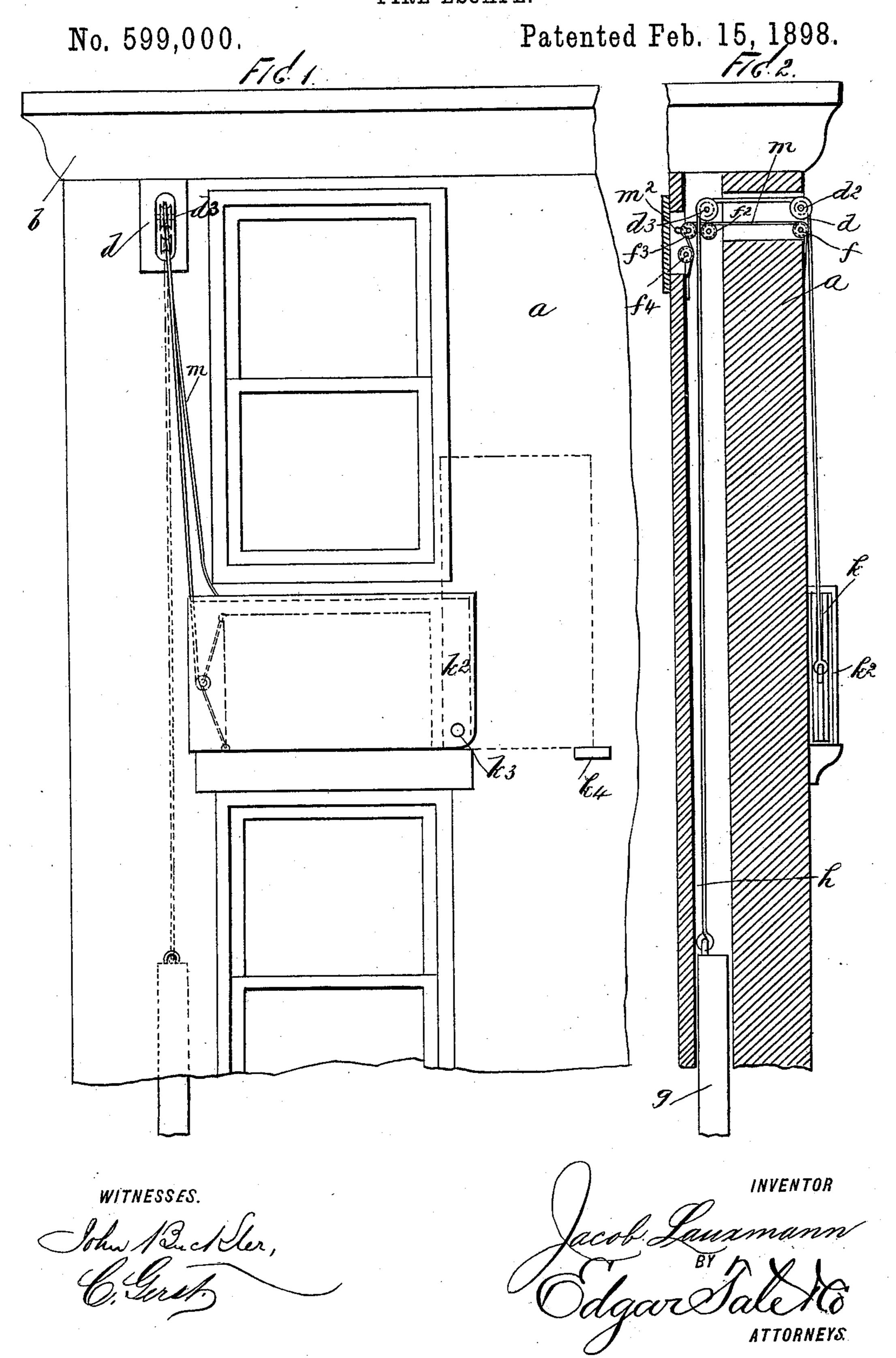
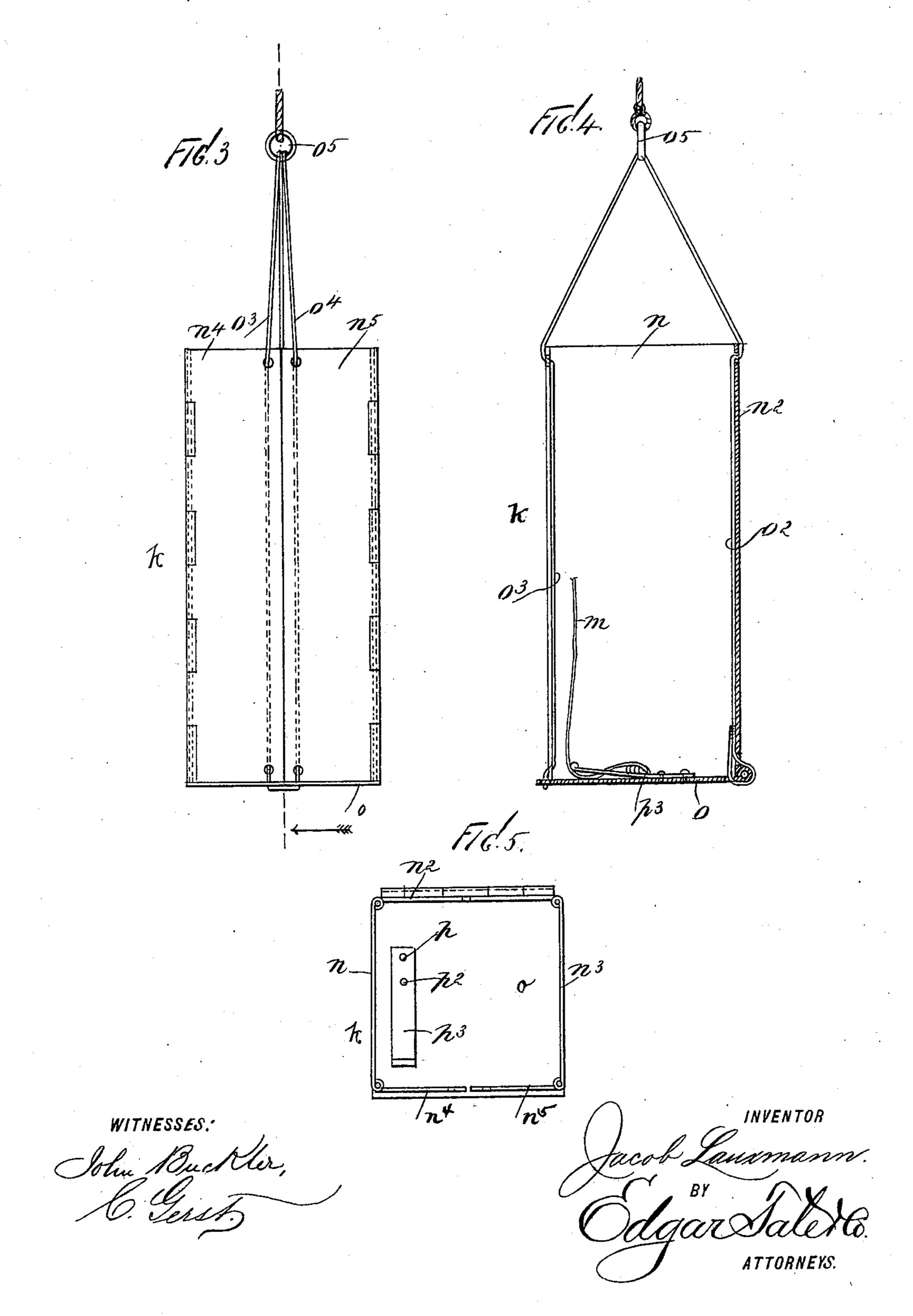
## J. LAUXMANN. FIRE ESCAPE.



## J. LAUXMANN FIRE ESCAPE.

No. 599,000.

Patented Feb. 15, 1898.



## United States Patent Office.

JACOB LAUXMANN, OF NEW YORK, N. Y.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 599,000, dated February 15, 1898.

Application filed August 31, 1897. Serial No. 650,138. (No model.)

To all whom it may concern:

Be it known that I, Jacob Lauxmann, a subject of the Emperor of Germany, residing at New York, in the county of New York and 5 State of New York, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

My invention relates to fire-escapes, and has for its object the production of an article of the above-described class which can be attached to the building without consequent disfigurement, which is constantly ready for use, and which by the arrangement of parts will also permit descent from any altitude without danger of such an accelerated movement as to endanger the life or limb of the person using the same.

My invention consists in the novel features of construction hereinafter described, and more particularly pointed out in the claims

hereto appended.

Referring to the accompanying drawings, Figure 1 is a front view of my improved fire-escape, showing the various parts in their relation to a building when in use; Fig. 2, a sectional view of the same; Fig. 3, an elevation of the carriage as upheld and ready for use; Fig. 4, a section on the line 4 4 of Fig. 3, and Fig. 5 a plan view of said carriage.

Like letters refer to like parts throughout

the several views.

In the accompanying drawings,  $\alpha$  denotes the front of an ordinary house, and b denotes the roof-cornices thereof. Firmly built in the walls of the house is a pulley-bearing casing d, in which are mounted pulleys  $d^2 d^3$ , to which are adapted to guide the main cable h, one end of which is attached to the carrier k and the other end to a counterweight g, which is preferably of such magnitude as to render it of the greatest use. The counterweight g15 slides in a vertical casing provided within the interior of the house. The said weight is maintained in such a relation to the carriage as will permit of the complete descent of the same when it is brought into use. Pivso oted in the casing are pulleys f,  $f^2$ ,  $f^3$ , and  $f^4$ , around which passes an auxiliary cable m, which passes through the car and is stored

therein. One of these pulleys, as  $f^3$ , is made adjustable by means of a slot  $m^2$ , by means of which it may be subjected to a certain 55 amount of lateral play. One end of the auxiliary rope m is firmly attached to the casing within the interior of said house.

The carriage k is preferably composed of sheet-metal plates  $n n^2 n^3$ , forming three sides 60 thereof, and two doorways in the front composed of plates  $n^4 n^5$ . These plates are preferably so hinged together as to render the carriage collapsible, and are secured by means of a bottom plate o, hinged to the plate  $n^2$ , 65 and by means of ropes or cables  $o^2$  and  $o^3$ , which are attached to the plates  $n^2$  and  $n^4$  and  $n^5$ , respectively, and to said bottom plate o. The top of said carriage is left open. The ropes  $o^2$  and  $o^3$  are brought together and 70 united by a suitable link o<sup>5</sup>, to which the main cable h is designed to be attached. Passing from the pulley to said carriage is an auxiliary rope m, which is designed to pass under a foot-brake  $p^3$ , which is secured to the 75 floor of the carriage by means of rivets or other suitable attaching means  $p p^2$ .

When the carriage is not in use, it is folded and placed within the casing  $k^2$ , attached to the walls of the house by means of a pivot 80  $k^{3}$ , which casing is adapted to receive said carriage in this position and designed to swing upwardly on said pivot until the lower free end thereof comes in contact with a checkblock  $k^4$ , as shown in Fig. 1 of the drawings. 85 This casing is preferably made ornamental and to so blend with the decoration on the front of the house as to prove rather ornamental than otherwise. It is obvious that any number of these devices may be attached 90 to a building, and the casing with which the weights g are designed to slide may be so constructed as to accommodate a sufficient number of weights to permit of an increase in number of carriages without interfering 95 with the operation of each other.

The fire-escape in operation acts as follows: The weight g will normally rest at a point in its casing which will permit the carriage to entirely reach the ground. When it is desired to use the escape, the casing  $k^2$  is swung upon the pivot  $k^3$ , thus permitting the free use of the carriage k in which the person intends to escape from the building. The said

carriage is then unfolded and may be brought in the proper relation to the window from which the escape is to be made by elevating the same, and when it reaches the desired 5 altitude held in this relation by means of the auxiliary rope m, which, by compressing the pulleys  $f^2$  and  $f^3$  against the main cable h, will act as a brake on said cable. The weight gis ordinarily of such magnitude as to permit ro of a steady descent at a speed which will not injure the carriage or its occupant; but when the weight of the occupant is disproportionate to that of the counterweight g the pulleys  $f^2 f^3$  may be brought into contact with the 15 main cable with sufficient pressure to retard said downward movement. To obviate any difficulty which might be occasioned by the necessity of operating this brake by hand, I provide the foot-clamp  $b^3$ , which may be used 20 to secure that end of the auxiliary rope m which is coiled within said carriage.

It is to be observed that there are many minor details of construction which will come within the scope of my invention and which 25 it is not my intention to exclude therefrom.

By the means above described the objects of my invention are fully accomplished and a fire-escape is produced which is perfectly safe, which is provided with means by which 30 the velocity of its descent may be governed, and which can be applied to a building without disfiguring the same.

Having fully described my invention, I claim as new and desire to secure by Letters 35 Patent—

1. In a fire-escape, a carriage, a counterweight, connection between said carriage and said counterweight, pulleys mounted in the structure of the building over which said con-40 nection is adapted to pass and means where-

by the velocity of descent may be regulated from within the carriage, substantially as described.

2. In a fire-escape, a carriage, a counterweight, connections between said carriage 4 and said counterweight, pulleys mounted in the structure of the building over which said connection is adapted to pass, a rope-clamp acting upon the said connections, comprising a stationary pulley, and a sliding pulley, and 59 a rope adapted to move said sliding pulley to clamp the rope or other connections passing between said pulleys, said rope being stored in the carriage whereby the velocity of the descent of the carriage may be regu- 5. lated from within the carriage, substantially as described.

3. In a fire-escape, a carriage consisting of side walls hinged together, a floor hinged to one of said walls, ropes attached to said floor, 60 and means whereby said carriage by means of said ropes may be lowered, and means whereby the velocity of the descent thereof may be governed from within the carriage, substantially as described.

4. In a fire-escape, a carriage, means for operating the same, a casing pivoted at one corner thereof to the front of the building and adapted to receive the carriage and a block whereby the movement of said casing is lim- 70 ited, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 28th day of August, 1897.

JACOB LAUXMANN.

Witnesses:

C. GERST, T. M. CARR.