

(No Model.)

2 Sheets—Sheet 1.

J. W. LATIMER.

MOWER.

No. 390,085.

Patented Sept. 25, 1888.

Fig. 1.

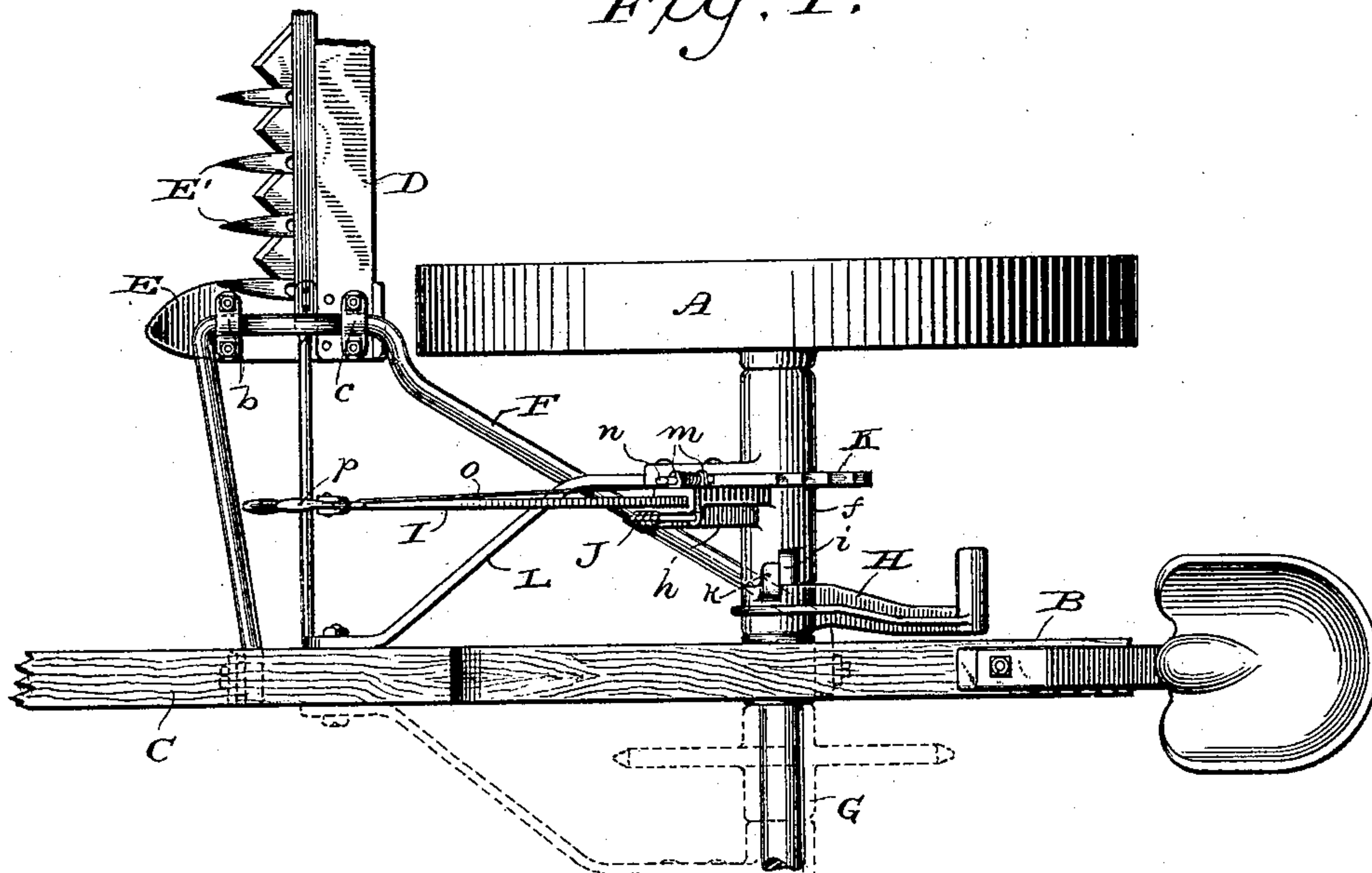
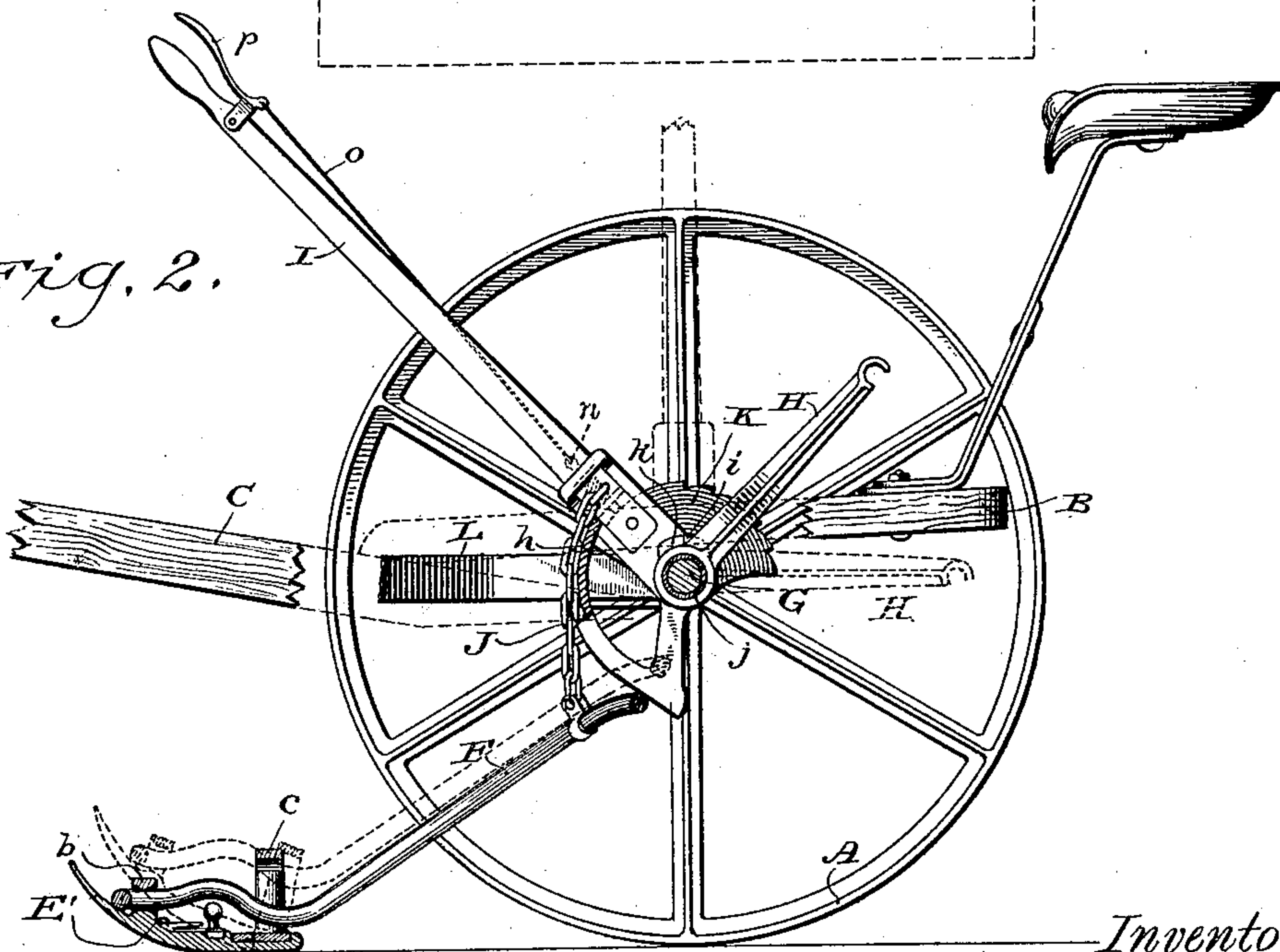


Fig. 2.



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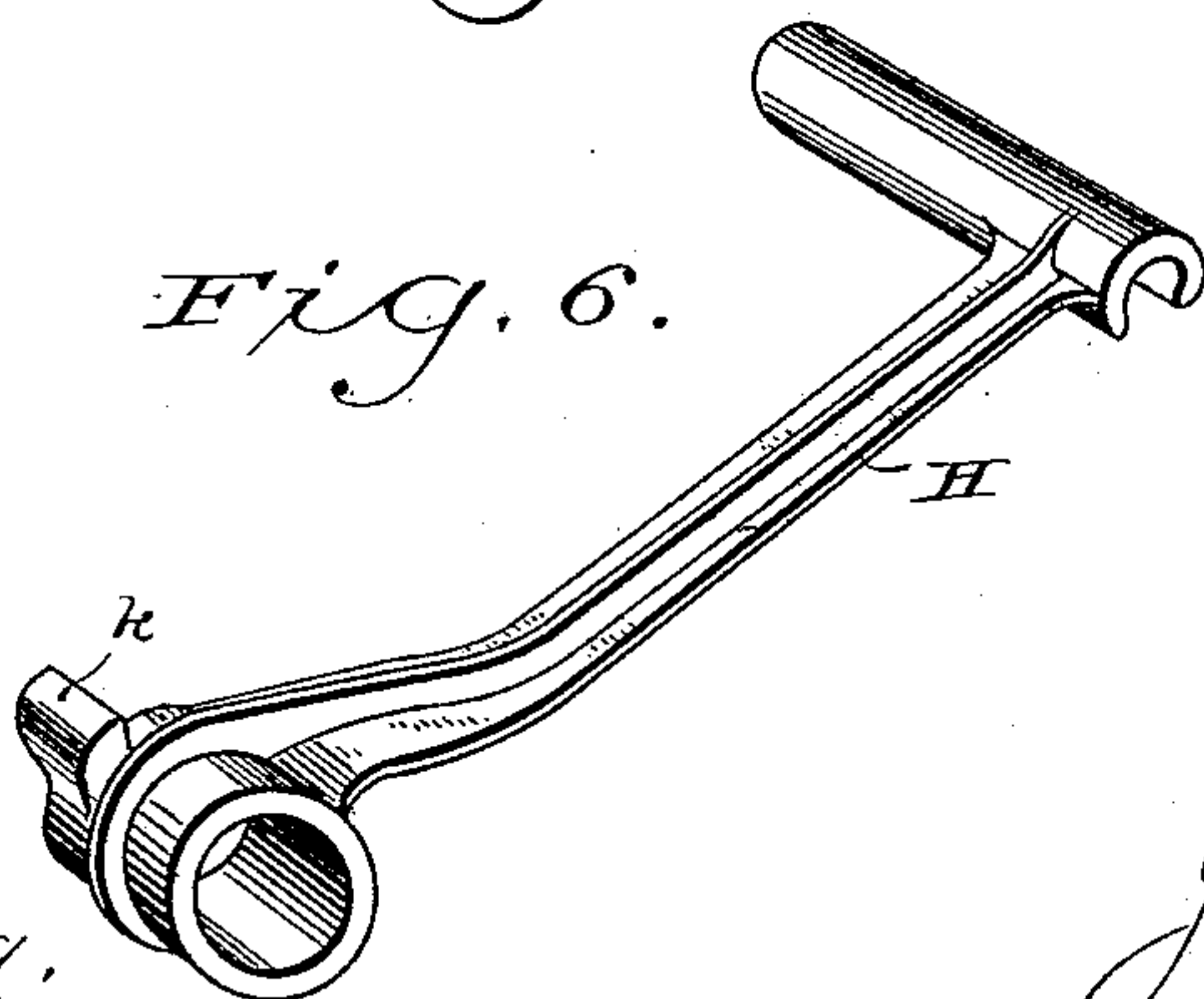
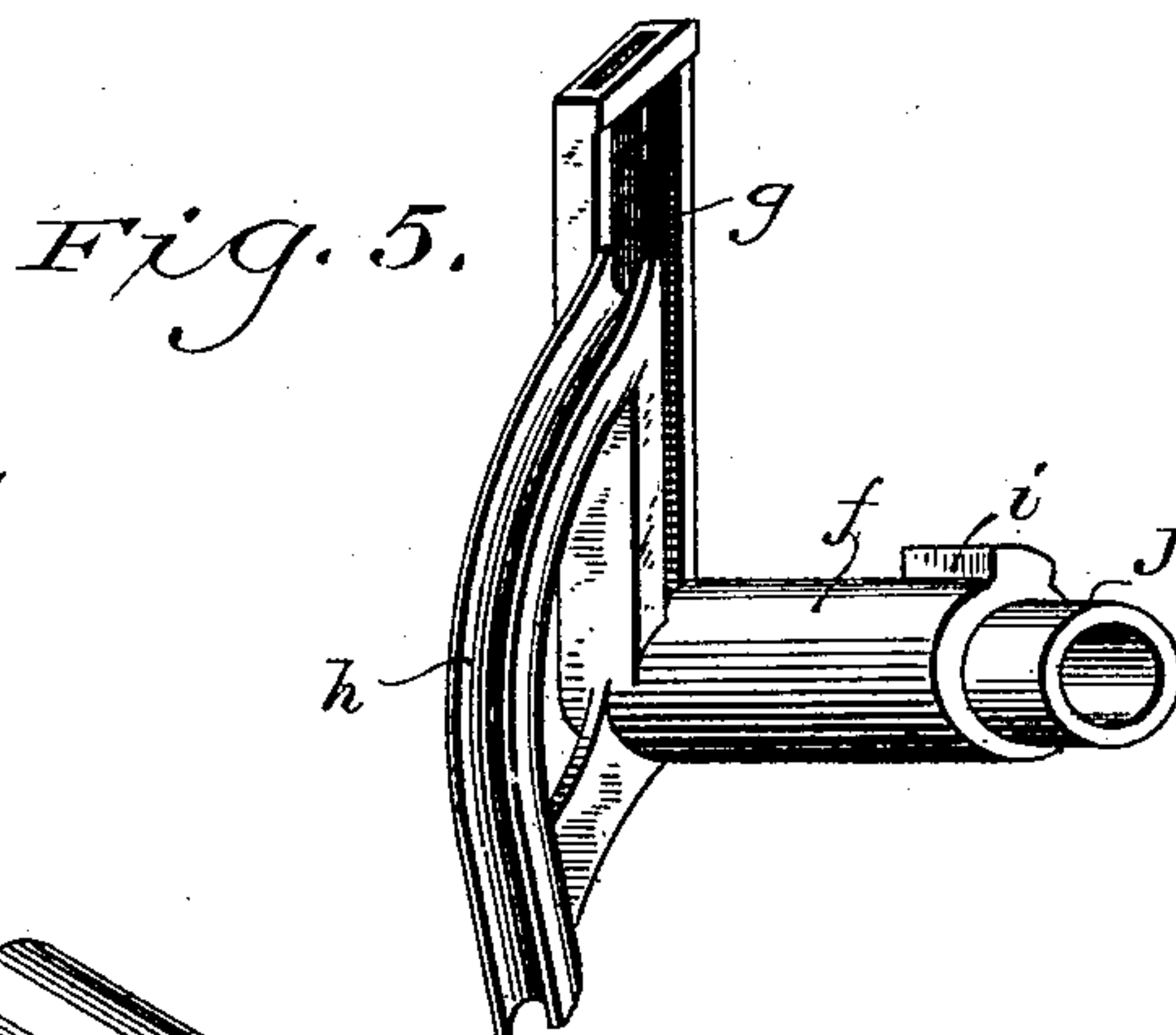
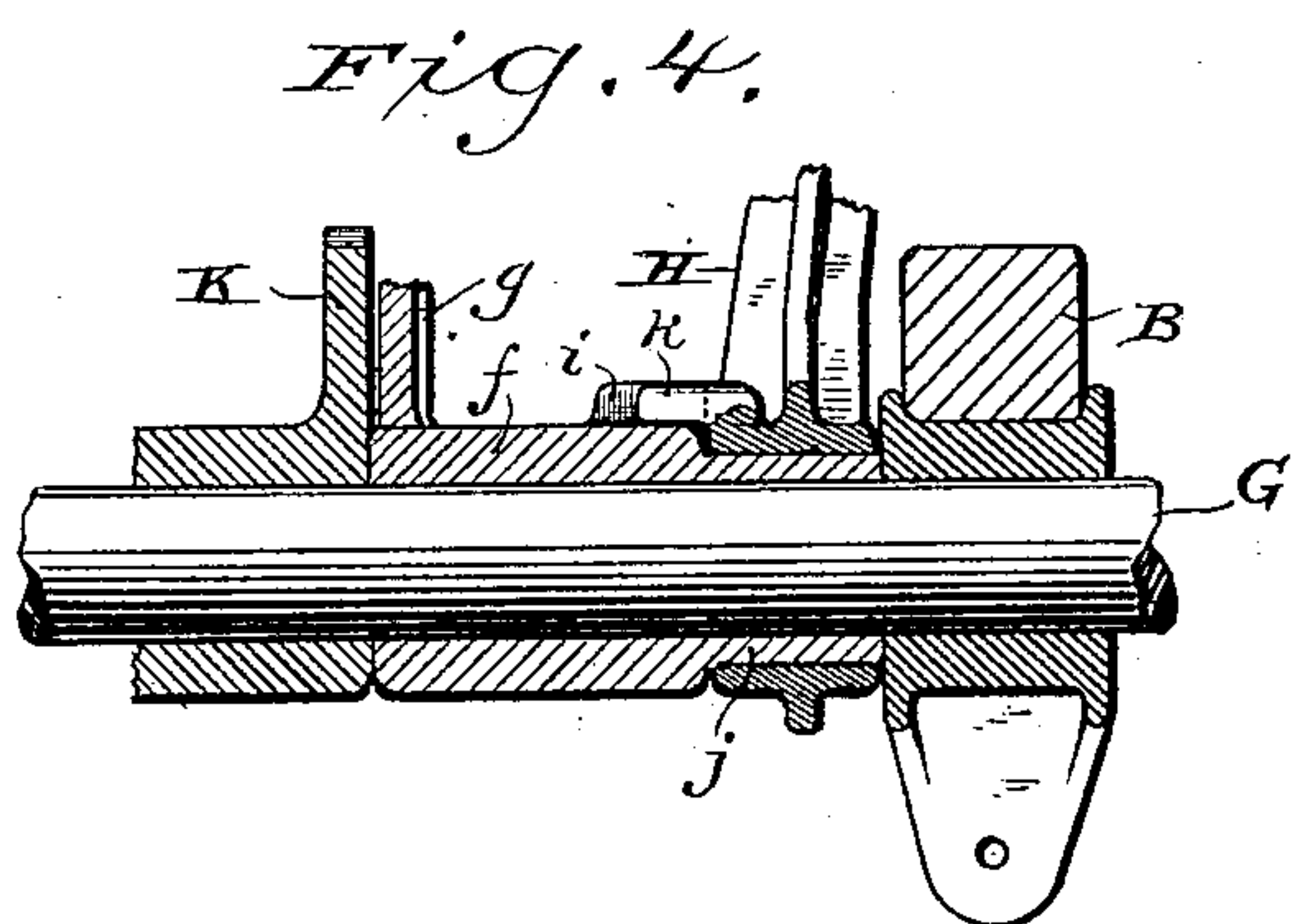
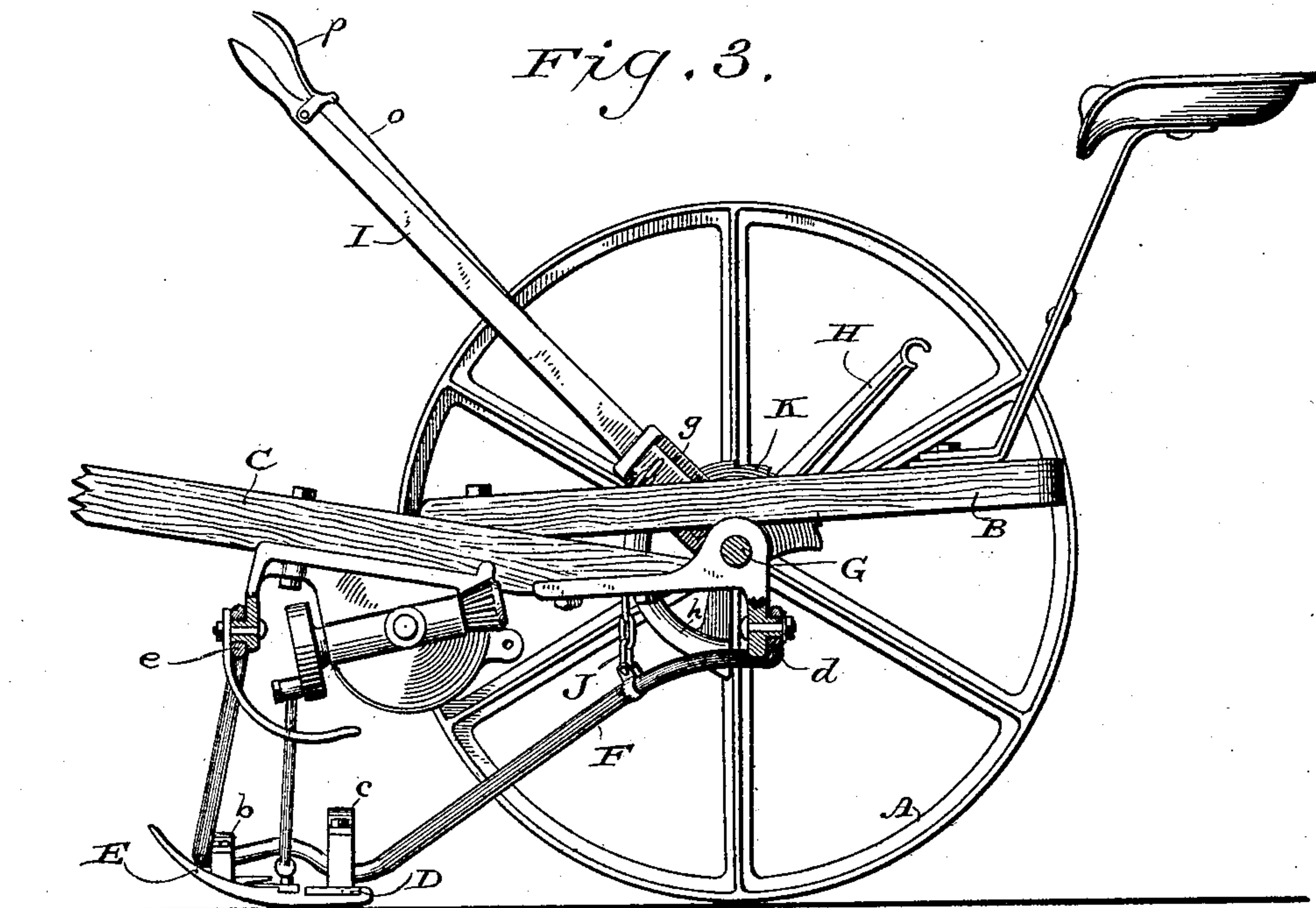
2 Sheets—Sheet 2.

J. W. LATIMER.

MOVER.

No. 390,085.

Patented Sept. 25, 1888.



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UNITED STATES PATENT OFFICE.

JOHN W. LATIMER, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO THE
MILWAUKEE HARVESTER COMPANY, OF SAME PLACE.

MOWER.

SPECIFICATION forming part of Letters Patent No. 390,085, dated September 25, 1888.

Application filed January 3, 1888. Serial No. 259,637. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. LATIMER, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Mowers; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to mowers; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a partial plan view of a mower having my invention applied thereto; Fig. 2, a vertical section thereof; Fig. 3, a side elevation of the same, partly broken away; Fig. 4, a detail sectional view illustrating the axle having a seat-bar, sleeve, and segment arranged thereon, and a foot-lever loose on the sleeve; Fig. 5, a perspective view illustrating a casting that forms a socket for a hand-lever, an arc over which the lifting-chain passes, and a bearing for a foot-lever; and Fig. 6, a similar view of the foot-lever.

Referring by letter to the drawings, A represents the inside drive-wheel of a mower, B the seat-bar, and C the tongue. Attached to the finger bar D is the inside shoe, E, that is provided with ears *b c* to receive the thrust-bar F, the opening in the rear one, *c*, of said ears being elongated, as best illustrated in Fig. 2, in order that said thrust-bar may have a vertical movement therein, as will be hereinafter more fully described.

The thrust-bar F has its rear end, *d*, pivoted to the frame-work of the mower under the seat-bar B and back of the axle G, and the forward end, *e*, of this thrust-bar is pivoted to said frame-work under the tongue C, as best illustrated in Fig. 3.

Loose on the axle G, between the tongue C and wheel A, is a sleeve, *f*, preferably cast in one piece with a lever-socket, *g*, and segment *h*, said sleeve being provided near its inner end with a lug, *i*, and this end is reduced to form a bearing, *j*, upon which is loosely mounted a foot-lever, H, the latter being also provided with a lug, *k*, in opposition to the lug *i* on the sleeve. A hand-lever, I, has its lower end fitted in the socket *g*, and is con-

nected with the thrust-bar F by means of a chain or other flexible connection, J, and said lower end of the lever is provided with guides *m* for a spring-dog, *n*, designed to engage rack-teeth on the rear portion of a segment, K, that is supported on the axle G and retained in position by a brace, L, the latter being bolted to the segment and tongue C, said dog being brought out of engagement with the rack-teeth on said segment by means of a rod, *o*, that connects with a hand-piece, *p*, pivotally connected to the upper portion of said lever.

In the operation of my invention, whenever it becomes necessary to raise the points of the guards E', as shown in dotted lines, Fig. 2, for the purpose of raising the cutter-bar D over uneven surfaces or for cutting high stubble, the operator presses his foot on the lever H, and thus causes the latter to turn on its bearing *j* and bring the lug *k* on said lever against the lug *i* on the sleeve *f*, thereby causing the latter to turn on the shaft G and raise the hand-lever I, that is fitted on the socket *g*, forming a part of said sleeve. The upward movement of the lever I draws the chain J up on the segment *h*, and thereby lifts the thrust-bar F, the latter carrying therewith the forward end of the shoe E, the rear end of this shoe remaining on the ground while said thrust-bar is moving upward in the elongated opening in the rear ear, *c*, on said shoe. When pressure is removed from the foot-lever H, the weight of the cutting apparatus will cause the points of the guards E' to return to their original position.

In order to raise the shoe high enough to permit the bar D to clear the ground or to pass over obstructions, the movement of the foot-lever H is continued in the same direction as when raising the points of the guards E', and when said shoe and bar are brought to the desired height the spring-dog *n* will automatically engage the rack-teeth on the segment K to hold the parts in the position to which they have been adjusted.

To raise the cutting apparatus to the fullest extent, the hand-lever I is ordinarily employed; but its power may be supplemented by the foot-lever, the latter being particularly useful in bringing said hand-lever up to within easy reach of the operator.

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

1. In a mower, the combination, with a tilting cutting apparatus and its hand-lever, of a foot-lever arranged to be normally independent of the hand-lever, a lug forming part of each lever, and the two lugs arranged to oppose each other, whereby the depression of said foot-lever will actuate the hand-lever to tilt said cutting apparatus, substantially as set forth.

2. In a mower, the combination, with a tilting cutting apparatus and its hand-lever, of a foot-lever arranged to be normally independent of the hand-lever, a lug forming part of each lever, and the two lugs arranged to oppose each other, whereby the depression of said foot-lever will actuate the hand-lever to tilt said cutting apparatus, a fixed segment-rack, and a spring-dog arranged on said hand-lever to engage the segment-rack, substantially as set forth.

3. In a mower, the combination, with the axle and cutting apparatus, of a sleeve loose on said axle and provided with a lug, a foot-lever turning loosely on the sleeve and provided with a lug in opposition to the lug on the sleeve, and a hand-lever rigid with the sleeve and connected to said cutting apparatus, substantially as set forth.

4. In a mower, the combination, with the axle and cutting apparatus, of a sleeve loose on said axle and having a lug, lever-socket, and segment, a hand-lever fitted in the socket, a flexible connection attached to the lever and

lying on the segment to unite the hand-lever and cutting apparatus, and a foot-lever turning loosely on said sleeve and provided with a lug in opposition to the one on the sleeve, substantially as set forth.

5. In a mower, the combination, with the axle and cutting apparatus, of a single casting comprising a sleeve that fits the axle and has one end thereof provided with a lug and reduced to form a bearing for the foot-lever and its other end provided with a segment, a socket for a hand-lever, a flexible connection laid on the segment to extend from the hand-lever to said cutting apparatus, and a foot-lever journaled on the sleeve and provided with a lug in opposition to the one on said sleeve, substantially as set forth.

6. In a mower, the combination of the pivotal thrust-bar, the inside shoe provided with front and rear ears that engage said thrust-bar, and one of these ears having the opening therein vertically elongated, a sleeve loose on the axle of the mower and provided with a lug, a foot-lever turning loosely on the sleeve and provided with a lug in opposition to said lug on the sleeve, and a hand-lever rigid with this sleeve and connected to said thrust-bar, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

JOHN W. LATIMER.

Witnesses:

H. G. UNDERWOOD,
N. E. OLIPHANT.