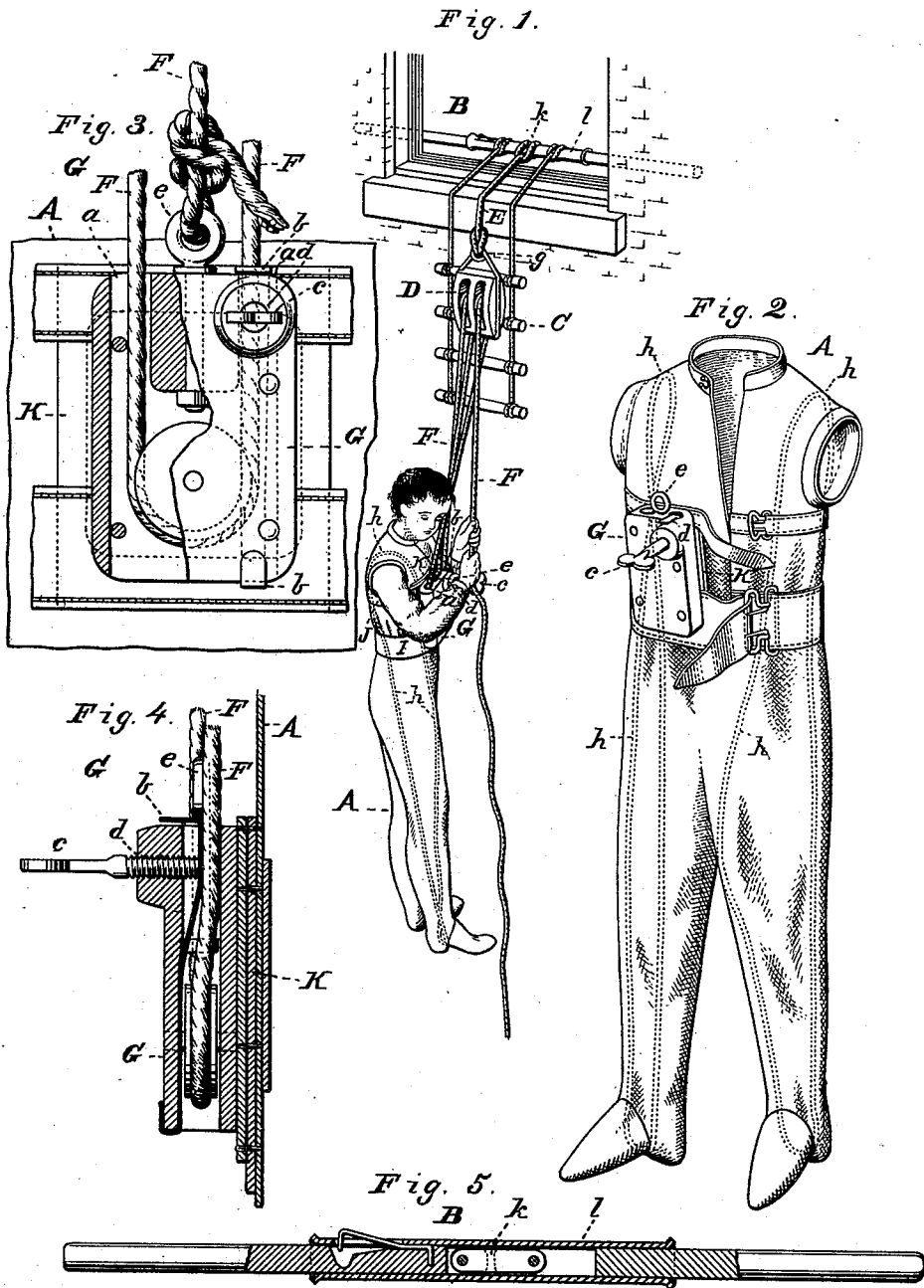


(No Model.)

J. C. BETTEN.
FIRE ESCAPE.

No. 416,550.

Patented Dec. 3, 1889.



WITNESSES:
Villette Anderson,
Mary Boykin

INVENTOR
John C. Betten,
BY
O. W. Anderson,
ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN C. BETTEN, OF EUREKA SPRINGS, ARKANSAS.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 416,550, dated December 3, 1889.

Application filed February 27, 1889. Serial No. 301,310. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. BETTEN, a citizen of the United States, and a resident of Eureka Springs, in the county of Carroll and State of Arkansas, have invented certain new and useful Improvements in Fire-Escapes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention and is a perspective view. Fig. 2 is a perspective view of the overall garment. Fig. 3 is partly a front view and partly a vertical section of the breast-block. Fig. 4 is a vertical section through the breast-block. Fig. 5 is a longitudinal section through the window-bar.

This invention has relation to portable fire-escapes; and it consists in the construction and novel combination of devices, as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings illustrating this invention, the letter A designates the overall garment, and B the window-bar; C, the ladder, and D the window-block or pulley. E is the rope whereby the block D is attached to the bar B or to a ring or immovable article in a room; and F is the escape-rope, which is reeved through the block D and through the block G of the overalls.

The fire-escape garment A consists of a body portion having arm-holes and attached legs, made of stout material and provided with small ropes or strong cords *h*, which are run in loop form over the shoulders and down the sides of the legs under the feet in casings of the garment, so that when the latter is put on and the person suspended the weight is upon these cords or ropes instead of the cloth or material of which the garment is composed. The cords or ropes are run in casings of the garment, so that they form a portion thereof.

The garment is provided with a waist-belt I and a breast-belt J, which are secured to

the same and to a strong breast-piece K, of leather, which is also secured to the front of the garment. To this breast-piece K is riveted the breast-block G, which is provided with the rope-passages *a* and with the brake-spring *b*, which is operated by means of a set-screw *c*, working through a threaded bearing *d*, communicating with one of the said rope-passages. A strong loop or ring *e* is secured to the block G, and to it is attached one end of the escape-rope F, which is rove in the window-block D and back through the breast-block G. The window-block D is provided with a stout loop or ring *g*, to which the attachment-rope E is secured. By means of this attachment-rope the window-block is secured to some immovable article in the room or to a window-bar B, which may be formed with a hinge-joint, as at *k*, and a sleeve *l*, so that when not needed for use it can be doubled in short length and put away in a trunk or other receptacle, and when needed can be opened out in full length and braced in open position by means of the sleeve.

A short ladder C, having rope sides and wooden or iron rounds, may be connected to the window-bar, so as to be in position for use at a window when the bar is placed across the same, bearing against the inside walls of the room. The ladder can be thrust through the window and will hang in convenient position to enable the operator to rest a moment before allowing himself to descend.

By manipulating the brake-screw *c* the escape-rope F can be regulated so that it will pass through the blocks D and G at the desired speed, thereby governing the rapidity of the descent; or the operator may by means of the screw set the brake-spring upon the rope with sufficient pressure to stop the descent entirely.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The fire-escape overall garment in combination with the loop-formed ropes running over the shoulders and down the legs under the feet, substantially as specified.

2. The fire-escape overall garment having the loop-formed suspending-ropes secured in casings, the waist and breast belts, the breast-

piece, to which said waist and breast belts are secured, and the breast-block having a brake, substantially as specified.

3. The combination, with a fire-escape over-
5 all garment having waist and breast belts and incased suspending-cords, of the breast-block, its spring and screw, the window-block, the escape-rope, and an attachment-rope, substantially as specified.

10 4. A fire-escape comprising a folding window-bar having a sleeve-brace, a window-

block and attachment-rope, an escape-rope, and an overall garment having a breast-block secured thereto, and looped incased suspending-ropes in said garment, substantially as 15 specified.

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

JOHN C. BETTEN.

Witnesses:

HENRY D. FIELD,
S. LINN FIELD.