

(No Model.)

W. A. JEFFERS.
FIRE ESCAPE.

No. 440,161.

Patented Nov. 11, 1890.

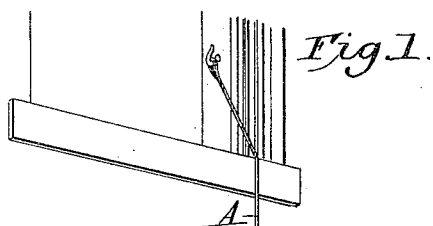
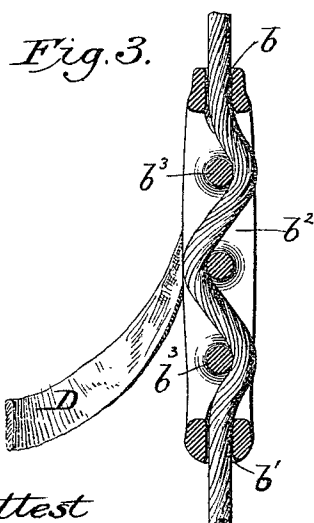
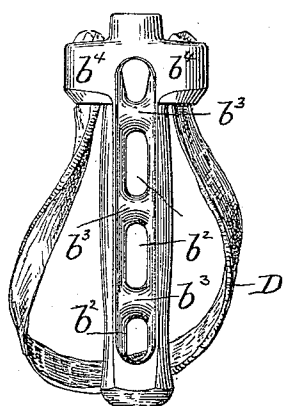
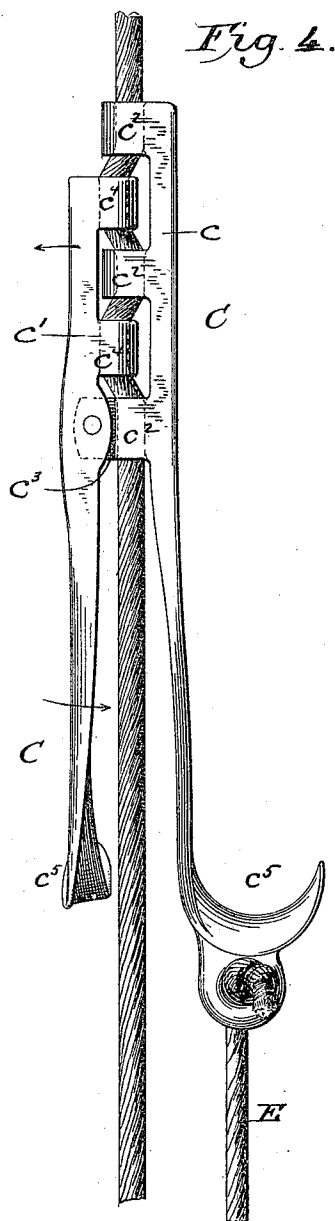


Fig. 2.



Attest

Sidney P. Hollingsworth
Baltus J. Long.



Inventor.

WILLIAM A. JEFFERS
by his attorneys

Walden Davidson & Wright

UNITED STATES PATENT OFFICE.

WILLIAM A. JEFFERS, OF MULBERRY, ARKANSAS.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 440,161, dated November 11, 1890.

Application filed July 21, 1890. Serial No. 359,380. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. JEFFERS, a citizen of the United States, residing at Mulberry, in the county of Franklin and State of Arkansas, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification.

My invention relates to that class of fire-escapes in which a cord, cable, or rope is fixed at one end to any desired part of a building, and extends through devices which are connected with the rope, so as to be held stationary thereon, or which may be allowed to descend more or less rapidly by means of friction-brakes or clutch devices.

My invention consists in the improved combinations of devices hereinafter described and claimed, and which are illustrated in the accompanying drawings, in which—

Figure 1 is a diagram view of all the devices employed. Figs. 2 and 3 are detail views of the upper brake-block, and Fig. 4 a detail view of the lower or adjustable brake-block.

The cord, rope, or cable A may be secured at its upper end to any desired part of a building, and it extends through the upper brake-block B and lower brake-block C, from which the lower end of the rope hangs loosely.

The upper brake-block B is made of any suitable material, preferably metal or hard wood, and is formed with an opening b at the top and an opening b' at the bottom, through which the rope passes. Between these ends the body of the block is slotted at b^2 , and cross-pieces b^3 , at suitable distances apart, are formed within the slot. The rope is caused to pass alternately in and out through the openings between the cross-pieces and bear against the cross-pieces, so that the descent of the block is retarded when weight is applied. The top of the block B is formed with laterally-projecting lugs b^4 , which are perforated to receive the ends of a loop D of stout tape, which serves as a hand-piece.

The lower brake-block C is formed in two parts $c c'$. The part c is provided with three laterally-projecting lugs c^2 , each of which is perforated to allow the rope to pass through. The inner or lower lug is formed with a bracket-piece c^3 , to which the part c' is hinged. The part c' is formed with two lugs c^4 , also perforated to receive the rope, and these lugs extend between the lugs c^2 when the two parts $c c'$ are hinged together. At their lower

ends the parts $c c'$ are formed with flattened hooks c^5 , which act as guards for the hand and prevent it from slipping.

A stirrup-cord E is secured to a perforated lug on the lower end of the part c of the lower brake-block.

In operation the upper end of the cord, rope, or cable is secured to any convenient part of a building. One foot is placed in the stirrup E, one hand holds the loop D, and the other grasps the parts $c c'$ of the lower brake-block. When the hand does not apply pressure to the parts $c c'$, the two brake-blocks will descend on the rope, being only slightly retarded. The descent may be retarded more or less as the lower ends of the parts $c c'$ are forced together. A sufficient amount of pressure may be readily applied by the hand to stop the descent of the brake-blocks, and consequently the descent of the person on the rope and the frictional contact may be varied so as to allow the person to descend at any desired speed.

I claim as of my own invention—

1. The combination, substantially as hereinbefore set forth, of a cord, rope, or cable, the upper brake-block through which the rope extends, the lower brake-block made in two parts hinged together and having interlocking perforated lugs, through which perforations the rope extends, and the stirrup-rope secured to the lower brake-block.

2. The combination, substantially as hereinbefore set forth, of a cord, rope, or cable, the upper brake-block formed with a central vertical slot divided by cross-pieces, and with openings at top and bottom through which the rope extends, and also with laterally-projecting perforated lugs, a flexible loop or hand-piece secured to these lugs, the lower brake-block formed of two parts hinged together and having perforated interlocking lugs, through which perforations the rope extends, and formed also with handles having guard-hooks at their lower ends, and the stirrup-rope secured to a perforated lug on the lower end of the lower brake-block.

In testimony whereof I have hereunto subscribed my name.

WILLIAM A. JEFFERS.

Witnesses:

EDGAR E. BRYANT,
H. S. SENERS.