Jan. 2, 1923.

1,440,529.

R. E. CARLSON ET AL.

MAIL BOX.

FILED AUG. 20, 1921.

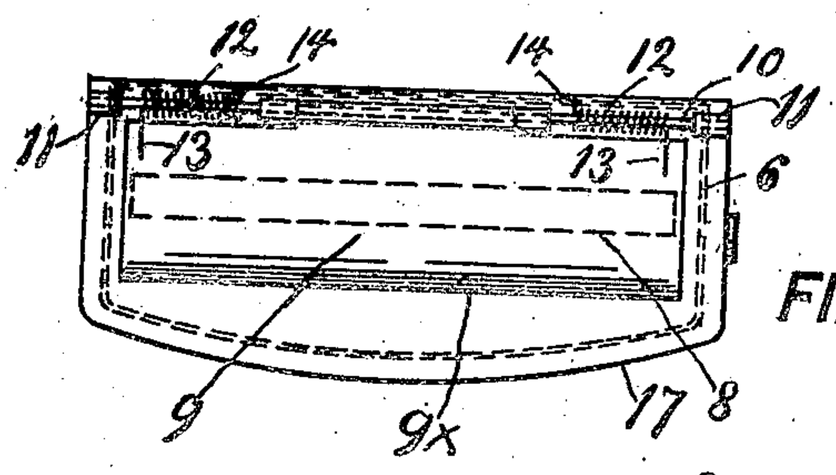

FIG. 1.

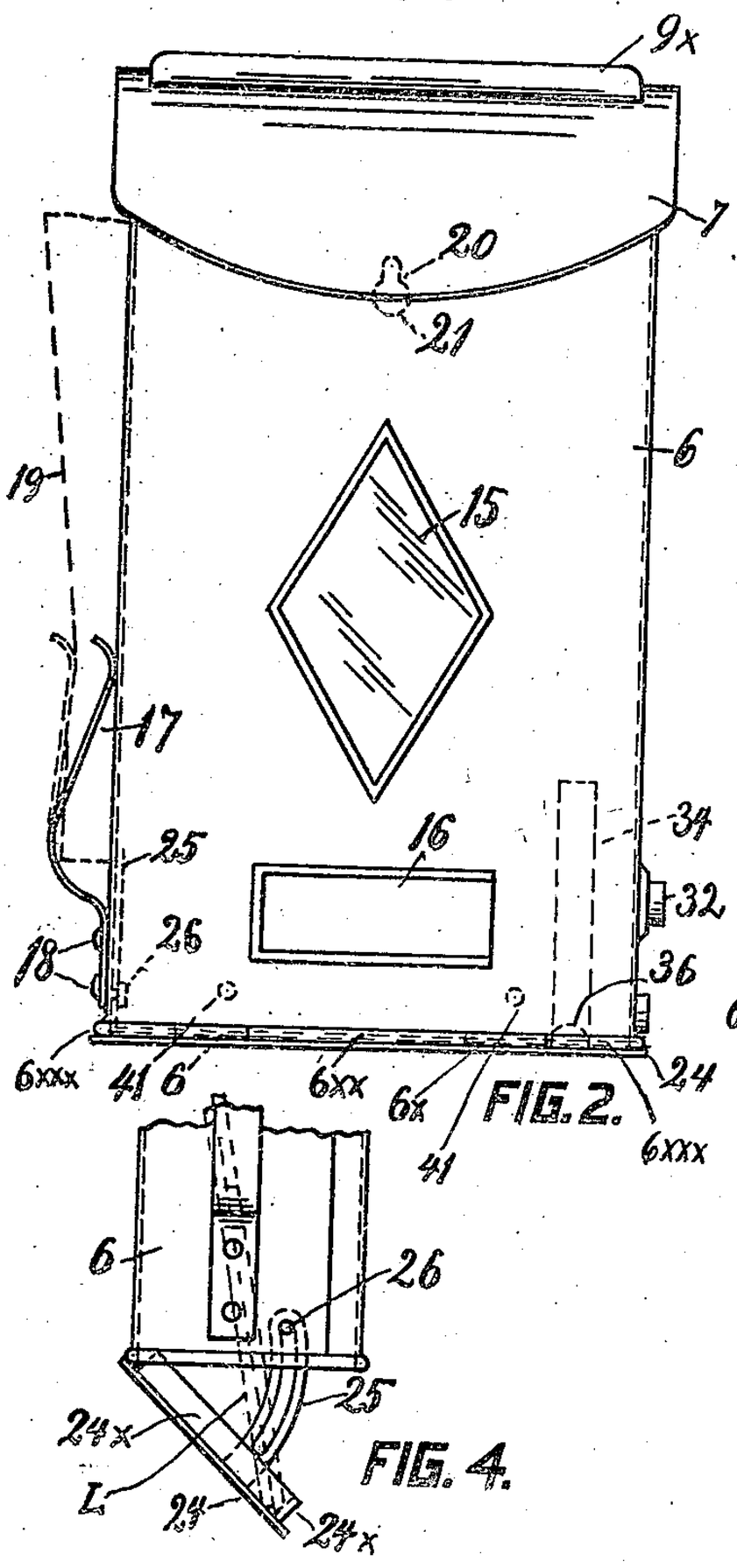

FIG. 2.

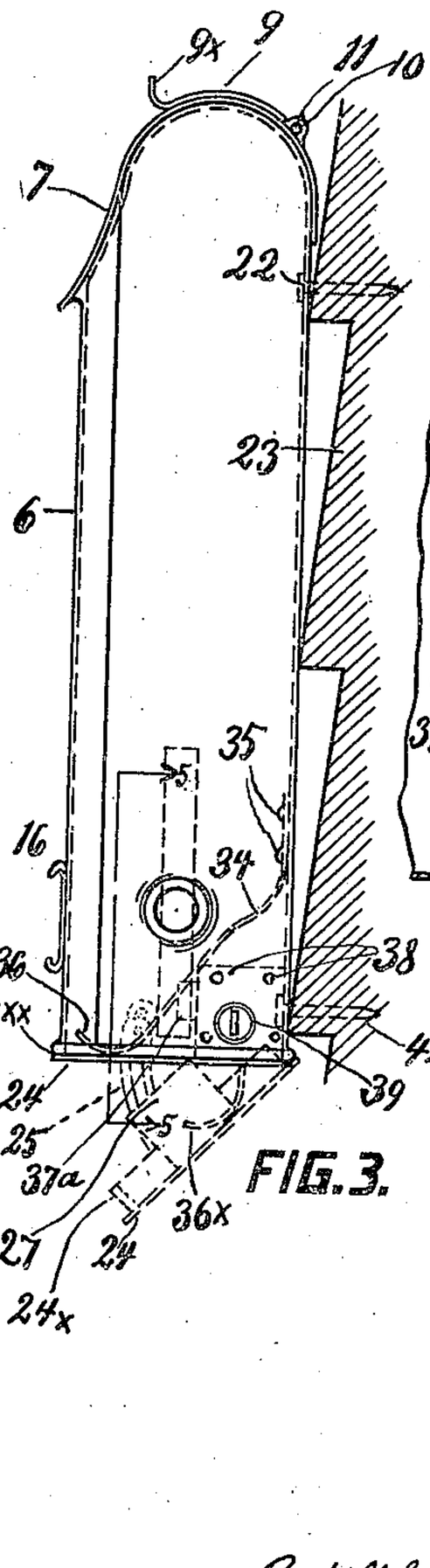

FIG. 3.

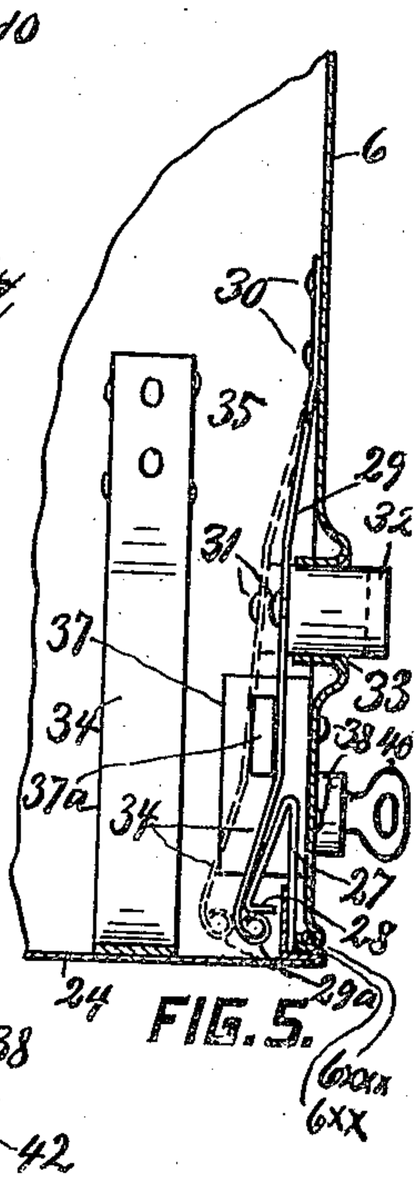

FIG. 5.

FIG. 4.

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UNITED STATES PATENT OFFICE.

RUDOLPH E. CARLSON AND JOHN M. GERSTER, OF ST. PAUL, MINNESOTA.

MAIL BOX.

Application filed August 20, 1921. Serial No. 494,028.

To all whom it may concern:

Be it known that we, RUDOLPH E. CARLSON and JOHN M. GERSTER, citizens of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented a new and useful Mail Box, of which the following is a specification.

Our invention relates to mail boxes in general and more particularly the type of mail boxes used on dwellings in cities where a mail delivery system is established.

The object of the invention is to provide a mail box of light and durable construction which will be convenient and if locked will resist any attempt to remove contents of same or remove the mail box, but is easily opened and closed by the person or persons supposed to have access to same.

In the accompanying drawing:

Fig. 1 is a top view of our improved mail box.

Fig. 2 is a front elevation of Fig. 1.

Fig. 3 is an edge view of the mail box looking from right to left in Fig. 2 and showing a portion of a wall to which the box is attached.

Fig. 4 is an edge view of the lower left hand portion of Fig. 2 showing the hinged bottom swung down.

Fig. 5 is an enlarged sectional view as on line 5—5 in Fig. 3.

Referring to the drawing by reference numerals, 6 is the receptacle of our mail box and is in general shape a normally vertically arranged sheet metal box having an integral top hood 7 with a slot 8 in its top for inserting mail. 9 is a slide normally resting on hood 7 and covering slot 8; it has a front wing $9^{\times}$ and may be hinged on a pintle rod 10 mounted in bearings 11 on the hood 7. One or more coil springs 12 on said rod, each with one end 13 on the lid and the other end 14 on the hood and said ends being under tension cause the lid to stay closed on hood 7.

15 is a glass or other transparent panel and 16 a name plate holder on the front of the box. 17 is a preferably flat spring on one edge or side of the box secured to it as at 18, its free top end arranged to be sprung outward for the purpose of holding bulky mail such as a newspaper 19, which is preferably placed in upright position to be clear of the wall 23 (shown in Fig. 3).

20 is a key hole shaped aperture in the upper part of the back wall of the receptacle, the large end 21 of the aperture adapted to be passed over the head of a nail or screw 22 after which the box is pulled down so that it hangs on the shank of the nail or screw securing the upper part of the box to a wall 23 (see Fig. 3).

The bottom end of receptacle 6 is closed by a hinged bottom 24 which is hinged by its rear lower edge $6^{\times}$ on a wire $6^{\times\times}$ inlaid in a bead $6^{\times\times\times}$ permitting the bottom to be swung down (as in Figs. 3 and 4) the downward drop of same being limited by a slotted segment 25 secured to flange $24^{\times}$ of bottom and guided on an inwardly projecting pin 26 in one of the side walls of the receptacle. The other end of bottom 24 has a catch 27 preferably made of flat metal, its lower end soldered or otherwise secured to flange $24^{\times}$ and its upper end bent inwardly and down at an angle, then bent back to form a shoulder 28 (see Fig. 5). Said shoulder is engaged by the lower end or hook 29^{a} of a vertically disposed flat spring bar 29 the upper end of which is secured as at 30 to the side wall of receptacle 6. At a point intermediate the ends of the flat spring 29 is secured as at 31 a push button 32 projecting through a flanged opening 33 in the side wall of the receptacle. Inward pressure on said button disengages said hook or catch 29^{a} of the spring 29 from shoulder 28 of catch 27, permitting hinged bottom 24 to swing down and operator has easy access to the mail within the box. Opening of the bottom 24 is automatic being caused by another vertically arranged preferably flat spring 34, the upper end of which is secured as at 35 to rear wall of the receptacle and the lower end bent as at 36 and pressing upon the inner side of the bottom 24 near its front edge. When bottom 24 is released as described spring 34 assumes the position $36^{\times}$ shown dotted in Fig. 3, pressing the bottom to the inclined position 24.

For locking our device a rim lock 37 of suitable size is secured as at 38 to the inner side of the wall of the receptacle and adjacent spring 34, a hole 39 being provided for insertion of key 40. Manipulation of the key causes lock bolt 37^{a} to project across spring arm 34 (see Figs. 3 and 5) positively preventing the latter from being operated by push button and consequently making it impossible to disengage it from the spring catch 28 of the hinged bottom.

41 are holes in the lower portion of rear

wall of the receptacle for insertion of nails or screws 42 to hold lower end of mail box properly against wall 23 after the upper portion has already been secured to wall as previously described. This method of securing mail box to wall leaves no exposed fastening means and consequently makes it difficult to remove it from the wall.

From the above description it will be understood that in the use of the box the top lid 9 is raised by taking hold of its upturned wing 9^x, the letters are dropped into the box and the wing released to let springs 12 close the lid. Packages may be piled upon the lid where they are retained by the wing 9^x. Newspapers are placed at 19 as stated. In removing mail from the box the button 31 is pressed, whereupon the bottom 24 is automatically thrown to the inclined position leaving the letters standing at an incline and with the lower ends resting on it close by the front guard 24^x, about as indicated by dotted lines L in Fig. 4, where the operator can easily reach and remove them. After such removal he simply swings or pushes the bottom upward to make the catches 27—28 and 29^a snap into engagement. Only in localities where there is danger of mail thieves the lock 37 and its keys 40 need to be used and is then applied as already described.

Having thus described our invention what we claim is:

1. A mail box having a vertically disposed hollow body with an inlet aperture for letters in its top and a hinged bottom adapted to be folded downwardly to an inclined position to let the mail out, and means for holding said bottom in closed position, and means for securing the box to a wall or other vertical object, means for stopping the bottom at a predetermined incline and means for automatically opening the bottom to the inclined position when released from the means holding it closed.

2. The structure specified in claim 1, said means for holding the bottom closed comprising a catch on the bottom and a catch engaging therewith and secured at the inner side of the box, the latter catch being resilient and having a press button protruding through an aperture in one side of the box.

3. The structure specified in claim 2, and a lock secured in the box near the resilient catch and arranged to lock the catch when so desired, said lock having a key hole and a removable key for same near the press button.

4. The structure specified in claim 1, said bottom being hinged at its rear edge and having near its front edge a rim or guard to prevent accidental escape of the letters when the bottom is suddenly swung to its inclined position.

In testimony whereof we affix our signatures.

RUDOLPH E. CARLSON.
JOHN M. GERSTER.