

(No Model.)

E. F. KINSEY.  
LETTER BOX.

No. 442,983.

Patented Dec. 16, 1890.

Figure 2.

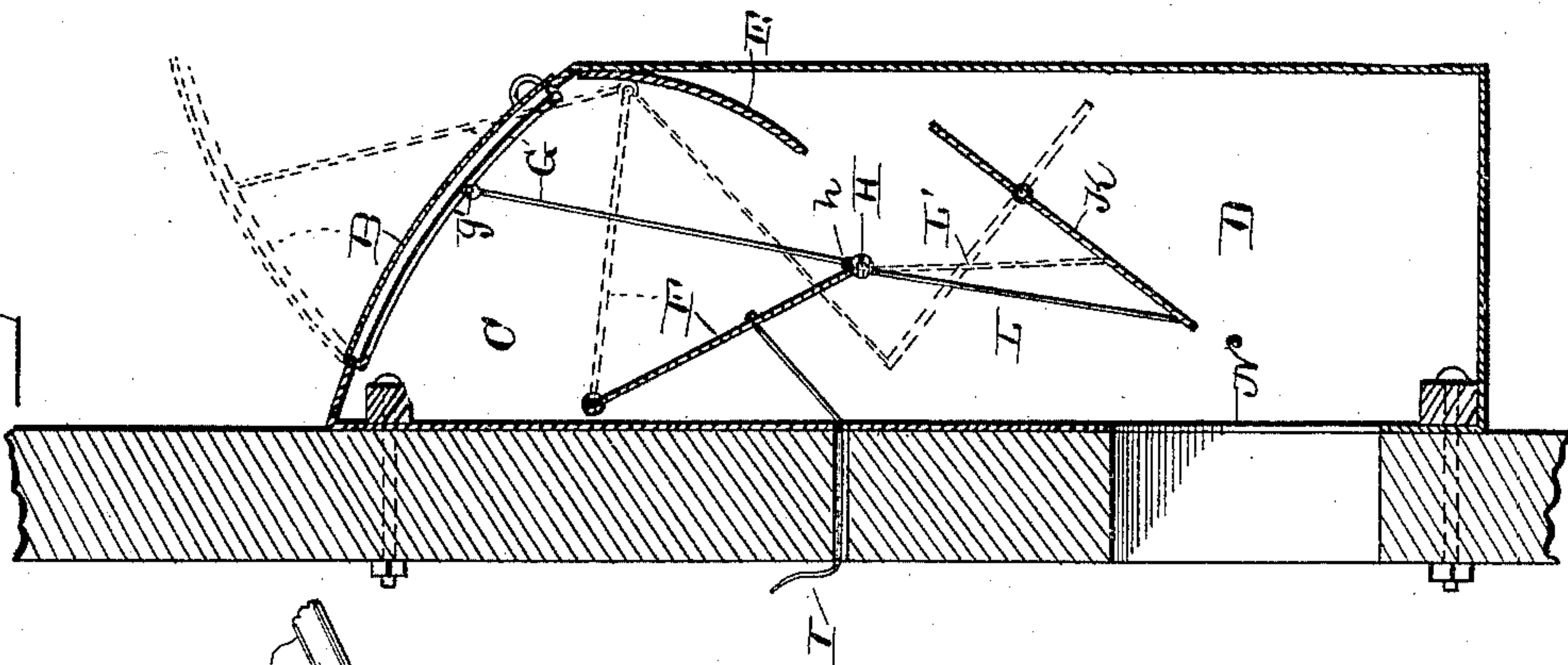


Figure 3.

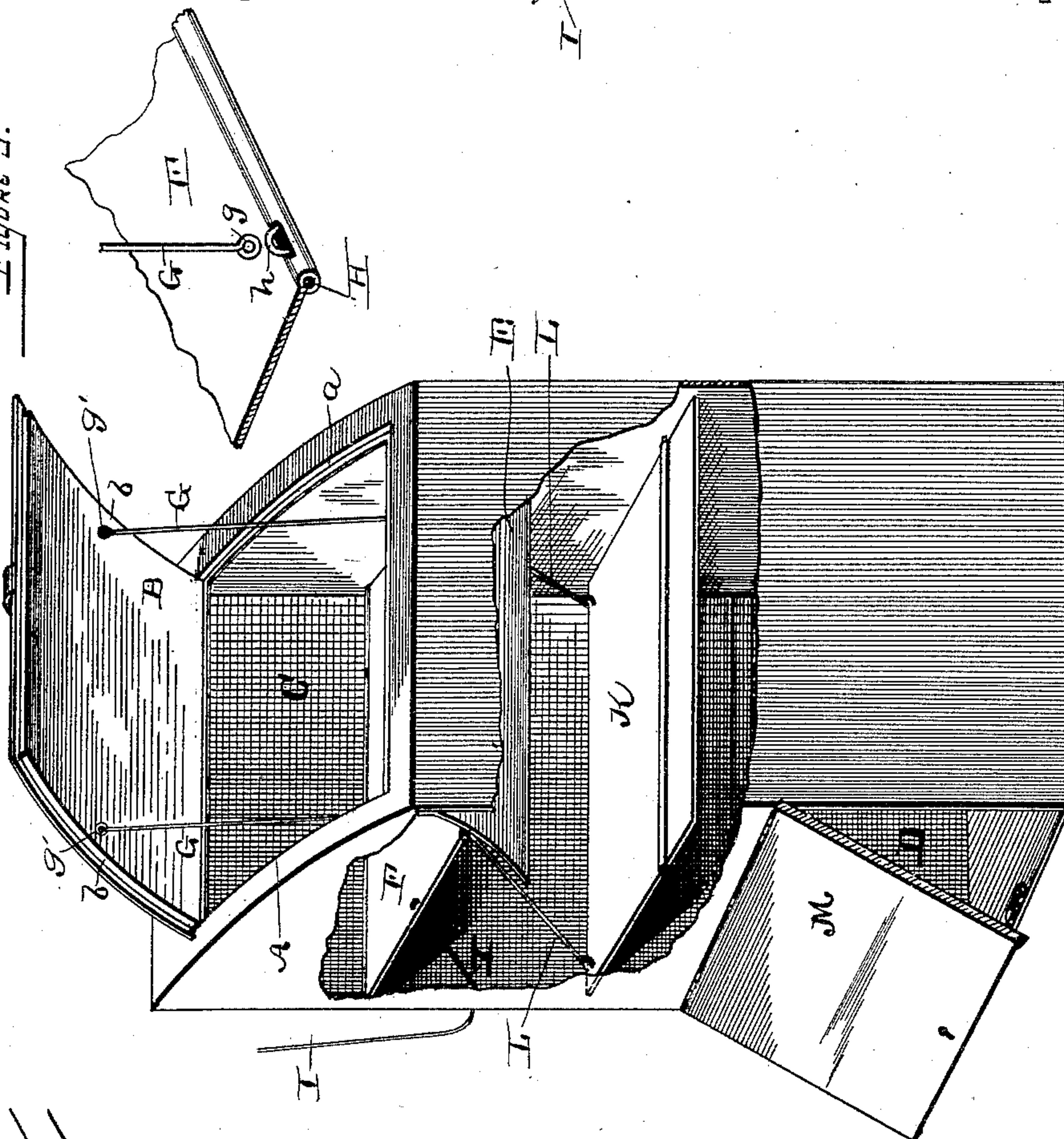
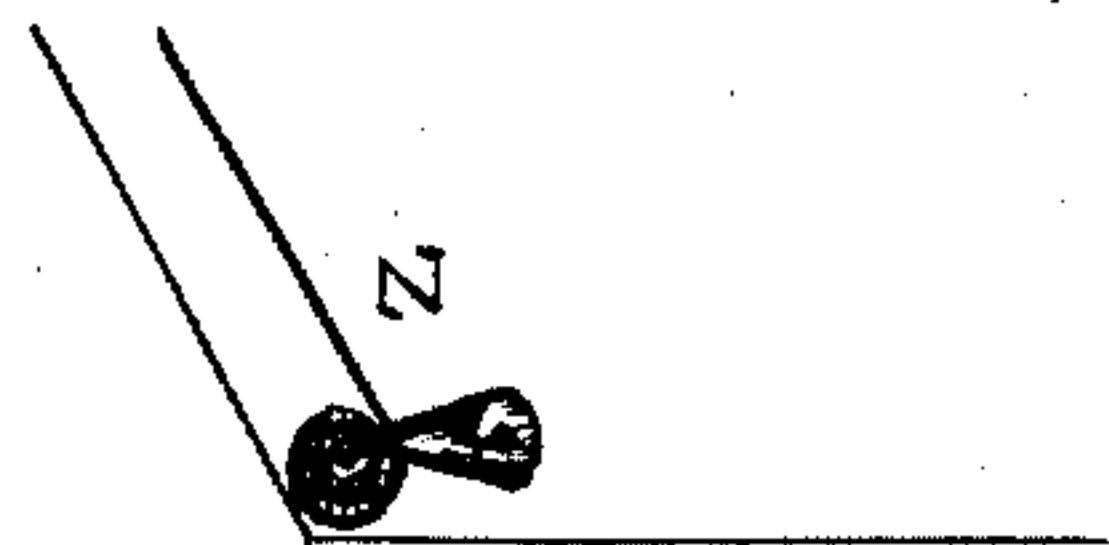


Figure 1.



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# UNITED STATES PATENT OFFICE.

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## LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 442,983, dated December 16, 1890.

Application filed July 16, 1890. Serial No. 358,896. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN F. KINSEY, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Mail-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to improvements in devices for the reception and the security of letters, parcels, and other mail-matter, which may be used in connection with residences, offices, and other buildings, and is preferably secured to a door, the construction of the device being such as to prevent the surreptitious abstraction of the mail-matter and enable the same to be reached only through a locked opening or through an opening in the door and rear of the box which is accessible to a person within the office or building.

I am aware that safety letter-boxes have been made heretofore; but their construction is such that when the lid is only partially open the parts are so arranged as to permit the abstraction of the mail-matter by the insertion of a hand or a wire; and therefore the object of my invention is to provide a device in which the contents are secure from interference at all times and in all positions of the lid or cover.

A further object of my invention is to combine simplicity and cheapness with durability and effectiveness in the construction of my improved mail-box, and thus produce a device which may be cheaply manufactured, will operate satisfactorily, and effectually prevent fraudulent tampering with the contents, and which will withstand the rough usage to which such articles are ordinarily subjected.

A further object of my invention is to provide means for giving notice or an alarm to the occupants of the building when mail has been deposited in the box, and also for giving an alarm whenever the outside lid or cover is raised.

My invention consists, further, in certain details of construction and arrangement, which

will be fully described hereinafter in connection with the accompanying drawings and specifically pointed out in the claims hereto appended.

Referring to the drawings, Figure 1 is a perspective view, partly broken away, of a mail-box embodying my improvements. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a detail view.

The body of the box is preferably of rectangular form and is provided at its upper end with an opening A, into which fits a hinged lid or cover B, the edges of the latter being provided with offsets *b* to fit in corresponding channels or grooves *a* in the edges of the opening, and a portion of the interior of the box at its top is divided off or separated from the remainder thereof to form a receiving-chamber C, which is opened by raising the said lid or cover. The lower portion or storage-compartment D is separated from the receiving-chamber by a stationary inclined ledge or shelf E, which is secured to the front side of the box and is inclined downwardly toward its rear edge, and a swinging leaf F, which is hinged to the rear side of the box and operates at its free edge close to the surface of the stationary ledge or shelf. The free edge of the swinging leaf is connected to an intermediate point of the lid or cover by means of rods, wires, or similar connecting devices G G, whereby when the lid or cover is raised to open the receiving-chamber the leaf is similarly operated, thereby causing its free edge to come close to the surface of the stationary ledge or shelf. When the lid or cover is lowered to its normal or closed position, the leaf drops to an approximately vertical position, thereby allowing the mail-matter which may have been deposited thereupon to drop into the storage-compartment. Stiffening-wires H H are fitted in sheaths in the edges of the swinging leaf, and at suitable points said wires are bent up to form loops or keepers *h*, in which are engaged the eyes *g g* on the lower ends of the rods, wires, or connecting devices G G, and the upper ends of the latter are also provided with eyes *g' g'* to engage rings or staples on the inner or under side of the lid or cover.

I am aware that heretofore mail-boxes and similar devices have been constructed with



swinging leaves which, when the lid or cover is raised, come in contact with stationary flanges to prevent the introduction of the hand to remove the contents; but it will be  
 5 seen that with such a construction if the lid or cover is only partially raised the leaf is not yet in contact with said flange, and therefore there is an opening through which mail may be abstracted. In my improved mail-  
 10 box, however, the swinging leaf does not come in contact with the stationary ledge; but instead its free edge traverses or moves over and close to the surface thereof, the width of the ledge being such that before the lid or  
 15 cover has been raised sufficiently to admit a hand or an implement of any kind all communication with the storage-compartment is cut off. This inclined ledge or shelf may be curved or concaved toward the swinging leaf,  
 20 as shown in the drawings, (its curve being a segment of a circle described from the hinge of the swinging leaf as a center,) or it may be flat; but in either case it is desirable to have it arranged at such an inclination that the  
 25 free edge of the leaf is close to its surface in all positions of the lid or cover when the latter is open.

In order to warn occupants of the office or building when mail has been deposited, I provide a wire I, which is attached at one end  
 30 to the free edge of the swinging leaf and at the other end to a bell Z, (either a jingle or gong bell,) which is located at some convenient point in the office or building where it  
 35 may be heard by the occupants. When the lid or cover is raised, this wire will be pulled and the bell rung, and upon closing the box the bell will be rung a second time. It will also be seen that by this arrangement an  
 40 alarm is given whenever the lid is raised, thus warning the occupants of the building in case any one but the postman tampers with the box. The manner in which the alarm mechanism is connected to the box—namely,  
 45 to the swinging leaf—prevents the detachment thereof. The wire I is arranged so as to run through the storage-compartment and is attached to the under side of the leaf.

In addition to the mechanism above described I also employ a supplemental trap-  
 50 door K, which extends (in its closed or horizontal position) entirely across the body of the box and is pivoted at an intermediate point, preferably near the front edge, to the  
 55 sides of the box. This trap-door is arranged in the storage-compartment beneath the swinging leaf, and is connected at its rear or free edge to the free edge of the leaf by means of wires or rods L, whereby when the lid or cover  
 60 is raised and the leaf assumes its closed or safety position the supplemental trap-door is also raised to a horizontal position and completely cuts off communication with the lower portion of the storage-compartment. Thus,  
 65 even should it be found possible by means of a wire or similar small implement to penetrate below the swinging leaf, it will be im-

possible to pass beyond the trap-door and reach the contents of the box. Further, by  
 70 attaching the upper ends of the wires or rods L to the extreme free edge of the leaf and attaching their lower ends to the trap-door close to its pivots, as shown at L' in dotted lines in Fig. 2, the latter is caused to swing more  
 75 rapidly than the former, and thus assume a horizontal or safety position as soon as the attempt is made to raise the lid or cover and before the free edge of the swinging leaf comes  
 80 to its safety position, and by the time the trap-door is raised sufficiently to allow of communication between the upper and lower parts of the storage-compartment the free edge of the leaf is in proximity to the surface of the ledge or shelf, thus cutting off communication  
 85 between the receiving-chamber and the storage-compartment.

From the above description it will be seen that the abstraction of mail-matter from a box constructed in accordance with my invention is impossible and at the same time a warning  
 90 is given each time the attempt is made to raise the lid or cover.

The improved box may be constructed without the supplemental trap-door under certain  
 95 circumstances, as when the box is not placed in a particularly exposed position; but it will be obvious that with said trap-door the safety of the device is increased.

When the improved mail-box is intended for use in connection with an office or build-  
 100 ing, as above described, I prefer to construct it of sheet metal, as galvanized sheet-iron, thereby enabling it to be cheaply manufactured; but it is evident that the same may be made of heavier metal and used in the  
 105 same way as ordinary street letter-boxes to be placed in such public locations as will suit the convenience of the community.

Access is gained to the storage-compartment for the purpose of removing the mail  
 110 through a locked door M, of any preferred construction, in the side of the box, and where the box is secured to a door, as of an office or building, and it is desirable to so construct it, an opening N is formed in the rear side of  
 115 the storage-compartment to register with a similar opening in said door, thus enabling the occupants of the office or building to remove the contents of the box without opening the door.  
 120

The minor details of construction are not essential to my invention, and I reserve the right to make such changes and alterations therein as I may deem proper to suit the particular purposes and uses of the box and the  
 125 peculiar conditions under which it is used.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination, with a casing provided  
 130 with a hinged cover B, of the stationary inclined shelf or ledge E, secured to the front side of the casing under the free edge of said hinged cover, and a swinging leaf F, hinged



to the rear side of the casing and adapted to operate at its free edge close to the surface of the shelf or ledge E, the said leaf being connected to said cover by connecting rods or wires, substantially as and for the purpose specified.

2. In combination with a casing provided with a hinged cover B and the stationary inclined shelf or ledge E, secured to the front side of the casing, the swinging leaf F, hinged to the rear side of the casing and connected by rods or wires to the said cover, whereby when the latter is raised to enable the mail to be introduced the leaf is caused to operate at its free edge close to the surface of the said shelf or ledge, the trip-bell, and the wire leading therefrom and extending through the rear side of the casing and attached to the swinging leaf, substantially as and for the purpose specified.

3. In a mail-box, the combination, with a casing having a hinged lid or cover, a sta-

tionary inclined ledge or shelf, and a swinging leaf connected to said lid or cover, of a supplemental trap-door arranged beneath the said leaf and connected thereto for simultaneous operation, substantially as specified.

4. In a mail-box, the casing having its interior divided to form a receiving-chamber and a storage-compartment and provided at its top with a hinged lid or cover, in combination with a swinging leaf arranged at the bottom of said receiving-chamber and connected to the lid or cover, and the supplemental trap-door arranged in the storage-compartment and connected thereto for simultaneous operation, all substantially as and for the purpose specified.

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

EDWIN F. KINSEY.

Witnesses:

F. P. HOWLEY,  
C. E. DOYLE.