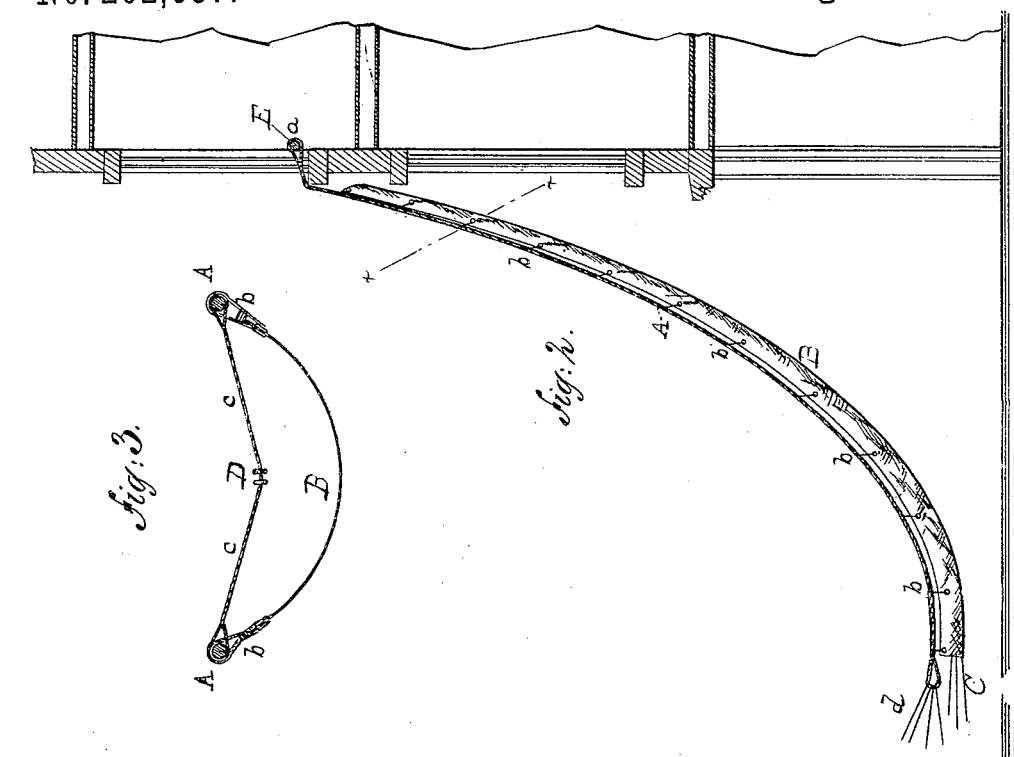
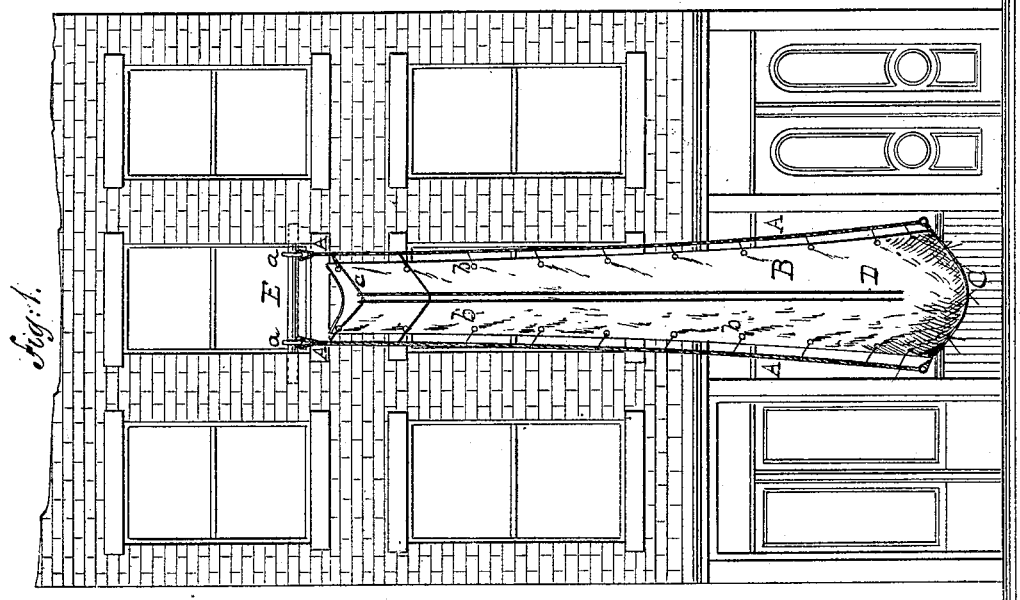
(No Model.)

# H. D. WILSON.

## FIRE ESCAPE.

No. 262,337. Patented Aug. 8, 1882.




WITNESSES:

Chas. Nichols.

Charles E. Simms Jr.

INVENTOR

Hattie D. Wilson

BY Simms & Simms

ATTORNEY

# UNITED STATES PATENT OFFICE.

HATTIE D. WILSON, OF NEW YORK, N. Y.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 262,337, dated August 8, 1882.

Application filed March 2, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, HATTIE D. WILSON, of the city, county, and State of New York, have invented a new and useful Improvement in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying sheet of drawings, making part of this specification.

This invention is in the nature of an improvement in fire-escapes, and the invention is a fire-escape with two sustaining-ropes, with rings or hooks or other means of attachment fixed to their ends, to which ropes and between the same is secured a canvas or flexible guide or chute, with cords attached to its lower end, in combination with two or more life-lines and a cross-bar or similar contrivance for securing the escape to a building, all arranged, combined, and constructed in the manner hereinafter particularly shown and described.

In the accompanying sheet of drawings, Figure 1 represents a front elevation of my escape applied to a building; Fig. 2, a side view of same; Fig. 3, a cross-section taken in the line *x x*, Fig. 2.

Similar letters of reference indicate like parts in the several figures.

This invention relates more particularly to that class of fire-escapes which are flexible, and which may be secured either to the interior of a building at its windows, or which may be carried up and fixed in place by means of ladders from the outside of the building when the emergency arises.

This escape consists essentially of two sustaining-ropes, A, to the extremities of which are permanently secured hooks or rings *a*, the length of these sustaining-ropes to be proportioned to the height of the different stories of a building, so that they will more than reach from the windows to the ground; or they may be made of such length as will enable them to reach from the roof or any window in a building, and they should be of sufficient strength to sustain, without danger of breaking, the weight of as many people as can cling to them. These ropes are separated from each other at a distance about equal to the width of an ordinary window, and they converge somewhat from their lower to their upper ends. To these ropes A, and filling the space between them, is secured a canvas or other flexible guide or chute, B, which is cut with flaring edges to correspond with the flare or angular arrangement of the ropes A. It may be fixed to these ropes by means of eyelets and cords *b*, or by any other convenient method.

To the lower edge of the canvas guide or chute B are secured a series of cords, C, and to the ropes A, at or near the upper end of the guide or chute B, are secured one or more cross-lines, *c*, to one of which cross-lines are likewise attached two or more life-lines, D, these life-lines extending from the point of attachment with the cross-lines before mentioned to the ground.

Through the hooks or rings *a* is inserted a cross-bar, E, which bar should be of sufficient length to reach across the windows of the building, its ends projecting on either side of the window.

Now, when my fire-escape is constructed substantially as hereinbefore described it is used by inserting the cross-bar E through the rings *a*, so that it will extend across the window, with its ends projecting at either side of the same. The escape is then thrown out of the window and allowed to fall to the ground, where it is guyed by the guy-ropes *d* to lamp-posts, trees, or any convenient object, or held by individuals. The cords C are also grasped by persons below, and the lower ends of the sustaining-ropes A and the guide or chute B are by their means turned up so as to form a pocket. The escaping person then issues from the window by stepping on the cross-lines *c* and grasping the life-lines D, one in each hand, and lowers himself by means of them to the ground. As soon as his full weight is borne by these life-lines D the cross-lines *c* draw the sustaining-ropes A more or less together, thereby causing the guide or chute B to bag, down which the escaping person may safely descend.

Under some circumstances the life-lines D may be tightly drawn by persons on the ground, causing the guide or chute to bag in the manner before described, and when this is done persons from the burning building, when frenzied by fear, can be placed into the bagging chute and be safely slid into the pocket before mentioned, and in this way be saved.

In cases where buildings are located on streets and alleys that would be too narrow to give a proper inclination to the escape, it can be led into buildings on the opposite side of the street.

The escape may be permanently secured to the windows of buildings, its flexible character permitting it to be rolled up and rendered inconspicuous; or they may be kept in a building and secured in the manner before described; or where the burning building is not provided with them the firemen may be supplied and carry them up by ladders, or by means of a cord thrown into the window to permit the occupant to haul them up and attach them, its light and flexible character permitting its use in this way. Besides the life-lines D, and in sliding down the chute, as described, the ropes A may be grasped and the attachment *b* used as feet-rests, so that each rope, with its attachment, will constitute substantially rope ladders to facilitate the descent of persons in danger, and all of these several applications of the escape may be employed at the same time.

The conical shape of the chute B—that is, its gradual widening from top to bottom—is for the purpose of enabling a broader or larger pocket to be formed at the base of the chute to catch the descending persons.

The sustaining-ropes may be of wire; or small chains may be substituted for the ropes; or that part of the rope that is fastened to the window and nearest to it may be of wire or chain to prevent its burning. In fact, the entire chute may be made of a fine wire-netting, if desired.

Fire-escapes have heretofore been designed in which are employed a flexible guide or chute suitably sustained, provided with life-lines and cross-pieces, the whole adapted to be secured in a window for use.

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

1. In a fire-escape, two or more sustaining-ropes, with rings or hooks and with a flexible guide or chute secured thereto, in combination with one or more cross-lines, *c*, and life-lines D, substantially as is shown and described.

2. In a fire-escape, two or more sustaining-ropes, with a flexible guide or chute, in combination with cords C and guys *d*, whereby a pocket may be formed at the lower end of the escape, substantially as is shown and described.

3. In a fire-escape, two or more sustaining-ropes, a flexible guide or chute having flaring sides, the cords C, and guys *d*, combined, whereby a pocket may be formed at the lower end of the escape, substantially as shown and described.

HATTIE D. WILSON.

Witnesses:
C. E. SIMMS, Jr.,
ROBT. JACKSON.