

(No Model.)

F. G. GASCHLIN.
LETTER BOX.

No. 570,628.

Patented Nov. 3, 1896.

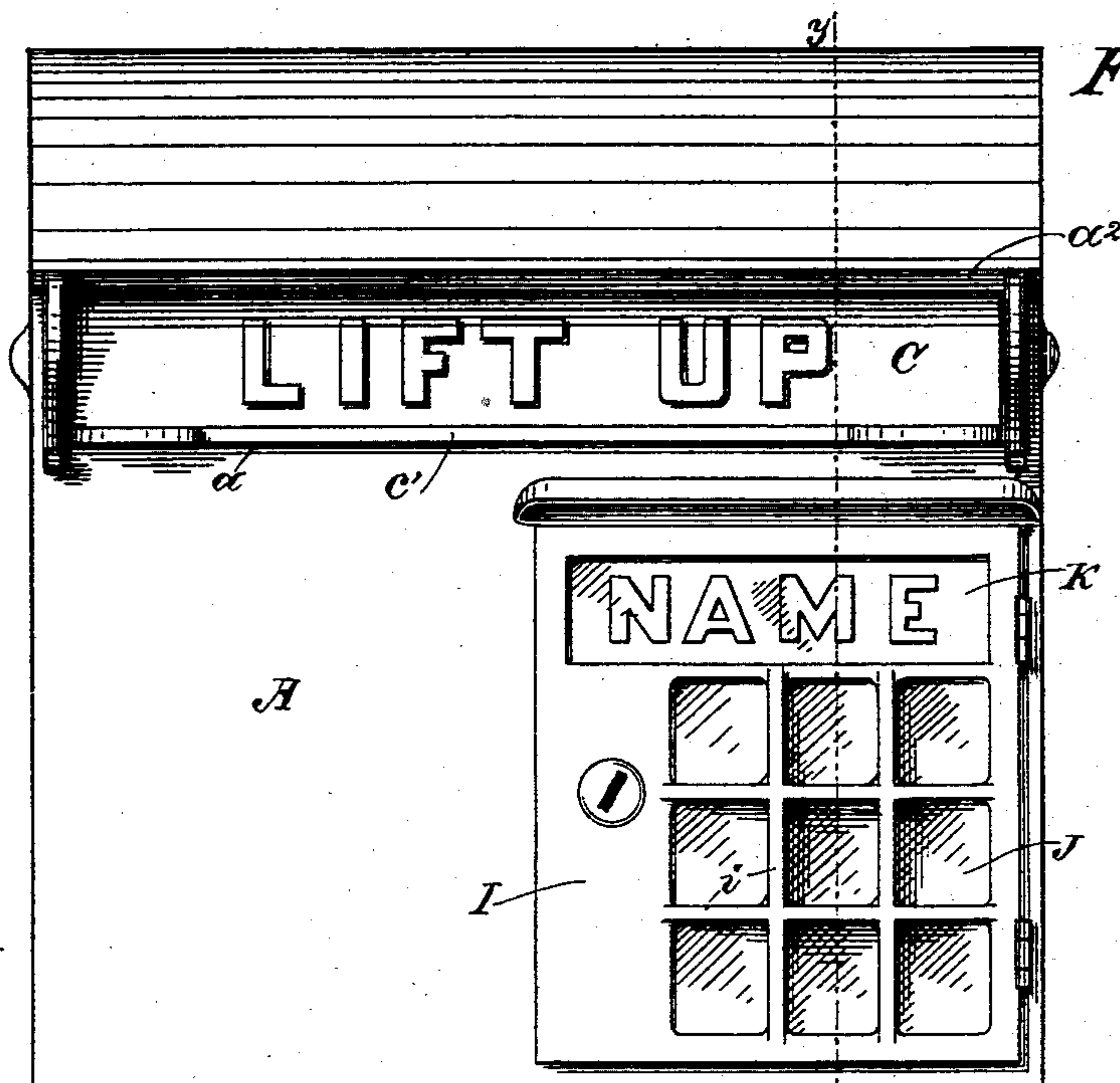


Fig. 1.

Fig. 2.

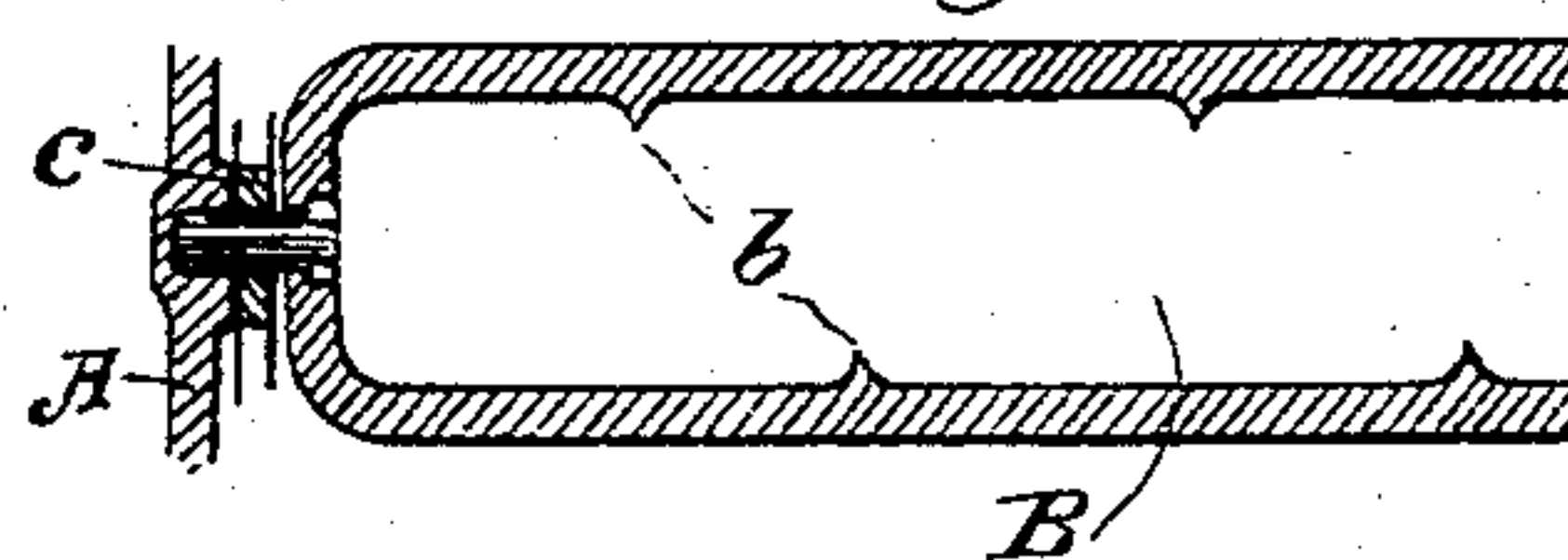
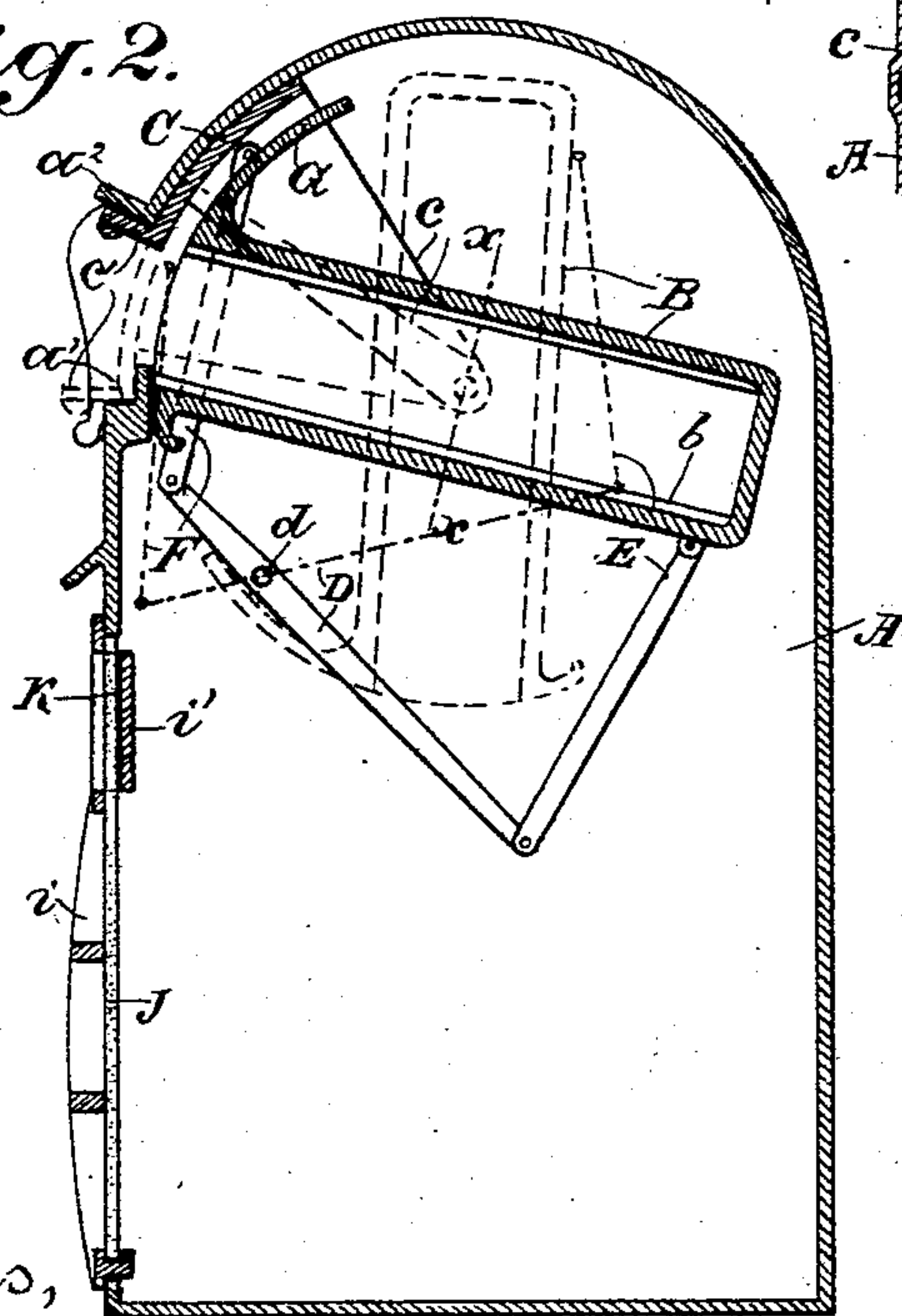


Fig. 3.

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UNITED STATES PATENT OFFICE.

FREDERICK GASTON GASCHLIN, OF SAN FRANCISCO, CALIFORNIA,
ASSIGNOR OF ONE-THIRD TO JACOB MAAS, OF SAME PLACE.

LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 570,628, dated November 3, 1896.

Application filed April 17, 1896. Serial No. 587,898. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK GASTON GASCHLIN, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Letter-Boxes; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the general class of boxes adapted to receive letters, newspapers, packages, and other mail-matter and bills, accounts, and documents usually left at offices, residences, and other establishments.

The object of my invention is to provide a letter or other receiving box adapted to readily receive and dispose of the matter inserted and thereupon to close itself and so confine the matter deposited that it cannot under any circumstances be withdrawn, nor can it be reached when the receiving-aperture is open, so that said box may be properly termed an "automatic safety letter-box."

My invention consists of the parts and the constructions and combinations of parts which I shall hereinafter fully describe and claim.

Referring to the accompanying drawings, Figure 1 is a front view of my box. Fig. 2 is a vertical section of the same on line *yy* of Fig. 1. Fig. 3 is a section through the receiver on line *xx* of Fig. 2.

A represents a box having in the upper portion of its front a receiving opening or aperture *a*. Within the box is the tilting receiver B, the front of which is open, as shown. This receiver is pivoted at its ends in the ends of the box and is adapted to turn through approximately a quarter of a circle from a position substantially horizontal or slightly inclined backwardly, in which position its open front coincides or aligns with the opening *a* of the box, to a position approximately perpendicular, in which its open front is lowermost. The receiver is so pivoted or so weighted that its normal position is perpendicular or approximately so, so that its contents will be discharged into the box.

C is the front guard-plate, having end arms *c* extending inwardly and pivoted about the same pivotal center as that upon which the receiver B swings. This plate is adapted to

move upwardly through an arc of a circle, extending in its upward movement under the top of the box A, and in its downward movement being adapted to close the entrance-aperture *a* of said box, its downward movement being limited by coming to rest upon a ledge *a'* on the front of said box.

A connection is formed between the front guard-plate C and the tilting receiver B of such a character that when the front guard-plate is lifted in order to expose the entrance-aperture *a* the receiver will be brought up to its approximately horizontal position, so as to align its open front with said opening *a*, and when said front plate is brought down again it will cause the tilting receiver to swing downwardly to its lowermost or approximately perpendicular position, or said receiver may be heavy enough, as before stated, to swing down by gravity to said position, in which case the front guard-plate, by reason of its connections with the receiver, will be brought down to its closed position. The connections between these two parts may be of any suitable character to accomplish these objects, but the simplest and best form of these connections I have here shown as consisting of levers D, pivoted within the ends of the box at the points *d*. The inner extremities of these levers are connected by links E with the rear portion of the tilting receiver, while the other ends of said levers are connected by links F with the arms *c* of the front guard-plate C.

The relative lengths of the portions of the levers D on each side of their pivotal points are such as to provide for the necessary difference in the lengths of movements of the receiver and the front guard-plate, for the latter need only move through a sufficient arc to expose and to again recover the front guard-plate, while the former, that is to say, the receiver, must move through a longer arc to the limits of its two positions.

The operation of the parts as far as described is as follows: In the normal position the front guard-plate is down and covers the opening *a*, so that no rain or other foreign matters can enter the box by accident, and the receiver is in its approximately perpendicular position within the box. Now to de-

posit a letter or other matter the front guard-plate is lifted to expose the opening *a* in the box, and is held in a lifted position, and this movement of the front guard-plate, through its connections, as described, will cause the tilting receiver to turn to an approximately horizontal position, preferably slightly inclined backwardly and downwardly, with its open front alined with the opening *a*, so that the letter or other matter may be placed within the receiver. As soon as it is so placed the front guard-plate may be pulled down again, or by releasing it the parts may return to a normal position by gravity, in which position the front opening *a* is again closed, while the receiver is so tilted that its contents will fall by gravity out its open front into the box A.

Minor details of construction contributing to the general utility and advantage of my box may now be noted.

In order to prevent the insertion of a letter on top of instead of within the receiver as the latter rises, I secure a guard-flange *G* to the top front of the receiver. This guard-flange comes up behind the opening *a* just as the front guard-plate *C* begins to expose said opening, so that as the exposure continues the guard-flange *G* is traveling behind the opening *a* and only exposes said opening at the time when the open end of the receiver comes into alinement therewith. If it were not for this guard-flange, a partial exposure of the opening *a* by the lifting of the front guard-plate, and before the receiver arrives in position, would induce the depositor to insert his letter before it was time to do so, and instead of falling into the box it would simply pass in on top of the receiver; but the guard-flange protects the opening until the mouth of the receiver comes into place.

In order to assist the opening of the guard-plate *C*, I provide its lower edge with an outwardly-extending flange *c'*, and I provide the top of the cover of the box A with an outwardly-extending flange *a''*, so that by placing the fingers upon the latter flange and the thumb under the former flange and pressing the thumb up toward the fingers the guard-plate can be readily opened.

The interior of the tilting receiver I make with a few surface ridges *b*, both top and bottom, the object of which is to reduce the frictional surface of said receiver, so that the matter placed within it will have less tendency to stick or bind therein, and will fall out into the box the more readily when the receiver is tilted. These ridges also tend to lessen the effect of any sticky substance which may be inserted within the receiver for the purpose of causing the letters to adhere.

The door by which access is had to the interior of the box may be placed in any suitable position, either on the front of the end thereof, as may be desired, and may be locked by suitable devices, but in cases where the boxes are used for offices and private families and require the application of a name-

card I provide for security by the following construction:

The door *I* is provided with an opening which is covered with open lattice-work *i*, and just above this opening the door is depressed or recessed at *i'*, the ends of said recess being closed, but the top and bottom open. A glass plate *J* is slipped down through this recess in suitable guides and supports behind the door, and so extends across said recess and the underlying lattice-work. A name card or plate *K* is now slipped in behind the glass and is backed by the rear wall of the recess. If now the glass in front of the name plate or card be broken, the back wall of the recess will still prevent access to the material of the box, while the lower portion of the glass is protected by the lattice-work, and if broken the box cannot be entered because of said lattice-work.

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

1. A letter or other receiving box comprising a casing or box having a receiving-opening and a ledge *a'*, a curved front guard-plate swinging within the box and adapted to successively expose and cover said opening, a receiver centrally pivoted within the box, connections between said guard-plate and the rear end of the receiver, adapted as the former uncovers the receiving-opening of the box, to bring the receiver into position so that its open end will aline with said opening, and as the guard-plate covers said opening to turn the receiver so that its contents may be discharged, and a means carried by the receiver adapted to temporarily cover the receiving-opening of the box preceding the alinement of said open front therewith.

2. A letter or other receiving box comprising a casing or box having a receiving-opening, a tilting receiver pivoted within the box and having an open front adapted to be brought into alinement with the receiving-opening of the box, a swinging guard-plate adapted to cover and to uncover said opening successively, a curved flange on the front end of the receiver adapted to temporarily cover the box-opening preceding the alinement of the open front of said receiver therewith, and connections between said guard-plate and the tilting receiver adapted as the former uncovers the receiving-opening of the box to bring the latter up to position to cause its open front to aline with said opening, and as the front guard-plate covers said opening to turn the receiver downwardly within the box to discharge its contents therein, said connections consisting of levers pivoted in the box at points between their ends, links connecting the rear ends of said levers with the receiver, and links connecting the forward ends of said levers with the front guard-plate.

3. In a letter or other receiving box, the combination of a box having a receiving-opening, a tilting receiver pivoted within said box

and having an open front adapted to be brought into alinement with the opening of said box, said receiver having also a guard-flange at its open front adapted to temporarily cover the opening of the box preceding the alinement of the front of the receiver therewith, a front guard-plate adapted to alternately expose and to cover said opening, said guard-plate having arms extending into the box and swinging from the same pivotal center as that of the receiver, and connections between the front guard-plate and the receiver adapted as the former uncovers the receiving-opening of the box, to bring the latter up to position to cause its open front to aline with said opening, and as the front guard-plate descends to cover said opening to turn the receiver downwardly within the box to discharge its contents therein.

4. In a letter or other receiving box, the combination of a box having a receiving-opening, a tilting receiver pivoted within said box, and having an open front adapted to be brought into alinement with the opening of said box, a front guard-plate adapted to alternately expose and to cover said opening, said guard-plate having arms extending into the box and swinging from the same pivotal center as that of the receiver and connections between the front guard-plate and the receiver adapted as the former uncovers the receiving-opening of the box to bring the latter

up to position to cause its open front to aline with said opening, and as the front guard-plate descends to cover said opening, to turn the receiver downwardly within the box to discharge its contents therein, said connections consisting of levers pivoted in the box at points between their ends, links connecting the rear ends of said levers with the receiver at points in rear of its center of movement, and links connecting the forward ends of said levers with the side arms of the front guard-plate.

5. In a letter or other receiving box, the combination of a box having a receiving-opening, a tilting receiver mounted within said box and having an open front adapted to be brought into alinement with the receiving-opening, a front guard-plate swinging within the box and adapted to successively expose and cover said opening, connections between the front guard-plate and the receiver whereby they work reciprocally as described, and the guard-flange on the receiver adapted to temporarily cover the receiving-opening of the box preceding the alinement of the open front of the receiver therewith.

In witness whereof I have hereunto set my hand.

FREDERICK GASTON GASCHLIN.

Witnesses:

WM. F. BOOTH,
H. F. ASCHECK.