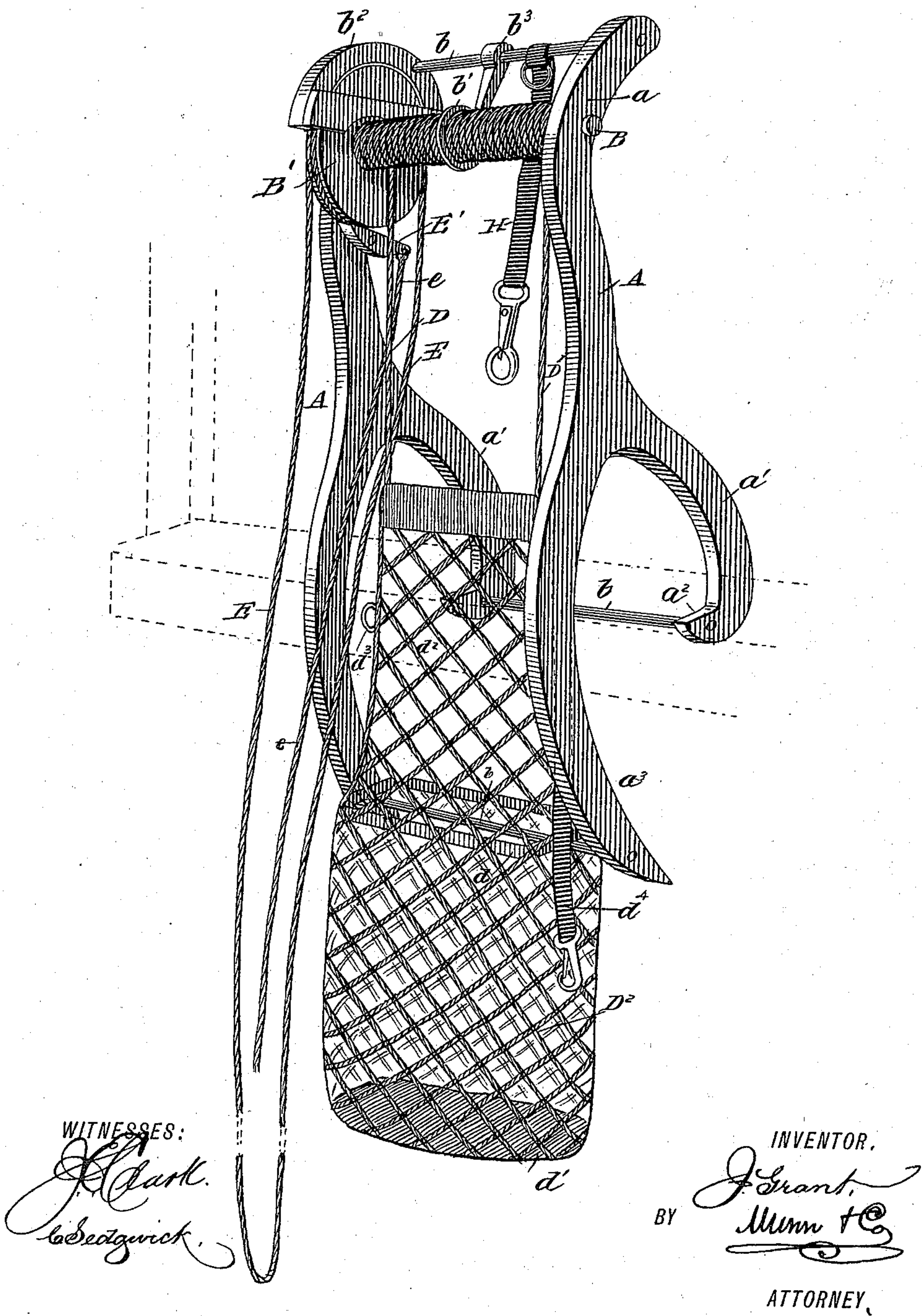


(No Model.)

J. GRANT.
FIRE ESCAPE.

No. 383,570.

Patented May 29, 1888.



UNITED STATES PATENT OFFICE.

JOHN GRANT, OF BEVERLY, MASSACHUSETTS.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 383,570, dated May 29, 1888.

Application filed March 27, 1888. Serial No. 268,649. (No model.)

To all whom it may concern:

Be it known that I, JOHN GRANT, of Beverly, in the county of Essex and State of Massachusetts, have invented a new and Improved Fire-Escape, of which the following is a full, clear, and exact description.

My invention relates to an improvement in fire-escapes, and has for its object to provide a portable device which may be readily secured to a window, and wherein the descent of an occupant may be controlled from the window or street, and wherein, also, accommodations will be provided for lowering an infant or disabled person with perfect safety.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure represents a perspective view of the device in position for use.

In carrying out the invention a frame, A, is provided, consisting of two parallel side pieces having an inward curve, *a*, at the upper end, and a bifurcated lower end, both of which members, extending outwardly, are inwardly curved, the inner member, *a'*, being the shorter and provided at the extremity with an inwardly-projecting horizontal pointed lug or lugs, *a''*, adapted to engage the under surface of the window-sill. The outer and longer member, *a'''*, is pointed to engage at its extremity the outer face of the wall. The two side pieces are united at top and bottom by transverse rods *b*, and near the upper ends a drum, B, is journaled in the side pieces provided with a central annular flange, *b'*, dividing the same into two sections, and an attached grooved pulley, B', at one end.

From the upper connecting-rod a segmental casing, *b''*, is suspended over the pulley, and from the center of the said rod a finger, *b'''*, is downwardly projected to an engagement with the central flange, *b'*, of the drum, the purpose whereof is to prevent the rope coiled upon one section of the drum running over upon the other section.

To each section of the drum B one end of a rope or chain, D D', is secured, the other ends of which ropes are secured to a hammock, D².

The hammock consists, essentially, of a bag held open at the top of a ring or rectangular band, *d*, and provided at the bottom with a stout foot-piece, *d'*, a rear extension, *d''*, being connected to the corners to which the aforesaid ropes or chains D D' are secured.

The hammock is made sufficiently large to accommodate a child. When, however, an adult is to descend, a strap, *d'''*, attached at one side of the extension, is passed in front of the body and clipped to a ring, *d''''*, fastened to the opposite side of the extension. An endless rope or chain, E, is passed over the pulley B', adapted to be of sufficient length to extend to the ground, by means of which the drum B is revolved and the hammock raised or lowered at will.

Beneath the pulley B' to one side piece of the frame a brake-shoe, E', is pivoted, manipulated by means of an attached rope, *e*, attached to one end of said shoe, adapted to extend between the strands of the endless rope E to the ground. When tension is exerted upon the brake-rope *e*, the brake-shoe is applied, the shoe being so weighted and pivoted as to be normally out of contact with the pulley.

In operation, if the descent is to be controlled from the window or ground, the brake-rope is manipulated by the operator stationed at that point, and the hammock carried upward to the window again after descending by the manipulating of the outer strand of the rope E.

The party in the hammock has complete control over his descent by retaining possession of the brake-rope.

When not in use, the hammock may be folded up in the frame and bound in such position by means of a strap, H, attached to the upper frame cross-bar, having a ring at one end and a clip at the other.

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

1. A fire-escape consisting of a frame having a bifurcated lower end adapted to engage opposite sides of a window-sill, a drum pivoted in the upper end, provided with a central flange, a pulley mounted upon one end of the drum, an endless rope or chain resting upon said pulley, a hammock suspended from the

drum, and a brake-shoe pivoted to the frame, engaging the pulley, substantially as and for the purpose specified.

2. In a fire-escape, the combination, with a
5 frame having bifurcated lower ends, the members whereof are oppositely curved and one shorter than the other, a drum pivoted in the upper end of the frame, provided with a central flange, a finger projected from the frame en-
10 gaging said flange, and a grooved pulley attached at one end of the drum, of a hammock

provided with a rear extension and throat-strap suspended from the drum, a brake having an attached rope pivoted to the frame beneath the pulley, and an endless belt or 15 band passing over the pulley, all adapted for operation substantially as shown and described.

JOHN GRANT.

Witnesses:

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