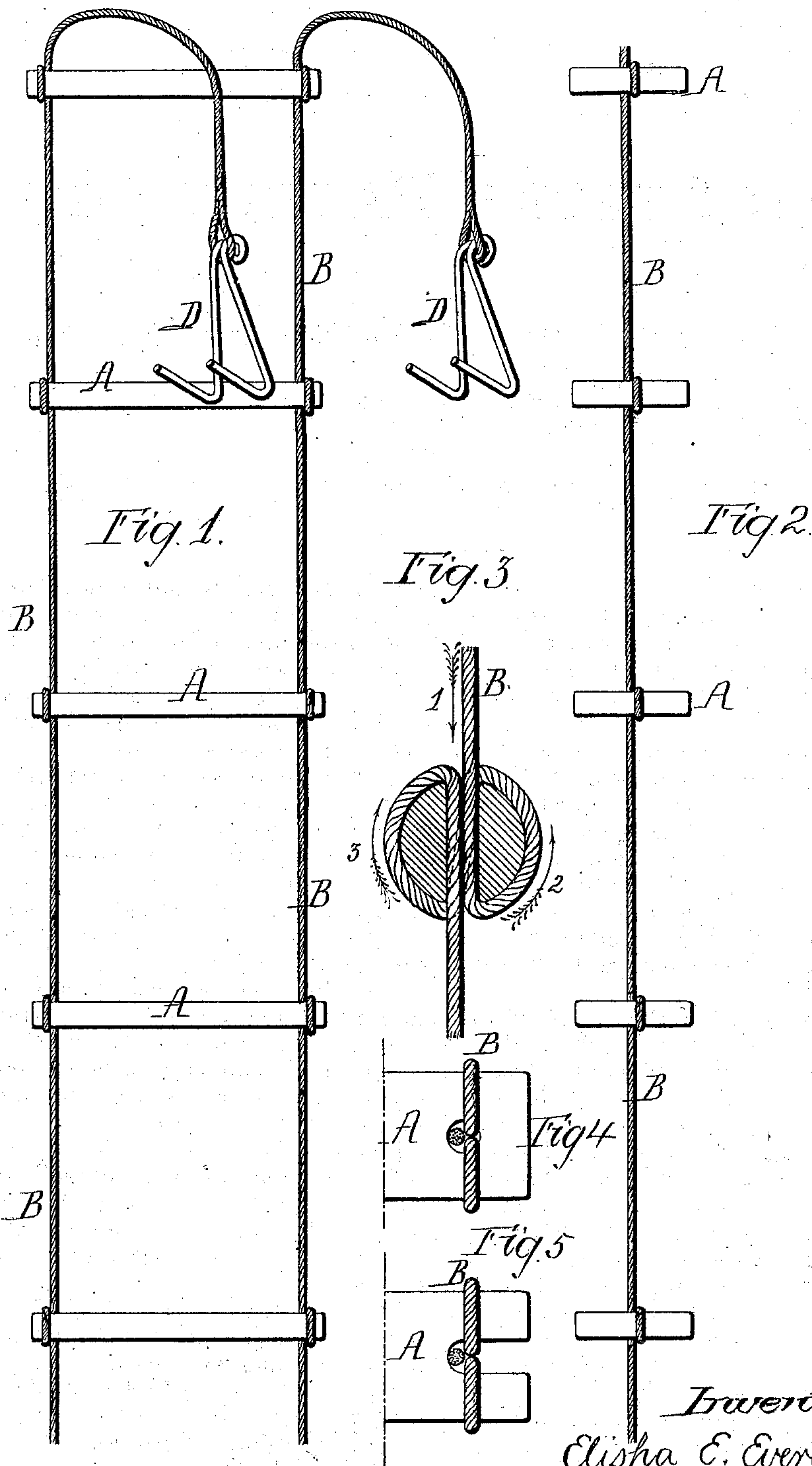


E. E. EVERITT.  
Fire-Escape.

No. 197,927.

Patented Dec. 11, 1877.



Witnesses  
Richard L. Gardiner  
Harry Smith

Inventor  
Elisha E. Everett  
by his Attorneys  
Howson and Co.

# UNITED STATES PATENT OFFICE.

ELISHA E. EVERITT, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **197,927**, dated December 11, 1877; application filed May 1, 1877.

*To all whom it may concern:*

Be it known that I, ELISHA E. EVERITT, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Folding Ladders, of which the following is a specification:

The object of my invention is to make a cheap and strong folding ladder for facilitating the escape of occupants of the upper rooms of buildings during a conflagration.

In the accompanying drawing, Figure 1 is a front view of my improved folding ladder; Fig. 2, a modification of the same; and Figs. 3, 4, and 5, enlarged views, illustrating the mode of securing the wooden rungs to the wire ropes of the ladder.

In Fig. 1, A A represent the rungs of the ladder, and B the wire ropes, which are flexible enough to permit the folding of the ladder into comparatively small compass. The wire ropes, moreover, are better calculated to resist the effects of heat and abrasion than those of hemp or other fiber, and are more durable.

The method which I prefer of securing the ropes to the rungs will be best understood by reference to Figs. 3 and 4. Holes larger in diameter than the ropes are bored through the rungs, one near each end of the same, and a rope from an upper rung is passed downward through one of the holes of a lower rung, as indicated by the arrow 1, Fig. 3; then bent upward round one-half of the rung, as shown by the arrow 2; again downward through the hole, and then upward and round the other

half of the rung, as shown by the arrow 3, and passed a third time downward through the hole to the rung below, to which the rope is attached in the same manner.

Instead of boring holes for the reception of the rope through the rungs, the latter may be slotted at the opposite ends, as shown in Fig. 5.

A suitable anchor or anchors, D, should be connected to the highest rung, or to the upper ends of the ropes, for securing the ladder to the window-sill or other object.

The ladder shown in Fig. 2 consists of a single wire-rope combined with short rungs, to which the rope is secured in the manner described above.

For additional security I coat or impregnate the wooden rungs with tungstate of soda, or equivalent composition, which will have the effect of rendering the rungs fire-proof, or at least capable of resisting the action of fire for a considerable period.

I claim as my invention—

The combination, in a folding ladder, of a rope or ropes, B, with rungs A, having holes or slots, through which and round the rung the rope is caused to pass, in the manner described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELISHA E. EVERITT.

Witnesses:

HERMANN MOESSNER,  
HARRY SMITH.