

H. STIBBS.  
Fire-Escapes.

No. 151,448.

Patented May 26, 1874.

FIG. I.

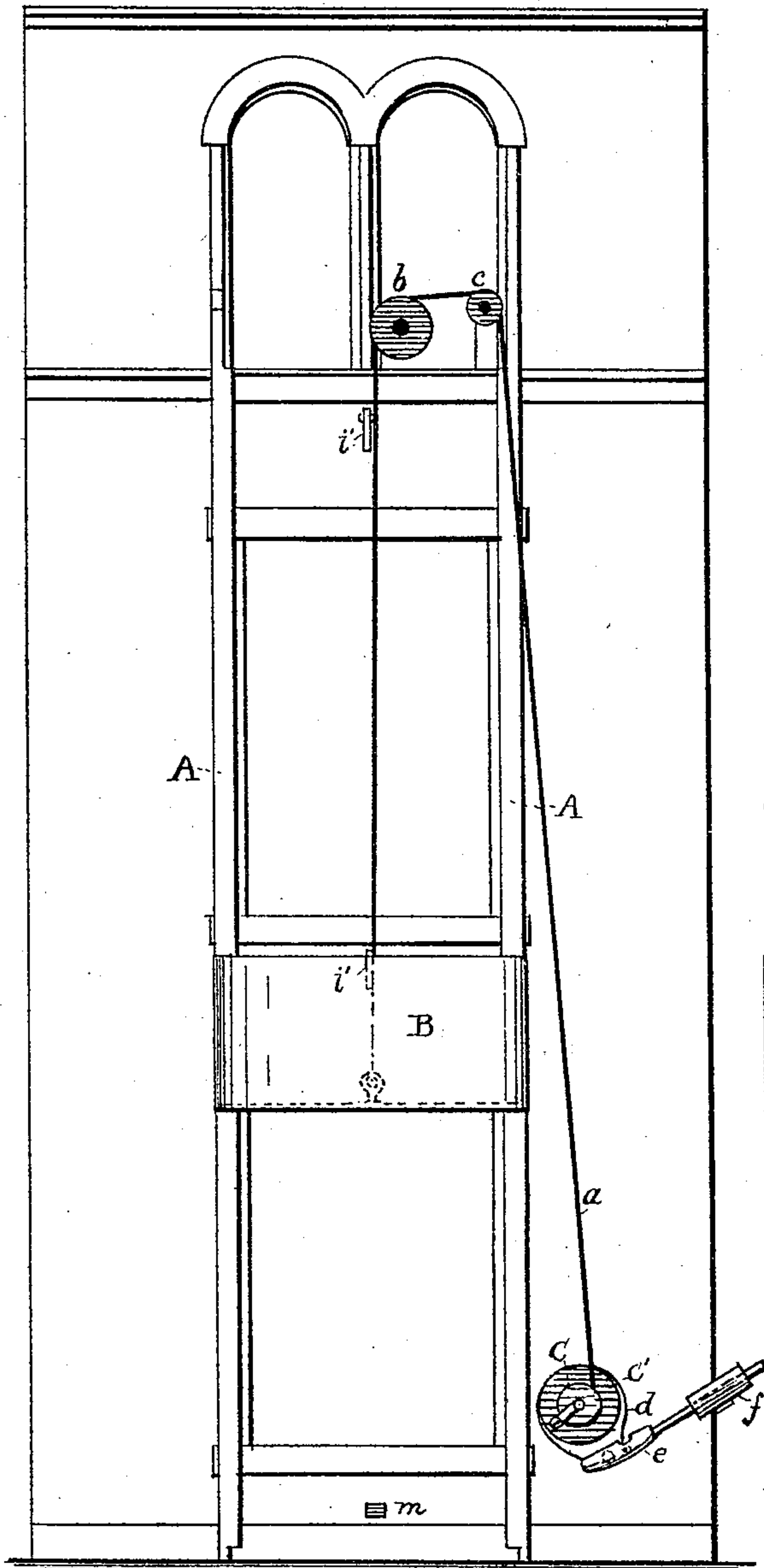


FIG. II.

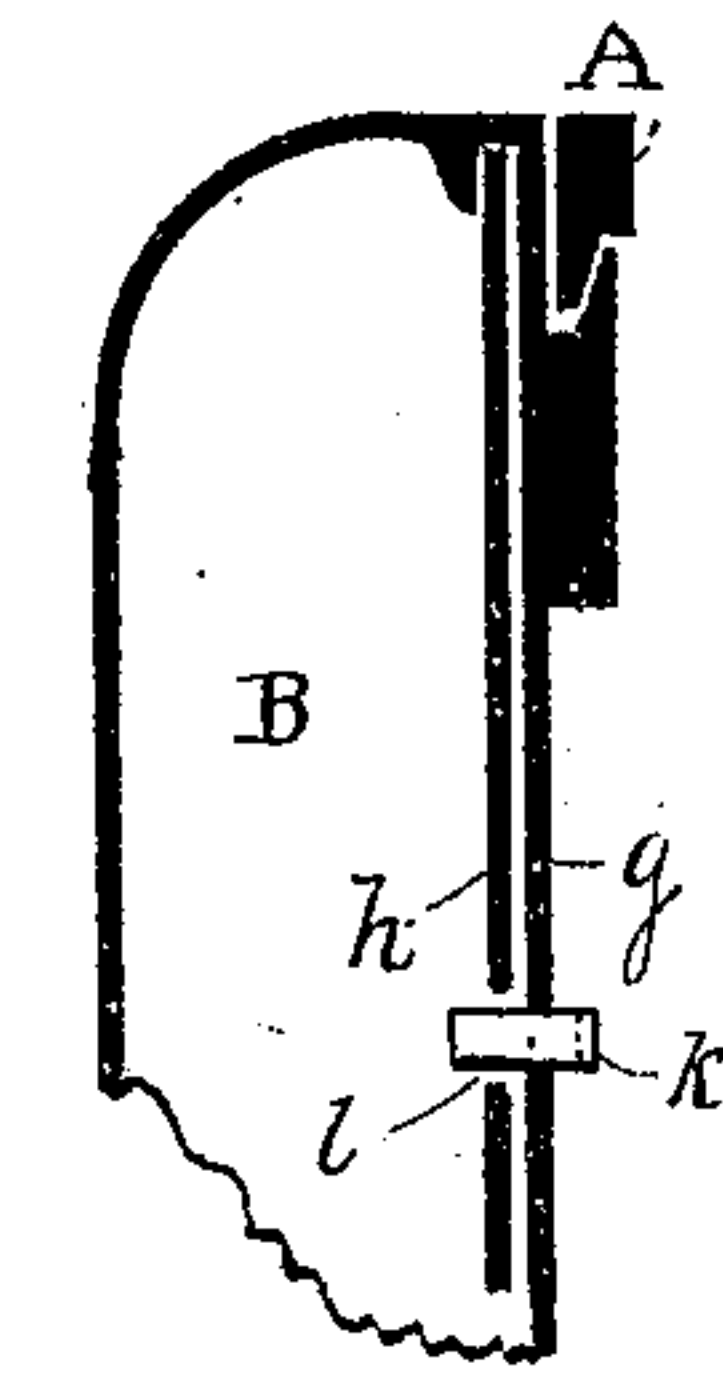
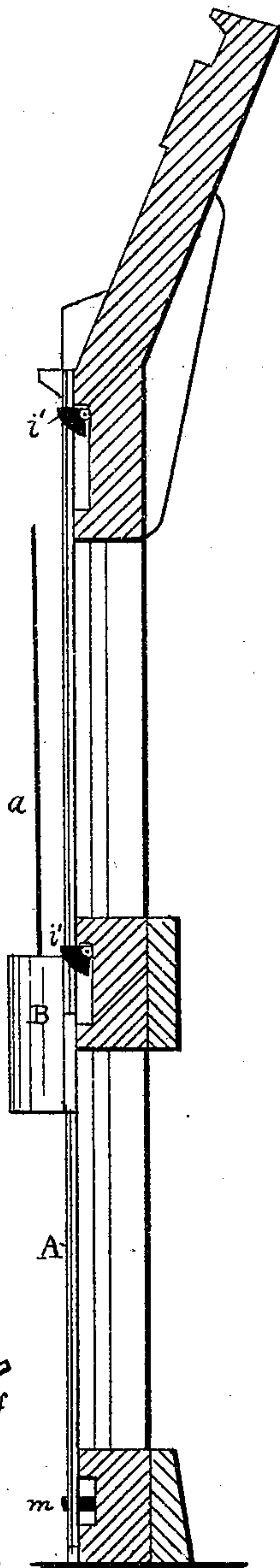


FIG. IV.

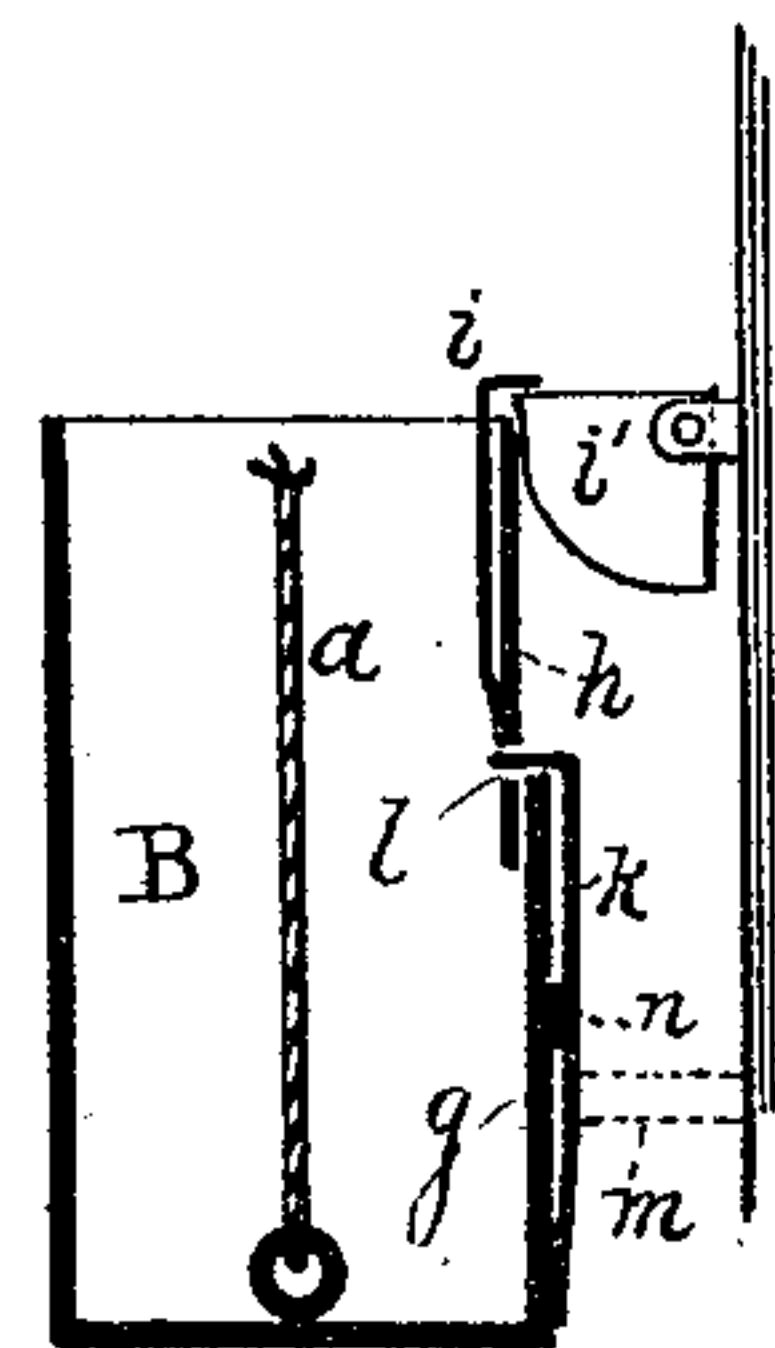


FIG. III.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

HENRY STIBBS, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. 151,448, dated May 26, 1874; application filed February 11, 1874.

*To all whom it may concern:*

Be it known that I, HENRY STIBBS, of the city of Baltimore, in the State of Maryland, have invented certain Improvements in Fire-Escapes, of which the following is a specification; and I do hereby declare that in the same is contained a full, clear, and exact description of my said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to that class of fire-escapes wherein a car or elevator is used in lowering persons, pieces of furniture, &c., from the upper rooms of a building on fire, the said car or elevator sliding upon guide-plates arranged at either side of a row of windows in the building.

My invention consists in certain devices tending to protect the occupants of the car from flames issuing out of windows past which it must pass in its ascent or descent.

In the accompanying drawing, forming a part of this specification, Figure 1 is an elevation of a portion of a building to which my invention is applied. Fig. 2 is a sectional elevation of a front of a building having my invention attached thereto, and Figs. 3 and 4 are enlarged sectional views of detached parts of my invention.

Similar letters of reference indicate similar parts of the invention in all the views.

A A are vertical guide-plates standing and secured at either side of a line of windows and doors in a building. B is the car, of sheet metal or other incombustible substance, adapted to slide upon the guide-plates A, and lowered or raised through the medium of the wire rope *a*, secured thereto, and leading over the sheaves *b* and *c*, fastened to the front of the building, down to the winding-drum C. The winding devices consist of the drum C, friction-pulley C' connected thereto, and friction-strap *d*, operated by a lever and weight, *e f*. The drum C and friction-pulley revolve upon an axis projecting from and securely fastened to the building. The back of the car, or that portion next to the building, is formed of two plates, one of them, *g*, being fixed, and the other, *h*, forming an automatically-acting fire-shield. The shield is designed to protect

the occupants of the car from flames issuing out of windows, and is operated as follows: Supposing that persons are to be rescued from the windows in the Mansard roof, and the car is elevated so that persons can step thereinto, the shield *h* being at this time lowered so that its upper edge is even with that of the plate *g*, as soon as the car begins to descend the projection *i* on the shield engages a bracket, *i'*, which, as the car continues to descend, lifts up the shield until the spring *k* at the back of the plate *g* enters the hole *l* in the shield, locking it up. The brackets *i'*, which are placed below each window, are weighted and pivoted, so that when the shield is locked they do not prevent the descent of the car in any way, neither affect it in its ascent. When the car reaches the ground the lower part of the spring K is pressed against the projection *m*, tending to force the spring from contact with the hole *l* in the shield, allowing the shield to fall, and to remain in readiness for the entrance of other persons to be rescued. A stop, *n*, is placed between the inner surface of the spring *k* and the plate *g*, operating with the projection *m* when brought into contact with it, to force the spring from the hole *l* in the shield. The car when not in use may be used as a balcony in front of any of the windows in its line of movement. It can also be used for any other purposes of elevating and lowering.

Having thus described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

1. The shield *h*, capable of being automatically lifted and locked, as specified, in combination with a car adapted to slide up and down upon vertical guide-plates secured to a building, as and for the purposes set forth.

2. The spring *k*, secured to the car, stop *n*, and projection *m*, co-operating to admit of the descent or fall of the shield when held up by the said spring *k*, substantially as herein specified.

HENRY STIBBS.

Witnesses:

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W. I. COLLAMER.