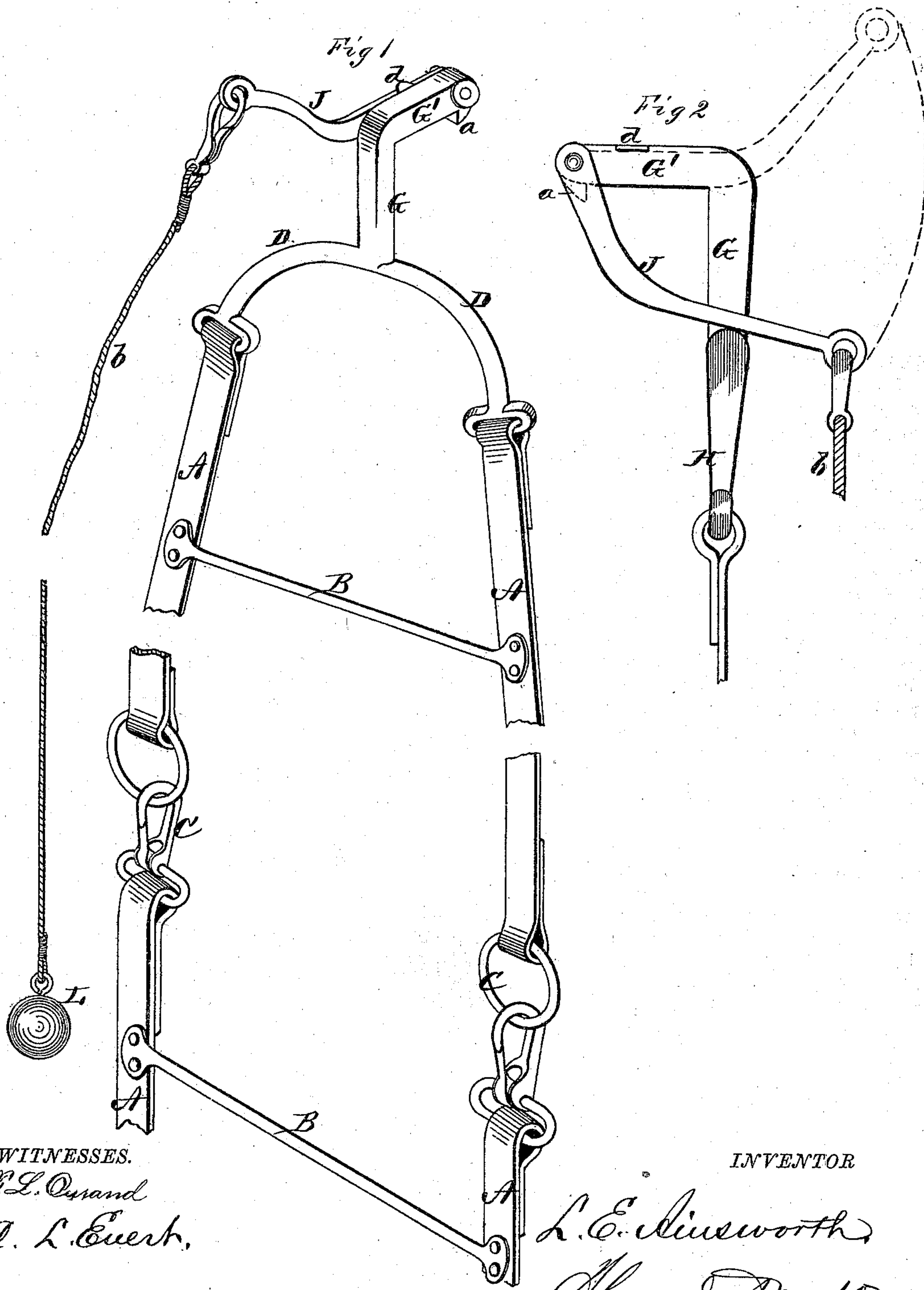


L. E. AINSWORTH.  
Fire-Escapes.

No. 143,112.

Patented September 23, 1873.



WITNESSES.  
H. L. Osgood  
C. L. Ewert.

By

INVENTOR

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# UNITED STATES PATENT OFFICE.

LLEWELLYN E. AINSWORTH, OF EAST BOLTON, CANADA.

## IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **143,112**, dated September 23, 1873; application filed September 18, 1873.

*To all whom it may concern :*

Be it known that I, LLEWELLYN E. AINSWORTH, of East Bolton, Province of Quebec, Dominion of Canada, have invented certain new and useful Improvements in Fire-Escapes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon making a part of this specification.

My invention relates to that class of fire-escapes in which a ladder made of rope, leather, or other flexible material is used; and it consists in the construction and arrangement of the devices for attaching and detaching the same, 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 perspective view, and Fig. 2 a side view, of my invention.

In the drawing I have represented a ladder made of leather straps A A connected by metal rounds or bars B B; but I do not confine myself to such ladder, as it may be made of any flexible material. Different lengths of the ladder are connected by snap-hooks C C, as shown, or other suitable devices, which are easily attached and detached. The upper ends of the ladder sides A A are secured to the ends of two prongs, D D, of a bar, G, and the other end of this bar is bent at right angles, the bent portion being marked G'. At the extreme end

of the bar G' is a sharp projection or tooth, *a*, extending in the same direction as the bar G. On the side and at the end of the bar G' is pivoted a lever, J, to the outer end of which is attached a rope or cord, *b*, of suitable length, and with a ball, L, of rubber or other suitable material attached to its other end.

The fire-escape is attached to a window by laying the bar G on the window-sill, the prongs D D outward, and the part G' of the bar extending downward, so that the tooth *a* can catch in the wood. The pivoted end of the lever J then lies along the bar G' against a lug, *d*, on its upper edge. By pulling on the rope *b*, the lever forces the tooth out of the wood and releases the bar, when the ladder falls down on the ground. By the use of the ball L the rope *b* may be thrown up to a window, and the ladder pulled up by the person inside, if necessary.

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

The combination of the pronged and bent bar G, tooth *a*, and lever J, with a ladder, A B, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of September, 1873.

L. E. AINSWORTH.

Witnesses:

C. L. EVERT,  
A. N. MARR.