(No Model.)

W. JENSEN.

FIRE ESCAPE.

No. 294,239. Patented Feb. 26, 1884.

Fig. 2.

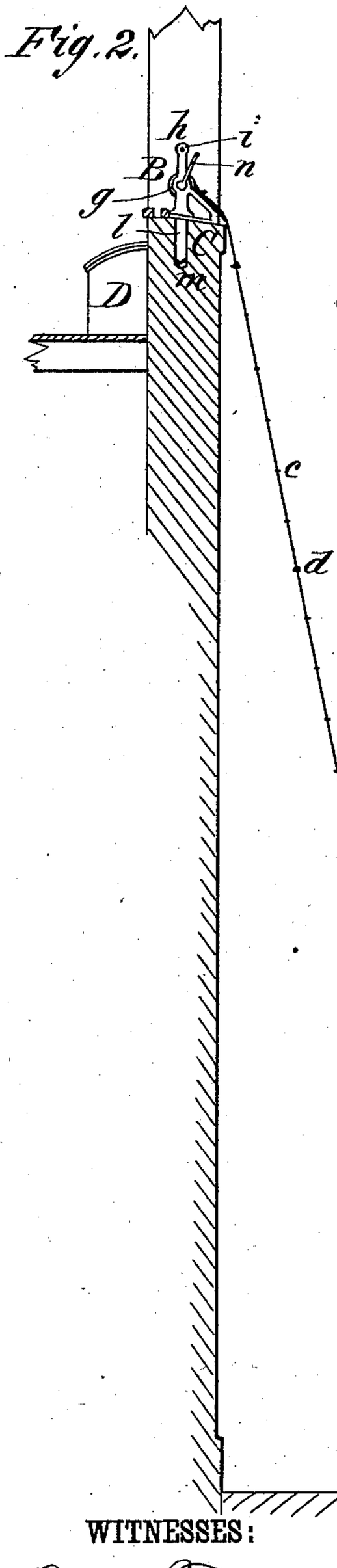


Fig. 3.

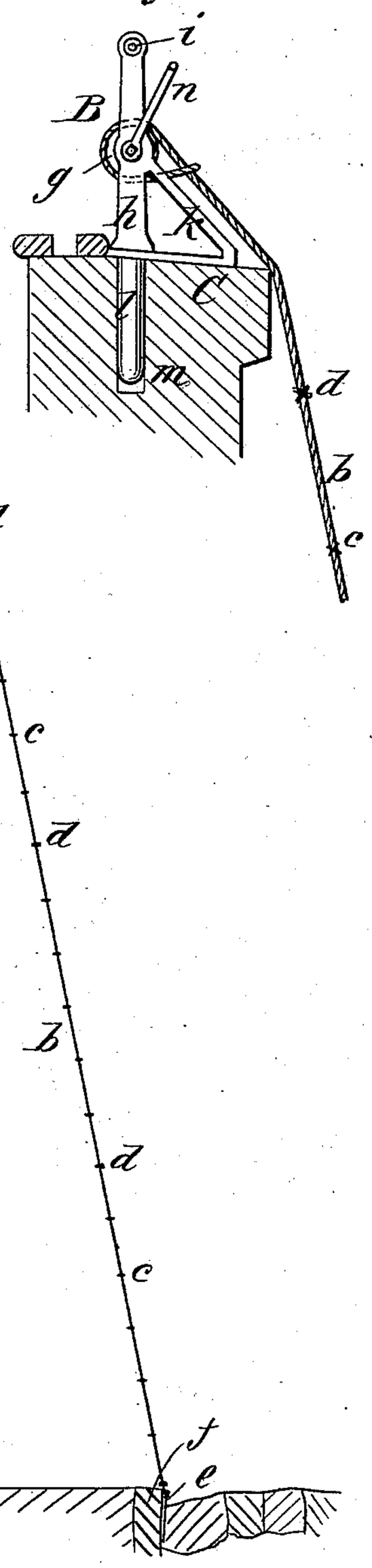
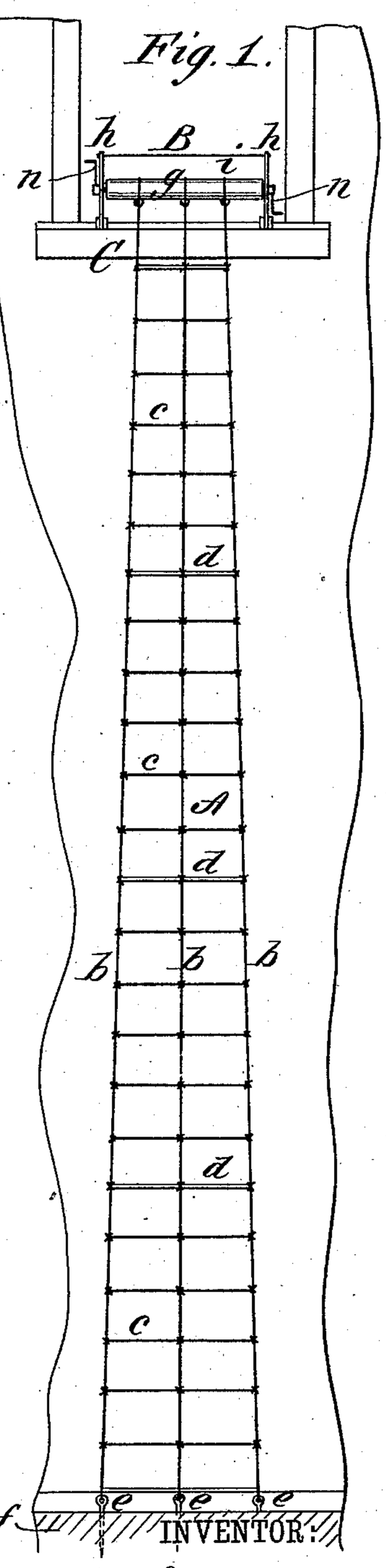


Fig. 1.



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UNITED STATES PATENT OFFICE.

WILLIAM JENSEN, OF VICTORIA, BRITISH COLUMBIA, CANADA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 294,239, dated February 26, 1884.

Application filed September 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JENSEN, of Victoria, in the Province of British Columbia and Dominion of Canada, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a full, clear, and exact description.

This invention relates to flexible-ladder fire-escapes, mainly for use on or from the window-sills of buildings, in connection with a windlass for lowering or raising the ladder, which, when lowered, occupies an inclined position away from the building in a downward direction.

The invention consists in certain novel constructions and combinations of parts in a fire-escape of this description, whereby I am enabled to produce a simple, durable, and cheap rolling-ladder escape, which is not only portable from window to window, but is incombustible, and combines lightness with strength, without the aid of guy-ropes and side braces; also provides for its being readily secured to the ground at its base, substantially as hereinafter described.

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 represents a front elevation of my improved fire-escape as applied to the window-sill of a building and as extended and secured at its base or lower end to the ground. Fig. 2 is a vertical section of the same in a plane at right angles to Fig. 1; and Fig. 3 is a similar view to Fig. 2, upon a larger scale, of the upper portion only of the extended escape and window-sill from which it is lowered.

A is a flexible steel-wire-rope ladder of any desired or required length, and composed in part of two, three, or more longitudinal strands, *b*, the outer ones of which are arranged to diverge from one another in an unrolling or downward direction. These several longitudinal strands are connected by numerous cross-strands, forming steps *c*, and, to give increased rigidity, by occasional tubes *d*, also forming steps. This construction of the ladder combines lightness with strength, and makes a fire-proof ladder which, when extended from the window-sill to the ground, has an increasing width in a downward direction, to give it all the necessary stability without the aid of guides or side braces, and which is readily secured to the ground by long steel pins *e*, arranged at the lower ends of the longitudinal strands, and driven into the ground or between the stones of the curbing *f* of a sidewalk, as shown in Figs. 1 and 2. The opposite or inner end of the ladder is fastened to the barrel *g* of a portable windlass, B, of a suitable size to sit upon the window-sill C of a building, said barrel being mounted in a frame that may consist of side standards or cheeks, *h*, united by one or more stay-rods, *i*, and stiffened by front braces, *k*. This frame has any number of attached lower pins or legs, *l*, which, when the windlass is placed on the window-sill, enter corresponding holes *m* in the sill, and thus serve to hold the windlass in place. These holes may have plugs or stoppers to exclude dirt from collecting in them when the fire-escape is not in use. The barrel of the windlass is operated by a handle, *n*, on one or both ends of it, and on releasing the pins *e* from the ground the ladder may be readily wound up and the whole apparatus be packed away in a small compass and kept in a box, D, ready for immediate use in case of danger. Said box or case may be kept inside of the room or building, and may be of an ornamental or useful character, and may be moved from window to window, as required.

The inclination of the ladder when extended not only facilitates the ascent of firemen and others, but also protects persons ascending or descending to or from the upper story of a high building from being burned by any flames which may issue from the windows of the lower stories of the building.

It is desirable that the windlass B should be made as light as practicable in order that the whole apparatus may be readily portable.

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

In a combined windlass and flexible-ladder fire-escape, the combination of the portable windlass B, having lower pins or legs, *l*, for entry within cavities in the window-sill of a building, the wire-rope ladder A, having its outer longitudinal strands arranged to diverge from one another in an outward direction, and the fastening-pins *e* at the outer ends of the longitudinal strands of the ladder, substantially as shown and described.

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Witnesses:

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