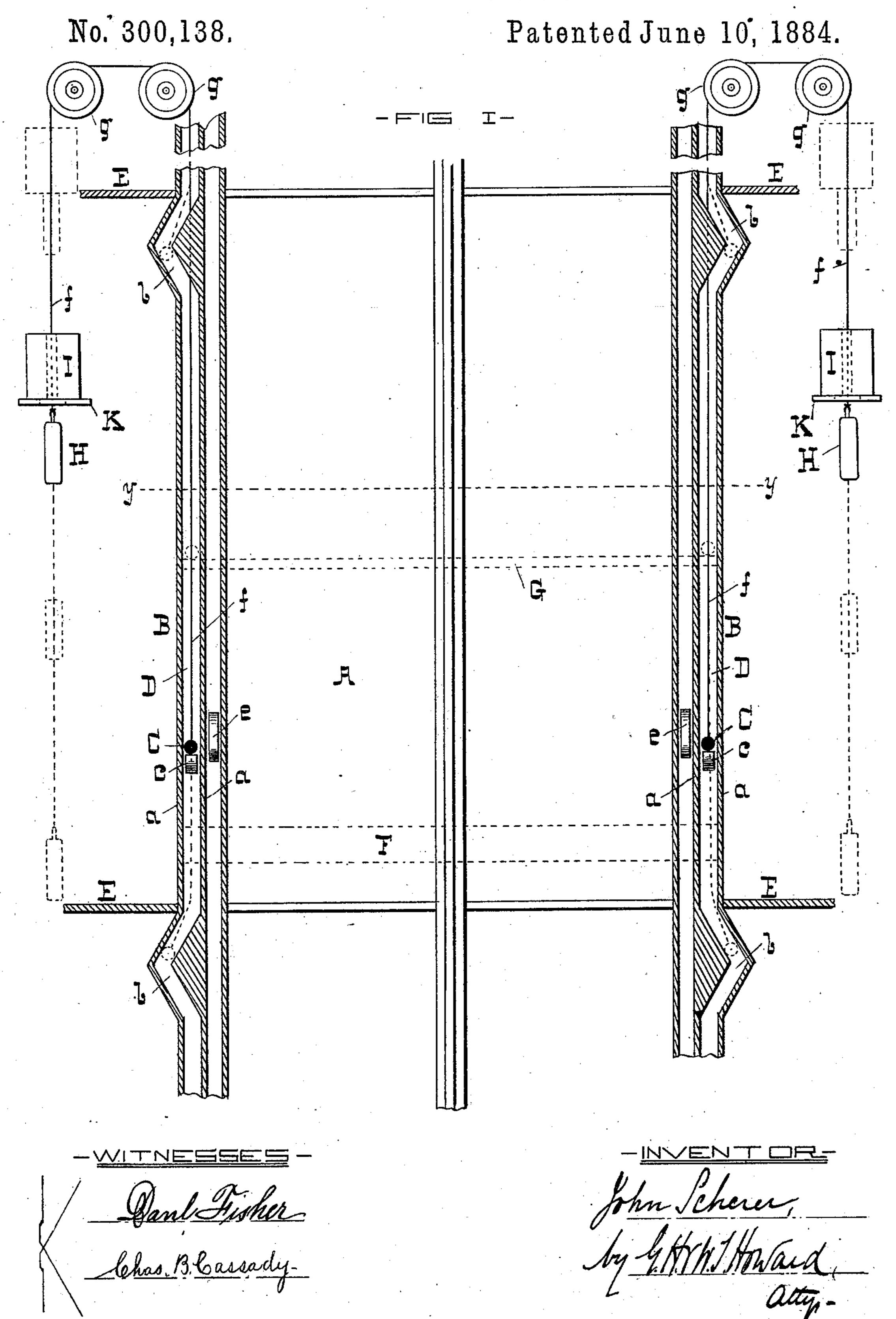
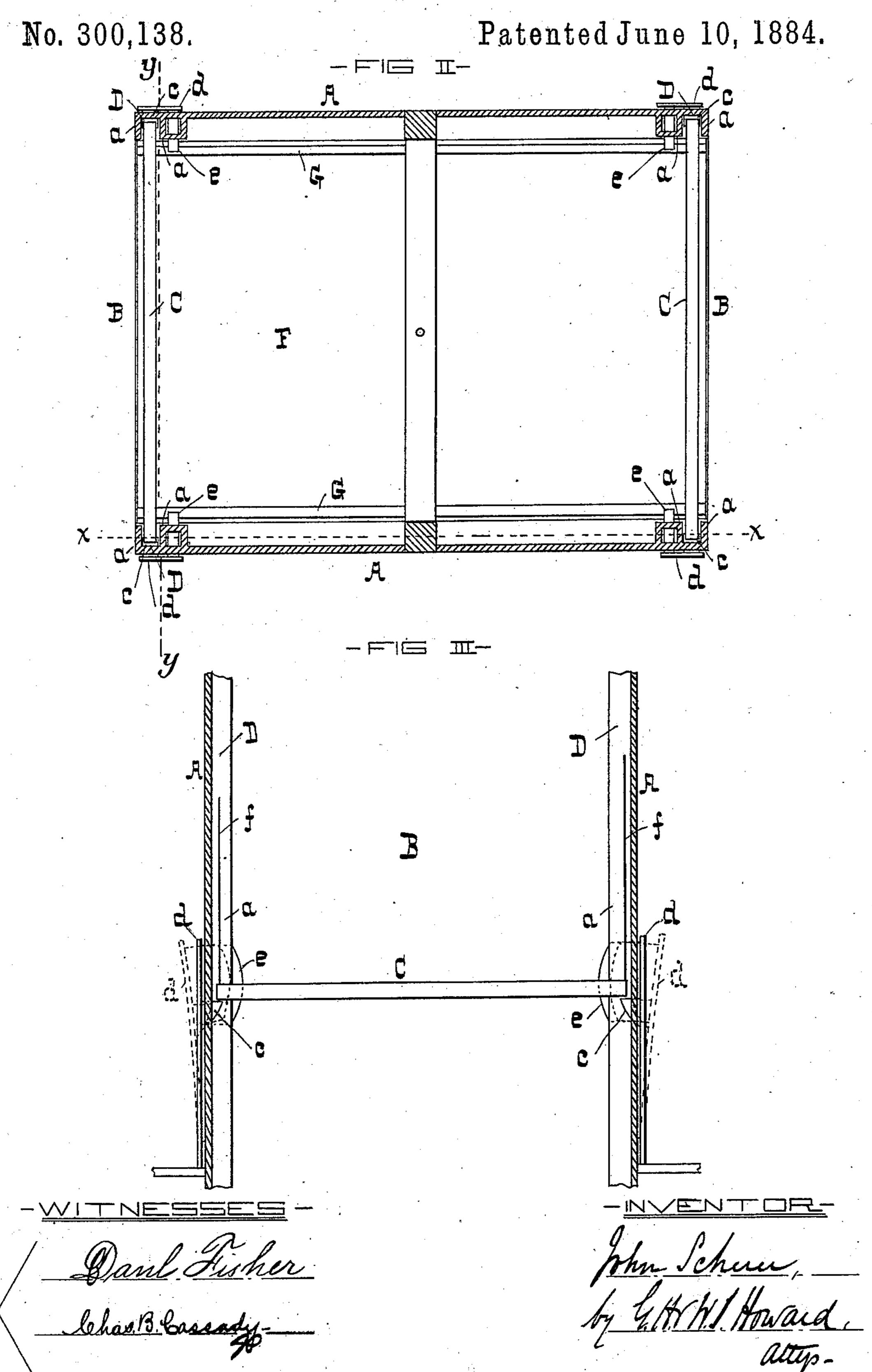
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HATCHWAY GUARD.



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United States Patent Office.

JOHN SCHERER, OF BALTIMORE, MARYLAND.

HATCHWAY-GUARD.

SPECIFICATION forming part of Letters Patent No. 300,138, dated June 10, 1884.

Application filed April 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, John Scherer, of the city of Baltimore, and State of Maryland, have invented certain Improvements in Safety Attachments for Elevator-Hatchways, of which

the following is a specification.

This invention relates to certain improvements in means whereby guard bars supported across the open sides of an elevatorno shaft are, in the movement of the platform and its attachments through a hatchway, carried either up or down, and after the passage of the platform conducted again to their original positions across the openings.

In the accompanying drawings, forming a part hereof, Figure I is a vertical section of a part of an elevator-platform provided with my invention, the said section being taken through the dotted line x x, Fig. II. Fig. III is a section taken on the y y, Fig. I. Fig. III is a section taken on the

dotted line y y, Fig. II.

A is the casing of the elevator-shaft, which is open at the sides B, where the guard-bars

25 C are situated. (See Fig. II.)

D D are grooves or channels formed by the pieces a of the casing, in which the guard-bars C are adapted to slide. By referring to Fig. I it will be seen that the channels D have offsets b immediately below the floors E of the building. These offsets are formed of two grooves in reversed angular positions, in order that the guard-bars which rest in the channels D may enter the said offsets from either above or below the floors.

F is the elevator-platform, (shown only in dotted lines, Fig. I, and in full lines, Fig. II,) and G G are rods supported in any suitable manner by the platform F at a fixed distance above the same. The rods G and the platform F project laterally beyond the guardbars C. Consequently in the elevation or depression of the elevator the said bars are carried with the same until they enter the offsets b, after which the elevator passes them. The

normal position of the guard-bars, which is, say, three feet above the floor, is maintained by means of brackets c, attached to a spring, d, and the said brackets project through the

casing and into the channels D. Lugs e, 50 fastened to the spring d, and which also extend through the casing A, are forced outward by contact with the elevator-platform, and carry with them the supporting-brackets c, which sustain the guard-bars. The guard-55 bars C are attached to cords f, which extend to the top story of the building, and pass over sheaves g. The weights H are fastened to the cords f, and keep them stretched and tightened; but the weights being lighter than 60 the bars C, the said bars naturally assume their normal position when not in contact with the elevator-platform. Additional weights I, through which the cords pass when not in use, are seated on fixed shelves or brackets 65 K, and are elevated with the main weights H as the guard-bars C are depressed below their normal position by the elevator in its descent, and the combined weights serve to re-elevate the guard-bars after the platform has passed 70 the offsets to which the said bars have been conducted. It will be understood that when the elevator is below a floor and the guardbars in their normal position above the said floor the said bars, in the upward movement 75 of the elevator, are carried up and sustained by the rods G, and if the platform is stopped at the said floor ample space is left below the guard-bars to admit of the platform being loaded or unloaded; but in the continued ele- 80 vation of the platform the rods G carry the guard-bars C to the first offsets b which they pass, and as the guard-bars descend they are caught by the platform and again conducted to the said offsets, in which they are held un- 85 til the platform has passed, when they fall to their normal positions. In the downward movement of the elevator the operation of the platform and the rods G is reversed, the platform acting first.

I claim as my invention—

1. In an elevator, the casing of the shaft, having vertical channels extending from one floor to another, with offsets therein formed of angular grooves reversed in position, substantially as described, guard-bars with their ends adapted to slide in the said channels and to the offsets from either end thereof,

weighted cords which pass over sheaves and are attached to the said guard-bars, and the platform, which is constructed to come in contact with the said guard-bars and elevate or 5 depress them from the channels to the said offsets, all combined substantially as specified.

2. In combination with the guard-bars C

and their supports c, the cord f, sheaves g, weights H and I, and shelf K, substantially as and for the purpose specified.

JOHN SCHERER

Witnesses

CHAS. B. CASSADY,
DANL. FISHER.