

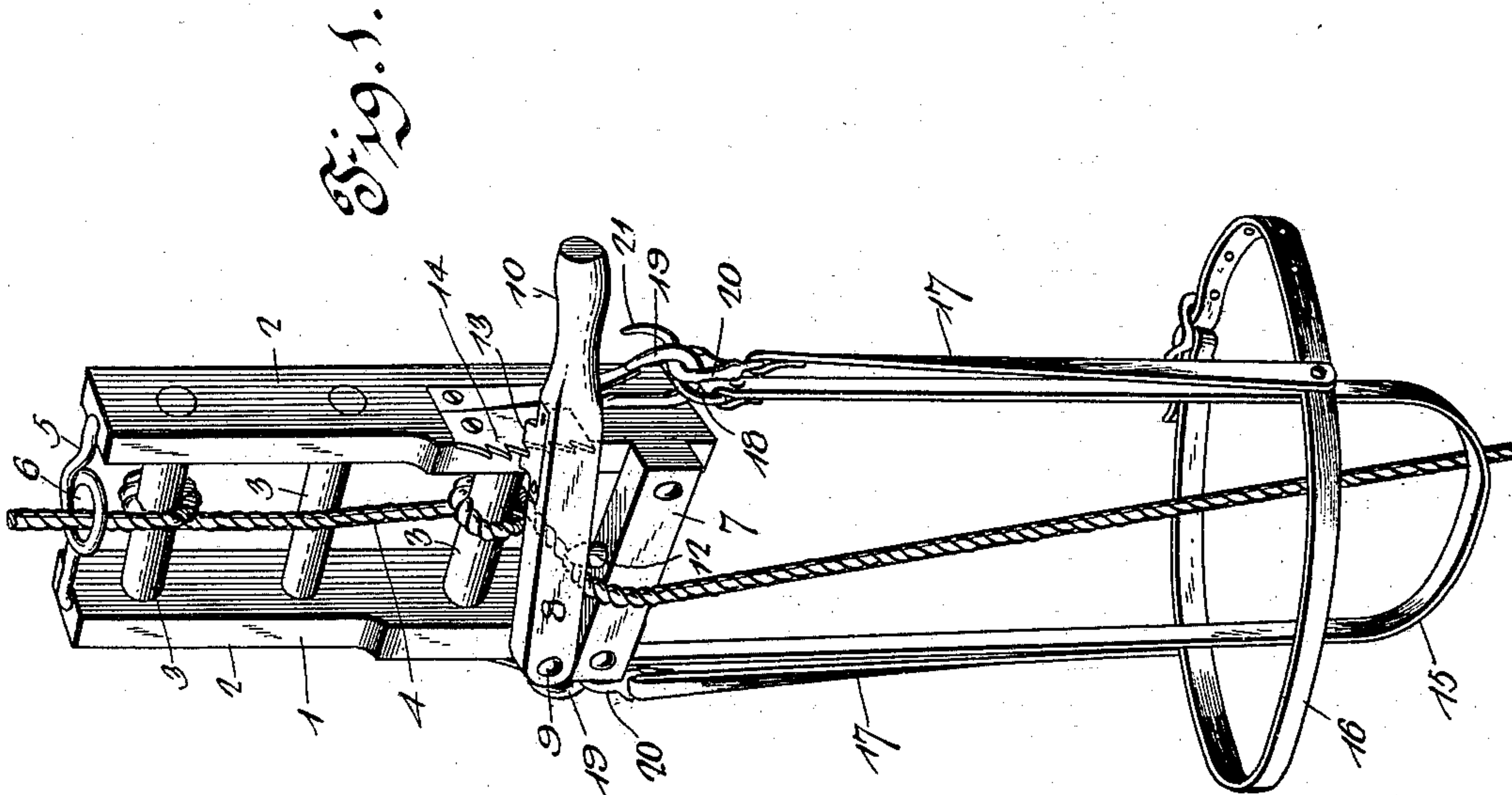
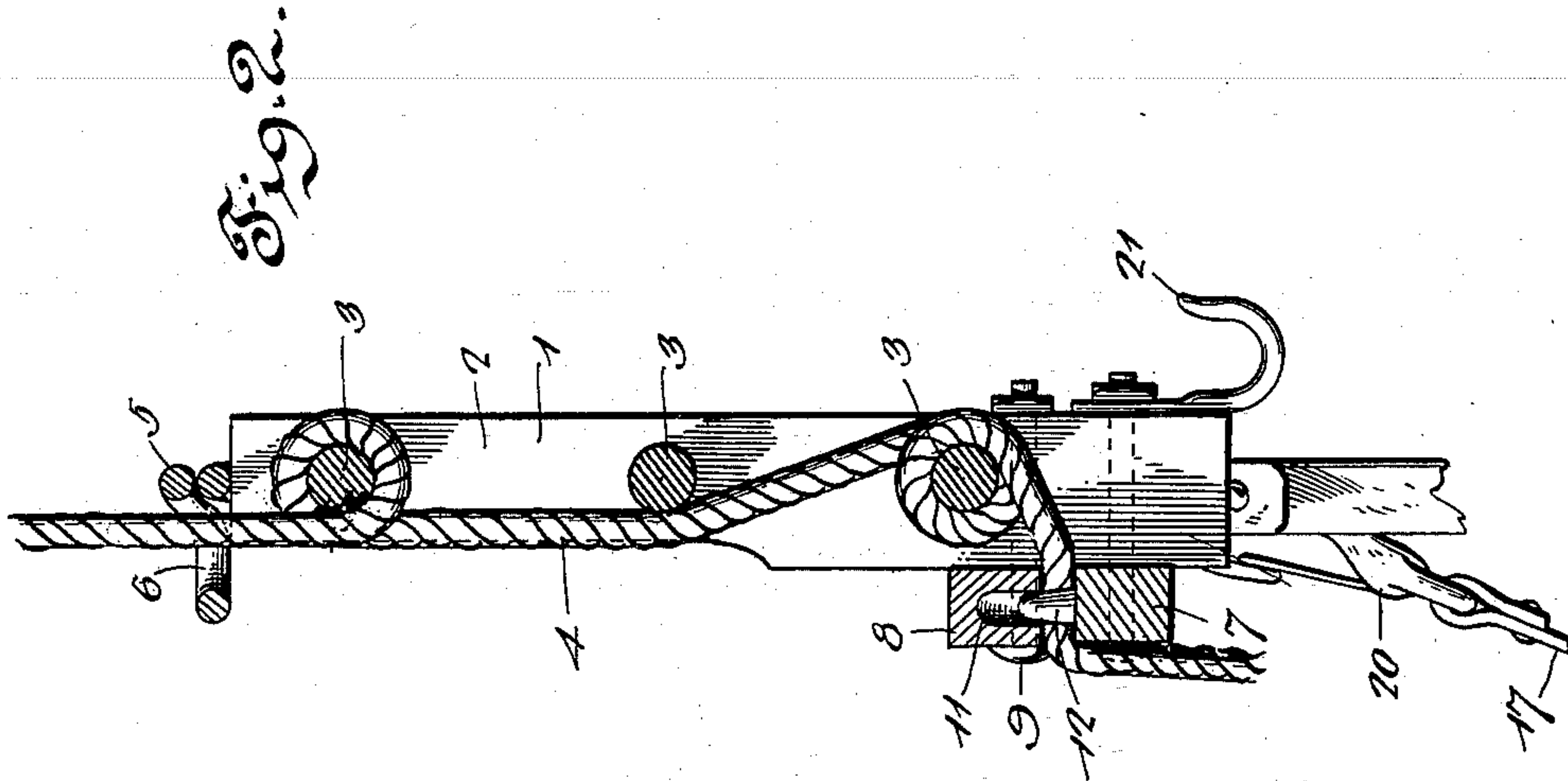
No. 637,709.

Patented Nov. 21, 1899.

T. D. CONNELLY.
FIRE ESCAPE.

(Application filed Aug. 4, 1899.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

TIMOTHEY D. CONNELLY, OF ESTES, MISSOURI.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 637,709, dated November 21, 1899.

Application filed August 4, 1899. Serial No. 726,175. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHEY D. CONNELLY, a citizen of the United States, residing at Estes, in the county of Pike and State of Missouri, have invented a new and useful Fire-Escape, of which the following is a specification.

The invention relates to improvements in fire-escapes.

One object of the present invention is to improve the construction of fire-escapes and to provide a simple, inexpensive, and efficient device designed for enabling a person to descend a rope at the desired speed to escape from a burning building or for any other purpose and capable of enabling the descent of a person to be readily controlled and of providing means for securely attaching a person to it.

A further object of the invention is to provide a device of this character adapted to accommodate itself to ropes of different sizes and capable of enabling various objects to be conveniently carried downward by a person operating the device.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a fire-escape constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same.

Like numerals of reference designate corresponding parts in both figures of the drawings.

1 designates a substantially oblong frame designed to be constructed of either wood or metal and composed of sides 2 and transverse rounds or bars 3, arranged near the center and ends of the frame and adapted, as illustrated in Fig. 2 of the accompanying drawings, to have a rope 4 passed around them to retard the descent of the frame. The frame is provided at its upper end with a guide 5, having an eye 6 arranged equidistant of the sides and adapted to retain the rope at the center of the frame and to prevent it from binding against the sides thereof.

The guide, which may be constructed in any suitable manner, preferably consists of a rod coiled to form an eye and having its termi-

nals secured to the upper ends of the sides of the frame.

The descent of the frame is positively controlled by a brake consisting of a rigid cross-bar 7 and a lever 8. The cross-bar 7 is bolted or otherwise secured to or connected with the sides of the frame at the lower ends thereof, and the lever is fulcrumed at one end on one of the sides of the frame by a bolt 9 or other suitable fastening device, and it is extended beyond the other side of the frame and shaped to form a handle 10. The lower portion of the rope is passed from the lowermost round 3 between the bars 7 and the lever 8 and is clamped to the desired extent by pressure applied to the handle end of the lever, which is provided between its ends with a depression or socket 11, arranged to receive a projection 12 of the cross-bar, whereby the lever is supported against inward and outward movement and is prevented from being strained by the passage of the rope through the brake. After the desired pressure is applied to the lever the latter is locked by means of a tooth 13, carried by the lever, and a ratchet 14, secured to the adjacent side of the frame. The teeth of the ratchet may, if desired, be formed integral with the side of the frame, and after the lever has been properly set it will not require further attention.

The operator or person descending is supported by a seat 15 and a belt 16, connected with the sides of the frame by straps 17. The seat consists of a strap provided at its ends with eyes or rings 18, which are linked into snap-hooks 19, secured to the outer faces of the sides of the frame. The belt is provided with a suitable buckle, and its straps are provided with snap-hooks 20 to engage those of the frame. The snap-hooks of the frame consist of hooks secured to the lower portions of the sides and springs secured at their upper ends to the sides of the frame and having their lower ends engaging the bills of the hooks.

The sides of the frame are provided at their lower ends with rearwardly-extending hooks 21, adapted to receive such articles as a person desires to carry with him when escaping from a burning building or other danger.

It will be seen that the fire-escape is exceedingly simple and inexpensive in construc-

tion, that it possesses great strength and durability, and that it is adapted to be applied to ropes of various sizes. It will also be apparent that the descent of a person may be readily controlled and that after the brake-lever has been properly adjusted it may be locked in such position. Furthermore, it will be seen that the straps securely fasten a person to the device and effectually prevent any accident happening to him should he lose his self-possession or become insensible through fright. Also, the device is adapted to convey to the ground various articles desired by a person in escaping from a building.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. A device of the class described comprising a frame having rounds to receive a rope or line, and a brake composed of a bottom cross-bar arranged horizontally and provided with a vertical projection, and a lever ful-

crumed on the frame above the said cross-bar and adapted to be drawn downward toward the same to clamp the rope or line, whereby the weight of a person may be utilized for this purpose, said lever being provided with a socket receiving the said projection to prevent the lever from being forced laterally by the pressure exerted on it or by the movement of the rope, substantially as described.

2. A device of the class described comprising a frame having rounds to receive a rope, a cross-bar provided between its ends with a projection, a brake-lever fulcrumed at one end on the frame and provided between its ends with a socket to receive the projection, and a ratchet arranged at one side of the frame in position to be engaged by the lever, substantially as described.

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

TIMOTHEY D. CONNELLY.

Witnesses:

JOHN W. MARTIN,
HOMER W. MARTIN.