

No. 717,352.

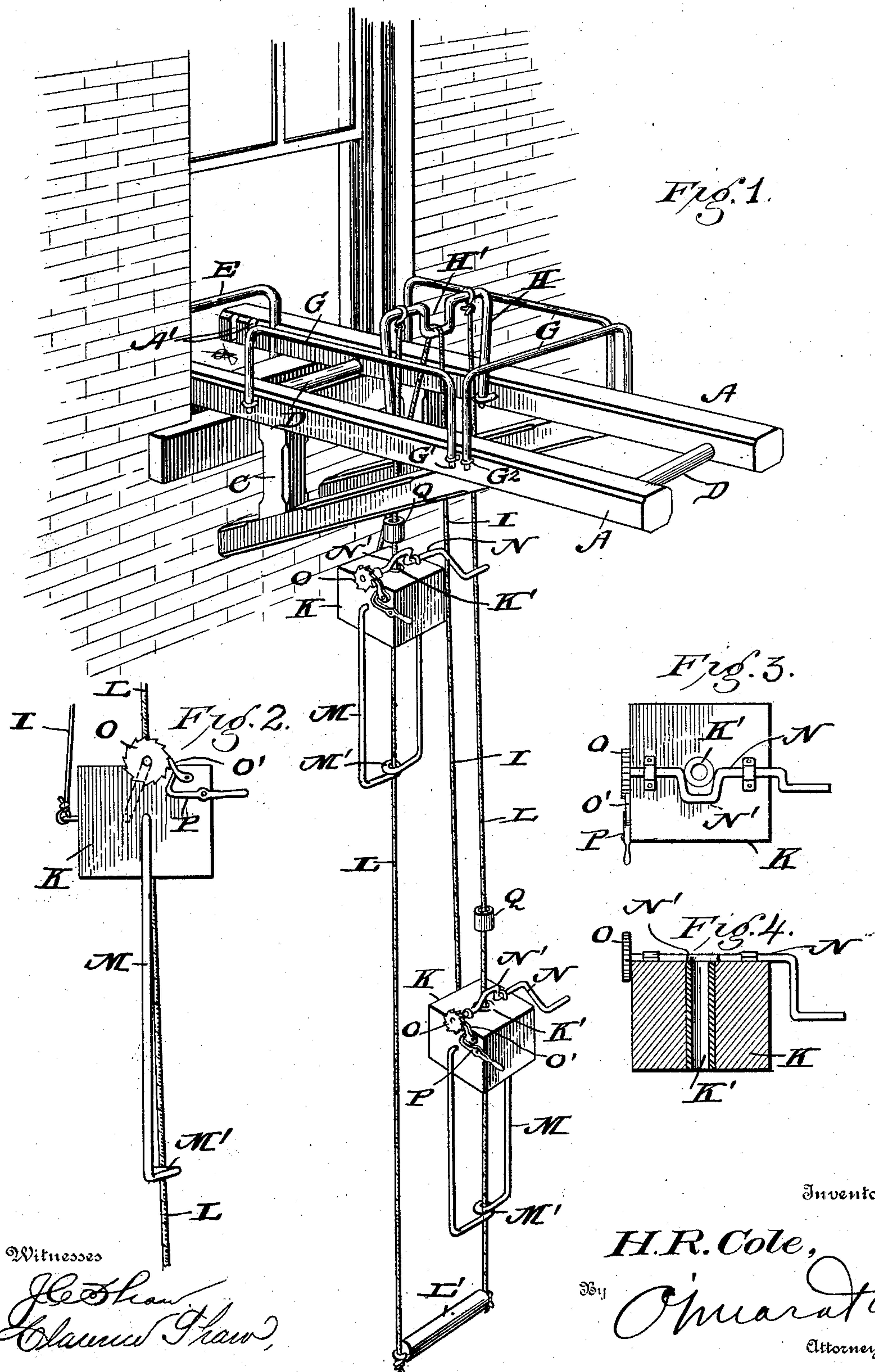
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H. R. COLE.

COMBINED WINDOW SCAFFOLD AND FIRE ESCAPE.

(Application filed Apr. 27, 1901.)

(No Model.)





# UNITED STATES PATENT OFFICE.

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## COMBINED WINDOW-SCAFFOLD AND FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 717,352, dated December 30, 1902.

Application filed April 27, 1901. Serial No. 57,769. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT ROSCO COLE, a citizen of the United States, residing at Millville, in the county of Cumberland and State of New Jersey, have invented a new and useful Fire-Escape, of which the following is a specification.

This invention relates to fire-escapes, and has for its object to provide a strong and simple construction which can be attached to a suitable scaffold and placed in the window.

With this object in view the invention consists in the peculiar construction of the various parts and in their novel combination and arrangement, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a view showing a scaffold secured to the window with my invention attached thereto. Fig. 2 is a side elevation of the invention. Fig. 3 is a top plan view. Fig. 4 is a vertical sectional view.

In constructing a supporting-scaffold in accordance with my invention I employ the side members A, having the rearwardly-extending brace-arms B, the side or bracket arms A being connected with the brace-arms B by means of the connecting members C, all of said parts being preferably constructed of hollow metal in order to make the structure as light as possible. The bracket-arms A are also connected by means of the cross-bars D, arranged adjacent to each end. The rear ends of the bracket-arms are intended to extend some distance beyond the window-sill, and the opposing faces are notched, as shown at A'', to receive the fastening-bar E, which is essentially rectangular in shape and fits into the notches A', bears against the inner face of the sill, and helps to hold the scaffold in position, as most clearly shown in Figs. 1 and 2.

The platform F has end angular extensions F', which rest upon the steps F<sup>2</sup>, and thereby hold the platform in the proper position between the side or bracket members A.

G indicates side and end railings, constructed of metal and having reduced lower ends G', which engage the staples G<sup>2</sup>, secured to the sides of the members A.

I propose to use the scaffold as the supporting portion for a fire-escape, and when so used

the platform is removed and a yoke H is supported between the side or bracket arms A, said yoke having a centrally-depressed portion H', around which a rope I passes, said rope having the blocks K attached to its opposite ends. These blocks have a central bore or aperture K', through which passes a rope L, the upper end of which rope being attached to the yoke H, while the lower ends of the ropes L are attached to a bar L', which rests close to or upon the ground and is firmly held in order to make the ropes L taut.

A depending frame M is attached to each block K and has a central loop M', through which the rope L passes. This frame M serves as a support for the body, the feet of the person resting upon the lower member of the frame.

A crank-shaft N is journaled upon the top of the block and has its crank portion N' arranged in alinement with the bore K' of the block, and by turning the crank-handle the cranked portion of the shaft can be forced and held against the rope L, creating friction and retarding the descending motion of the block and frame, so that the descent will be gradual.

A ratchet-wheel O is arranged upon the opposite end of the crank-shaft N, and a pawl O' is pivoted to the side of the block and adapted to engage the said ratchet-wheel, so that when the crank-shaft is adjusted to throw the cranked portion against the rope the ratchet and pawl will serve to lock the shaft in such adjusted position. A lever P is also pivoted upon the side of the block and has its inner end curved or hooked to engage the pawl, so that by pressing down upon the lever the pawl can be thrown out of engagement with the ratchet, and thereby release the shaft. Q indicates a sleeve, of rubber or other suitable material, which serves as a handhold for gripping the rope L with the left hand during the descent, the purpose of the said sleeve being to prevent injury to the hand by the rope.

It will be understood that as one block and frame is lowered the other block and frame is raised, and in making the escape from the window the person will first crawl out upon the scaffold and then support himself upon the frame, regulating the friction upon the



rope, and descend, the rope being held taut by pressure upon the bottom bar L'.

The mechanism herein described provides a simple, inexpensive, and thoroughly-efficient fire-escape which can be quickly and easily set up at any window.

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

10 1. In a device of the kind described the combination with the supporting-scaffold, of the detachable yoke supported by said scaffold and having a central depression, a guide-rope attached to the yoke and depending  
15 therefrom, a rope traveling over the depending portion of the yoke and the escape devices arranged at the ends of the said traveling rope, substantially as shown and described.

20 2. In a device of the kind described the combination with a yoke having a central depression of the guide-ropes suspended from the yoke and connected at their lower ends by the cross-bar, a rope traveling over the depressed portion of the yoke, the blocks at-  
25 tached to the ends of the traveling ropes provided with a depending guide for the guide-ropes, and the friction-regulating devices arranged in connection with each block, substantially as shown and described.

30 3. In a device of the kind described, the combination with the depending guide-ropes

of the yoke, the traveling rope passing over the yoke, the traveling blocks attached to the ends of the traveling rope, each block having a frame depending therefrom, and having an  
35 eye or loop at its lower end through which the guide-rope passes, a cranked shaft arranged upon the top of the block, the central portion bent outwardly and adapted to be forced against the guide-rope which passes  
40 through the block, substantially as described.

4. In a device of the kind described, the combination with the supporting-scaffold of the detachable yoke, guide-ropes connected to said yoke and depending therefrom, the  
45 traveling rope passing over said yoke, blocks attached to the ends of the said traveling rope and having central bores through which the guide-ropes pass, a depending frame carried by each block, said frame having a guide  
50 eye or loop, a cranked friction-shaft arranged upon the top of each block and adapted to bear against the guide-ropes, the ratchet arranged upon the end of the shaft, the pawl  
55 attached to the block for engaging with the ratchet and the lever portion to the block for disengaging the pawl, substantially as described.

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Witnesses:

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LEWIS A. SHAW.