

(No Model.)

L. H. WHITE.
FIRE ESCAPE.

No. 453,951.

Patented June 9, 1891.

FIG. 1.

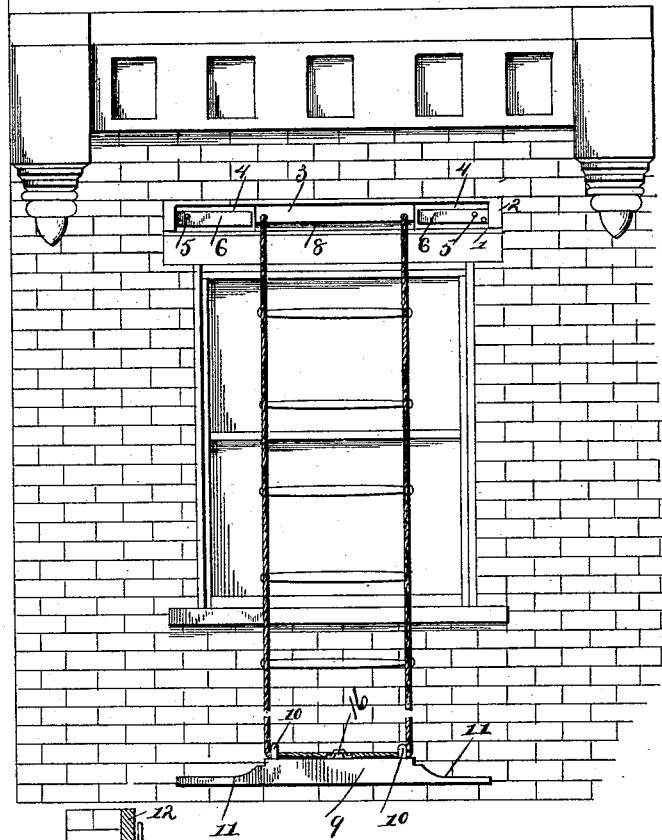


FIG. 2.

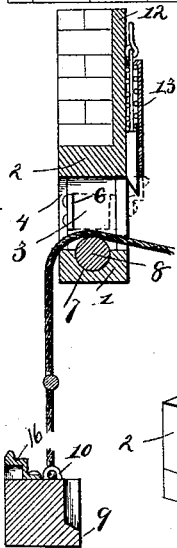
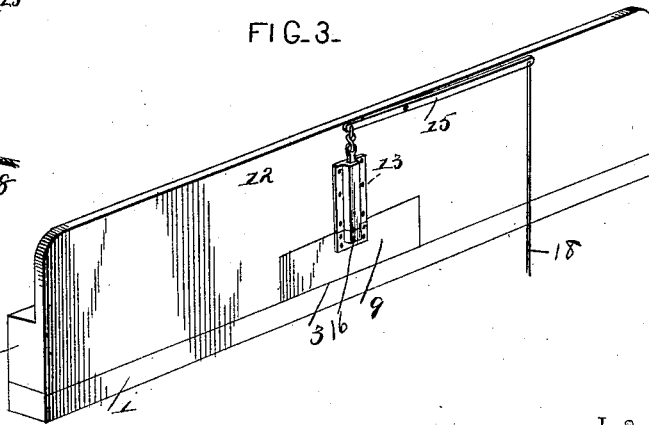


FIG. 3.



Witnesses

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

LOUIS HAMLIN WHITE, OF ST. AUGUSTINE, ASSIGNOR OF ONE-FOURTH TO
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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 453,951, dated June 9, 1891.

Application filed January 22, 1891. Serial No. 378,714. (No model.)

To all whom it may concern:

Be it known that I, LOUIS HAMLIN WHITE, a citizen of the United States, residing at St. Augustine, in the county of St. John's and State of Florida, have invented a new and useful Fire-Escape, of which the following is a specification.

This invention relates to fire-escapes to be permanently applied to buildings; and the objects of the invention are to provide an extremely cheap and simple escape that may be lowered at the time of need for the purpose of rescuing the inmates of a burning building or permitting of access thereto by the firemen; furthermore, to render the construction of such escape as to insure a proper working of the same at the time of need and a mistake in operating the same impossible, regardless of the excitement that prevails at the time, and, finally, to so construct the escape and its releasing mechanism that the same may be operated from any room of a series in vertical alignment or from the ground when desired.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a front elevation of a portion of a building having an escape constructed in accordance with my invention applied thereto. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a rear perspective view of the escape.

Like numerals indicate like parts in all the figures of the drawings.

1 designates the sill of the escape-frame, upon which is secured an upper sill 2, provided at its center with a longitudinal elongated opening or slot 3, the opposite walls of which are inclined upon their front faces, forming recesses 4. To the bottoms of the recesses 4, at the outer ends of the same, are bolted, as at 5, flat steel springs 6, which terminate near the ends of the aforesaid openings. A recess 7 is formed in the upper side of the sill 1 in rear of the opening, and in the opposite end walls of the recess there is journaled a loose roller 8, the periphery of which at its upper side extends a slight distance above the upper face of the sill.

9 designates a weighted bar having its opposite ends reduced in the outer side and designed to loosely fit within and approximate the shape of the opening 3 and the opposite recesses 4. A pair of eyes 10 are secured to the rear face of the bar near the inclined or cut-away ends thereof, and beyond said eyes said inclined ends are channeled, as at 11, to receive the springs 5 when the bar is forced within the opening. The upper sill 2 has secured thereto a back-board 12, and to this board, immediately above the opening, there is secured a spring-latch 13, to the bolt of which is loosely connected the inner end of a lever 15, pivoted near its center to the board. The frame thus described is mounted upon the wall of a building above a series or vertical tier of windows, and is preferably located in that space of a building formed by the roof and the ceiling of the upper room.

In operation the bar is inserted from the front in the recesses and openings of the sill, and is retained by the spring-actuated latch or bolt engaging with a keeper 16, secured to the rear face and at the center of the bar. To the screw-eyes 10 is secured one end of a rope ladder, the rope of which is preferably chemically treated to prevent burning. If desired, a chain or wire rope may be substituted for the one herewith shown, such being immaterial. The ladder thus connected to the bar is neatly coiled and rests upon the rafters of the ceiling, and a wire 18 is connected at its upper end to the outer end of the operating-lever, extends down through the several rooms of the series over which the device is mounted, and may extend down the outside of the building or to any other point where convenience may dictate. When necessary to use the escape, the wire is drawn upon from any of the rooms or other convenient point and causes a withdrawal of the bolt of the latch from the keeper of the bar. When thus released, the flat springs 5 serve to throw the bar away from the frame, and said bar, acting as a weight, serves to pay out the ladder, the opposite end of which being of course fastened to some fixed object. By this means an instantaneous escape is arranged in front of a window of every room of a vertical tier, and the inmates may readily descend or firemen

or others may ascend and gain access to any of the rooms. The cornices of the windows over which the ladder is suspended serve to support the ladder such a distance from the wall of the building as will afford a convenient foothold upon the rungs of the ladder.

The ladder is preferably made greater in length than is the distance to the ground, so that the same may be grasped from below and drawn away from the building in case the front of the building is in flames and danger of burning the ladder or the person descending exists.

In lieu of locating the escape in the space mentioned, the same may be mounted in a housing or box located upon the roof of the building.

Having described my invention, what I claim is—

1. The combination, with the frame adapted to be secured within the wall of a building and having the opening and upon its front face at each side of the opening provided with inclined recesses, flat springs seated in the recesses and terminating adjacent to the ends of the opening, and a bar having inclined or cut-away ends fitting the opening, of a ladder connected to the bar and extending through the opening, a spring-latch mounted on the frame, a keeper mounted on the bar for engaging the latch,

and means for withdrawing said latch from the keeper, substantially as specified.

2. The combination, with the window-frame, the upper sill secured thereto and having an opening, and in its front face provided with recesses occurring at the opposite sides of the opening and having inclined bottoms, a roller mounted in the bottom of the opening, flat springs secured to the bottoms of the recesses, and a back-board secured to the upper sill, of a removable bar mounted within and fitting the recesses and openings and having channels for the reception of the springs, a keeper located on the bar, a spring-latch for engaging the keeper, located upon the back-board, a wire depending from the back-board, a lever pivoted to the back-board and connected at one end to the wire and at its opposite end to the latch, screw-eyes connected to the rear face of the bar, and a ladder connected to the screw-eyes and extending through the opening, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

LOUIS HAMLIN WHITE.

Witnesses:

S. E. DAVIS,

C. F. HOPKINS, Jr.