

(No Model.)

4 Sheets—Sheet 1.

E. F. KINSEY.
HOUSE MAIL BOX.

No. 518,924.

Patented Apr. 24, 1894.

Fig. 2.

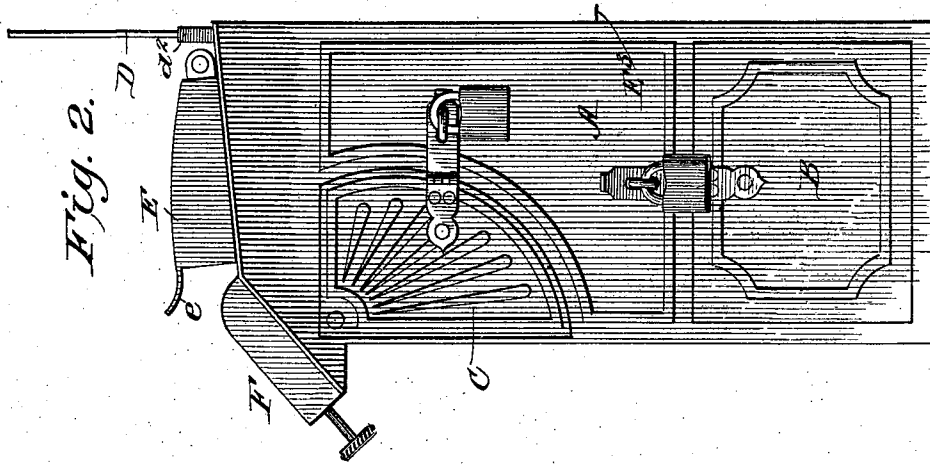
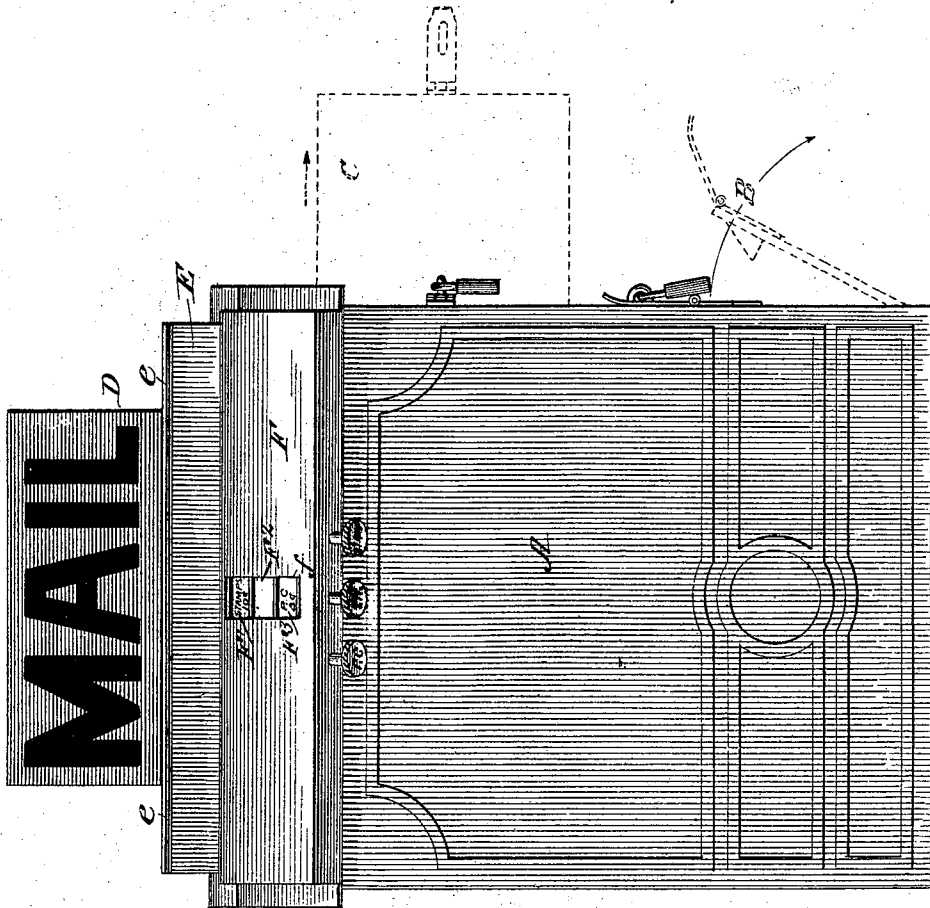


Fig. 1.



WITNESSES:
Fred G. Dieterich
Edw. W. Byru.

INVENTOR
Edwin F. Kinsey.
 BY *Marvin C.*
 ATTORNEYS.

(No Model.)

4 Sheets—Sheet 2.

E. F. KINSEY.
HOUSE MAIL BOX.

No. 518,924.

Patented Apr. 24, 1894.

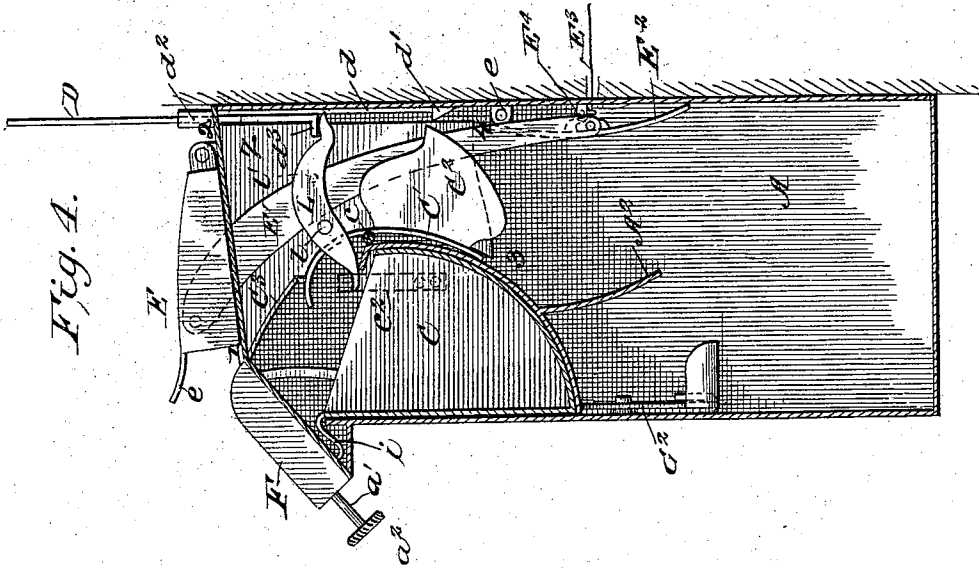


Fig. 1.

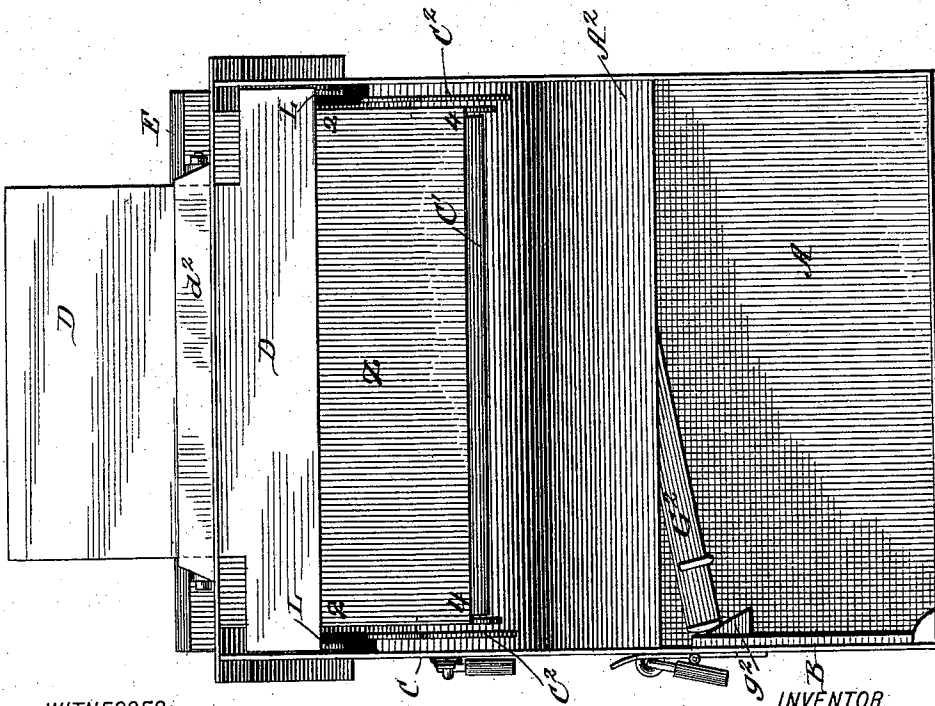


Fig. 2.

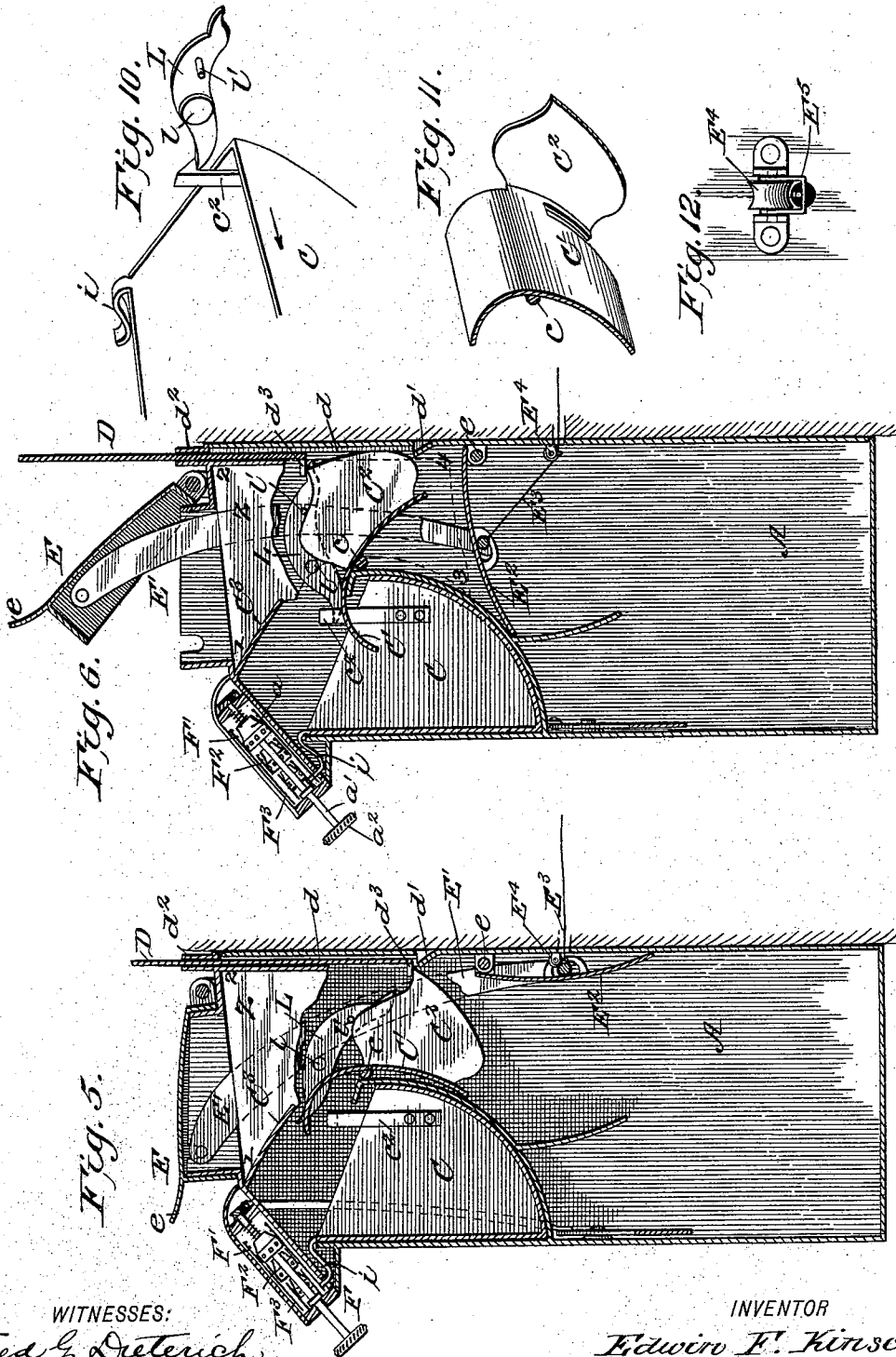
WITNESSES:
Fred G. Dieterich
Edw. W. Byrne.

INVENTOR:
Edwiro F. Kinsey.
 BY *Munn & Co*
 ATTORNEYS.

E. F. KINSEY.
HOUSE MAIL BOX.

No. 518,924.

Patented Apr. 24, 1894.



WITNESSES:
Fred G. Deterich
Edw. W. Byrne,

INVENTOR
Edwiro F. Kinsey.
 BY *Munn & Co.*
 ATTORNEYS.

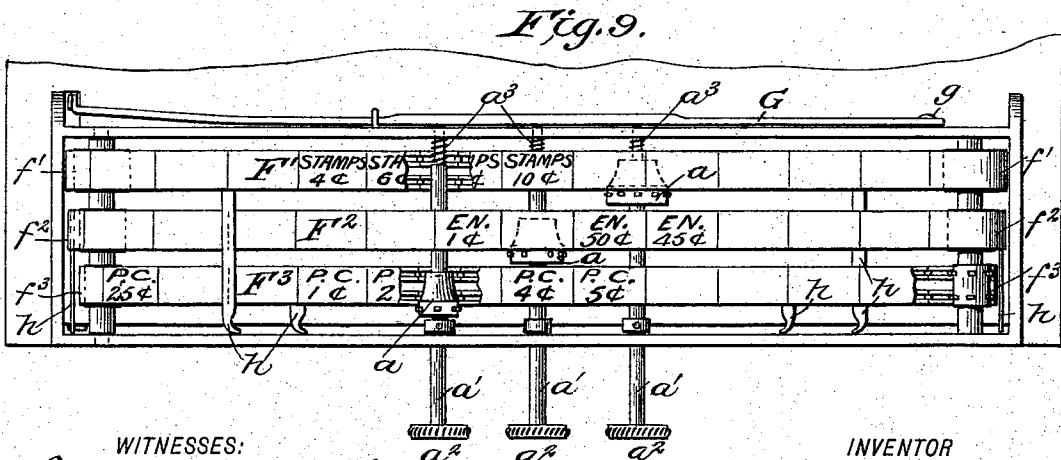
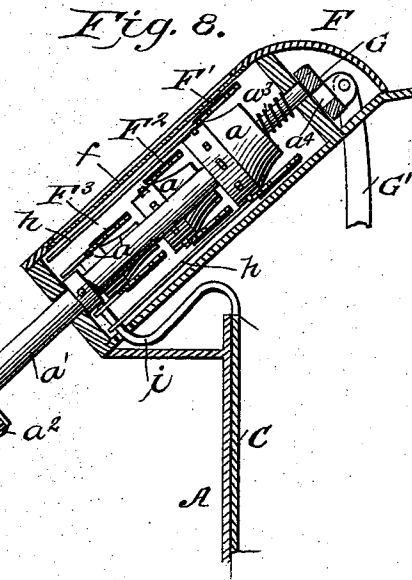
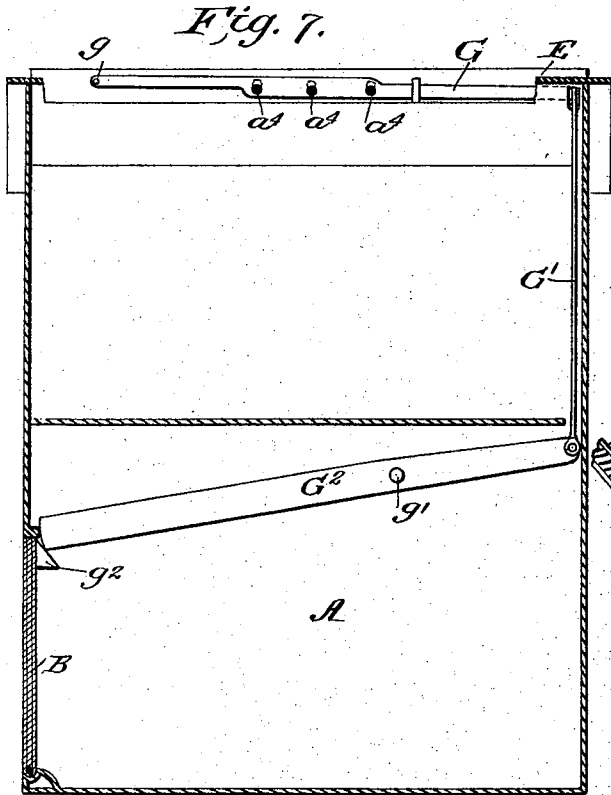
(No Model.)

4 Sheets—Sheet 4.

E. F. KINSEY.
HOUSE MAIL BOX.

No. 518,924.

Patented Apr. 24, 1894.



WITNESSES:
Fred G. Dieterich
Edw. W. Byrne.

INVENTOR
Edwin F. Kinsey.
 BY *Munn & Co.*
 ATTORNEYS.

UNITED STATES PATENT OFFICE.

EDWIN F. KINSEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

HOUSE MAIL-BOX.

SPECIFICATION forming part of Letters Patent No. 518,924, dated April 24, 1894.

Application filed July 18, 1893. Serial No. 480,853. (No model.)

To all whom it may concern:

Be it known that I, EDWIN FREDERICK KINSEY, of Washington city, in the District of Columbia, have invented a new and useful
5 Improvement in House Mail-Boxes, of which the following is a specification.

The object of my invention is to provide a mail box to be attached at or near the front doors of residences, offices, or other buildings, to the face of a wall or in a niche specially formed to receive it, and which shall indicate to the mail carrier the presence of mail deposited therein by the occupants of the house, which shall indicate by a signal
10 bell to the occupants of the house the deposit of mail by the mail carrier, and through the medium of which box also the purchase of stamps, stamped envelopes, and postal cards from the mail carrier in definite quantities
20 may be effected and change made, and all without risk of loss of money or mail, as will be hereinafter fully described with reference to the drawings, in which—

Figure 1 is a front and Fig. 2 a side elevation of the box. Fig. 3 is a rear view with the back plate removed. Figs. 4, 5 and 6 are vertical transverse sections showing different positions of the parts. Fig. 7 is a vertical longitudinal section taken near the front and
30 looking from the rear. Figs. 8 and 9 are respectively a vertical transverse section and plan view in section of the stamp selling devices shown on a larger scale and Figs. 10, 11 and 12 are details.

In the drawings A represents the body of the box, which is designed to be stamped up out of sheet metal, and to be attached to the front door or wall by bolts arranged within the casing so that the same are not accessible
40 from the exterior, and the box cannot be surreptitiously taken off and carried away.

I will first describe the external features of the box which are directly manipulated by hand, and will afterward explain the mechanism within whereby the external features
45 are made to co-operate with each other in carrying out the objects of my invention.

B is an end door hinged on a level with the bottom of the box, and provided with a hasp and staple with padlock for fastening the
50 same. This door opens into the bottom of the box and gives access to the letters, &c.,

which are deposited by the postman, and for this purpose the key to this door is kept by the owner of the house, or in some convenient place in the house for the use of its occupants.

C is a drawer, which is trough shaped in cross section and slides in guides in a horizontal position near the top part and on the front side of the box. This drawer is designed to receive the letters, &c., deposited by the occupants of the house and intended to be collected by the postman, and also any money which may be placed therein in payment for stamps, postal cards, &c. This drawer is provided with a suitable lock, the key to which is held in the possession of the postman and fits the drawers of all other boxes.

D is an indicator plate which bears the word "mail," and is arranged to be elevated to the plain view of the postman by the act of the house holder in putting mail in the box, for the purpose of calling the attention
75 of the postman to the fact that there is mail waiting for collection. This indicator plate is raised automatically by the occupant of the house in depositing mail, or money for stamps, &c., and is released or dropped again by the act of the postman in collecting the mail or delivering stamps, &c., by devices which will be hereinafter described.

E is the lid or cover, which is flanged around its edges to fit over a corresponding flange on the box to exclude rain, &c., and is hinged at its rear side. This lid is raised to give access to the interior both in the deposition of mail by the postman, and the insertion of mail by the occupants of the house.

F is the stamp selling case, which is affixed to the beveled upper front edge of the box, and is operated as hereinafter described.

To the lid E Figs. 4, 5 and 6 there is pivotally connected on each side a link E' E' which at their lower ends are in turn connected to a hinged leaf E² near the middle of its end portions. This leaf is hinged at its rear edge e to the stationary back plate of the box, so that when the lid E of the box is raised, as in Fig. 6, the links E' lift and hold the leaf E² transversely across the box, so as to prevent access being had to the bottom of the box, and thereby preventing the surrep-
100

titious abstraction of mail already deposited in the box by the postman. When the lid of the box is raised for the insertion of the postman's mail, the leaf E^2 acts as a partition across the box to receive the mail, and then when the lid is closed this leaf drops and allows the mail to fall to the bottom of the box whence it can only be removed by the occupants of the house through the door B.

Attached to the rear side of the leaf E^2 is a wire E^3 which runs through the back of the box to the interior of the house and connects with a bell or other signal which is rung by the lift of the leaf E^2 when the postman deposits the mail, thereby notifying the occupants of the house. This wire E^3 runs under a small grooved pulley E^4 journaled in the back plate, and to prevent this wire from dropping away from the roller or getting misplaced a loop or keeper E^5 of wire, see Fig. 12, is made to embrace the same. This pull wire I do not claim broadly in this relation as it is shown in my previous Patent No. 442,983, granted December 16, 1890, but I do not know that it has ever been combined with a guide pulley and keeper as above described.

Ordinarily entrance into the top of the trough shaped drawer C is obstructed by a hinged and curved leaf C' closing up against a lip C^3 , Figs. 4 and 5, but when letters are to be deposited to be collected and mailed by the postman, this leaf is deflected by the hand by pressing forwardly on its upper edge, as in Fig. 6, this leaf being hinged at the point c near its middle in the stationary end walls of the box. This curved leaf C' is slotted as shown in Fig. 11 to give passage to the link bars E' when the leaf is deflected as shown in Fig. 6. When letters are thus inserted in the drawer for the postman notice is given to the postman by the automatic lifting of the indicator plate D, which I will now explain. This plate is guided vertically against vertical ribs d struck up from the back plate, and rest upon a horizontal lip d' of the back plate, and plays vertically through the flattened tube d^2 in the top of the box. At the bottom side of each end of the indicator plate there is formed a foot d^3 which is arranged to be acted upon and lifted by the lift wings C^2 , which are formed on or attached to the ends of the hinged leaf C' , and project rearwardly at right angles to the leaf, see Fig. 11, so that when the hinged leaf C' is deflected by the house holder in the act of depositing letters, to be mailed, in the drawer, this deflection of leaf C' causes its wings C^2 to lift the indicator plate D into view as in Fig. 6. The leaf C' when released drops from gravity and the weight of the wings C^2 , and it is necessary to maintain the indicator in its elevated position. For this purpose there is at each end of the box a latch L fulcrumed at the point l which is also lifted by the wings C^2 through pin l' . The rear end of this latch rests under the foot of the indicator plate, Fig. 4, and when raised

to its highest position the forward end of the latch is caught, Figs. 6 and 10, beneath a beveled face spring catch c^2 on each end of the drawer C, so that although the hinged leaf C' drops again after being deflected, the indicator plate is still held firmly in elevated position by the latch L as in Fig. 4. When the drawer C, however, is pulled out by the postman for the removal of the mail, (in Fig. 1 it is shown partly so drawn out) the catches c^2 are taken away from the latch L, and the indicator plate drops again to its lowest position upon the lip d' of the casing. This lip is formed by cutting and pressing inwardly a portion of the back plate, which leaves a slot in the back plate at this point. This is not only a convenient way of forming the lip, but it also makes a drainage slot and water shed that catches all the water that may enter through the indicator tube d^2 and discharges it outside the box again.

I will now describe the stamp selling devices shown in Figs. 1, 2, 8 and 9. In the case F is arranged three (or more) endless chain belts F' F^2 F^3 , Figs. 8 and 9, distended in parallel position along the horizontal upper edge of the box. I do not confine myself to any particular construction of belts but as shown each one of these belts consist of a metal body and a facing of leather or canvas marked with the denomination of stamps in different quantities, thus on belt F' appears stamps 5 cents, stamps 10 cents, stamps 15 cents and so on. The next belt F^2 will be marked for stamped envelopes in the same way, the third F^3 will be similarly marked for postal cards, and so on for as many belts as may be used. The three classes named however, will be usually found sufficient. These belts are to be set so that the kind and amount wanted will show through the glass covered window f in the case F, and money is placed in the drawer to pay for them. These belts revolve around spiked rollers f' f^2 f^3 journaled in the case and are adjusted to the desired position by conical sprockets a fixed on shafts a' extending through the case and terminating in knobs a^2 for turning them. These shafts are normally forced downwardly and outwardly by spiral springs a^3 , so that the sprockets are not in engagement with the chain belts until forced up against the tension of the springs. These shafts are locked against being thus forced up by a longitudinal bar G, Figs. 7, 8, and 9, which is pivoted or hinged at one end g , and at the other end is connected to a link G' that descends to and connects with a lever G^2 lying inside of the box near its front face. This lever is fulcrumed at g' Fig. 7 near its middle, and its free end is normally held up by a beveled face lug g^2 on the outlet door B for mail. When this door is closed therefore the link G' and locking bar G are drawn down and the bar G lying in front of the upper ends of shafts a' prevents them from being raised, and hence the sprockets cannot act upon the belts. The result is that chil-

dren or unauthorized persons cannot change or tamper with the readings or indications which appear through the window *f* of the case. Whenever, however, the door B is opened by the occupant of the house, the free end of the lever G^2 drops down, and the link G' and locking bar G are raised. This locking bar is provided with three holes a^4 of a size large enough to allow shafts a' to protrude through them, and when the bar is lifted these holes pass into coincidence with the shafts, see Fig. 8, so that whenever the occupant of the house is present he may by the opening of the door B set the stamp selling chains to indicate his want, and by leaving the money in the drawer the postman will deposit the proper stamps, postal cards, or stamped envelopes with proper change in the house holders compartment to be in turn received by the house holder.

After the postman has made the proper exchange the chains of the stamp selling devices will all be set to zero or a blank space again. This is effected through the tappet arms *h* carried by the belts which are struck and carried along to restore the belts to zero or a blank space by a hook or arm *i* on the drawer C Figs. 8 and 9 as the latter is manipulated by the postman. To permit this to be done without interference between the belts the spiked rollers and sprocket wheels of the belts are made of different diameters see Fig. 8, those at the top being larger and decreasing in size toward the bottom, so that the tappet arms *h* of the different belts lie in different planes. These tappet arms all reach down to the range of engagement of the arm *i* which operates through a slot in the back of the case F, and for this purpose the arms of each belt are made longer than the one next below it.

In order that the sprocket wheels may pass into and out of engagement with the belts freely and without catching and hanging, the teeth of the sprockets may be beveled on the two sides which rub against the belt in going into and out of engagement therewith, and this, together with the yielding character of the belts, allows free engagement and disengagement.

To prevent any entanglement of letters or mail matter with the working parts of the device, an inner lining Z of sheet metal is placed just inside the end walls and back of the case, so as to make a perfectly smooth throat for the passage of mail matter into the box. The shape of the end walls of the lining is shown at 1—2—3—4 in full lines in Fig. 4, and dotted lines in Fig. 6, and the back of the lining as shown at Z in Fig. 3.

In constructing the drawer C it is intended to be arranged to slide freely but so connected to the box that it cannot be pulled entirely out and disconnected from the box.

In constructing the lid E it is formed with a projecting lip *e* which is engaged by the back of the same hand of the postman that drops the mail, so that the postman in depositing the

mail is only required to use one hand. This lip projects horizontally, extends the full length of the lid, and is made integral therewith. The downwardly projecting flange of the lid and the upwardly projecting flange on the box are also made quite deep, so that the lid has to be raised quite a distance before any opening of the box is offered, so that the closure of partition leaf E^2 and the ringing of the bell is certainly effected before any one could open the lid to rob it with a wire, or tamper with its contents. This I find to be necessary for the reason that the slack of the signal bell wire, and the looseness of the connections will allow the lid to be raised far enough to permit the insertion of a wire, without either ringing the bell, or closing the partition leaf. By making the flanges of the lid and box deep, and deeper in front than behind so as to accommodate the radial movement of the lid, a very considerable movement of the lid must be made before even a crack is afforded for the insertion of a wire, and this insures the ringing of the bell and closure of the partition leaf.

To accommodate the pivot pin of the link bars E' , the upper edges of the end flanges of the box are notched or slotted as shown in Fig. 6.

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

1. In a letter box the combination with a horizontally sliding drawer arranged in the upper front part of the box; of a hinged leaf C' closing access to this drawer except when tilted, an indicator plate made vertically adjustable, and mechanism connecting the hinged leaf and the indicator plate to cause the latter to be lifted and sustained in elevated position when the said hinged leaf is deflected substantially as shown and described.

2. In a letter box, the combination with a horizontally sliding drawer arranged in the upper front part of the box; of a hinged leaf C closing access to the drawer except when tilted and having rearwardly projecting lift wings C^2 at its ends, lever latches L, the indicator plate resting upon said latches and arranged to be lifted through the lift wings, and a catch fixed to the drawer and arranged to hold the latch and indicator in the elevated position until the drawer is pulled out substantially as shown and described.

3. The letter box having a supporting lip d' with a slot behind it formed in the back of the case; in combination with the indicator plate resting above the same and playing through an opening in the top of the box substantially as shown and described.

4. A letter box having a stamp selling device and consisting of an adjustable want indicator, a separate mail compartment provided with a door and lock, and connecting mechanism extending from said door to the

stamp selling devices, whereby the latter are rendered inoperative except when said door is open substantially as shown and described.

5 The combination in a letter box, of endless belts carrying markings for stamps, &c., adjustable sprockets arranged to be thrown into or out of gear with the belts to actuate them, a locking device to hold said sprockets out of gear and a door and connecting mechanism arranged to release the locking device
10 by the opening of the letter box substantially as shown and described.

6. The combination in a letter box of the case *F* with window *f*, the endless belts *F'* *F''*
15 *F'''*, the longitudinally adjustable shafts *a'* with sprockets *a* springs *a³* and knobs *a²*, the locking bar *G* with holes *a⁴*, link *G'*, lever *G²*, and the door for fixing the position of the parts substantially as shown and described.

20 7. The combination with the stamp selling device having endless belts with markings thereon and arms *h*, of the sliding drawer for the postman having hook or arm *i* arranged to act upon the tappet arms of the belt and
25 set them to zero by the movement of the drawer substantially as shown and described.

8. The combination with a letter box having a hinged leaf *E²* operated by the lid or cover of the box; of a pull wire *E³* for a signal bell,
30 a grooved pulley *E⁴* fixed in the back of the box, and a loop or keeper *E⁵* embracing the

wire and retaining it upon the pulley substantially as shown and described.

9. The combination with a letter box; of a stamp selling device composed of endless
35 belts, and distending rollers of different diameters, actuating sprockets of different diameters for adjusting them, tappet arms affixed to the belts and lying in different planes, and a setting arm operating upon the tappets
40 substantially as shown and described.

10. In a letter box, the combination of a case having a deep upwardly projecting flange around its upper opening or mail inlet, a hinged lid having a deep downwardly projecting
45 flange fitting around the same, both flanges being deeper at the front than at the back, a hinged partition leaf connected to the hinged lid, and a bell wire attached to the hinged partition leaf, to insure the sounding
50 of a signal before giving access to the box substantially as shown and described.

11. The combination with the letter box, the hinged leaf *C'* with lift wings, and latches; of an internal lining *Z* arranged as described
55 to screen the working mechanism from entanglement with mail matter substantially as shown and described.

EDWIN F. KINSEY.

Witnesses:

JAMES H. GRIDLEY,
 SOLON C. KEMON.