

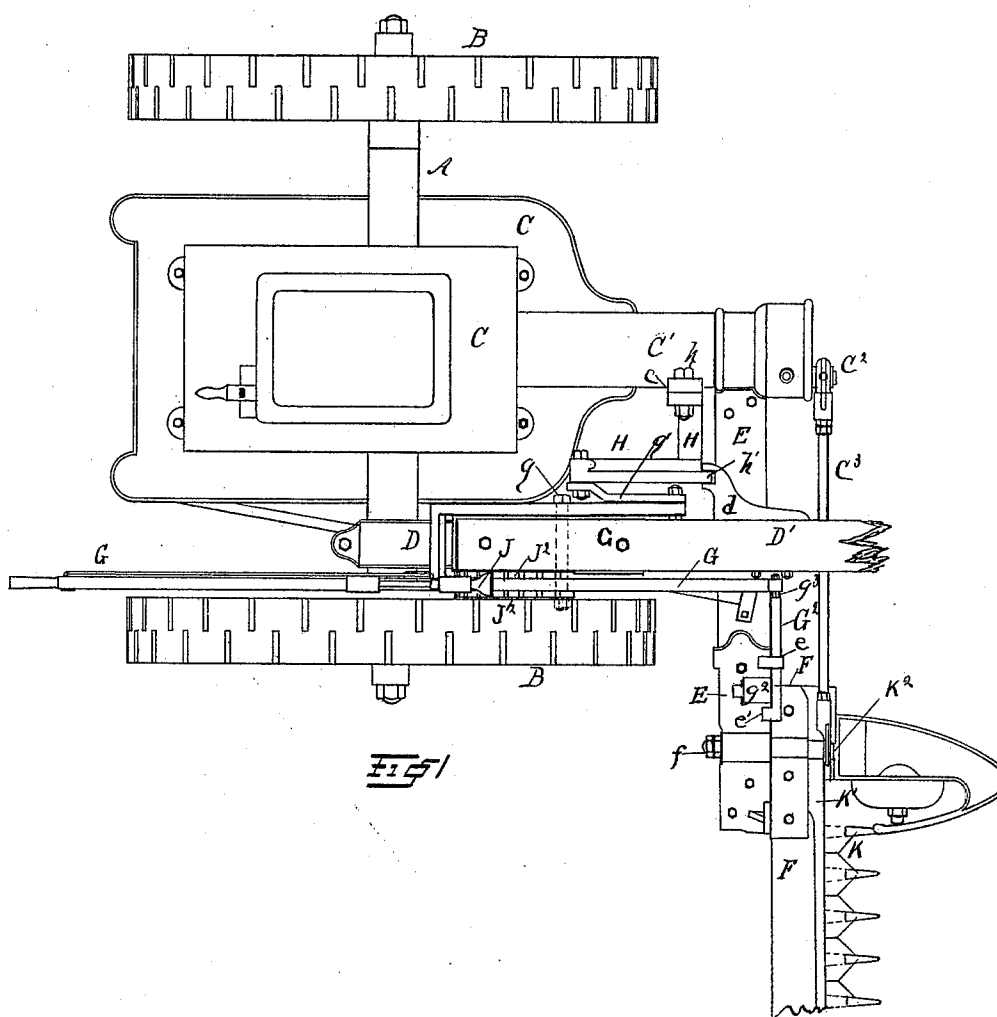
(No Model.)

2 Sheets—Sheet 1.

J. FARRINGTON.
MOWING MACHINE.

No. 470,331.

Patented Mar. 8, 1892.



WITNESSES.

Wm. Marks, Jr.
Eben. Brewer.

INVENTOR

J. Farrington
by Hallock W. Wallack
Atty

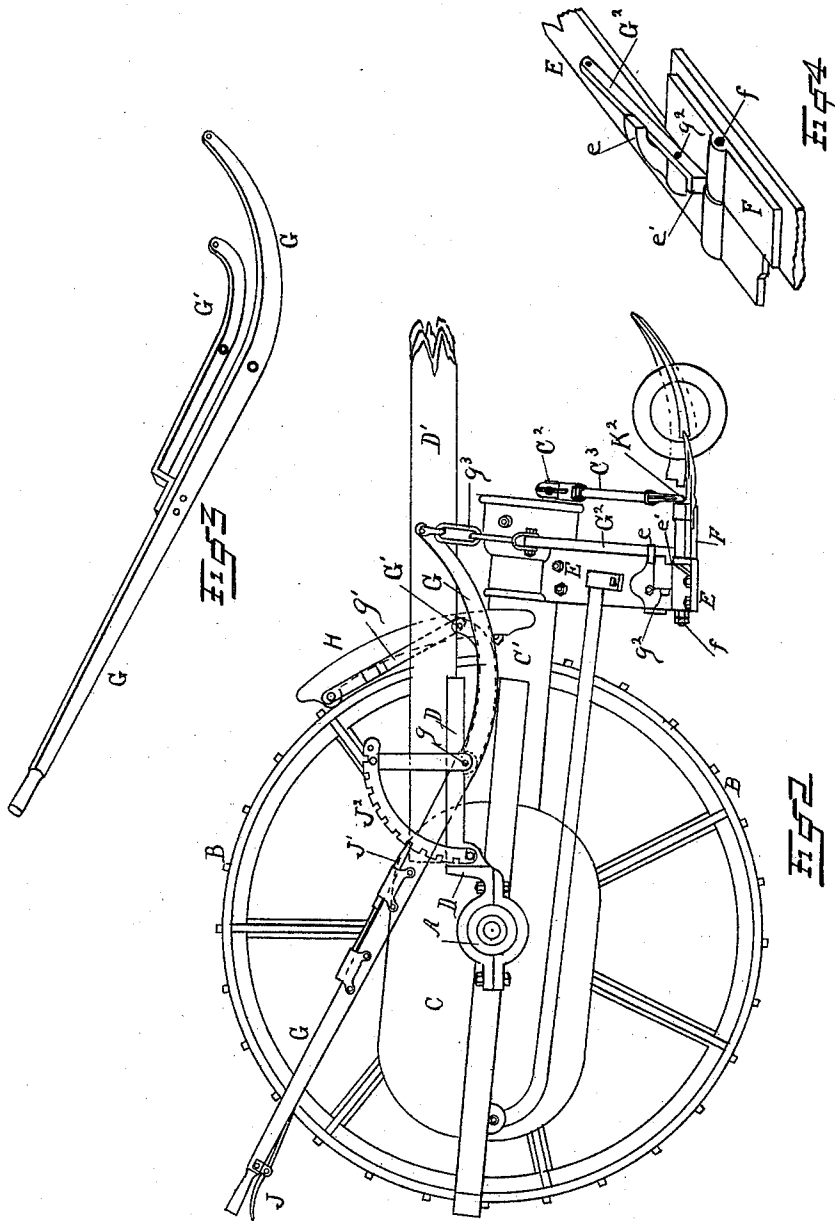
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UNITED STATES PATENT OFFICE.

JOEL FARRINGTON, OF ERIE, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS
TO TOBIAS MEYERHOEFER AND SETH CLOVER, OF SAME PLACE.

MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 470,331, dated March 8, 1892.

Application filed September 5, 1891. Serial No. 404,806. (No model.)

To all whom it may concern:

Be it known that I, JOEL FARRINGTON, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Mowing-Machines; 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.

This invention relates to mowing-machines; and it consists in certain improvements in the means for raising and lowering the finger-bar, as will be hereinafter fully explained, and pointed out in the claims.

Reference is had to the invention shown in Letters Patent of the United States granted to me January 7, 1873, No. 134,531, on which my present invention is an improvement.

In the accompanying drawings, Figure 1 is a top plan view of a mowing-machine containing my present improvements. Fig. 2 is a side elevation of the same machine looking from the end of the cutter-bar. Fig. 3 is a perspective view of the lifting-lever $G\ G'$ detached from the machine; and Fig. 4 is a perspective view of the lower end of the coupling-arm E , the inner end of the finger-bar F , and the gag-lever G^2 .

Letters of reference in all the figures indicate parts as follows:

A is the main axle; $B\ B$, the driving-wheels; C , the frame and gearing-box; C' , the crank-shaft sleeve or housing; C^2 , the crank; C^3 , the connecting-rod or pitman; K , the knives; K' , the knife-bar; K^2 , the wrist on the knife-bar to which the pitman connects; F , the finger-bar; E , the coupling-arm; f , the joint or hinge of the finger-bar to the coupling-arm; D , the tongue-plate; D' , the tongue; H , a lifting arm or horn connected with the frame-work $C\ C'$ at c by bolts h ; $G\ G'$, the lifting-lever; G^2 , the gag or lock lever; g , the fulcrum of the lever $G\ G'$; g' , a lifting bar or link connecting the prong G' of the lever $G\ G'$ with the lifting-arm H ; g^2 , the fulcrum of the gag-lever; g^3 , the chain connecting the lever G with the gag-lever; J , a hand grip-lever on the lever $G\ G'$; J' , a pawl operated by the hand-grip J ; J^2 , a notched quadrant with which the pawl J' engages.

Other letters of reference will be referred to in place herein.

As the invention relates wholly to the means for lifting the finger-bar and said means are applicable to machines of various construction as to other parts, it is not necessary to further describe the general construction of the machine than to point out the associated parts, as above. The lifting-lever $G\ G'$ straddles the tongue D' , and is pivoted at g on a bolt or pin, which passes through the tongue-plate D . The ordinary grip-lever J , pawl J' , and notched quadrant J^2 are used to hold the lever $G\ G'$ in any desired position. The prong G' of the lifting-lever is shorter than the main part G , and both are curved upwardly at their ends. The prong G' is connected with the lifting-arm H by a lifting bar or link g' , which stands parallel with the vertical part of the arm H and is pivoted to said arm at its upper end and to the lever at its lower end. The arm H is attached to the sleeve C' at c by bolts h , and it is guided in a block d on the side of the tongue D' by a lip h' thereon entering a notch in said block, as clearly seen in Fig. 1. The main arm G of the lever connects with the gag or lock lever by a chain g^3 , as in the former patent referred to. The gag-lever G^2 , as here shown, is longer than in said former device and is of different form, and it has the same spur or lug e' at its outer end for engaging the coupling-bar E ; but here I further add a lug e on the coupling-bar, which extends out over the gag-lever G^2 back of its pintle g^2 . This lug e supplements the spur e' in supporting the strain upon the lever G^2 when the finger-bar is supported in an elevated position.

The form of the lever $G\ G'$ here shown, the manner of pivoting the same, and the introduction of the lifting bar or link g' , together with the form of the lifting-arm H and the manner in which it is guided or supported, add greatly to the efficiency of the lifting devices and constitute a very important improvement upon the construction heretofore used by me. For instance, in my former construction that part of the lifting-lever which engaged the lifting-bar (said parts being marked g , g' , f , and f' in said patent) was not integral with the lever G , but was in the form

of a crank-bar connecting with the lever G so as to be turned by it and serving as a pivot for the said main lever G. My present construction is much stronger and the prong G' can be made longer, and by substituting the lifting bar or link g' for the pin and slotted eye used as a means for connecting the crank-arm g' with the extension f' from the bar f in said former construction I am able, through the long curved-up lever-prong G' and the link g' , to obtain a toggle action in place of a friction-generating sliding connection and also to apply the power necessary for lifting the parts at the most advantageous point; but a more important point gained is that I am able by this new construction to get more throw, and hence can lift the finger-bar much higher than I could with the old form. This is of great advantage in crossing ditches or passing over rocks, stumps, or mounds. I have found by actual experience that in the present form I can raise the finger-bar higher and with less exertion than with the old construction.

What I claim as new is—

1. In a mowing-machine, the combination, substantially as shown, of the forked lifting-lever G G', pivoted on the bolt g , the lifting-

arm H, attached to the sleeve C', and the lifting-link g' , pivoted at its lower end to the lifting-lever and at its upper end to the lifting-arm.

2. In a mowing-machine, the combination, substantially as shown, of the forked lifting-lever G G', pivoted astraddle of the tongue, the lifting-arm H, extending from the sleeve C' and guided in a block on the tongue D', and the lifting-bar g' , pivoted at its lower end to the lever-prong G' and at its upper end to the lifting-arm H.

3. In a mowing-machine, the combination, substantially as set forth, of the forked lifting-lever G G', pivoted astraddle of the tongue D', the lifting-arm H, extending from the sleeve C', the lifting-link g' , connecting the upper end of the arm H with the prong G' of the lever, the gag-lever G², connected with the prong G of the lever, and the lug e on the coupling-bar E, engaging said lever G² back of its pintle g^2 .

In testimony whereof I affix my signature in presence of two witnesses.

JOEL FARRINGTON.

Witnesses:

JNO. K. HALLOCK,
WM. P. HAYES.