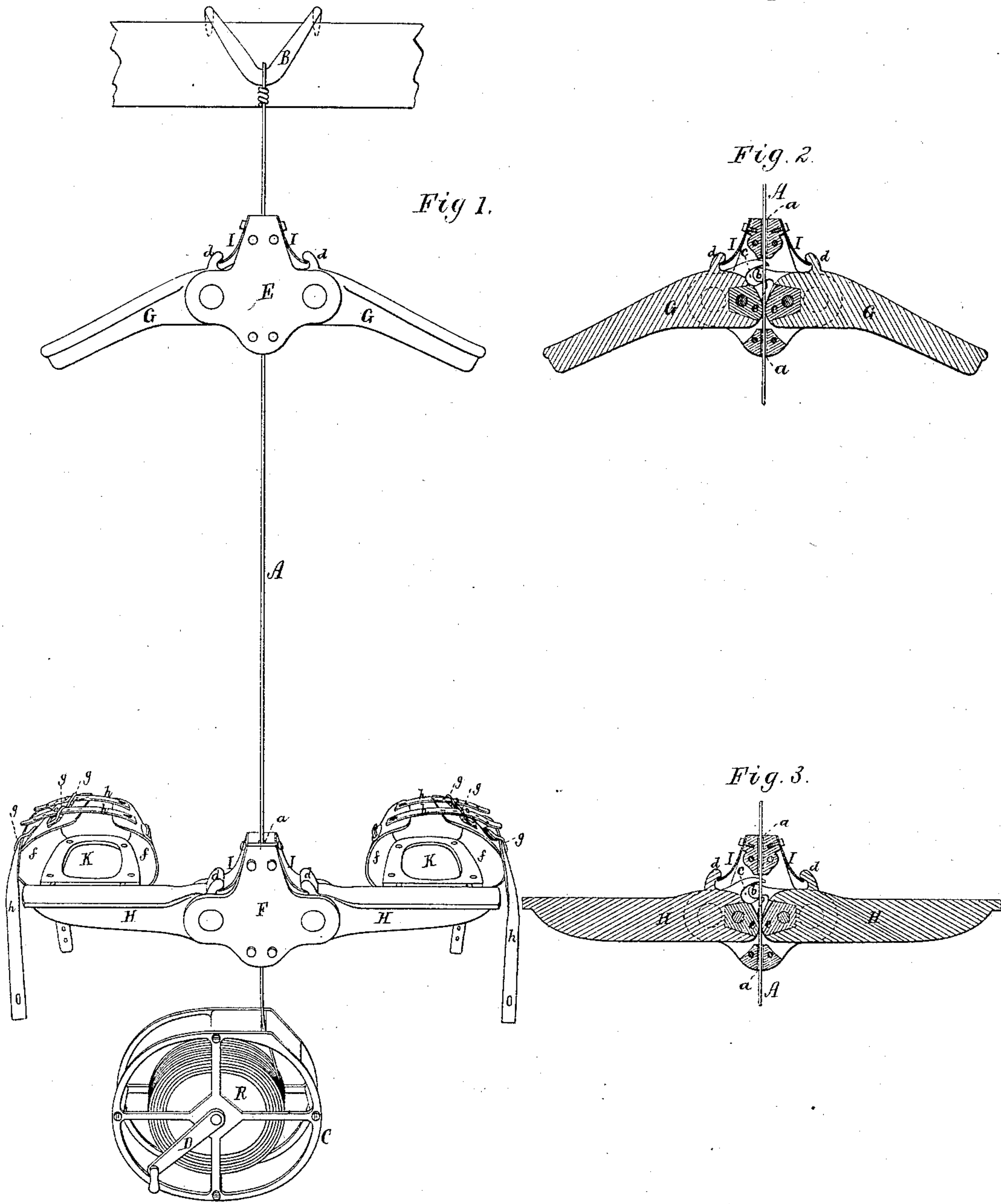


(No Model.)

G. M. HEATH.  
FIRE ESCAPE.

No. 315,025.

Patented Apr. 7, 1885.



Witnesses.  
*S. N. Pipes*  
*Ernest B. Pratt.*

Inventor.  
*George M. Heath.*  
*by R. H. Eury atty*



# UNITED STATES PATENT OFFICE.

GEORGE M. HEATH, OF ROCKINGHAM, VERMONT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO SAID HEATH, AND JOSEPH JOSIAH BARNES AND LAURENTIUS F. BARNES, BOTH OF WESTMINSTER, VERMONT.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 315,025, dated April 7, 1885.

Application filed November 24, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE M. HEATH, of Rockingham, in the county of Windham, of the State of Vermont, have invented a new and useful Improvement in Fire-Escapes; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a perspective view of a fire-escape containing my invention, the nature of which is defined in the claims hereinafter presented. Fig. 2 is a vertical section of its hand-holding clamping mechanism, and Fig. 3 is a similar section of its foot-supporting clamping mechanism, to be explained.

As a part of the fire-escape I have a wire, A, provided at one end with a duplex hook, B, for attaching it to a window-sill. This wire, like a common measuring-tape, may have at its other end a box, C, within which it may be coiled upon a shaft or drum, R, by a crank, D, applied thereto. The wire goes through suitable guide holes or passages, *a*, in two boxes, E and F, and at their middles, and between a pair of jawed levers, G G, of the one box, and H H of the other, the longer arm of each lever projecting from the box. Each lever of the pair of levers of each box is fulcrumed to the box, and there extends from the shorter arm of one lever a tooth, *b*, which enters a notch, *c*, in the shorter arm of the fellow lever. This tooth and notch are to cause each lever to be moved simultaneously by and in correspondence with the other. Above each pair of levers there is fastened to their box a pair of springs, I I, whose free ends bear against projections *d* from the levers, such springs being to move the levers so as to close their jaws *e e* upon the wire running between them.

There is projected from each longer arm of the lower pair of jawed levers a shoe or a foot-rest, K, provided with leather wings *f f*, having buckles *g g g* to one and straps *h h h* to the other, for securing the foot of a person to the rest K, very much as a skate is generally fastened to the foot of a skater.

In using the said fire-escape, a person is to apply its duplex hook to the sill of a window of a building from which he may desire to descend. Having done this, with the wire depending from the window, he is to place

his feet upon and secure them to the rests of the lower pair of jawed levers, and, seizing the longer arms of the upper pair of such levers by his hand, he is to allow his weight to bear upon the lower pair of jawed levers, so as to force their jaws into close contact with the wire to an extent to prevent the levers from slipping down upon it. Next, with his hands hold of the upper pair of jawed levers, he is to manipulate them so as to move their jaws away from the wire, which having been accomplished he is to force the said levers and their carrier or box a suitable distance down upon the wire. Next, hanging upon the said levers by his hands, he with his feet is to manipulate the lower set of jawed levers so as to loosen their grasp of the wire and move them and their carrier or box downward on the wire a distance equal, or about so, to that to which the upper pair of levers has just previously been moved thereon. In this way, by continuing to so operate, he can descend intermittently on the wire.

With the apparatus a person can intermittently ascend or climb the wire when occasion may require.

I claim—

1. The fire-escape, substantially as described, consisting of the wire, its duplex hook, the two boxes or carriers, and the two sets of jawed levers and their springs, the lower pair of said levers having means of applying or fastening the feet of a person to their longer arms, so as to enable him to move said arms either upward or downward by his feet, all being essentially and to operate as and for the purpose set forth.

2. The combination of the coiling-box and its drum, and the crank for revolving the latter with the fire-escape, substantially as described, consisting of the wire, its duplex hook, the two boxes or carriers, and the two pairs of jawed levers and their springs, the lower pair having means of securing the feet of a person to their longer arms, so as to enable him to move them either upward or downward by his feet, all being essentially as represented.

GEORGE M. HEATH.

Witnesses:

ZIM M. ALLEN,  
GEO. A. BROWN.