C. A. GULLICK.

AUTOMATIC MAIL BOX.

APPLICATION FILED FEB. 28, 1908.

907,787. Patented Dec. 29, 1908.

2 SHEETS—SHEET 1.

Fig. 1

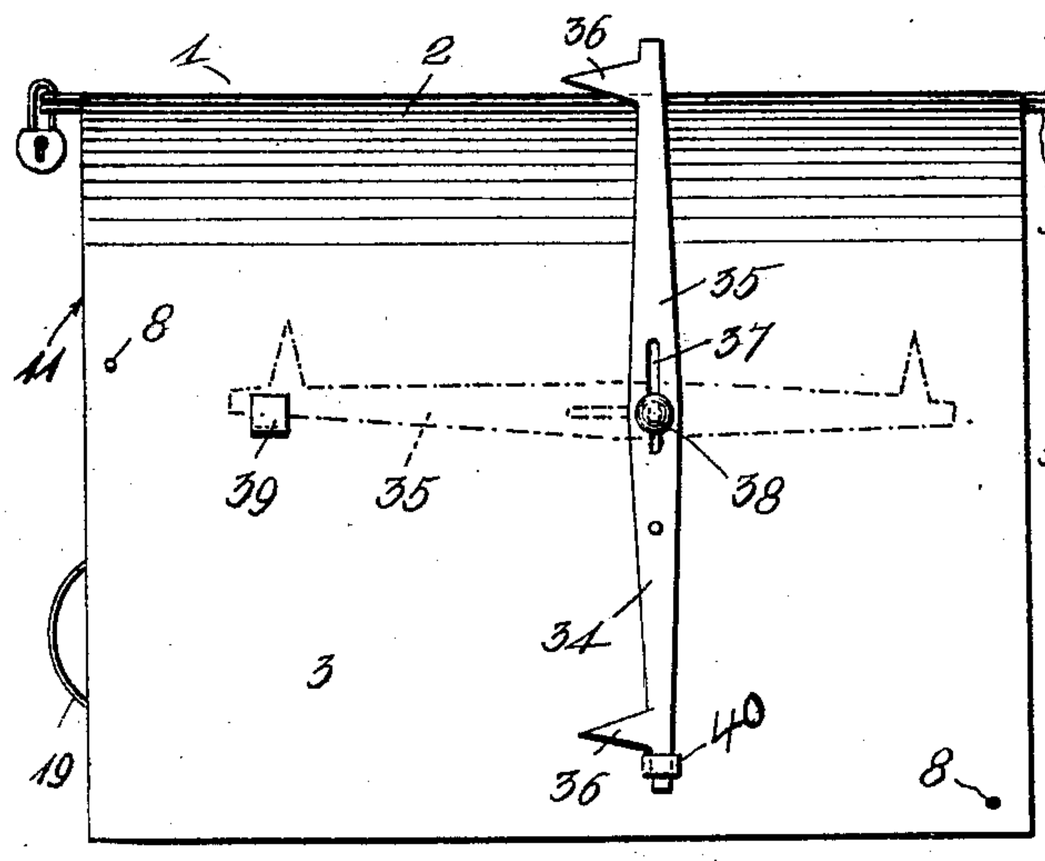


Fig. 5

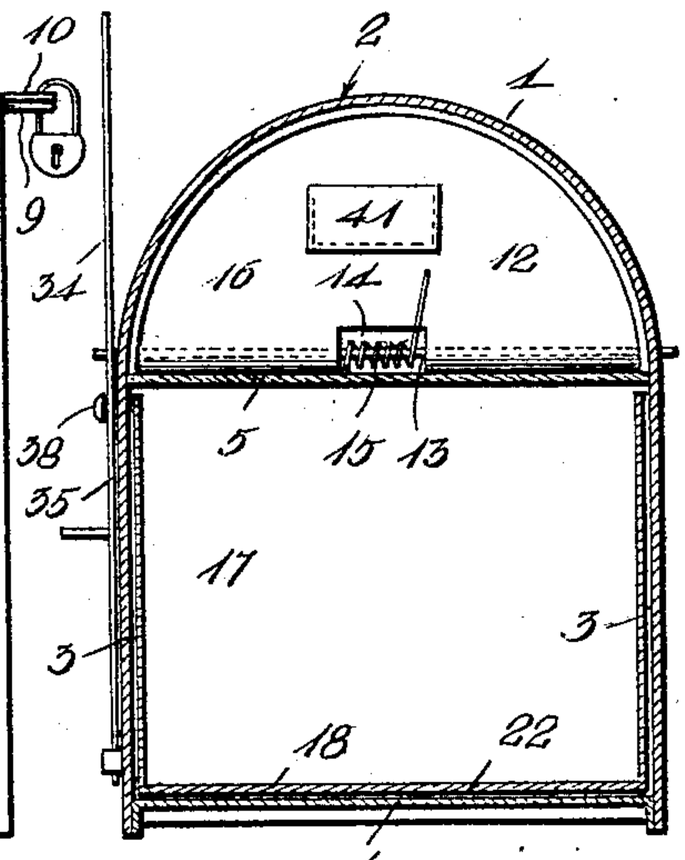


Fig. 4

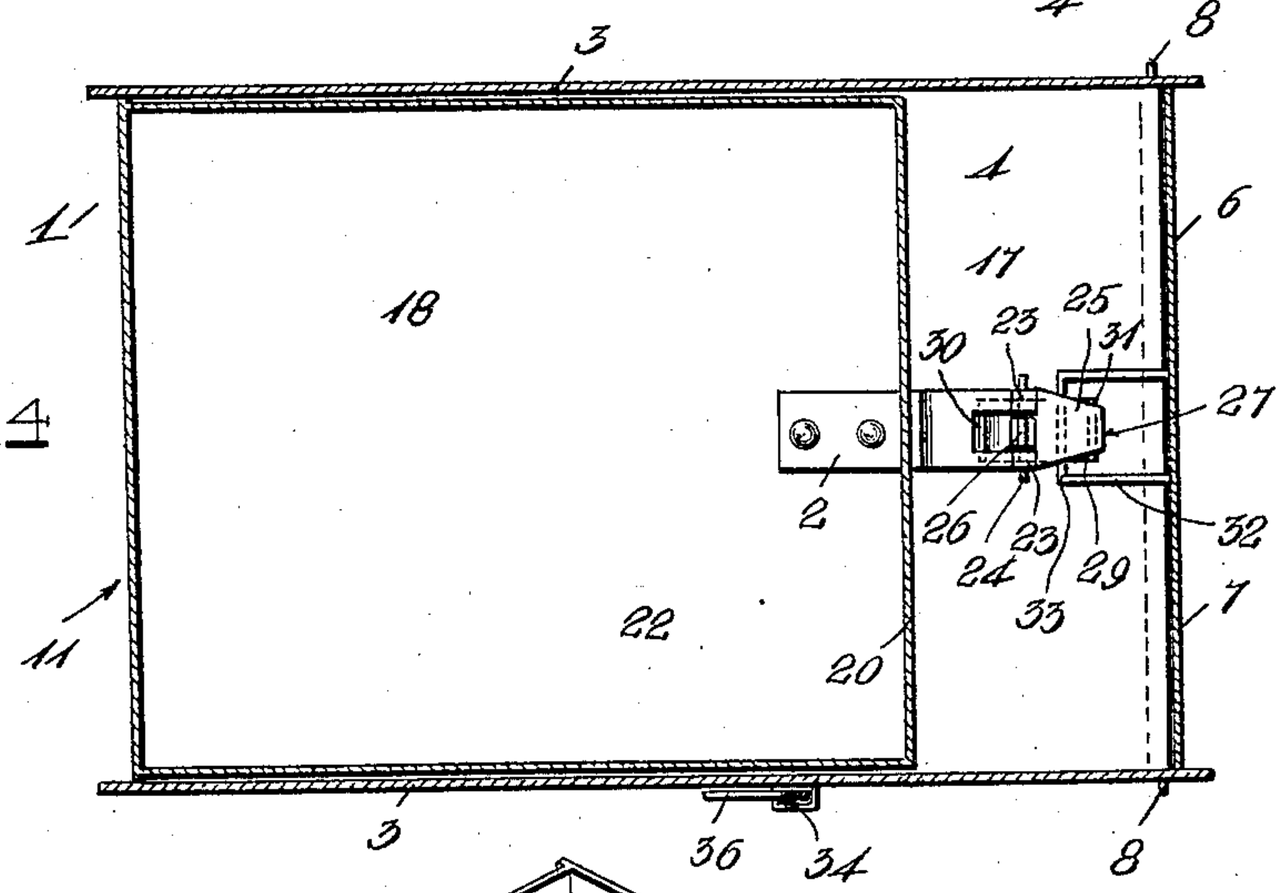
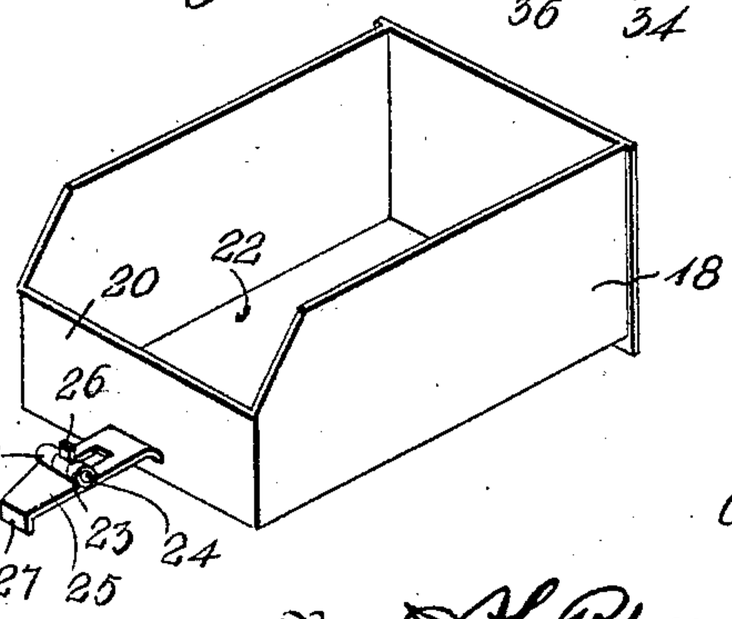


Fig. 6



Witnesses

E. Allentsen

C. H. Griesbauer

Inventor

C. A. Gullick

By A. B. Williamson & Co

Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

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2 SHEETS—SHEET 2.

FIG. 2

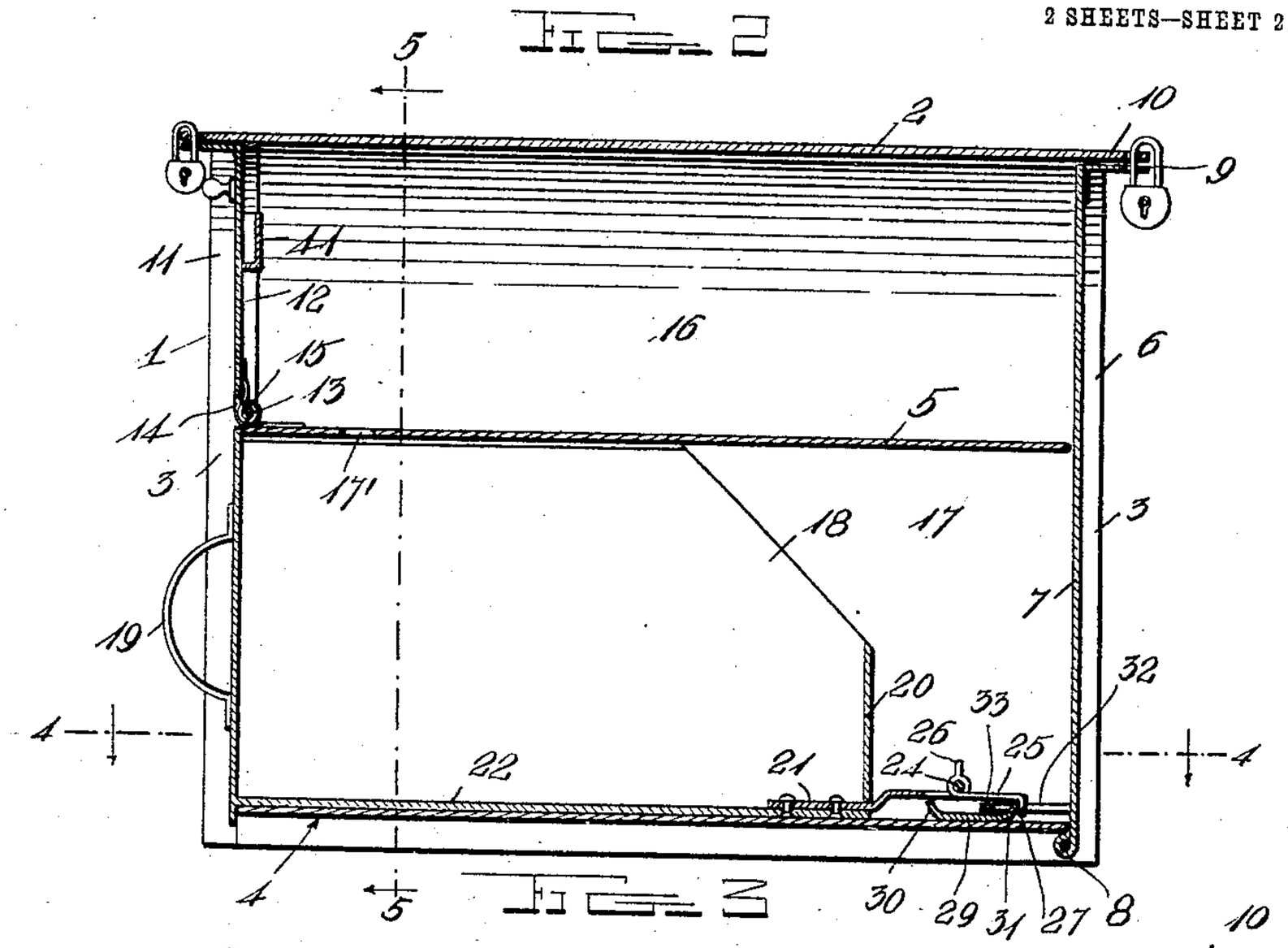
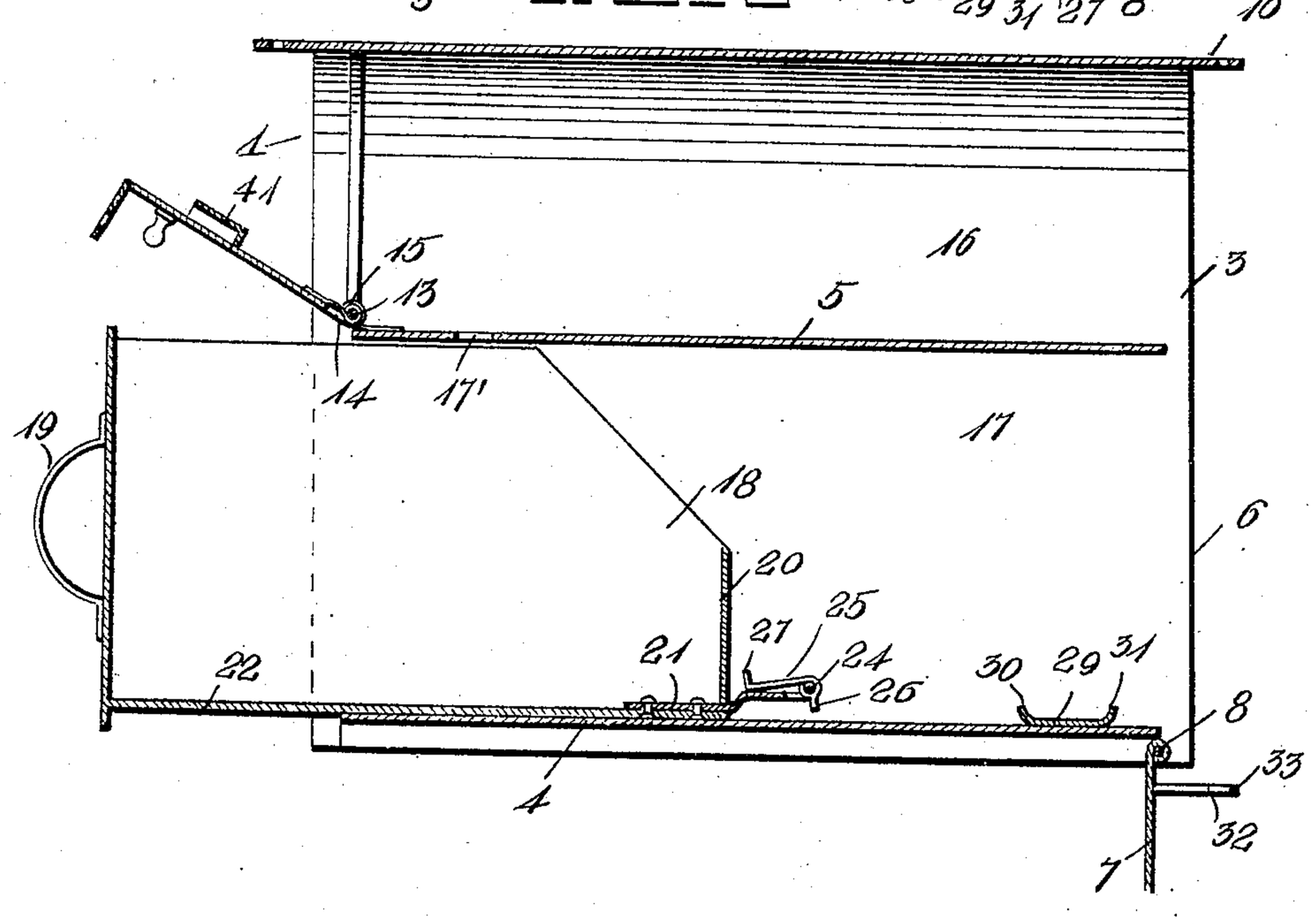


FIG. 3



Witnesses

C. Clarence a

C. H. Grisbauer.

Inventor

C. A. Gullick

By A. B. Williamson & Co

Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES A. GULLICK, OF BROOKINGS, SOUTH DAKOTA.

AUTOMATIC MAIL-BOX.

No. 907,787. Specification of Letters Patent. Patented Dec. 29, 1908.

Application filed February 28, 1908. Serial No. 418,340.

To all whom it may concern:

Be it known that I, CHARLES A. GULLICK, a citizen of the United States, residing at Brookings, in the county of Brookings and State of South Dakota, have invented certain new and useful Improvements in Automatic Mail-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to free rural delivery mail boxes, and has for its object to provide a box of this kind which will be automatic as to its locking arrangements, thus affording a very convenient and efficient mail box of this character.

Another object is to provide, in a box of this kind, novel automatic locking means whereby the box may be always locked and unlocked at the proper time without attention on the part of the person operating the box.

For these and other objects which will appear as the description proceeds my invention consists of certain novel arrangements and combinations of parts of which the herein described mail box is an embodiment.

While herein I describe minor details I do not limit myself to these, as the same may be greatly varied without departing from the spirit of the invention. Neither do I limit the herein described locking and signaling means to boxes of this character, or to mail boxes, but reserve the right to use them wherever expedient or desirable.

In the annexed drawings forming a part of this specification, and in which like reference characters designate like parts throughout the several views, Figure 1 is a side elevation of my mail box, Fig. 2 is a longitudinal sectional view showing the parts in normal position, Fig. 3 is a longitudinal sectional view showing the movable parts open, Fig. 4 is a horizontal sectional view taken on the line 4—4 of Fig. 2, Fig. 5 is a vertical cross sectional view of the mail box, Fig. 6 is a perspective view of the removable drawer and its locking mechanism.

As shown my invention comprises a mail box 1, made of sheet metal, or of any desired material having a rounded upper surface forming a roof 2, the same being continued downwardly to form sides 3, between which are fastened the lower floor 4 and the partition floor 5. At the end 6, which will be hereinafter referred to as the outer end is a door 7, completely closing said end, and pivoted between the lower corners of said sides 3 by means of outwardly extending pins or the like 8, the upper part of said door is provided with an outwardly projecting perforated hasp 9 adapted to register with a correspondingly shaped hasp 10 on the roof 2. Suitable locking means is provided as the bail of a pad-lock. At the inner end 11 I provide an outwardly opening semi-circular door 12 pivoted at its lower corners similar to the door 7, by means of a pin 13, said pin extending from end to end of the lower edge of said door. The material around said pin is cut away at some point intermediate the ends thereof, as at 14, and is wrapped with a coil spring 15, the free end of said spring being fastened in any suitable manner to the door 12, and the floor 5, whereby said spring holds the door 12 normally closed. The door 12 is provided with locking means similar to that shown for the door 7.

The floor 5 divides the mail box into an upper compartment 16 and a lower compartment 17, and is provided near the inner end with a transverse letter slot 17′, the lower compartment being rectangular in shape and adapted to receive in its inner end the drawer 18. The drawer is provided with a suitable handle 19 by which the same may be removed. The inner end 20 of the drawer is slotted at its lower portion, said slot receiving a supporting piece 21, which is riveted to the bottom 22 of the drawer and projects outwardly, and is formed into two upturned perforated ears 23, having a spindle 24 passed therethrough. Pivotally mounted between said ears and on said spindle is a locking lever 25 being formed at its inner end around said spindle, and provided with a laterally projecting tripping lug 26 at its pivoted end, the free end being provided with a catch 27, which projects downwardly when the drawer is locked in place. Near the outer end of said mail-box, and on said lower floor is riveted or otherwise fastened a plate 29, having its opposite ends slightly upstanding to form an inner shoulder 30 and an outer shoulder 31. Said plate being so placed that when the drawer is closed the spindle 24 will lie over said plate intermediate the ends thereof, but slightly nearer the inner shoulder 30. Rigidly secured to the inner face of the door 7 and near its pivoted edge and projecting laterally from said door is a flattened U shaped

throwing device 32. The yoke 33 is flattened as shown and when the door 7 is closed lies against the plate 29, midway its ends but nearer the outer shoulder 31. When the locking lever 25 is closed over the shoulder 31, said locking lever lies over said yoke 33 as clearly shown in Fig. 2.

The operation of my device is as follows: We will suppose that the drawer 18 is unlocked and that the lever 25 is lying back against the supporting piece 21, the tripping lug 26 projecting outwardly. The mail carrier now deposits the mail and inserts the drawer in place. As the drawer closes the tripping lug 26 is brought into contact with the shoulder 30, throwing the lever 25 over in substantial alinement with the supporting piece 21, whereby the catch 27 is caused to engage over the shoulder 31, the lever 25 lying over the flattened yoke 33. The box now remains locked until the patron comes to receive his mail, when he will unlock the door 7, and in taking out his mail he necessarily drops down the end of the box, the yoke 33 of course moving upwardly in the arc of a circle and throwing the lever 25 back against the supporting piece 21, thus leaving the box unlocked for the return of the carrier. The shoulder or flange 30 being inclined outwardly and the lug 26 similarly inclined permits said lug to ride over the shoulder without catching as shown in Fig. 3. The space between the lower face of the partition 5 and the upper edges of the drawer permits sufficient play to allow the lug 26 to ride over the shoulder 30 should there be any tendency of said lug to catch. If the patron should fail to unlock his box before the carrier makes his next delivery, the carrier may deposit the letters through the slot 17′ into the drawer. In case the patron wishes to deposit mail in the box he places it in the upper compartment and locks it, leaving the drawer unlocked, and the carrier can get the same by unlocking the door 12.

I provide my box with a convenient and efficient signal 34 to indicate to the carrier whether or not the box is empty or has in it incoming or outgoing mail. The signal 34 comprises a bar 35 provided at its ends with laterally projecting indicators 36, and intermediate its ends with an elongated slot 37, by means of which slot said signal is slidably and pivotally mounted on the side 2 as at 38. Near one end of the mail box is an upwardly opening holder 39 to receive the end of the signal when the same is lying horizontally to indicate that there is no mail in the box. This holder is placed in a convenient position to hold the end of the signal bar when the same is moved as far in the operation of the holder as the slot 37 will permit, the slot 37 being of sufficient length to enable the signal to be free of engagement with and passed by the holder 39. The U-shaped holder 40 is adapted to receive either end of the bar 35 to hold the same in vertical position.

Fig. 1 illustrates the signal in two positions, one in solid lines and one in dotted lines. The position shown in solid lines may be used to indicate outgoing mail, the horizontal position indicating of course that there is no mail in the box. Any predetermined method of indication may be used, or one of the ends 36 may be painted red and the other white to indicate the different kinds of mail in the box. Near the top of the inner side of the door 12 I provide a small upwardly opening flat box 41 where the patron may leave money for stamps. This box opens upward as stated so that when the door is opened and lowered the coin will drop out into the carrier's hand without his having to pick them up.

I claim:—

1. A mail box having a compartment open at both ends, a door for closing one end thereof and provided on its inner face with a laterally extending member, a drawer for closing the other end of said compartment and means carried by said drawer for engaging the laterally extending member of the door for locking said drawer in closed position.

2. A mail box having a compartment open at both ends, a closure for each of said ends, means within the box for locking one of said closures and means carried by the other closure for unlocking said first mentioned means on the opening of said last mentioned closure.

3. In a device of the class described, an upper and lower compartment, each of said compartments being open at both ends a single closure at one end adapted to close both of said openings, a door adapted to close the other end of said upper compartment, and a drawer adapted to slide into and close said lower compartment.

4. In a device of the class described, the combination of a compartment having open ends, a closure for each of said ends and cooperating locking elements carried by the respective closures and operable to engage and lock one of said closures in closed position.

5. In a device of the class described, a compartment having openings at its opposite ends, a drawer slidable in said compartment from one end, said drawer being provided with locking means whereby said drawer is locked in said compartment, a closure at the other end of said compartment, and means carried by said closure adapted to unlock said drawer locking means when said closure is open.

6. In a device of the class described, a compartment having open ends, a shoulder secured in the lower part of said compartment, a drawer slidable in said compartment from one end, a locking lever pivoted to said drawer, and having a shoulder thereon

adapted to engage said first named shoulder, a door adapted to close the other end of said compartment, and means rigidly secured to said door adapted to throw said locking lever when said door is opened.

7. In a device of the class described, a compartment having open ends, a drawer slidable into said compartment from one end, a supporting piece extending from the inner end of said drawer, a locking lever pivoted to the outer end of said supporting piece, said locking lever being provided at its free end with a projecting shoulder, oppositely disposed shoulders at the lower part of said compartment, one of said shoulders being adapted to be engaged by said projecting shoulder the pivot end of said locking lever being provided with a tripping shoulder adapted to be engaged by the other of said oppositely disposed shoulders, a closure pivotally mounted in the other open end of said compartments, a tripping member rigidly secured to said closure and adapted to lie between said oppositely disposed shoulders and under said locking lever when said locking lever and said door are in closed position.

8. In a mail box, a roof, a bottom and side members, a division floor between said side members dividing said mail box into upper and lower compartments each having oppositely opening ends, oppositely disposed shoulders on said bottom near one of said open ends, a door pivoted between the lower corners of said sides and adapted to close the open ends of said upper and lower compartments adjacent said oppositely disposed shoulders a U-shaped throwing device rigidly secured to said door and adapted to lie between said oppositely disposed shoulders when said door is closed, a drawer adapted to slide in said lower compartment from the opposite end thereof, the inner end of said drawer being provided with a supporting piece, a locking lever provided with a shoulder on the free end thereof pivotally secured to the outer end of said supporting piece and adapted to engage the one of said oppositely disposed shoulders nearer said end and adapted to lie over said U-shaped throwing device, a tripping lug secured to the pivoted end of said locking lever and being adapted to be engaged by the other of said oppositely disposed shoulders when said locking lever is folded against said supporting piece, and another door at the opposite end of said upper compartment.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES A. GULLICK.

Witnesses:
G. J. FLITTIE,
HANY A. WILLIAMS.