

(No Model.)

V. A. KREPPS.

ELECTRICAL MAIL INDICATOR.

No. 358,360.

Patented Feb. 22, 1887.

Fig. 1.

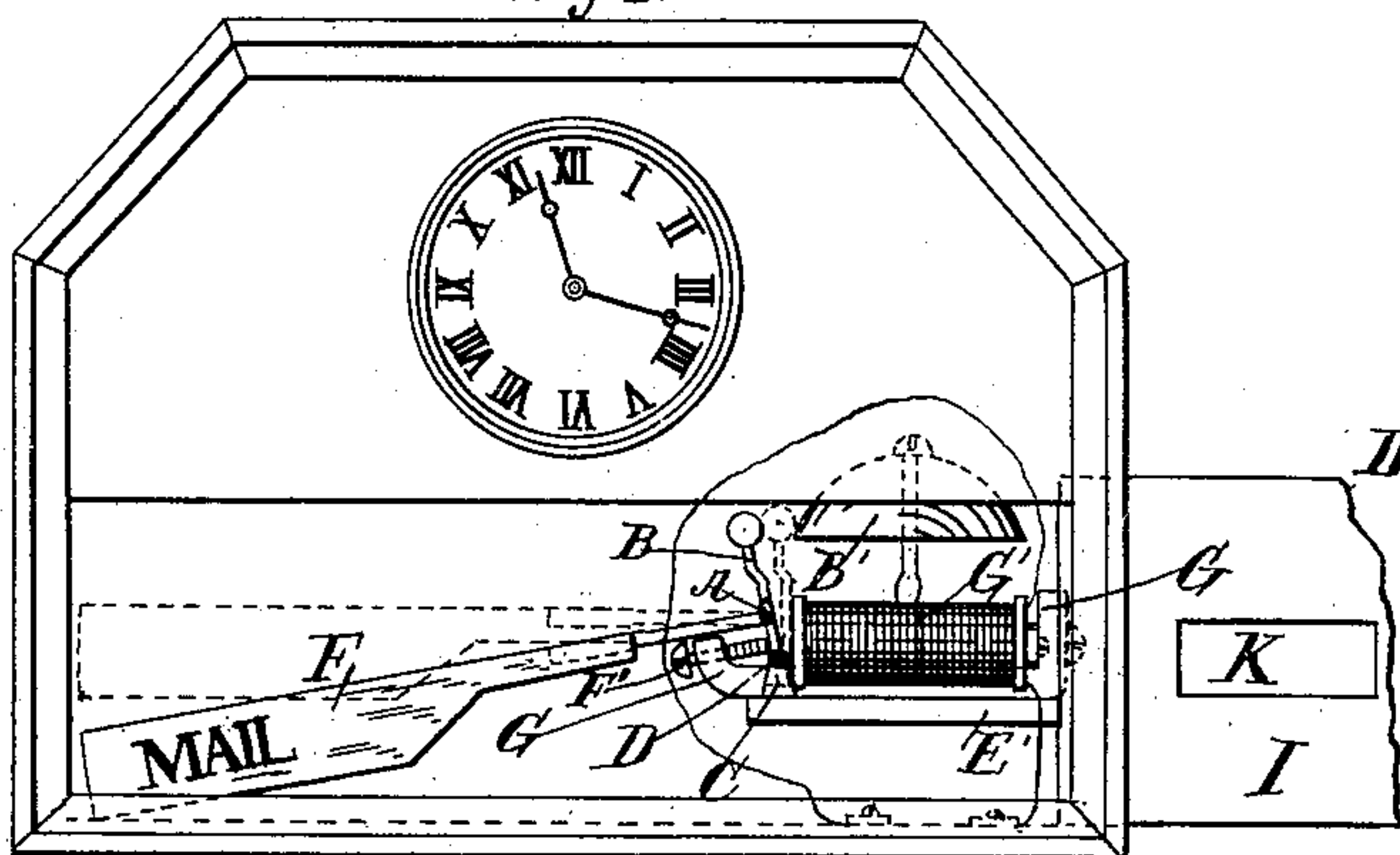


Fig. 2.

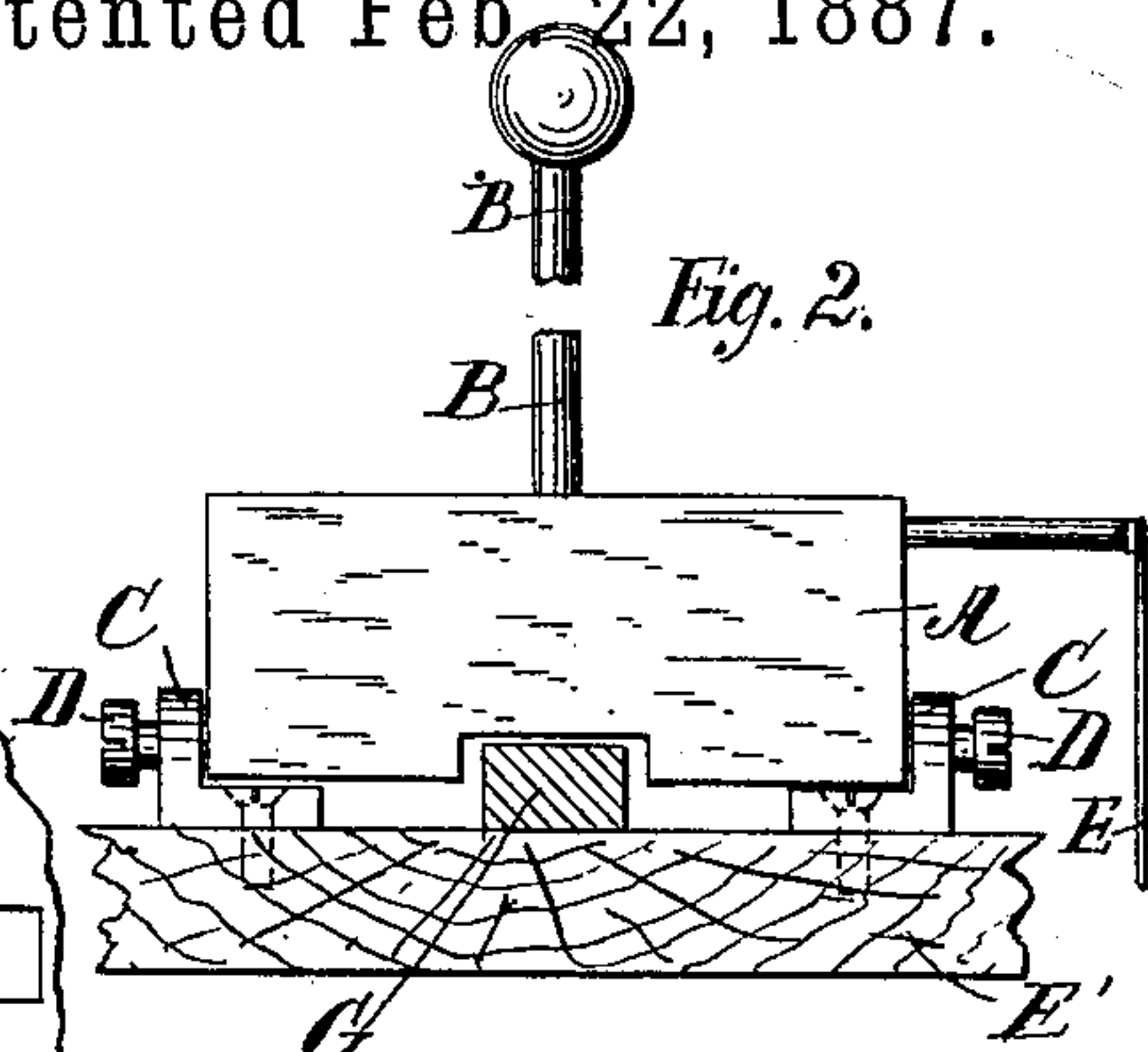


Fig. 4.

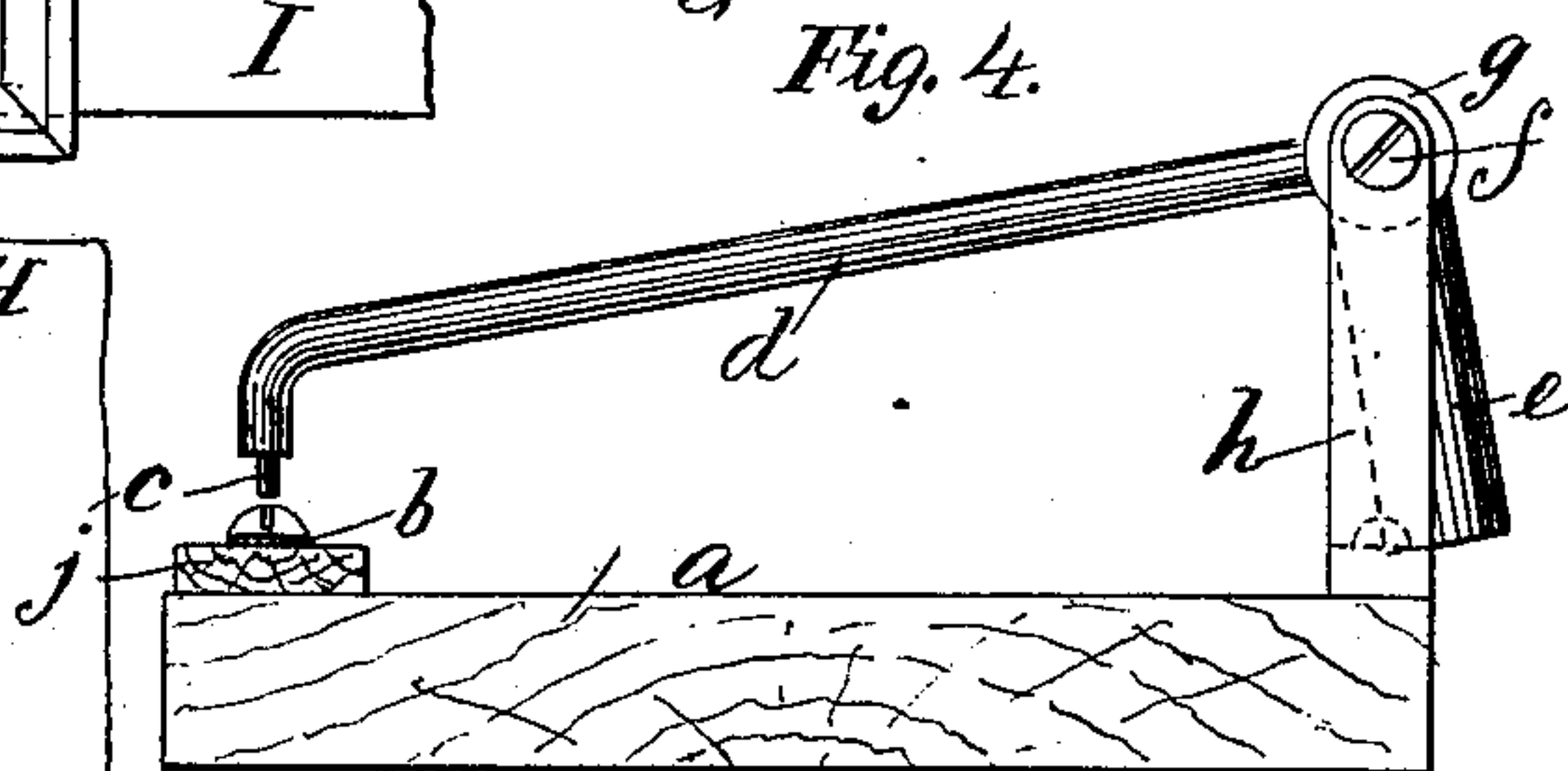


Fig. 3.

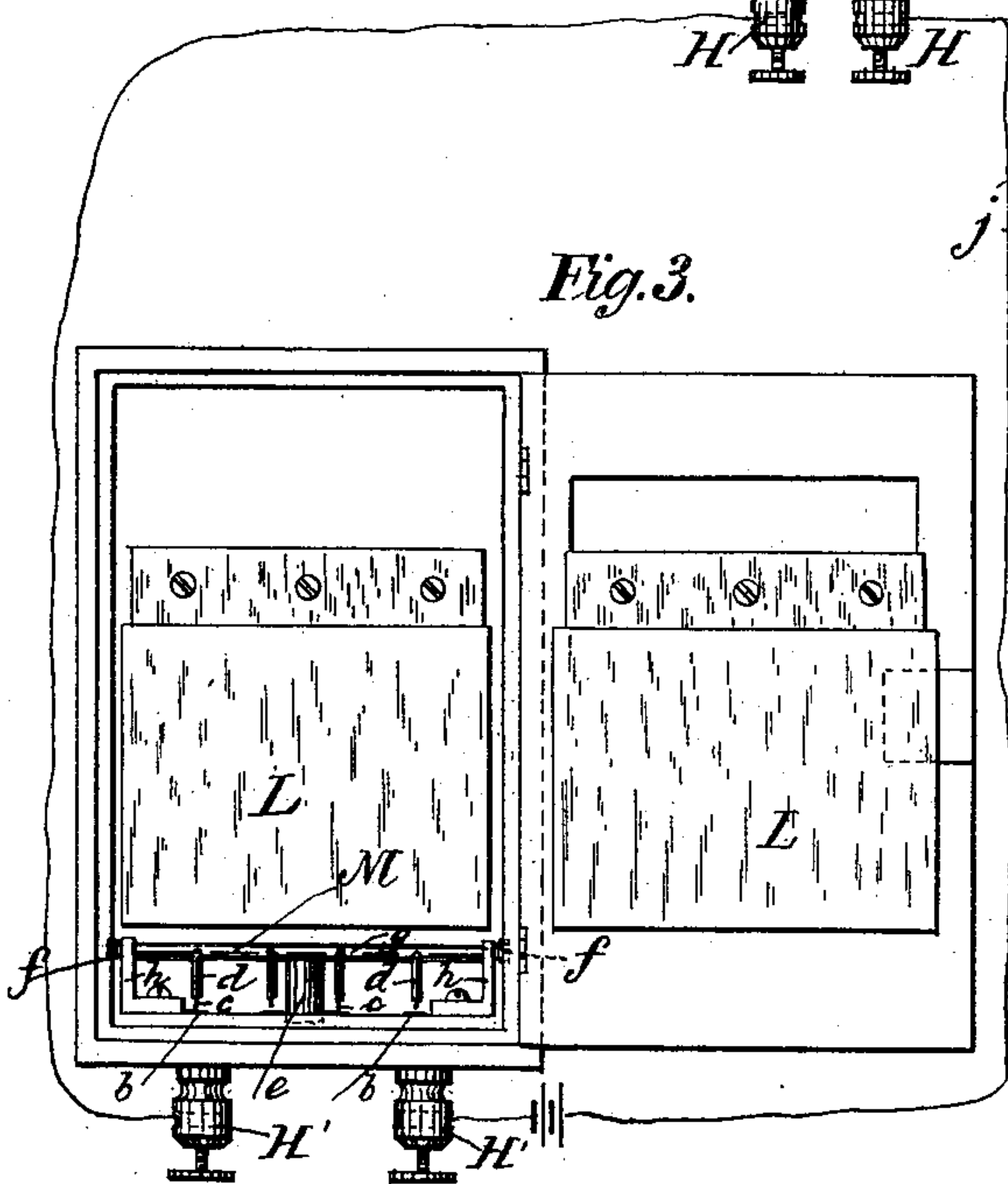
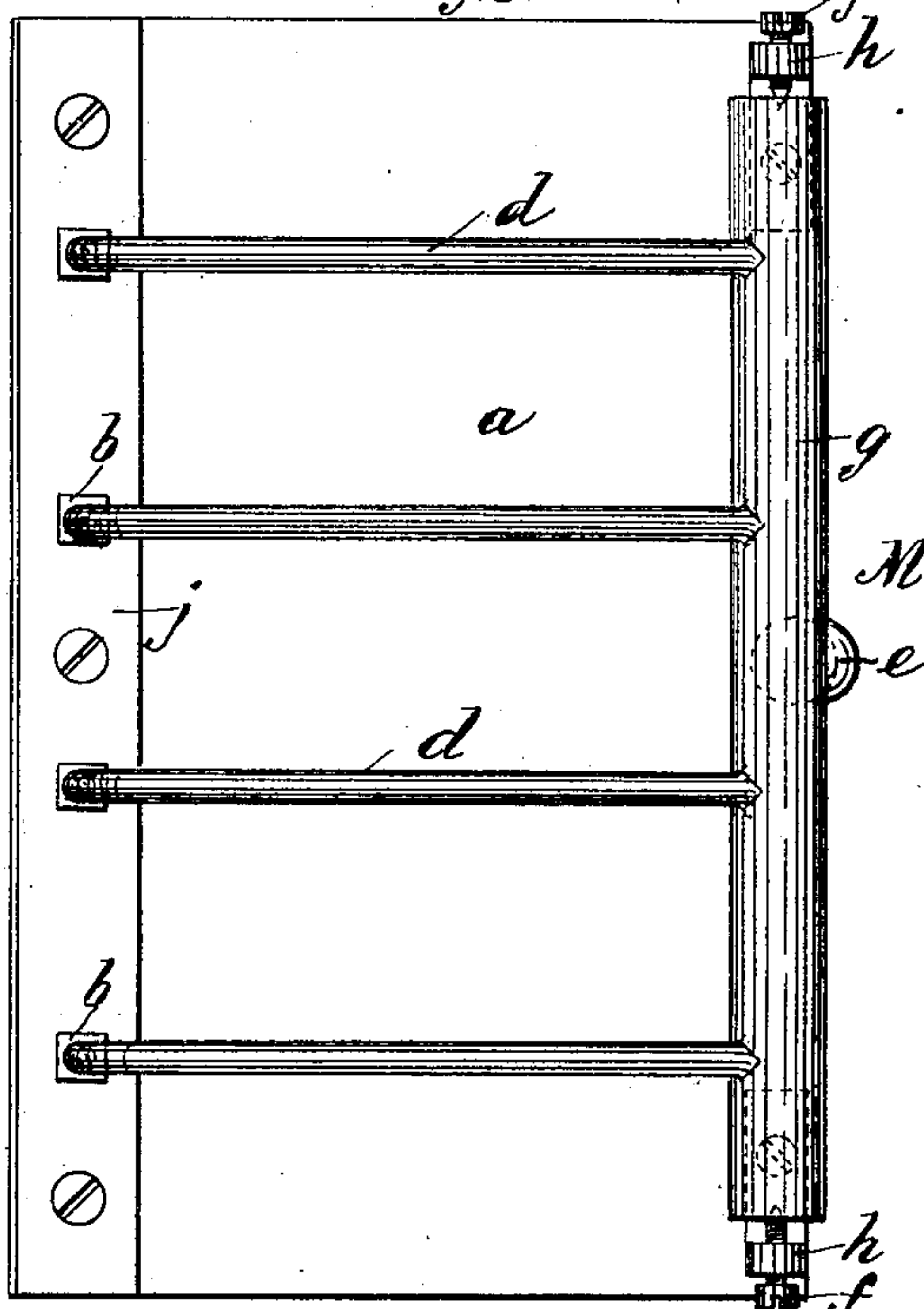


Fig. 5.



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UNITED STATES PATENT OFFICE.

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ELECTRICAL MAIL-INDICATOR.

SPECIFICATION forming part of Letters Patent No. 358,360, dated February 22, 1887.

Application filed May 12, 1886. Serial No. 201,898. (No model.)

To all whom it may concern:

Be it known that I, VIRGIL A. KREPPS, of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Electrical Mail-Indicators, of which the following is such a full, clear, concise, and exact description as will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention has for its object the construction of a suitable indicator which will, whenever a letter is dropped into the mail-box, show that there is mail in the box for the person in whose office or room the indicator is placed.

This invention is intended more particularly for use in office buildings, apartment houses, and residences which have a letter-box into which the postman drops the mail for the person whose box it is.

In the drawings, Figure 1 is a front view of the indicator-case, which in this figure is shown as also containing a clock. The slide of the case is represented as being drawn nearly out, so as to expose the interior connections to view. Fig. 2 is a detailed view taken at right angles to Fig. 1, and shows the mail-indicator lever and connections on an enlarged scale. Fig. 3 represents the letter-box when open, and shows the metallic inclines L L, which form a chute for the letters when the door of the box is closed. In this figure the mail-rack which makes the electric circuit appears in front view. Figs. 4 and 5 are respectively an end view and a plan of the letter-rack, the front view of which is shown in Fig. 3, such end and plan views being on an enlarged scale.

In the drawings similar reference-letters indicate corresponding parts.

A represents a thin metallic cross-piece within the indicator-case.

B is a lever-arm carrying a gong-hammer, and B' represents a gong.

C represents lugs or brackets to which the cross-bar A is pivoted. These brackets are secured by screws to a base, E.

D represents the pivot-screws by which the cross-bar A is pivoted to the brackets C.

F is the mail-indicator lever, which extends from the side of the cross-bar A.

G is the metallic support, to which an electro-magnet, G', is secured at one end, and at the other end this support G has an adjust-
ment or limitscrew, F', which limits the downward motion of the lever F.

H H represent binding-posts holding wires from which the electric current is conveyed to the indicator.

I represents a slide having an opening, K, which exposes the indicator to view when there is any mail in the box.

In Fig. 3 the rack M is shown in the lower part of the mail-box, which is constructed of a balance-rod, *g*, the ends of which are pivoted by the screws *f* to brackets *h*, which are screwed to the bottom of the box. This rod has extension-arms *d d*, and is balanced by a weight, *e*. The outer ends of the extension-arms are bent, as shown in Fig. 4, and upon these ends a small platinum wire, *c*, is secured. These platinum wires connect when the circuit is closed, the platinum contact-piece *b* (shown in Figs. 4 and 5) being secured to the cross-piece *j*. The platinum contact-pieces *b* connect with the wires secured by the binding-posts H' H', one of which is connected with a battery (shown in Fig. 3) and with one of the binding-posts of the indicator-case.

When the door of the letter-box is closed, the metallic inclines L L, one of which is secured inside to the back of the back wall thereof and the other to the inside of the door, together form a chute for the mail when it is put through the opening in the letter-box. The mail as it is put in is directed by this chute to the rack M, and as it strikes the rack the weight thereof will be sufficient to overcome the weight *e*, which counterbalances the extension-arms of the rod *g*, and the effect will be to tip the extension-arms down far enough to cause the platinum wires *c* and the ends of these arms *d* to come in contact with the contact-pieces *b*, and thus the circuit will be closed and the electrical current will pass to the indicator and raise the lever F, while at the same time the gong will ring. The mail-indicator will then remain stationary until the letters or other mail is removed from the letter-box, and during all the time that the letter-box contains any mail the indicator will be exposed to view through the opening K of the slide I. When the mail is removed from

the letter-box, the indicator-lever F will be dropped again and disappear from sight.

I have shown the indicator-case as being made to inclose a clock, because if one be absent from his office or room when the mail is dropped into the letter-box he will not hear the ringing of the gong, but would be likely to look at the clock to see the time of day upon his return, and his attention would at once be directed to the fact that there was some mail for him. This form of indicator, however, is not absolutely essential to my invention, as I may vary it by dispensing with the clock entirely, or it may be constructed in a different form—as, for instance, instead of having the lever behind the slide, as shown, an opening could be made in the lower part of the case, and a button or other device passed out of the opening by the electrical current when the mail was deposited in the box. There are also other forms of indicators which would answer the purpose and be equally adapted to use. The form of the rack M is not essential either, as any form of device which would, by the weight of the mail, make the electrical contact by which an indicator would be exposed to view can likewise be used.

In practice I locate the indicator in the room most used by the party for whom it is constructed, and the letter-box may be placed in the hall of an office, building, or at the side of the door or other convenient place of an apartment or dwelling-house.

The advantages derived from the use of a mail-indicator which, by the gravity of the

mail, will show that the postman has been around are considerable, because it often happens that the postman has to ring the bell and wait for some one to open the door if no regular letter-box is used, and where letter-boxes are used it also often happens that through forgetfulness or negligence the mail remains in the box for a considerable time after its delivery; but in the use of an electrical indicator the postman does not need to wait, nor does the mail remain longer than is necessary, and if the party be in his room or office he is instantly warned of the delivery of the mail, and hence the conveniences of such a contrivance are apparent.

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

In combination with an indicator, a letter-box having secured therein posts *h h*, rod *g*, pivotally connected with said posts, weight *e*, secured to said rod, one or more arms, *d*, extending from said rod, and being provided at the outer end thereof with contact piece or pieces *c*, said letter-box being also provided with contact piece or pieces *b*, corresponding to those on the arms *d*, and electrical connections adapted to operate the indicator when said pieces *c* and *b* are brought into contact with each other, substantially as described.

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