

(No Model.)

H. T. FORBES & J. F. WELDON.
PORTABLE FIRE ESCAPE.

No. 579,823.

Patented Mar. 30, 1897.

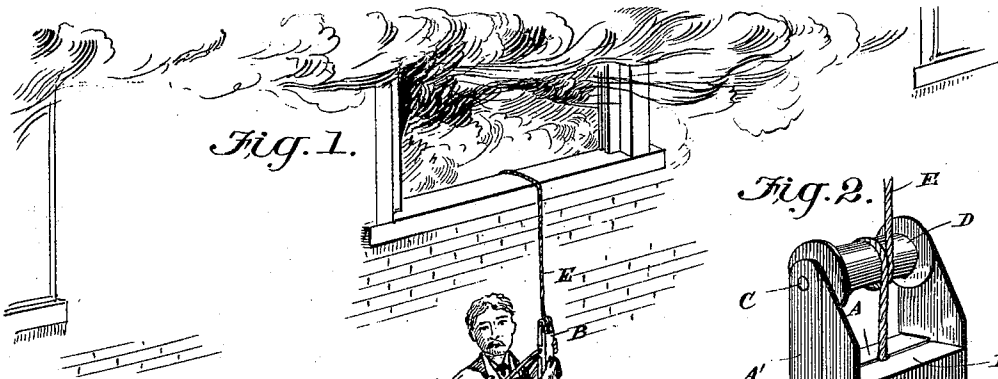
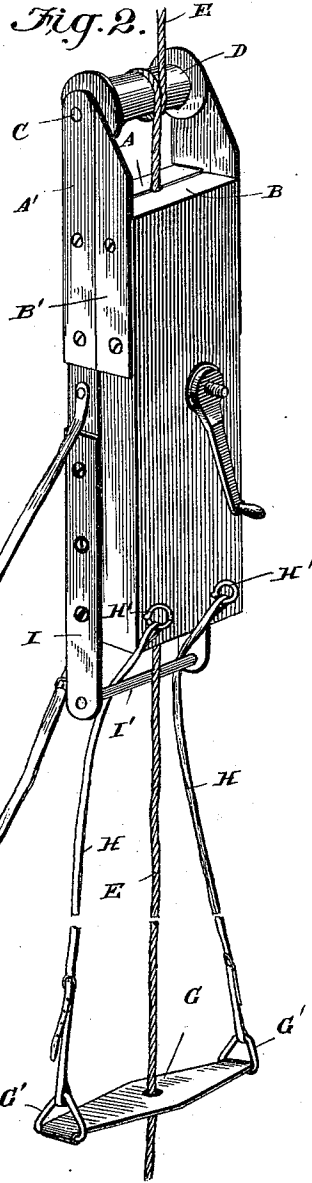


Fig. 1.



UNITED STATES PATENT OFFICE.

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PORTABLE FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 579,823, dated March 30, 1897.

Application filed August 19, 1896. Serial No. 603,260. (No model.)

To all whom it may concern:

Be it known that we, HILIARD T. FORBES and JAMES F. WELDON, residents of Hallsville, in the county of Boone and State of Missouri, have invented a new and Improved Portable Fire-Escape, of which the following is a specification.

This invention relates generally to fire-escapes, and more particularly to that class thereof known as "portable friction fire-escapes."

The object of our invention is to provide an exceedingly cheap and simple construction of fire-escapes of the kind described which can be carried about in a valise or other suitable manner without occupying a great deal of room and can be quickly and easily attached to any rigid object within a room, dropped out of a window, and will permit a person to slowly descend upon a rope to the ground.

Another object of our invention is to provide a fire-escape of the kind in which it will be absolutely impossible for the operator to fall, and another object is to provide means whereby the friction can be increased or decreased, as desired.

With these various objects in view our invention consists, essentially, of two blocks hinged together at one end and bound together by a suitable screw device, said blocks being grooved to permit a rope to pass there-through, a seat suspended from the said blocks, a bail depending from one of the blocks and through which seat straps pass, whereby the weight of the body aids in holding the blocks in contact with the rope, and the body-strap attached also to one of the blocks and adapted to hold the body in the proper position with relation to the rope and friction device.

Our invention consists also in certain details of construction and novelties of combination, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a view showing our invention in use. Fig. 2 is a detail perspective view of the escape device ready for use. Fig. 3 is a vertical longitudinal section. Fig. 4 is a section on the line 4 4, Fig. 3.

In carrying out our invention we employ

the blocks A and B, preferably constructed of wood, though they may be constructed of any suitable material. Attached to each side of the blocks A and B at the upper end are hinge-plates A' and B', pivotally connected at their upper ends by means of a pin C, and mounted upon this pin C, between the hinge-plates, is a pulley or drum D, around which the escape-rope E passes before passing between the blocks A and B, said blocks having longitudinal grooves A² and B² in which the said rope fits in place between the blocks, said rope being held within the groove by means of the guide-staples F, secured in the face of the block A, the block B being recessed upon its inner face to receive the said guide-staples.

The rope E has a suitable hook E' at its upper end for the purpose of attaching the rope to any fixed portion of the building or any rigid object within the room. The rope, after passing around the pulley and between the friction-blocks, passes centrally through the seat G, said seat having stirrups G' at each end, to which are attached the straps H, by means of which the seat is suspended from the friction-block B, said straps being attached at their upper ends to the eyes H', fixed upon the outer face of the block B.

A pendent bail I is attached to the lower end of the block A and has a cross-bar I', over which the straps H pass, as most clearly shown in Figs. 2 and 3, so that the weight of the person resting upon the seat G will tend to bind the lower ends of the friction-blocks A and B tightly together. For the purpose of securing the said blocks A and B in close position we employ a screw-bolt K, passing through the blocks A and B, the threaded end of the bolt projecting outward from the face of the block B, and upon the said threaded end is placed a tension-nut L, provided with a crank-handle L' within easy reach of the operator, so that by turning the said crank-handle in one direction or the other the tension upon the friction-blocks can be increased or decreased, as desired. In order to increase or decrease the friction upon the rope a body-strap M is attached to the block A about midway its length, said strap being adapted to pass around beneath the arms of the person and hold said person in the proper relative

position upon the seat. The body-strap M and the seat-straps H are both adjustable in order to accommodate persons of different sizes.

5 It will thus be seen that we provide an exceedingly cheap and simple construction of fire-escape which can be placed in operation very easily and quickly and will safely conduct a person to the ground in a steady and
10 gradual manner, and by means of the tension-regulator the speed of descent can be increased or decreased, as necessity may require.

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

1. An improved portable fire-escape consisting of two friction-blocks hinged together, a pulley at their upper ends, a seat suspended from the lower end of one of the blocks,
20 and a body-strap attached to the other block, the escape-rope passing between the blocks and means for increasing or decreasing the friction upon the said rope, substantially as shown and described.

2. In a fire-escape, the combination with the friction-blocks hinged together at their upper ends and a pulley at said hinged joint, of the seat suspended from the lower end of one of
30 the blocks, the body-strap attached to the opposing block, the screw-bolt and tension-nut, said tension-nut having a crank-handle and the escape-rope all arranged and adapted to operate substantially as shown and described.

3. In a portable fire-escape, the combination with the friction-blocks grooved longitudinally upon their inner faces and hinged together at their upper ends, of the pulley arranged at said hinged joint, the escape-rope passing between the said blocks and resting in the longitudinal grooves, the guide-staples fixed upon the inner face of one of the blocks, the seat and straps for supporting the same,
45 and the body-strap, the threaded bolt passing

through the friction-blocks, the tension-nut arranged upon the end of said bolt and having a crank-handle adapted to operate substantially as shown and described.

4. In a portable fire-escape, the combination 50 with the friction-blocks hinged together and a pulley at their upper ends, of the escape-rope passing between the said friction-blocks and means for holding the said blocks together and increasing or decreasing the friction thereof upon the escape-rope, the pendent bail attached to one block the straps attached to the other block and passing through the said pendent bail, the seat carried at the end of said straps and the body-strap attached 60 to one of the blocks, substantially as and for the purpose described.

5. In a portable fire-escape, the combination of the friction-blocks arranged together, a pulley at their upper ends, the inner faces of 65 said blocks being grooved longitudinally, one of said blocks carrying guide-staples upon its inner face, the opposite block having recesses in its inner face to receive the said guide-staples, the escape-rope having a hook at its 70 upper end, said escape-rope passing around the pulley and between the friction-blocks and resting in the longitudinal grooves, the threaded bolt passing through the blocks, the tension-nut arranged upon the end of said 75 bolt and having a crank-handle, the pendent bail attached to the lower end of one of the blocks, the seat-straps attached to the lower end of the other block, and passing over the lower bar of the said pendent bail, and the 80 seat carried at the lower ends of the seat-straps, said seat having a central opening through which the escape-rope passes, substantially as shown and described.

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Witnesses:

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