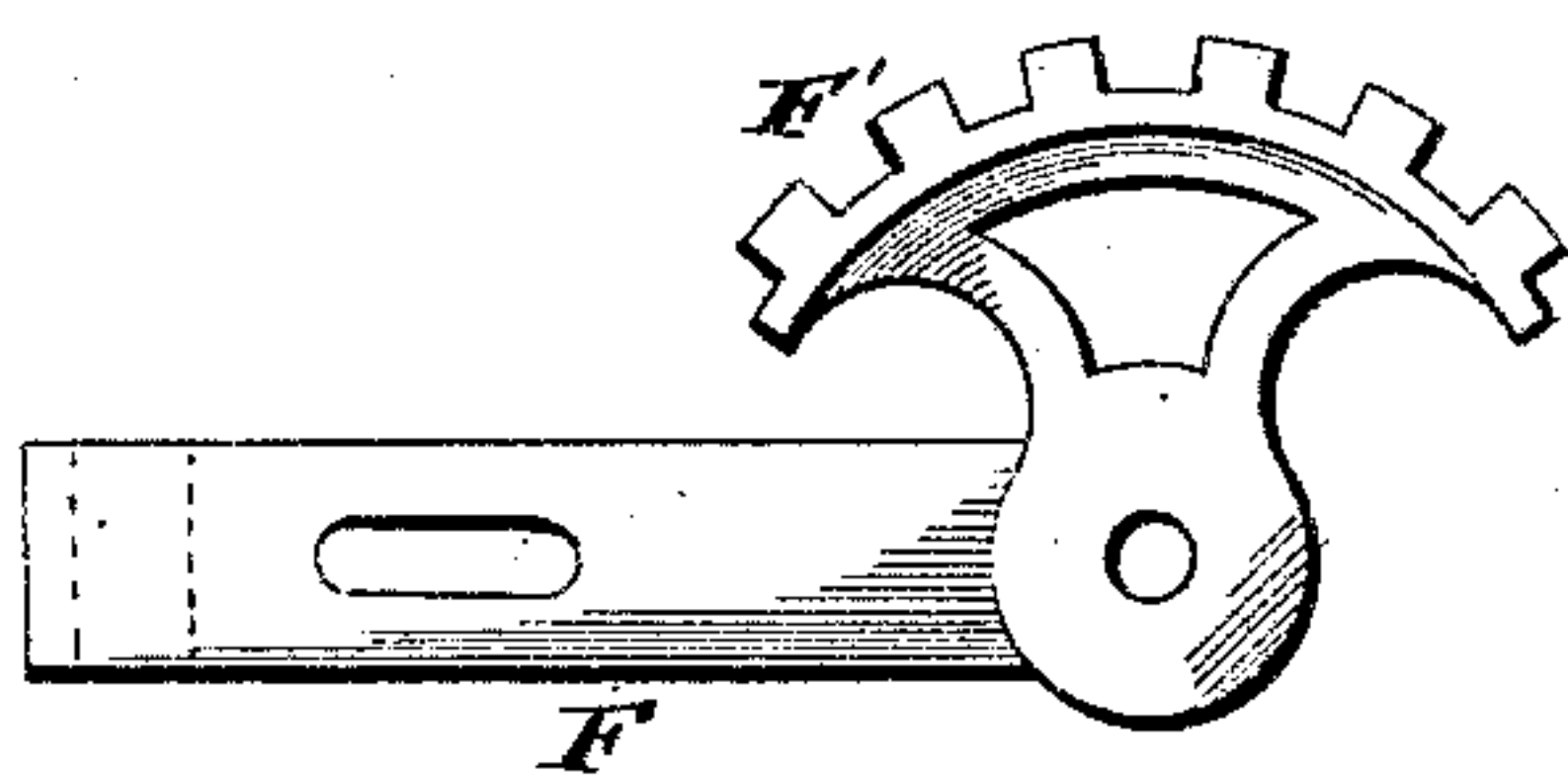
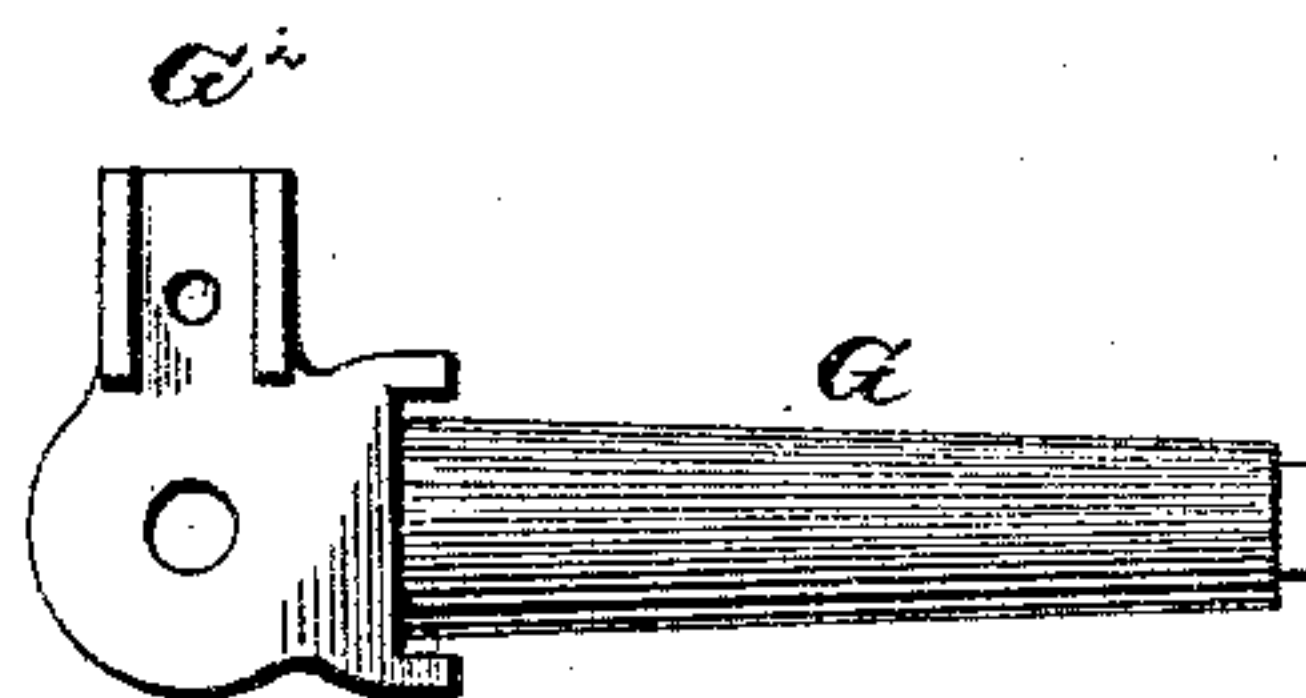


FIG. 3.



WITNESSES
E. Nottingham,
Geo. F. Downing.

INVENTOR
Wm L. Casaday.
B. H. Seymour
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM L. CASADAY, OF SOUTH BEND, INDIANA, ASSIGNOR OF ONE-HALF
TO THE SOUTH BEND IRON WORKS, OF SAME PLACE.

WHEEL-PLOW.

SPECIFICATION forming part of Letters Patent No. 323,496, dated August 4, 1885.

Application filed June 10, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. CASADAY, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Wheel-Plows; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to wheel-plows, and more particularly to an improvement on the construction shown in Patent No. 299,343, granted to me May 27, 1884. In this patent the furrow-wheel is journaled on a spindle secured within a box, which latter can be turned in a horizontal plane by a lever secured to a sleeve, which latter forms a bearing for one end of the crank. Between the spindle and the spindle-supporting box is inserted a washer, by means of which the inclination of the spindle can be varied or changed as necessity demands. This construction for changing the inclination of the furrow-wheel spindle is objectionable, in that it is necessary, when it is desired to change the inclination of the spindle and the wheel journaled thereon, to stop the team and dismount.

The object of my present invention is to provide improved means whereby the inclination of the furrow-wheel can be changed or varied in an instant without stopping the team; and with these ends in view my invention consists in the parts and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation of my improved device. Fig. 2 is a detached view of the sliding block, and Fig. 3 is a detached view of the wheel-spindle.

This improvement, while it is well adapted for use in connection with the plow described in the patent previously referred to, is also well adapted to other constructions of wheel-plows, and instead of being connected to a sleeve, as described in said patent, might be secured to other parts of a plow with good results; but for the sake of convenience I will describe it in connection with the said sleeve.

A represents a sleeve adapted to be rigidly secured to a draft-tongue. To the under side of the sleeve, and at its outer end, is pivotally secured by the bolt *b* the box B, the free end of which slides in the groove *e'*, formed in the sleeve A. To the rear or free end of this box is pivoted the pitman C, which latter is also connected to the lower end of the operating-lever D. This lever is pivoted to the sleeve A, and is provided with a spring-actuated dog adapted to engage the sector E, rigidly secured to the sleeve. The box B is hollow and preferably open on its lower face, and is provided on its opposite sides with the elongated slot C', which latter register with the elongated slot of the sliding block F. By means of these elongated slots in the block and box the width of the furrows can be increased or diminished as necessity demands. The box and block are also provided with vertical slots for the passage of the bolt *b*, which latter assists in holding the block in place. The block F is provided at its outer end with an opening for the passage of a bolt and with an upwardly-projecting sector, F', the function of which will be described later on.

G is a spindle provided at its inner end with an enlarged head having a horizontal opening therein for the passage of the bolt G', which latter pivotally secures the spindle to the block, and an upwardly-projecting socket or seat, G², in which the lower end of the operating-lever G³ is rigidly secured. This lever G³ is provided with a spring-actuated dog adapted to engage the sector F' and lock the spindle in position. By releasing the dog from the sector and drawing inwardly on the lever, the spindle can be moved upwardly to a horizontal position, and by releasing the dog and moving the lever outwardly the spindle can be inclined to any angle desired, and cause the furrow-wheel to run against the land wall of the furrow and prevent the plow from swerving to the left. In some instances the resistance of the earth on the plow causes the furrow-wheel to mount the wall, and consequently elevate the plow above the surface. Again, in shallow plowing the resistance is not sufficient to cause the furrow-wheel to run in contact with the wall, and the plow consequently swerves

to the right. This, however, is overcome by the pivoted block F, which permits the wheel to be turned from the line of draft.

It is evident that numerous slight changes in the construction and relative arrangement of the several parts might be resorted to without departing from the spirit of my invention, and hence I would have it understood that I do not confine myself to the exact construction shown and described, but consider myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

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

1. In a wheel-plow, the combination, with a rigid sector and a pivoted wheel-spindle, of a lever rigidly secured to the wheel-spindle, whereby the latter can be moved vertically in the arc of a circle for the purpose of changing the inclination of the wheel, and a dog for locking the lever to the sector, substantially as set forth.

2. In a wheel-plow, the combination, with a block having a sector rigidly secured thereto, of a wheel-spindle pivotally secured to said block, a lever rigidly secured to said spindle, whereby the spindle can be moved vertically in the arc of a circle for the purpose of changing the inclination of the wheel, and a dog for locking the lever to the sector, substantially as set forth.

3. In a wheel-plow, the combination, with an adjustable block and a wheel-spindle pivoted thereto, of a lever for changing the inclination of the spindle and devices for locking the lever to the block, substantially as set forth.

4. The combination, with a horizontally-movable block and a spindle pivoted to the outer end thereof, of a lever for changing the inclination of the spindle and devices for locking the lever against movement.

5. The combination, with a longitudinally adjustable and horizontally movable block, of a spindle pivotally secured to said block and devices for changing the inclination of said spindle.

6. The combination, with a pivoted box and a block adjustably secured within said box, of a spindle pivoted to the outer end of the block and a lever for changing the inclination of the spindle, substantially as set forth.

7. The combination, with the pivoted box, a lever for moving the same, and a block secured within said box, of a lever secured to the spindle, whereby the inclination of the latter can be changed.

8. The combination, with the pivoted box, the lever for moving the same, the longitudinally-adjustable block secured to the box and the sector secured to the outer end of the block, or the spindle pivoted to the outer end of the block, the lever for changing the inclination of the spindle, and a dog for locking the lever against movement.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM L. CASADAY.

Witnesses:

F. C. NIPPOLD,
H. B. SMITH.