

L. MEYER.
FIRE-ESCAPE.

No. 192,339.

Patented June 26, 1877.

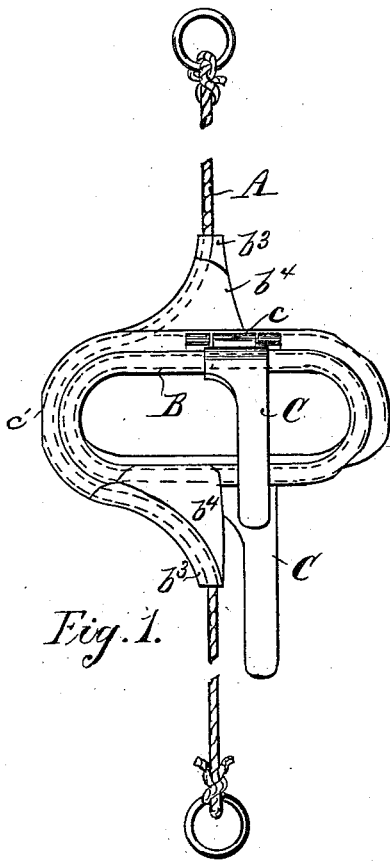


Fig. 1.

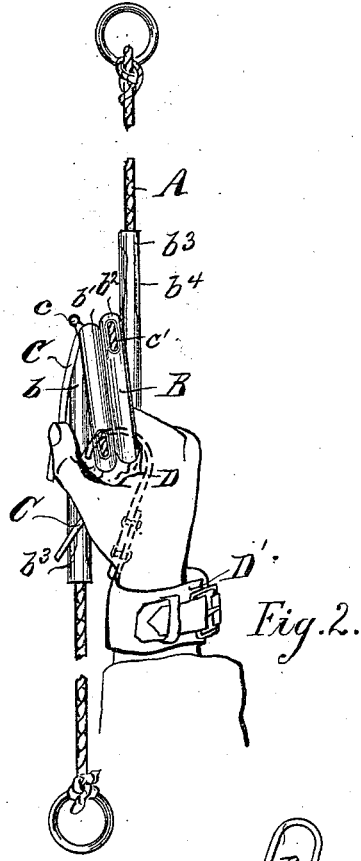


Fig. 2.

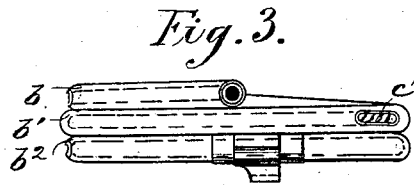


Fig. 3.



Fig. 5.

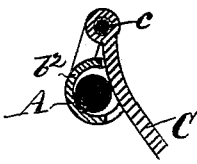


Fig. 4.

Witnesses;
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UNITED STATES PATENT OFFICE.

LOUIS MEYER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **192,339**, dated June 26, 1877; application filed May 2, 1877.

To all whom it may concern:

Be it known that I, LOUIS MEYER, of St. Louis, in the county of St. Louis and State of Missouri, have invented an Improvement in Fire-Escapes, of which the following is a specification:

This invention is an improved hand attachment to be used in connection with a rope fastened above and reaching below for fire-escape purposes.

The object of my invention is to enable the user to quickly apply the escape, to make the descent with confidence and ease, and otherwise to facilitate the method of escape.

Of the drawing, Figure 1 is a front elevation, Fig. 2 is a side elevation, Fig. 3 is a top plan, and Fig. 4 is a detail section, showing more clearly the brake. Fig. 5 is a perspective view of the hook and wristband.

A represents the rope. B is my hand attachment. As here shown, the attachment B consists of a metallic tube, bent in such wise as to have one or more coils, $b^1 b^2$, both opposite ends at b^3 terminating in vertical line with the rope.

The rope is passed through the tubing B, the coils thereof being to increase the friction, so that the hand attachment adapts itself to the weight to be supported, and prevents a too quick descent.

The number of coils can be increased or diminished—the more the weight the more coils can be provided.

The respective ends of the tubing B are strengthened by a plate, b^4 , jointed or soldered to the tubing. (See Figs. 1 and 2.)

In order that the operator can control at will the descent, I provide the hand attachment B with a brake. This brake consists of a lever, C, hinged at c , and made to extend within reach of the operator's hand or finger. (See Figs. 1, 2, 4.) The coil to which the lever C is hinged is slotted sufficiently to allow the contiguous part of said lever to bear against the surface of the exposed rope. The lever, therefore, being caused to press against the rope, estops the operator's descent, according to the force of the lever acting—the pressure of the lever being entirely within the control of the operator. I provide each hand attachment with two of the brakes oppositely positioned, (see Figs. 1, 2,) for the purpose as will hereinafter appear.

At any point of the coil air-holes c' are made

to ventilate the apparatus when acting, and prevent overheating.

Instead of the operator taking hold directly on the coils, and as a better means of catching a hold, I prefer to provide a separate holding device, consisting of a hook, D, and wristband D'. (See Fig. 2.) The hook D is bent over, so as to hook the lower part of the coils, (see Fig. 2,) and is properly fastened to the wristband.

The operator has the hand and fingers thus left free to operate and control the brake, also the hold cannot be injured by the heating of the coils which takes place owing to the great friction.

The manner of using my escape is as follows: One end of the rope is fastened securely to any point—say to a piece of furniture in the room. The remaining part of the rope is thrown outside of the building to reach below to the ground floor. This done, the operator secures the wristband D' to the wrist, and next secures the hook on the hand attachment B. (See Fig. 2.) Being therefore suspended, as apparent, the operator can readily control the descent by means of the brake.

A most safe, quick, and simple method of escape is thus accomplished, and at same time the hand not engaged can be the means of saving property or life.

When one descent has been made, the rope is drawn up again and the ends are reversed, (the end that was fastened tight is let down, and the other end is fastened,) thus reversing the hand attachment, which brings the other brake in proper position for use.

What I claim is—

1. The hook D and wristband D', in combination with the hand attachment B, carrying the brake C and the rope A, as and for the purposes set forth.

2. The reversible hand attachment B, provided with two oppositely-positioned brakes, C, all constructed as herein shown and described, in combination with a rope, to operate in the manner and for the purpose set forth.

In testimony of said invention I have hereunto set my hand.

LOUIS MEYER.

Witnesses:

WILLIAM W. HERTHEL,
JOHN W. HERTHEL.