

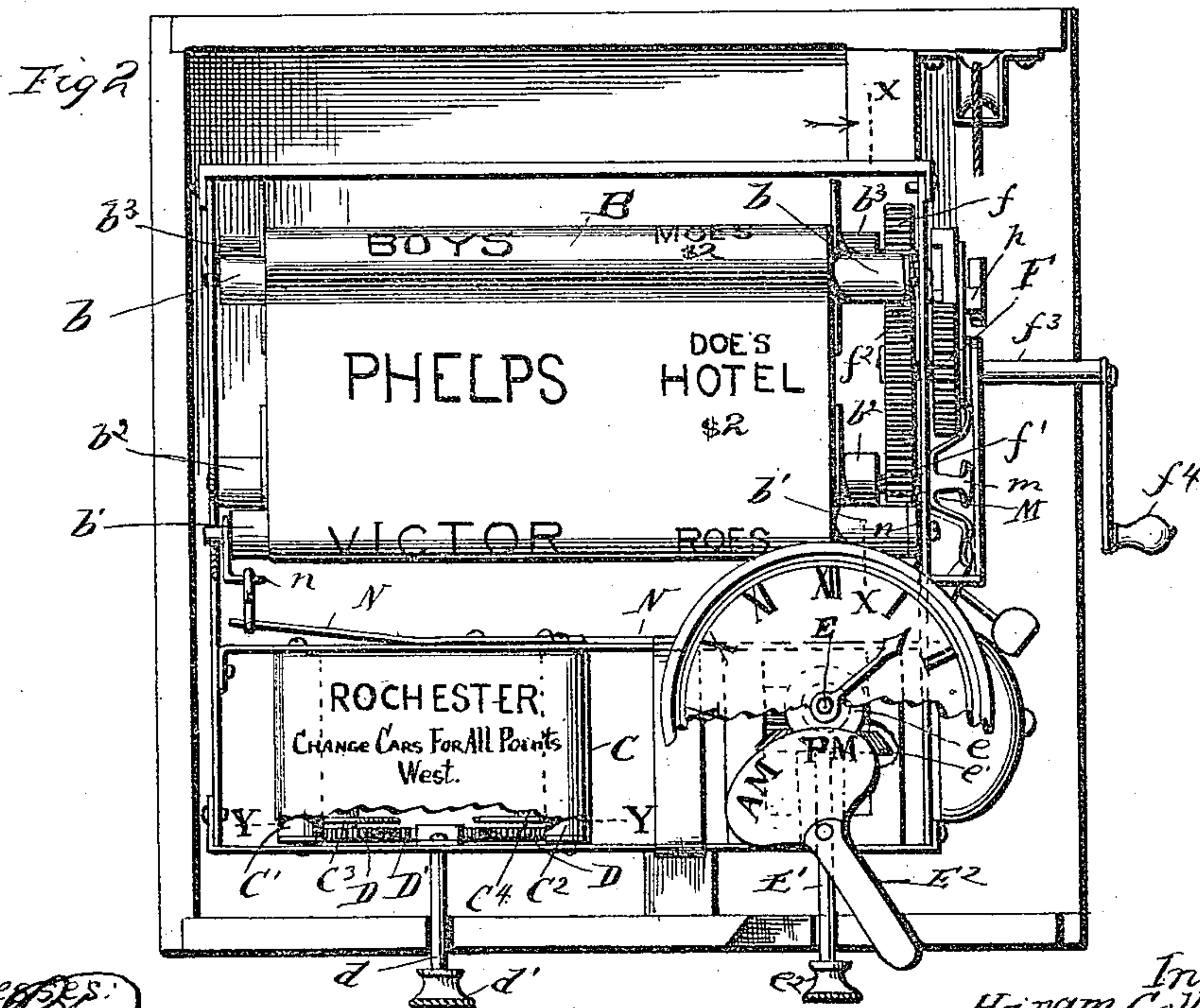
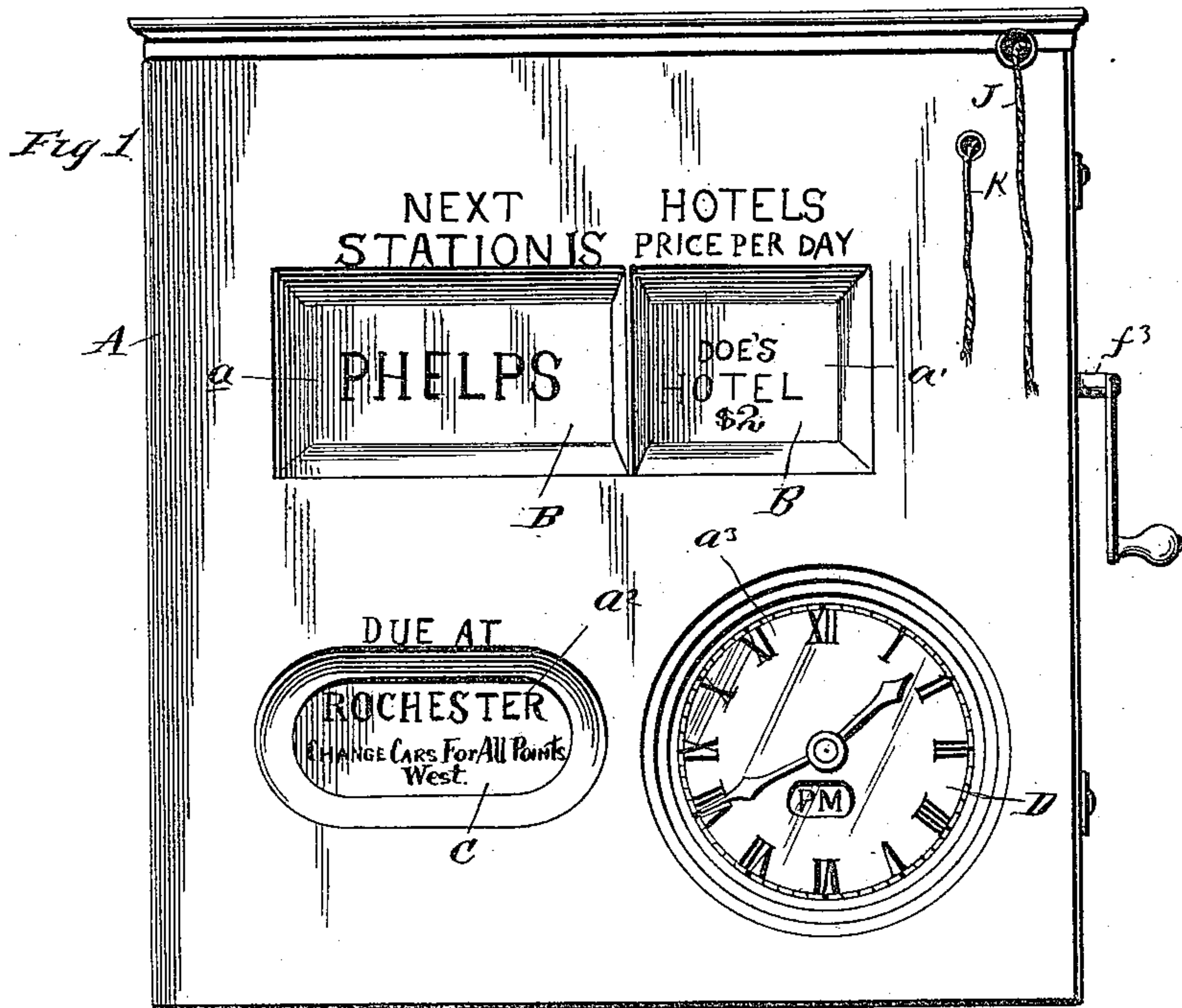
(No Model.)

2 Sheets—Sheet 1.

H. C. MAPES.
CAR REGISTER.

No. 442,527.

Patented Dec. 9, 1890.



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

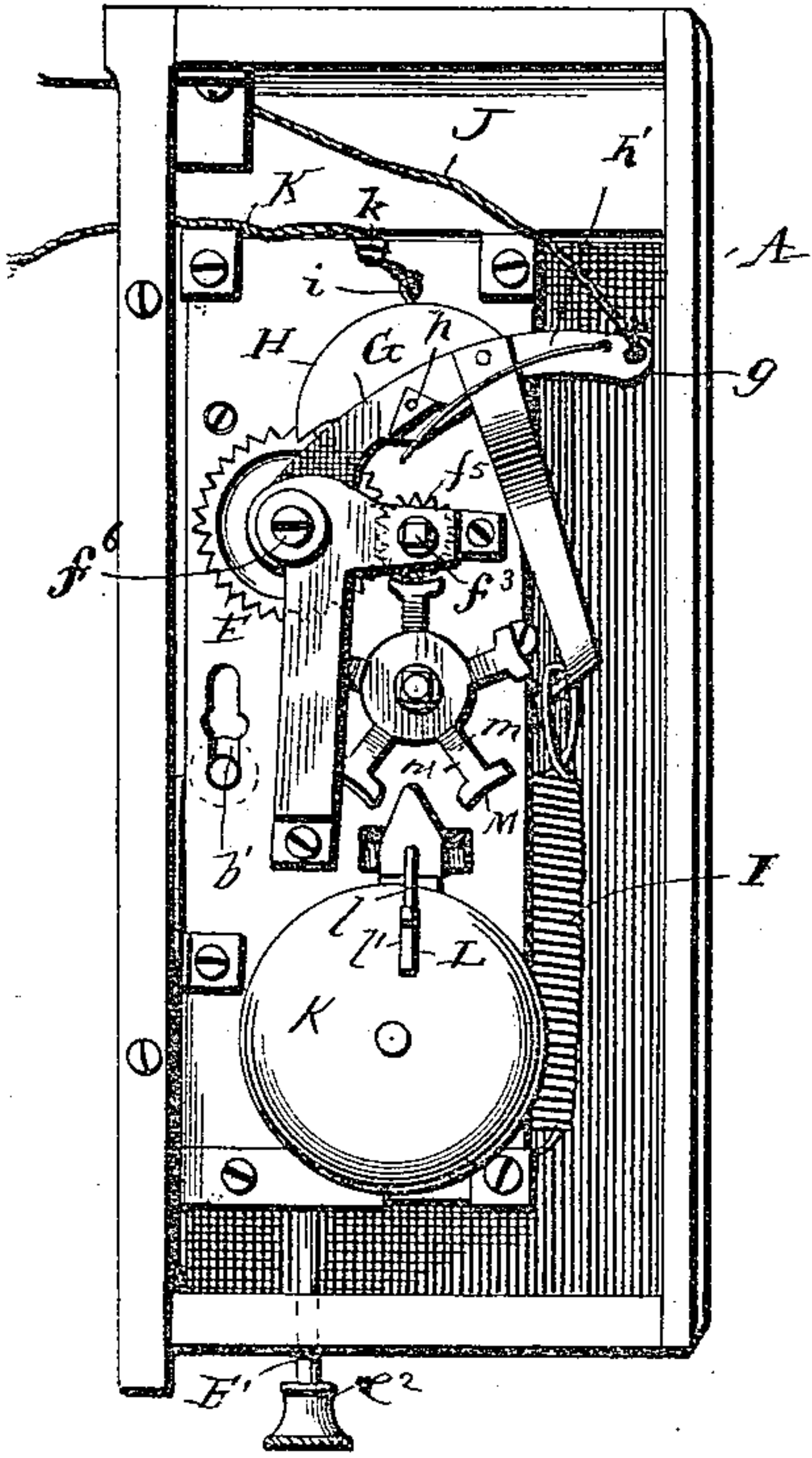


Fig. 4.

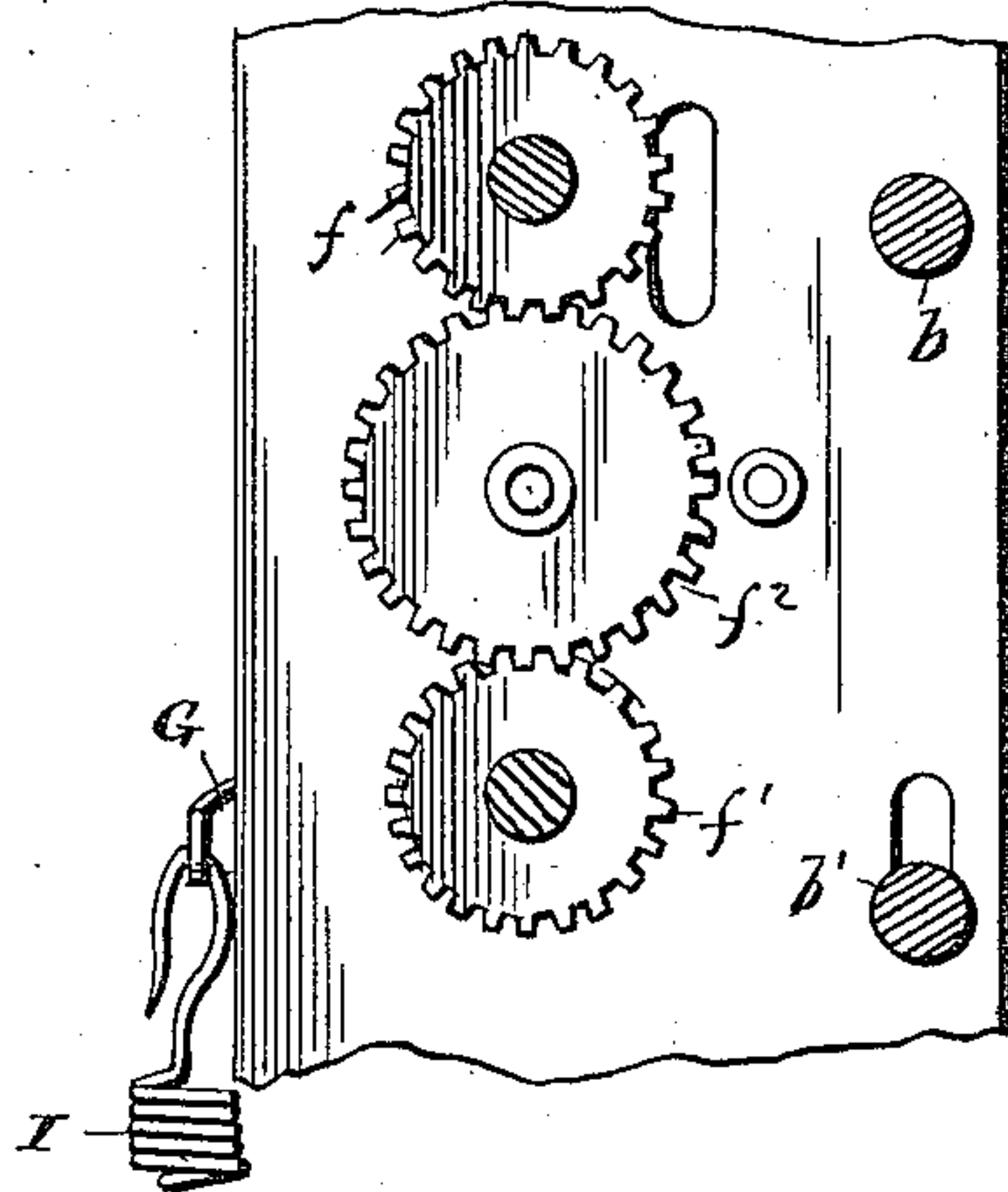


Fig. 5.

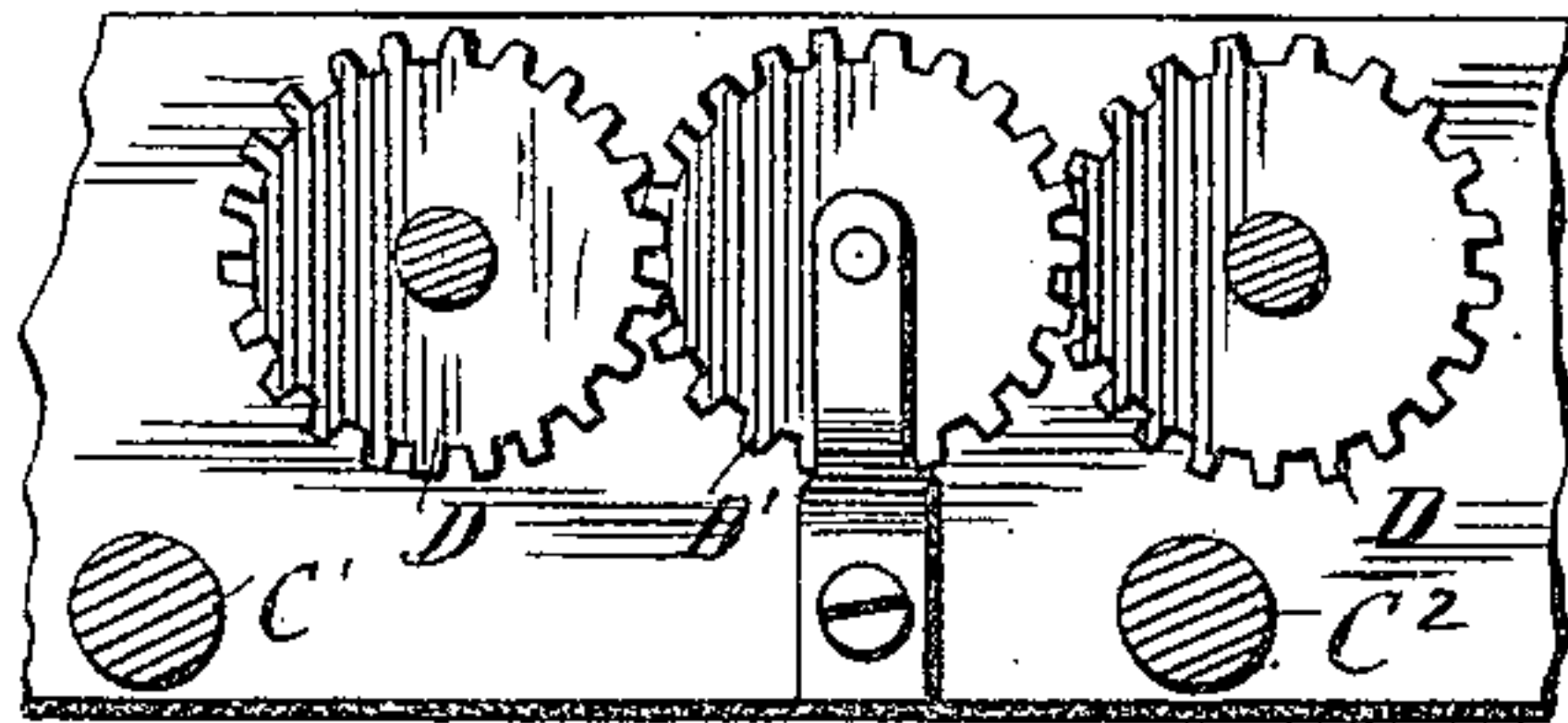


Fig. 6.

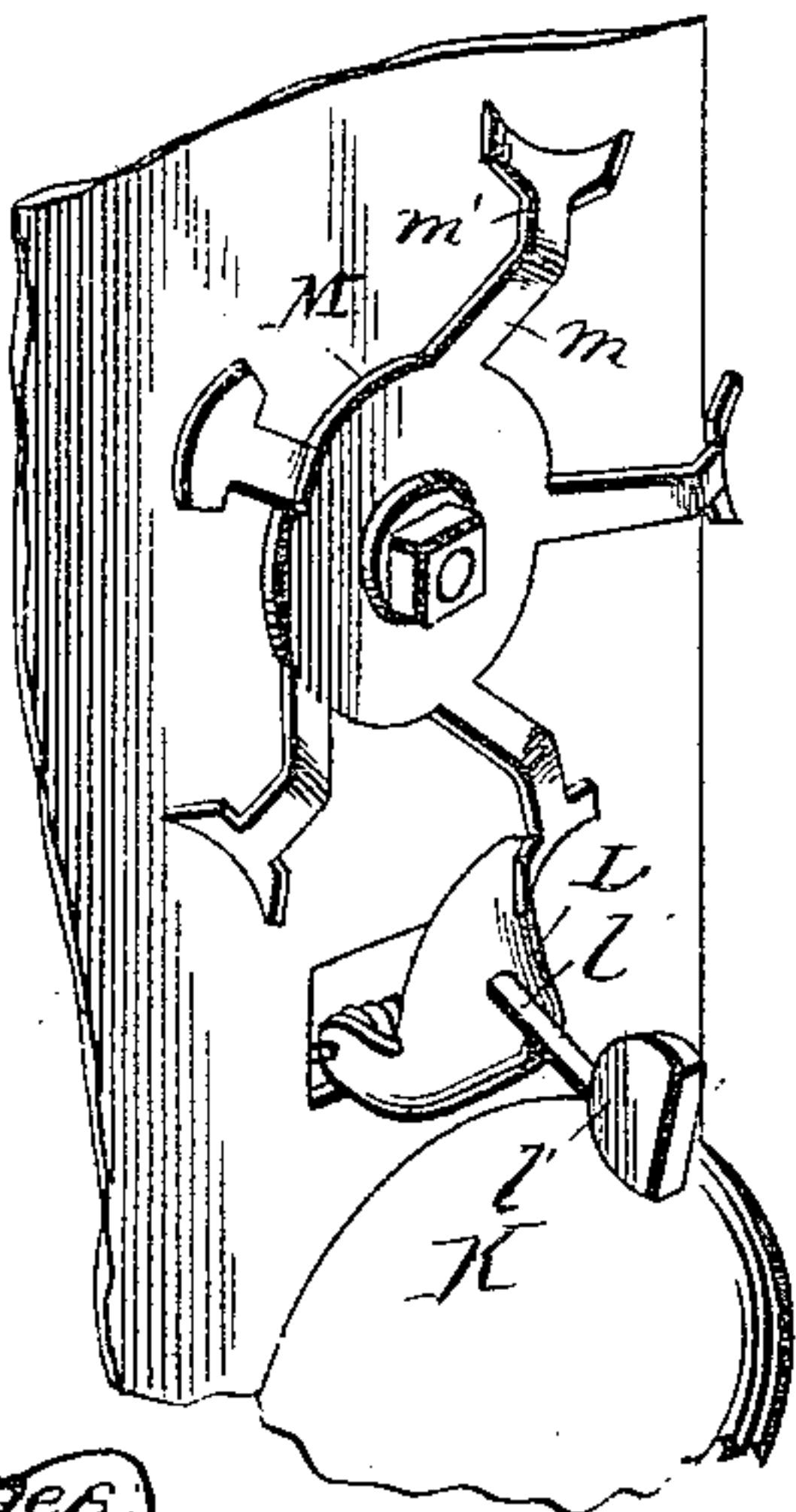
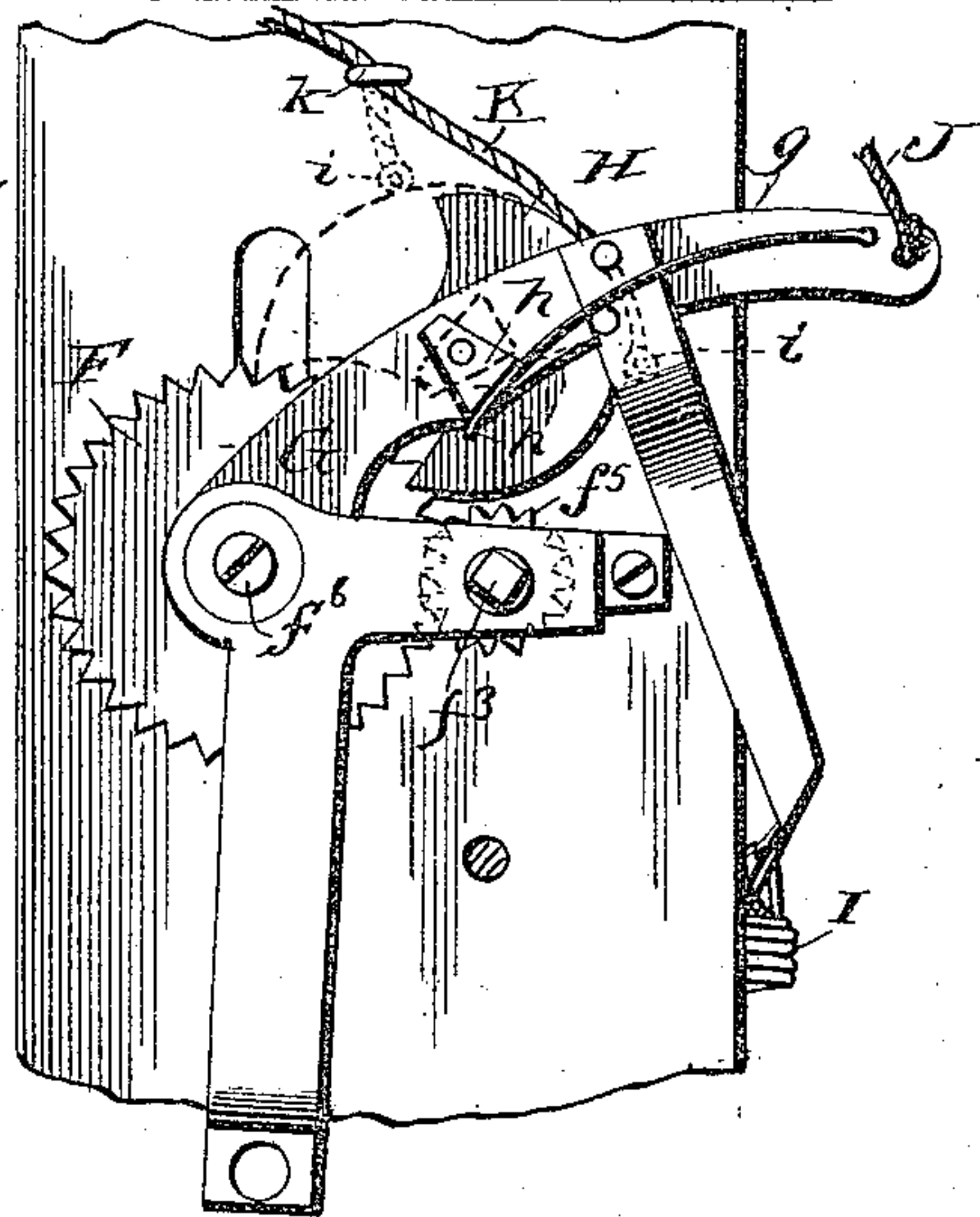


Fig. 7.



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HIRAM COLLINS MAPES, OF GORHAM, NEW YORK.

CAR-REGISTER.

SPECIFICATION forming part of Letters Patent No. 442,527, dated December 9, 1890.

Application filed November 16, 1889. Serial No. 330,592. (No model.)

To all whom it may concern:

Be it known that I, HIRAM COLLINS MAPES, a citizen of the United States, residing at Gorham, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Car-Registers; 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to registers and indicators for cars and public conveyances, and aims to provide a device for registering the cross-streets *en route*, the stations at which transfers are made, the time at which the car or other conveyance is due at such stations, besides acting in the capacity of an advertising medium to expose a new advertisement at each operation of the street-indicator.

The improvement consists of the novel features which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a front view of the device. Fig. 2 is a similar view, parts being broken away and the cover or door of the case being removed. Fig. 3 is an end view, the obverse end of the case being removed to show the operating mechanism. Fig. 4 is a section on the line X X of Fig. 2, looking in the direction of the arrow. Fig. 5 is a detail section on the line Y Y of Fig. 2, showing the mechanism for operating the station-indicating strip. Fig. 6 is a detail perspective view showing the tap-pet-wheel and the gong-tapper. Fig. 7 is a detail view of the operating-lever, showing the pawl the reverse of Fig. 3.

The case A is of suitable construction, and its front or door is provided with appropriate openings a , a' , a^2 , and a^3 , through which the strips B and C and the time-indicator D can be seen. The strip B, which is nearly the width of the case, passes over the rollers b and b' , and is adapted to be wound on the rollers b^2 and b^3 , and is provided with the names of the streets on the left-hand side, which names are read through the opening a , and with the

advertising matter on the right-hand side, which is read through the opening a' . The strip C, provided with the names of the stations, passes over guide-rollers C' C^2 , and is adapted to be wound on the rollers C^3 and C^4 . These rollers have gear-wheels D, which are in mesh with the third or idle wheel D' , the latter being keyed to stem d , which extends outside of the case and is provided with the thumb-button d' .

The time-indicator is composed of the dial, hands, and hands-gearing of an ordinary clock, excepting that the hands-staff E is provided with a miter gear-wheel e , which meshes with a corresponding miter gear-wheel e' on the shaft E' , which protrudes through the side of the case and is provided with the thumb-button e^2 . In order to designate whether the time is ante or post meridian, the dial is provided with an opening, through which the characters "P. M." and "A. M." are exposed, said characters being provided on a lever E^2 , which extends beyond the side of the case, to be grasped and operated by hand.

The rollers b^2 and b^3 are provided with gear-wheels f and f' , which mesh with a third wheel f^2 , from which extends the shaft f^3 through the side of the case, and which is provided with the crank f^4 and the pinion f^5 , the latter meshing with the ratchet-wheel F. Thus it will be seen that the strip B can be operated in either direction by turning the crank f^4 in the required direction. However, it is not always expedient to operate the crank. Hence other means are provided for turning the shaft f^3 and operating the street and advertising strip, which in the present case consist of the lever G, which is mounted on the shaft f^6 , the reversible pawl H, and the retracting-spring I, which is connected to the arm g of the lever and is fastened at its other end to frame-work. The pull-cord J is connected with the lever G and extends within convenient reach. The pawl-reversing cord K is connected with the reversible pawl H, and, like cord J, extends within convenient reach. The pawl H is double-ended, either end being adapted to be brought in engagement with the ratchet-wheel F, and its pivot extends through lever G and is provided with the bearing-block h , on which the free end of the spring h' presses and holds

the pawl in engagement with the said ratchet-wheel F, the opposite end of the spring h' being connected with the lever G.

The gong-bell K is sounded by the tapper L, which comprises the pivoted arm l and the hammer l' . The tappet-wheel M is mounted on the projecting end of the roller b^2 , and its arms m curve outwardly and terminate in short cross-bars m' , which curve in their circumferential length. When the strip B is moved, the tappet-wheel M also turns and sounds the gong, thereby attracting the attention of the passengers.

The guide-roller b has its journals projected through slots in the frame-work and provided with brackets n , to which the free ends of the springs N are connected. These springs N pull down on the brackets n , carrying the guide-roller b with them, thereby preserving a tension on the strip B.

The pawl H is reversed in the following manner: The lever G being at the limit of its movement, as shown in Figs. 3 and 7, the connection of the reversing-cord K with the pawl at i is to one side of a perpendicular line passing through the guide k . Hence a pull on the cord K will reverse the pawl H, as shown by

the dotted lines in Fig. 7. Obviously, when the pawl is in the position shown by full lines in Fig. 3, the lever G can be operated by pulling on either cord J or K, as the points i and k are not in the same perpendicular line. To reverse the pawl H, the cord J is pulled upon until the point i is carried to the left of a perpendicular line let fall from the guide k , and, still holding the cord J, cord K is drawn upon, when the position on the pawl H will be reversed.

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

The combination, with the roller b^2 , means for rotating the said roller, and the gong, of the tappet-wheel having its arms curving outward and provided with short cross-bars which curve in their circumferential length, the tappet l , and the hammer l' , substantially as set forth.

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

HIRAM COLLINS MAPES.

Witnesses:

L. PHILLIPS,
WM. PRATT.