

(No Model.)

W. BRUCE.
FIRE ESCAPE.

No. 390,446.

Patented Oct. 2, 1888.

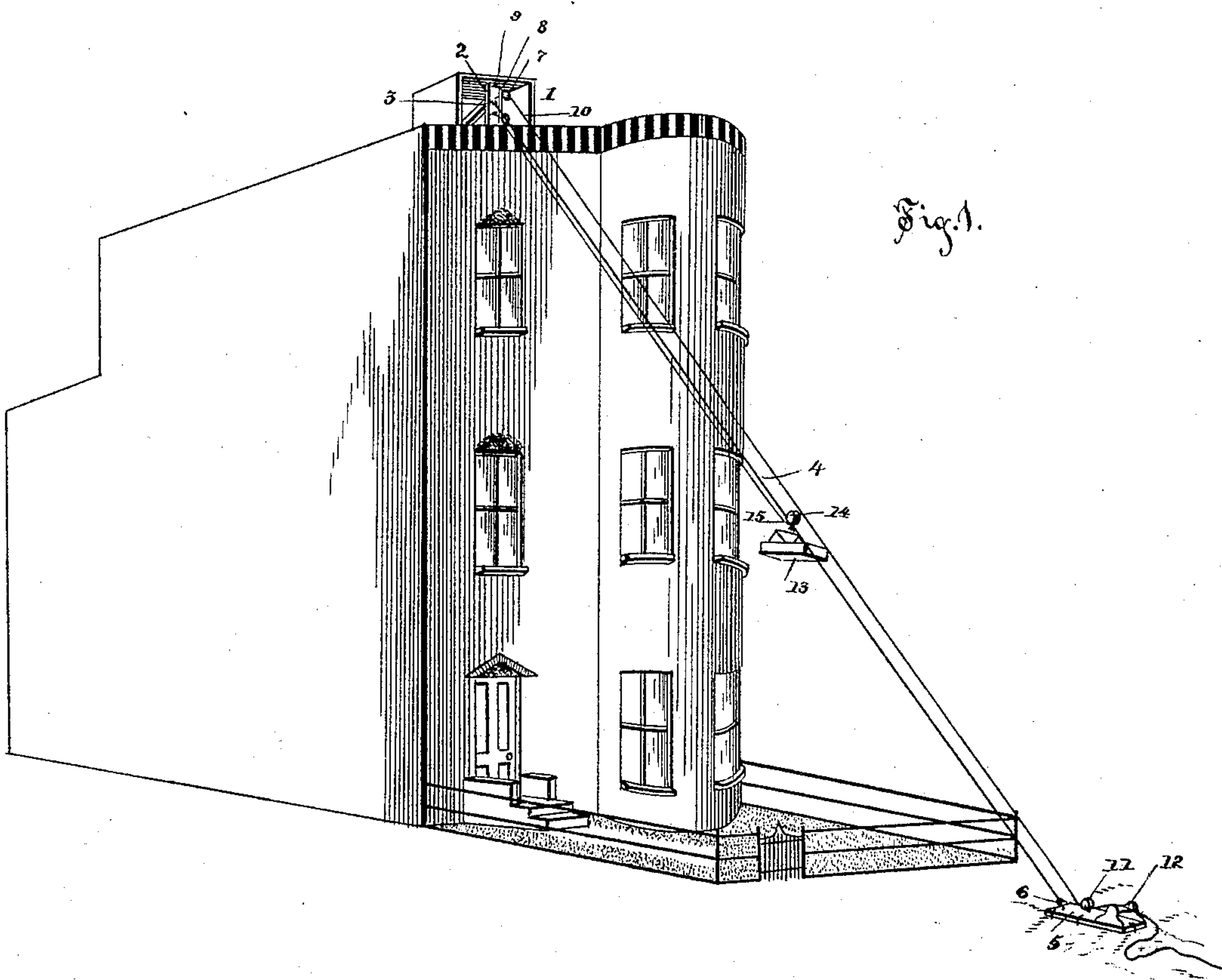
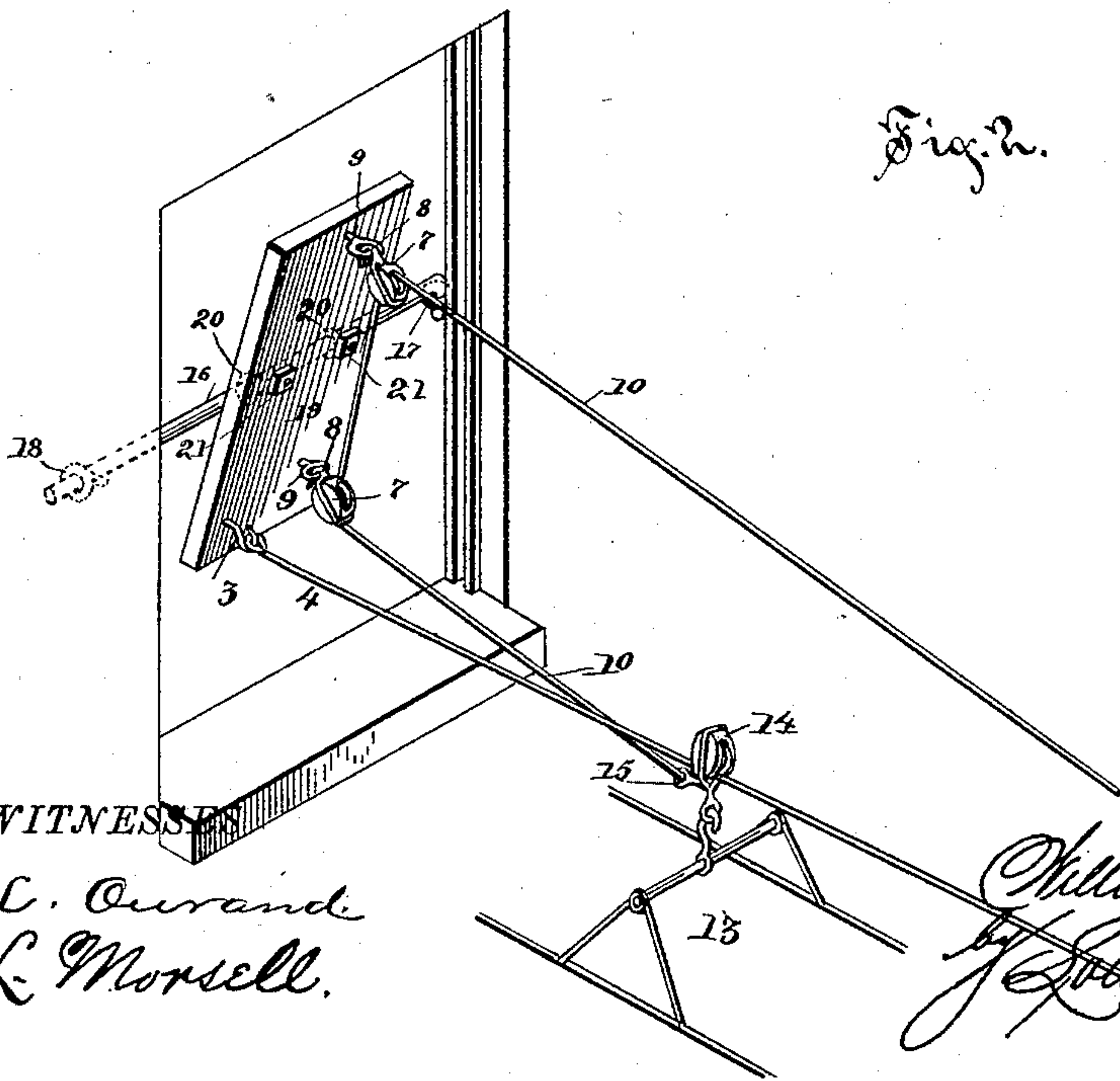


Fig. 2.



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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 390,446, dated October 2, 1888.

Application filed May 5, 1888. Serial No. 272,978. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BRUCE, a citizen of the United States, and a resident of Wellsville, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Fire-Escapes; 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, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved fire-escape as adjusted from the roof of a building, and Fig. 2 is a similar view showing the device as adjusted from a window.

Like numerals of reference indicate corresponding parts in both the figures.

My invention has relation to improvements in fire-escapes; and it consists in providing a device of such construction that the working parts thereof may be protected from the injurious effects of the weather when not in use, and, when occasion demands its employment, to be readily adjusted in operative position with but the smallest expenditure of labor and time being necessary; and to this end it consists in the improved construction and arrangement of parts of the same, as hereinafter more fully described and set forth.

In the accompanying drawings, the numeral 1 represents the shed or cover of my improved device when operated from the roof, and 2 the upright or standard arranged within said cover or shed near the inner edge of the wall of the building. The upright or standard 2 is provided with a hook or its equivalent, 3, to which is attached a rope, 4, which passes downward in a slanting or inclined direction to a short beam, 5, spiked or otherwise secured to the ground, and is there secured to an eye or staple, 6, in said beam. Pulley-blocks 7 7, furnished with hooks or eyes 8 8, are secured to staples 9 9 in the upright and arranged one above the other and about a foot apart, hook 3, with respect to staples 9 9, occupying a position to the left of the lower staple.

Passing over the sheaves or pulleys arranged within the blocks 7 7 is a rope, 10. One end of this rope, after passing over the pulleys in

the manner described, passes down in an inclined or slanting direction and through a pulley, 11, secured to beam 5, and thence over a roller, 12, on said beam into the hands of persons operating the device.

The numeral 13 represents the car or basket of the escape, which is provided with a pulley-block, 14, the sheave or pulley thereof sliding upon the stationary inclined rope 4. This pulley-block 14 is also provided with a hook or eye, 15, to which the short end of the operating-rope 10 is attached.

Fig. 2 represents a modified construction of my improved escape, adapting the same to be used from a window of a dwelling, and consists simply in employing a cross-bar, 16, which is constructed with one end bent or hooked to engage a hook-eye, 17, screwed into one side of the casing or frame of the window, and having the other end straight, so as to pass through a screw-eye, 18, in the opposite side of the frame; or it is obvious that any other form may be used without departing from the spirit of my invention—as, for instance, providing both ends of the cross-bar with hooks engaging screw-eyes in opposite sides of the frame.

Secured to the cross-bar in a slanting position is a beam, 19, having screw-eyes 20 20 passing through the same and secured on the outer side of the beam by locking-nuts 21 21. These latter screw-eyes form a convenient means of securing the beam to the cross-bar, it only being necessary to first pass the cross-bar through said screw-eyes, after which the bar may be easily adjusted to the window. This inclined beam 19 is provided with similar appliances as the upright or standard 2—viz., with a hook or its equivalent, to which is attached the rope 4, said rope passing down to the short beam 5 and there secured to the eye or staple 6 in said beam, and also with the pulley-blocks 7 7, furnished with hooks or eyes 8 8, secured to the staples 9 9, screwed in said inclined beam, and having the rope 10 passing over the sheaves of said pulley-blocks in exactly the same manner as when operated from the roof of the building.

When my device is not in use, the rope and tackle are all placed under the projecting shed or cover, thereby preventing them from being damaged by exposure to the weather, or kept

in the room near the window at which it is to be operated.

When a fire is discovered and it becomes necessary to employ the device, all that is required of those on the roof is to throw the free ends of the ropes 4 and 10 to the ground, in order that they may be properly adjusted to the pulley and roller; or, the cross-bar with inclined beam being adjusted at the window, the ends of the rope may in like manner be thrown to the street.

Two or more persons may enter the basket from the roof or from the window, and their descent is regulated by persons on the street below, who, having the end of the operating-rope 10 in their hands, can govern the descent by simply walking toward the frame or short beam 5. The basket is of course again raised simply by a reverse operation—viz., by the operators walking away from the beam 5.

This device, it will be seen, is simple, strong, safe, practical, and cheap. It can be most readily adjusted when necessary, and its working parts are thoroughly protected when not in use. In point of safety it possesses superior advantages, and it is obvious that there is but very little risk to the occupants of the

escape - basket, as their descent may be made easy and gradual, subjecting them to but very little discomfort.

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

The combination of the window casing or frame provided on opposite sides with screw-eyes, the cross-bar having a bent end, the inclined beam provided with a hook and pulley-blocks, the eyebolts passing through said inclined beam and having their ends screw-threaded, so as to receive locking - nuts, the street frame or beam provided with a hook or eye, a pulley-block, and a roller, the stationary rope, the escape basket or car provided with a pulley-block, said block having an eye or hook, and the operating-rope, substantially as and for the purpose shown and set forth.

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

WILLIAM BRUCE.

Witnesses:

ELISHA GREER,
WM. WACK.