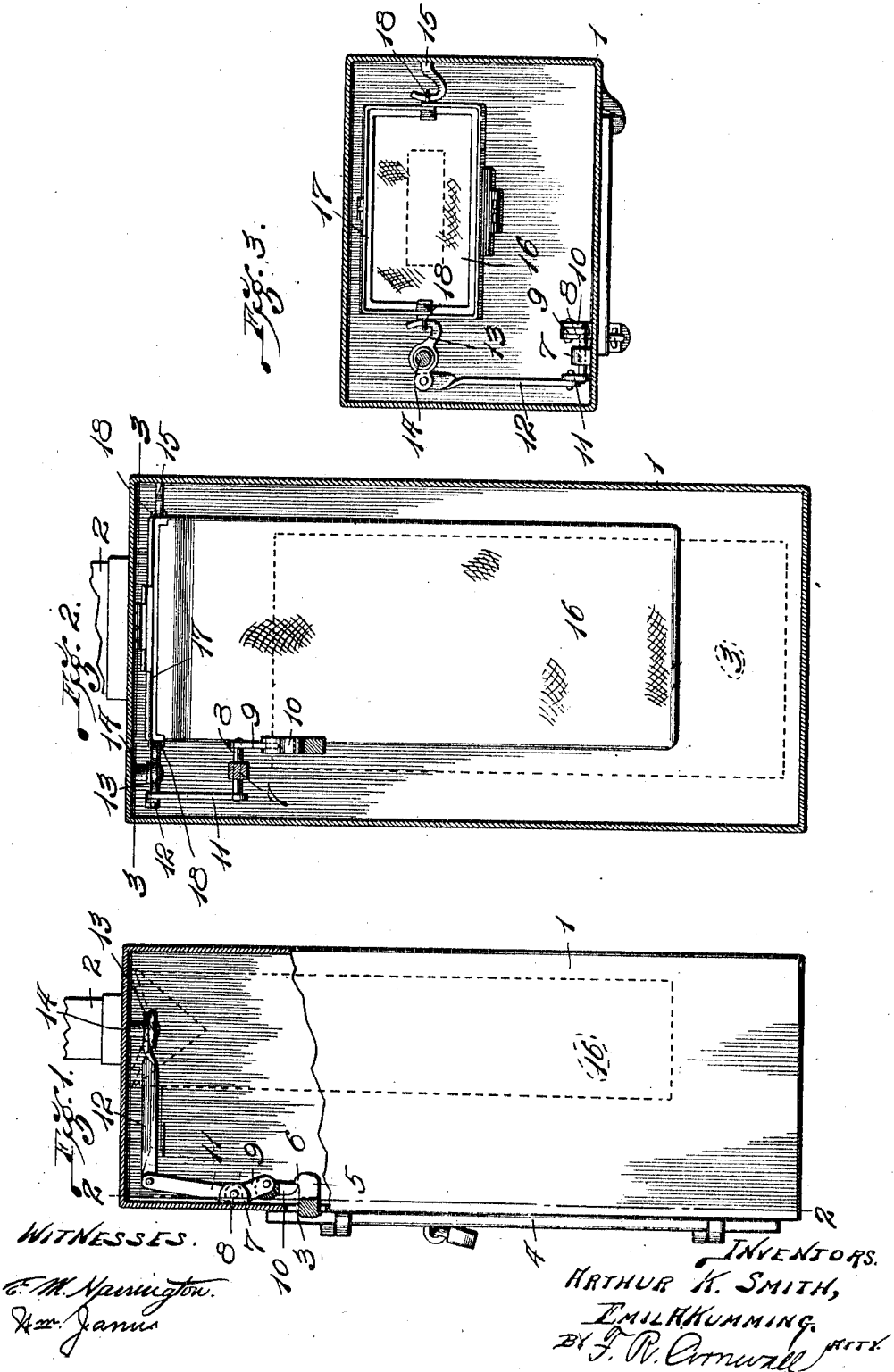


A. K. SMITH & E. A. KUMMING.
MAIL BOX.

APPLICATION FILED MAR. 12, 1910.

986,951.

Patented Mar. 14, 1911.



UNITED STATES PATENT OFFICE.

ARTHUR K. SMITH AND EMIL A. KUMMING, OF ST. LOUIS, MISSOURI, ASSIGNORS, BY
MESNE ASSIGNMENTS, TO CUTLER MAIL CHUTE COMPANY, OF ROCHESTER, NEW
YORK, A CORPORATION OF NEW YORK.

MAIL-BOX.

986,951.

Specification of Letters Patent.

Patented Mar. 14, 1911.

Application filed March 12, 1910. Serial No. 546,897.

To all whom it may concern:

Be it known that we, ARTHUR K. SMITH and EMIL A. KUMMING, both citizens of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Mail-Boxes, of which the following is a full, clear, and exact description, such as 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 part of this specification, in which—

Figure 1 is a side elevation of a mail box of our improved construction the upper end thereof being shown in vertical section. Fig. 2 is a section taken on the line 2—2 of Fig. 1. Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2.

Our invention relates particularly to that type of boxes or receptacles which are located at the lower end of mail chutes such as are now in general use in office buildings, hotels and the like.

The principal object of our invention is to removably arrange a mail bag within the mail box or receptacle with the mouth of the bag open so that all mail matter deposited in the mail chute will drop into the bag and which bag automatically closes and is locked when the door of the box or receptacle is opened by the mail collector. Such an arrangement prevents the person collecting the mail from handling the individual pieces of mail matter, thus saving considerable time in the collection of mail and insuring the safety of all of the mail matter taken from the chute as the closed and locked bags are transported to the post-office by the collector and there opened by the proper clerk or official.

To the above purposes our invention consists in certain novel features of construction and arrangement of parts hereinafter more fully described and claimed.

Referring by numerals to the accompanying drawings, 1 designates a box or housing located at the lower end of a mail chute 2 and formed in one of the walls of said box is an opening 3 normally closed by a door 4. This door is provided with a suitable lock, the key of which is held by the post-office employee who serves as mail collector.

Formed on or fixed to the inside of the door 4 at a point near the top thereof is an

inwardly projecting lug 5 on the end of which is formed a hook 6. Formed on or fixed to the inner face of the wall of the box above the lug 5 is an ear 7 and journaled for rotation therein is a rock shaft 8. Fixed on one end of this rock shaft is a depending finger 9 and pivotally arranged on the lower end of said finger in such a manner as to swing freely forward is a trigger 10 which when the door 4 is closed engages behind the hook 6.

Arranged on the end of the rock shaft 8 opposite the end on which the finger 9 is arranged is an upwardly projecting arm 11 to the upper end of which is pivoted the forward end of a link 12, the rear end of which is pivoted to a hook 13, which latter is journaled on a stud or pin 14 depending from the top of the box 1. This hook 13 is arranged directly opposite the opening in the top of the box, which communicates with the lower end of the chute 2, and fixed to the inner face of the side wall of the box directly opposite this hook 13 is a second hook 15.

16 designates a mail bag the mouth of which is provided with a pair of spring frames 17 similar to the frames employed on traveling bags, and the springs are arranged on the hinge joints between said frames and normally tend to close said frames. These frames are provided with a spring lock, the key of which is held by the proper postal clerk or official.

Located on the ends of the spring frames 17 and at the hinge joints thereof are loops or eyes 18 which when the bag is properly positioned within the box are engaged by the hooks 13 and 15.

When the bag 16 is properly positioned within the box 1, the hooks 15 engage in the loops or eyes 18 and the spring frames 17 bear against the top of the box, thus holding the mouth of the bag open, and all mail matter deposited in the chute 2 will discharge from the lower end thereof into the open mouth of the bag. While the door 4 of the box 1 is closed, the hook 6 on the end of the lug 5 engages the lower end of the trigger 10 and holds the same and the parts 9, 8, 11 and 12 in the positions seen in Figs. 1, 2 and 3 and thus the hook 13 is normally held in engagement with the corresponding one of the loops or eyes 18. When the door 4 is opened by the mail col-

lector the lug 5 is drawn outward with the door, which movement pulls the trigger 10 toward the wall of the box on which the door is located, thus slightly swinging the depending finger 9 and rocking the shaft 8. This movement swings the upper end of the arm 11 and the connecting rod rearward, in turn swinging the hook 13 upon its pivot and causing the point thereof to disengage from the corresponding loop or eye 18. This movement releases one side of the mail bag and as the upper portion of said bag drops the spring frames instantly swing together, thus closing and locking the mouth of the bag. The bag is now disengaged from the hook 15 and removed from the box, after which an empty bag is positioned in the box with the spring frame open and bearing against the top of the box, and with the loops or eyes 18 engaged upon the hooks 13 and 15. With the parts so arranged the lower end of the trigger 10 is directed in the path of travel of the hook 6 and when the door 4 is closed by the collector, said hook 6 will strike against the trigger 10 causing the same to swing inward. As the lower end of the trigger passes the hook 6, said trigger will by gravity swing into a vertical position with its lower end directly in the path of travel of the hook 6 when the same is subsequently drawn outward with the door.

A mail box of our improved construction is comparatively simple, and can be utilized as an ordinary street letter box, or in connection with a mail chute. The mail receiving bag located within the box is automatically closed and locked whenever the door of the box is opened, thus providing safeguard against loss through the dishonesty of the mail collector.

It will be readily understood that minor changes in the construction, arrangement and combination of the several parts of our improved device can be made and substituted for those herein shown and described without departing from the end and principle of our invention.

We claim:

1. The combination with a mail box having an inlet opening, of a self closing mail

bag removably positioned within the box, means for supporting the bag within the box with the mouth of said bag open, and a portion of which supporting means is connected to and released by the door of the mail box when the same is opened.

2. The combination with a mail box having an inlet opening, of a mail bag adapted to be positioned within the box beneath the opening, a self-closing frame around the mouth of said bag, which frame bears against the top of the box when the bag is positioned therein and a bag releasing means arranged within the box for normally supporting the bag in proper position and which releasing means is actuated by the opening movement of the door of the box.

3. The combination with a mail box having an inlet opening of a mail bag adapted to be positioned within the box beneath said opening, a self-closing frame around the mouth of the bag, a fixed support for one side of the bag, a movable support for the opposite side of the bag, a door on the box and releasing mechanism actuated by said door and connected to the movable support for the bag.

4. The combination with a mail box having an inlet opening, of a mail bag adapted to be positioned within the box beneath said inlet opening, a pair of spring-pressed frames hinged to one another and arranged around the mouth of the bag, a self-acting lock on said frames, supporting means within the box for maintaining the frames in an open position against the under side of the top of the box, a portion of which supporting means is releasable, and means on the door of the box for engaging the releasable means while the door is closed and actuating said releasable means when the door is open.

In testimony whereof, we hereunto affix our signatures in the presence of two witnesses, this first day of March, 1910.

ARTHUR K. SMITH.
EMIL A. KUMMING.

Witnesses:

J. S. MOSLANK,
THOMAS LANGFORD.