

(No Model.)

R. SUTHERLAND.
ATTACHMENT FOR ELEVATORS.

No. 489,240.

Patented Jan. 3, 1893.

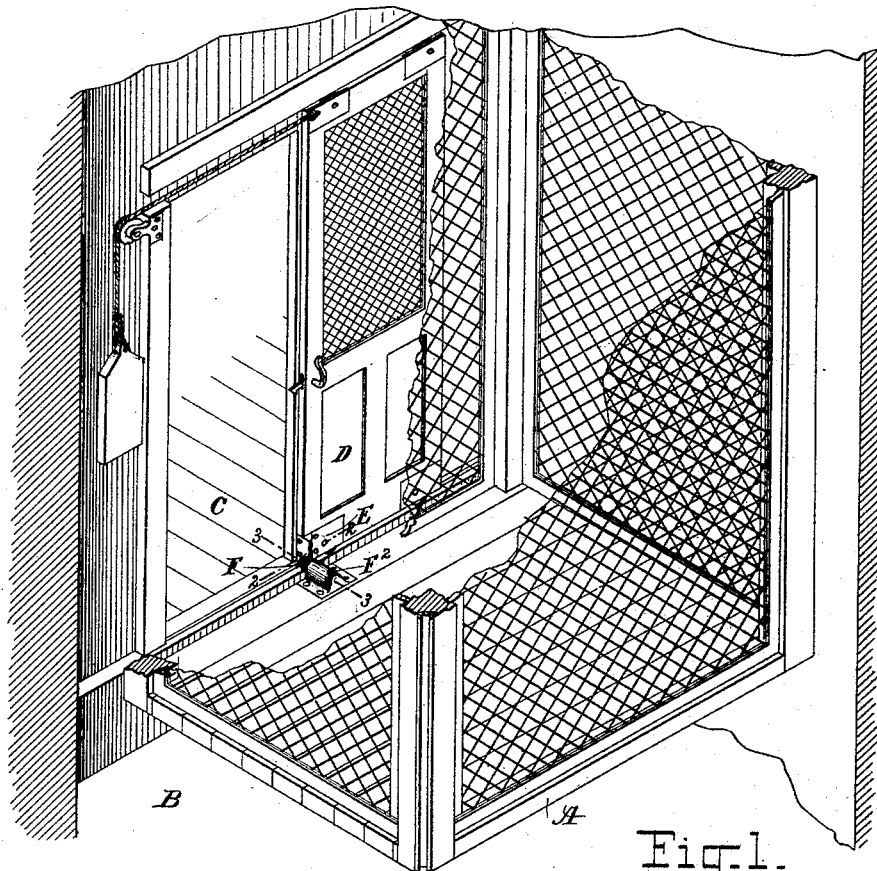


Fig. 1.

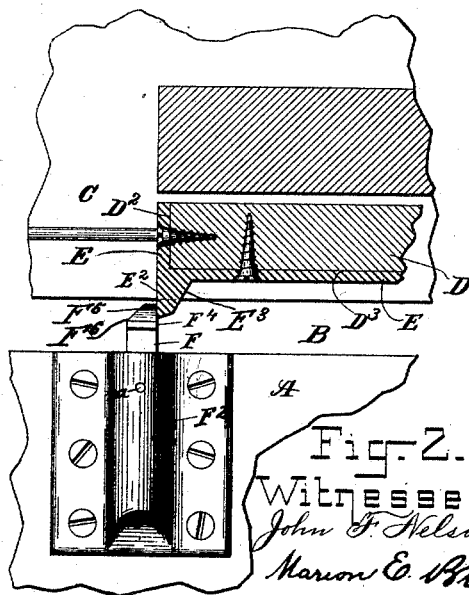
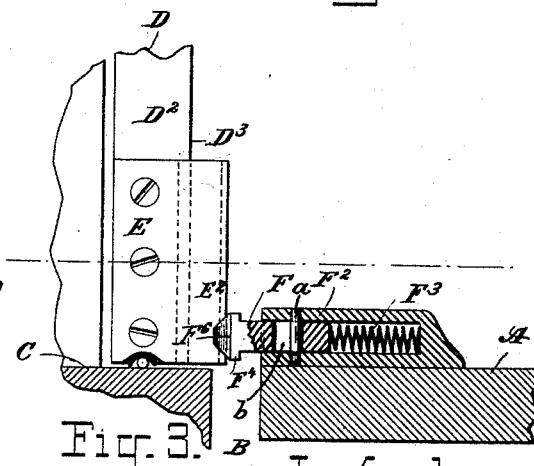


Fig. 2.



UNITED STATES PATENT OFFICE.

ROBERT SUTHERLAND, OF BOSTON, MASSACHUSETTS.

ATTACHMENT FOR ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 489,240, dated January 3, 1893.

Application filed September 15, 1891. Serial No. 405,774. (No model.)

To all whom it may concern:

Be it known that I, ROBERT SUTHERLAND, a citizen of the United States of America, and a resident of the city of Boston, in the county
5 of Suffolk and State of Massachusetts, have invented a certain new and useful improved Attachment for Elevator Carriages, Platforms, &c., of which the following is a full, clear, and exact description.

10 This invention relates to an attachment in one part applied to an elevator platform or carriage and in another part applied to a sliding self-closing door at a landing of the elevator-well whereby with the platform at a
15 floor landing of the building on then opening the door, said two parts of the attachment will engage and hold the door opened and on a determined length of movement, either up or down, will disengage and leave the door
20 free to close, all as hereinafter particularly described and pointed out in the claim.

In the drawings, forming part of this specification, Figure 1 is a perspective view of an elevator-carriage and its well and a floor-
25 landing severally broken away and a self-closing door and the attachment of this invention on said door and said carriage. Fig. 2 is a horizontal section in detail and enlarged, line 2—2, Fig. 1. Fig. 3 is a vertical section
30 in detail and enlarged, line 3—3, Fig. 1.

In the drawings, A is an elevator-carriage; B is the elevator-well; C is a floor landing and D is a sliding self-closing door for said land-
35 ing all as well known and forming no part of this invention.

The part of the attachment of this invention which is on the door D consists of a vertical plate E attached to the forward edge D² and projected beyond the inner side D³ of the
40 door and also beyond the floor landing and toward but not into the pathway of the elevator carriage. This plate E has on its opposite sides and off from the inner side of the door, and beyond the floor landing vertical
45 abutment faces E² and E³, each for action as hereinafter explained.

The part F of the attachment of this invention which is on the elevator, consists of a horizontal headed-bolt F contained in a tubu-
50 lar casing F² and its inner end is backed by a

spring F³ confined end to end between the inner end of the bolt and the farther end of the casing. This bolt is free to slide forward and backward in its casing and is limited, in either direction, by a co-operative action, of a trans-
55 verse pin *a* fixed on the casing and a longitudinal slot *b* of the bolt which receives said pin. The tubular casing F² is fastened on the elevator-platform at right angles to and with the head F⁴ of its bolt toward the sliding-door
60 and in position when the door is fully opened to then lie, by its vertical flat side F⁵, against the abutment face E² of the plate E on door and so hold the door opened until by the move-
65 ment of the elevator, either up or down, said bolt traveling over the height of the plate escapes at either its upper or lower end therefrom, when the door is left free to close. The side F⁶ opposite to the flat side F⁵ of the bolt
70 is beveled off lengthwise of the bolt so that in opening the door the abutment face E³ of its plate E can the better work on and force the bolt inward for the door to pass.

Having thus described my invention, what I claim and desire to secure by Letters Pat-
75 ent is:

The combination with an up and down moving elevator-platform, and a vertical, but horizontally sliding door at the floor-landing for the
80 elevator, of a horizontally extended projection E which is secured to and is projected from said door beyond the floor-landing and toward, but not into the vertical pathway of said platform and presents exposed vertical abutment faces
85 E², E³ transversely to and off from the inner side of said sliding door, and beyond the floor-landing, and a horizontal sliding spring-bolt F which is mounted on and normally projects
90 from said platform into the vertical plane of said door-projection E and has a beveled head F⁴ to act in co-operation with said abutment faces of said door projection, all as described, for the purposes specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing
95 witnesses.

ROBERT SUTHERLAND.

Witnesses:

ALBERT W. BROWN,
MARION E. BROWN.