(No Model.)

L. J. RING.

MOWER.

No. 589,616. Patented Sept. 7, 1897.

Fig. 1.

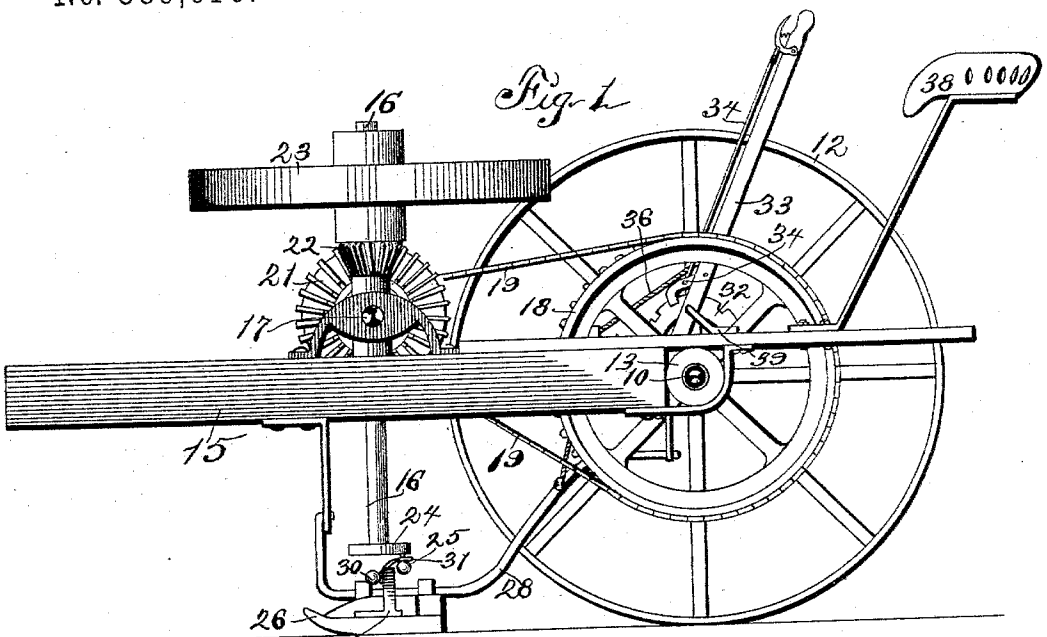
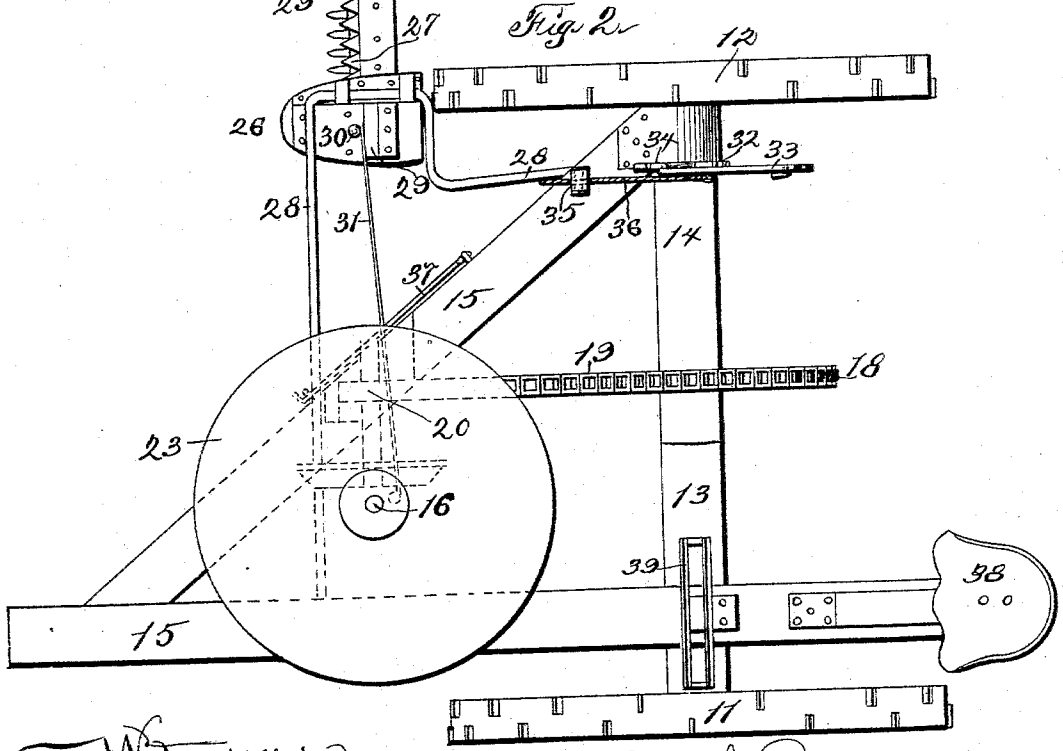


Fig. 2.



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UNITED STATES PATENT OFFICE.

LEWIS J. RING, OF STANTON, IOWA.

MOWER.

SPECIFICATION forming part of Letters Patent No. 589,616, dated September 7, 1897.

Application filed November 6, 1896. Serial No. 611,306. (No model.)

To all whom it may concern:

Be it known that I, LEWIS J. RING, a citizen of the United States of America, and a resident of Stanton, in the county of Montgomery and State of Iowa, have invented a new and useful Improvement in Mowers, of which the following is a specification.

The object of my invention is to provide improved mechanism for mowing in which means will be furnished for establishing and maintaining a uniformly rapid speed of the cutter-bar by gearing with the traction mechanism.

My invention consists in the construction, arrangement, and combination of parts and elements, as hereinafter set forth, pointed out in my claim, and illustrated by the accompanying drawings, in which—

Figure 1 is an elevation of the machine, one supporting-wheel being removed. Fig. 2 is a plan of the machine, a portion of the cutter-bar being removed and parts of the machine shown in dotted lines.

In the construction of the machine as shown the numeral 10 designates an axle or driving shaft, the ends of which are supported in traction-wheels 11 12, from which wheels the axle derives motion and power. Sleeves 13 14 are mounted on the axle 10, and the axle is free to rotate therein. A frame 15, comprising a bar at right angles to the axle 10 and a brace-bar at an oblique angle to said shaft, is mounted on the sleeves 13 14, and the sleeve 14 has a revolubility in the said frame. A shaft 16 is vertically positioned in bearings formed in the forward portion of the frame 15, and a shaft 17 is horizontally positioned for rotation in the said frame adjacent to the shaft 16. A sprocket spur-wheel 18 is mounted rigidly on the axle 10 between the sleeves 13 14 and is connected by a sprocket-chain 19 with a sprocket-wheel 20 on the horizontal shaft 17, the wheel on the shaft 17 being of much less diameter than the wheel 18. A bevel-gear 21 on the shaft 17 meshes with a bevel-gear 22 on the shaft 16, and a fly or balance wheel 23 is located on and fixed to the upper end of the said shaft 16. A wrist-wheel 24 is positioned on and fixed to the lower end of the shaft 16, and a wrist-pin 25 is mounted in said wheel. A shoe 26 for the cutter-bar 27 is provided, and said shoe is journaled on the central portion of a hanger-frame 28, which hanger-frame is hinged at either end to the frame 15. The cutter-bar 27 is provided with a pitman-head 29, mounted for horizontal reciprocation in the shoe 26, and a pin 30 on the pitman-head is flexibly connected to one end of a pitman-bar 31, the opposite end of said pitman being connected to the wrist-pin 25 by a journal-joint. The pitman need not be detached from the wrist-pin 25 when it is desired to elevate the cutter-bar for transportation.

A segmental rack 32 is fixed to the frame 15 adjacent to the sleeve 14, and a hand-lever 33 is mounted rigidly on the said sleeve and provided with a pawl 34, engaging said rack. A pulley 35 is mounted on the frame 15 adjacent to the hand-lever 33, and a cable 36 rove through said pulley has its ends fixed to the hanger-frame 28 and to the hand-lever, respectively.

A hooked bar 37 is fixed to the frame 15 and is designed for engagement with the cutter-bar to sustain the same when elevated for transportation.

In practical use the cutter-bar may be raised slightly by raising the hanger-bar through the medium of the hand-lever.

A seat 38 and foot-rest 39 are provided and fixed to the frame 15.

I claim as my invention—

An apparatus for mowing comprising the following elements in combination: traction-wheels; an axle-shaft in and rigidly connected with the traction-wheels; a sleeve on the axle-shaft; a frame loosely mounted on the axle-shaft; a segmental rack on the frame; a lever mounted rigidly on the sleeve; a pawl on the lever and engaging the segmental rack; a hanger hinged to the frame; a cutter-bar mounted on the hanger; a cable fixed at its rearward end to the lever, extended over the frame and fixed at its front end to the hanger; a sheave on the frame in front of the lever, through which sheave the bight of the cable runs; a shaft 17 horizontally mounted on and above the frame in front of and parallel to the axle-shaft; a sprocket-wheel rigidly

mounted on the axle-shaft; a sprocket-wheel rigidly mounted on the shaft 17; a sprocket-chain connecting said sprocket-wheels; a shaft 16 vertically positioned in the frame at right angles to the shaft 17; intermeshing bevel-gears on the shafts 16, 17; a balance-wheel on the upper end of the shaft 16; a wrist-wheel on the lower end of the shaft 16; a wrist-pin on the wrist-wheel; and a pitman connecting the wrist-pin and cutter-bar.

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