(No Model.)

W. B. WILSON.

FIRE ESCAPE.

No. 589,541. Patented Sept. 7, 1897.

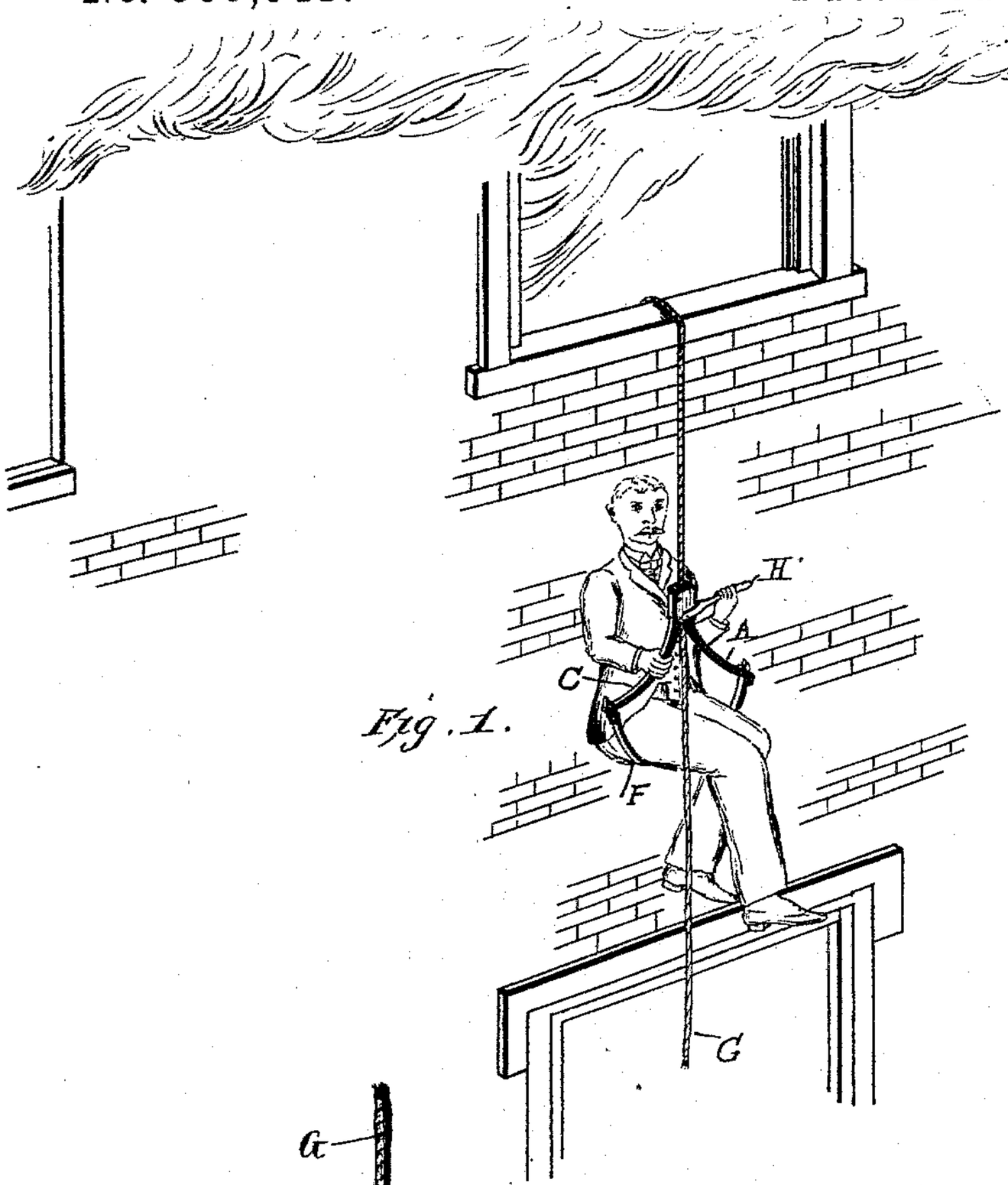

Fig. 1.

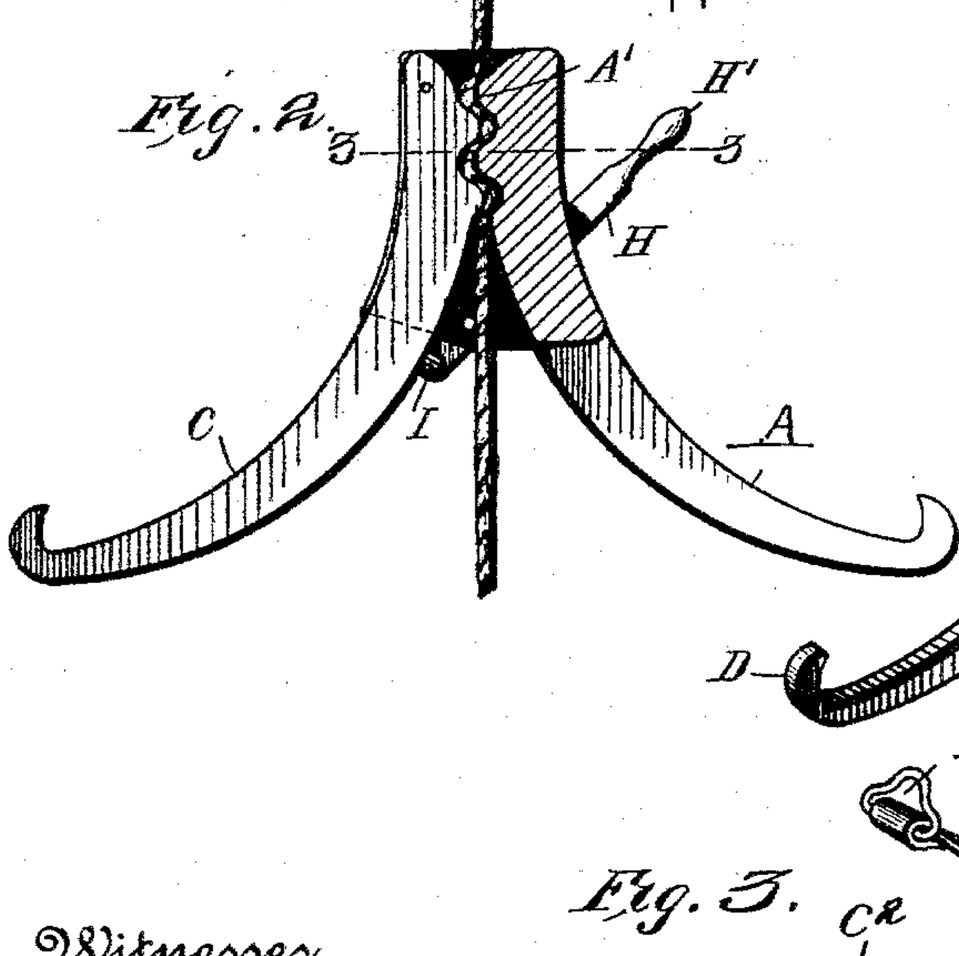

Fig. 2.

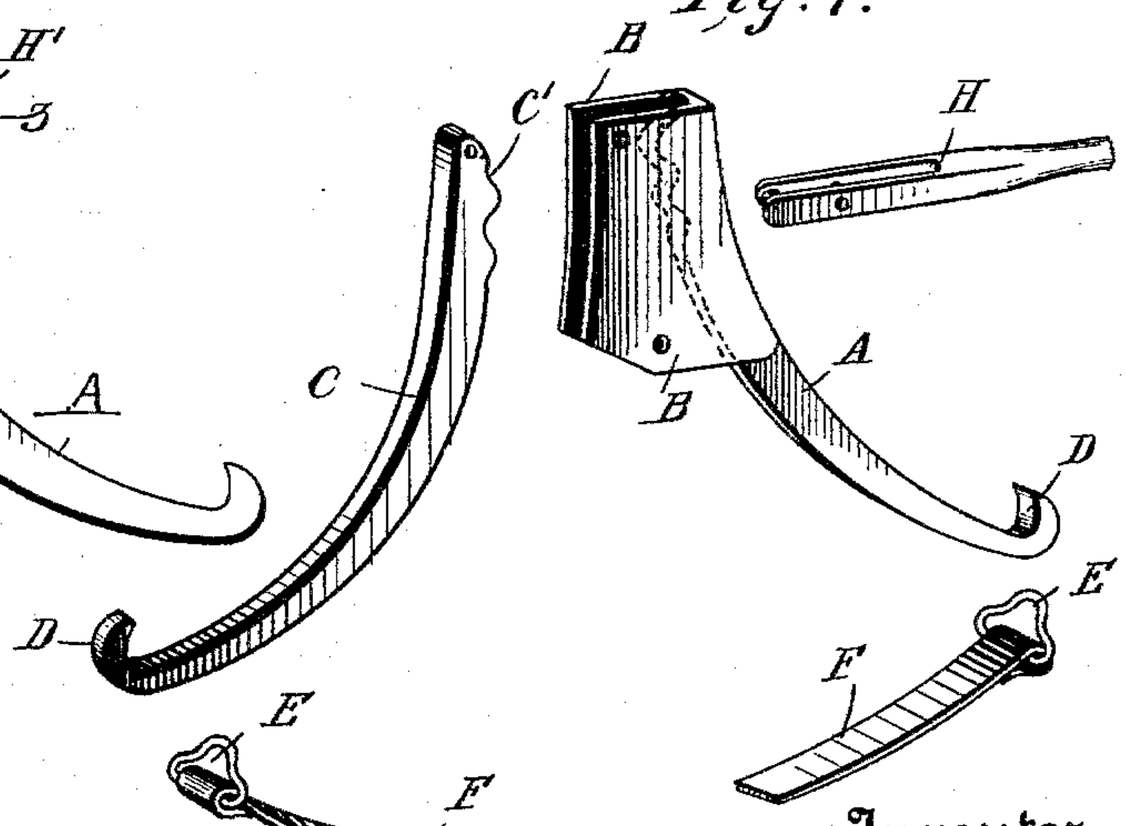

Fig. 3.

Fig. 4.

Witnesses
H. C. Sumford.
Chas. E. Brock.

Inventor
W. B. Wilson.
By
Thacher & Co
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM B. WILSON, OF ABERDEEN, WASHINGTON.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 589,541, dated September 7, 1897.

Application filed November 18, 1896. Serial No. 612,597. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. WILSON, residing at Aberdeen, in the county of Chehalis and State of Washington, have invented a new and useful Fire-Escape, of which the following is a specification.

This invention relates generally to fire-escapes, and more particularly to that class thereof known as "portable" fire-escapes, the object being to provide an exceedingly small and simple device which can be carried about in a valise; and another object of the invention is to provide a fire-escape in which the weight of the body will cause the operating parts to bear frictionally upon the escape-rope, whereby the descent will be steady and slow; and another object is to provide a regulating-lever by means of which the speed of descent can be increased or decreased as desired.

With these various objects in view my invention consists, essentially, of a pair of levers hinged together near their upper ends and connected at their lower ends by means of a supporting-strap, the upper ends being corrugated to provide a tortuous passage through which the rope passes, and a regulating-lever adapted to operate upon one of the friction-levers for the purpose of regulating the friction and consequently the speed of descent.

My invention consists also in certain details of construction and novelties of combination, 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 the practical application of my invention. Fig. 2 is a detail view, partly in section. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Fig. 4 is a view showing the various parts detached.

In the practical embodiment of my invention I employ a friction-lever A, which is preferably curved in the arc of a circle and at its upper end upon the convexed side is corrugated, as shown at A′ in Fig. 2, said corrugated portion being grooved, as shown at A^2 in Fig. 3.

Bearing-plates B are formed integral with the upper end of the lever A, and pivoted between the plates B is the friction-lever C, curved reversely to the lever A and having corrugations C′ near the upper end, which are grooved at C^2, said corrugations and grooves being arranged reversely to the corrugations and grooves upon the lever A, as shown most clearly in Figs. 2 and 3.

The lower ends of the levers A and C are formed with hooks D, upon which are placed the loops E, attached to the ends of the supporting-strap F, which supporting-strap can be placed beneath the arms or can be used as a seat to sit upon, as most clearly shown in Fig. 1.

The escape-rope G passes between the bearing-plates B and between the corrugated portions of the friction-levers, and the weight of the person supported by the strap F causes the said levers to be drawn toward each other and consequently to bear tightly against the escape-rope and crimp or twist said rope as it passes through the serpentine or tortuous passages formed by means of the mating corrugations and grooves upon the opposing faces of the friction-levers. In this manner it will be seen that the descent of the person will be extremely steady and gradual along the descent-rope, said rope having a hook or other suitable gripping device at the upper end, which can be attached to any rigid object.

In order to regulate the speed of descent, I employ a regulating-lever H, which is bifurcated at its lower end and is pivoted upon the exterior of the bearing-plates B, near their lower ends, said lever having a pin I at its lower end, which is adapted to engage the friction-lever C, so that when the handle H′ is thrown downward the pin I will be brought into engagement with the friction-lever C, moving the same outwardly, and consequently the descent will be more rapid. By slackening the pressure upon the lever H the friction will be increased and the speed decreased.

Thus it will be seen that I provide an exceedingly cheap and simple device, inasmuch as all of the parts can be made of steel or other suitable material, and, furthermore, it will be seen that I provide a device by means of which the descent can be rendered safe, easy, and steady, the weight of the body serving at all times to produce sufficient friction to render the descent extremely slow, and by

the aid of the regulating-lever the speed of descent can be increased or decreased as desired.

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

1. The herein-described fire-escape, comprising a friction-lever A having the bearing-plates formed integral therewith, the opposing friction-lever pivoted between said bearing-plates, the friction-levers being curved away from each other at their lower ends and having the corrugated upper portions, the supporting-strap attached to the lower ends of said levers, and a regulating-lever pivoted upon the exterior of the bearing-plates and provided with a pin I at its lower end to engage the lever C for the purpose set forth.

2. In a portable fire-escape, the combination with the friction-lever A having the bearing-plates formed integral at the upper portion thereof, the top part of said lever being corrugated and curved as described, of the opposing friction-lever pivoted between the bearing-plates and having the upper portion thereof corrugated and curved as shown, said friction-levers curving outwardly away from each other at their lower ends and provided with hooks at said lower portion, the supporting-strap having loops at each end adapted to engage the hooks, the bifurcated and regulating lever pivoted upon the exterior bearing-plates of the lever A and having a pin adapted to engage the inner curved surface of the lever C, substantially as shown and described.

WILLIAM B. WILSON.

Witnesses:
R. P. CAMPBELL,
M. L. PEARSON.