

(No Model.)

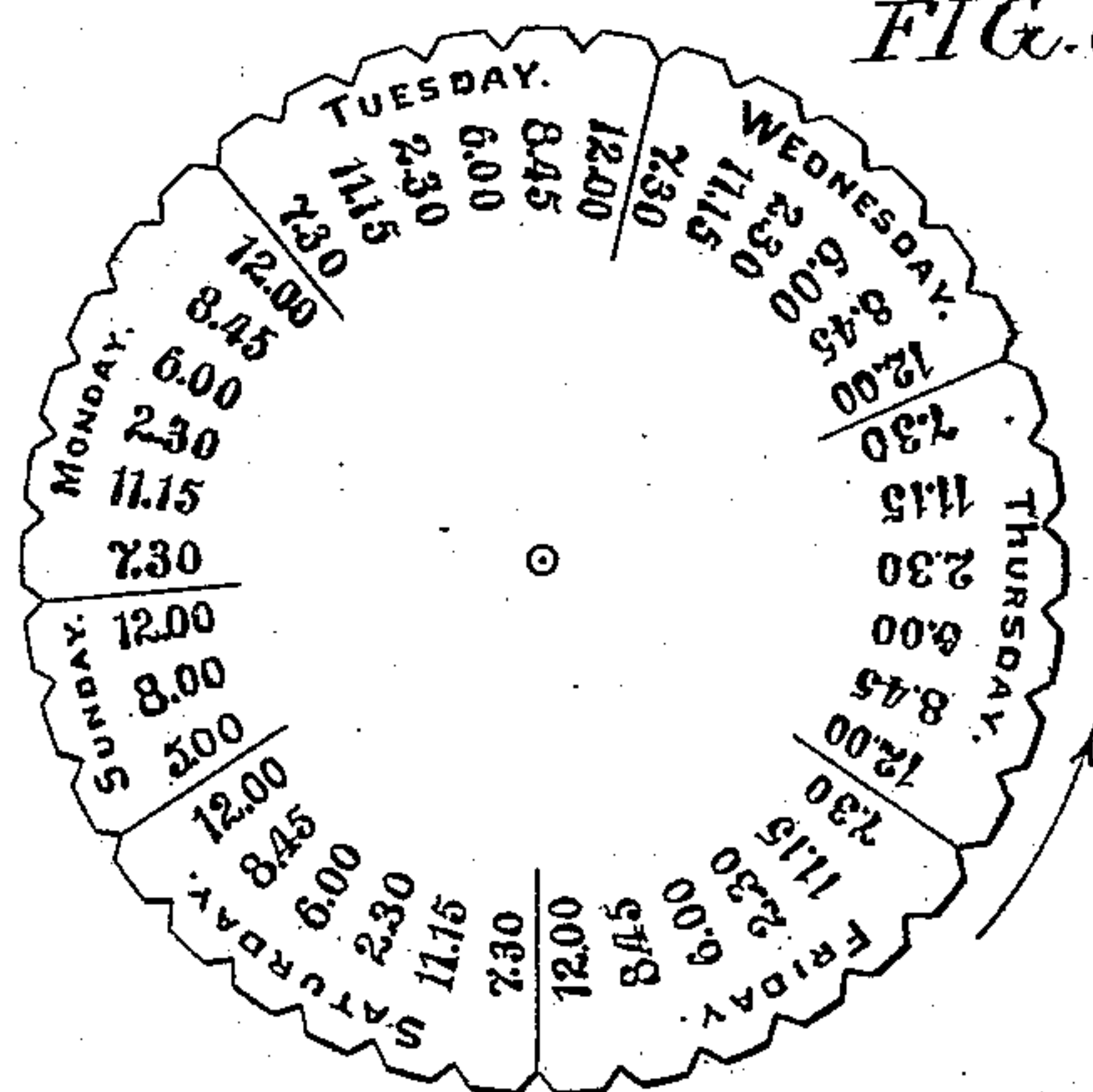
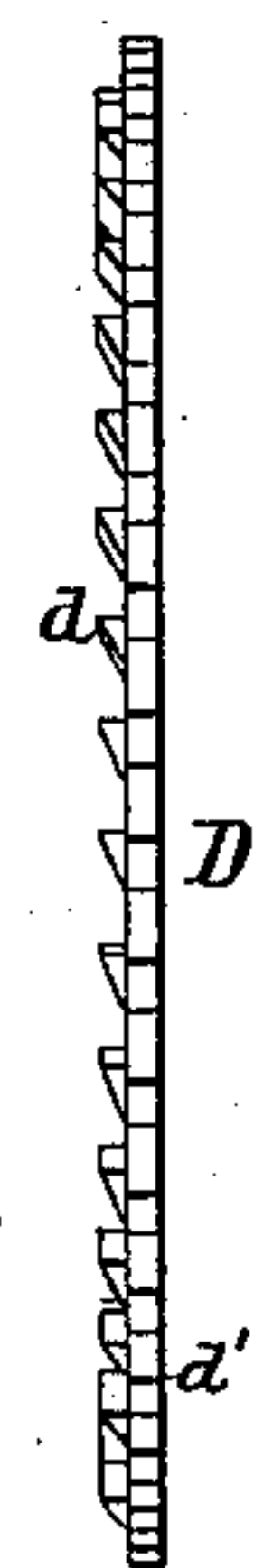
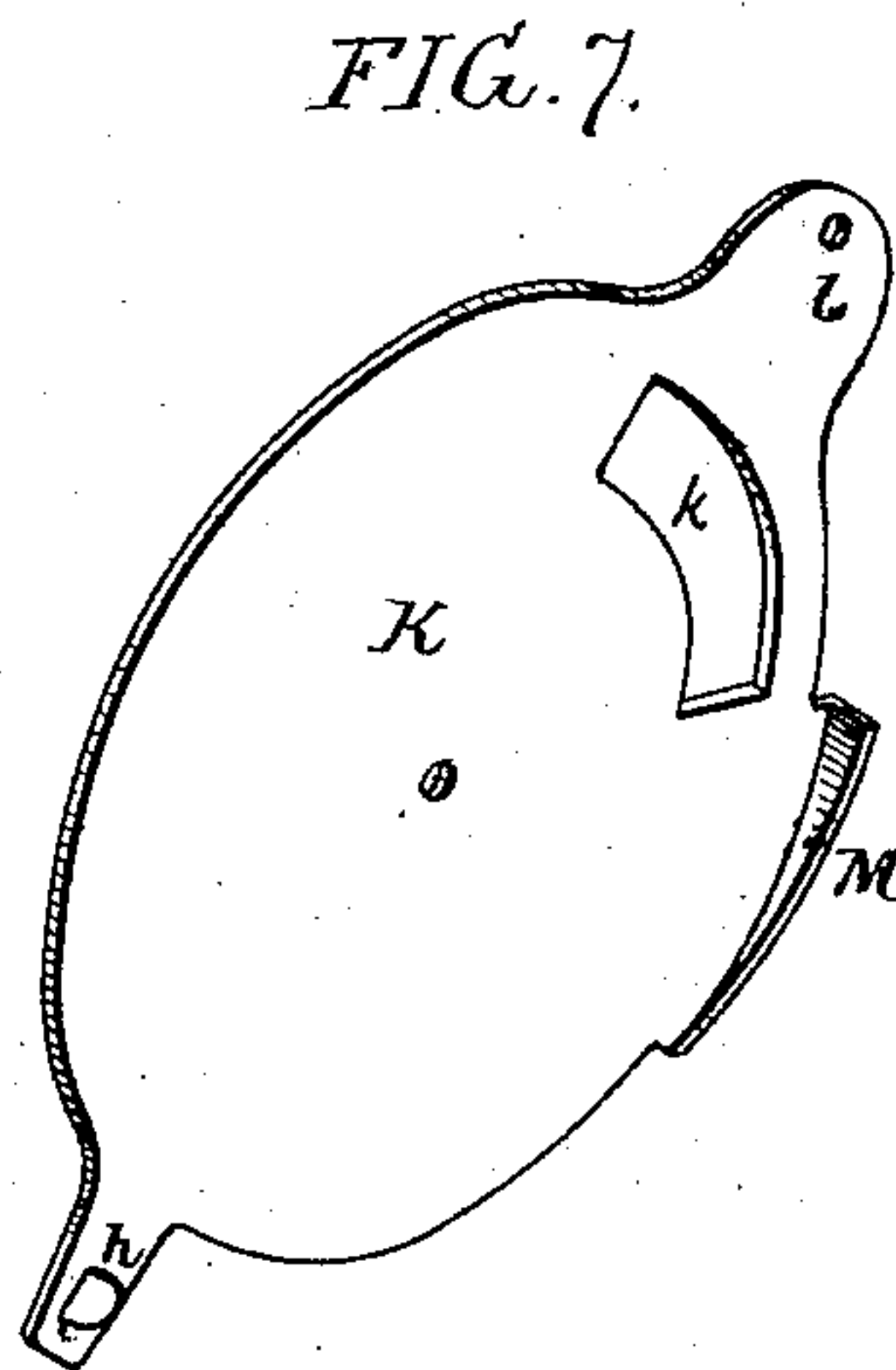
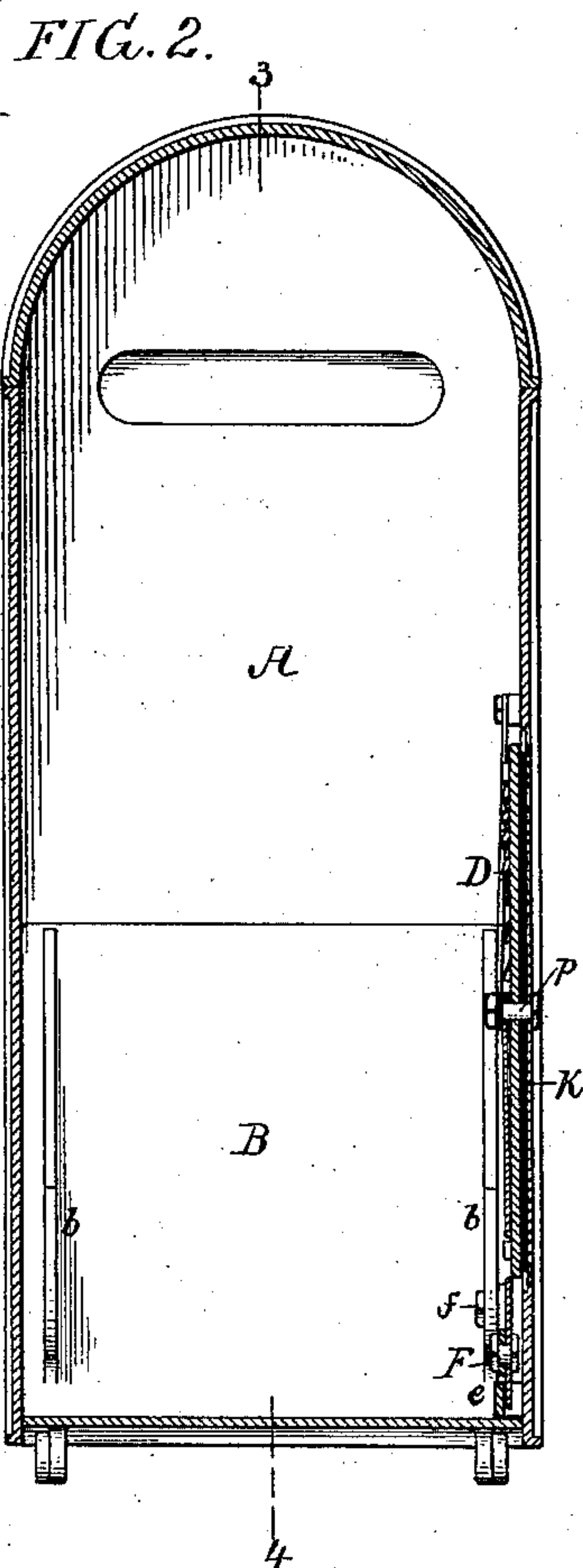
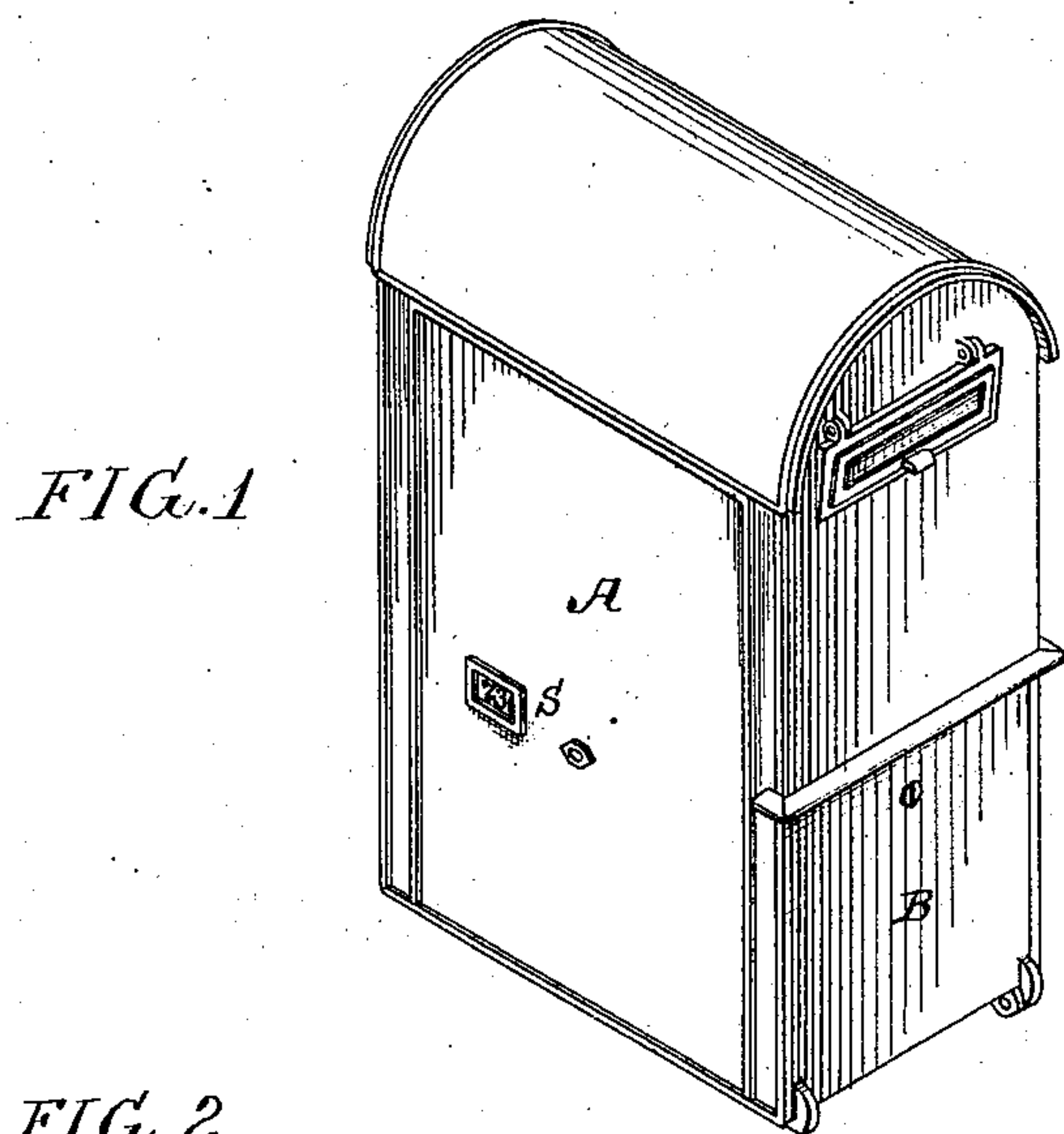
2 Sheets—Sheet 1.

H. B. GRIFFITHS.

# AUTOMATIC INDICATOR FOR LETTER BOXES.

No. 368,918.

Patented Aug. 23, 1887.



Witnesses  
David S. Williams,  
Hamilton D. Furness.

Inventor:  
Howard B. Griffiths  
by his Attorneys  
Horton and Sons

2 Sheets—Sheet 2.

# AUTOMATIC INDICATOR FOR LETTER BOXES.

Patented Aug. 23, 1887.



Inventor  
Howard B. Griffiths  
by his Attorneys  
Horton and Voss



# UNITED STATES PATENT OFFICE.

HOWARD B. GRIFFITHS, OF PHILADELPHIA, PENNSYLVANIA.

## AUTOMATIC INDICATOR FOR LETTER-BOXES.

SPECIFICATION forming part of Letters Patent No. 368,918, dated August 23, 1887.

Application filed February 14, 1887. Serial No. 227,508. (No model.)

*To all whom it may concern:*

Be it known that I, HOWARD B. GRIFFITHS, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented an Improved Automatic Indicator for Letter or Mail Boxes, of which the following is a specification.

The object of my invention is to provide street and other letter or mail boxes with a simply-constructed attachment for indicating automatically the hours at which the successive collections of letters and mail matter are to be made.

A further object of my invention is to provide for throwing the indicator out of action on holidays or other days when the collections are not made at the regular hours.

These objects I attain as hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view of a letter-box provided with my improvement. Fig. 2 is a transverse section on the line 1 2, Fig. 3, but drawn to a smaller scale than Fig. 3. Fig. 3 is a longitudinal section on the line 3 4, Fig. 2, showing the box closed, but drawn to a larger scale than Fig. 2. Fig. 4 is a similar view showing the box open or partially open for the removal of the mail matter therefrom. Figs. 5 and 6 are side and edge views, respectively, of the indicating-wheel; and Fig. 7 is a perspective view of an attachment.

My improvements may be applied to any convenient or well-known construction of letter or mail box; but in the drawings I have illustrated only one of the common forms.

A is the letter-box, to the lower part of which is hinged the usual door, B, provided with a guard-wing or flange, *b*, on each side. I mount on a pivot, *p*, on the inside of the front plate of the box, an indicating-wheel, D, carrying on its outer face numbers to indicate the hours at which collections are to be taken, as hereinafter described. This wheel is provided on its opposite face with laterally-projecting ratchet-teeth *d* and on its periphery with notches *d'*, preferably V-shaped, as shown in Figs. 3, 5, and 6. To the same center pin, *p*, is pivoted a bar, E, preferably of steel of sufficient elasticity to ride over the tops of the ratchet-teeth *d* and engage with those teeth, so as to act in the character of a pawl. The

free end of this pawl-bar E is guided in a lug, *e*, fixed at the bottom of the case, this lug having at each end a shoulder, which serves as a stop to limit the swinging movement of the pawl-bar in either direction. To the bar is connected a link, F, which is pivoted at *f* to one of the guard wings or flanges *b* of the door of the box, the connection between the link F and bar E being a pin-and-slot connection, in order to allow a certain amount of lost motion in the opening of the door before the pawl-bar E begins to move. A bar, G, is also connected at one end to the center pin, *p*, and at the other end to a pin, *g*, fixed to the case. This bar G, like the bar E, is preferably made of steel of sufficient elasticity to ride over the ratchet-teeth and yet engage with them, in order to prevent back movement of the indicating-wheel when the bar E returns on the closing of the door.

To the outside of the flange or guard-wing *b* of the door is secured a pin, *r*, Fig. 3, corresponding in shape to the notches in the periphery of the wheel or disk D, so that when the door is closed the pin will engage with one of the notches, and in that way insure the retention of the disk not only in a fixed position, but in proper position for the hour-indicating figures to be seen through a suitable slot, S, in the front of the letter or mail box, Fig. 1.

I prefer to provide the wheel with a sufficient number of figures to cover a period of time—such as a week—including not only the successive days on which the collections are made an equal number of times and at the same hours, but also including a day—such as Sunday—when the collections are made a different number of times and at different hours.

As will be seen on reference to Fig. 5, the indicating wheel or disk is provided with indicating-figures for six days of six collections each, and the seventh day (Sunday) of three collections.

The back of the indicating-wheel is indexed (Figs. 3 and 4)—that is to say, it carries the names or abbreviations of the names of the days of the week in proper relation to the series of tables on the front of the wheel, so that in the event of any derangement of the wheel the postman or other attendant will have no difficulty in properly resetting the wheel.



In order to avoid mistakes on the part of the public, I provide an attachment whereby the indicator may be thrown out of action entirely and the opening S closed, so that no figures may be seen whenever holidays or other days occur on which collections are made at hours different from those on the days having regular collections.

Between the wall of the box and the indicating-wheel I mount on the center pin, *p*, a thin plate or disk, K, having a slot, *k*, in such a position that so long as the plate K remains in the position shown by full lines in Figs. 3 and 4, the hour-numbers on the wheel D show through the slot S in the front of the box. I provide the plate K with a handle, *h*, on the side adjacent to the door, and this handle is adapted to engage with either of the stop-notches *i* and *i'* on the wall of the box, according to the position to which the plate is turned on its pivot.

A cam or wedge, M, is provided on the outer edge of the disk K in such a position that when the said disk is turned in the direction of the arrow, Fig. 4, until the handle *h* engages with the stop-notch *i*, this cam, pressing on the under side of the bar E, will have raised the latter clear of the ratchet-teeth, so that the opening and closing of the door B of the box will not operate the indicator. At the same time the change of position of the plate K will have brought a portion of the latter across the slot S in front of the figures on the wheel D, so that no figures can be seen. Thus the carrier when he makes the last collection—say at twelve midnight on a Wednesday before a holiday, when collections are to be made at irregular hours—will move the plate K from the position shown by full lines in Fig. 4 until the handle *h* engages with the stop-notch *i*, so that there will be no hours indicated during the holiday. At the last collection on the holiday he moves the plate K back again, when the first morning collection will show through the slot S. In order that this may be for the correct day,

(Friday in the supposed instance, Thursday being the holiday,) the third pawl-bar, L, connected to a projection, *l*, on the plate K, is provided to engage with the ratchet-teeth on the wheel D, so that when the plate K is turned by the handle *h* to throw the pawl E out of action and cover the numbers, the wheel D will be turned by the pawl L to the extent of a day.

I claim as my invention—

1. The combination of a letter or mail box having a hinged door and an indicating-wheel mounted on a center pin in the wall of the box, and having laterally-projecting ratchet-teeth on its face, with an elastic bar pivoted to the center pin of the wheel and connected to the door and engaging with the ratchet-teeth to act as a pawl, substantially as set forth.

2. The combination of a letter or mail box having a hinged door with an indicating-wheel mounted on a center pin in the wall of the box, and having laterally-projecting ratchet-teeth on its face, with an elastic bar pivoted to the center pin of the wheel and connected to the door and engaging with the said ratchet-teeth to act as a pawl, and a second elastic bar engaging with the ratchet-teeth to prevent back movement of the bar, substantially as set forth.

3. The combination of a letter or mail box, an indicating-wheel having ratchet-teeth, and an operating-pawl therefor, with a plate covering the indicating-numbers and carrying a cam to throw the pawl out of action.

4. The combination of a letter or mail box, an indicating-wheel having ratchet-teeth, and an operating-pawl, E, therefor, with a plate covering the indicating-numbers and carrying a pawl, L, and a cam to throw the pawl E out of action, all substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HOWARD B. GRIFFITHS.

Witnesses:

WILLIAM D. CONNER,  
HARRY SMITH.