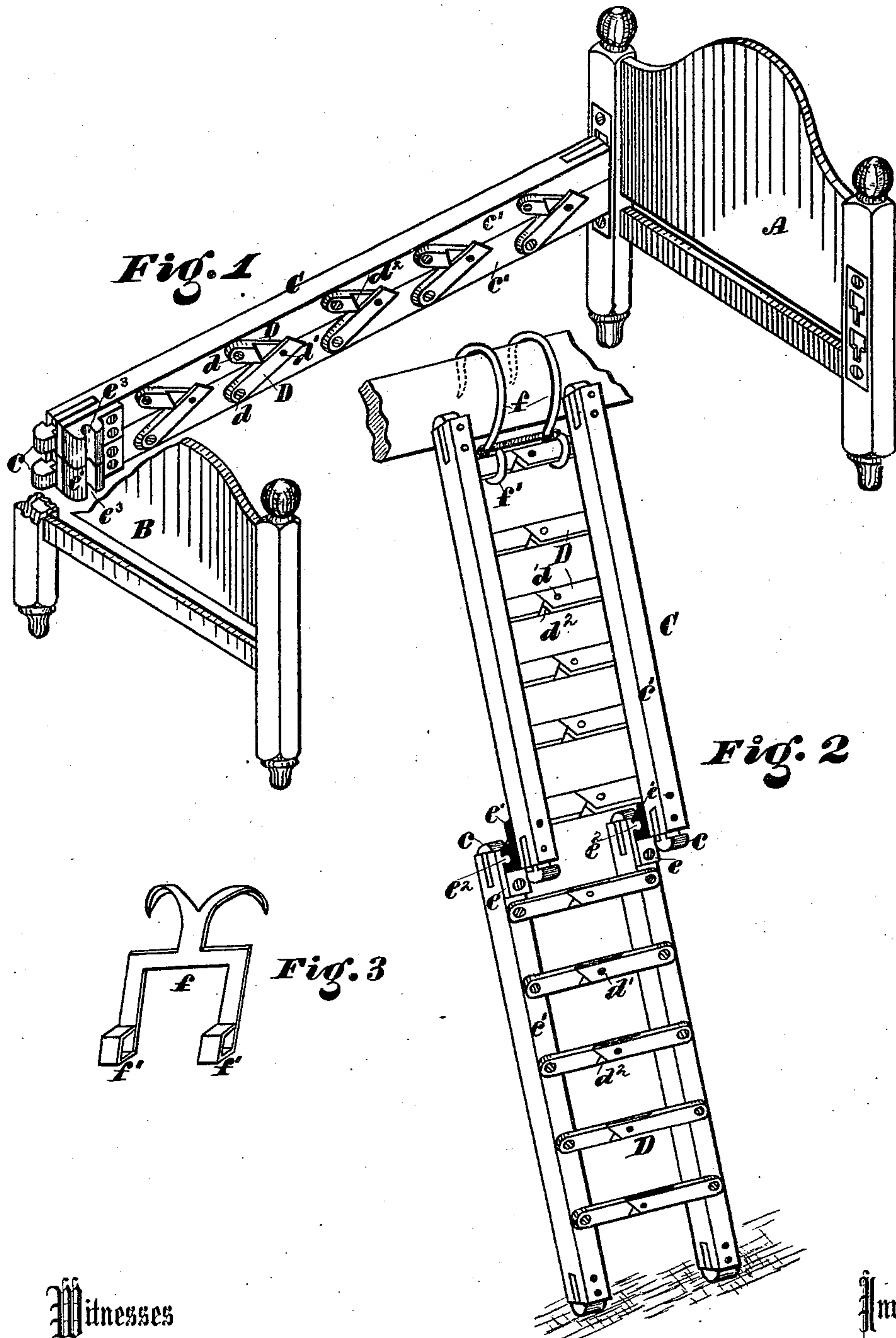


M. HOWIE.  
FIRE-ESCAPE.

No. 184,871.

Patented Nov. 28, 1876.



Witnesses  
Saml. J. Van Stavern  
Jos. B. Connolly

Inventor  
Mathew Howie  
Connolly Bros. Attorneys

# UNITED STATES PATENT OFFICE.

MATHEW HOWIE, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. 184,871, dated November 28, 1876; application filed November 4, 1876.

*To all whom it may concern:*

Be it known that I, MATHEW HOWIE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Fire-Escape Bedstead; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a broken perspective of a bedstead having its side rails constructed according to my invention. Fig. 2 is a perspective of the fire-escape; and Fig. 3 a detail perspective of my invention.

My invention has for its object to provide a bedstead which can be used as a fire-escape.

The nature of my invention consists, essentially, in so constructing the side rails of a bedstead that they can be withdrawn and converted into a ladder to serve as a means of fire-escape.

Referring to the accompanying drawing, A and B represent, respectively, the head and foot of a bedstead, the same being of the usual or any suitable construction. C C represent the side rails fastened in the posts or to the head and foot of the bedstead by the T-connections shown at c c, or by any other appropriate fastening. Said side rails are each constructed as follows: I take two bars, c' c', to each of which I fasten a number of short plates, D D, by means of screws d d, which serve as pivots. I also pivot these plates to one another near their extremities, as shown at d<sup>1</sup>. Each plate, also, has its end beveled and its side cut away or offset, forming a V-shoulder, d<sup>2</sup>. The effect of this construction of said plates is that they will fold snugly and out of the way, as shown in Fig. 1, when the rail is in its place in the bedstead, the bars c' c' then resting closely together, one upon the other; but when said bars are drawn apart the beveled ends rest against the V-shoulders d<sup>2</sup>,

forming a perfectly stiff "round" for the ladder, as shown in Fig. 2, operating, in this respect, like the familiar "rule-joint," which will close only one way. Therefore, to form a ladder it is only necessary to withdraw a side rail from the bedstead and draw the two bars composing said rail apart until the plates D D have straightened out and formed rounds.

To form a long ladder the two side rails should be connected, end to end. This I accomplish by furnishing the bars c' c' with clips e e<sup>1</sup>, the former of which has a dovetail tongue, e<sup>2</sup>, while the latter has a correspondingly-grooved ear, e<sup>3</sup>, fitting, as shown in Fig. 2, by sliding the tongue laterally into the groove.

To facilitate the attachment of the ladder to a window-sill or other fixture, hooks f f, having spring or clip ends f' engaging with the end round or plate D, may be employed.

What I claim as my invention is—

1. A bedstead convertible into a fire-escape, substantially as described, having side rails, which, when detached, form a ladder or ladders, as set forth.

2. The side rails C of a bedstead, constructed, substantially as described, of bars c' c' and plates D D pivoted to said bars and to each other, substantially as shown and set forth.

3. The pivoted plates D D, having beveled ends and V-shoulders d<sup>2</sup>, substantially as and for the purpose set forth.

4. In combination with the side rails C C of a bedstead, the clips e<sup>1</sup> e<sup>1</sup>, having dovetailed tongues and grooves, and forming a connection, substantially as shown and set forth.

5. In combination with the side rail or rails C, convertible into a ladder, the clip-hooks f f, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of October, 1876.

MATHEW HOWIE.

Witnesses:

M. DANL. CONNOLLY,  
CHAS. F. VAN HORN.