

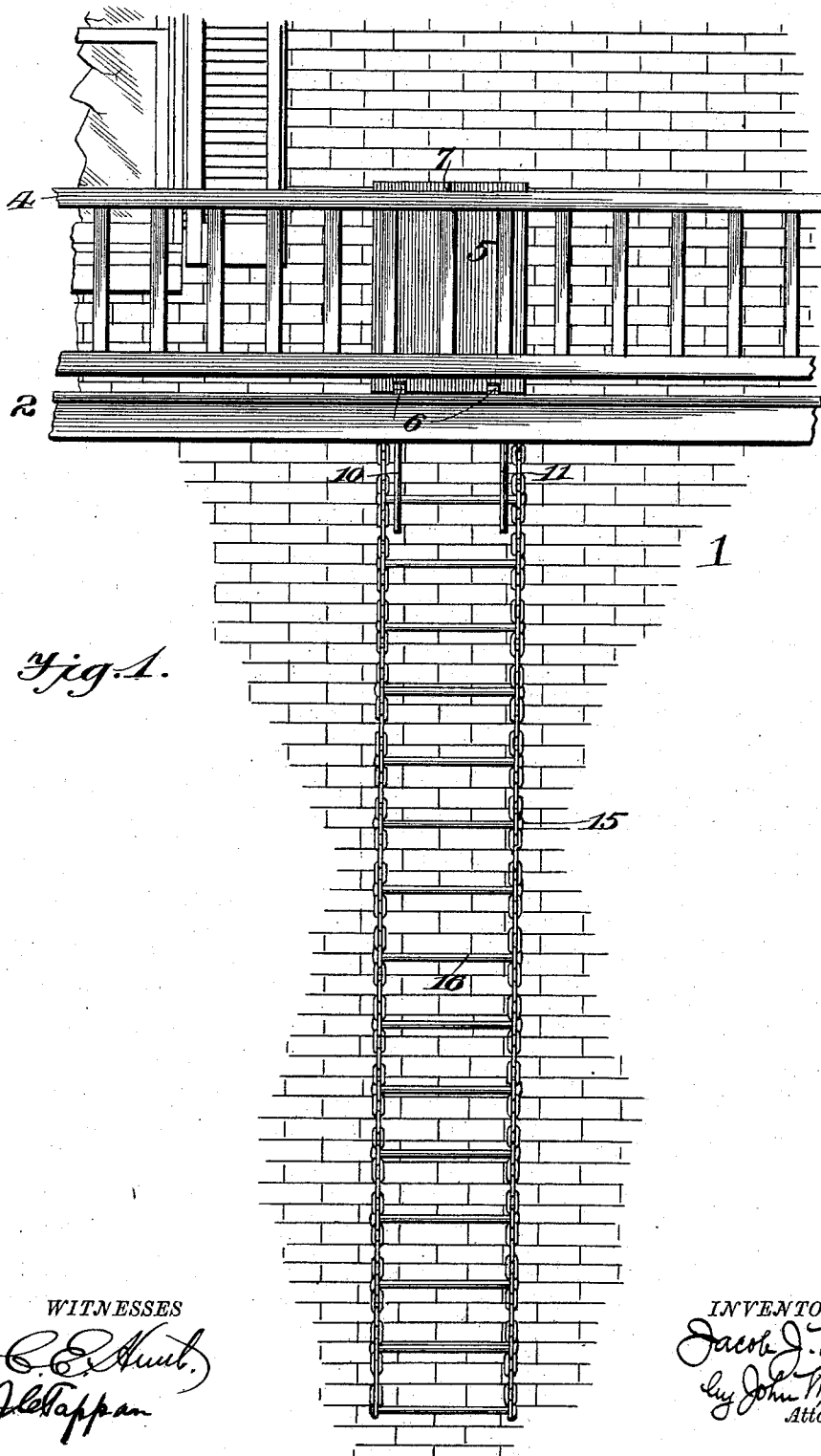
(No Model.)

2 Sheets—Sheet 1.

J. J. MARKEL.  
FIRE ESCAPE.

No. 580,670.

Patented Apr. 13, 1897.



WITNESSES

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INVENTOR

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

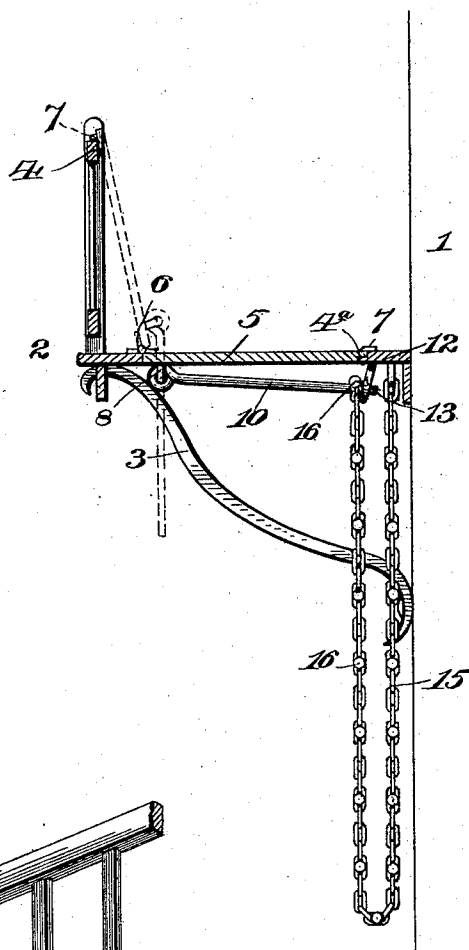
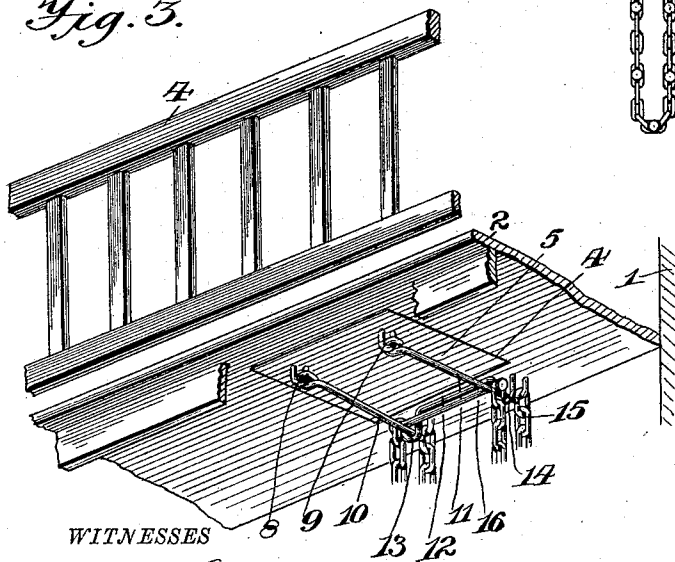


Fig. 3.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JACOB J. MARKEL, OF NANKIN, OHIO.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 580,670, dated April 13, 1897.

Application filed October 15, 1896. Serial No. 608,966. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB J. MARKEL, a citizen of the United States, residing at Nankin, in the county of Ashland and State of Ohio, have invented certain new and useful Improvements in Fire-Escapes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to fire-escapes.

My object is to provide an improved fire-escape of novel and cheap construction which will occupy but small space and be ornamental in appearance and can be made ready for use quickly and easily whenever desirable.

Having this object in view, my invention consists of a fire-escape of novel and improved construction, as will appear more fully hereinafter in the accompanying drawings, in which—

Figure 1 is a front elevation of a section of a house equipped with my improved fire-escape, the ladder being shown lowered; Fig. 2, a view in cross-section, showing the ladder rolled up and suspended, as ordinarily; and Fig. 3, a bottom perspective view of the balcony and trap-door.

The numeral 1 designates a section of an ordinary house.

At 2 is shown a balcony, which is connected to the house by fastening devices 3 and is provided with a guard-rail 4. This balcony is made of iron and extends across the front of the house underneath the windows of one story. A separate balcony is employed in connection with each story of the house, as also a ladder and the other mechanisms to be described later on. This balcony is provided with an opening 4<sup>a</sup>. The numeral 5 designates a trap-door which is hinged at its outer end, as at 6, and the inner free end of the door is provided with a catch 7, adapted for engagement with the guard portion of the balcony when the door is raised.

The numerals 8 and 9 designate rings which are secured to the trap-door near its heel, and 10 and 11 designate locking-rods which are fastened to these rings.

The numeral 12 represents a lock made of a single rod which has its ends fastened to the

bottom of the balcony near the house and is bent into catches 13 and 14, which are adapted to receive the ends of the locking-rod.

The numeral 15 represents a chain ladder which has rungs 16. Ordinarily the ladder is folded, as shown, and the locking-rods extend underneath the rungs and have their ends received in the catch-loops, so that the ladder is held suspended. When, however, the trap-door is raised, the locking-rods are pulled out of the loops and the ladder drops by gravity onto the balcony below, so that the occupants of the premises can pass down the ladder.

It is obvious that many slight and immaterial changes of construction might be resorted to in carrying out my invention, and hence it is to be understood that I do not limit myself to the precise construction herein shown and described, but consider that I am entitled to all such variations as properly come within the spirit and scope of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fire-escape, the combination with a balcony provided with an opening, of a hinged trap-door adapted to close said opening, a flexible ladder connected to the balcony, a catch, and a locking-rod adapted for engagement with said catch, said rod being adapted to hold the ladder raised and to be operated when the trap-door is removed so that the ladder is released.

2. In a fire-escape, the combination with a balcony provided with an opening, of a hinged trap-door adapted to close said opening, locking-rods pivoted to the trap-door, catch-loops connected to the balcony, and a flexible ladder connected to the balcony, said ladder being normally held in raised position by the locking-rods, and allowed to drop when the locking-rods are pulled out of the catch-loops when the trap-door is raised.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JACOB J. MARKEL.

Witnesses:

J. C. SLOAN,  
E. N. HARVART.