

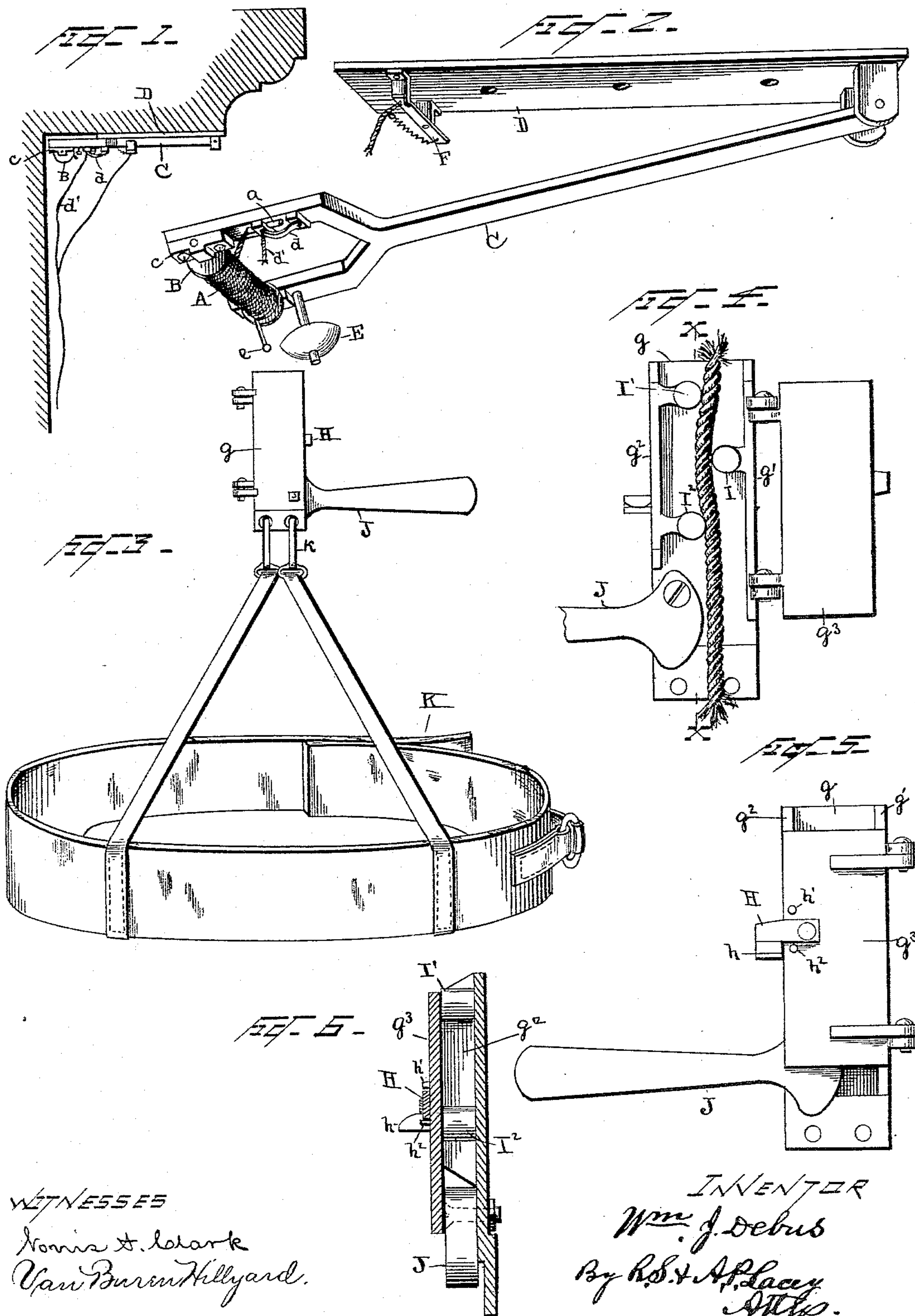
(No Model.)

W. J. DEBUS.

FIRE ESCAPE.

No. 387,772.

Patented Aug. 14, 1888.



WITNESSES

Norman H. Clark  
Van Buren Hillyard.

INVENTOR  
Wm. J. Debus  
By H. B. & A. Lacey  
Atty.



# UNITED STATES PATENT OFFICE.

WILLIAM J. DEBUS, OF ROCHESTER, NEW YORK.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 387,772, dated August 14, 1888.

Application filed April 25, 1888. Serial No. 271,766. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. DEBUS, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Fire-Escapes; and I do 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to fire-escapes, and has for its object the provision of means which can be conveniently operated by the occupant of a room to release a life-line, which will automatically unwind itself from a reel and at the same time sound an alarm, and to provide a device that can be quickly adjusted to the person and to the said line, and by which the person can lower himself on the line fast or slow, as desired.

The improvement consists, chiefly, of a case having three sides and the fourth side closed by a hinged door, which is fastened at its free end by a suitable catch, and having a series of projections extending up from the bottom of the case and braced laterally from the sides of the case, the projections being set staggering and on opposite sides of the longitudinal center of the case, and having a cam-lever which is adapted to bind the said line between it and the side of the case with a greater or less friction to control the descent.

The improvement further consists of the details of construction which hereinafter will be more fully described and claimed, and shown in the accompanying drawings.

Figure 1 is a sectional view of the cornice of a building, showing my invention; Fig. 2, a perspective view of the bracket on an enlarged scale; Fig. 3, a front view of the friction device, showing the belt applied thereto; Fig. 4, a front view of the friction device, showing the door open, on an enlarged scale; Fig. 5, a front view of the friction device, showing the door closed; and Fig. 6 is a vertical section on the line X X of Fig. 4.

The life-line A is wound on a drum or reel, B, that is journaled at its ends in the arms c

of the swinging bracket C, which is hinged to the strap-iron D, fastened to the cornice or other suitable portion of the building. The end of the life-line is provided with the weight *a*, which is supported by a suitable catch, *d*, from which the cord *d'* extends within convenient reach to be pulled on for releasing the weight, when it will descend, carrying with it the life-line. During the unwinding of the line an alarm will be sounded by the hammer *e*, secured to the reel and carried around with it in its revolutions, striking against the gong-bell E, supported on the bracket C. The bracket is adapted to fold close to the building, and may be held folded by any well-known means, as the catch F, which is connected with the cord *d'*, so that when the weight is released the bracket will likewise be released and swing outward, carrying the line away from the building a sufficient distance to avoid projections and prevent the person from being injured against the said building.

The friction device consists of the case G, composed of the bottom *g*, the sides *g'* *g''*, and the door *g'''*, that is hinged to the side *g'* and held to the side *g''* by the latch H, engaging with the arm *h* integral with and projecting from the side *g''*. The latch is pivoted to the door and is limited in its movements by the studs *h'* and *h''*. The projections I, I', and I'', extending up from the bottom of the case, are braced laterally from the sides of the case. The projection I is arranged opposite the space between the two projections I' and I'' and on one side of the longitudinal center of the case, the projections I' and I'' being on the other side of said longitudinal center. The opposing sides of the projections come quite close to the said line, but do not touch it, so as not to deflect the rope too much from a straight line. The cam-lever J, arranged at right angles to the case, is adapted to clamp the rope between it and the side *g'* of the case to regulate the descent of the person. The bottom and the sides of the case, together with the projections and the arm *h*, are integral, and the projections and the sides *g* and *g'* are of an equal height. The harness K is connected with the case by the snap-hooks *k* or like means.

The friction device can be quickly applied to and removed from the line by opening the



doors, and when adjusted to the line is held thereon by closing and fastening the door.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The herein-described fire-escape, composed of the case having three sides and having projections extending up from the bottom and braced from the sides, the projections being set on opposite sides of the longitudinal center of the case, the cam-lever extending at right angles to the case, and adapted to clamp the line between it and the side of the case, and the door hinged to one side of the case and adapted to be fastened at its free end to the other side of the case, substantially as described.

2. The herein shown and described friction fire-escape, composed of the case open at its ends and one side, and having projections integral with its bottom and sides and arranged with their opposing sides approaching close to the longitudinal center of the case, the cam-lever adapted to clamp the rope between it and the side of the case, the door hinged to one

side of the case and provided with a pivoted latch, and the arm extending from the other side of the case, to be engaged by the said latch to fasten the door and hold the line in place between the projections and between the side of the case and the said cam-lever, substantially as described.

3. In a fire-escape, the combination of the strap D, the bracket C, hinged thereto at one end and having arms *c* at its other end, the reel journaled between the arms *c*, the line wound on the reel and having its end weighted, the gong-bell supported on the bracket, the hammer carried by the reel, the catches for supporting the weighted end of the line and holding the bracket folded, and the releasing-cord for operating the catches, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM J. DEBUS.

Witnesses:

JOHN DAILEY,  
JOSIAH G. FISK.