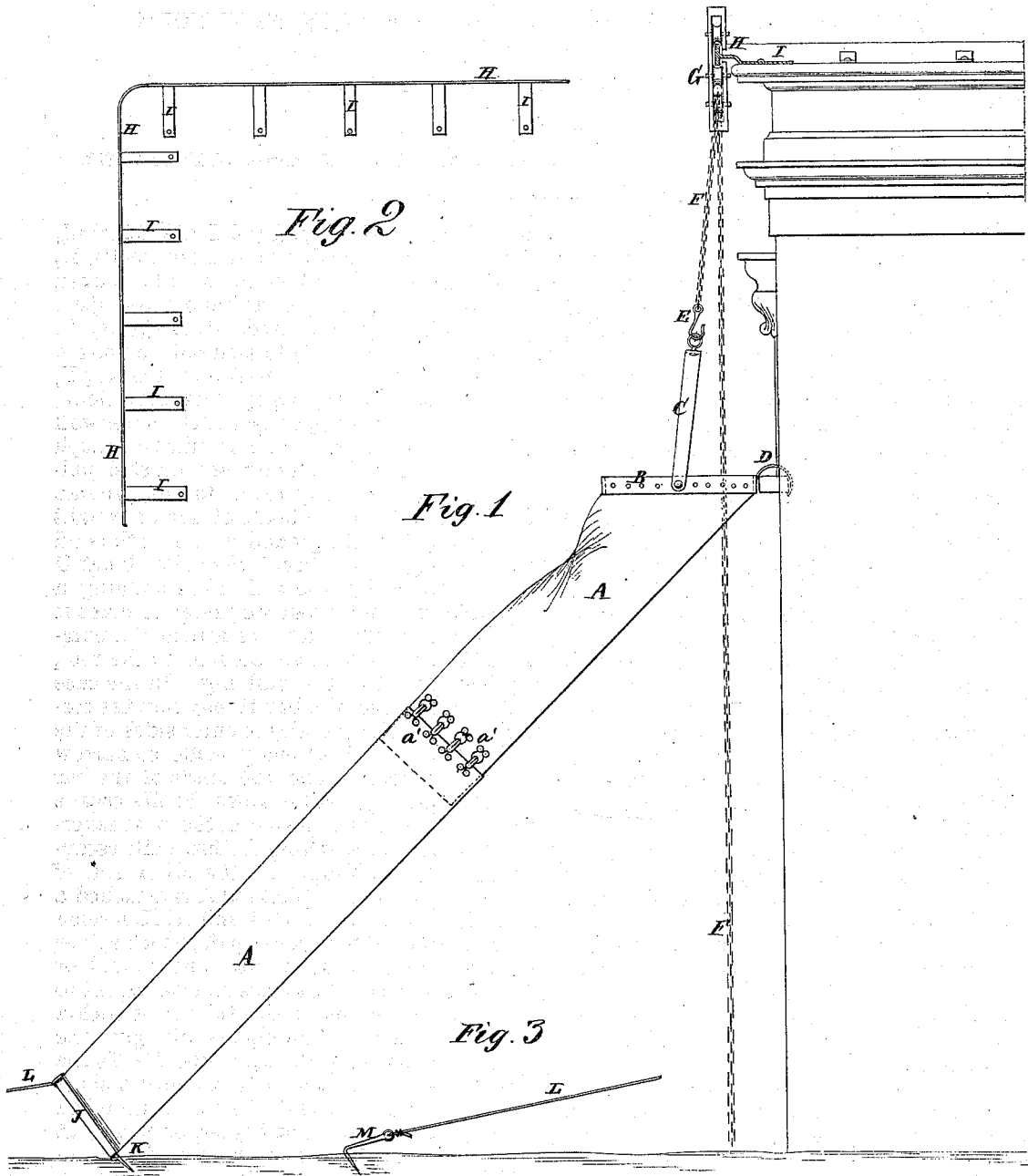


JOHN BEARNS & AXEL OLSSON.

Improvement in Fire Escapes.

No. 124,715.

Patented March 19, 1872.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN BEARNS AND AXEL OLSSON, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. 124,715, dated March 19, 1872; antedated March 4, 1872.

To all whom it may concern:

Be it known that we, JOHN BEARNS and AXEL OLSSON, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Fire-Escape; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side view of our improved fire-escape, illustrating its use. Fig. 2 is a detail view of the way or rail to be attached to the roof of the house. Fig. 3 is a detail view of the anchor-rope.

Similar letters of reference indicate corresponding parts.

Our invention has for its object to furnish an improved fire-escape, simple in construction, convenient in use, and effective in operation, enabling persons and property to be safely removed from a burning building; and it consists in the construction and combination of various parts of the apparatus, as hereinafter more fully described.

A represents a canvas tube, which should be made of such a size that persons may slide down it freely, but which may be made larger to allow articles of furniture to be passed through it. The tube A is made in sections, to adapt it for use upon buildings of different heights and upon different stories of the same building. The lower end of the upper section is inserted in the upper end of the lower section, so that the lap may cover the seam or joint between the sections and prevent the person or thing that may be passing through the tube from catching upon the said seam. The upper edge of the lower section is secured to the body of the upper section by hooks and eyes *a'*, or other equivalent fastenings, that will allow the sections to be quickly and conveniently attached and detached, and which, when attached, will connect the sections strongly and securely. The upper end of the upper section is securely attached to a hoop or band, B, to which is pivoted a bail, C. To the in-

ner side of the hoop or band B are attached, or upon it are formed, two or more hooks, D, of such a size as to allow them to be hooked upon the casing or sill of a window to support the tube A while being used. Upon the bail C, or into an eye swiveled to said bail is hooked a hook, E, attached to the end of a chain, F, which passes over the pulley of a pulley-block, G, attached to the upper part of the outer wall of a building. The chain F should be of such a length that while passing around said pulley both its ends may reach to the ground. The hook E should be made of such a weight as to descend to the ground whenever the said chain F may be left free. The pulley-block G may be attached to the wall of the building in any desired manner, but we prefer to place it upon a bar, H, to which are attached a number of arms, I, which are secured to the roof, cornice, or wall of the building. In the case of a corner house, the bar H may turn the corner and pass along both the outer sides of the building, the block G being made so narrow that it may pass around the angle of the bar H. This arrangement enables the fire-escape to be conveniently adjusted in the most favorable position for avoiding the fire while escaping from the building. To the lower end of the lowest section of the tube A is attached a hoop, J, having two or more spikes, K, formed upon or attached to its lower side, which spikes are made sharp, so as to enter the ground or the seam between the stones of a pavement to secure the lower end of the tube A at such a distance from the building as will give the proper inclination to the said tube A. To the upper side of the hoop J is attached a short rope, L, to the other end of which is attached a hook, M, bent at right angles, or nearly at right angles, and made sharp-pointed so as to readily enter the ground or the seam between the stones of the pavement, to assist in anchoring the lower end of the tube A.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The bar H and arms I, for attachment to the building to receive the pulley-block G and

chain F, substantially as herein shown and described, and for the purpose set forth.

2. An improved fire-escape, consisting of the tube A, hoop or band J, prongs K, rope L, hook M, band or hoop B, hooks D, bail C, hook E, chain F, pulley-block G, bar H, and arms I, said parts being constructed and operating in connection with each other, sub-

stantially as herein shown and described, and for the purposes set forth.

The above specification of our invention signed by us this 26th day of June, 1870.

JOHN BEARNS.

AXEL OLSSON.

Witnesses:

JAMES T. GRAHAM,

T. B. MOSHER.