

(No Model.)

W. A. BERGSTROM.
FIRE ESCAPE.

2 Sheets—Sheet 1.

No. 512,498.

Patented Jan. 9, 1894.

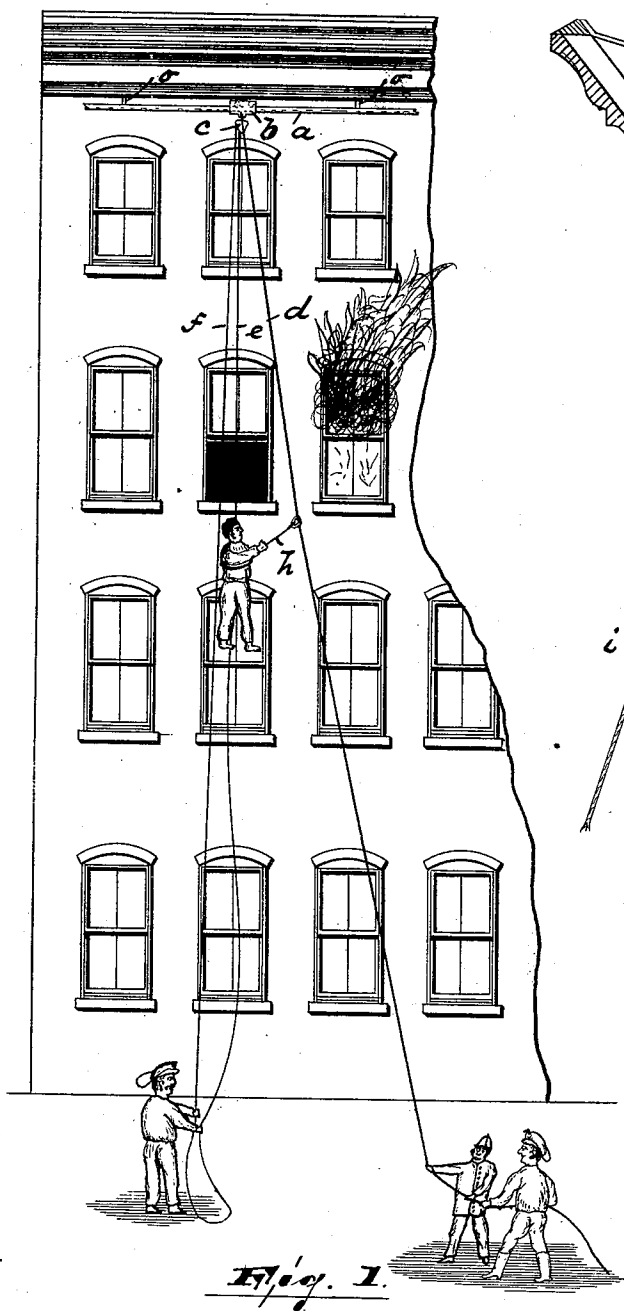


Fig. 1.

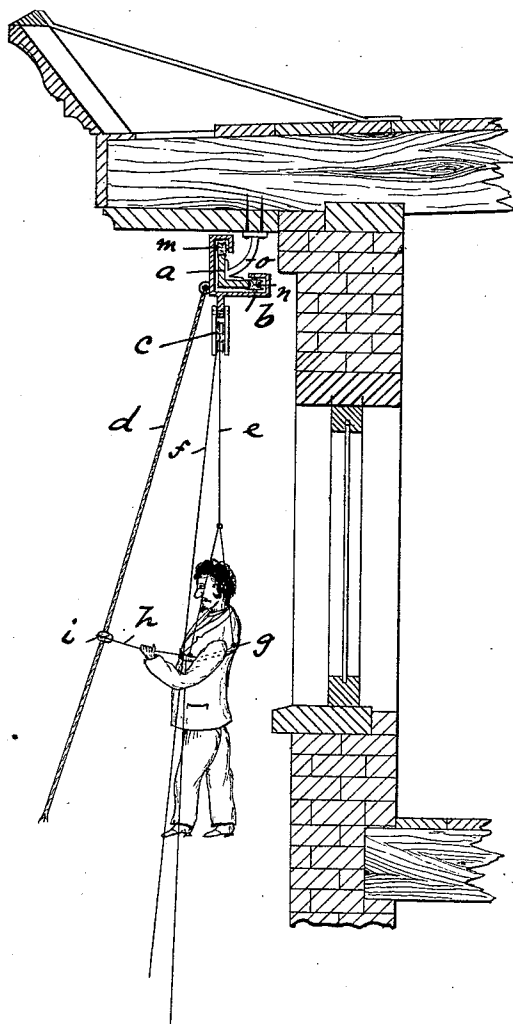


Fig. 2.

WITNESSES:

Wm. D. Bell.
O. H. Robertson.

INVENTOR:

Walter A. Bergstrom

BY

Gartner & Co.

ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

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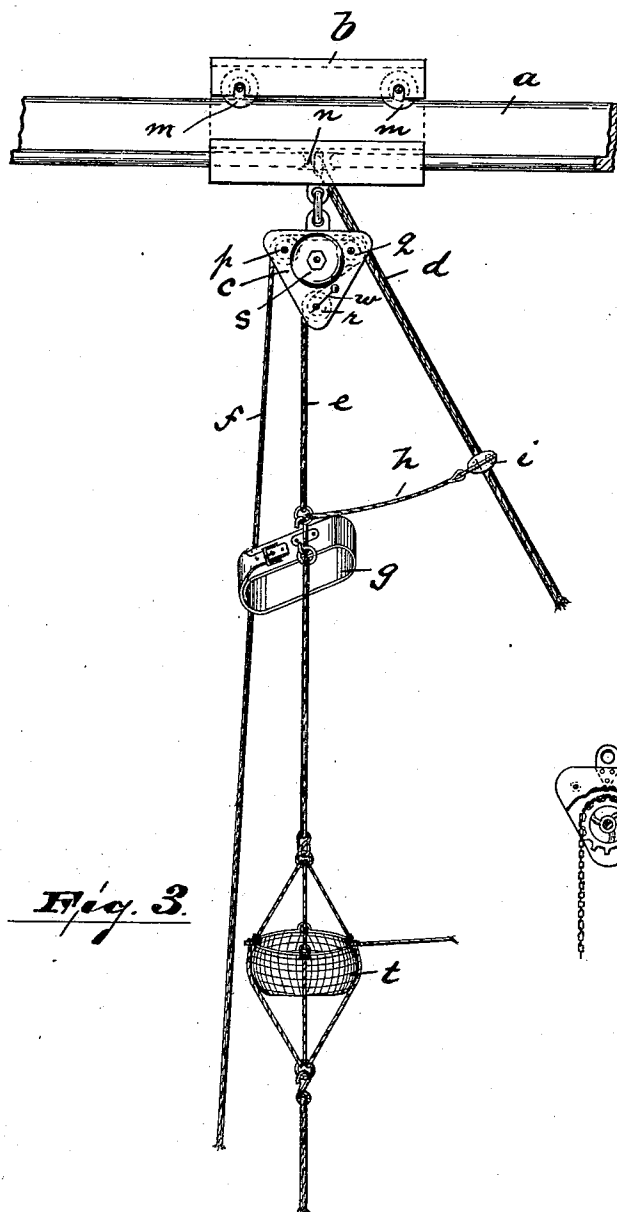


Fig. 3.

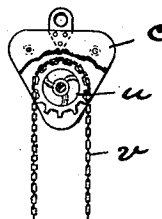


Fig. 4.

WITNESSES:

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UNITED STATES PATENT OFFICE.

WALTER A. BERGSTROM, OF PATERSON, NEW JERSEY.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 512,498, dated January 9, 1894.

Application filed August 14, 1893. Serial No. 483,083. (No model.)

To all whom it may concern:

Be it known that I, WALTER A. BERGSTROM, a citizen of the United States, residing at Paterson, county of Passaic, and State of New Jersey, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare the following to be a full, clear, and exact description of the invention, 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, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to a new and useful improvement in fire escapes and it consists essentially in a carriage carrying the fire escape and running on a rail which is permanently secured to a building or buildings. The carriage and fire escape may be moved from window to window as exigencies demand. It consists also in the combination and arrangement of parts hereinafter described and claimed.

In the drawings Figure 1 is a front elevation of a building showing my improved fire escape in use. Fig. 2 is an enlarged side view of the same partly sectioned. Fig. 3 is an enlarged rear view of the fire escape and Fig. 4 a front view of a modified detail of the fire escape.

In said drawings *a* is a rail angular in cross section and secured to the walls of the building by suitable brackets *o*. Traveling on this rail *a* is a carriage *b* provided with one or more wheels *m* resting on the top of the rail *a* and one or more wheels *n* resting on the side thereof. Depending from this carriage *b* is a block *c* containing one or more pulleys or sheaves *p*, *q* and *r* around which a double rope *f* and *e* (see Figs. 1, 2 and 3) passes.

Secured to the carriage *b* is a cable *d* upon which a pulley *i* is adapted to ride. Secured to the portion *e* of the rope *f* is a belt or supporting strap *g*. This strap or belt *g* is connected to the pulley *i* by a rope or chain *h*. Instead of this strap or belt *g*, a basket *t* may be attached to the rope *e* as shown in Fig. 3, or both may be used at preference. Instead of using one or more tension pulleys *p*, *q* and *r* and a rope *f*, *e*, if preferred a sprocket wheel

u and chain *v* may be substituted. Outside the shell *c* may be placed a gong *s* operated by a striker *w* keyed to and rotating with the shaft of one of the friction pulleys *p*, *q* and *r* or of the sprocket wheel *u* (see Fig. 3) for a purpose hereinafter explained.

The operation is as follows: In case of fire the carriage *b* is moved on its rail by the cable *d* until the rope carrying the strap, or basket is in front of the window at which the persons to be rescued are standing. The cable is then stretched as far across the street as possible; the strap or basket is run up by pulling on rope *f* to the window, and the strap either placed about the person or in case of children, the person is placed in the basket. The basket or strap is then lowered, the weight of the person being sustained almost entirely by the cable *d*. To prevent surreptitious use of the appliance by thieves, a gong is arranged in the shell *c* so that it will ring when the strap or basket is raised or lowered. The rail *a* may be placed on one or all sides of the building and the carriage so constructed that it will ride thereon and turn corners.

The device is simple, inexpensive and safe and its peculiar advantage resides however in the fact that when the person using it has secured himself to the rope *e* the entire device may be shifted on the rail out of reach of flames from lower or side windows—or the cable *d* may be stretched to such a distance away from the building that if the entire building below the window is in a blaze, the person could be safely removed.

Having thus described my invention, what I claim is—

1. The combination, in a fire escape, of the angle-railed track, secured to a building, a carriage provided with two sets of wheels adapted to slide on the horizontal and vertical rails of said angle track, said carriage conforming in shape with said angle track, and a cable secured to said carriage and extending therefrom to the street whereby said carriage may be moved on said track from the street, with a pulley block suspended from said carriage, an endless rope passing around the pulleys in said block, a basket or other suitable support carried by said endless rope,

and a rope and pulley connecting said support with said cable, all arranged so that the rollers of the carriage traveling on the horizontal rail of the angle track prevent the carriage from being derailed, substantially as described.

2. The combination, in a fire escape, of the angle track *a*, having vertical and horizontal rails, a carriage *b* provided with the rollers *m* traveling on the vertical rail and roller *n*, traveling on the horizontal rail of said angle track *a*, and a cable *d* secured to said carriage *b* and connecting the same with the ground, with a pulley bracket *c* depending from said carriage *b* and supported thereby, one friction pulley or more secured in said bracket *c*, an

endless rope passing around said friction pulleys and connecting said bracket *c* with the ground, a basket *t* carried by said endless rope, a cord *h* and pulley *i* riding on the cable *d* and securing said basket *t* to said cable, all arranged so that the roller *n* prevents the derailment of the carriage when the carriage is moved by said cable *d*, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of July, 1893.

WALTER A. BERGSTROM.

Witnesses:

HENRY E. EVERDING,
ELLA BERGSTROM.