

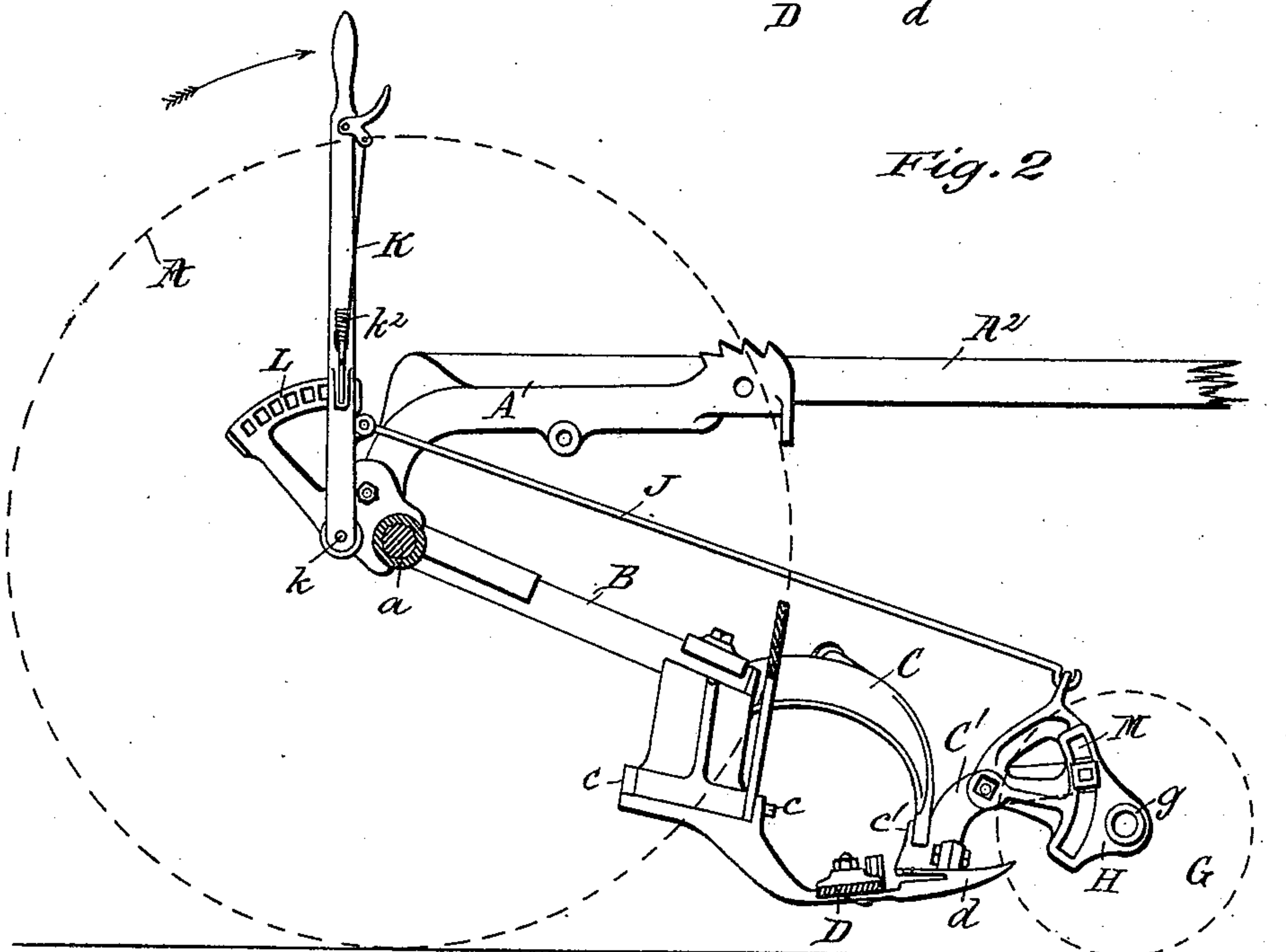
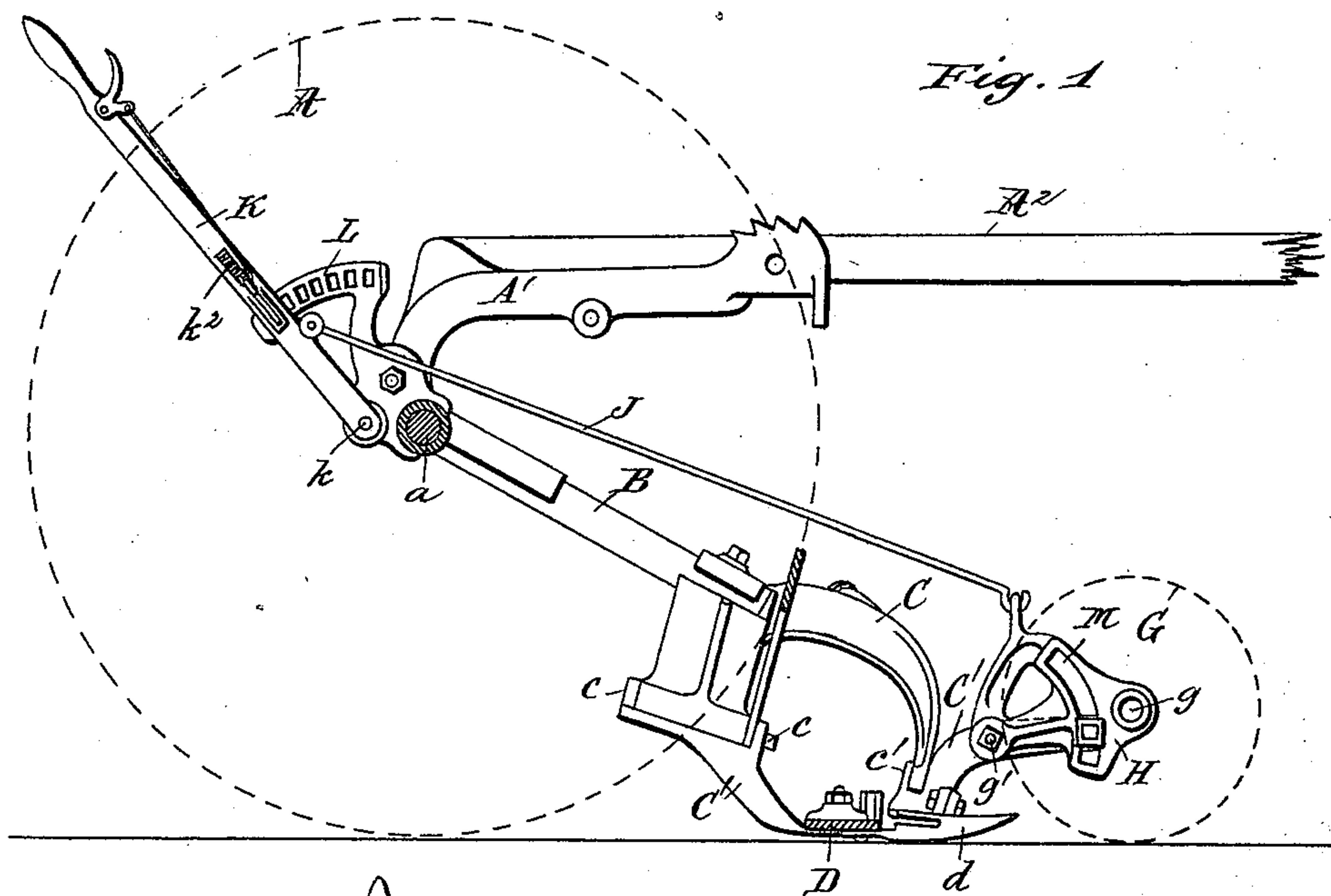
(No Model.)

2 Sheets—Sheet 1.

G. H. BARTLETT.  
TILTING DEVICE FOR MOWING MACHINES.

No. 441,463.

Patented Nov. 25, 1890.



WITNESSES:

Walter H. Longacre.  
Frank A. Bove

INVENTOR

George H. Bartlett,  
BY  
Hendell Parsons  
his ATTORNEY.

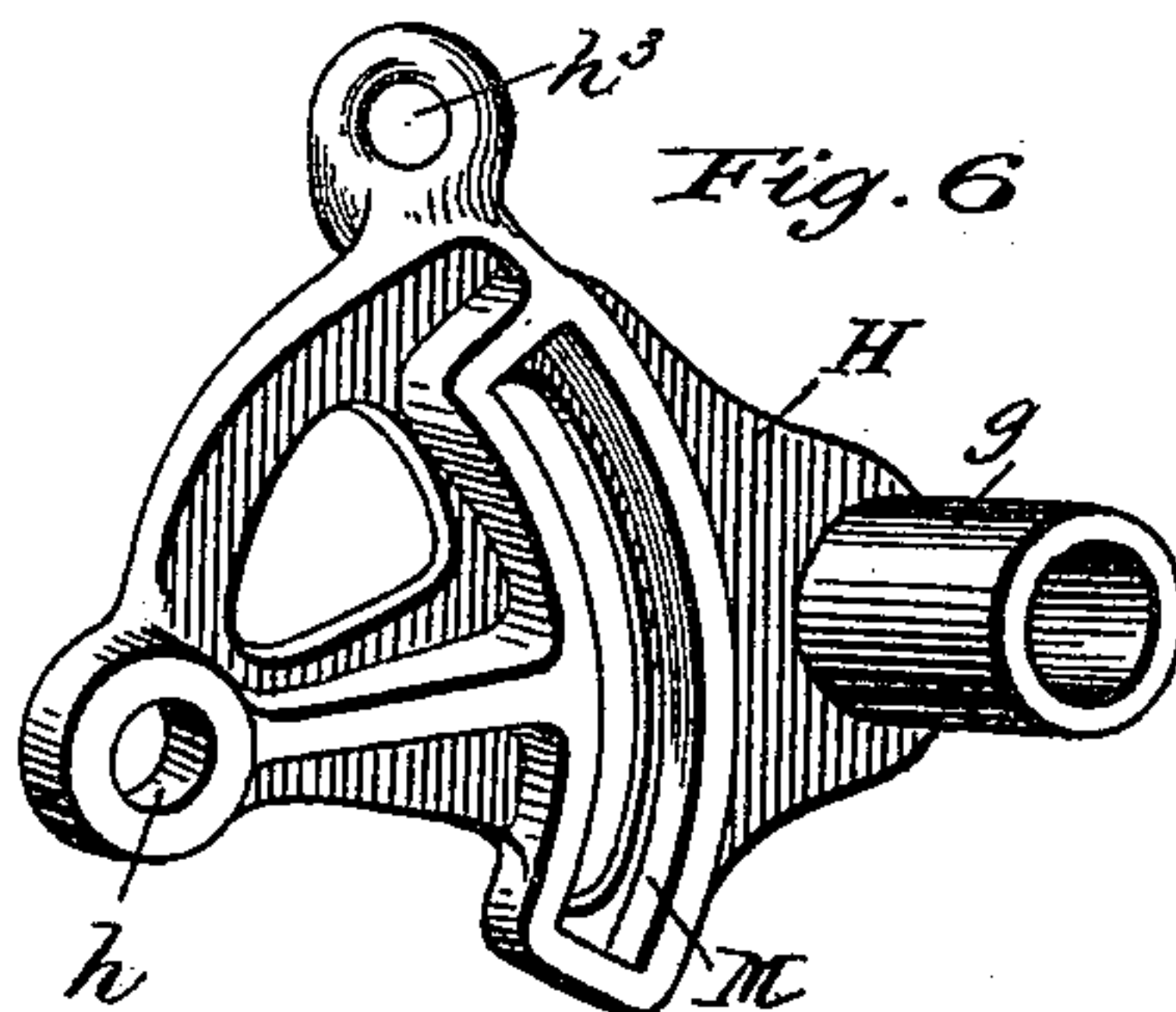
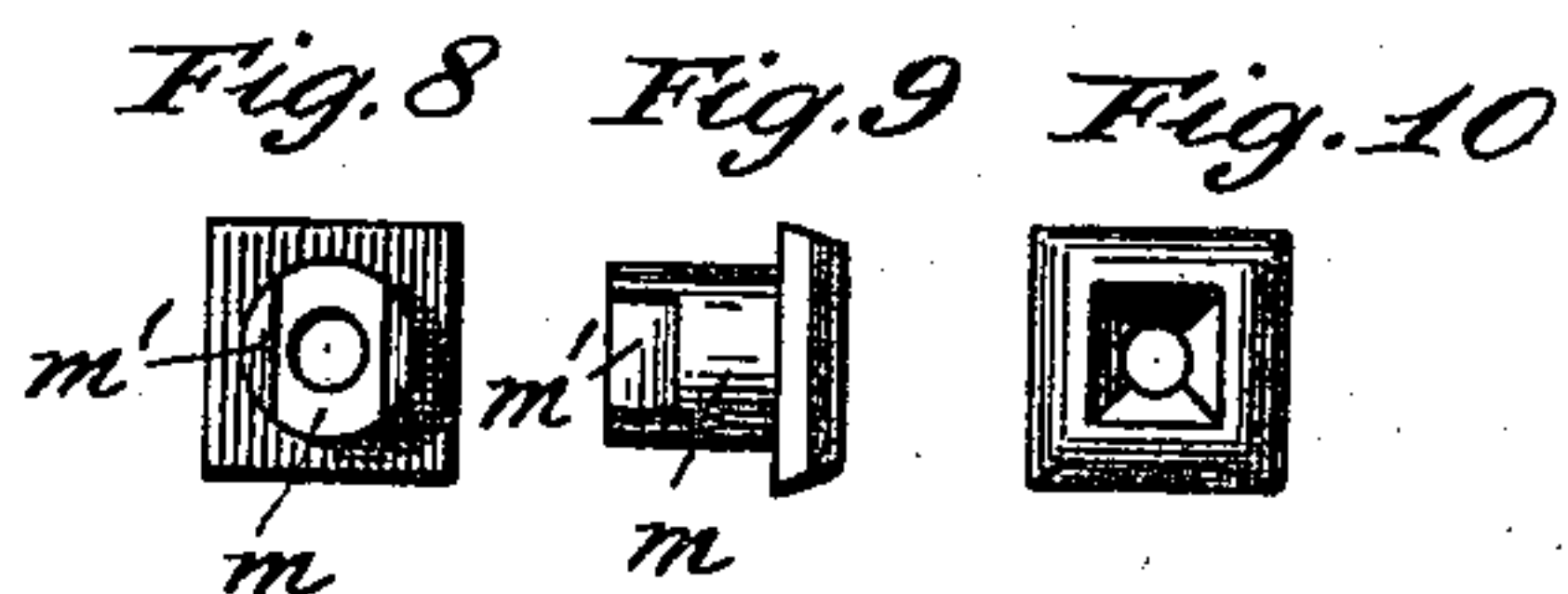
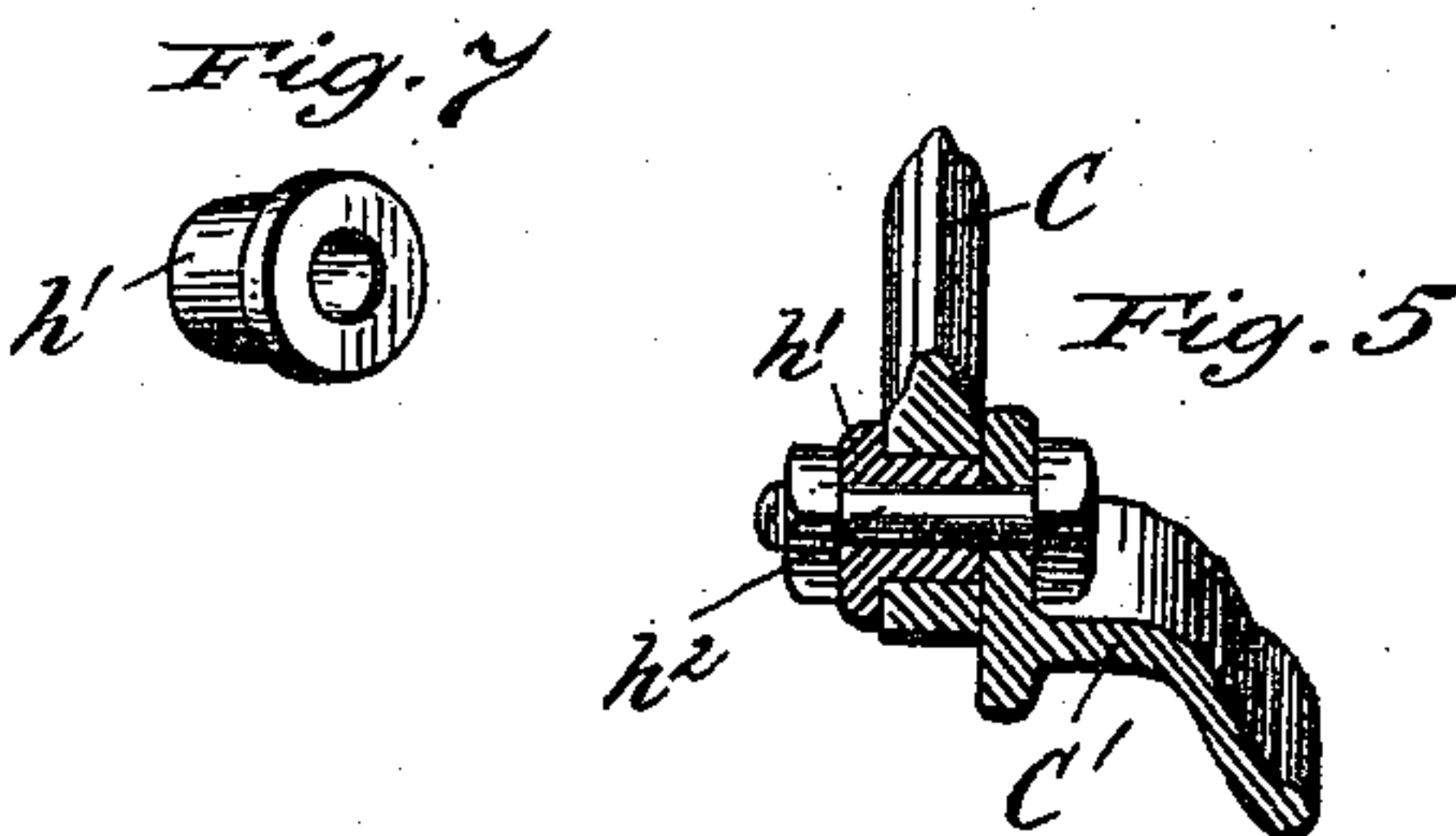
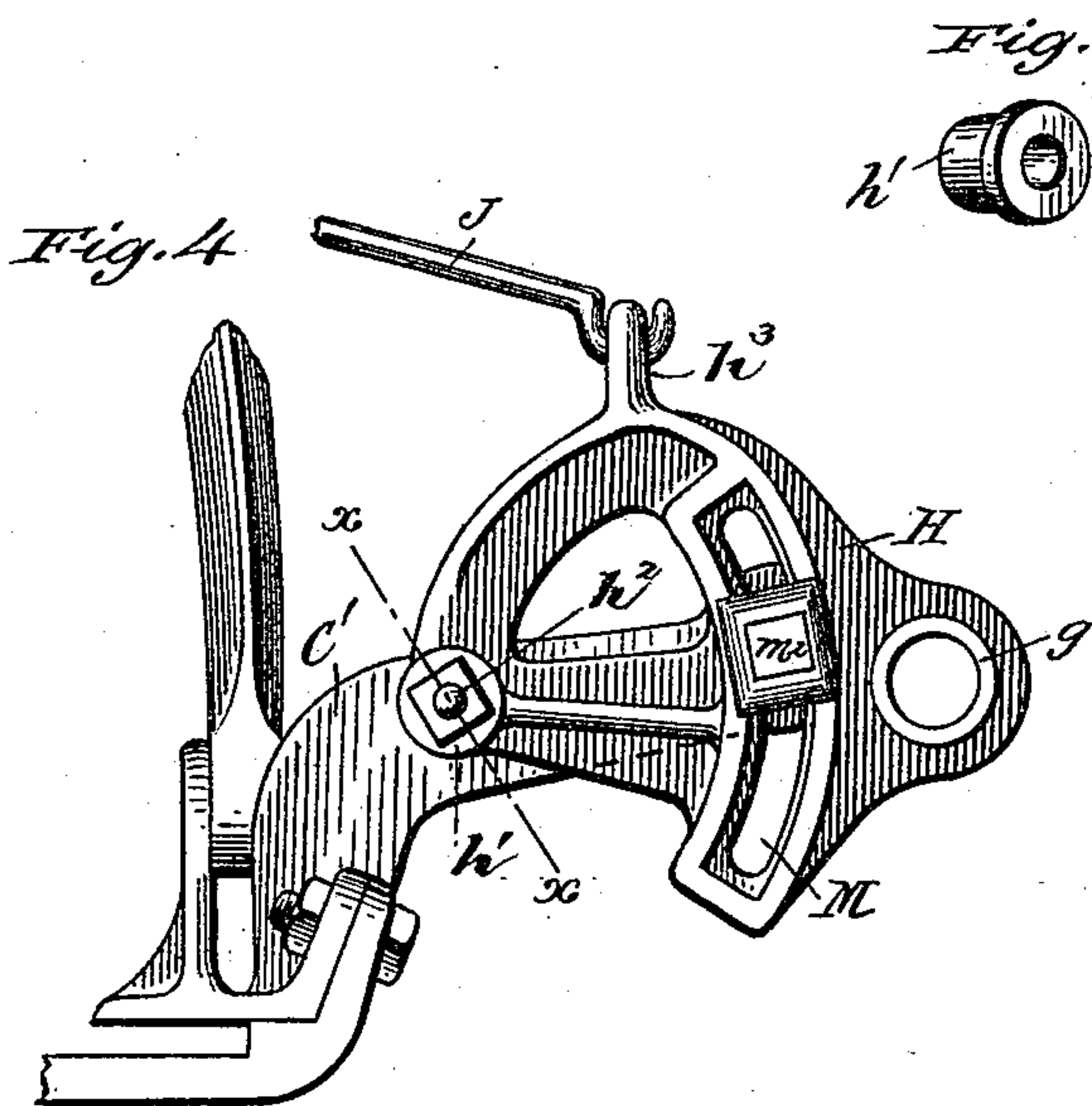
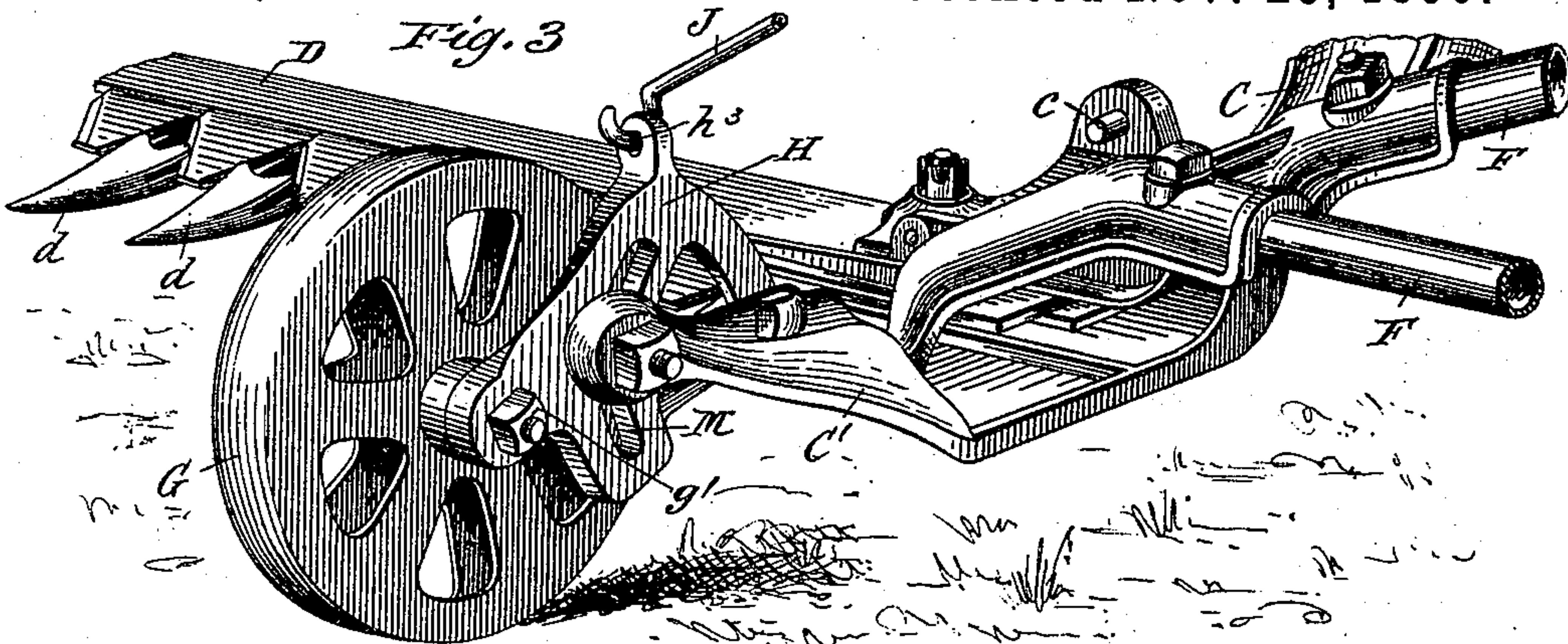
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2 Sheets—Sheet 2.

G. H. BARTLETT.  
TILTING DEVICE FOR MOWING MACHINES.

No. 441,463.

Patented Nov. 25, 1890.



WITNESSES:  
*Walter W. Torrey*  
*Frank A. Bove*

INVENTOR  
*George H. Bartlett*  
BY *Harold Parsons*  
his ATTORNEY.



# UNITED STATES PATENT OFFICE.

GEORGE HERMAN BARTLETT, OF HOOSICK FALLS, NEW YORK.

## TILTING DEVICE FOR MOWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 441,463, dated November 25, 1890.

Application filed February 24, 1890. Serial No. 341,560. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE HERMAN BARTLETT, a citizen of the United States, residing at Hoosick Falls, county of Rensselaer, State of New York, have invented certain new and useful Improvements in Tilting Devices for Mowing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention has for its object to provide a simple and effective tilting apparatus, and one which may be economical to manufacture. In mowing-machines the main frame is, as a rule, pivoted upon the axle of the carrying or driving wheels and is supported at its forward end by a lead-wheel.

My invention consists in pivoting an arm on the lead-wheel stud connecting this pivot-arm to the shoe and to an adjusting-lever mounted on the main frame, whereby the pivot-arm may be rocked on the lead-wheel stud, and consequently the points of the guards tilted up or down, the main frame rocking on the axle of the driving-wheel.

In order that others skilled in the art to which my invention relates may fully understand the same, I will now proceed to describe it with reference to the accompanying drawings, in which similar letters of reference indicate like parts, and in which—

Figures 1 and 2 are side elevations of so much of a mowing-machine as is necessary to illustrate my invention. Fig. 3 is a front perspective view of a portion of the main frame, the shoe, cutting apparatus, and connections of the lead-wheel and shoe. Fig. 4 is a side elevation of part of the main shoe and the pivot-arm. Fig. 5 is a section through line  $x x$ , Fig. 4. Fig. 6 is a side elevation of the pivot-arm. Fig. 7 is a perspective of a pivot-bearing. Figs. 8, 9, and 10 are rear, side, and front elevations of a bearing-stud.

A is one of the driving and supporting wheels, (shown in dotted lines in Figs. 1 and 2.) A' is the pole-frame, and A<sup>2</sup> the pole secured thereto.

B is the main frame pivoted on the axle  $a$ .

C is the shoe-support, forming a part of the main frame B, and C' is the shoe pivoted to the shoe-support at  $c c'$ . The finger-bar D, to

which the guard-fingers  $d$  are attached, is rigidly secured to the shoe C'.

F F are brace-rods forming a part of the main frame. 55

G is the lead-wheel and is journaled on the stud  $g$ , which is secured to or formed integral with the pivot-arm H. The stud  $g$  is formed hollow, and a securing-bolt  $g'$ , passing through the stud  $g$  and through the lead-wheel, secures the latter on the stud  $g$ . 60

The pivot-arm H extends rearwardly and is perforated at  $h$  to receive the bushing  $h'$ , and a bolt  $h^2$ , passing through the forward portion of the shoe C' and the bushing  $h'$ , secures the shoe to the pivot-arm H. The bushing  $h'$  forms a bearing for the pivotal connection between the pivot-arm and the shoe. The pivot-arm extends upwardly and is perforated at  $h^3$  to receive a connecting-rod J, the other end of which is connected to the tilting-lever K, pivoted at  $k$  on the main frame and provided with the spring detent mechanism  $k^2$ , to engage the segmental rack L, secured to the main frame. By means of the detent mechanism and segmental rack L the lever, and consequently the pivot-arm H, may be adjusted and held in any desired position. It is evident that by moving the lever K the point of the pivot-arm from which the shoe C' is supported will be raised or depressed, and that consequently the points of the guards will be tilted up or down according to the direction of movement of the lever K. 70

In order to prevent lateral movement of the shoe and pivot-arm, and consequently cramping of the parts when the guards are tilted, I extend the shoe beyond its pivotal connection to the pivot-arm and provide it with a segmental slot M, concentric with the pivotal connection of the pivot-arm H and the shoe C'. A hollow bearing-block  $m$ , having a flattened portion  $m'$ , fits into the segmental slot M, and a bolt  $m^2$ , passing through the bearing-block  $m$  and through the perforated forward end of the shoe, secures the parts in place and maintains the alignment of the shoe and pivot-arm. 75

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is— 100

The combination, in a mowing-machine, of

the pivoted main frame, the shoe secured thereto; a pivot-arm mounted on the axis of the lead-wheel, a pivotal connection between the pivot-arm and the shoe, a segmental slot  
5 in the pivot-arm concentric with the axis of the pivotal connection of the arm and shoe, a bearing-block on the shoe taking into the segmental slot, and an adjusting-lever mounted

on the frame and connected to the pivot-arm, substantially as and for the purpose specified. 10

In witness whereof I have hereto set my hand this 20th day of February, 1890.

GEORGE HERMAN BARTLETT.

Witnesses:

WALTER W. LOVEGROVE,

FRANK A. BOVIE.