

No. 778,743.

PATENTED DEC. 27, 1904.

O. EWERS.
FIRE ESCAPE.

APPLICATION FILED DEC. 14, 1903.

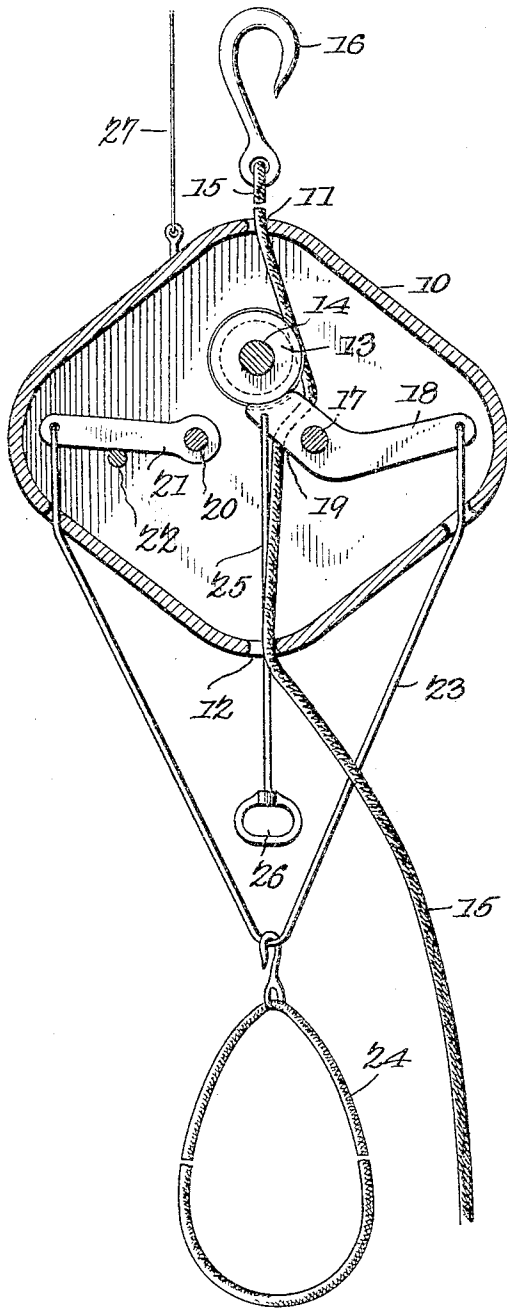


Fig. 1.

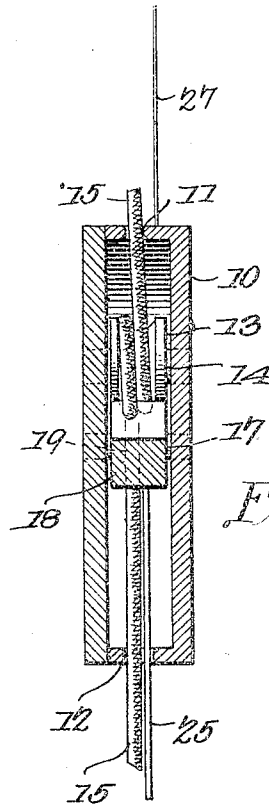


Fig. 2.

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FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 778,743, dated December 27, 1904.

Application filed December 14, 1903. Serial No. 185,154.

To all whom it may concern:

Be it known that I, ORLANDO EWERS, a citizen of the United States, residing at Readstown, in the county of Vernon and State of Wisconsin, have invented a new and useful Fire-Escape, of which the following is a specification.

This invention relates to means whereby persons may escape from burning buildings, and has for its object to produce a device of this character simple in construction, easily and quickly attached, and by means of which persons may safely lower themselves from any height and control the speed of the descent; and the invention consists in certain novel features of construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a sectional front elevation. Fig. 2 is a sectional side elevation.

The improved device comprises an inclosing casing 10, having guide-apertures 11 12 in its ends and a roller 13 mounted for rotation therein upon a stud 14, as shown. A suspension-cable 15 is provided long enough to reach to the ground from the point of descent and may vary in length to correspond to the building upon which it is used. The cable will preferably be of steel wire as small as consistent with the strains to which it will be subjected, but may be of rope or any suitable material, and I do not, therefore, desire to be limited to any specified quality or form of material for this portion of the apparatus. The cable will be provided with means, such as a hook 16, to connect its upper end to some permanent object, such as a window-sill. The cable will pass through the apertures 11 12 and be wound once or more around the roller 13 within the casing, as shown, the roller being preferably grooved to support the cable.

Fulcrumed at 17 within the casing is a lever 18, with its shorter end recessed and bearing upon the portion of the cable wound around the roller and with the cable preferably extending loosely through the lever between its pivot and its "gripping" end, as shown at 19. Pivoted at 20 within the casing 10 is another

lever 21, the latter bearing against a stop 22 to limit its downward movement.

A supporting member is provided in the form of a U-shaped rod 23 with the ends connected, respectively, to the free ends of the levers 18 and 21 and providing means for supporting an approved form of suspension-harness, as at 24.

Connected to the gripping end of the lever 18 is a rod 25, terminating in a handle 26 outside of the casing 10 and within reach of the person supported by the harness 24. By this simple arrangement when a person desires to descend from a burning building the hook 16 is connected over a window-sill or other permanent support, the harness 24 secured about the body, and the person climbs from the window, permitting the weight to bear upon the harness, which causes the lever 18 to firmly grip the cable upon the roller 13 and effectually prevent any downward movement of the casing and its attachments.

The person in the harness by drawing downward upon the handle 26 releases the lever 18 and permits the roller, with the casing and its attachments, to slide down the cable, and, the speed of the descent, it will be obvious, can be perfectly and easily controlled by regulating the degree of force exerted on the rod 25. By this simple means persons can permit themselves to descend at any desired speed or stop the descent at any required point.

The parts will preferably be of metal of sufficient quality and strength to resist the strains to which they will be subjected and may be modified in minor particulars without departing from the principle of the invention or sacrificing any of its advantages.

A relatively small wire, as at 27, will be attached by one end to the casing 10 and by the other end to some portion of the building and as long as the distance which the casing will travel to provide means whereby the latter, together with its sling and other attachment, may be drawn upward again for further use, if required.

Having thus described the invention, what is claimed is—

1. A fire-escape comprising a roller, a suspension-cable engaging said roller, a lever ful-

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crumed adjacent to said roller and bearing against the cable thereon, and with the cable passing loosely therethrough between its pivot and gripping end, a supporting means suspended from the free end of said lever, and a releasing device connected to the gripping end of said lever and under the control of the person in said supporting means.

2. A fire-escape comprising a casing having
10 vertically - alined guide - apertures, a roller mounted for rotation in said casing, a suspension-cable extending through said apertures and engaging said roller, a lever fulcrumed in said casing and bearing upon the cable upon
15 said roller, the cable passing through a guide-opening in the lever, a supporting means suspended from the free end of said lever, and a releasing device connected to the gripping end of said lever and projected through one of the
20 guide-apertures in the casing to be under the control of the person in said supporting means.

3. A fire-escape comprising a casing having

vertically - alined guide - apertures, a roller mounted for rotation in said casing, a suspension-cable extending through said apertures 25 and engaging said roller, a lever fulcrumed in said casing and bearing upon the cable upon said roller, the cable passing through an opening in the lever, a supporting means of substantially U shape hung below the casing with 30 one end connected to the free end of the lever and the other end to the casing, and a releasing-rod connected to the gripping end of said lever and projected through the lower guide-aperture of the casing to be under the 35 control of the person in the suspending means.

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

ORLANDO EWERS.

Witnesses:

EDGAR EWERS,

ACHILLES EWERS.