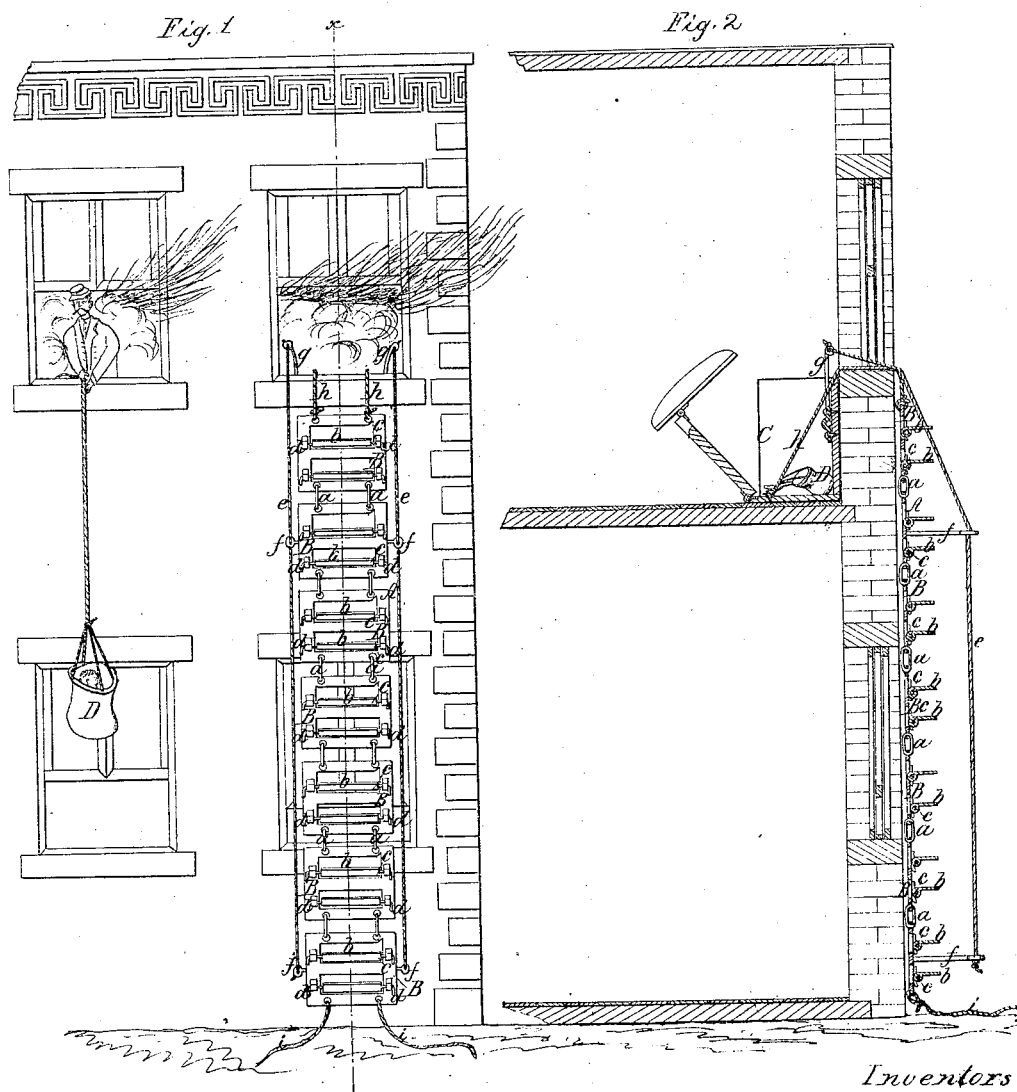


C. J. & E. W. Jones.

Fire Escape.

N^o 50,596.

Patented Oct. 24, 1865.



Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES J. JONES AND EMMA W. JONES, OF NEW BRIGHTON, NEW YORK.

IMPROVED FIRE-ESCAPE.

Specification forming part of Letters Patent No. 50,596, dated October 24, 1865.

To all whom it may concern:

Be it known that we, Rev. CHARLES J. JONES and EMMA W. JONES, of New Brighton, in the county of Richmond and State of New York, have invented a new and Improved 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 drawings, forming part of this specification, in which—

Figure 1 is a front elevation of this invention, showing its application to a building. Fig. 2 is a vertical section of the same, the line *x x*, Fig. 1, indicating the plane of section.

Similar letters of reference indicate like parts.

This invention relates to certain improvements in that class of fire-escapes which are composed of a series of steps arranged so that the same can be folded up and stowed away in a comparatively small space when not used, and when they are to be used they are thrown out of the window, the upper end being secured inside the building, and the steps, in falling down, arrange themselves in the proper position and form a ladder, by means of which persons from a burning building can escape.

The peculiarities of our fire-escape and its advantages will be readily understood from the following description.

A represents a ladder composed of a series of frames, B, which are made of sheet metal, or which may be cast or made of any suitable material. The several frames are connected by links *a*, so that they can be folded up, if desired, and each frame contains two (more or less) steps, *b*, which swing on rods *c*, so that they can be turned up flat against the frame or out at right angles with the same, as shown in the drawings. In order to hold the steps in position when the same are turned out at right angles to the frames, the ends of the rods *c* are bent to form steps *d*, which, by coming in contact with the surface of the frame, prevent the steps from turning down any farther than desirable. When the frames are unfolded, as shown in the drawings, the steps turn out spontaneously, and a sort of a banister is formed by ropes *e*, which are drawn through arms *f*, secured to the edges of the frames at proper intervals. Said arms are hinged, so that they turn up when the frames are unfolded or in when the frames are folded.

The upper ends of the ropes *e* are secured

to arms *g*, which are hinged to the inside of a window, so that the same turn up to the position shown in the drawings when the ladder is to be used, or down into the box C, which incloses the ladder, when it is not used.

The upper end of the ladder is secured to ropes or chains *h*, which are fastened inside the box C, and its lower end is provided with guy-ropes *i*, by means of which the ladder can be pulled off from the wall if the lower part of the building should be on fire, so that persons passing down over the ladder are not injured.

The box C is secured inside the building next to a window, and it may be so arranged that its top forms a seat with a cushion, and the whole device is an ornament for the room in which it is situated. A basket, D, may also be placed in this box to save small children or valuables.

This ladder is easily made. All its parts can be cast of iron or stamped out of sheet metal, if desired, and when it is not used it folds up in a comparatively small compass. When it is thrown out of the window the steps and banisters arrange themselves in the desired position, and a ladder is obtained over which the most timid persons can readily descend. The steps are broad and form a good hold for the feet, and by means of the banisters persons descending are enabled to steady themselves the same as on ordinary stairs.

When properly arranged this ladder is not liable to get out of order. It can be stowed away in the box C, where it is out of the way and still on hand in case of an emergency, and in cases of sudden conflagrations it will be the means to save many lives of persons who, without such an escape, would perish in the flames, and of valuable articles which otherwise could not be removed.

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

A ladder composed of a series of frames, B, each containing one or more folding steps, *b*, provided with suitable stops, in combination with links *a* and banisters *e*, constructed and operating substantially as and for the purpose set forth.

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Witnesses:

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