No. 653,498. Patented July 10, 1900.

F. N. BARNETT.

FIRE ESCAPE.

(Application filed Mar. 21, 1900.)

(No Model.)

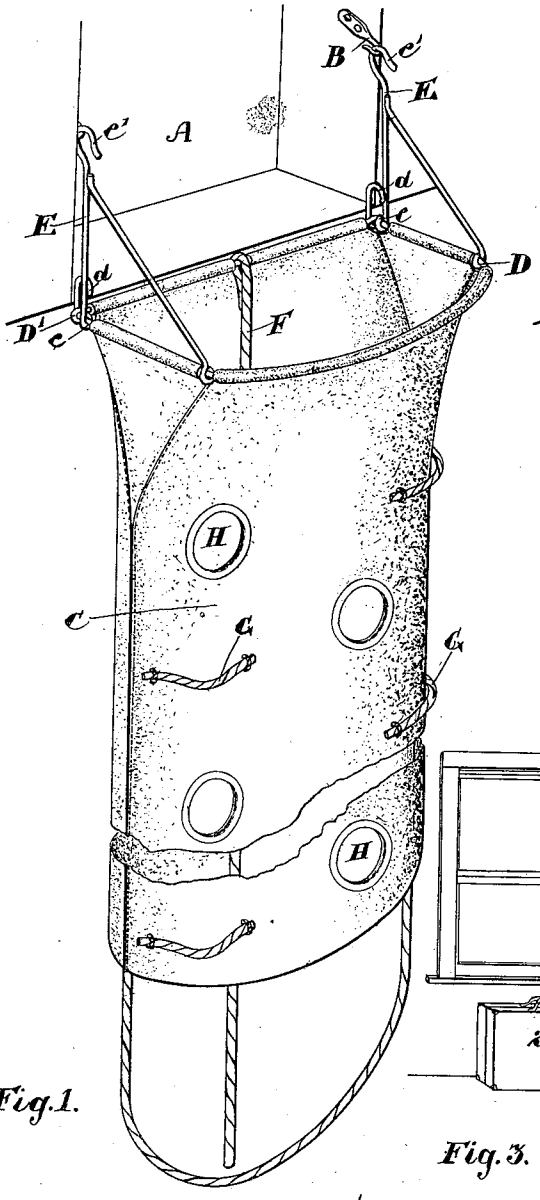


Fig. 1.

Fig. 3.

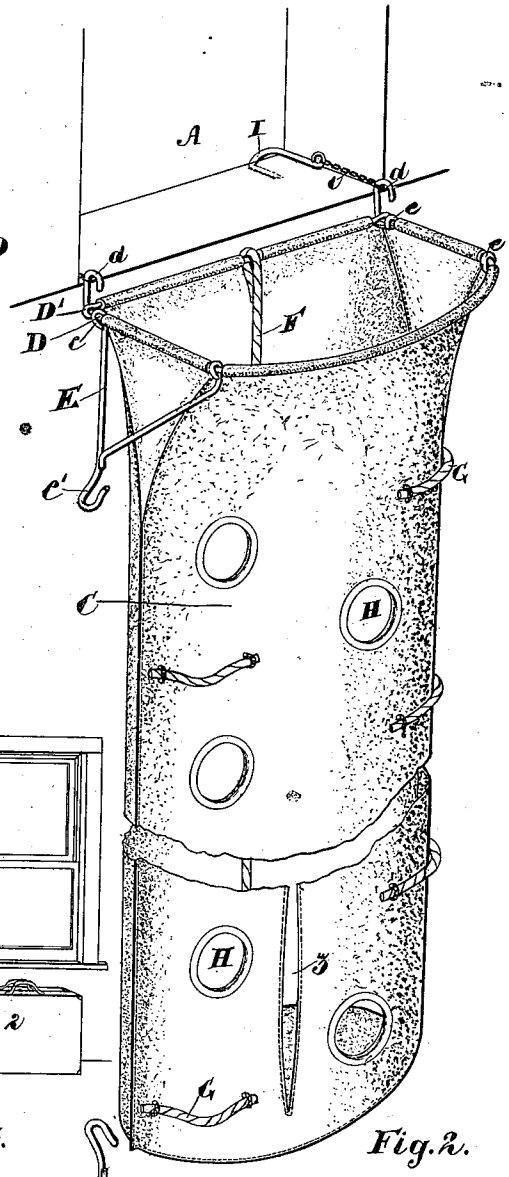


Fig. 2.

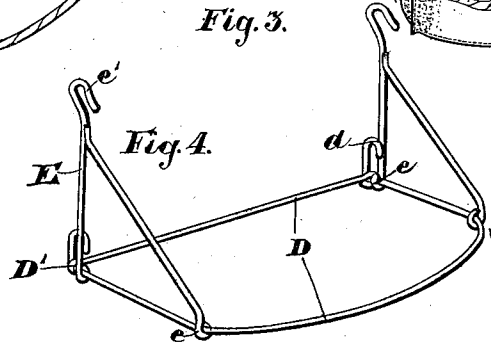


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

FRANK NUTTER BARNETT, OF TORONTO, CANADA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 653,498, dated July 10, 1900.

Application filed March 21, 1900. Serial No. 9,580. (No model.)

To all whom it may concern:

Be it known that I, FRANK NUTTER BARNETT, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification.

My invention relates to improvements in fire-escapes; and the object of the invention is to devise a simple device whereby a person may readily escape from a burning building rapidly and without any danger of being injured; and it consists, essentially, of a cylindrical casing made of canvas or any other suitable material and provided at the top preferably with a metal frame substantially rectangular in form and provided with two short sides, upon which are mounted the supporting-braces, a rope being provided to extend through the center of the casing from top to bottom and suitable hand and foot holds being provided on the outside of the casing from top to bottom, the parts being otherwise constructed and arranged in detail and the device supported in position as hereinafter more particularly explained.

Figure 1 is a perspective view showing a window with my improved fire-escape attached in one manner. Fig. 2 is a similar view showing it attached in an alternative manner. Fig. 3 is an interior view inside a window, showing my fire-escape inclosed in a suitable hand-bag. Fig. 4 is a detail of the frame.

In the drawings like characters of reference indicate corresponding parts in each figure.

In the drawings, A is the window, and B indicates the hooks secured to the side thereof.

C is my cylindrical casing, which is made, preferably, of canvas or other suitable material, which is also preferably fireproof.

D is a frame, preferably of heavy steel rod and also preferably rounded at the front and flat at the back. The sides are preferably at right angles to the back and have hinged on them the supporting-braces E by the eyes *e*. The upper ends of the braces are provided with the supporting-hook *e'*. The rear ends of the sides of the frame are provided with hooks *d*, over which are passed the eyes formed at the ends of the back bar D' of the frame. The braces E are each made in two pieces, though, if desired, they might be made in one. The front and sides are preferably made in one piece.

F is a rope which is fastened, preferably, at the center of the back of the cylindrical casing and extends down and through the bottom of such casing.

G represents a series of loops secured to the outside of the bag and preferably alternately arranged and extending down the front thereof, as indicated, and also down the back.

H represents a series of holes situated between the loops and arranged alternately in a similar manner to the loops. The loops and holes are intended to form hand and foot holds for a person to descend on the outside of the bag, while another person may descend in the interior of the bag and grasp and utilize the rope while supporting himself by his limbs by pressing against the side of the flexible casing. Of course he might support himself by his limbs alone in the bag and prevent his too-rapid descent; but I find it extremely important that the rope be provided, as people in their fright may not preserve presence of mind sufficient to descend by pressing outwardly against the casing, and as long as they have the rope to guide them they will have more confidence and get down with greater facility.

Not only may the loops and holes be used for getting down on the outside of the casing, but also a fireman may ascend up the outside of the casing and help those in the burning building.

In Fig. 2 I show the casing supported independently of the hooks B, the braces being swung down and having their ends resting against the wall, so that they will act as brackets to assist in supporting the casing. Grappling-hooks I are also provided, the ends of the chain *i* of the hooks I being fastened to the hooks *d*, while the grappling-hooks are slung to the inside of the window, so as to catch on the inner side of the sill. In this figure also I show the bottom of the casing closed and with a slit 3 at the side, so that it will therefore be understood that as the bottom would not reach the ground the person in descending would in any event be prevented from being injured should he lose his presence of mind, as the bottom would prevent his falling to the ground, and he may read-

ily make his exit or be removed from the casing when he has reached the bottom through the slit.

It will be noticed that the hooks project beyond the inner edge of the material on the bag, so as to prevent such material becoming worn.

It will thus be seen that I have made every provision for a secure and easy descent from the window or other avenue of escape from a burning building.

It will of course be understood that the frame and the flexible cylindrical casing may be rolled up into compact form and held in a small case 2, so that it may be carried from any one part of the building to the other with but a very little inconvenience.

What I claim as my invention is—

1. In a fire-escape, the combination with a cylindrical casing, of a frame secured in the mouth thereof, having suspending-hooks, and supplemental frames E pivotally secured to the main frame, adapted to form in one position suspending devices and to be reversed to provide braces, substantially as described.

2. A fire-escape comprising the substantially-tubular casing, the substantially-rectangular frame at the top to which the upper edge of the casing is secured, the hinged braces swung on eyes on the sides of the frame and provided at their upper ends with hooks there being unobstructed holes extending through the tube as and for the purpose specified.

3. The combination with the casing and the upper substantially-rectangular frame and the braces hinged on the sides of the frame and hooks formed on the rear ends of the sides, the back cross-bar of the frame provided with eyes fitting over the hooks and the grappling-hooks provided with chains having the ends thereof fitting over the hooks of the frame, the said grappling-hooks being designed to grasp upon the inner side of the sill of the window as and for the purpose specified.

4. The combination with the casing and the substantially-rectangular frame the sides having the rear hooks, and the cross-bar fastened at the ends forward of such hooks and forming with the front portion of the frame means for connecting the casing, so as to leave the back portions thereof forward of the shanks of the hooks as and for the purpose specified.

FRANK NUTTER BARNETT.

Witnesses:

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