

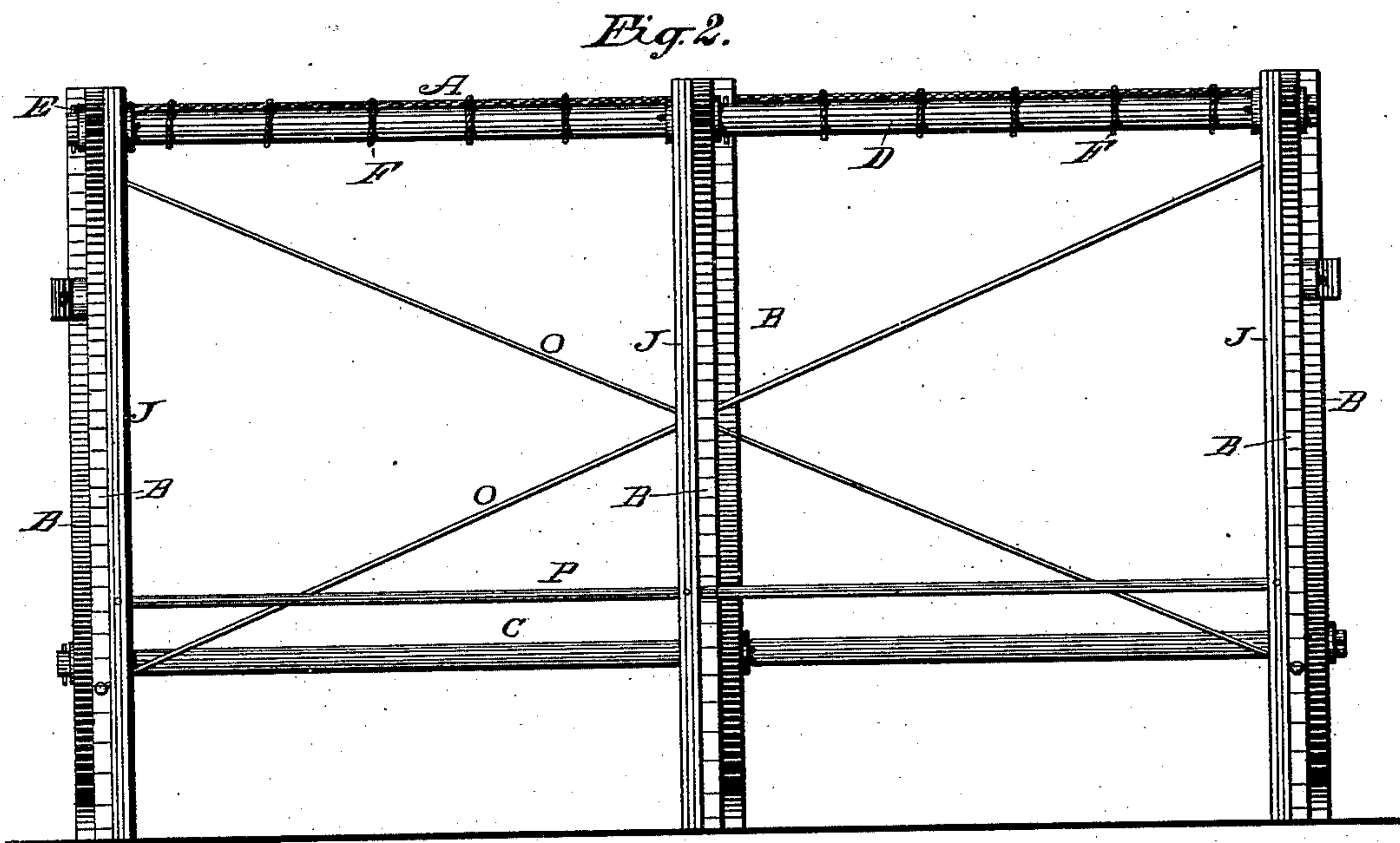
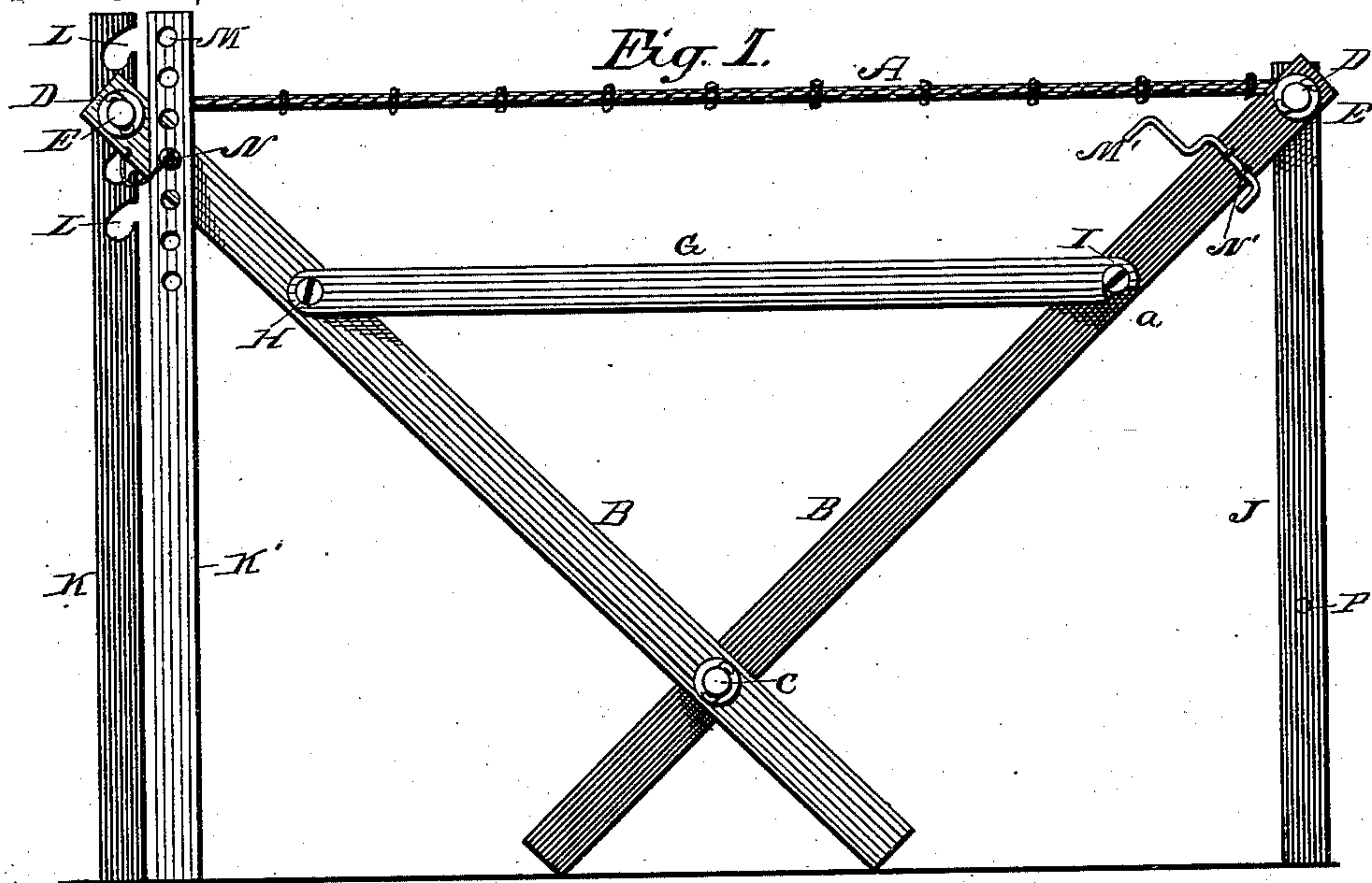
(No Model.)

2 Sheets—Sheet 1.

H. WETTSTEIN.  
FIRE ESCAPE.

No. 312,684.

Patented Feb. 24, 1885.



Witnesses:

C. B. Story.

Wm. S. Smith.

Inventor:

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By

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Attorneys



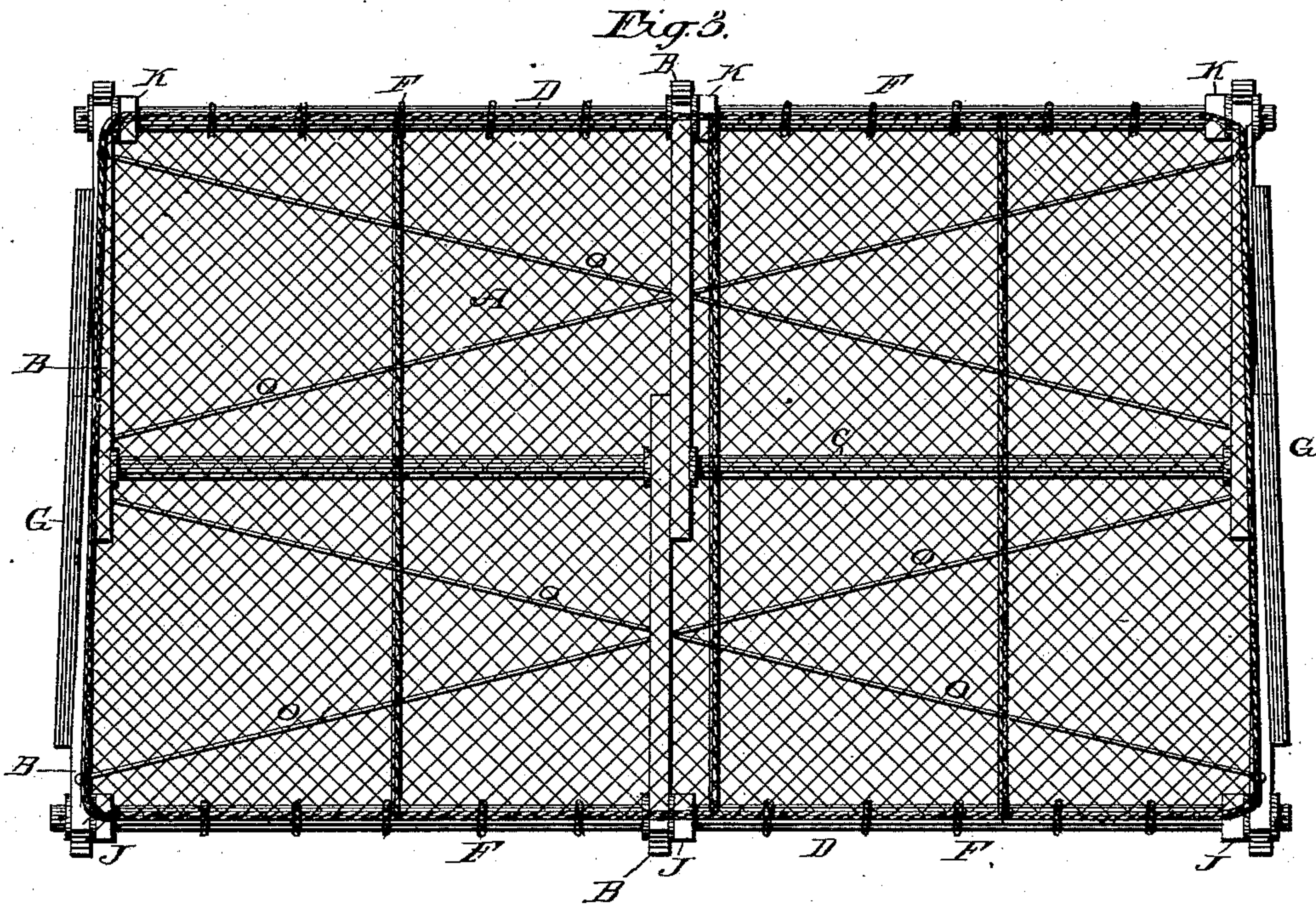
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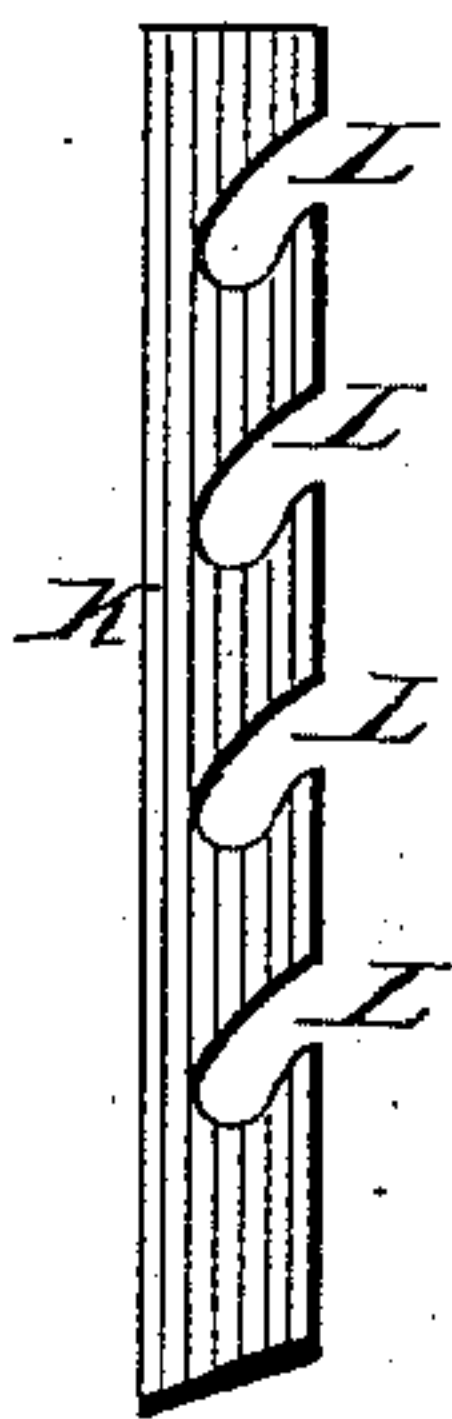
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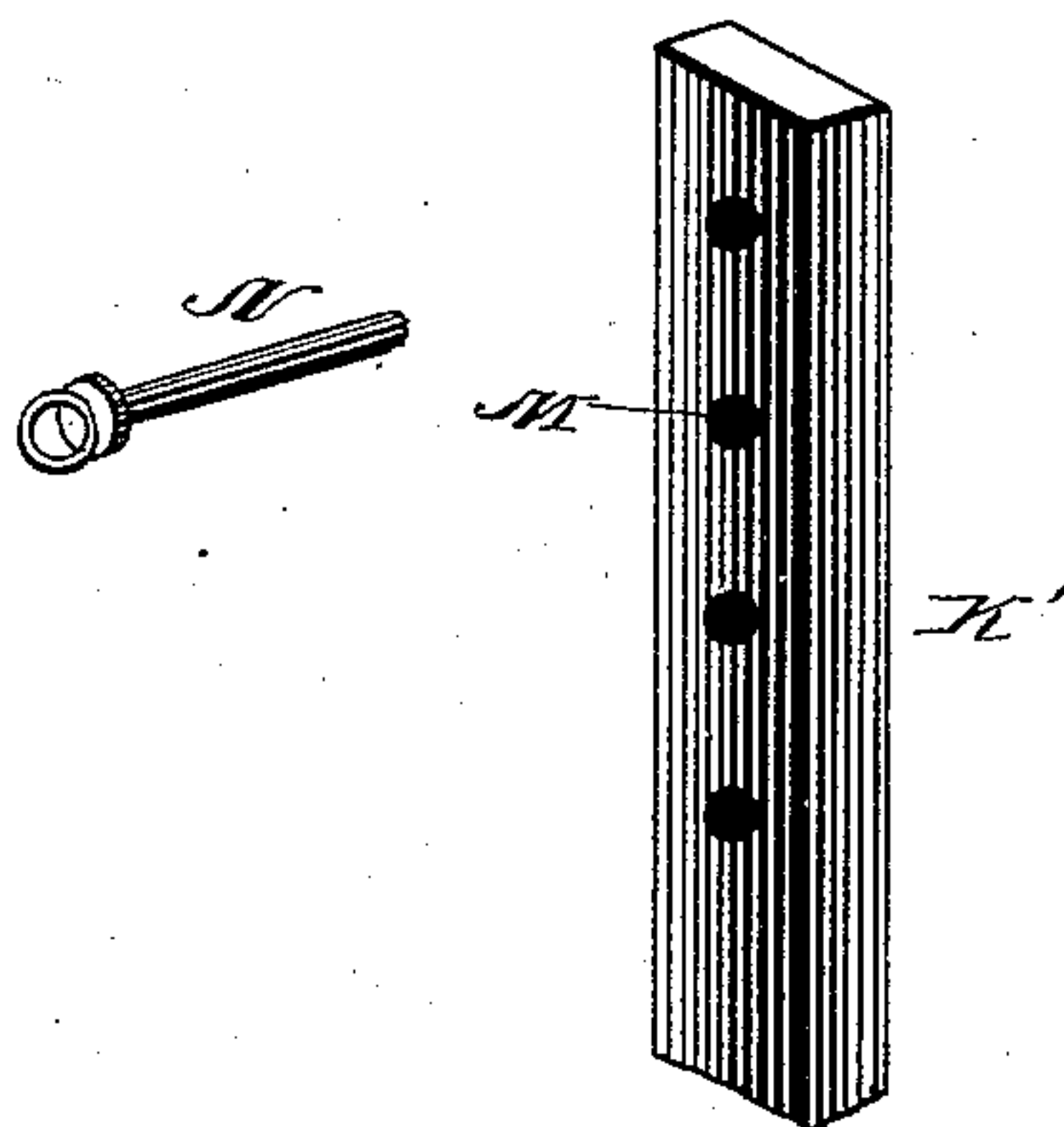
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*Fig. 4.*



*Fig. 5.*



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# UNITED STATES PATENT OFFICE.

HERMAN WETTSTEIN, OF HARVARD, ILLINOIS.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 312,684, dated February 24, 1885.

Application filed June 25, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, HERMAN WETTSTEIN, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Fire-Escapes; and I 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 ap-  
10 pertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in that class of fire-escapes which are used to rescue persons who are compelled in escaping to jump from the upper stories of a building.

The object of my invention is to provide a strong, light, yielding, portable device, which  
20 may be folded into small compass and be easily and quickly moved, and which is easily and quickly thrown into shape for service when required at the place to be used.

My invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents an end view. Fig. 2 is a side view. Fig. 3 is a top view, and Figs. 4 and 5 are details.

Like parts are referred to by the same reference-letters throughout the several views.

In the construction of my escape a heavy canvas or net-work, A, is secured to a folding frame similar in construction to the camp chair or bedstead, in such a manner that when  
35 the frames are separated and supported upon their legs or cross-bars the canvas or net-work is suspended from its edges and retained taut in nearly a horizontal position.

The supporting-frame consists of the several  
40 pairs of cross-bars B B, which are secured to each other by pivotal rod C, which rod permits said cross-pieces to be turned toward or in line with each other when folded together, or at an angle to each other when opened for use, as shown in Figs. 1 and 3. The several  
45 pairs of cross-bars B are connected together at their upper ends by strong rods D, which pass through holes provided therefor in the upper ends of said cross-bars, as shown at E.  
50 To these rods the canvas or net-work is secured by cords or straps F. When the cross-bars are separated or unfolded, as shown in

Figs. 1 and 3, they are rigidly retained in such position and the canvas or net-work A kept taut by the end braces, G G, as shown in said  
55 Fig. 1. One end of the braces G is permanently secured to one of the cross-pieces B by a screw or bolt, H, as shown in Fig. 1, while the other end is detachably attached, when the escape is opened, by the screw or bolt I. The  
60 braces G, for ordinary purposes, are required at the ends of escape only, but may, in case the escape is large, be attached to some or all of the central cross-bars. The end of the brace G which is temporarily attached is provided  
65 with a notch, a, for the reception of the screw I.

To prevent the escape from tipping over, and to make the same stand more firmly, it is supported at its sides or corners by the folding standards J J and K K'. The upper ends of  
70 the standards J J are permanently attached to the side rod, D, of the escape, which when in use are toward the building, the rod D being passed through holes provided therefor in the upper ends of said standards, the lower  
75 ends of said standards being of such length as to bring them on a level of the lower ends of the cross-pieces B.

P is a brace or connecting rod by which the lower ends of the standards J are connected  
80 together.

To provide for uneven surfaces, or for supporting the escape with one edge over the sidewalk and the other edge over a gutter, I have made the outer standards, K K', longer than  
85 the standards J J, and have provided a series of notches, L L, in their edges for the reception of the side rod, whereby the standards may be adjusted to conform to the surface upon which the escape rests, while the surface of  
90 the canvas or net-work is retained in a horizontal position. As an equivalent for the notches L a series of holes, M M, may be substituted, as shown in standard K', and said standards secured to the cross-pieces by a bolt,  
95 N, as shown in Fig. 1, the two forms of adjusting-standards K K' and the retaining-pin being shown in Figs. 4 and 5.

When it is desired to fold the escape preparatory to removing it, the detachable ends  
100 of the braces G are detached from the screws I and folded alongside of the cross-piece to which they are attached, when the pieces B B are folded alongside of each other, and the



standards J brought toward each other, so that the cross-pieces, braces, and standards are all brought in close contact, while the canvas or net-work is folded between said cross-pieces, 5 and all is thus easily and quickly put into a compact form convenient to be moved, all the parts being so connected to each other that there is no danger of any of them becoming lost or displaced, but may all be quickly 10 brought back into their proper shape in condition for use.

To one of each of the end cross-pieces B is attached a bracket, M', by staples N', which, when said cross-pieces are folded together, are 15 adapted to engage the other cross-piece, and thus prevent said pieces from separating and unfolding. The adjustable standards are preferably connected to the side rod by a loose cord, to prevent them from becoming lost or 20 displaced.

To render the frame more stable, the several cross-pieces are connected together by the angularly-arranged brace-rods O O, as shown in Figs. 2 and 3.

25 Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. In a fire-escape, the combination of two or more pairs of cross-pieces, B, connecting-rod C, side rods, D D, connecting-rod P, canvas or net-work A, braces G, and standards J J and K K', as set forth. 30

2. In a fire-escape, the combination of two or more pairs of cross-pieces, B B, connecting-rod C, side rods, D D, braces G G, canvas or 35 net-work A, retaining cords or straps F F, and brace-rods O O, as set forth.

3. In a fire-escape, the combination of two or more pairs of cross-pieces, B B, pivotal rod C, side-rods, D D, canvas or net-work A, braces 40 G G, permanently attached side standards J, connecting-rod P, and adjustable side standards K, all substantially as and for the purpose set forth.

In testimony whereof I affix my signature 45 in presence of two witnesses.

HERMAN WETTSTEIN.

Witnesses:

H. L. FREDERICK,

P. WILKINSON.