

(No Model.)

2 Sheets—Sheet 1.

R. J. G. MONTARDON.
PORTABLE FIRE ESCAPE.

No. 554,709.

Patented Feb. 18, 1896.

FIG. 2.

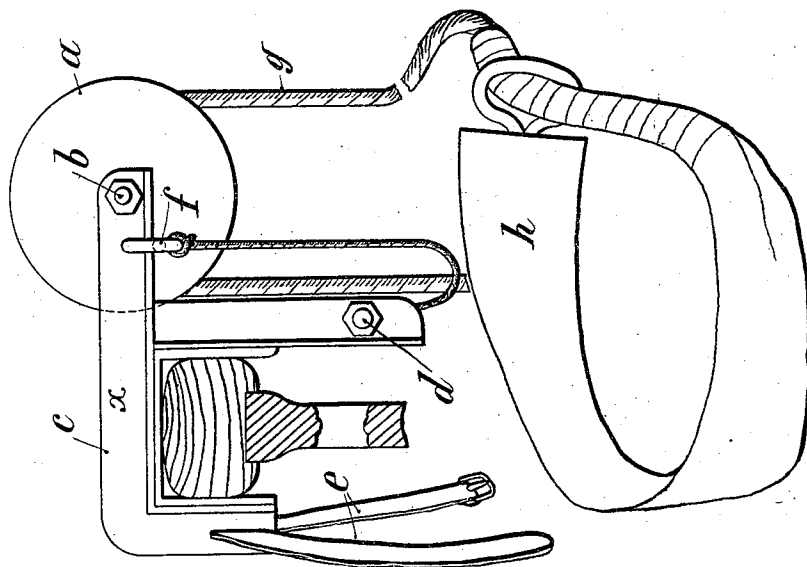


FIG. 1.

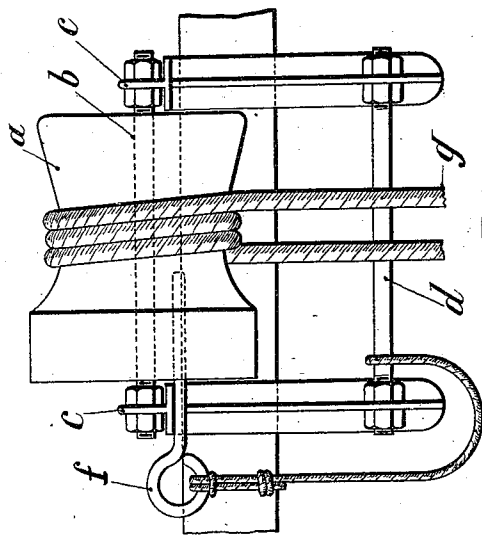
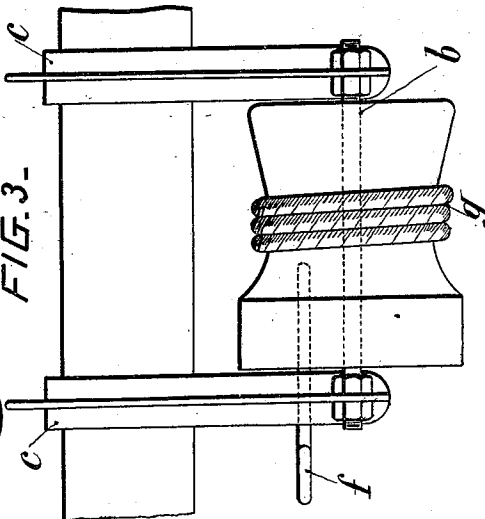


FIG. 3.



Witnesses:
L. M. Hachschlager,
R. O. Morse.

Inventor
Remy J. G. Montardon
By Briesen Knautz
his Attorneys.

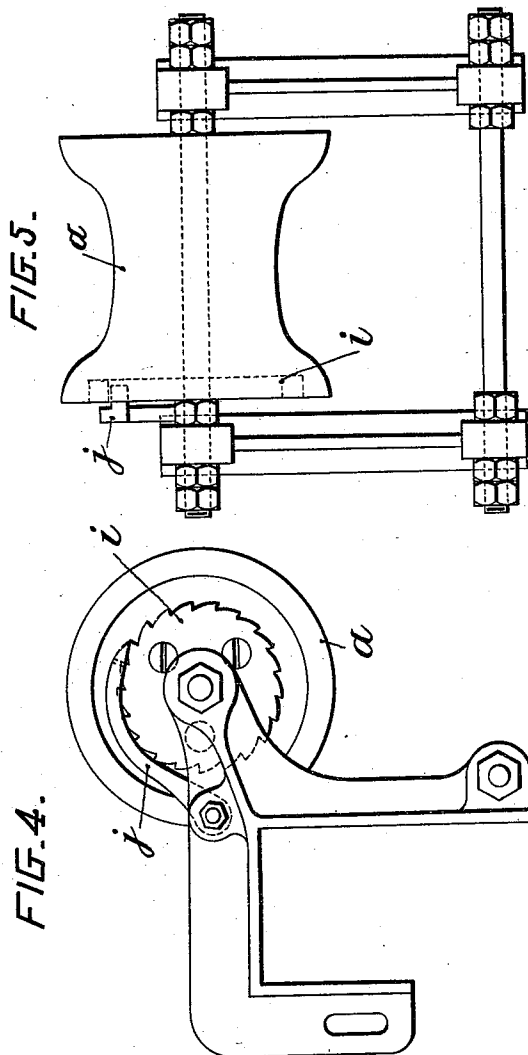
(No Model.)

2 Sheets—Sheet 2.

R. J. G. MONTARDON.
PORTABLE FIRE ESCAPE.

No. 554,709.

Patented Feb. 18, 1896.



Witnesses:
L. M. Hachschlager,
Geo. C. Moore.

Inventor
Remy J. G. Montardon
By Briesen Knautz
his Attorneys.

UNITED STATES PATENT OFFICE.

RÉMI JEAN GEORGES MONTARDON, OF PARIS, FRANCE.

PORTABLE FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 554,709, dated February 18, 1896.

Application filed September 28, 1895. Serial No. 563,970. (No model.) Patented in France June 30, 1894, No. 239,720.

To all whom it may concern.

Be it known that I, RÉMI JEAN GEORGES MONTARDON, of the city of Paris, France, have invented an Improved Domestic Fire-Escape, (for which I have obtained Letters Patent in France for fifteen years, dated June 30, 1894, No. 239,720,) of which the following is a full, clear, and exact description.

My invention relates to a portable fire-escape which is of simple construction, easy of manipulation, and can be readily fixed to the window-sill or balcony or to hooks on the building provided for the purpose, so that no time, which is of such consequence in an emergency, need be lost. By means of this apparatus the occupants of a building may quickly escape without external aid.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a face view, Fig. 2 a side view, and Fig. 3 a plan, of the apparatus. Fig. 4 represents a side view, and Fig. 5 a face view, of a modified arrangement of the apparatus.

The same letters of reference denote like parts in all the figures.

The fire-escape consists essentially of a drum *a*, mounted to turn loosely upon an axle *b* carried by brackets *c c*, and secured by means of nuts screwing on the ends of said axle. The brackets *c* are braced together by tie-rod *d*, as shown in Fig. 1, and are extended to form U-shaped braces *x*, which may be readily fixed to the window-sill or balcony to form a brace on each side thereof. The brackets *c* may be provided with leather straps *e* for more securely attaching the apparatus to the balcony or other rigid support.

In descending, the drum *a* is held fast, it being provided for this purpose with a perforation at one end to receive a pin *f*, which abuts against one of the brackets, and so prevents the drum from rotating. Upon the drum *a* are coiled two, three or four turns of a rope *g*, one end of which is provided with a band *h* of leather or other suitable material, terminating in a running loop, as seen.

The apparatus is of sufficiently small size to be inclosed in a box; but care should be taken to keep the rope coiled upon the drum, so that the escape may be always ready for use.

On an alarm of fire the apparatus is imme-

diately applied to the window, the pin *f* being inserted so as to prevent rotation of the drum. The band *h* is then passed under the arms, and the person escaping then allows himself to descend by his own weight, the descent being checked by gently grasping the free end of the rope. In this manner the arms and legs are completely free, so as to enable the person escaping to avoid striking in his descent against cornices or other projecting parts of the building. During the descent the rope slips on the drum *a*, as the latter is prevented from rotating, and consequently but a very little effort is required to steady the person descending. On reaching the ground the person using the escape releases the band, which may then be drawn up again to enable another person to use the escape, the pin *f* having been first removed from the drum by a person in the room, so as to permit the drum to rotate. In this manner a number of persons may be rescued in succession, care being taken to replace the pin *f* in position before each descent. When all the inmates have been rescued, the last person remaining passes the band under his arms, throws out of the window all the rope remaining in the room, and after inserting the pin *f* in the drum descends by his own weight, the free end of the rope being held either by him during his descent or by another person in the street.

In cases where any of the inmates of a house are too timid or unable through illness or other cause to avail themselves of the apparatus it may be used as an elevator for going in search of them. For this purpose after fixing the apparatus the pin *f* is withdrawn and the band lowered to the ground, after which the other end of the rope, which should simply be passed over the drum without being coiled thereon, is thrown out of the window, so as to enable any one after placing the band under the arms to draw himself up or be drawn up by others by pulling on the free end of the rope. In this manner the rescuer is enabled to enter the building in search of any person remaining in it, and can then proceed to lower them to the ground in the manner before described. The lowering operation occupies but a few moments and the raising operation can be performed in less than half a minute.

In the arrangement represented in Figs. 4 and 5 the drum *a* is provided with a ring of ratchet-teeth *i* recessed therein at one end, with which a pawl *j* pivoted to bracket *c* engages. This ratchet and pawl may be used in lieu of the stop-pin *f*, the employment of which is therefore optional.

I claim—

A portable fire-escape for descending from or ascending to the upper stories of buildings consisting essentially of brackets *c* extended to form U-shaped braces *x* with means thereon for securing said brackets to the window-sill, balcony, or other part of the house, an axle carried by said brackets, a rotatable drum mounted upon said axle, means for effecting an engagement and disengagement

between the drum and the brackets for allowing of or preventing the rotation of the drum, and a rope coiled around the drum and having one end provided with a band adapted to be passed around the person, the said rope forming the means for controlling the descent or elevation of the person, all substantially as hereinbefore described and illustrated in the drawings.

The foregoing specification of my improved domestic fire-escape signed by me this 13th day of August, 1895.

RÉMI JEAN GEORGES MONTARDON.

Witnesses:

JOHN PRESTON BEECHER,
G. PERREN.