No. 685,914. Patented Nov. 5, 1901.

P. W. FROMHOLD.

MAIL BOX.

(Application filed Sept. 14, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

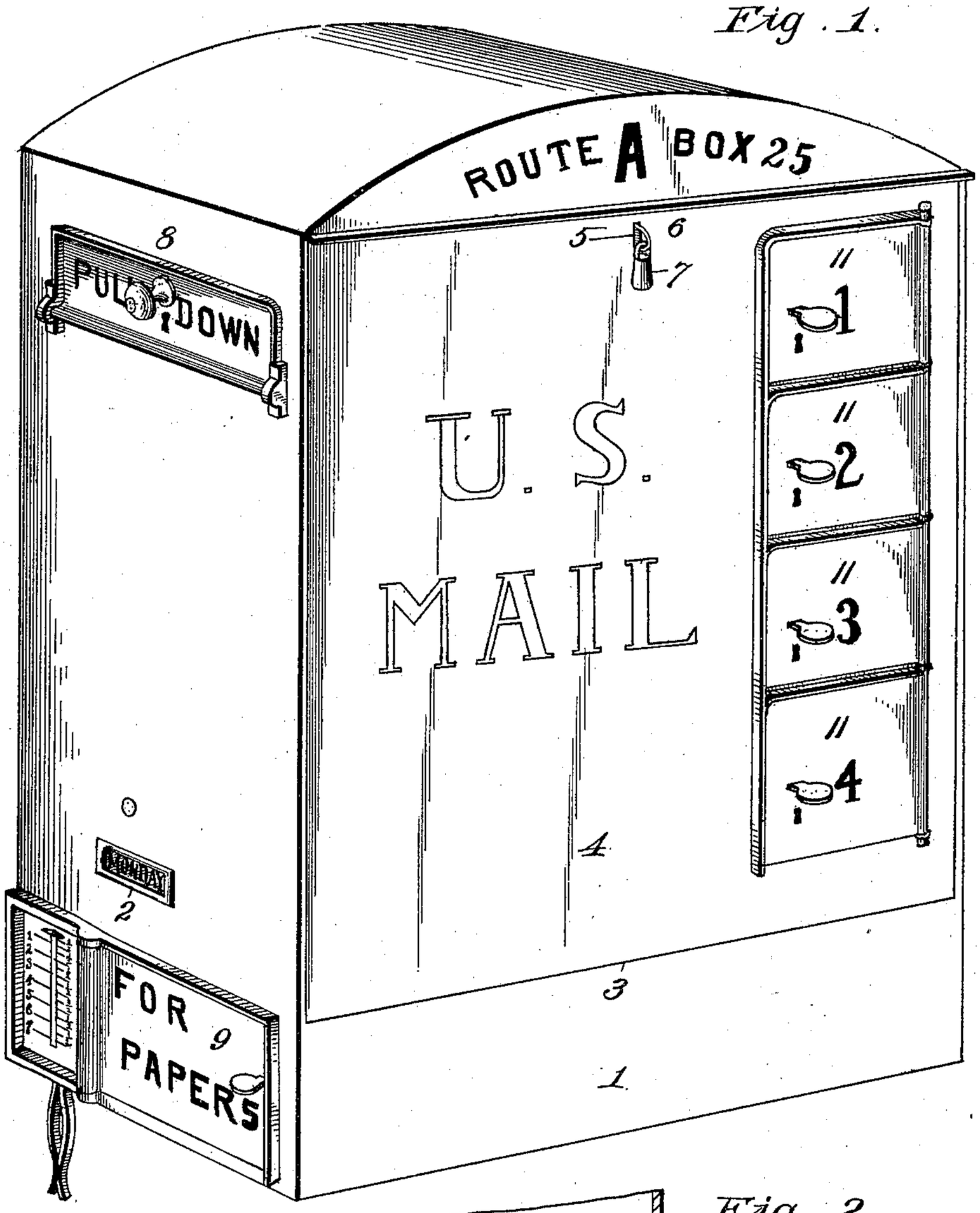
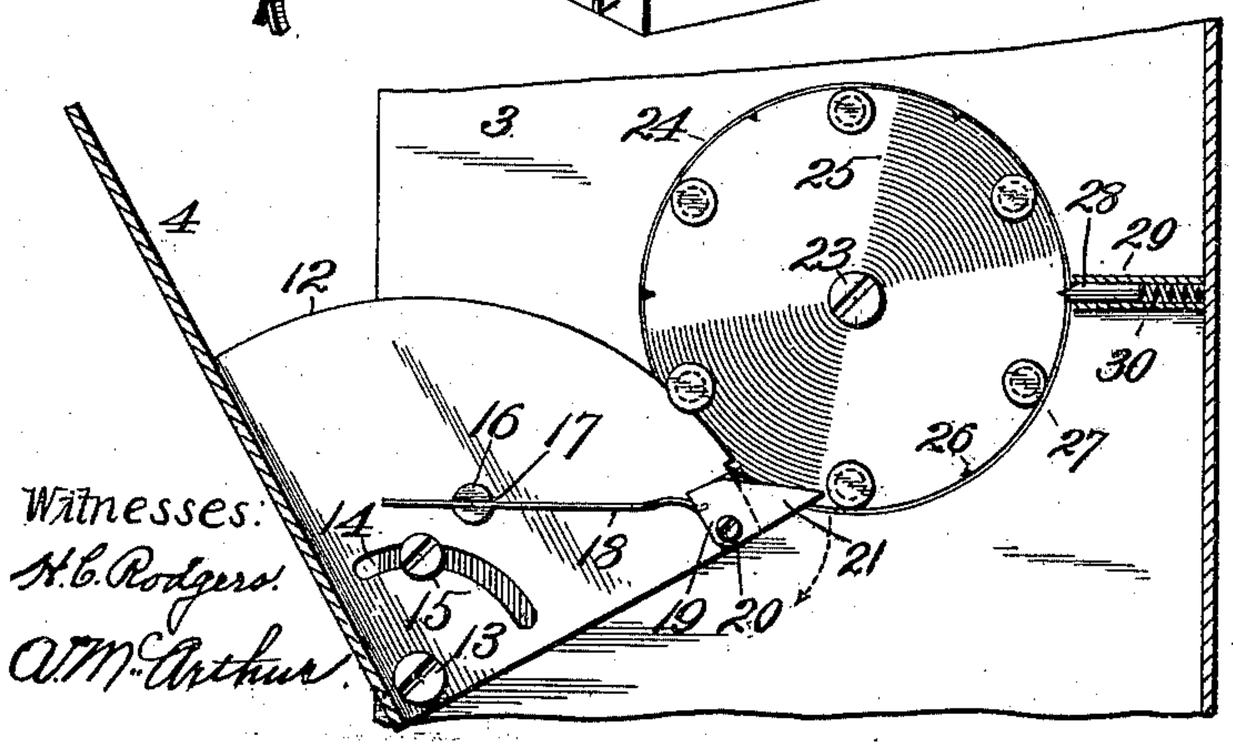


Fig. 2.



Witnesses:
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A. M. McArthur.

Inventor:
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Fig. 3.

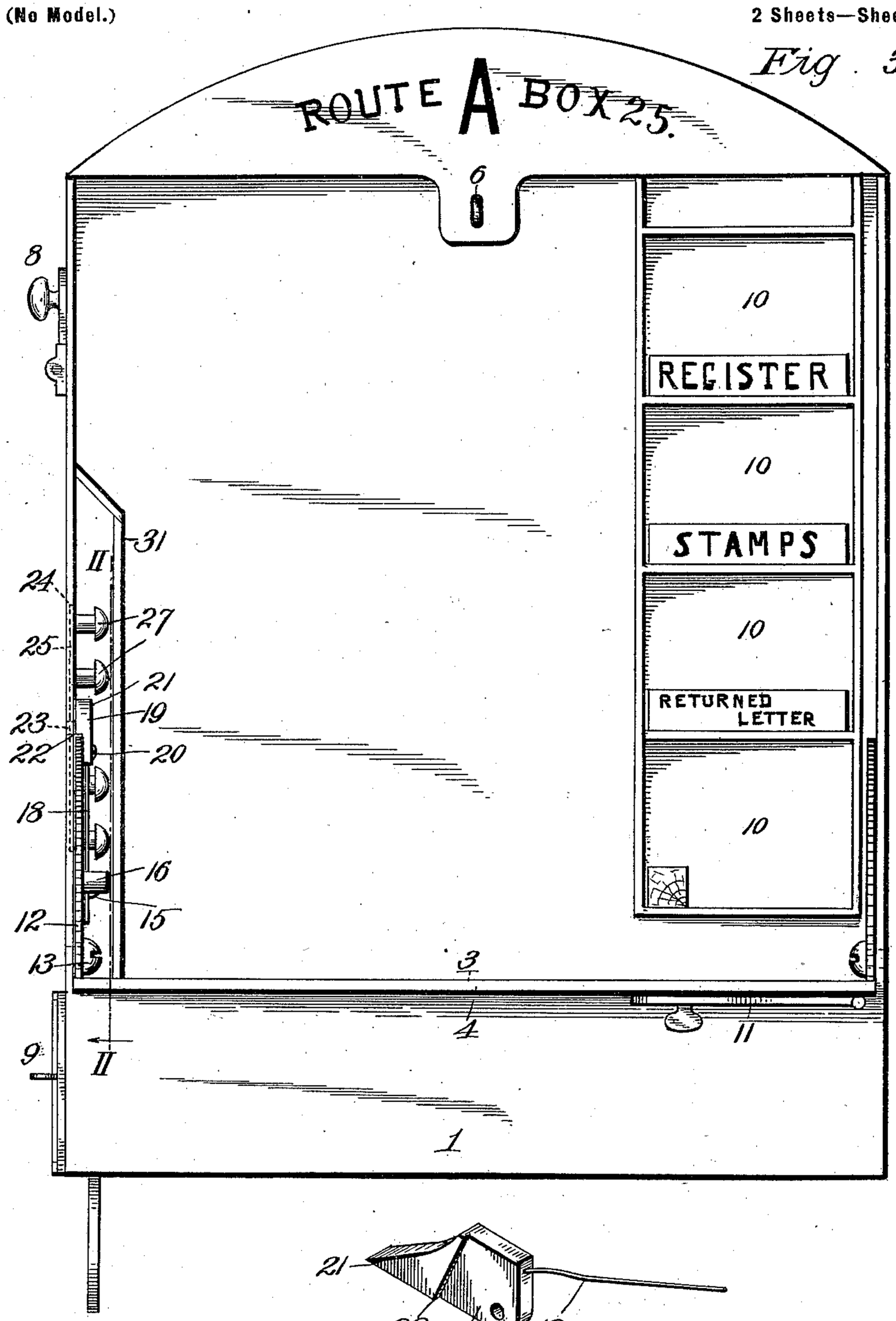

Fig. 4.

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UNITED STATES PATENT OFFICE.

PRIMUS W. FROMHOLD, OF KANSAS CITY, MISSOURI.

MAIL-BOX.

SPECIFICATION forming part of Letters Patent No. 685,914, dated November 5, 1901.

Application filed September 14, 1901. Serial No. 75,374. (No model.)

To all whom it may concern:

Be it known that I, PRIMUS W. FROMHOLD, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Mail-Boxes, of which the following is a specification.

My invention relates to mail-boxes, and more especially to that class used for rural delivery or equivalent service; and it consists in certain novel and peculiar features of construction and combinations of parts hereinafter described and claimed.

My object is to produce a device of this character of that class which automatically indicates the day on which the next call of the carrier or postman will be made and which is positive and reliable in operation and of such construction that it cannot easily get out of order.

In order that the invention may be fully understood, reference is to be had to the accompanying drawings, in which—

Figure 1 is a perspective view of a mail-box embodying my invention. Fig. 2 is a vertical section on the line II II of Fig. 3. Fig. 3 is a front view with the door open. Fig. 4 is a detail perspective view, enlarged, of the dog forming part of the adjusting mechanism.

In the said drawings, 1 designates a box of rectangular form, by preference, and provided at one side with a sight-opening or window 2, which will exclude rain. Almost the entire front side of the box is in the form of an opening 3, controlled by a door 4, arranged to swing downward to a horizontal position, so as to form a table or support whereon the carrier may make notations of such matters as he desires, the upper part of the door being provided with a slot 5 to slip over a staple 6 for engagement by a padlock 7 or its equivalent, the key controlling said door being in the possession of the carrier, who is the only person having authority to open the door.

In the upper end of that side of the box containing the sight-opening or window 2 is an opening controlled by a door 8, through which letters destined for distant points are inserted, while below the sight-opening is a door 9, through which papers or small packages may be inserted.

As the patrons of the box have no access to and are unauthorized to open door 4, the box in the opposite side from that occupied by the sight-opening is provided with a series of pigeonholes 10, one for each patron, which register with openings in door 4, controlled by small doors 11, these doors being provided in the usual manner with separate locking devices (not shown) and numbered, so that a person renting a particular pigeonhole may obtain access thereto whenever he desires, but cannot obtain access to the pigeonholes of his neighbors.

12 designates side flanges at the inner end of the door 4, one at least of said flanges being quadrant-shaped—namely, that one adjacent to the sight-opening. These flanges lend stability to the door and also act as a guard when the door is opened and the postman in making notations to assist in preventing his papers being blown away or disarranged by the wind. Through these flanges extend the hinge pins or screws 13 of the door, and they are also provided concentrically of said hinge pins or screws with quadrant-shaped slots 14, engaging stop-pins 15 and adapted as their opposite ends strike said pins to limit the opening and closing movement of the door.

16 designates a pin having a slot 17 extending in the direction of the inner corner of the segmental flange, and fitting slidingly in said slot is a spring 18, attached at its inner end to the dog 19, pivoted, as at 20, to the flange, said dog having a V-shaped tooth 21 and a shoulder 22, the latter being adapted by engagement with the curved edge of the flange to prevent the dog swinging farther upward or forward than the position shown in Fig. 2—namely, with its lower edge about coincidental with the lower edge of the flange.

Journaled upon a pin 23 mounted in the side of the box and fitting in the circular recess 24 of such side is a disk 25, the inner face of the same being flush with said side, said disk being provided in its periphery with six equidistant V-shaped notches 26 and in its inner side with six equidistant headed or

flanged pins 27, said pins being arranged centrally between said notches and are disposed with relation to the door so that the quadrant-flange 12 shall be overlapped by the head or flange, but shall just clear the shank of the pins, as hereinafter explained, the heads of said pins being also sufficiently remote from the disk to admit of the passage of the dog between them and the disk. This disposition of the parts as the dog projects beyond the periphery of the segmental flange insures the successive engagement of the straight or lower side of said dog with said pins, and the dog is also of such proportion that it shall impart to the disk by engagement with such pins a movement equal to that between any two of said notches, and in order to prevent the momentum of the disk carrying it after the disengagement of the dog takes place I provide a detent 28 for automatically engaging one of the notches 26 and positively checking the dog at the proper point. This detent is mounted in a casing 29 and is advanced with a yielding pressure by a spring 30 within said casing and bearing at its opposite ends against the detent and the back wall of the box.

To prevent mail-matter from being caught and engaged by the adjusting mechanism, it is inclosed at its inner and upper sides by a guard-plate 31.

Assuming now that the door is closed, it will be understood that the disk 25 is in the position shown in Fig. 2 and that in consequence the name of one of the week-days, which is imprinted on its outer face, appears through the sight-opening—as, for instance, "Monday," Fig. 1—thereby showing that the next call of the carrier or postman will be on the ensuing Monday. It will also be understood that the dog is below the disk and in the same horizontal plane as the lower end of the door. On Monday the carrier or postman arrives and opens the door, and as he opens it the dog moves upward and forward until the upper or inclined side of its tooth strikes the pins 27 in its path. As said pins are held by a greater force than that with which spring 18 holds the dog, the latter swings pivotally in the direction indicated by the arrow, Fig. 2, until completely out of the path of the pins, and thereby permits the door to be opened without affecting the position of the disk. After transacting his business at the box the postman closes the door, and in such operation the lower or straight side of the dog engages the pins above referred to and, overcoming the pressure of spring-actuated detent 28, forces the latter back and advances the disk one step, the dog being unyielding in this action, because its shoulder 22 bears against the edge of the flange. In such operation of the disk the name of the next call-day on the disk is exposed through the sight-opening, so that the patrons of the box can always ascertain on what day the mail will be collected.

From the above description it will be apparent that I have produced a mail-box which embodies the features of advantage enumerated as desirable in the statement of invention and which is also of simple, strong, durable, and cheap construction.

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

1. In a mail-box, the combination of a disk provided with equidistant peripheral notches and equidistant laterally-projecting pins, the pins being arranged centrally between the notches, a spring-actuated detent for successive engagement with said notches to overcome momentum of the disk, a hinged door provided with a quadrant-shaped flange, a dog pivoted to said flange and provided with a shoulder engaging the edge thereof to limit independent movement in one direction, said dog projecting beyond the periphery of said flange and adapted as it moves downward to engage one of said pins and move the disk a distance equal to that between any two pins, and a spring attached to said dog to allow it under pressure of one of said pins to swing back within the periphery of said flange as the door is opened, substantially as described.

2. In a mail-box, the combination of a disk provided with equidistant peripheral notches and equidistant laterally-projecting pins, the pins being arranged centrally between the notches, a spring-actuated detent for successive engagement with said notches to overcome momentum of the disk, a hinged door provided with a quadrant-shaped flange, a dog pivoted to said flange and provided with a shoulder engaging the edge thereof to limit independent movement in one direction, said dog projecting beyond the periphery of said flange and adapted as it moves downward to engage one of said pins and move the disk a distance equal to that between any two pins, a slotted pin projecting from said flange, and a spring slidingly engaging said slot and attached to said dog to allow it under pressure of one of said pins to swing back within the periphery of said flange as the door is opened, substantially as described.

3. In a mail-box, the combination of a stop-pin projecting inwardly and a sight-opening contiguous to said stop-pin, a disk journaled in the box and provided with equidistant week-day names on its outer face to successively appear through said sight-opening, and with equidistant peripheral notches and equidistant laterally-projecting pins, the pins being arranged centrally between the notches, a spring-actuated detent for successive engagement with said notches to overcome momentum of the disk, a hinged door provided with a quadrant-shaped flange and a segmental slot concentric of the hinge-point and

engaging the stop-pin, a dog pivoted to said flange and provided with a shoulder engaging the edge thereof to limit independent movement in one direction, said dog projecting beyond the periphery of said flange and adapted as it moves downward to engage one of said pins and move the disk a distance equal to that between any two pins, and a spring attached to said dog to allow it under pressure of one of said pins to swing back within the periphery of said flange as the door is opened, substantially as described.

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

PRIMUS W. FROMHOLD.

Witnesses:

H. C. RODGERS,

G. Y. THORPE.