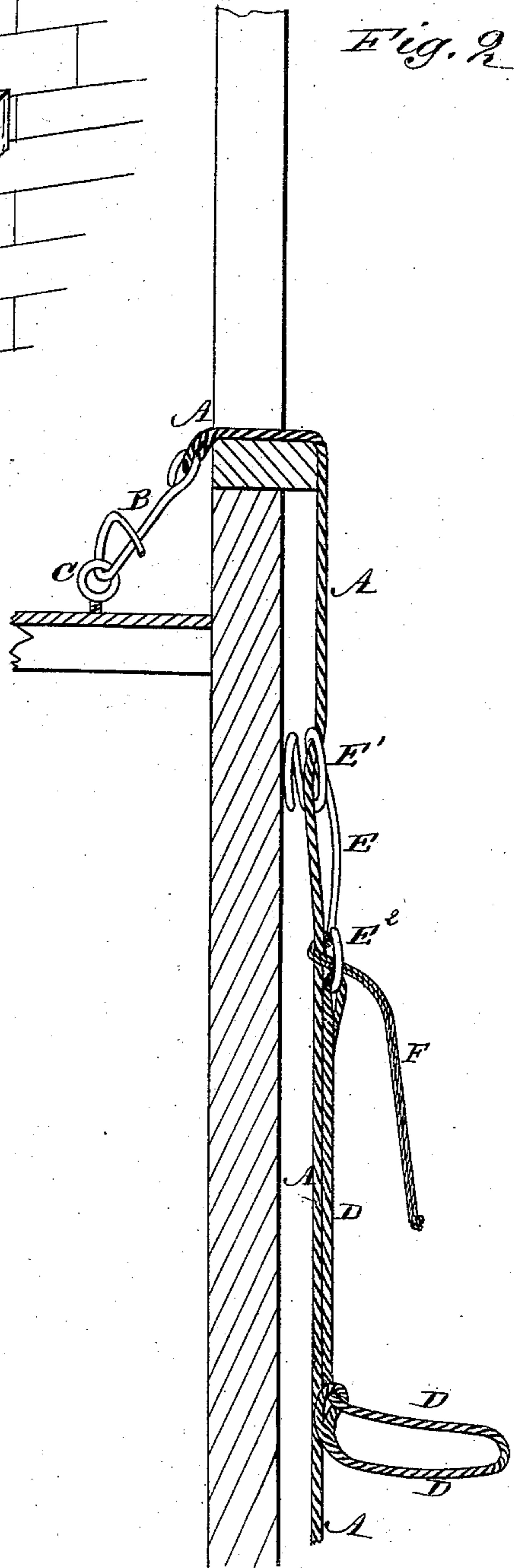
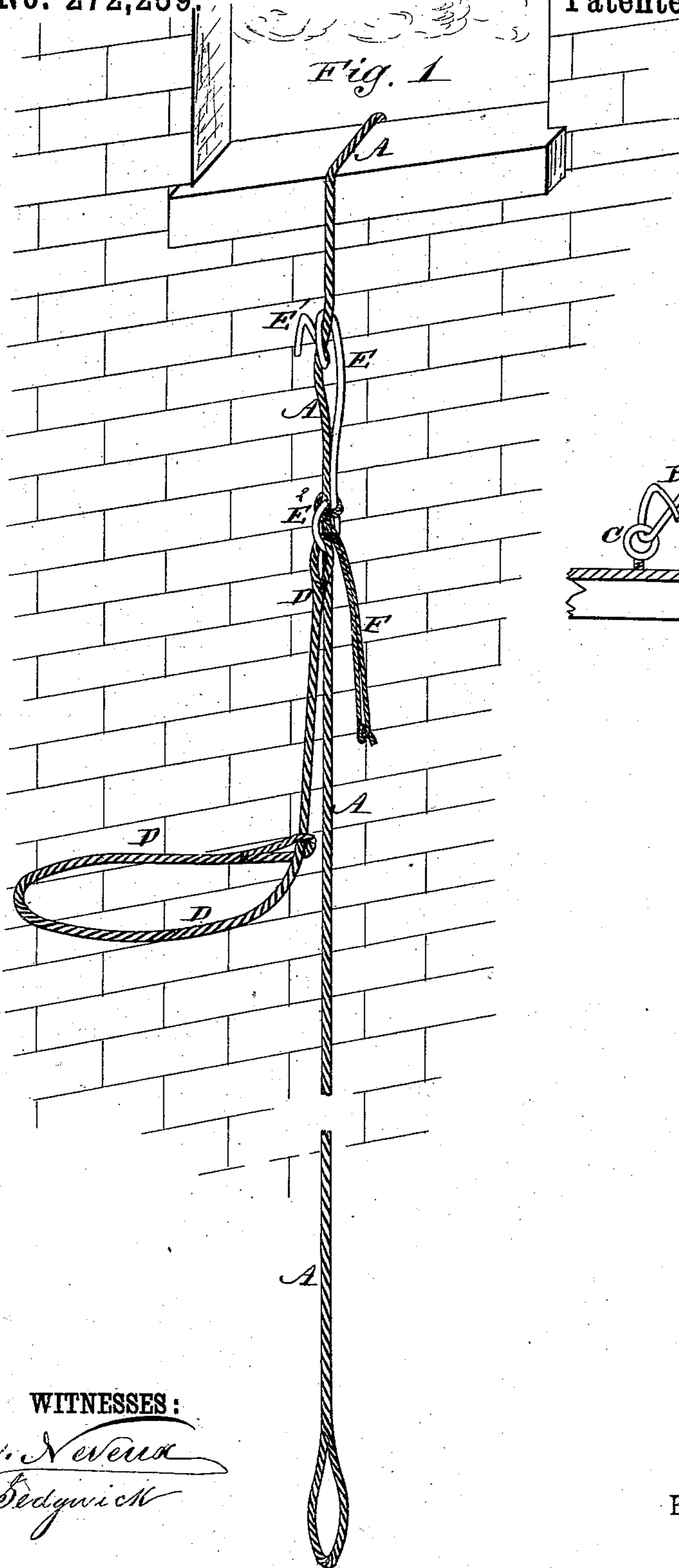


(No Model.)

R. HOWLAND.  
FIRE ESCAPE.

No. 272,259.

Patented Feb. 13, 1883.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

RAY HOWLAND, OF BROOKLYN, NEW YORK.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 272,259, dated February 13, 1883.

Application filed May 1, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, RAY HOWLAND, of Brooklyn, Kings county, New York, have invented a new and useful Improvement in Portable Fire-Escapes, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a front elevation of my improvement shown as applied to a building; and Fig. 2 is a side elevation of the same, the building being shown in section.

The object of this invention is to facilitate the escape of people from a burning building should the ordinary egress-passages become impassable.

The invention consists in a fire-escape constructed with a rope connected at its upper end with a building at or near a window, and upon which slides a friction-hook. With an eye formed in the shank of the friction-hook is connected a rope or strap to be secured to the person desiring to escape, and a cord to be passed around the hanging rope and through the shank-eye of the hook for controlling the rapidity of descent, all as will be hereinafter fully described.

A represents a rope, which is made of such a length as to reach from the window or other place where the escape is to be used to the ground.

To the upper end of the rope A is attached a spring-hook, B, to be hooked into the eye of an eyebolt, C, attached to the floor of the room, or to the wall of the building or the window-casing inside or outside of the window; or the end of the rope A may be secured to a cross-bar attached to the window-casing, or to any other convenient support. The other end of the rope A can have an eye or loop formed upon or attached to it, for convenience in securing it to a stake or other support at the ground; or the lower end of the rope A can be left free.

D is a rope or strap, to be secured around the waist of the person using the escape.

To one end or any other convenient part of the rope or strap D is attached a hook, E, which may be made in the form of a coil, E', as shown in Figs. 1 and 2, so that it can be readily placed upon and removed from the rope A.

In the shank of the hook E is formed an eye,

E<sup>2</sup>, to the rim of which is secured the end of a short cord, F. The cord F is passed around the rope A and its free end is passed through the shank-eye E<sup>2</sup> of the hook E, as shown in Figs. 1 and 2.

In using the escape the end of the rope A is secured to some suitable support at or near the window, and the said rope is then thrown out of the window. The lower end of the rope A can be left free, or it can be carried back from the building and secured to some suitable support by persons upon the ground. The person desiring to descend then secures the rope or strap D around his waist, adjusts the hook E upon the rope A, and passes the cord F around the rope A and through the shank-eye E<sup>2</sup> of the friction-hook E. Then, grasping the cord F with his hands, he steps out of the window and hangs suspended from the rope or strap D, and by loosening the cord F he allows the friction-hook to slide down the rope A, the rapidity of descent being controlled by throwing more or less of his weight upon the cord F.

In many cases the cord F need not be used, as the friction between the hook E and rope A will make the descent sufficiently slow.

It is designed to have as many ropes or straps D, hooks E, and cords F as there are persons employed in the part of the building where the rope A is kept, so that they can pass down the said rope A successively.

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

1. In a fire-escape, the combination, with the rope A, of the rope or strap D and the hook E, connected to one end of the rope or strap D, and having a coil, E', through which passes the rope A, substantially as and for the purpose set forth.

2. An improved fire-escape constructed substantially as herein shown and described, and consisting of the rope A, the rope or strap D, the friction-hook E, and the brake-cord F, as set forth.

3. In a fire-escape, the combination, with the rope A to be connected with the building, and the rope or strap D, to be attached to the person, of the friction-hook E and the brake-cord F, substantially as herein shown and described, whereby a descent upon the rope A can be readily controlled, as set forth.

Witnesses: RAY HOWLAND.

JAMES T. GRAHAM,  
C. SEDGWICK.