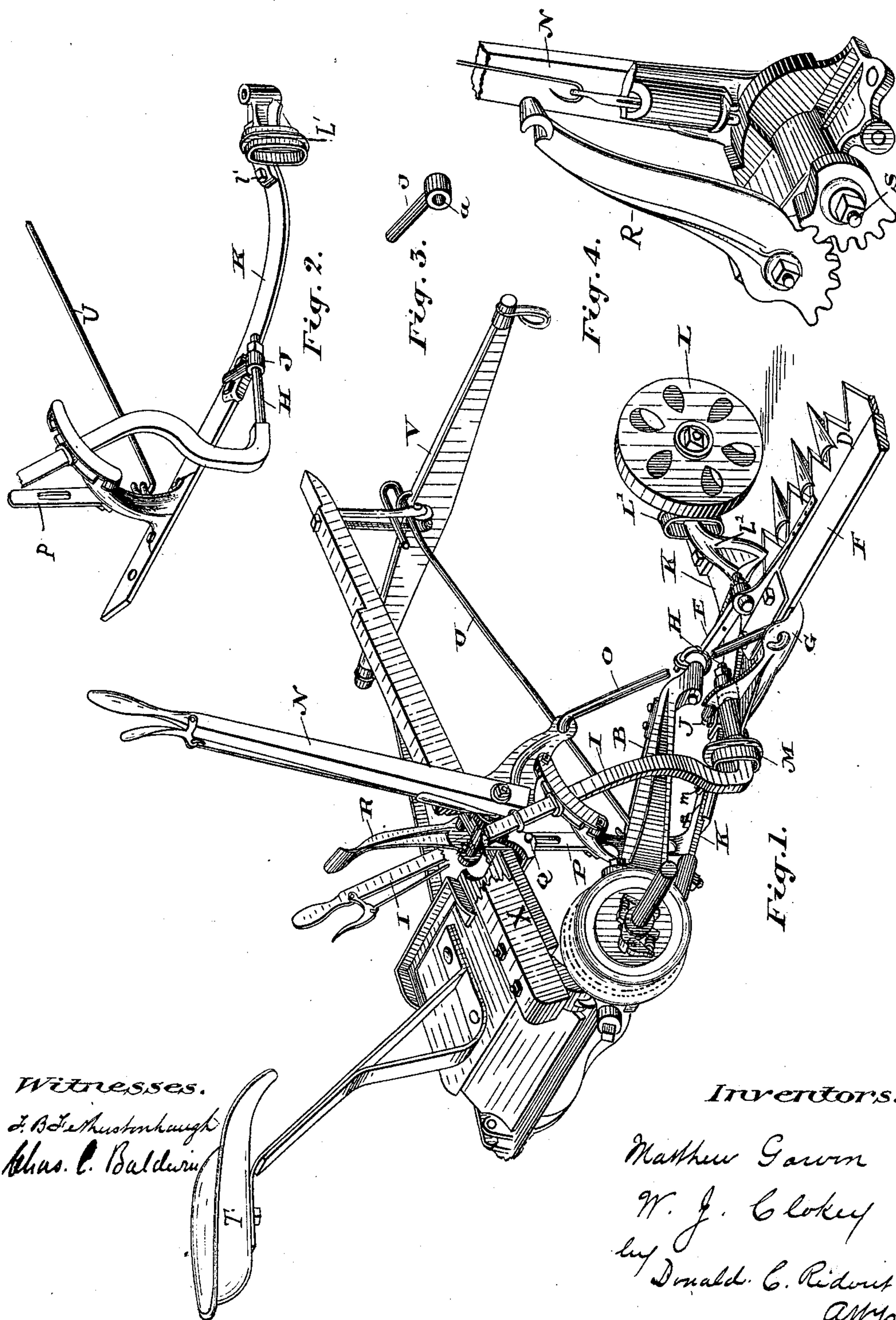


(No Model.)

M. GARVIN & W. J. CLOKEY.
MOWING MACHINE.

No. 346,277.

Patented July 27, 1886.



Witnesses.

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UNITED STATES PATENT OFFICE.

MATTHEW GARVIN AND WILLIAM JOHN CLOKEY, OF TORONTO, ONTARIO, CANADA, ASSIGNORS TO WILLIAM NEEDHAM WHITELEY, OF SPRINGFIELD, OHIO.

MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 346,277, dated July 27, 1886.

Application filed June 20, 1885. Serial No. 169,258. (No model.)

To all whom it may concern:

Be it known that we, MATTHEW GARVIN, manufacturer, and WILLIAM JOHN CLOKEY, pattern-maker, both of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have jointly invented certain new and useful Improvements in Mowing-Machines, of which the following is a specification.

The objects of the invention are to construct a simple and effective tilt for the finger-bar independent of the leader-wheel; to so arrange the frame carrying the finger-bar, and which is supported by the leader-wheel, that the said frame may be raised by the same handle by which the finger-bar is elevated, and to improve in detail the mechanical structure of this portion of the mowing-machine; and it consists, essentially, of the arrangement and form of parts hereinafter specified.

Figure 1 is a perspective view exhibiting the parts of the mowing-machine immediately connected with our invention. Fig. 2 is a perspective detail of the frame on which the cutter-bar is pivoted. Fig. 3 is a detail of the eyebolt for pivotally connecting the cutter-bar to the frame. Fig. 4 is an enlarged detail, showing the arrangement of the auxiliary foot-lever for assisting the hand-lever used in elevating the cutter-bar.

Our invention relates to that particular class of mowers in which the knives of the cutter-bar are driven by what is commonly termed a "wabbling gear," which imparts a reciprocating movement to the arm B, which is connected to the knife D by the pitman E; but as no claim is made to this feature I have not shown it in the drawings.

In our construction the finger-bar F is bolted to a shoe, G, which shoe is journaled on the shank H of the lever I. The end of this shank H passes through the eye *a* of the eyebolt J, which, as indicated, is journaled in a suitable bearing-box attached to the push-bar K. The upper end of this push-bar K is pivoted to the main frame of the machine, and its lower end is supported by the leader-wheel L. Loop-brackets L' and M are bolted to the push-bar K by means of bolts *l'* and *m*, respectively. An

arm, L², extending from the front of the shoe G, passes through the loop-bracket L', while the shank H of the lever I passes through the rear loop-bracket, M. In this manner the shoe is braced, and at the same time the cutter-bar cannot be tilted too much. The tilting, it will be noticed, is effected by moving the lever I backward or forward, according to the angle it may be desired to set the finger-bar, and as the center line of the eyebolt J is near the center line of the finger-bar the slightest motion of the lever I will change the angle of the finger-bar.

N is the lifting-lever pivoted to the main frame X of the machine, and connected by the rod O to the shoe G.

P is a bar extending from the push-bar K to a point above the main frame of the machine, to which it is connected by a bolt, Q, fastened to the main frame and passing through a slot in the bar P. Said main frame is hinged to the main axle in any well-known manner.

By pulling the lifting-lever N back the wheel end of the push-bar K is raised until the bottom of the slot in the bar P comes in contact with the bolt Q, which arrests the upward motion of the push-bar K. It therefore follows that by continuing the backward motion of the lever N the finger-bar F will be tilted up on its pivot formed by the shank H; and in order to make this action as easy as possible we provide an auxiliary foot-lever, R, pivoted on the main frame of the machine, and having teeth cut on its end to engage with corresponding teeth of a segment-gear secured to the spindle S of the lever N.

The mechanism herein described is clearly shown in Fig. 4, and it will be understood that the driver who sits on the seat T may push with his foot on the lever R, and draw with his hands on the lever N, and in this way the finger-bar is readily raised.

With the view of directing the draft as near to the finger-bar as possible we provide a rod, U, connected at one end to the push-bar K, and at its other end hooked onto the whiffle-tree V.

A slotted bar, P, which connects the push-bar K to the main frame of the machine, not

only prevents the said push-bar from being raised higher than required, but also prevents the said push-bar from dropping below a certain point, which it would were it not for this
 5 bar in the event of the leader-wheel dropping into a hollow much below the level of the ground on which the main wheel of the machine may be passing.

We are aware of the Patent No. 211,946,
 10 and make no claim to the construction shown therein as forming part of our invention.

What we claim as our invention is—

1. The lever I, push-bar K, and a finger-bar supported on the shank H of said lever,
 15 combined with the eyebolt J, supported in suitable bearings on said push-bar in line with the cutter-bar and having an eye, receiving and forming a support for the end of said shank, and said shank forming a pivot-point
 20 on which the cutter-bar is rocked, as set forth.

2. The finger-bar F, secured to the shoe G, which has an arm extending through the loop-bracket L', in combination with the shank H of the lever I, passing through the loop-bracket,

and a bearing formed in the shoe G, and eye- 25 bolt J.

3. The combination, with the push-bar K, pivoted at one end to the frame and at the other supported by the leader-wheel L, the loop-brackets L' and M secured to said push- 30 bar, of the shoe G, having arm, L', extending through the loop-bracket L', the eyebolt J, supported in suitable bearings on the push-bar, and the lever I, provided with the shank H, passing through the loop-bracket M, and a 35 bearing in the shoe and eyebolt, as and for the purposes specified.

4. The lifting-lever N, having fixed to its spindle a toothed gear, in combination with the foot-lever R, having a gear formed on it 40 to mesh with the gear on the spindle S.

Toronto, June 9, 1885.

M. GARVIN.
 W. J. CLOKEY.

In presence of—

CHARLES C. BALDWIN,
 G. H. WATSON.