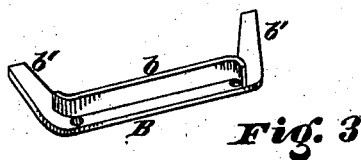
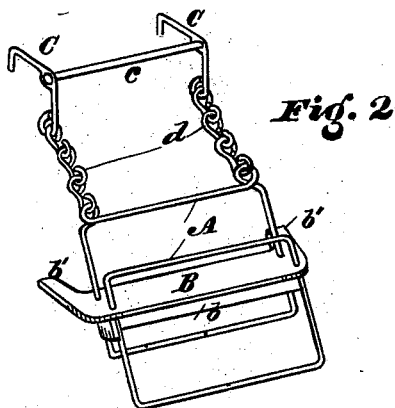
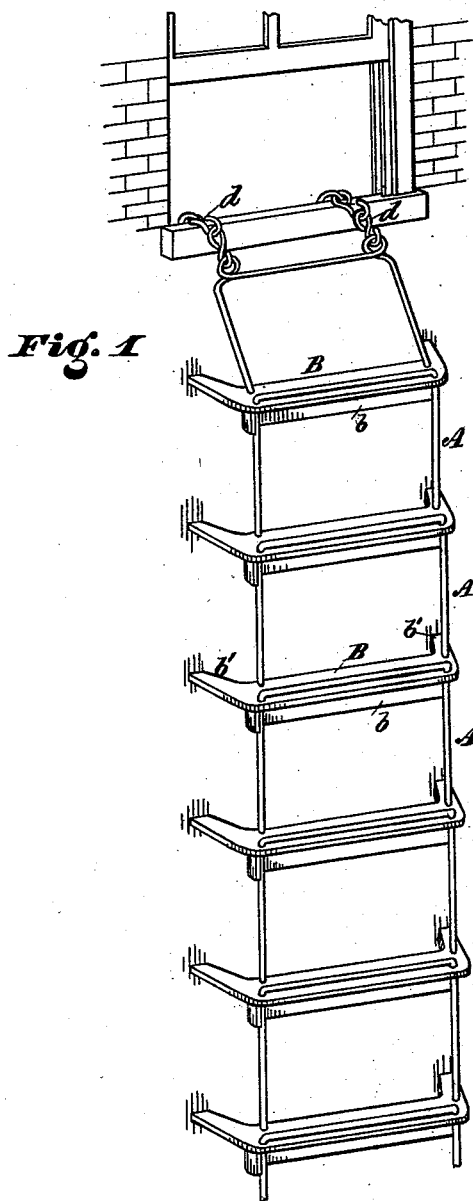


E. B. LAKE.
FIRE-ESCAPES.

No. 190,342.

Patented May 1, 1877.



Witnesses
Saml. J. Van Stuvoren
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UNITED STATES PATENT OFFICE

EZRA B. LAKE, OF BRICKSBURG, NEW JERSEY.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. 190,342, dated May 1, 1877; application filed January 27, 1877.

To all whom it may concern:

Be it known that I, EZRA B. LAKE, of Bricksburg, in the county of Ocean and State of New Jersey, have invented a certain new and useful Fire-Escape Ladder; and 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 perspective of my invention, showing the ladder suspended from a window. Figs. 2 and 3 are detail perspectives.

My invention has relation to fire-escape ladders; and consists in the construction, combination, and arrangement of parts, as hereinafter described and claimed.

Referring to the accompanying drawing, A A designate a series of rectangular metal frames, united by being passed, as shown, through openings in metal plates B B. Said plates are formed with ribs *b* on their under sides, serving to strengthen them and give stiffness to the frames A A when the ladder is extended. Said plates form the steps or rounds of the ladder, and are made or provided with projections or feet *b'*, which serve to prevent the ladder from hugging too closely the wall against which it hangs, thereby affording room or space for the foot of a person mounting or descending the ladder. The frames A A slide through the plates B, and the plates B slide together, so as to permit the ladder to occupy but a very small space, it being designed to keep such ladder under the bed or hanging on the wall of a sleeping or other apartment, and throw it out of the window,

after attaching the upper end to the sill, when occasion for its use arises. Means of connection with the window-sill are shown at C C, which are two metallic hooks united by a rod, *c*. Said hooks are secured to the ladder by chains *d d*, which are fastened to eyes *a*, formed in the upper frame A. Said chains, being flexible, will pass readily over the sill and adapt themselves to the shape thereof under circumstances where a rod or other similar connection would not fit without being bent out of shape.

What I claim as my invention is—

1. A fire-escape ladder the sides and step or round supports of which are formed of metal frames A A, adapted to slide or fold upon one another, and to support and rest upon the steps lengthwise of the latter, so as to avoid shortening of the foot-surface as the ladder extends upward, substantially as set forth.

2. A fire-escape ladder having steps or rounds made of cast metal, with flat surfaces, and formed or provided with feet or projections *b'*, cast in one piece with the steps, which serve to prevent said ladder from hugging the wall too closely.

3. In a fire-escape ladder, the plates B, having ribs *b* to strengthen the same and stiffen the frames A, composing the sides and step or round supports, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of January, 1877.

EZRA B. LAKE.

Witnesses:

GEO. C. SHELMEKDINE,
M. DANL. CONNOLLY.