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J. C. SMITH & J. S. DAVIS.
TIME INDICATOR FOR LETTER BOXES.
APPLICATION FILED OCT. 13, 1905.

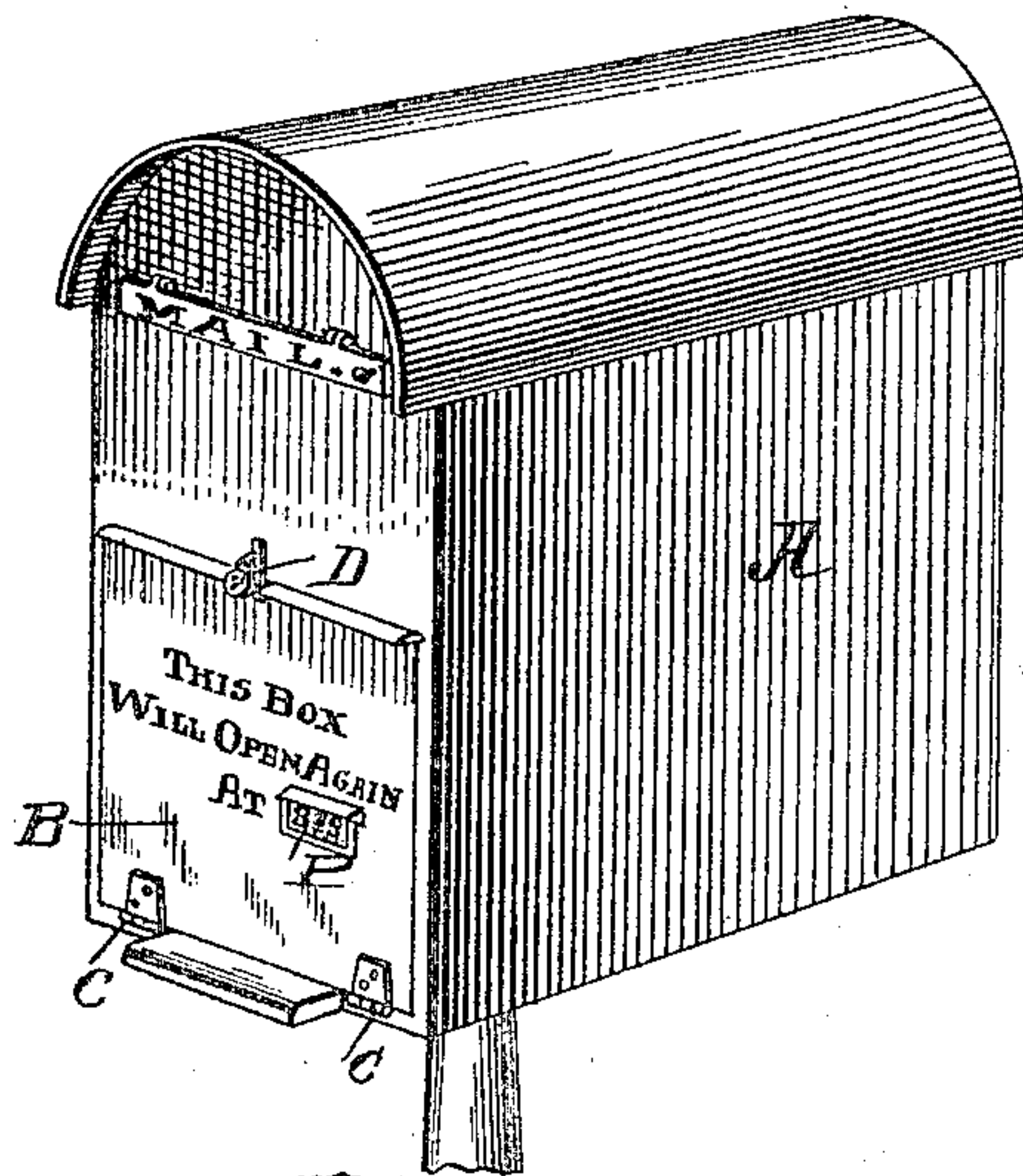


Fig. 1

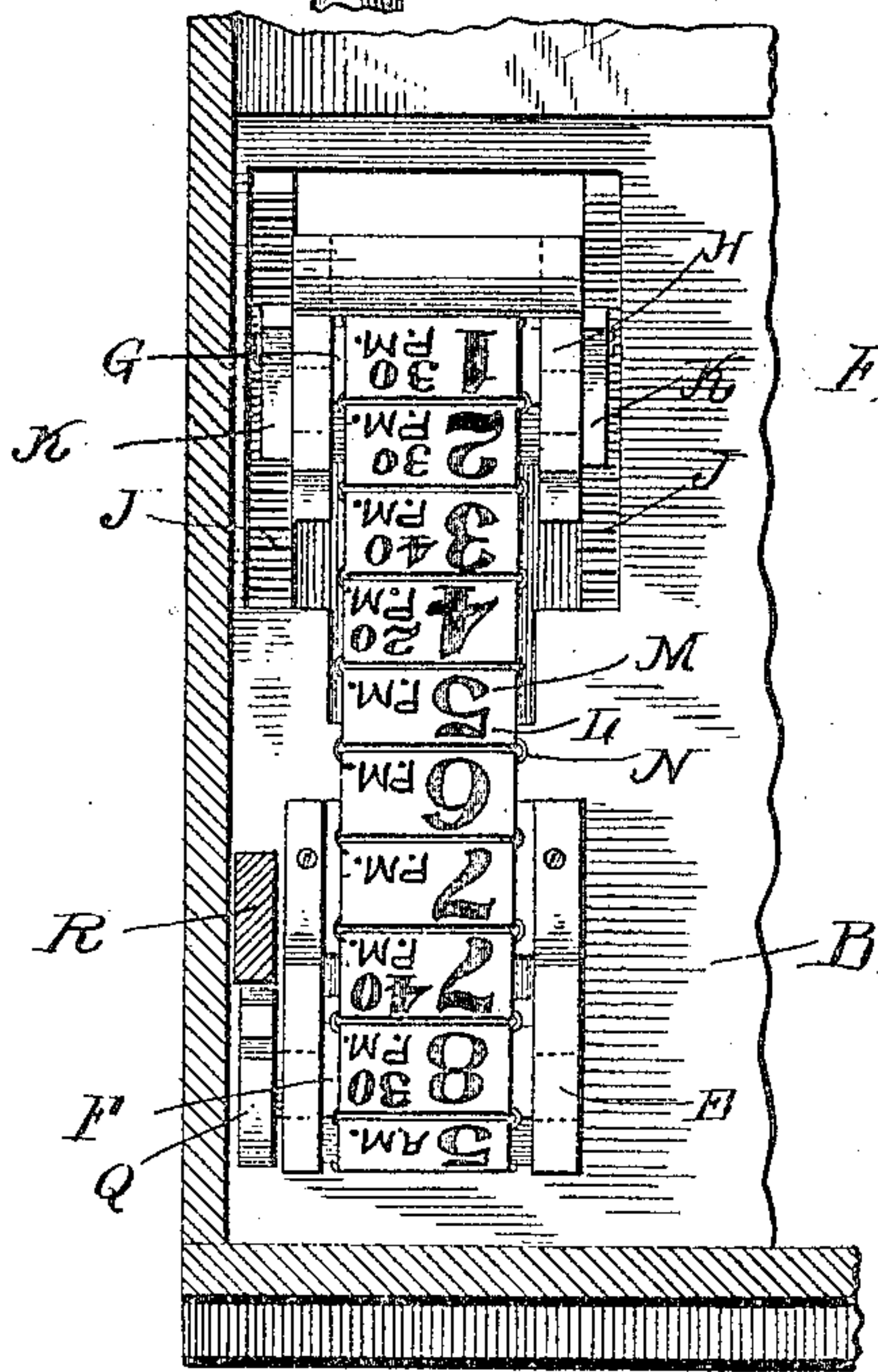


Fig. 4

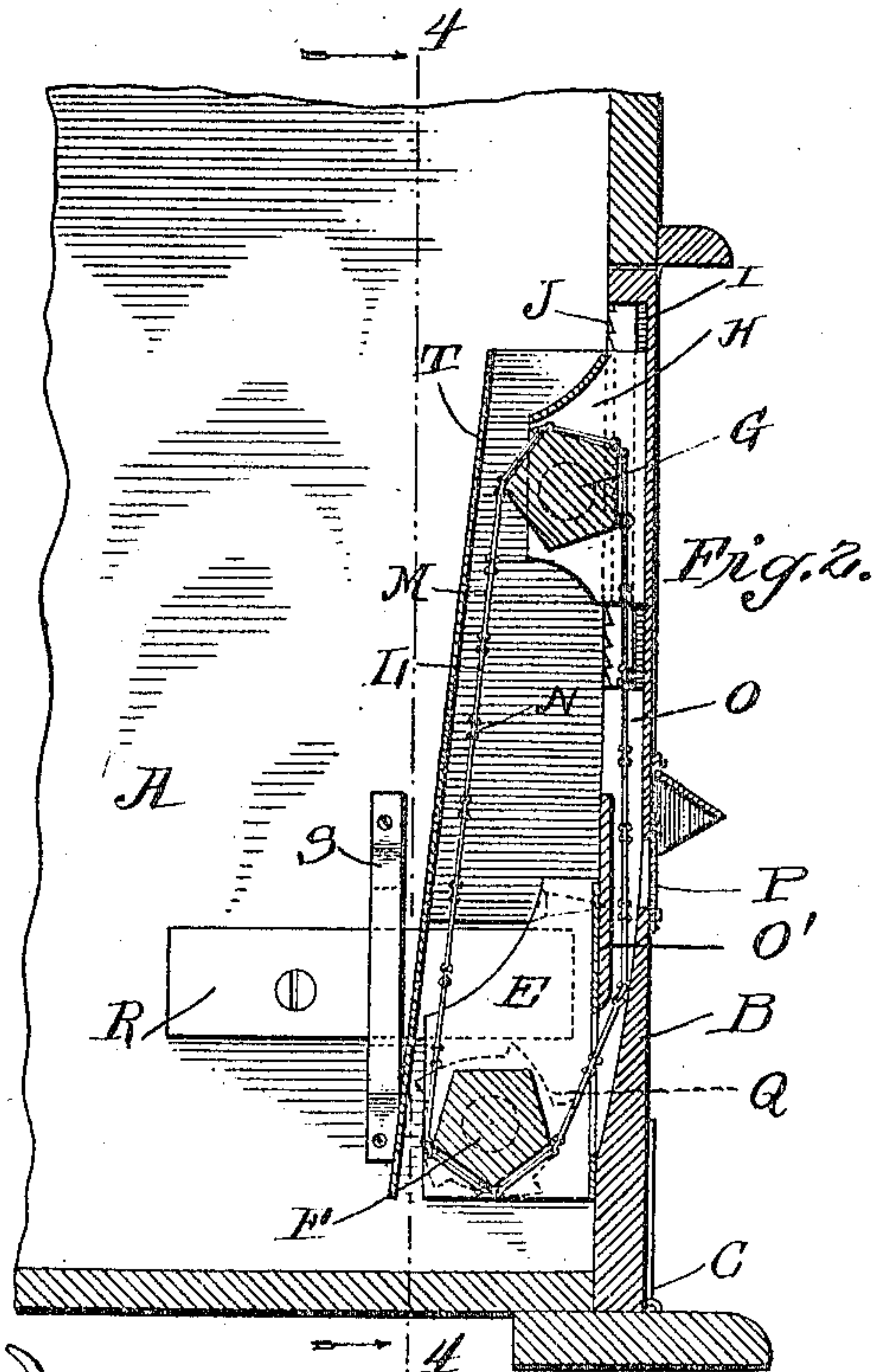


Fig. 2.

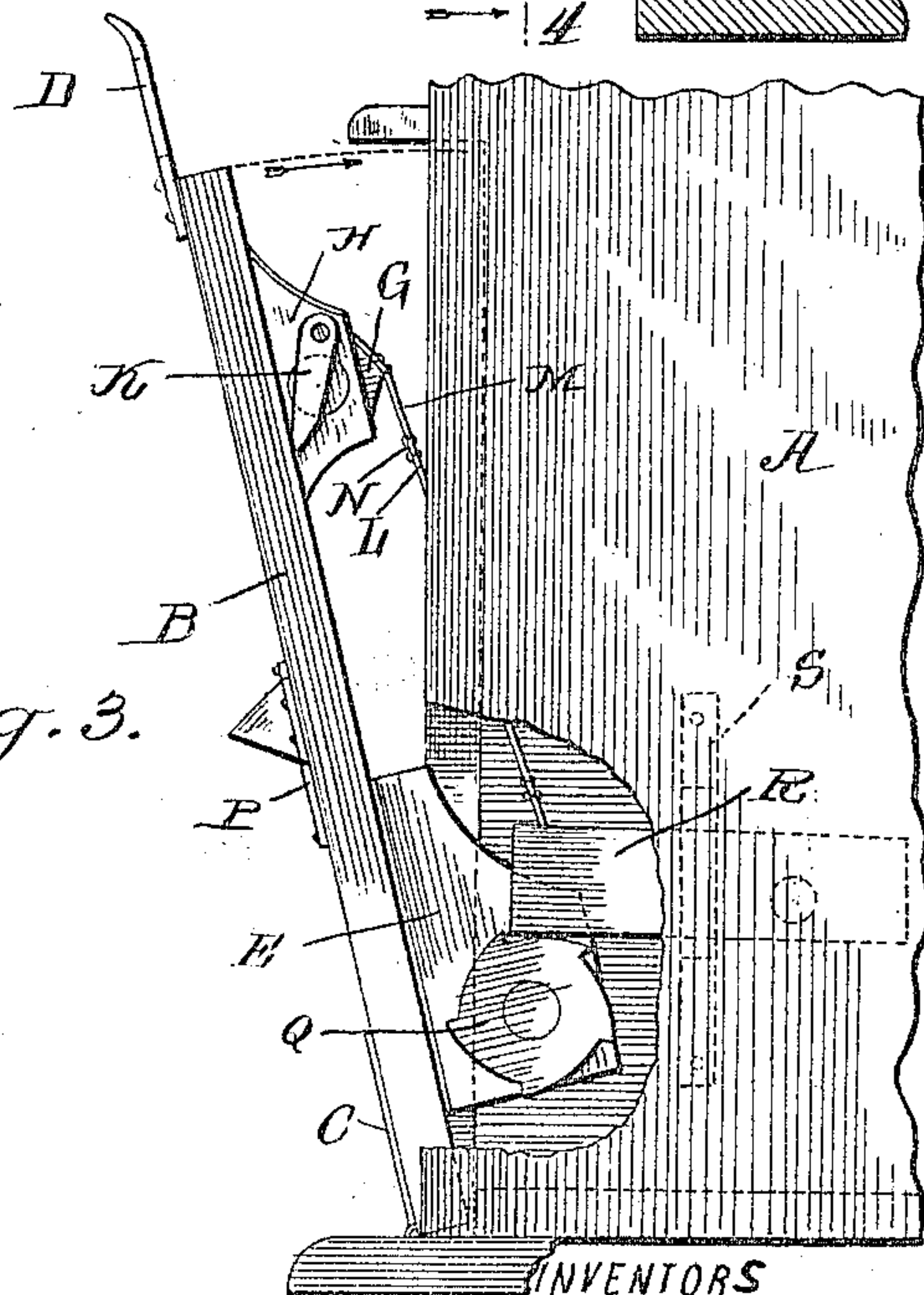


Fig. 3.

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UNITED STATES PATENT OFFICE.

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TIME-INDICATOR FOR LETTER-BOXES.

No. 812,692.

Specification of Letters Patent.

Patented Feb. 13, 1906.

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To all whom it may concern:

Be it known that we, JAMES CRAIG SMITH and JOHN SHADERICK DAVIS, citizens of the United States, and residents of Montgomery, in the county of Montgomery and State of Alabama, have invented a new and Improved Time-Indicator for Letter-Boxes, of which the following is a specification.

Our invention relates to means on a letter-box for indicating the time at which the letters are collected, and has for its object an indicator of the character stated which will be automatically operated, displaying the next time of collection upon simple closure of the letter-box door.

The invention consists of the special construction, arrangement, and combination of parts hereinafter fully described, and shown by the accompanying drawings, the novel features being pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a letter-box with our invention applied thereto. Fig. 2 is a vertical sectional view through a broken-away portion of a letter-box, the section being taken through the novel mechanism employed by us and the view illustrating its application to the letter-box door. Fig. 3 is an exterior view of the portion of the box shown in Fig. 2. In the view the letter-box door is illustrated part way open and the box side shown broken away near its lower or hinge edge. Fig. 4 is a sectional view taken on line 4 4 of Fig. 2 and looking at the rear side of the box-door as indicated by the arrows.

In the practice of our invention we may employ any suitable letter-box A having a door B, the latter being hinged to the box along its lower edge C and provided at its upper edge with any suitable locking device D. On the rear side of the door B we fixedly arrange brackets E, with the same adapted for providing rotatable support for a polygonal drum F—that is to say, the drum ends have bearing in suitable sockets or openings formed in the brackets E, as will be understood.

G denotes a drum similar to the drum F, with the same having rotatable end bearings in brackets H. The latter brackets are arranged on the door B suitably near its free or upper edge, as shown in Fig. 2, and made adjustable in a guideway I on the box-door.

The upper surface of the guideway I is provided with a series of ratchet-teeth J.

On the upper bracket H we arrange a pawl K, whose free end is adapted for engaging the ratchet-teeth J, and thereby supporting the brackets H to a vertical adjustment.

L denotes an endless band arranged on the drums F G, the same consisting of a series of plates M, hingedly secured together in flat arrangement by any suitable loop or other device N, substantially as shown in Fig. 4.

Upon reference to Fig. 2 it will be noticed that the rear side of the door of the box is channeled at O and provided with a bridge O'. The channel is constructed to receive the adjacent side of the endless band L and the bridge O' designed for proper guiding of the band-plates M closely in rear of an opening or window P in the door.

In further carrying out of our invention we provide a ratchet-wheel Q on one extended end of the drum F. (Shown by dotted lines in Fig. 2 and full lines in Fig. 3.) The ratchet-wheel is located suitably for engagement of its teeth by a dog R, pivoted to the inner side of the letter-box, substantially as shown in Figs. 2 and 3, and the dog's engaging end is supported for proper engagement of the ratchet-wheel by any suitable keeper S.

According to our invention there should be twelve plates M in the endless band L and the same marked on their outer sides "1:30 P. M.," "2:30 P. M.," to "12 o'clock" following or other hours and fractions thereof, substantially as illustrated in Fig. 4.

The construction of our invention will be understood from the above description. In its use it is obvious that when the letter-collector opens the door B for removal of letters from the box A upon closure of the box-door, as indicated by the arrow in Fig. 3, the forward or free end of the dog R will engage the teeth of the ratchet-wheel Q, and thereby effect rotation of the drum F. It is further obvious that this action will impart movement of the endless band L, drawing its plate successively to position in rear of the door-window P, exposing the time, as denoted on the band-plate M, when the mail will be again collected.

Now it will be understood that with our invention the letter-carrier need go to no further trouble for proper setting of the indi-

cator than the mere act of closing the box-door, and as the devices employed are automatic and sure of action much time is saved thereby over the setting action of any other
5 similar indicators known to us.

The mechanism on the box-door may have any suitable cover T, substantially as shown by Fig. 2.

Having thus described our invention, what
10 we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a suitable box having a hinged door constructed with a suitable window, of drums spacedly supported on the inner side of the door, an endless band on the drums having indicating characters thereon, adapted for display
15 through said window, a ratchet-wheel on one of the drums, and a dog secured to the inner side wall of the box, the dog being adapted for engagement with the ratchet-wheel teeth, and for rotation of the adjacent drum upon closure of the box-door, substantially as described.

25 2. The combination with a letter-box having a hinged door, and the latter provided with a suitable window, of indicating mechanism consisting of a drum supported by brackets fixedly located on the rear side of

the box-door, a similar drum supported in
30 brackets adjustably secured to the same side of the box-door, a pawl on the latter brackets, rack-teeth on the door, the same being located for engagement by the pawl, a ratchet-wheel on one of said drums, and a dog on the inner side of the box, the same being arranged for
35 engaging the ratchet-wheel teeth, substantially as described.

3. The combination of a letter-box door having a suitable window, of indicating mechanism employing a fixedly-located drum, an adjustable similar drum, a pawl in connection with the latter drum, and rack-teeth on the door, whereby to secure the second drum as adjusted, an endless band on said drums, the
40 band consisting of a series of connected plates having time characters marked thereon, a ratchet-wheel on one of said drums, and a dog on the letter-box, the same being arranged for engaging the ratchet-wheel teeth
45 upon closure of the box-door, substantially as described.

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