No. 689,850. Patented Dec. 31, 1901.

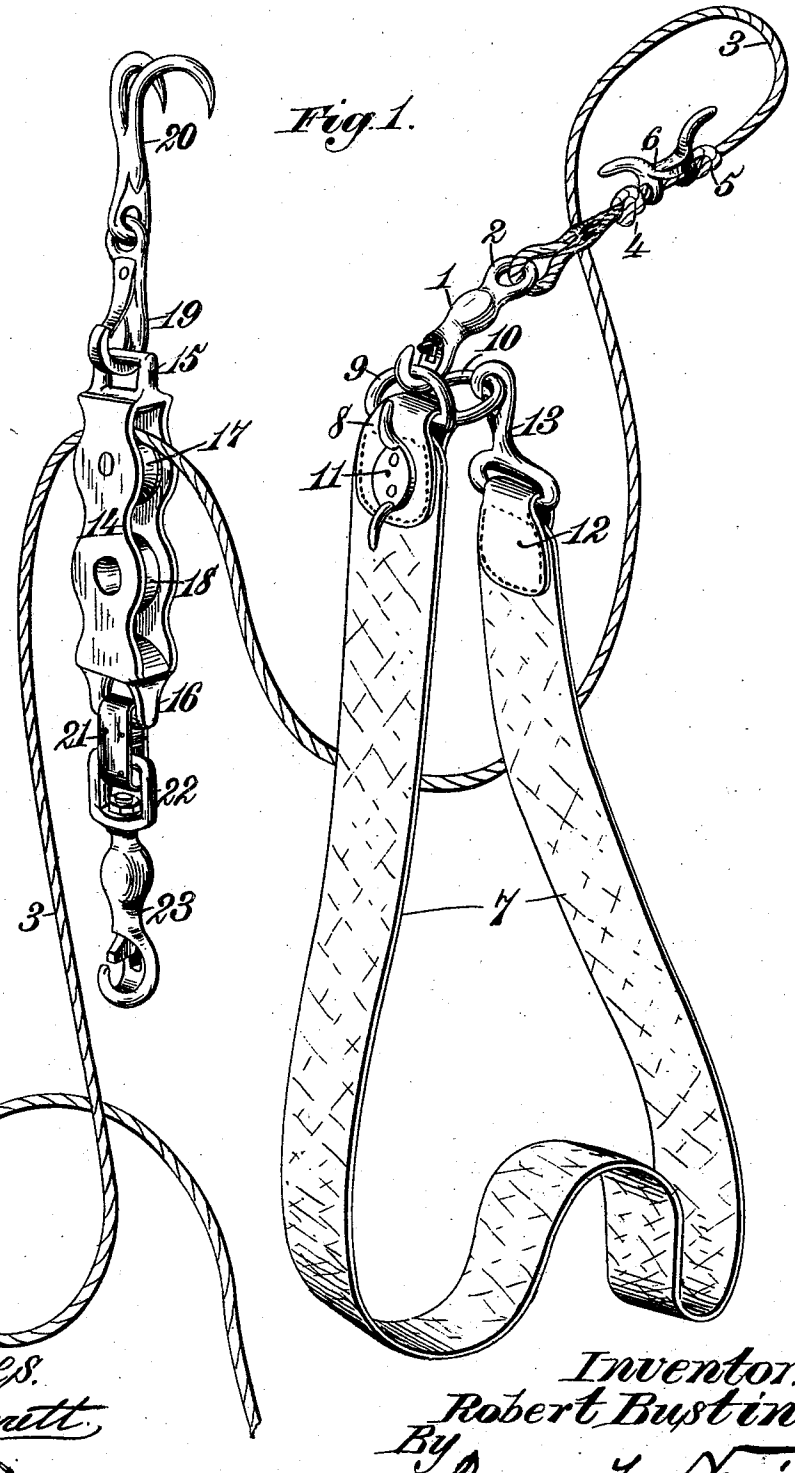
R. BUSTIN.

FIRE ESCAPE.

(Application filed Mar. 30, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.



Witnesses.
Robert Everett.
J. B. Taylor

Inventor.
Robert Bustin.
By James L. Norris.
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 689,850. Patented Dec. 31, 1901.

R. BUSTIN.

FIRE ESCAPE.

(Application filed Mar. 30, 1901.)

(No Model.) 2 Sheets—Sheet 2.



Fig. 2.

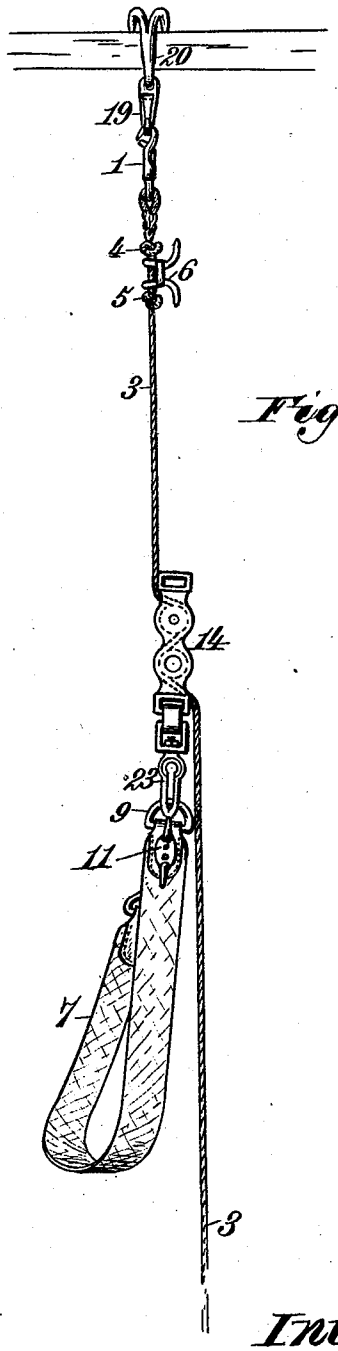


Fig. 3.

Witnesses.
Robert Everett.
J. B. Keedy

Inventor.
Robert Bustin.
By James L. Norris.
Att'y.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROBERT BUSTIN, OF ST. JOHNS, CANADA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 689,850, dated December 31, 1901.

Application filed March 30, 1901. Serial No. 53,570. (No model.)

To all whom it may concern:

Be it known that I, ROBERT BUSTIN, a subject of the King of Great Britain, residing at St. Johns, New Brunswick, Canada, have invented new and useful Improvements in Fire-Escapes, of which the following is a specification.

This invention relates to certain new and useful improvements in fire-escapes, its object being to produce an apparatus of this character with means for increasing friction, if desired, during the lowering of a person or persons from buildings or when lowering various objects.

A further object of the invention is to construct an apparatus of this character of such size that it can be conveniently carried about the person or packed into a small space for transportation and by means of which any number of persons may be successfully and safely lowered from a burning building or other elevated positions at a moment's notice.

The invention further aims to provide an apparatus of this character which can be adapted for use as a block and fall. Furthermore, the invention aims to construct a fire-escape which shall be extremely simple in its construction, strong, durable, and efficient in its operation, readily set up, and comparatively inexpensive to manufacture; and it consists of the novel combination and arrangement of parts hereinafter more specifically described, illustrated in the accompanying drawings, and particularly pointed out in the claim hereunto appended.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like numerals of reference indicate corresponding parts throughout the several views, and in which—

Figure 1 is a perspective view of my improved fire-escape. Fig. 2 is a like view showing the same adapted for use as a block and fall. Fig. 3 is a like view showing the same adapted for use as a fire-escape.

Referring to Figs. 1 and 2 of the drawings by reference-numerals, 1 denotes a snap-hook, provided with an eye 2 at one end, to which is secured one end of the rope 3. The latter is formed with a pair of knots 4 and 5 a suitable distance apart, and between which is mounted upon the rope 3 the friction-cleat 6.

The reference-numeral 7 denotes a sling or band formed of any suitable material and has attached to one end thereof the strip 8, forming a loop for connecting the rings 9 10 thereto. Secured to one side of the strip 8 is a friction-cleat 11. The other end of the sling 7 has attached thereto a strip 12, forming a loop for attaching to the sling 7 a snap-hook 13, which is adapted to engage the ring 10, the snap-hook 1 being connected to the ring 9.

The reference-numeral 14 denotes a casing, having the eyes 15 16 formed integral with the top and bottom thereof, respectively. Within the casing 14 is mounted a pulley 17, and below the latter the casing is formed with a concentric friction-bearing 18, the rope 3 passing over the pulley 17. Attached to the eye 15 is a snap-hook 19, the latter being pivotally connected at its upper end to the grappling-hook 20. Attached to the eye 16 is a link 21, connected by a swivel 22 to the upper end of the snap-hook 23. The casing 14 and the pulleys 17 18 I term a "friction device."

In Figs. 1 and 2 the apparatus is set up as a block and fall. In Fig. 3 the apparatus is set up as a fire-escape, and the snap-hook 1 is connected to the hook 19, the rope 3 passing over the pulleys 17 18 and the hook 23 attached to the ring 9.

When using the device as a block and fall, the hook 20 is attached to any suitable object and the apparatus is set up as shown in Figs. 1 and 2, the rope passing around the cleat 6 to increase friction, and, if desired, the rope may be passed around the cleat 11. When lowering objects from an elevated point, the rope 3 is passed around the cleat 6, and if a person is in the sling all that is necessary to increase the friction of the rope is to pass the rope around the cleat 11. When used as a fire-escape, the snap-hook 19 is attached to the hook 1 and the grappling-hook 20 attached to any desirable object. The rope 3 is passed around the pulley 17 and friction-bearing 18 in the casing 14, which in this instance I term the "friction device." The hook 23 of the friction device is attached to the ring 9 of the

sling. When it is desired to increase the friction during the operation of the fire-escape, the rope 3 is passed around the cleat 6, attached to the sling.

The apparatus will also prove a valuable auxiliary to the fire-department both as a means for saving the lives of the occupants of burning buildings, also for the purpose of saving the firemen when by any means they may be cut off from their ladders during their work in a burning building. Furthermore, the apparatus can be readily adapted as a block and fall, so that various objects can be conveniently lowered from the building or other elevated position, and as the rope is always within the grasp of a person being lowered when used as a fire-escape the rapidity of the descent can be decreased, owing to the arrangement of the cleat upon the sling, and also the rapidity of the lowering of various articles decreased by the arrangement of the cleats upon the rope and sling, as before mentioned.

It is thought the operation and many advantages of my improved fire-escape can be readily understood from the foregoing description, taken in connection with the accompanying drawings, and it will be noted that minor changes may be made in the details of construction without departing from the general spirit of my invention.

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

In a fire-escape, a friction device, a rope operating therethrough, a friction-cleat carried by said rope, a sling, and a friction-cleat carried by said sling.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROBERT BUSTIN.

Witnesses:
GEO. E. SULLIVAN,
GEO. W. REA.