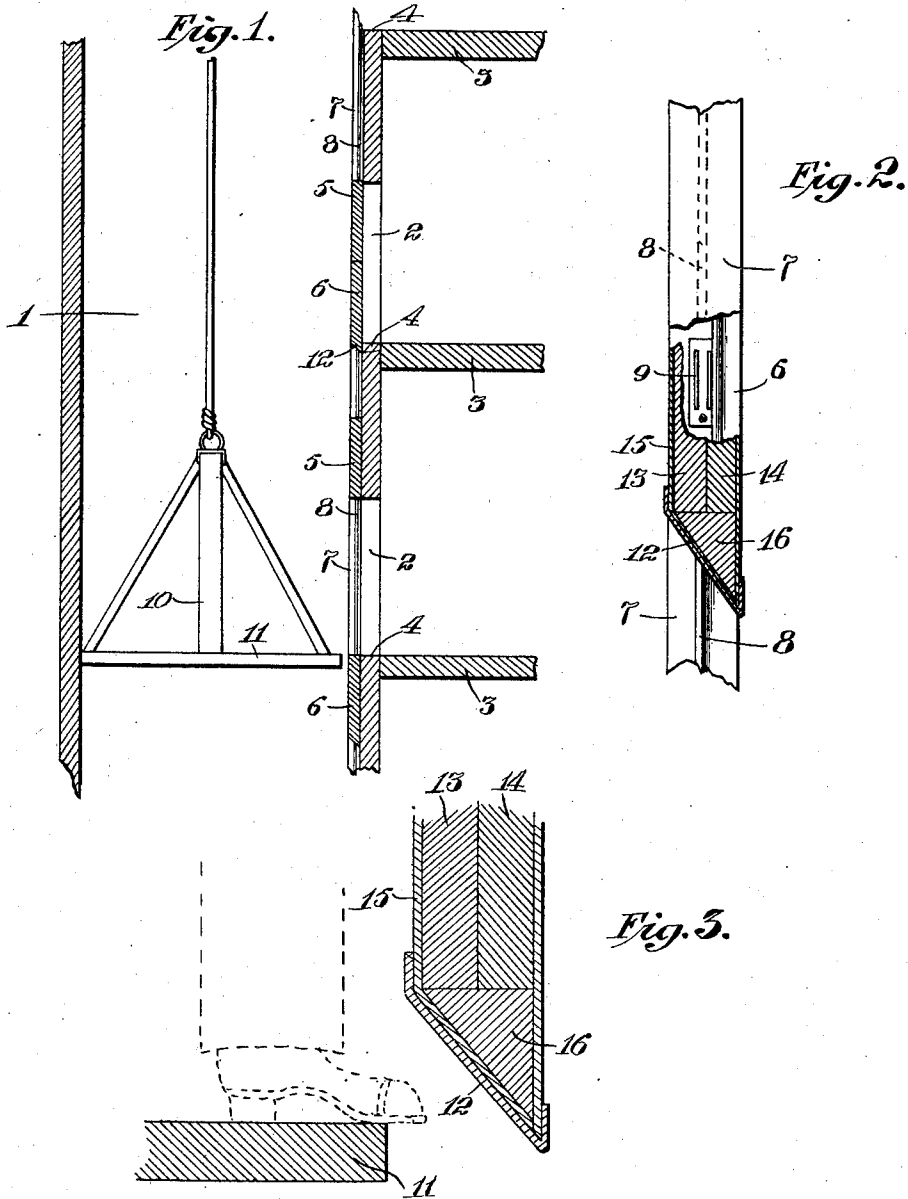


H. B. PITCHER.
DOOR FOR ELEVATOR SHAFTS.
APPLICATION FILED JUNE 12, 1912.

1,043,138.

Patented Nov. 5, 1912.



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UNITED STATES PATENT OFFICE

HUGH B. PITCHER, OF BOONTON, NEW JERSEY.

DOOR FOR ELEVATOR-SHAFTS.

1,043,138.

Specification of Letters Patent.

Patented Nov. 5, 1912.

Application filed June 12, 1912. Serial No. 703,172.

To all whom it may concern:

Be it known that I, HUGH B. PITCHER, a citizen of the United States, and a resident of Boonton, in the county of Morris and State of New Jersey, have invented certain new and useful Improvements in Doors for Elevator-Shafts, of which the following is a specification.

This invention relates to improvements in doors for elevator shafts and more particularly to that class of doors that are mounted on the inside of the shaft, the exposed surfaces of which doors are adjacent to the edge of the elevator car or platform.

The object of my invention is to provide a new and improved elevator door of this kind which is so constructed as to prevent the projecting parts of the body of a person, on the rising elevator car, or accidentally projecting parts of the load on the car, from being mutilated, injured or broken by being forced against the bottom edge of the door, thus vastly increasing the safety of the structure and which door is simple in construction, strong and durable and does not require more space than the doors used in elevator shafts heretofore.

In the accompanying drawings, in which like letters of reference indicate like parts in all the figures: Figure 1 is a vertical sectional view of parts of an elevator shaft provided with my improved doors. Fig. 2 is an enlarged detail edge view of the lower part of one of my improved doors, parts being broken away and parts of the elevator guides being shown in elevation. Fig. 3 is an enlarged vertical transverse view of the lower part of my improved door showing one method of construction.

The elevator shaft 1 is provided with the usual door openings 2 at the various floors 3 and these openings are provided with the conventional sills. The openings are closed by sliding doors 5 composed of two sections 5 and 6 which are suitably guided on vertical guide standards 7 having guide ribs 8 on which guide clips 9 fastened to the doors, slide. The two sections of the doors move from each other in opening and toward each other in closing in the conventional manner.

The elevator car 10 may be of any conventional construction and has a floor or platform 11 one edge of which is located closely adjacent to the inner face of the doors. When the platform 11 rises and an attend-

ant or person riding on the platform accidentally projects a toe over that edge of the platform which is adjacent to the inner face of the door, as indicated in Fig. 3, there is great danger of the projecting part of the foot such as the toe being cut off or crushed by coming in contact with the bottom edge of the lower section 6 of a door in case said bottom edge is at right angles to the inner face of the door. Likewise if parts of the material or freight on the car should project over such edge the projecting parts are apt to be broken off when coming in contact with the bottom square edge of a door or the object on the car platform may be tilted and thrown against the door and the latter injured and the said article broken or the entire elevator car might become jammed. In order to prevent such accidents I bevel the bottom edge of the bottom section of the door downward from the exposed surface of the door toward the wall of the shaft, at an angle of about forty-five degrees, as shown in the drawings. If now a person projects his toe over the edge of the car platform 11 and the latter rises and such projecting part of the foot for example, the toe, strikes the said bevel of the door, there is no danger of crushing the toes as the bevel pushes the foot inward and within the limits of the edge of the platform or floor 11. An angle iron 12, on which the flange is at an acute angle to the web is secured to the bottom door section 6.

Such doors, as a rule, are made of two thicknesses of planking 13 and 14, Fig. 3, and on both faces the door is covered with sheet metal 15 in order to meet the requirements of the "fire underwriters." I make the door in this manner and obtain the bottom bevel by securing a strip of wood 16, triangular in cross section to the bottom edges of the planking 13 and 14, which strip of wood is also inclosed in the sheet metal covering 15 applied on the door. The metal angle strip 12 is secured to the bottom edge of the door in the manner shown in Fig. 3.

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

1. The combination with an elevator shaft and an elevator car in the same, of a door disposed in said shaft between the wall of the shaft and the car, the bottom edge of the door being beveled downward in the

direction from that face of the door adjacent to the car toward the wall of the elevator shaft, adjacent to the door, substantially as set forth.

- 5 2. The combination with an elevator shaft and an elevator car in the same, of a vertically sliding door mounted in the shaft between the wall of the shaft and the car, the bottom edge of the door being beveled downward from the exposed side of the door toward that side of the door adjacent to the wall of the shaft and a metal acute angled angle strip secured to said beveled edge of the door, substantially as set forth.
- 10 3. The combination with an elevator shaft and an elevator car in the same, of a door located between the wall of the shaft and

the elevator car, said door being composed of two layers of wood, and a covering of sheet metal, a triangular strip secured to the bottom edges of the two layers of wood, thus forming a bevel at the bottom edge of the door, and extending in the direction from the exposed face of the door toward that face adjacent to the shaft wall, and an acute angled angle strip secured over said bottom bevel edge, substantially as set forth.

20 25

Signed at New York city in the county of New York and State of New York this 12th day of March A. D. 1912.

HUGH B. PITCHER.

Witnesses:

H. A. PITCHER,
OSCAR F. GUNZ.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."