

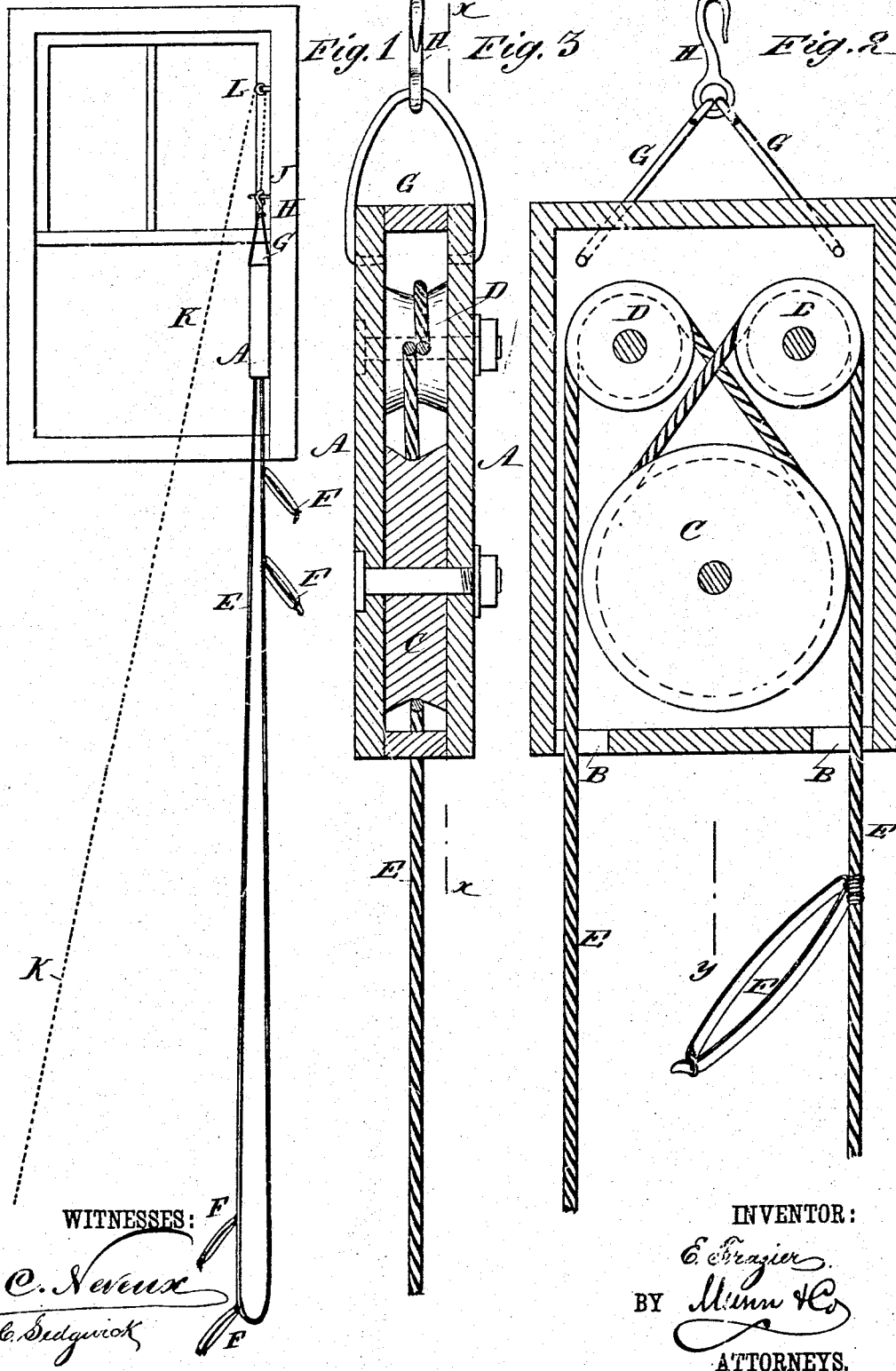
(No Model.)

E. FRAZIER.

FIRE ESCAPE.

No. 303,426.

Patented Aug. 12, 1884.



UNITED STATES PATENT OFFICE.

ELI FRAZIER, OF NORTH LAWRENCE, KANSAS.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 303,426, dated August 12, 1884.

Application filed April 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, ELI FRAZIER, of North Lawrence, county of Douglas, Kansas, have invented a new and Improved Fire-Escape, of which the following is a full, clear, and exact description.

This invention relates to certain new and useful improvements in that class of fire-escapes in which an endless rope or chain is used for lowering the persons.

The invention consists in the construction and arrangement of parts, as will be herein-after fully described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an elevation of my improved fire-escape, showing the manner in which it is used. Fig. 2 is a longitudinal sectional elevation of the friction-pulley box on the line *x x*, Fig. 3; and Fig. 3 is a cross-sectional elevation of the same on the line *y y*, Fig. 2.

In a flat box, A, provided with openings B in the bottom, a large grooved pulley, C, is pivoted, and above the same two smaller pulleys, D, are pivoted equidistant from the central line of the box. An endless rope, E, is passed around the pulley C and over the pulleys D D, in the manner shown, and passes through the openings B in the bottom of the box, the rope being crossed between the two pulleys D. The endless rope E is of such length that it can extend to the ground. A series of belts or straps, F, are held securely on the rope at proper distances apart. On the top of the box A two bails, G, are hung, which pass through the eye of a hook, H.

The fire-escape is used in the following manner. The hook H is passed into a staple or eye, J, projecting from the window-frame. The person to be rescued grasps the rope and passes one of the belts F around his waist, and descends by his own weight, the friction of the rope E on the pulleys C D preventing the rope from descending too rapidly; or the person can place one foot in a belt, F, and grasp the rope. A number of persons can descend successively or simultaneously. The belts F are so arranged on the endless rope E that when one set of belts is raised, the other set is lowered, as the belts are not to pass through the pulley-box. A rope, K, is secured to the hook H, passes over a pulley, L, on the window-frame, and then to the ground. After all the persons have been rescued, the hook H is disengaged from the staples or eye J by means of the rope K, and the fire-escape is lowered, and can be used again.

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

In a fire-escape, the combination, with the box A, of the pulleys C D in the same, the endless rope E, passed over the pulleys, the hook H held on the box, the eye or staple J, projecting from the window-frame, the pulley L on the window-frame, and the rope K, passed over the pulley L and secured to the hook H, substantially as herein shown and described.

ELI FRAZIER.

Witnesses:

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