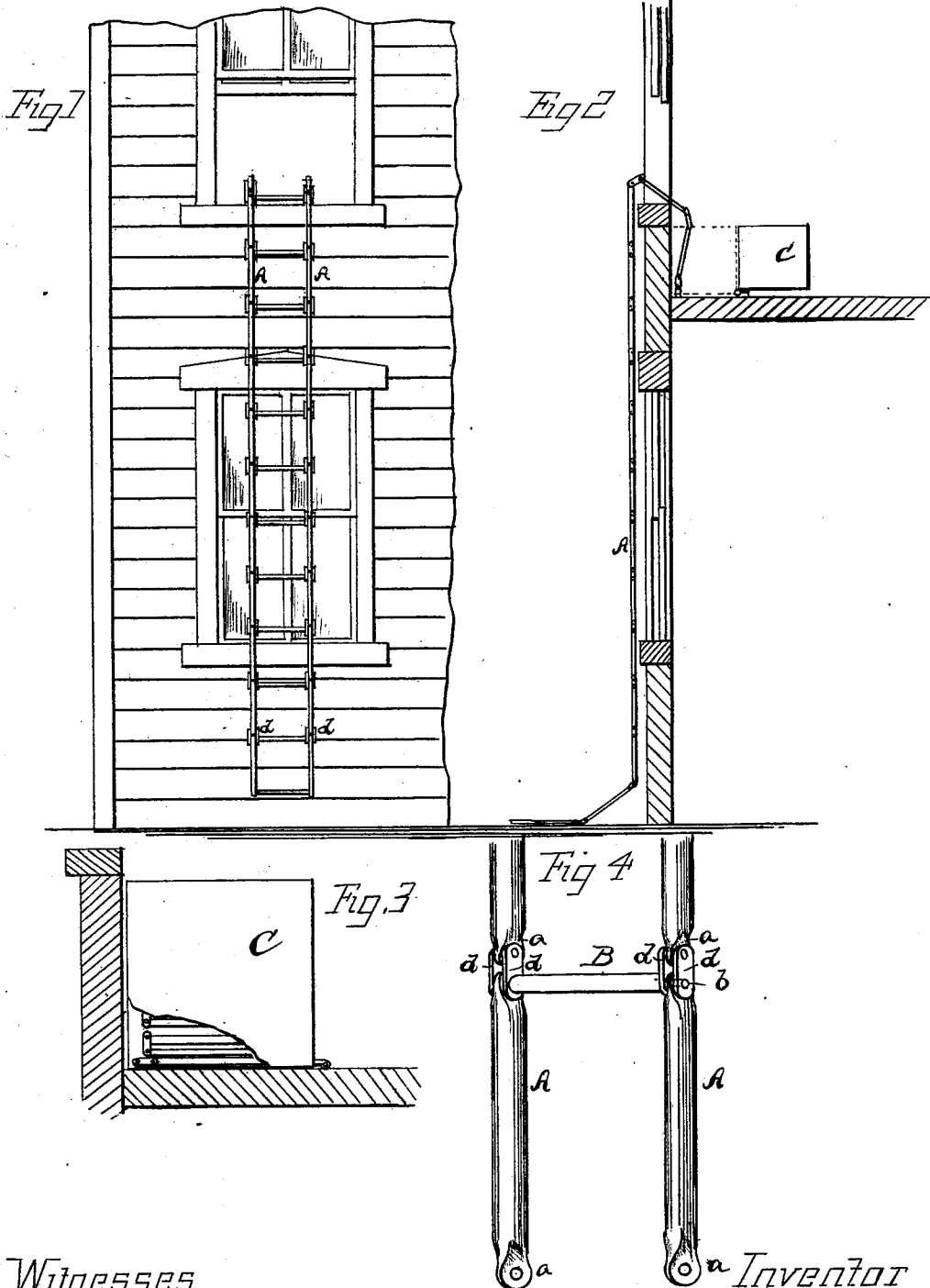


H. HUTH.
FIRE-ESCAPE.

No. 191,762.

Patented June 12, 1877.



Witnesses

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John L. Warkness.

per.

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UNITED STATES PATENT OFFICE.

HENRY HUTH, OF MILTON, ASSIGNOR TO HIMSELF AND JOHN H. SCHREINER,
OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **191,762**, dated June 12, 1877; application filed April 28, 1877.

To all whom it may concern :

Be it known that I, HENRY HUTH, of Milton, in the county of Northumberland and State of Pennsylvania, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to fire-escapes or life-saving apparatus; and it consists in the construction of a ladder made of metal, in sections, united by links, so as to be folded in small compass and attached permanently inside of a house, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a front elevation of a house, showing my ladder in position. Fig. 2 is a vertical section of the same, and Figs. 3 and 4 are enlarged detail views of my invention.

Each section of my ladder is made of two parallel side bars, A A, made of metal, either round or of other suitable form, and the ends of said bars flattened to form ears or projections *a a*. In each section is a round or cross-bar, B, passing through the ears *a* at one end of the section, or rather the cross-bar has tenons *b* at its ends passing through said ears. On each side of each ear *a*, on the tenon *b*, is placed a link, *d*, and the other ends of these links are pivoted to the open end of the adjoining section of the ladder, the whole thus forming a jointed or flexible metallic ladder, which can be folded together in small compass.

This ladder is intended to be permanently attached inside of a house under a window,

as shown, so that, in case of fire, by raising or taking out the window-sash the ladder can be easily thrown out of the window, and will unfold itself and hang down on the outside of the building.

When the ladder is folded inside of the room it is covered by a box, C, which is hinged at its inner end to the floor, and can be readily thrown back when the ladder is to be used. This box may be covered or ornamented in any suitable manner, so as to present a neat and handsome appearance in the room.

In practice, I intend the ladder to be several feet longer than to simply reach to the ground, so that, in case fire should be coming out through the windows between the person descending on the ladder and the ground, parties on the ground can take hold of the lower end of the ladder and stretch the same outward in an inclined position, allowing the person to descend without injury from the fire.

One of these ladders is to be permanently affixed in every room of a building, affording ample means to escape from fire, and thus in many cases save life.

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

In a folding fire-escape, the double links *d d*, pivoted at one end to the side bars by a pin, and at the other end to the adjoining side bars by the rounds or cross-bars B, all constructed and arranged to operate in the manner and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY HUTH.

Witnesses:

FRANK GALT,
W. C. McARTHUR.