

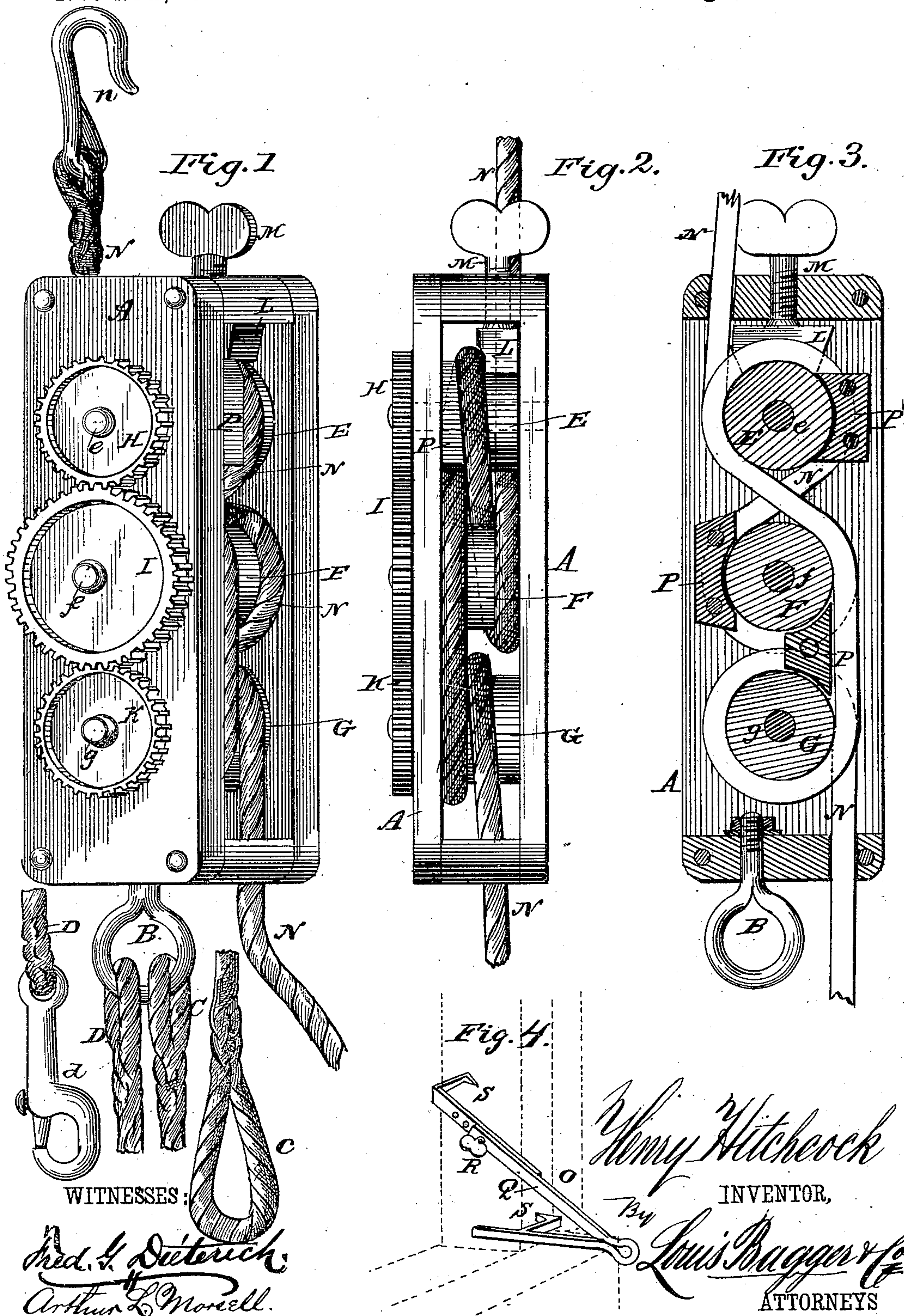
(No Model.)

H. HITCHCOCK.

FIRE ESCAPE.

No. 282,892.

Patented Aug. 7, 1883.





# UNITED STATES PATENT OFFICE.

HENRY HITCHCOCK, OF GENESEE, ASSIGNOR OF ONE-HALF TO AUGUSTINE CARPENTER, OF FLINT, MICHIGAN.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 282,892, dated August 7, 1883.

Application filed April 23, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY HITCHCOCK, of Genesee, in the county of Genesee and State of Michigan, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved fire-escape. Fig. 2 is a side elevation of the same. Fig. 3 is a longitudinal vertical section, and Fig. 4 is a detail view of the adjustable bracket used in connection with my improved escape.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to individual fire-escapes, or that class of escapes which can be carried by a traveler in his trunk or valise; and it consists in the improved construction of a frictional fire-escape of that class, as hereinafter more fully described and claimed.

In the accompanying drawings, A is the box or casing of the escape, in the lower end of which is securely fastened a hook or eye, B, for the attachment of two ropes or straps, C and D, one of which has a loop, *c*, at its lower end, while the other is provided with a snap-hook, *d*. Inside of the box or casing A are journaled three drums or pulleys, E, F, and G, the shafts of which (shown, respectively, at *e*, *f*, and *g*) are journaled in the side pieces of the casing, and provided at one end with gear-wheels H, I, and K, which intermesh with one another, as clearly shown on the drawings. In the top part of the casing, if desired, may be affixed the brake-block L, which may be regulated or controlled by means of a thumb-screw, M, which works in a threaded bearing in the top part of the casing.

N is the escape-rope, which has a hook, *n*, at its upper end, by means of which it may be secured in the adjustable bracket O. This rope passes through an aperture in the top part of

casing A, and is wound around the several pulleys E, F, and G, inside of the casing, in the manner clearly shown in the drawings. To prevent the rope at its several turns around the pulleys from wearing against itself in using the apparatus, I provide the inside of casing A with guide-blocks P, by means of which the several windings of the rope are properly spaced, so as to make one turn run free of another.

I prefer to use this escape in connection with the adjustable bracket which is shown in Fig. 4 of the drawings, one of the arms, Q, of which is made extensible, so that it can be adjusted to the width or depth of any window-casing by means of the screw R. Each of the two arms of the bracket is provided with a dog, S, which, by bearing against the wood of the window-casing and working with its point into the same, will hold the bracket securely in place, with its outer end projecting the proper distance from the wall to make a person descending swing free of the building when the apparatus is in use.

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

The combination, in an individual frictional fire-escape, of the casing A, having hook or eye B, provided with ropes or straps C D, adapted to support or hold the person using the apparatus, drums or pulleys E, F, and G, provided with the intermeshing gear-wheels H, I, and K, escape-rope N, having hook *n*, and guide-blocks P, arranged inside of casing A, as shown, and adapted to properly space rope N in its turns or windings around the several pulleys, the whole constructed and combined to operate substantially in the manner and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

HENRY HITCHCOCK.

Witnesses:

ALEX. EMERY,

W. D. RANDOLPH.