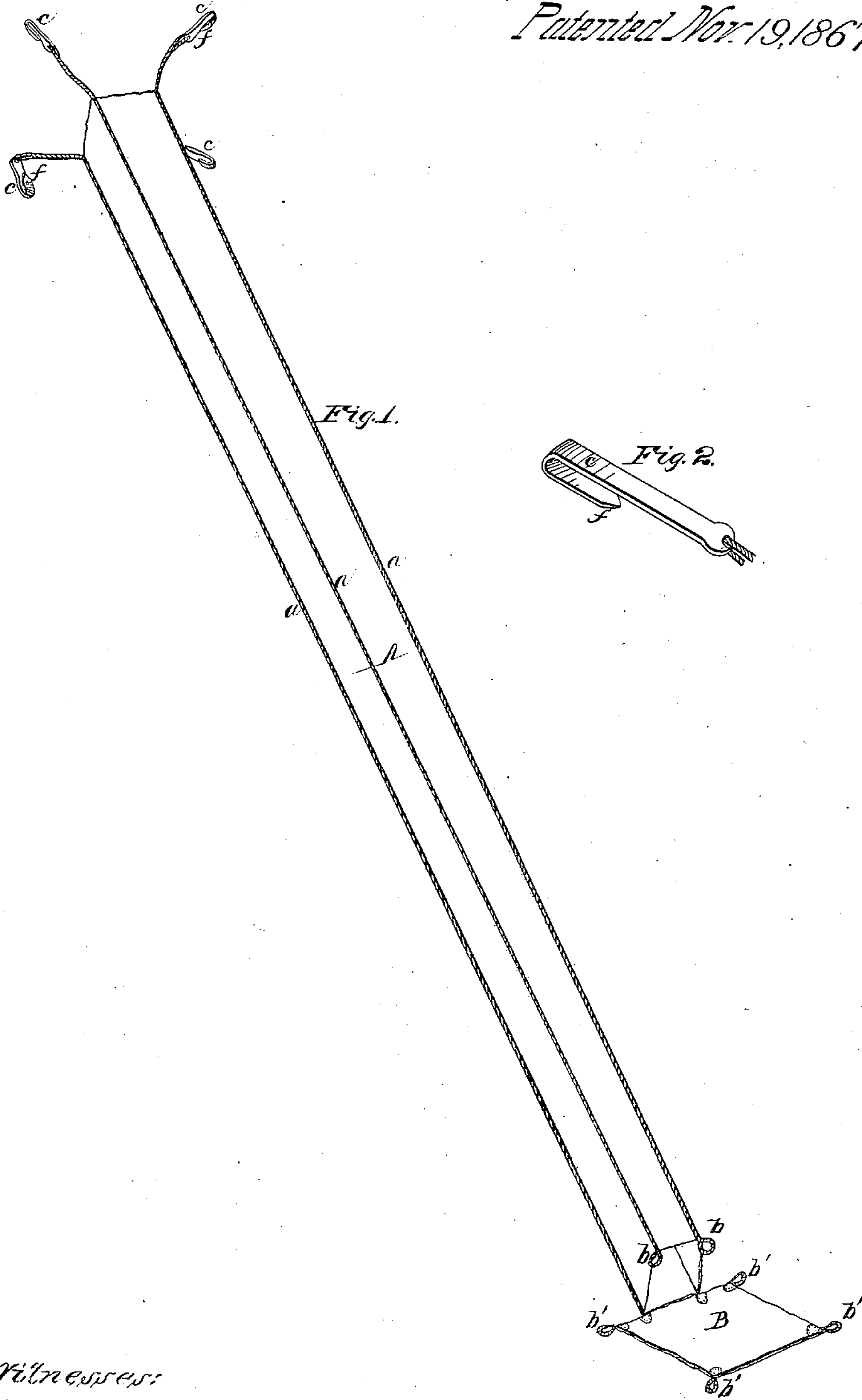


*J. Marx.*

*Fire Escape.*

*N<sup>o</sup> 71,030.*

*Patented Nov. 19, 1867.*



*Witnesses:*  
*Chas. T. Spencer*  
*J. A. Davis.*

*Inventor:*  
*John Marx.*  
*By J. Fraser & Co.*  
*Attys.*

# United States Patent Office.

JOHN MARX, OF ROCHESTER, NEW YORK.

Letters Patent No. 71,030, dated November 19, 1867.

## IMPROVEMENT IN FIRE-ESCAPES.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN MARX, of Rochester, in the county of Monroe, and State of New York, have invented a certain new and useful Improvement in Fire-Escapes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a perspective view of my improved fire-escape.

Figure 2, a view of one of the hooks.

Like letters of reference indicate corresponding parts in both figures.

My invention consists in the employment of cords and hooks of peculiar arrangement and construction, in connection with a flexible tube forming the escape; and also in the employment of an enlarged flap or sheet at the bottom of the tube, which is held in an extended position to catch the body descending, and thereby ease the shock.

As represented in the drawings, A is a flexible tube, forming the escape, made of strong cloth, or equivalent flexible material. I prefer to make this tube square, in cross-section, as shown. In the angles I secure strong cords *a a a a*, extending longitudinally from top to bottom. At the bottom, the cords are simply formed into loops *b b b b*, convenient for holding in the hands. At the top, they are attached to hooks *c c c c*, which, when the tube is in use, are hooked inside the sill and the casing of the window. These hooks are of peculiar construction, being sharp-edged and pointed, as shown at *f*, and the sides bent near together. The object of this is to enable the hooks to cut their way through the wood, and without going too deep, when sufficient strain is applied to the cords, after the escape has been accomplished. Ordinary hooks take too rank a hold of the wood, and the tube cannot be detached without tearing or destroying it. The sharp edges in this case cut easily in the wood, and the bends of the hooks gauge the depth of cut. At the bottom of the tube is an enlarged flap or sheet, B, attached firmly to the under side of the tube, and provided with strong loops *b' b' b b'*, by which it can be extended and held firmly below the ejection-outlet. The object of this flap is to catch the descending body and break the shock, being held firmly suspended from the ground by the operators at the bottom.

The great advantage in this device results from the employment of the cords *a*, the sharp-pointed hooks *c*, and the flap B. I am not aware that these elements have ever before been combined together with a fire-escape tube. The cords not only hold the tube taut and straight, but, by being situated in the angles, hold it extended in form for the passage of the body. They also prevent strain to the tube itself when great force is applied. The sharp-pointed hooks hold in the wood with sufficient force to retain the tube in place, but still are readily drawn out, as before described. The flap is of much service in preserving life and limb from the rapid descent.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement with the flexible tube A of the cords *a*, sharp-pointed hooks *c*, and the flap B, operating in the manner and for the purpose herein set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN MARX.

Witnesses:

R. F. OSGOOD,

J. A. DAVIS.