

(No Model.)

2 Sheets—Sheet 1.

H. W. LIBBEY.
HOUSE DOOR LETTER BOX.

No. 502,673.

Patented Aug. 1, 1893.

Fig. 1.

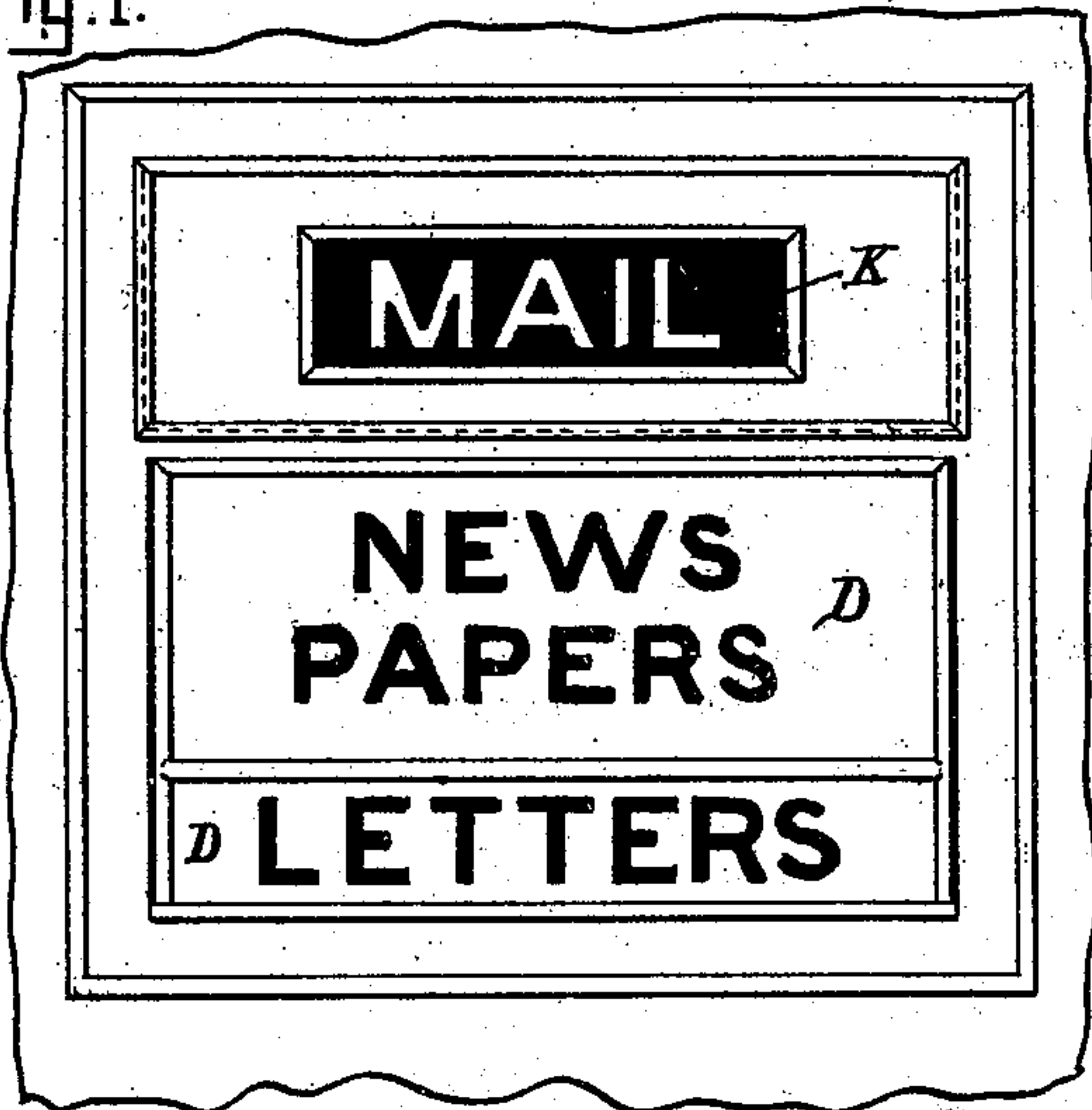


Fig. 2.

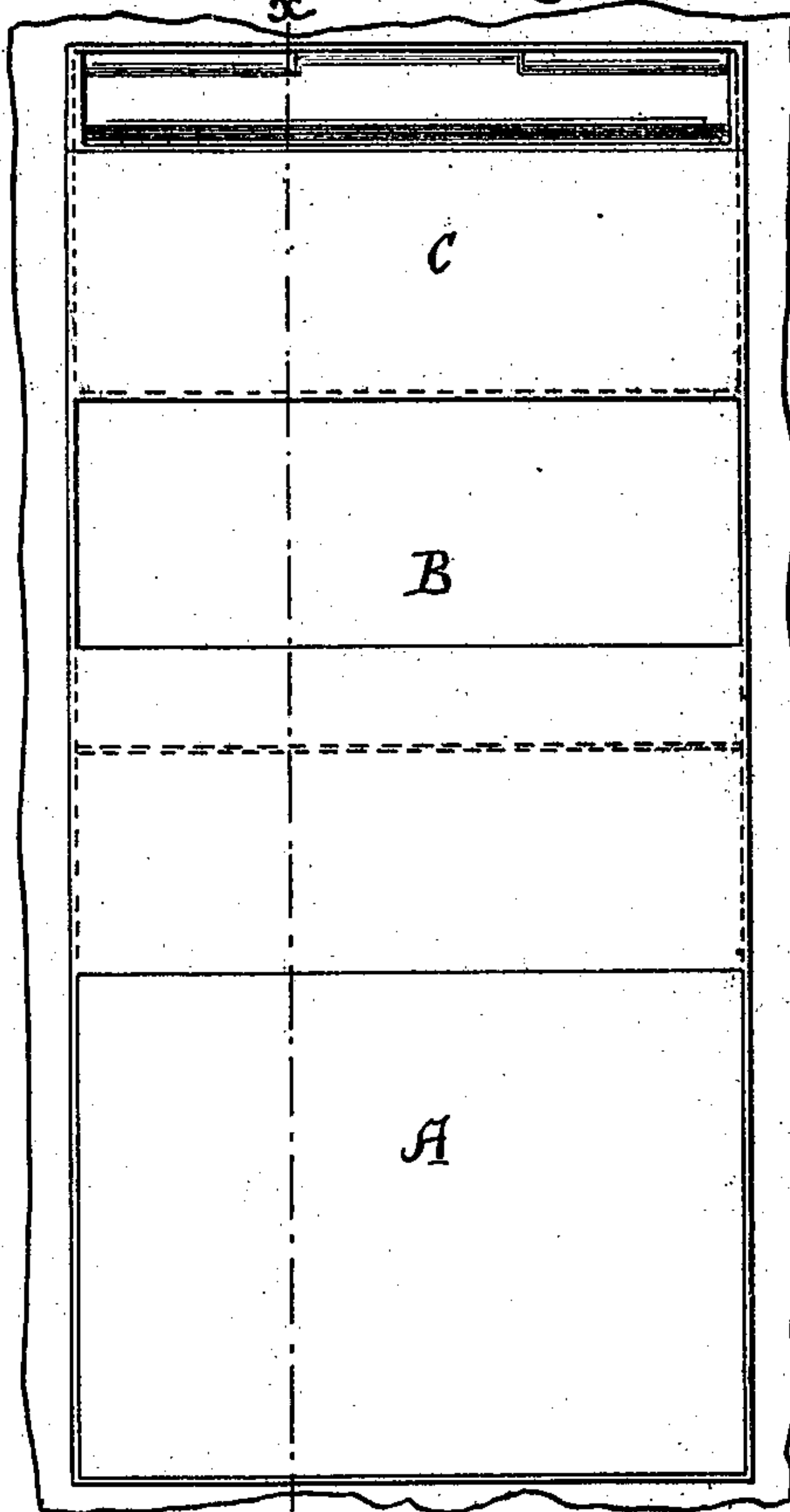


Fig. 4.

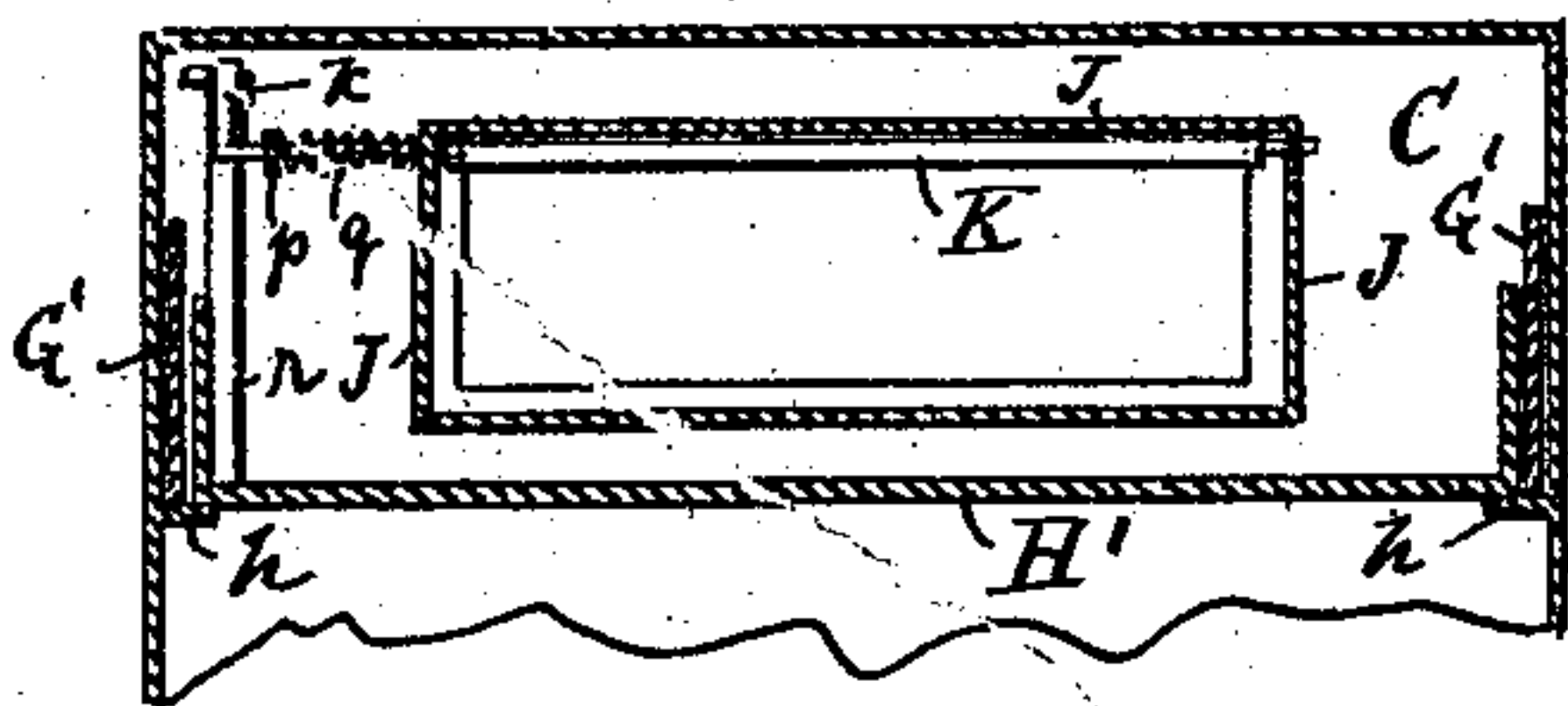


Fig. 3.

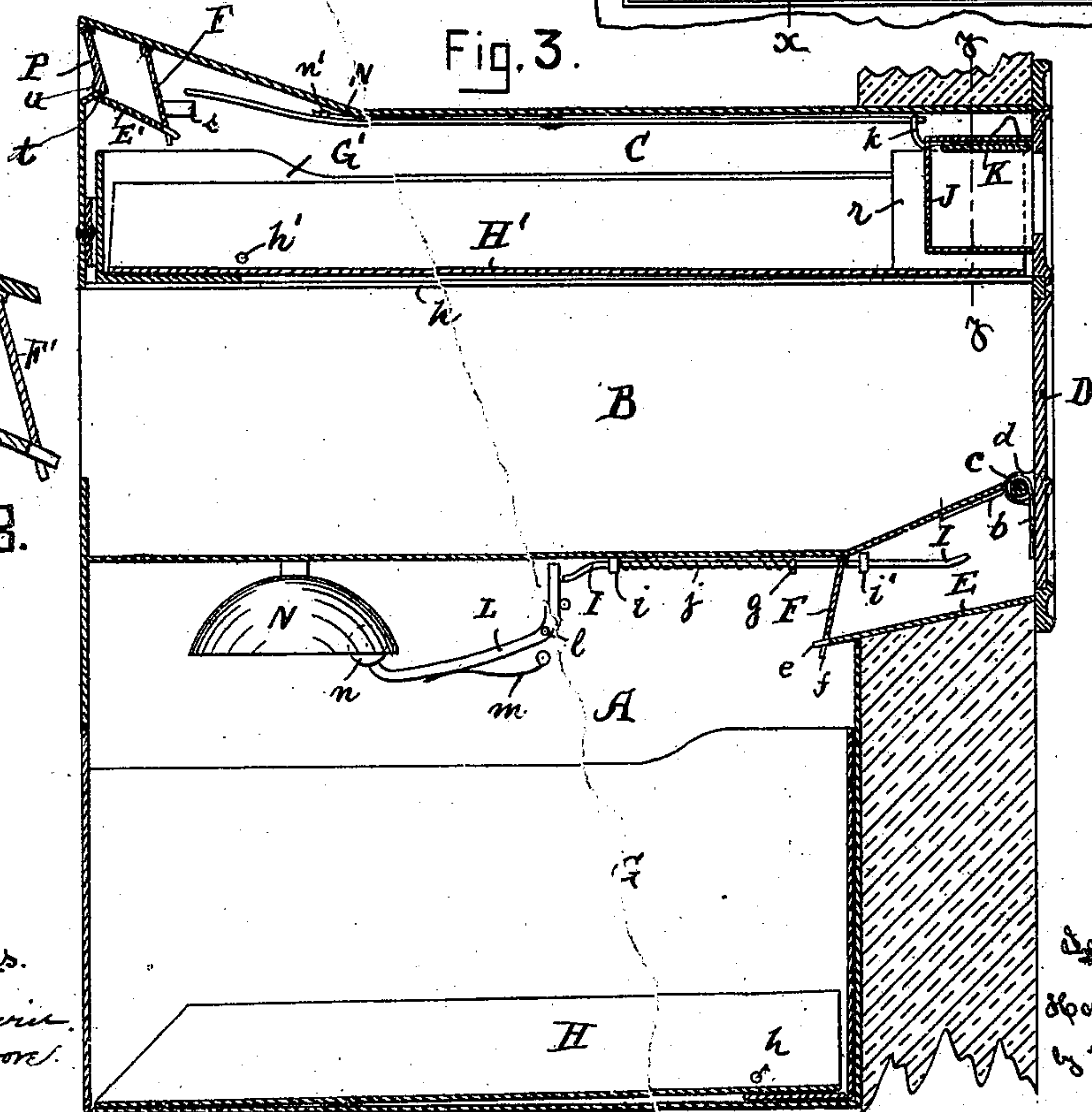


Fig. 8.

Witnesses.

Wm. G. Kewin.
John J. Moore.

Inventor.

H. W. Libbey
by Edwin Blanton
Attorney.

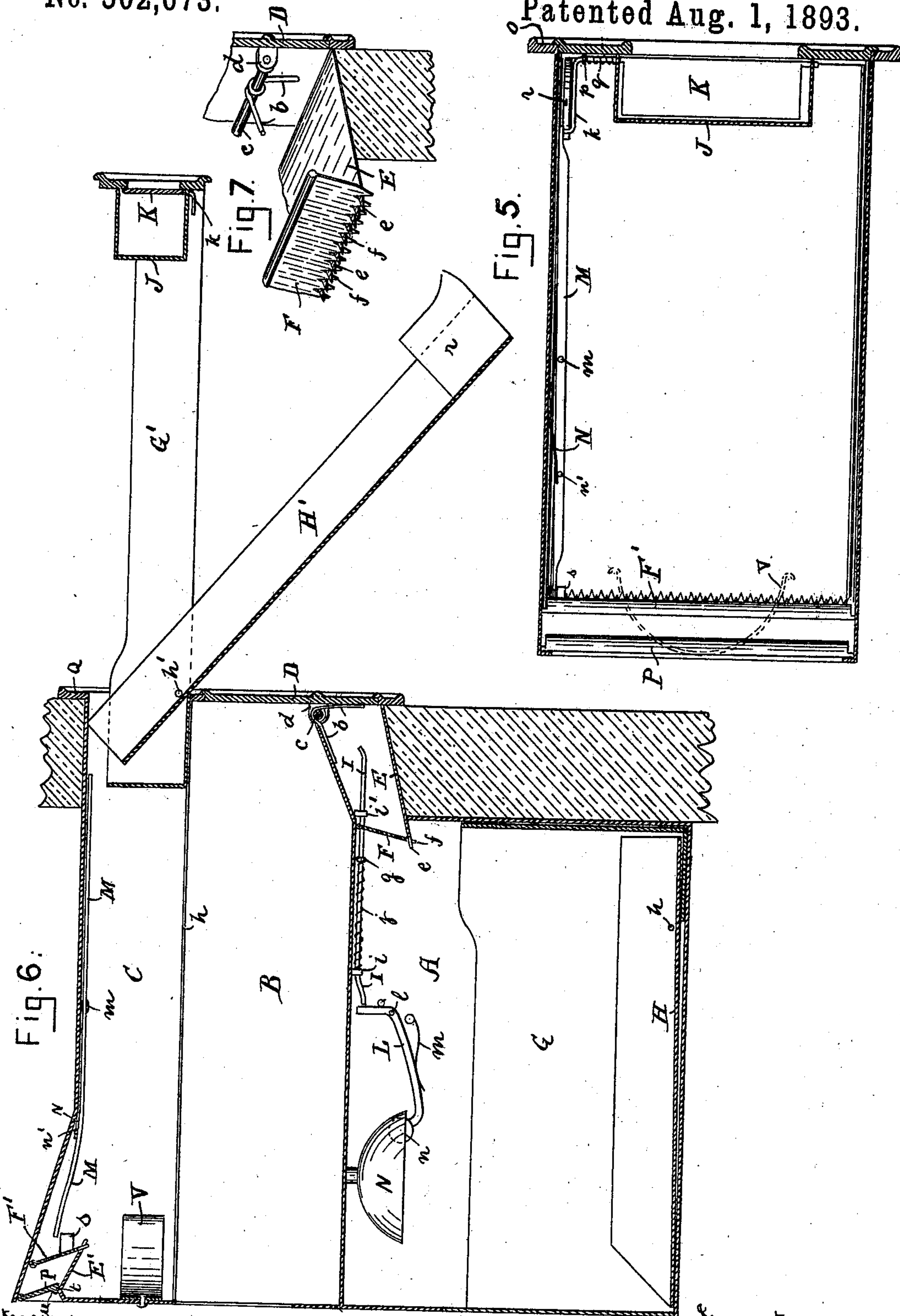
(No Model.)

H. W. LIBBEY.
HOUSE DOOR LETTER BOX.

2 Sheets—Sheet 2.

No. 502,673.

Patented Aug. 1, 1893.



Witnesses.
Wm. G. Herwin.
John J. Moore.

Inventor.
Hosea W. Libbey.
by Edwin Blanta
attorney.

UNITED STATES PATENT OFFICE.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

HOUSE-DOOR LETTER-BOX.

SPECIFICATION forming part of Letters Patent No. 502,673, dated August 1, 1893.

Application filed April 13, 1891. Serial No. 388,698. (No model.)

To all whom it may concern:

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Letter-Boxes, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to produce a letter box that will be of small cost, neat in appearance, simple in operation, protect its contents from the weather, be secure against removal of letters by thieves, have a cover that can be easily operated by one hand, and having a receptacle for papers and also both a delivery and collection receptacle, and also disclose the presence of mail without being opened.

The invention consists in certain details of construction as hereinafter fully described and pointed out in the claims.

Referring to the accompanying drawings:—
Figure 1—represents a view of a letter box embodying my invention, as it appears on the outside of a door when there is mail to be collected. Fig. 2—is a similar view of the rear of the box. Fig. 3—is a longitudinal section of the box taken on line *x, x*, of Fig. 2. Fig. 4—is a transverse section taken on line *y, y*, of Fig. 3. Fig. 5—is a plan view of the upper compartment the top being removed. Fig. 6—is a longitudinal section through the box showing the collection receptacle drawn out. Fig. 7—is a detail view showing the double flaps for protecting the contents of the box; and Fig. 8 is a vertical sectional view of a portion of the box and the entrance into the collection receptacle.

The box is of rectangular form and is divided into three compartments, a lower one in which the letters are deposited by the postman, a central one to receive newspapers, and an upper one in which letters for collection are placed.

A, represents the lower compartment for the reception of letters, B, the central compartment for the reception of newspapers, and C, the upper compartment in which letters for collection are placed.

When applied to a door as shown in the drawings, the lower compartment A, is of less length than the upper compartment, the dif-

ference being the thickness of the door, but when applied to places other than a door the front of all the compartments would be on a line with each other. The fronts of the lower and central compartments are closed by a flap or door D, provided on its rear with lugs *d*, through which a rod *c*, passes upon which it turns, a grasshopper spring *b*, keeping the flap D, in its normal closed position. The lower portion of the flap D, is pressed in when depositing mail which at the same time gives access to the central compartment so that newspapers may be placed therein. After the letters have been inserted they pass down the sloping guide plate E, which projects a short distance beyond the front wall of the lower receptacle A, and is on its inner edge serrated or formed with teeth *e*, (see Fig. 7.) F, is a flap hung loosely at its upper end and having serrations or teeth *f*, corresponding to and fitting between the teeth *e*, on the plate E, as will be best seen in Fig. 7, so that when a letter is inserted it forces the flap F, open, and falls into the receptacle A, and should any person attempt to abstract said letter by any instrument it would be retained by the teeth on the plate E, and flap F. The compartment A, is fitted with a drawer G, having a bottom H, pivoted thereto at *h*, so that when the drawer is pulled out the bottom will tip and allow the contents to fall out. When the flap D, is operated it comes into contact with a push bar I, free to slide in suitable bearings *i, i'*, and it is provided with a collar *g*, a spiral spring *j* being interposed between the bearings *i*, and the collar *g*, to keep the bar in its normal position. When this bar I, is pushed back it comes in contact with a bell crank lever L, carrying a hammer *n*, said lever being fulcrumed at *l*, so that when the flaps D, is released the hammer *n*, will be caused to strike the gong N, by the spring *m*, acting upon the long arm of the bell crank L.

The central compartment B, is at its rear end formed with an opening through which the papers may be removed, but when used as an outside box this opening would have to be closed by a door or flap, or it might be dispensed with altogether, and the papers removed through the front opening that is closed by the flap D.

The upper compartment C, for receiving

mail for collection is fitted with a flap P, that closes against a small projection or angle *t* formed on a serrated plate E'. The outer portion of the plate is inclined downwardly and the outer surface of the flap P is provided with an outwardly projecting lip *u* which, when the flap is closed, projects over the ridge or angle *t* on the plate E' and causes water to drop on the outer inclined portion of the plate and run off instead of following the outer surface of the flap in past the ridge or angle against which the flap closes and thence down into the box as it would do were it not for the lip projecting outwardly over the ridge or angle. A serrated flap F', is arranged at the rear of the flap P, and is similar to that described with reference to the bottom compartment, and said compartment also provided with a draw G', having a bottom H', pivoted at *h'*, so that when the draw is pulled out, the bottom will fall and allow the mail matter to drop out as shown in Fig. 5. This drawer is supported on each side by runners *h* (see Fig. 4). To the rear of the front part of the drawer is secured a casing J, in which is pivotally secured a plate K, bearing the word "Mail," or other suitable sign. An arm *k*, extends out beyond the casing J, and is bent to the form shown (see Fig. 5), and it is provided with a small collar *p*, and a small spiral spring *q*, is interposed between the collar and the side of the casing J, so as to keep the plate bearing the sign drawn to one side. Attached to one side of the drawer is a small block *r*, which supports the outer end of the arm *k*, when in its normal position. The plate K, is shown raised in Figs. 3, 4 and 5, and lowered in Figs. 1 and 6. M, is a lever fulcrumed at or about its center at *m*, to the top of the box and its rear end is kept extended by a spring N, secured to the side of the box, and bearing against a pin *n'*, on the lever (or it might bear against the side of the lever M). The forward end of this lever stands just behind the end of the arm *k*, and its rear end just above a cam piece *s*, secured to the flap F', so that when the flap F', is raised, the lever M, will be operated so as to push the arm *k*, off the block *r*, when it will fall by its own weight and indicate that mail matter is in the box to be collected.

The draw G', can be secured by any kind of lock that may be desired and is preferably so constructed that as soon as it has been unlocked it is forced out by a spring. In the drawings I have shown a flat spring V, attached to the rear of the box, and in Fig. 5 I have shown in dotted lines the position the spring would occupy when the drawer is thrown out.

The operation is as follows:—To insert a letter the lower end of the flap D, is pressed in and the letter inserted through the opening, the letter passing over the plate E, and under the flap F, which immediately falls again by its own weight, thus preventing the letter from being abstracted by reason of the

toothed or serrated edges of the plate and flaps. When the flap D, is pressed in it comes into contact with the presser bar I, which causes the gong to be sounded, thus indicating to the inmates of the house that there is mail in the box, and should there be any papers to be left they are inserted over the top of the flap D, while it is still open into the compartment B. To remove the letters from the compartment A, the draw G, is pulled out, and the bottom being fulcrumed as described, tips, and the mail matter drops out. This draw may if required be secured by a lock of the description above given, or any other kind of lock may be used as may be desired. To remove the papers, the hand has simply to be passed through the opening and lift them out. When desired to insert letters for collection, they are inserted into the upper compartment, and as the flaps are pressed back, the cams *s*, on the flap F', comes into contact with the end of the lever M, thus pressing it toward the side of the box, and throwing the other end out which dislodges the arm *k*, from the cam block *r*, and the plate *k*, bearing the sign falls, thus indicating that there is mail to be collected. To collect the mail, the postman inserts his key and unlocks the drawer at the same time holding his bag beneath the same, and the moment the drawer is thus released, the spring V, forces it out and the bottom tipping, guides the letters into the bag. He then pushes the drawer in, and as the bottom is raised, the cam block *r*, comes into contact with the arm *k*, and raises it thereby raising the indicating sign. He then turns the key and the box is secure.

If desired, the upper or collection compartment may be dispensed with, and the indicating plate may be made to slide instead of turn, as above described.

What I claim as my invention is—

1. A letter box having three compartments arranged one above the other, each provided with two openings and one of said compartments being provided with a movable receptacle, and the other two compartments being provided with a common door for one of the openings in each of said boxes, substantially as set forth.

2. In combination with a letter box of the character described, the front end of which is provided with an indicator to show the presence of mail within the box, of a drawer to receive the letters deposited in the box, said drawer consisting of a rectangular frame having the bottom pivoted thereto so that when the drawer is pulled out the bottom will tip and deliver the contents, the front end of said drawer being provided with means for engaging with the indicator, substantially as set forth.

3. A letter box having two compartments, one to receive letters and one to receive newspapers, the entrance to both compartments being closed by a flap or door fulcrumed at

the junction of the two compartments, so that when pressed in to open one compartment, the other portion will be forced out and open the other compartment substantially as set forth.

4. In combination with a letter box having a compartment to receive mail matter for collection and an indicator compartment at one end, a flap pivotally secured within said indicator compartment having the word mail or other sign thereon, a bent arm projecting into the mail compartment provided with a collar, a spring upon the arm, one end of which bears against the casing of the indicator compartment, and the other end bears against the collar for forcing the arm and flap laterally, a support for the arm, and means for removing the support from under the arm when mail is inserted into the box, substantially as set forth.

5. In combination with a letter box having a compartment to receive mail matter for col-

lection, a drawer G', having an opening at its front end, a casing J, around said opening, and a flap K, bearing a suitable sign, and having an extended arm k, that is raised by a block r, and lowered by a flap F', through a lever M, when letters are inserted into the compartment substantially as set forth.

6. In a letter box the inwardly inclined flap P, hung at its upper end, and its lower end provided with an outwardly projecting lip to fit over a ridge upon the plate against which it rests to protect the box from rain, snow or dust, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 24th day of January, A. D. 1891.

HOSEA W. LIBBEY.

Witnesses:

CHAS. STEERE,
EDWIN PLANTA.