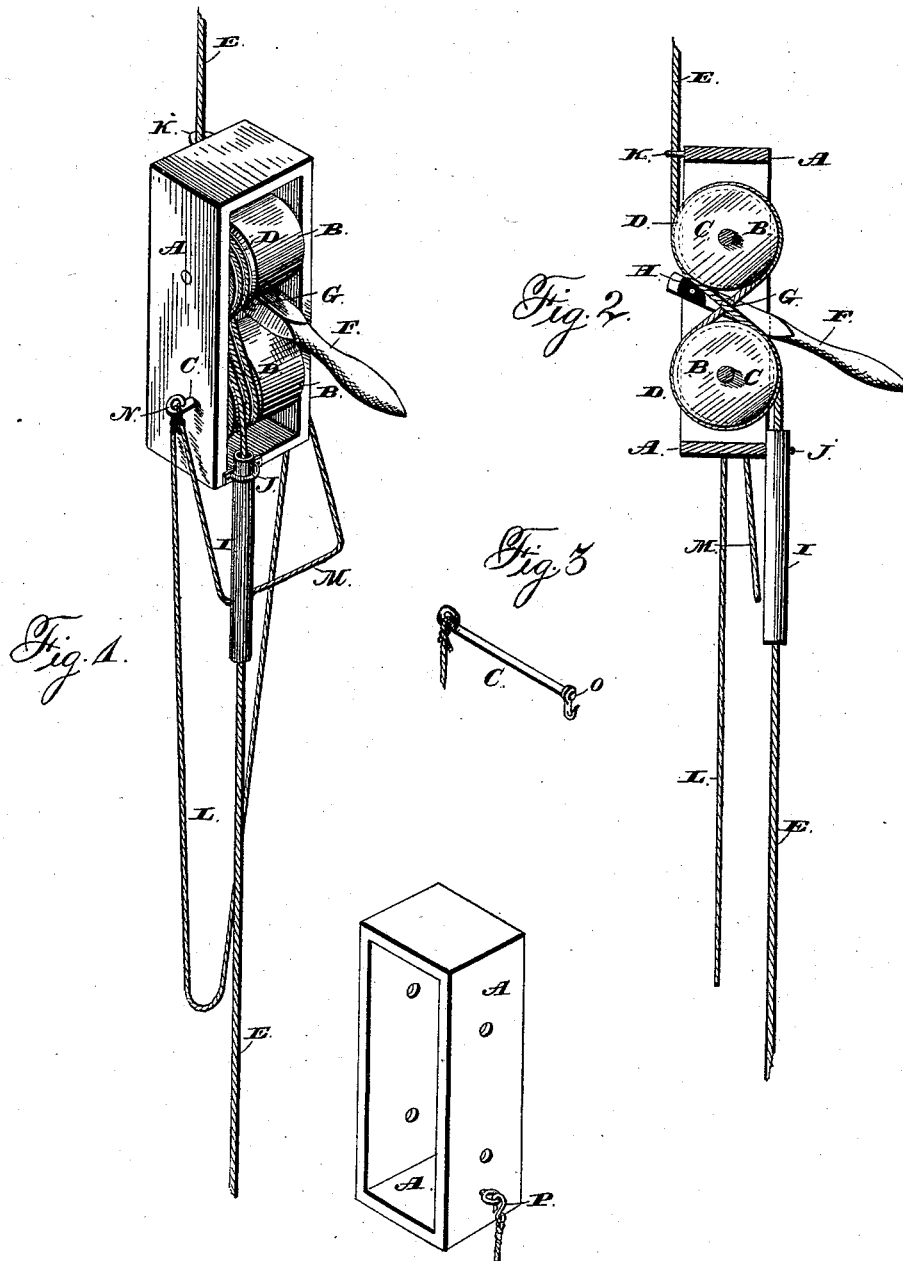


(No Model.)

C. BLOSS.
FIRE ESCAPE.

No. 302,232.

Patented July 22, 1884.



WITNESSES
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UNITED STATES PATENT OFFICE.

CHARLES BLOSS, OF BETHLEHEM, CONNECTICUT.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 302,232, dated July 22, 1884.

Application filed March 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BLOSS, residing at Bethlehem, in the county of Litchfield and State of Connecticut, 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 same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in fire-escapes, the object being to produce a portable escape combining simplicity, cheapness, and compactness of construction, and adapted to be readily made available for use, and to be perfectly controlled when in use.

With these ends in view my invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of a fire-escape embodying my invention. Fig. 2 is a view thereof in vertical transverse section; and Fig. 3 is a detail view showing one mode of attaching the seat and arm ropes to the escape.

The frame or casing A of the escape is preferably constructed of band or wrought iron; but, if found desirable, it may be made of cast metal and in one piece. Drums B, located within the frame, are journaled upon shafts C, mounted in the side walls thereof. As herein shown, the frame is not sufficiently deep to entirely inclose the drums; but it may be made so, if desired. The periphery of one end of each drum is provided with grooves D, the grooved ends of the drums being placed contiguous to each other. The said grooves receive the pendent escape-rope E, which is wound from the ends of the drums inward, and which passes around and between them, as shown in Fig. 2 of the drawings. By this involved mode of winding the escape-rope upon the drums, sufficient friction is developed to prevent it from slipping upon them under any weight which may be imposed upon the device. A lever, F, fulcrumed within the frame upon a stud, G, and located between the drums, is thus adapted to be simultaneously engaged with the periphery of each drum, and to act upon them as a brake for controlling the rate of their rotation, and consequently the de-

scend of the device upon the rope. This is further regulated by a friction-block, H, composed of or faced with rubber, leather, or equivalent material, and secured to the inner face of the outer end of the lever in position to engage with the rope. Another safeguard for controlling the descent of the escape is a flexible tube, I, inclosing the rope, and attached to the lower end of the frame by a clamp, J, as shown. This tube is grasped by the hand, and by compressing it upon the rope friction for retarding the descent of the escape will be developed. But whether used as a brake or not, the tube affords convenient means of support for the person descending with the escape. Aside from this, the tube steadies the device upon the rope, and, for this same purpose, also a staple, K, receiving the rope, is attached to the upper part of the frame. A seat-rope, L, and an arm-rope, M, form, as it were, a harness. The ends of the said seat-rope are respectively fastened to an eye, N, and a hook, O, respectively formed integral with and attached to opposite ends of the shaft C of the lower drum. One end of the said arm-rope is fastened to the eye N and the other end provided with a hook, P, adapted to be engaged with the hook O aforesaid at pleasure. So far, however, as the attachment of these ropes to the frame of the escape is concerned, it is evident that it may be done in a variety of ways, and I do not limit myself to any particular means or mode of doing it.

Having described the construction of my improved escape, I will now proceed to set forth the manner of its use.

The escape-rope is preferably fastened to the upper part of or to some point above a window-frame, from which it extends to the ground or other landing, and the escape is adjusted upon the rope so as to hang about midway of the window. A sitting posture is assumed in the seat-rope, and the arm-rope is passed around the body under the arms, and then engaged with the escape, as provided for. This done, the lever and tube are grasped and the escape swung out of the window and the rapidity of its descent regulated by the manipulation of the lever and tube.

I would have it understood that I do not limit myself to the exact construction herein

shown and described, but hold myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

5 Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A portable fire-escape designed to descend upon a pendent escape-rope, and consisting of a frame, drums journaled therein, and having the rope wound upon them for friction, and a lever for applying friction directly to the drums for controlling their rotation, substantially as set forth.

15 2. A portable fire-escape designed to descend upon a pendent escape-rope, and consisting of a frame, two drums journaled therein, and having the rope wound upon them for friction, and a lever located between and arranged to be directly engaged with each of the drums at the same time for controlling their rotation, substantially as set forth.

25 3. A portable fire-escape designed to descend upon a pendent escape-rope, and consisting of a frame, drums journaled therein,

and having the ropes wound upon them, and a lever arranged and adapted to engage with the drums and the rope to control the descent of the device, substantially as set forth.

4. A portable fire-escape designed to descend upon a pendent escape-rope, and consisting of a frame, drums journaled therein, and having the rope wound upon them, and a lever arranged to engage with the drums, and provided with a friction-block to engage with the rope, substantially as set forth.

5. A portable fire-escape designed to descend upon a pendent escape-rope, and consisting of a frame, drums journaled therein, and having the rope wound upon them for friction, means for applying friction to the respective drums for controlling their rotation, and a harness, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES BLOSS.

Witnesses:

MARY G. BLOSS,
SAMUEL L. BLOSS.