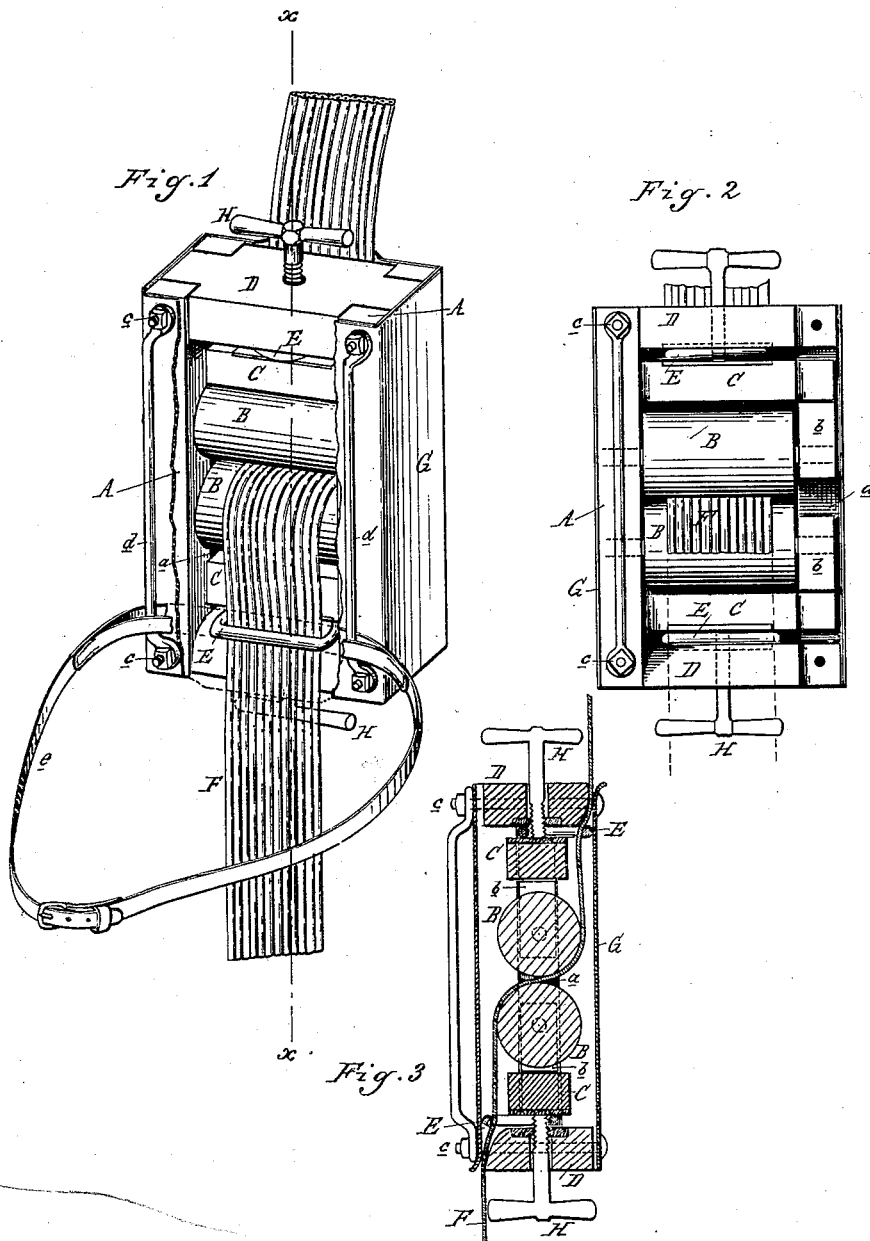


F. P. MANKIN.
Fire-Escape.

No. 221,332.

Patented Nov. 4, 1879.



Attest:
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UNITED STATES PATENT OFFICE.

FRANKLIN P. MANKIN, OF HOPKINS STATION, MICHIGAN.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **221,332**, dated November 4, 1879; application filed June 27, 1879.

To all whom it may concern:

Be it known that I, FRANKLIN P. MANKIN, of Hopkins Station, in the county of Allegan and State of Michigan, have invented an Improvement in Fire-Escapes, of which the following is a specification.

The nature of my invention relates to certain new and useful improvements in the construction of that class of devices known as "fire-escapes," made portable, by means of which the inmates of a building can lower themselves without danger from the upper floors of a building, should such be necessary, owing to other avenues of escape being cut off.

The invention consists in the peculiar construction of a portable and reversible device for the purpose, as more fully hereinafter described.

Figure 1 is a perspective view of my improved portable and reversible fire-escape. Fig. 2 is a plan view with one of the sides removed. Fig. 3 is a vertical section on the line *x x* in Fig. 1.

In the accompanying drawings, which form a part of this specification, A represents the side pieces or cheeks of my device, the inner faces of which are provided with grooves *a*, as shown in Fig. 2.

B represents two rollers, preferably covered with rubber or other flexible material, of equal length, and each end of each journaled in boxes *b*, which are fitted into and have a reciprocating motion in said grooves *a*. C represents followers, the ends of each of which also fit into said grooves. These parts all being in place, the cheeks or sides A are secured together by means of the ends D, by means of bolts and nuts *c* at each of the corners.

E are D-shaped guides inserted between the followers and the ends D of the frame, through which the webbing or belt F passes, and it (the webbing) then passes over one of the rollers and under the other, with an end projecting at each end of the frame, which is covered with a metallic cover, G. This cover

is held in place by means of the bolts and nuts *c*, which also hold in place the iron bails *d*, through which the body-belt *e* passes.

In the ends are inserted the screws H, with handles, so arranged that their inner ends will, when the handles are turned, advance or retract the followers, and thereby control the frictional bearing of the rollers against the webbing, as may be desired.

In practice the short end of the webbing is secured at or near a window, the body-belt secured about the person, who, with one hand upon the lower of the two screws, then slides to the ground upon the longer end of the webbing, which hangs out of the window, regulating the rapidity of his descent by means of the screw and its follower bearing upon the lower of the two rollers and regulating the "paying" through them of the webbing. On reaching the ground another person above casts off the upper end of the webbing, and (the body-belt being loosened from the person who has just descended) draws up, hand over hand, the other end, makes the end fast, and, strapping the device to his own body, descends like the first.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A portable and reversible fire-escape consisting of a pair of rollers journaled in boxes adapted to have a reciprocating movement, and means for regulating the friction of said rollers upon a strip of webbing, substantially as and for the purposes described.

2. A portable and reversible fire-escape consisting of the frame A D, the sides A thereof being provided with grooves *a*, rollers B, boxes *b*, followers C, actuated by the screws H, belt or webbing F, bails *d*, and cover G, all the parts being constructed and operating substantially as and for the purposes specified.

FRANKLIN P. MANKIN.

Witnesses:

H. S. SPRAGUE,
A. BARTHEL.