

(No Model.)

F. J. McCLENON.

DEVICE TO FACILITATE GRINDING SECTIONS OF MOWING MACHINES.

No. 402,465.

Patented Apr. 30, 1889.

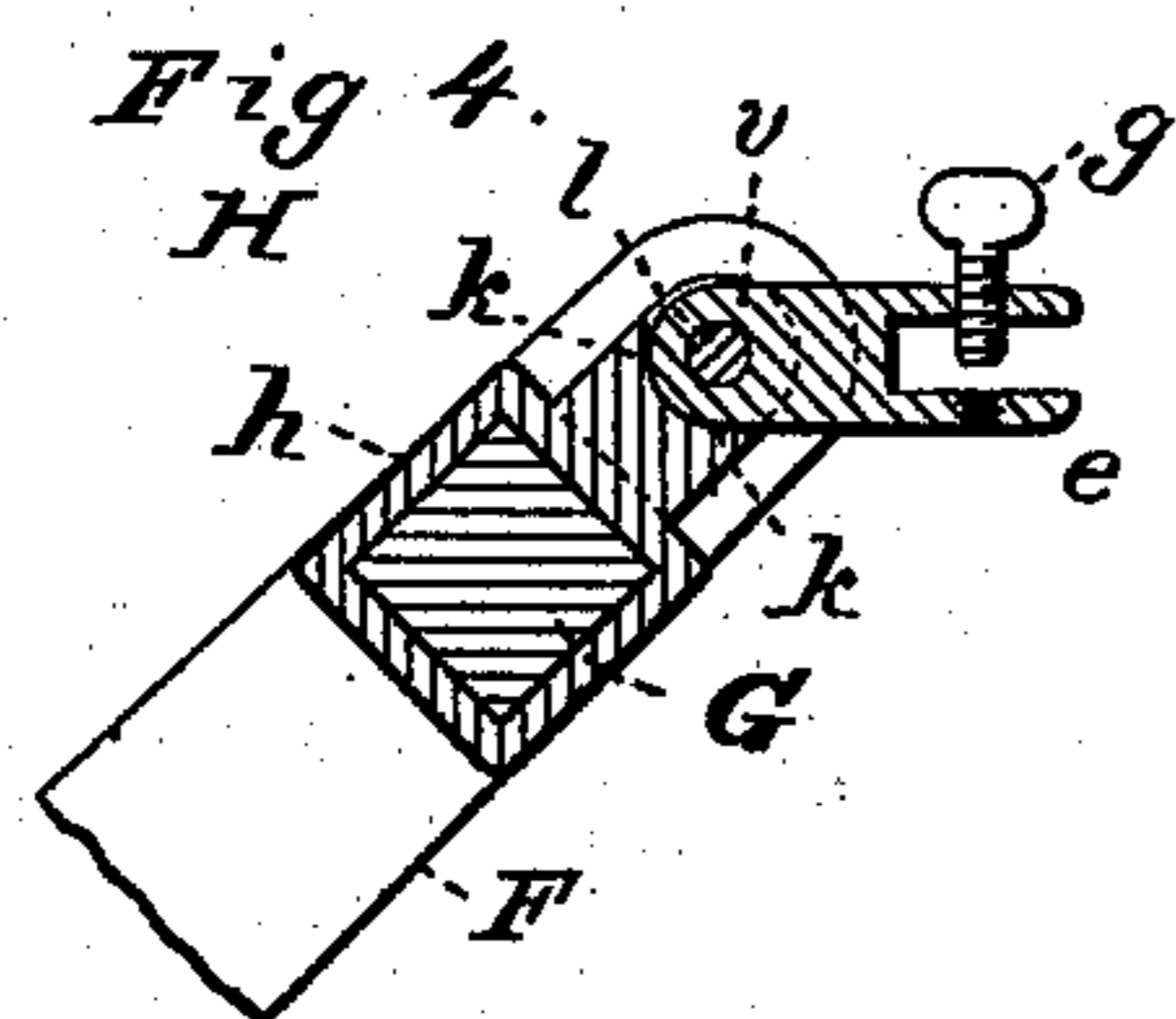
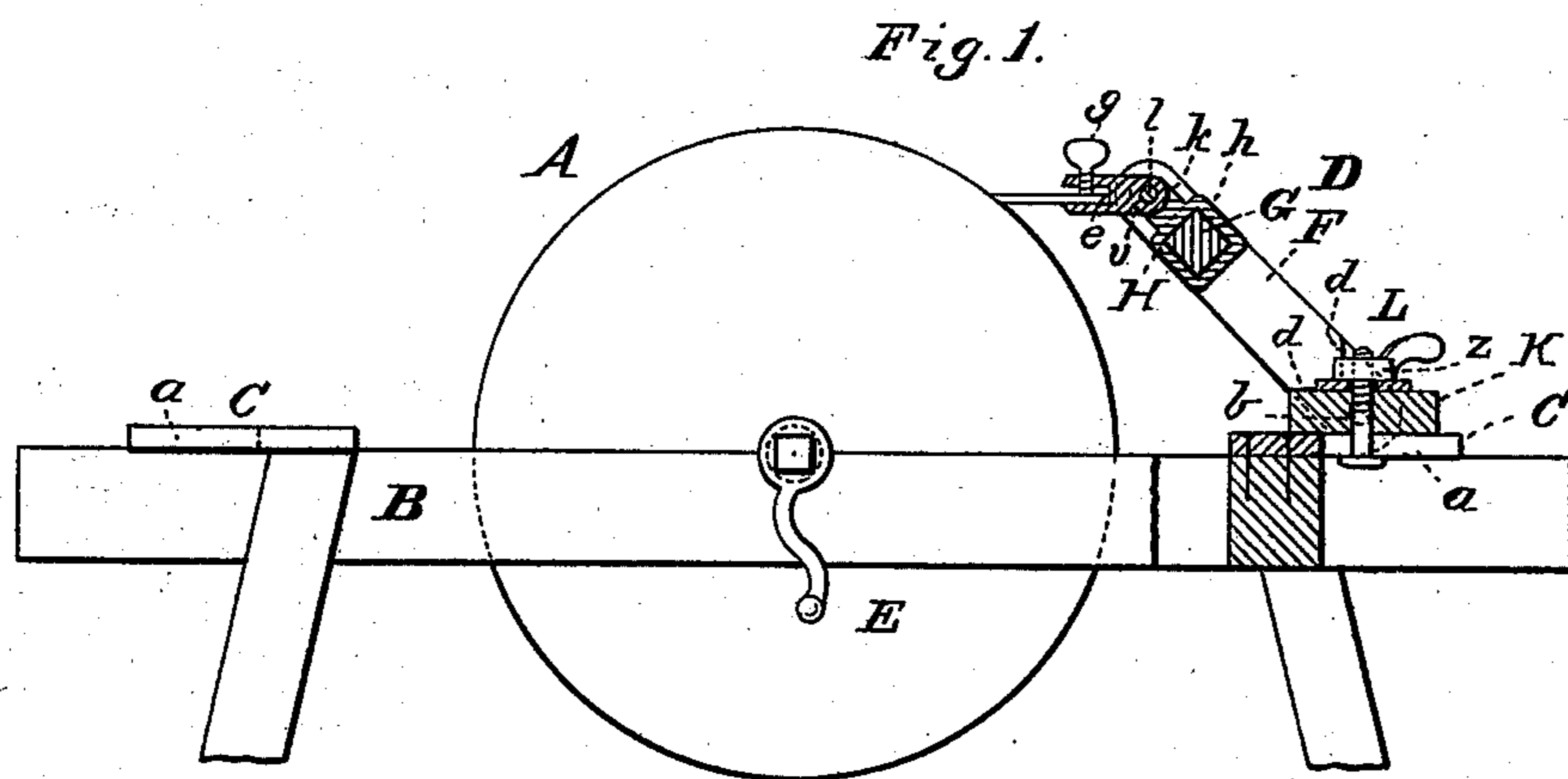


Fig. 5.

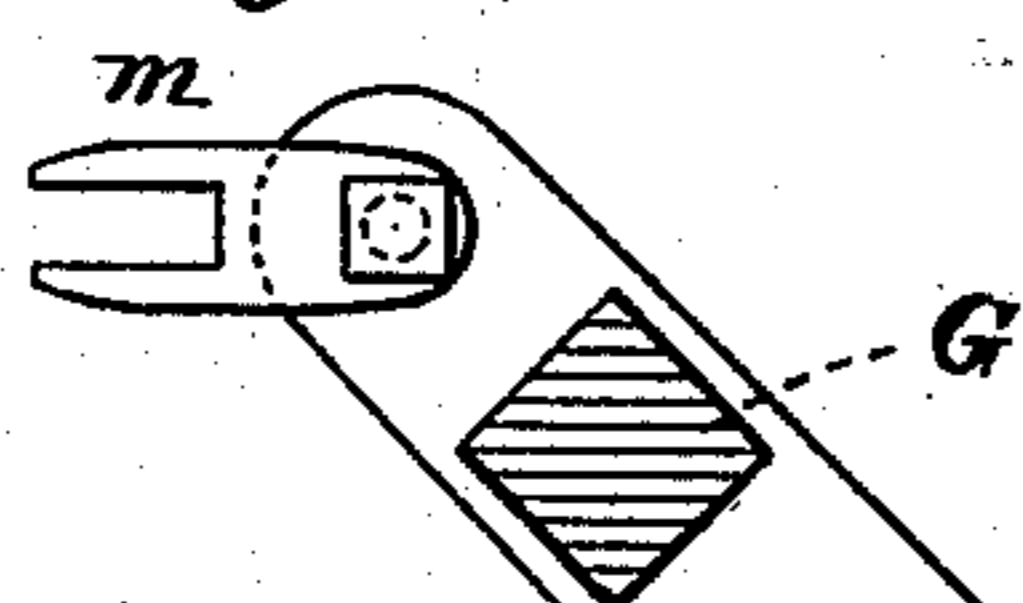


Fig. 6.

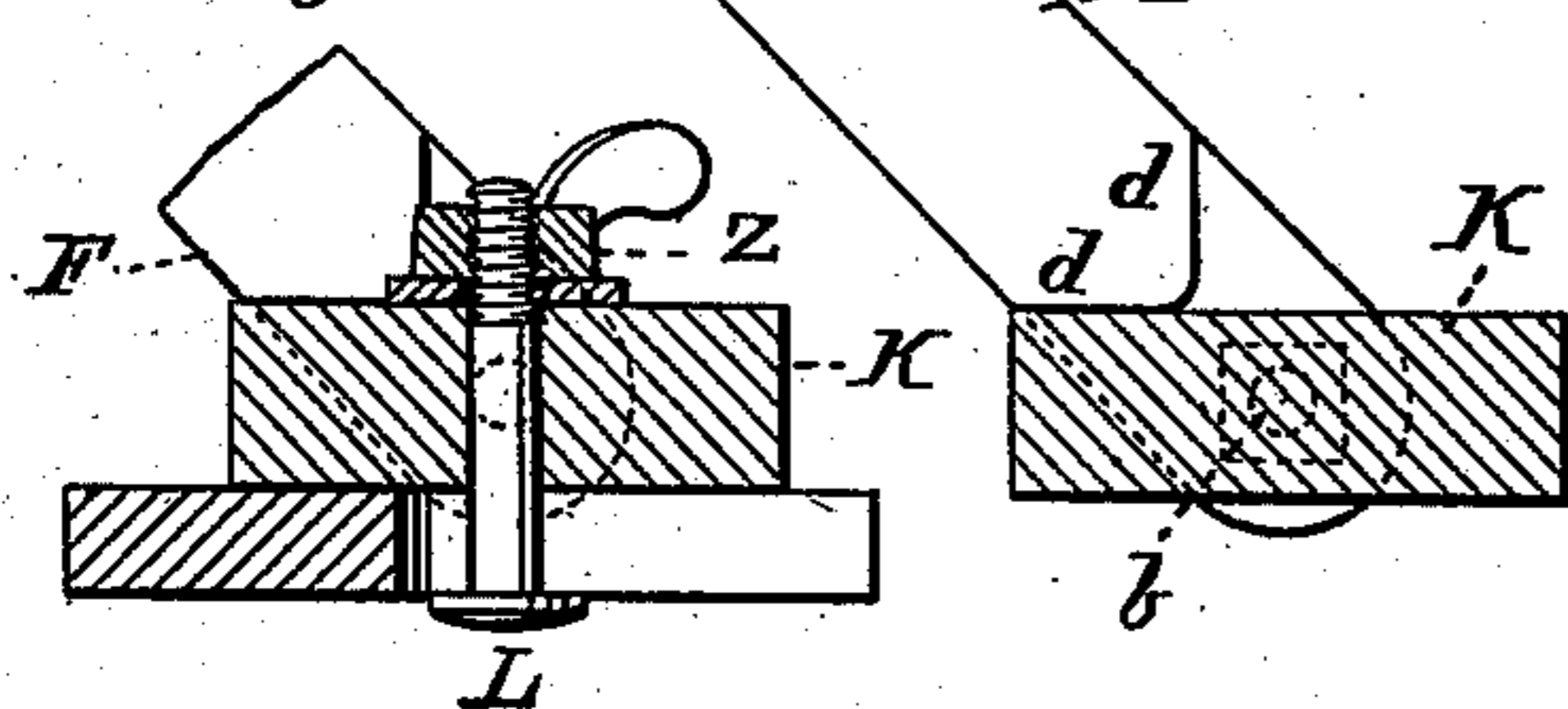


Fig. 2.

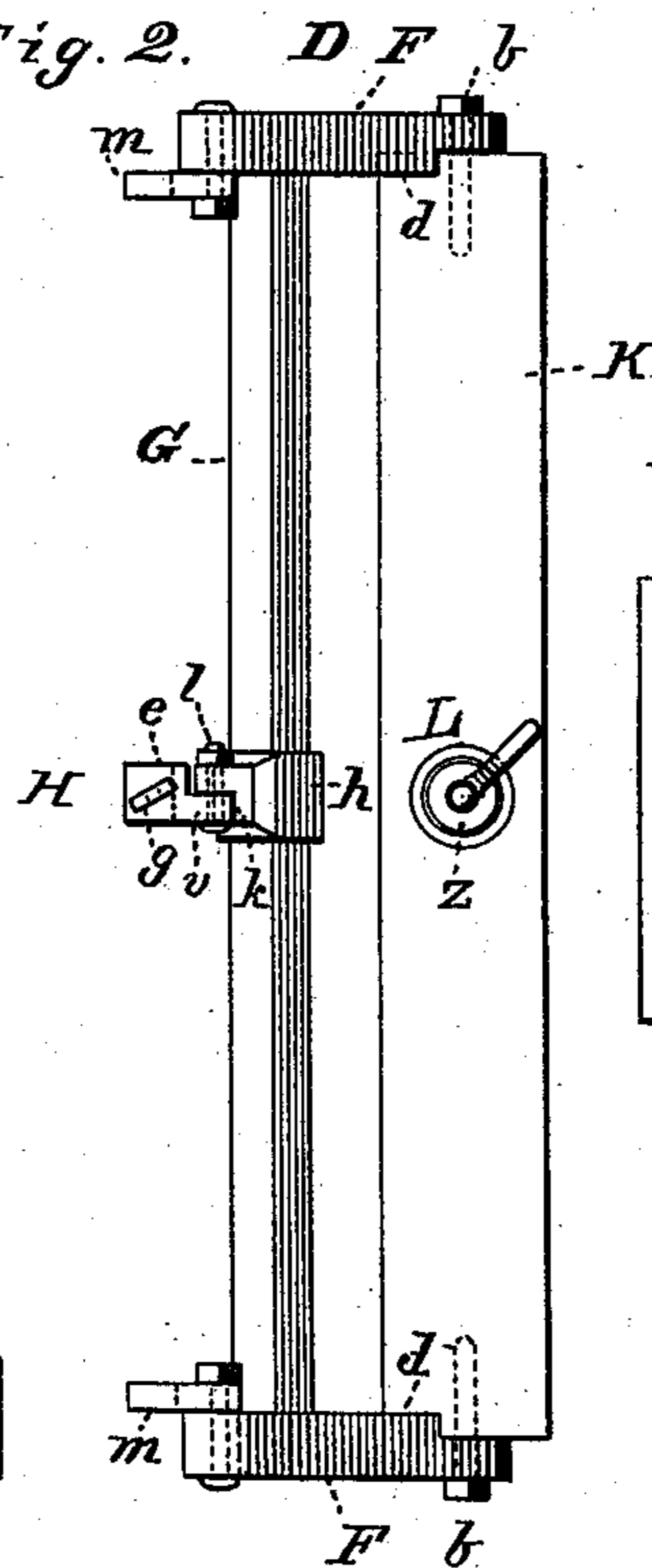
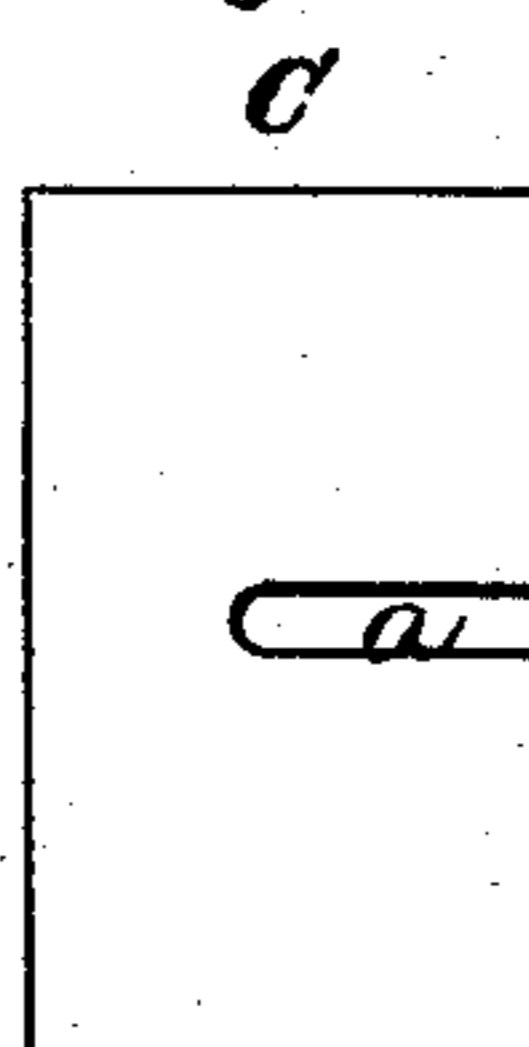


Fig. 3.



WITNESSES.

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DEVICE TO FACILITATE GRINDING SECTIONS OF MOWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 402,465, dated April 30, 1889.

Application filed December 21, 1888. Serial No. 294,299. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC JOY McCLENON, a citizen of the United States, and a resident of Walton, in the county of Delaware and State of New York, have invented certain new and useful Improvements in Devices to Facilitate Grinding Sections of Mowing-Machines; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and shows a side view of a grindstone, the frame being partly broken away and the holder in vertical section. Fig. 2 is a top view of the holder. Fig. 3 is a top view of the bearing-bar. Fig. 4 is a detail of the adjustable clamp. Figs. 5 and 6 are also details of the clamp-holder.

This invention has relation to holders designed to facilitate grinding the cutting-section bars of mowing-machines on ordinary grindstones; and it consists in the novel construction and combination of parts, as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, the letter A designates a grindstone, and B its framing, which is provided at each end of the grindstone with a transverse bearing-bar, C, having a central notch, *a*, extending inward or toward the grindstone from its outer edge. These bars are firmly attached to the frame of the grindstone, and are designed to enable the holder D to be rigidly secured at either side of said grindstone and readily removable therefrom as the section is ground first on one side and then on the other. The crank of the grindstone is indicated at E.

The holder D consists of the side bars, F, their transverse connecting-bar G, forming a guide-bearing for the adjustable clamp H, the base-bar K, to which the lower ends of the side bars are pivoted, as at *b*, its central clamp, L, and the notched holding-guides *m*, pivoted to the upper ends of the side bars, F.

The lower ends of the side bars are formed

with arc-shaped shoulders *d* on their inner sides, as shown, these shoulders being designed to engage the base-bar K when the side bars are at an angle of about forty-five degrees, so that the holder will not fall forward on the grindstone. The side bars and transverse bar form a frame which is pivoted to the ends of the base-bar.

The clamp H, which slides on the bar G of the holder-frame, consists of the pivoted jaw *e*, its set-screw *g*, and the slide *h*, which is formed with a concave shoulder, *k*, below the pivot *l* of said jaw, the tang *v* of which is curved at its end to correspond to the concavity of the shoulder K, which nevertheless engages the edge of the tang when the jaw is turned to its limit. The angle of this limit on each side of the plane of the holder is about forty-five degrees.

The holder is secured to the bearing-bar C at either end of the grindstone by applying the base-bar K to said bearing-bar, so that the screw of the clamp L enters the notch thereof, and turning up the lever-nut *z* of said clamp.

The frame is made of proper length to support the section-bar, which is seated in the pivoted guides *m*, and clamp H being secured in the jaw of the latter by means of its set-screw *g*. The section-bar, therefore, can be held true at the proper angle in grinding one side, and can be moved along on the grindstone by moving the clamp H until this side of the section-bar is finished. Then the holder is to be detached and secured at the other end of the grindstone for grinding the other side of the section.

This holder is designed to enable the operator to grind the section-bars evenly, so that all will have the same bevel and will conduce to the ease and efficiency of the working of the mowing-machine. The holder is very strong and durable, and is easily operated by one man, who can hold the section-bar with one hand in grinding while the other hand is employed in turning the stone.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. A section-bar holder consisting of the side bars connected by a transverse guide-bar and having shoulders upon their inner sides near

their lower ends, the planes of which extend one at a proximate right angle to the other, the base-bar to which said side bars are pivoted, the clamp of the base-bar, the notched
5 guides pivoted to the upper ends of the side bars, the adjustable clamp on the guide-bar, and its pivoted jaw and set-screw, substantially as specified.

2. The combination, with the guide-bar of
10 the section-bar holder, of the clamp consisting of the slide adjusted upon said guide-bar and

having a concave shoulder, and the pivoted jaw applied to said slide and having a curved end fitting in the concavity of said shoulder, said jaw having a set-screw, substantially as
15 set forth.

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

FREDERIC JOY McCLENON.

Witnesses:

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G. S. FITCH.