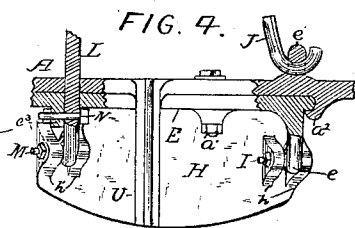
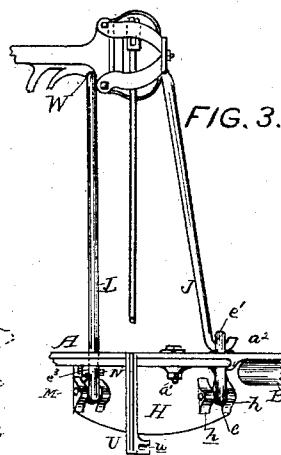
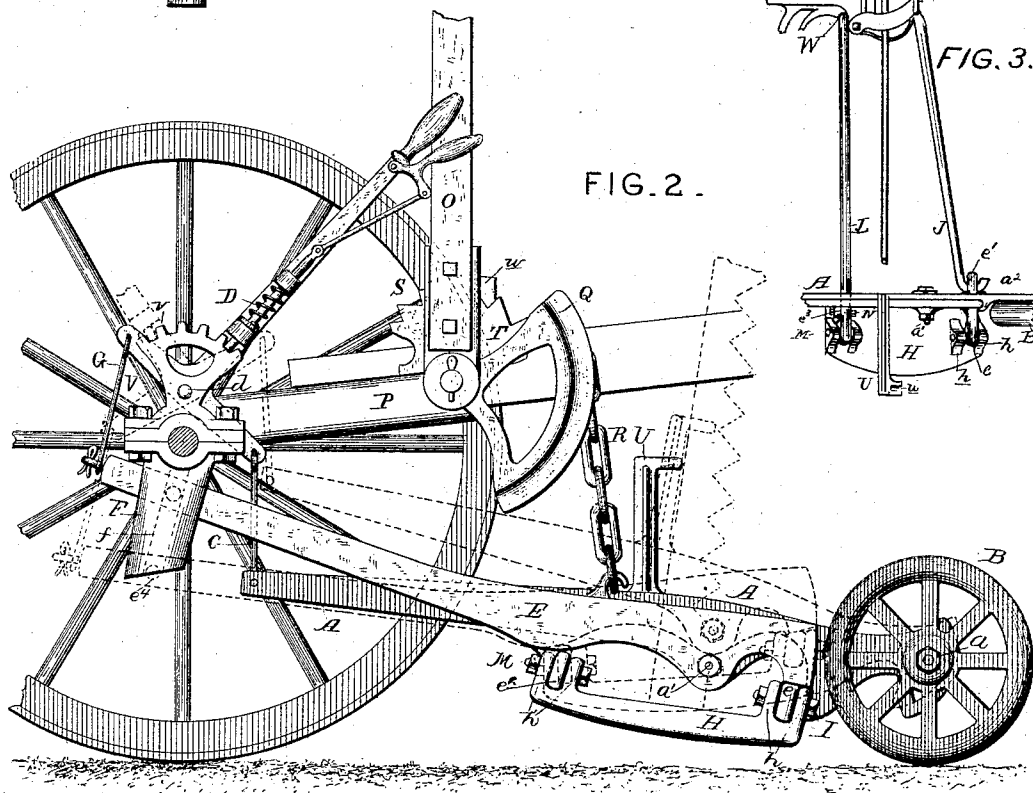
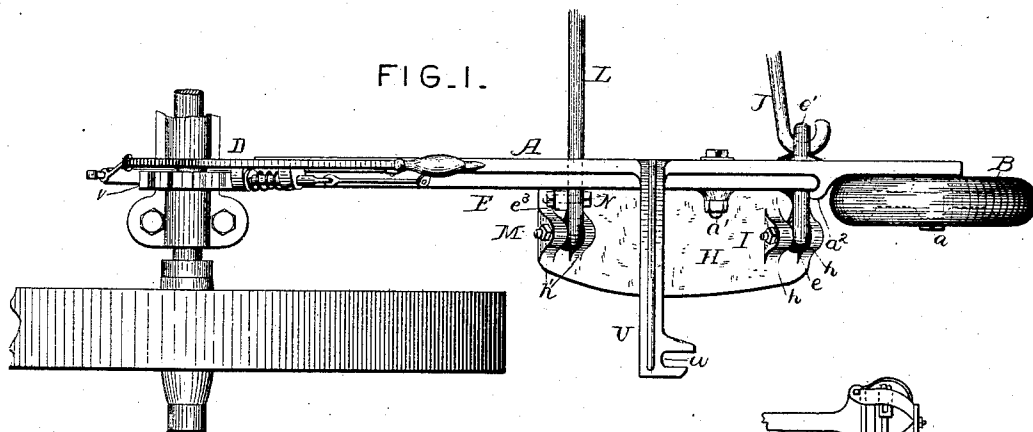


(No Model.)

I. RAWSON.
MOWER.

No. 315,071.

Patented Apr. 7, 1885.



ATTEST.

Geo. P. Smallwood.

J. Henry Kaiser.

INVENTOR.

Isaac Rawson

134 J. W. Robertson
att'y

UNITED STATES PATENT OFFICE.

ISAAC RAWSON, OF HORNELLSVILLE, NEW YORK, ASSIGNOR OF ONE-HALF
TO SCOTT THACHER, OF SAME PLACE.

MOWER.

SPECIFICATION forming part of Letters Patent No. 315,071, dated April 7, 1885.

Application filed May 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, ISAAC RAWSON, a citizen of the United States of America, residing at Hornellsville, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Mowers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in that class of mowers in which the finger-bar is adapted to swing independently of the frame of the machine; and the invention consists in the peculiar combinations and the construction and arrangement of parts herein after more particularly described, and then pointed out in the claims.

In the accompanying drawings, Figure 1 represents a plan of my improvement with parts of a mowing-machine attached, and Fig. 2 is an elevation of the same. Fig. 3 is a plan on a smaller scale of some of the parts of my improvement. Fig. 4 is a detail, partly broken away.

A is a tilting-bar, provided at its front end with a stud, a , on which the lead-wheel B is mounted, and having its rear end connected by a link, C, to an arm of a T-shaped lever, D. A second tilting-bar, E, is pivoted to the bar A at a' , and its rear end passes between the sides of a bifurcated pendant, F, and is connected to the other arm of the lever D by the link G. The front end of this bar E runs in a guide formed on and near the front of the bar A by a flange, a'' , extending from the face of the bar, its outer edge being turned backward so as to form a retaining edge for the bar E. This bar E is connected to the shoe H forward of the pivotal point a' by the bolt I passing through ears h , formed on said shoe, and through a stud, e , cast with or firmly attached to the lever E, and is stayed by the brace J, one end of which is hooked through a stud, e' , (also cast with or firmly attached to the bar A), and its other end is connected with the usual crank-shield. The shoe H is stayed in the rear of the pivotal point a' by a brace, L, which is connected to the main frame by a ball-and-socket bearing at W. This brace L extends beneath the bar A, and is loosely connected to the shoe H by the bolt M passing through ears h' on the shoe, and firmly secured to the lever

E by a bolt, N, passing through said brace and a lug, e' , cast with or rigidly fastened to said lever E, as shown in Fig. 4.

O is a lever of the usual construction, pivoted to one side of the frame P, and provided with the sheave Q and chain R, the latter being suitably connected to the bar E. This lever and its attachments are designed to raise or lower the levers and the cutting apparatus; and it may be held in any required position in the usual manner by its latch w engaging a rack, S, formed on the upper edge of a standard, T, bolted to the main frame. An upwardly and outwardly curved bar, U, projects from the bar A, and may be formed integral therewith or suitably fastened thereto. The free end of this bar is provided with a notch, u , which is designed to embrace the cutting apparatus and hold the same in a vertical position, in a manner hereinafter described. The T-shaped lever D is pivoted at d to a standard, V, having a rack, v , and is provided with an ordinary dog and its connections, whereby the lever may be secured in any desired position.

The pendant F, before referred to, is cast with a cruciform opening; or, in other words, the slot in which the lever E works has a groove, f , on each side, in which a pin or stud projection, e' , on each side of the lever E works. This groove, it will be observed, slants slightly backward, and for a reason that will be hereinafter explained.

The operation of my improvement is as follows: When it is desired to rock the cutter-bar so as to change the position of the knives to suit the grass in which it is operating, a backward motion of the lever D will raise lever A and depress lever E, as shown in dotted lines, and as the pin e' on said lever E passes down the inclined groove f in the pendant F, said lever is drawn slightly backward, and thus a rolling or tilting motion is given to the cutter-bar without giving the latter the forward or backward motion always given the cutter-bar when it is arranged in the usual manner, by which means the usual compensating joint at the wrist-pin, which is always such a trouble to farmers, is entirely dispensed with.

When it is desired to move the machine

from field to field, the cutter-bar is raised to a vertical position, or nearly so, and then, when the lever D is thrown backward so as to raise the rear end of the lever A, the bent rod U is by the same motion thrown forward, as shown in dotted lines, which causes the sides of the slot *u* to embrace the rear edge of the cutter-bar, and thus firmly hold the same in position.

What I claim as new is—

- 10 1. The combination, in a harvester, of two bars pivoted to each other, a shoe attached to one of said bars, and devices, substantially as described, for giving said bars a motion in opposite directions simultaneously, substantially as described.
- 15 2. The combination, in a harvester, of two adjustable bars pivoted together, a shoe attached to one of said bars and connected thereto at opposite sides of the pivotal point of the bars, substantially as described.
- 20 3. The combination, in a harvester, of two adjustable bars pivoted to each other, a shoe supported on said bars, and a guide connected with one of the bars to give the rear end of the same a slight backward motion as it descends, substantially as described.
- 25 4. The combination, in a harvester, of two adjustable bars, a shoe supported by said bars, and a pendant in which one of the bars moves, provided with a groove inclined downwardly and rearwardly to give the rear end of said bar a slight backward motion, substantially as described.

5. The combination, in a harvester, of two adjustable bars pivoted together, one carrying a shoe connected to it on opposite sides of the pivotal point, and the other supporting a spindle for the lead-wheel, substantially as described.

6. The combination, in a harvester, of two bars pivoted together, a shoe connected to one of them, a wheel connected to the other, and an adjusting-lever having its opposite arms connected with the free ends of said bars, substantially as described.

7. The combination, in a harvester, of two bars pivoted to each other, a shoe connected to one of them, a wheel connected to the other, and braces connecting the bar carrying the shoe to the frame, substantially as described.

8. In a harvester, and as a means for holding the cutting apparatus thereof in a vertical position during transportation, the combination, with the cutter-bar, of the adjustable bar A, having the curved rod U, projecting therefrom, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 6th day of May, 1884.

ISAAC RAWSON.

Witnesses:

T. J. W. ROBERTSON,
E. L. WHITE.