

No. 775,404.

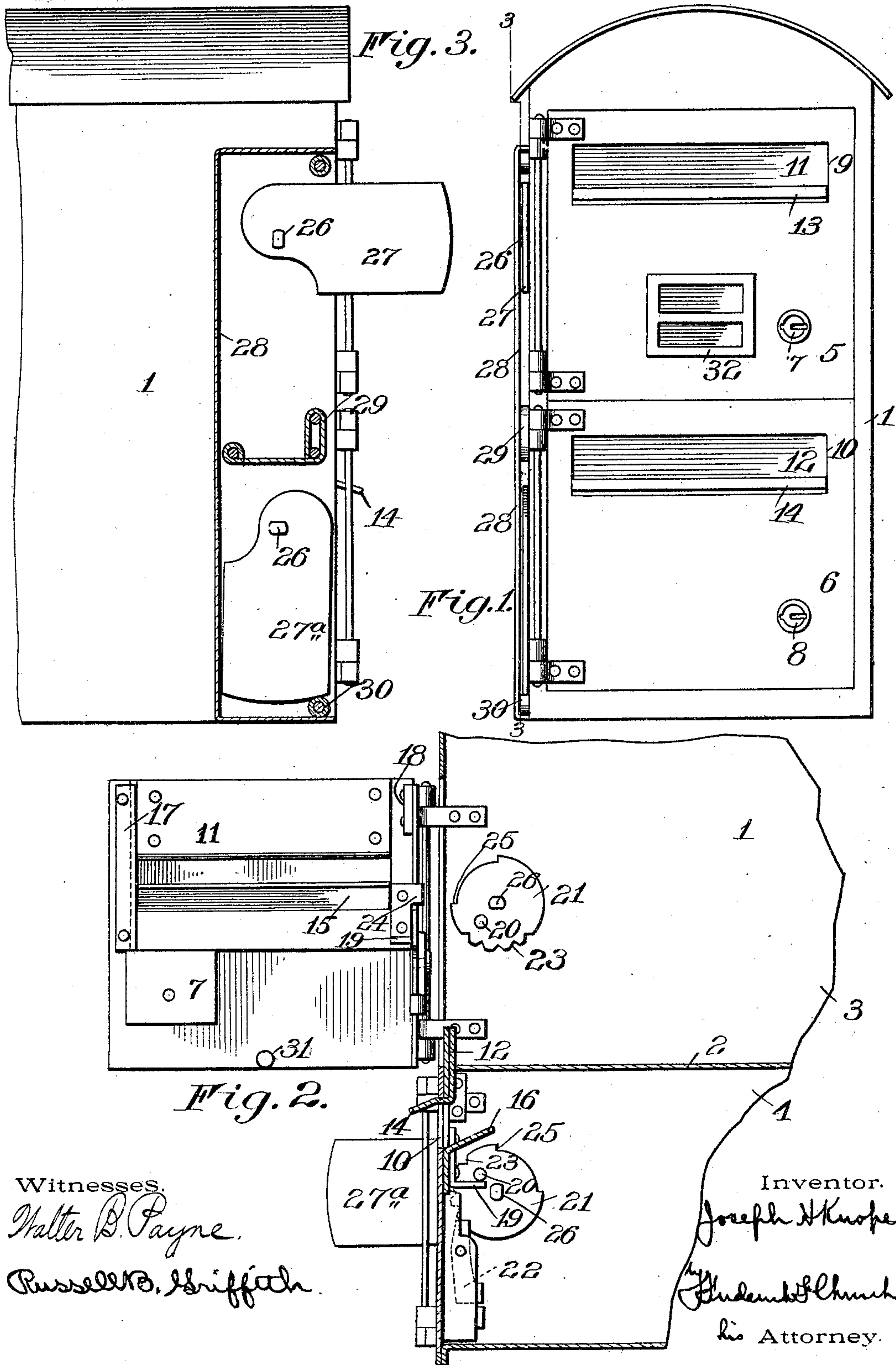
PATENTED NOV. 22, 1904.

J. H. KNOPE.  
MAIL BOX.

APPLICATION FILED JULY 22, 1903.

NO MODEL.

2 SHEETS—SHEET 1,



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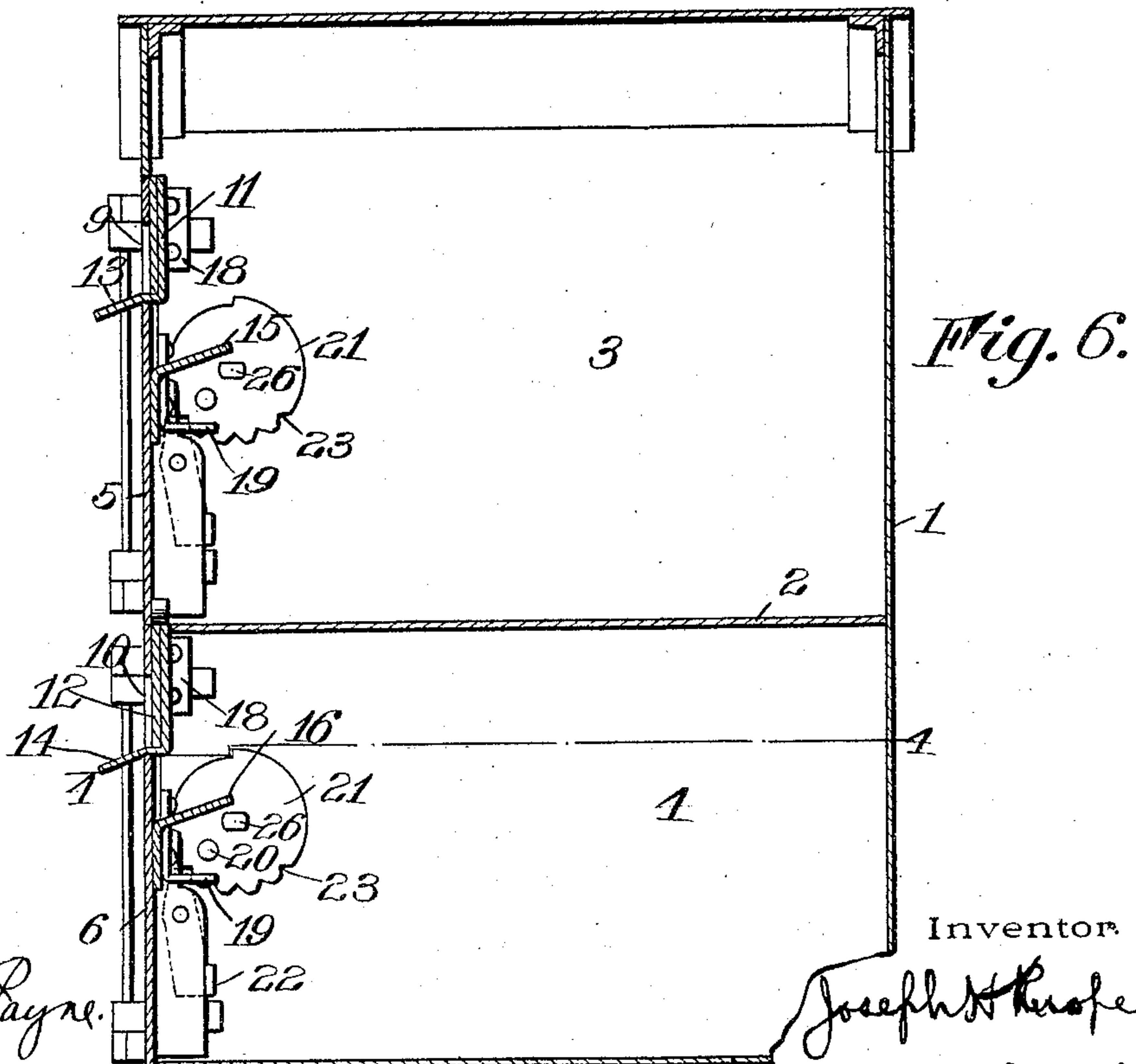
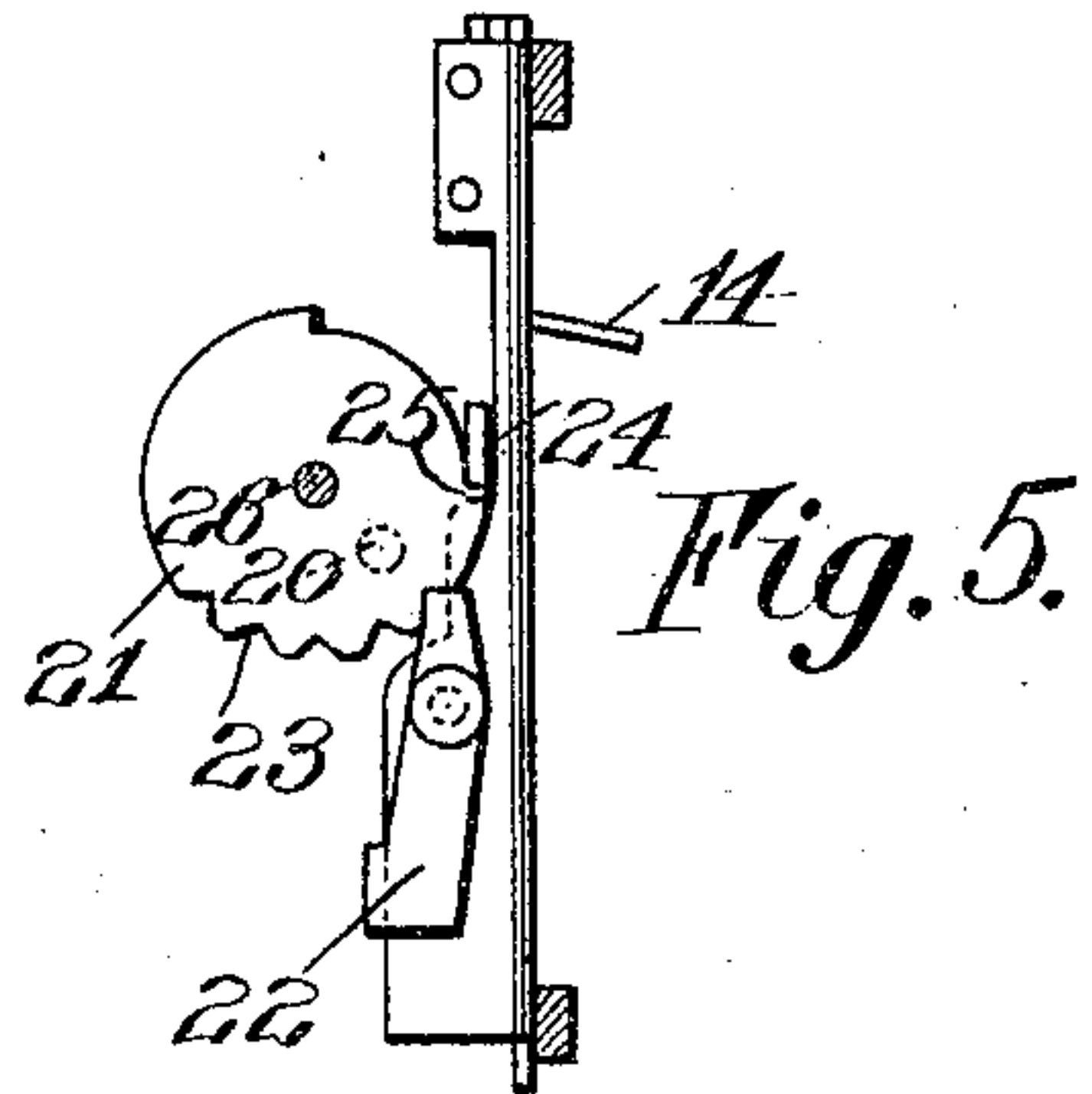
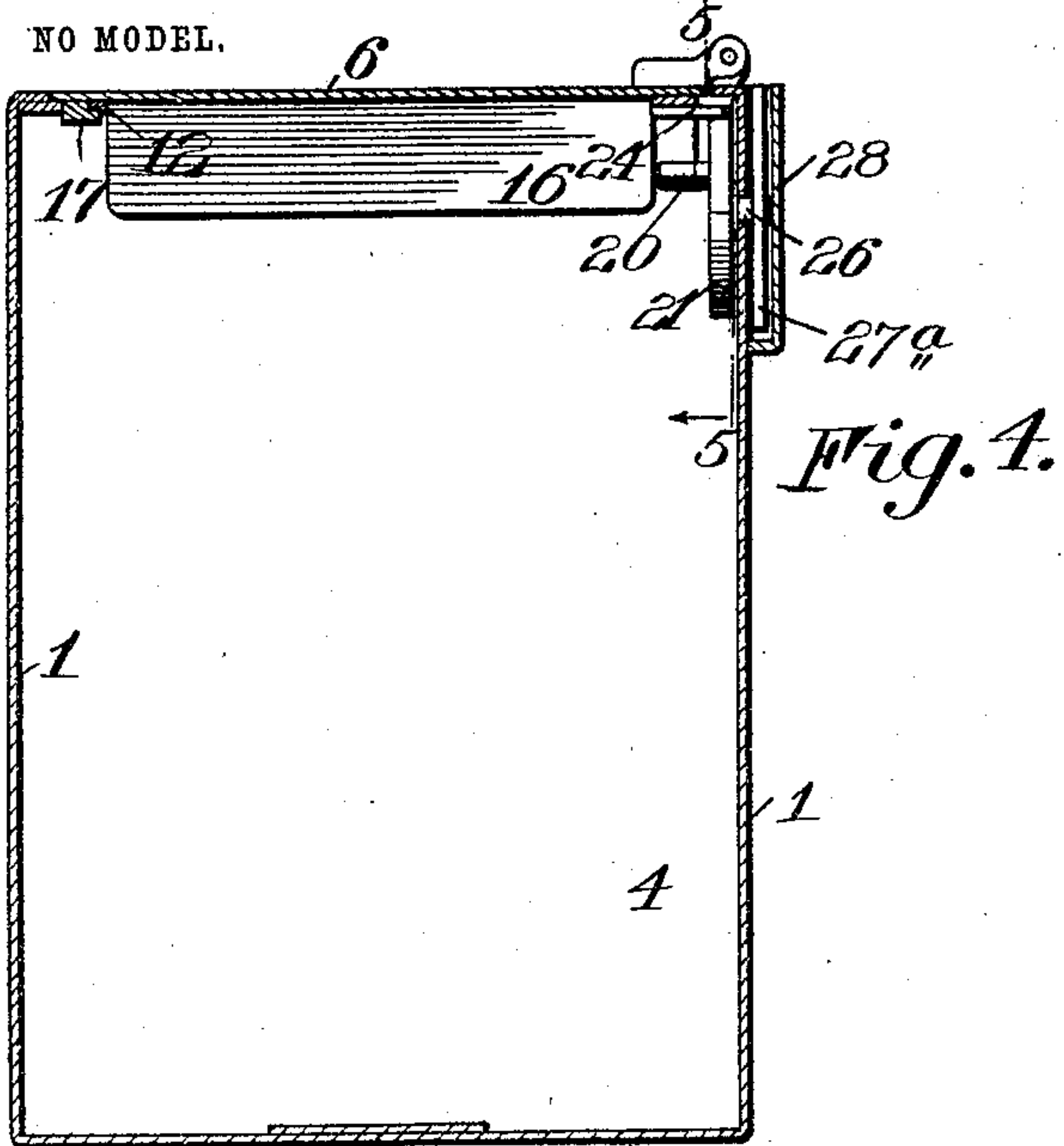
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NO MODEL.

2 SHEETS—SHEET 2.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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TO JOHN W. KNOPE, OF ROCHESTER, NEW YORK.

## MAIL-BOX.

SPECIFICATION forming part of Letters Patent No. 775,404, dated November 22, 1904.

Application filed July 22, 1903. Serial No. 166,534. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH H. KNOPE, of Newmarket, Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Mail-Boxes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention relates to improvements in mail boxes or receptacles, and has for its object the production of a device of this character especially adapted to house-to-house collection and delivery, and particularly effective for such service in rural districts where heretofore it has been necessary for the collector to traverse a considerable distance in order to determine if a deposit has been made in the mail-box, such a device employing independent compartments or receptacles for the reception of mail delivered and that to be collected and independently-operated signal devices or indicators each adapted to be actuated automatically by the slide or other device controlling the deposit of mail in its corresponding receptacle, whereby the inconvenience and delay necessarily arising from the use of boxes employing a single signal or none at all are avoided.

It is also an object of my said invention to prevent the deposit of mail into the collection-receptacle by unprivileged parties and to eliminate the possibility of operating the signals improperly and improve the construction and efficiency of such devices in general.

Other features of novelty and advantage will hereinafter be more fully explained, and pointed out in the claims hereunto annexed. In the drawings, Figure 1 is a front elevation of a device embodying my said invention. Fig. 2 is a fragmentary sectional view, the parts being in such position that the collection-box may receive mail. Fig. 3 is a sectional view on the line 3 3, Fig. 1. Fig. 4 is a transverse sectional view on the line 4 4, Fig. 6. Fig. 5 is a sectional view on the line 5 5, Fig. 4, looking in the direction of the arrows; and Fig. 6 is a vertical sectional view showing the parts in their normal locked position.

The same numerals of reference designate similar parts throughout the views.

To facilitate an understanding of my invention, reference will be had to the herein-shown embodiment, wherein 1 designates a closed casing divided by the partition 2 into upper and lower compartments or receptacles 3 and 4, the upper receptacle being preferably employed as the receptacle for the mail delivered and the lower receptacle to receive the mail to be collected by the authorized collector. However, it will be understood that I do not limit myself to this particular arrangement, as separate receptacles in fixed relation may be employed, if desired, as will hereinafter more fully appear. Closing the front of each receptacle are hinged doors 5 6, respectively, the door 5 carrying a lock 7, the key to which is possessed by the party receiving the delivered mail and the lower box carrying a lock 8 capable of being unlocked by the carrier or authorized person. Each door is also provided with an aperture 9 10, respectively, normally closed by the slides 11 12, having the operating projections 13 14, respectively, preferably inclined to form rain-guards, and the inwardly-extending guards 15 16 constituting deflectors, said guards being preferably so disposed as to prevent the insertion of an object for the purpose of tampering with the parts. Each slide is movable vertically in guides 17 18, respectively, the aperture of each slide registering with the aperture of its corresponding door when in an elevated position.

Carried by and movable with each slide is an arm 19, adapted to engage beneath the pin 20 of the rotatable disk 21, mounted in the casing when the door is closed, the parts being so arranged that when the slide is raised the disk 21 is rotated, a pawl 22, carried by the door, engaging the teeth 23 in said disk to retain it in its elevated position. A lug or projection 24 may also be provided on these slides to engage the shoulder 25 of the rotatable disk 21 to prevent the rotation thereof while the slide remains at rest. Rigidly connected to the disks 21 are stud-shafts 26 26, carrying signals or indicators 27 27<sup>a</sup>, respectively inclosed within a casing 28, open in



front, through which said signals swing in assuming an elevated or exposed position, as shown in Fig. 3, the parts 29 30 being located in close proximity to the signals when lowered to resist the efforts of malicious parties to tamper with them. However, as the shoulder 25 of the disk 21 bears against the lug 24 of the slide elevation of the signal will be impossible without operation of the slide. These parts are so arranged that when said doors are swung open the pawls 22 will disengage themselves from the ratchet-teeth 23 of the disks and allow the signals 27 27<sup>a</sup> to drop down to their normal position within the casing ready to be again raised or actuated when their corresponding slide is raised while the door is closed. However, to prevent unprivileged parties from utilizing the receptacle from which the mail is to be collected by the authorized collector it is desirable to provide an abutment 31, so disposed on the upper door 5 that when said door is properly closed operation of the slide 12 of the lower door 6 will be prevented, rendering it impossible to deposit mail into the collection-receptacle without first unlocking and opening the upper door 5.

In Fig. 2 the parts are shown in the relative positions they will occupy when the collection-receptacle is ready to receive mail, after which the slide 12 will return to its lowered position, and the door 5 is closed and locked, the abutment resting above the slide 12 of the lower door to normally prevent its operation. At this time the signal or indicator 27<sup>a</sup> will be exposed to signify to the collector or other authorized person that a deposit has been made into the collection-receptacle; but unless the signal 27<sup>a</sup> is exposed it will be understood that no deposit has been made therein. The upper slide 11 of the delivery-receptacle is raised by the carrier or person delivering the mail to the proper party, and when such a deposit has been made the upper signal 27 will be exposed, signifying to the proper party that mail has been delivered to said receptacle, a name-plate 32 being provided for convenience, if desired, and bearing the name of the party to whom the mail is addressed. In both cases it will be understood that when either door is opened the pawls 22 22 will disengage themselves from the teeth of the disks 21 21, allowing the signals 27 27<sup>a</sup> to automatically return to their normal unexposed position.

A device of this character constructed in accordance with the above invention will obviously possess the essential features necessary to the production of a successful device of this character. For instance, it will be observed that no confusion whatever will arise as to which receptacle contains the mail, as the upper signal controlled by the operation of the slide of the upper door will be understood to signify to the party to whom the mail

is addressed that a deposit has been made therein, and, on the other hand, should the lower signal be exposed it will be understood by the collector that a deposit has been made therein for collection. As the upper receptacle is accessible only to the privileged party and as the slide controlling the deposit of mail into the collection-receptacle is prevented from operation unless said upper door be opened, the use of the device will be strictly limited to the proper privileged party. Malicious tampering with the signals, with the resulting annoyance and inconvenience, is also rendered impossible by the construction hereinbefore described.

Any suitable form of construction may be adopted in carrying out my said invention, sheet metal punched out and stamped into the desired shape being especially adapted for the purpose, although any other preferred form of construction may be employed involving different arrangements and modifications of the parts without departing from the spirit of my invention. It will also be understood that any desired number and arrangement of the receptacles may be employed as desired to meet the requirements of varying conditions.

I claim as my invention—

1. In a mail-box, the combination with a receptacle having a door therein, and a slidable closure mounted on the door for controlling the deposit of mail into the receptacle, of a signal, and operating means operatively connected to the signal when the door is in its closed position for actuating the signal when the closure is operated.

2. In a mail-box, the combination with a receptacle having a door therein, and a slidable closure mounted on the door for controlling the deposit of mail into the receptacle, of a signal, and devices operatively connecting the signal and closure when the door is in its closed position, and disengaging when the door is opened.

3. In a mail-box, the combination with a receptacle having separate compartments formed therein, and a door having an independently-operable closure thereon for controlling the deposit of mail into each receptacle, of a signal for each receptacle, and operating devices coöperating with the closures for operating their respective signals when the door is in its closed position, and disengaging therefrom when the door is opened.

4. The combination with a mail-box having separate receptacles formed therein, doors for said receptacles, and closures carried by the door adapted to be operated in depositing mail-matter into the receptacles, of a signal for each receptacle operated by its corresponding closure and independently-operable devices each controlled by the operation of its corresponding door for resetting its respective signal.

5. The combination with a mail-receptacle



having mail-receiving apertures therein, and a movable closure for each aperture adapted to be operated in making a deposit therein, of a door and a device cooperating therewith to prevent the operation of one of the closures while the door is in its closed position.

6. The combination with a mail-box provided with separate mail-receiving apertures, and independently-operable closures for the apertures, of a door and a projection thereon cooperating with one of the closures when the door is in its closed position to prevent the operation of the closure and disengaging from the latter when the door is opened.

7. The combination with a mail-box having separate collection and delivery receptacles therein, each having a mail-receiving aperture, and independently-operable closures for the apertures, of a door for each receptacle, and means controlled by the door of the delivery-receptacle and cooperating with the closure of the collection-receptacle for preventing the operation of the latter while said door occupies a predetermined position.

8. The combination with a mail-box having a mail-receiving aperture therein, and a door through which access may be had thereto, of a signal provided with an operating projection, a closure carried by the door for closing the aperture and provided with an operating-arm cooperating with the projection of the signal for operating the latter while the door is in its closed position, and a device carried by the door for retaining the signal in its operated position.

9. The combination with a mail-box having a mail-receiving aperture and a closure therefor adapted to be operated in making a deposit of mail in the box, of a signal having a notched disk connected thereto and an operating projection, an operating-arm connected to the closure and cooperating with the projection to operate the signal and a device cooperating with the notched disk for retaining the signal in position after the operation of the latter by the closure.

10. The combination with a mail-box having a movable door provided with a mail-receiving aperture, and a movable closure for the aperture, of a signal having an operating projection and a notched member connected thereto, an arm carried by the closure and cooperating with the projection of the signal for operating the latter, and a retaining device carried by the door and cooperating with the notched member for holding the signal in its operated position, said device being arranged to disengage from said member when the door is opened.

11. The combination with a mail-box having a mail-receiving aperture therein, and a movable closure for the aperture, of a signal having a rotatable plate connected thereto provided with an operating projection and a notched portion, an operating-arm connected

to the closure and cooperating with the said projection for operating the signal, and a pawl cooperating with the notched portion of the plate for retaining the signal in its operated position.

12. In a mail-box, the combination with the receptacle having a mail-receiving aperture, a door through which access may be had to the receptacle and a swinging pawl carried by the door, of a signal, a rotatable plate connected thereto and provided with a plurality of notches cooperating with the pawl to retain the signal in its operated position, said pawl being so arranged as to disengage from the said notches when the door is opened.

13. In a mail-box the combination with a receptacle provided with a mail-receiving aperture, a movable closure normally covering said aperture and a door for the receptacle, of a movable signal, a rotatable disk connected thereto provided with an operating projection cooperating with an operating-arm on the closure for operating the signal, and having a plurality of notches in its periphery, and a pivoted pawl carried by the door and cooperating with the notches of the disk to retain the signal in its operated position and disengaging from the notches when the door is opened to permit the signal to return to its normal position.

14. In a mail-box the combination with a receptacle provided with a mail-receiving aperture, and a movable closure for the aperture, of a signal, a movable member connected thereto provided with a shoulder thereon, and a projection carried by the closure and cooperating with said shoulder to prevent the operation of the signal independently of the closure.

15. The combination with a receptacle having a mail-receiving aperture therein, and a movable closure controlling said aperture, of a signal or indicator, signal-actuating devices on said closure, and devices cooperating with said closure for preventing the operation of said signal independently of said closure.

16. The combination with a mail-box having a plurality of receptacles provided with separate mail-receiving apertures and closures normally covering said apertures, and doors for said receptacles, of a separate signal or indicator for each receptacle, devices carried by said closures for actuating its corresponding signal when an aperture is uncovered, and to release it when the door to the corresponding receptacle is opened, devices for preventing the operation of said signals independently of said closures, and means for controlling the operation of one or more of said closures.

JOSEPH H. KNOPE.

Witnesses:

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JOSEPH PIPHEN.