G. A. BLAKE.

PORTABLE FIRE ESCAPE.

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1,340,146. **Patented May 18, 1920.**

Fig. 1.

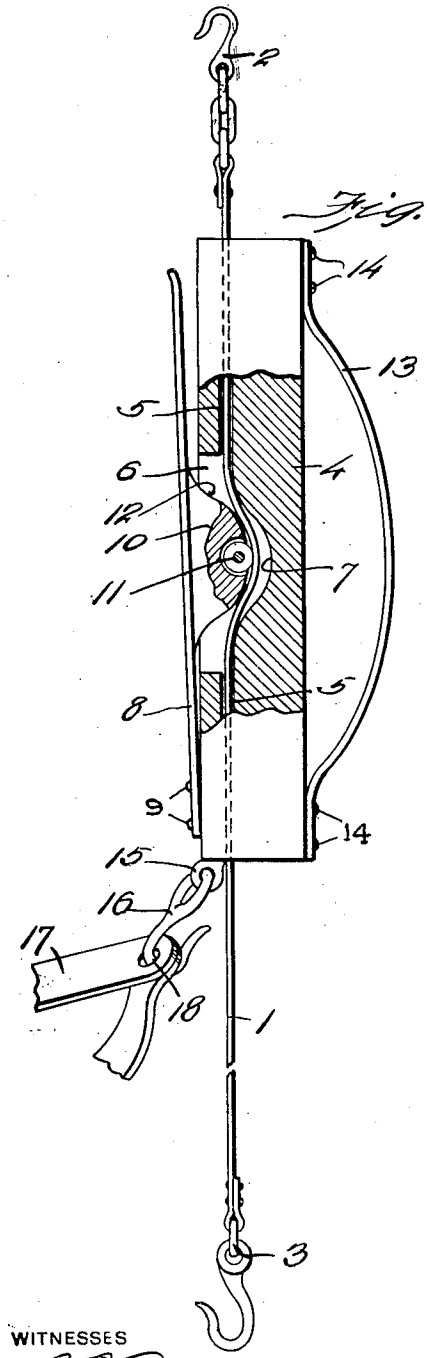
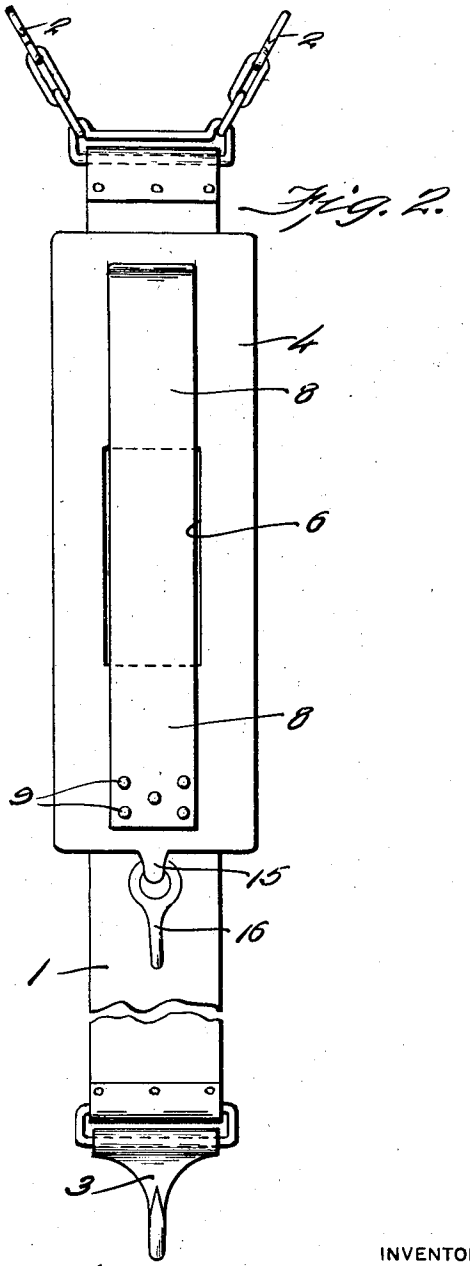


Fig. 2.



WITNESSES

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PORTABLE FIRE-ESCAPE.

1,340,146. Specification of Letters Patent. **Patented May 18, 1920.**

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To all whom it may concern:

Be it known that I, GEORGE A. BLAKE, a citizen of the United States, residing at Storrs, in the county of Tolland and State of Connecticut, have invented certain new and useful Improvements in Portable Fire-Escapes, of which the following is a specification.

This invention is a portable fire escape and has for its principal object the production of a frame which is movably mounted upon a tape, thereby permitting the frame to be moved along the tape at a desired speed.

Another object of this invention is the production of a portable fire escape wherein a friction member is employed upon the frame, said friction member being manipulated by the operator, whereby the frame may move downwardly upon the tape at a desired speed.

A still further object of this invention is the production of a portable fire escape which is comparatively light in construction since the frame is arranged so as to be gripped by the hand of the operator.

In addition to the foregoing objects my invention comprehends improvements in the details of construction and arrangement of the parts to be hereinafter more fully described, and particularly set forth in the appended claim.

One practical form of the assembly and construction of the present invention is shown in the accompanying drawings, in which:

Figure 1 is a side view with parts broken away of the portable fire escape illustrating the manner in which the same is used, and

Fig. 2 is a front elevation of the fire escape, a portion of the tape being broken away.

Referring to the accompanying drawings by numerals, it will be seen that the portable fire escape comprises a tape 1 which has hooks 2 at its upper end and a hook 3 at its lower end. It is of course obvious that this tape may be of any width or length desired, while the provision of the hooks permits the tape to be secured within the building and extended from a window or like opening, while the lower hook may be secured so as to prevent the tape from swinging.

The frame comprises an elongated body 4 having rectangular channels 5 extending inwardly from its ends. A pocket 6 is formed intermediate the ends of the body 4 and this pocket 6 is provided with a recess 7. By referring to Fig. 1, it will be noted that the channels 5 communicate with the ends of the pocket 6 for purposes to be hereinafter set forth.

The frame is positioned upon the tape 1 so as to cause this tape to pass through the channels 5 and the pocket 6, thereby slidably mounting the frame upon the tape.

In order to regulate the speed of the frame, a flat spring 8 is riveted or otherwise secured as indicated at 9 to the front surface of the body 4. This spring 8 is of resilient material so as to normally extend outwardly from the body 4, as shown in Fig. 1. A block 10 is carried upon the spring 8 intermediate its ends, while a friction roller 11 is rotatably mounted upon the block 10. It should be noted that the block 10 is provided with a cam-like periphery as indicated at 12 so as to conform somewhat in contour to the shape of the recess 7 of the pocket 6.

The guard 13 has its ends secured as indicated at 14 to the rear surface of the body 4. This guard 13 is spaced throughout the greater portion of its length from the rear surface of the body 4.

An eye 15 is fixedly mounted upon the lower end of the body 4 and the hook 16 is carried by the eye 15. A strap 17 is releasably carried as indicated at 18 upon the hook 16.

When this portable fire escape is in use it may used simply as a lowering means by securing the hook 3 to a portion of the garment of the person, although, of course, it is intended to be used as an escape to be operated by the person escaping. Under the latter conditions, the upper hooks 2 are secured to any suitable structure within or without the building from which the person is escaping so as to permit the tape 1 to depend. The strap 17 is then passed about the body of the person and secured as indicated at 18 to the hook 16. The operator then grips the body 4 and the spring 8 so as to urge the spring 8 inwardly toward the outer surface of the body 4. It should be noted that the guard 13 will protect the hand of the operator from injury by coming into contact with the outer surface of the structure from which the person or operator is

escaping. It is obvious that increased pressure applied to the spring 8 will cause the block 10 to move deeper into the recess 7 thus causing a binding action between the tape 1 and points of the body 4 adjacent the recess 7 as well as between the tape and the friction roller 11, as illustrated clearly in Fig. 1. It is obvious that this increased pressure will increase the friction and thus reduce the speed of movement of the frame toward the lower end of the tape. By releasing slightly the spring 8, it is obvious that the speed of the movement of the frame upon the tape will be increased as it moves toward the lower end of the tape.

From the foregoing description it will be seen that a very efficient portable fire escape has been produced which may be easily carried to any place desired and attached to a supporting object, and in which the frame will move at a desired speed upon the tape although it is only necessary for the operator to control the movement of this frame by the pressure applied thereto when the same is gripped.

It is of course obvious that many minor detail changes may be made in the construction of this invention, such for instance, as using a tape of a flexible element of any other form such as a cable or a chain upon which the frictional action of the frame may be applied, without departing from the spirit of the present invention, and for this reason it is not intended to limit the construction of the portable fire escape to the specific form herein shown, as it is intended to include all such forms of the invention as properly come within the scope of the device as claimed.

What is claimed is:

A fire escape comprising a body member provided with a longitudinal channel and a seat in the medial portion of said channel, an opening in the block opposite to said seat, a spring handle mounted on said body portion and carrying a lug extending through said opening toward said seat, a strand movable through said channel, said lug adapted to compress said strand against said seat, and a hand guard carried by said body portion confining the hand over said lug.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE A. BLAKE.

Witnesses:
GEORGE R. BLAKE,
DWIGHT H. HANKS.