

(No Model.)

J. J. McBRIDE.
ELEVATOR HATCHWAY.

No. 468,820.

Patented Feb. 16, 1892.

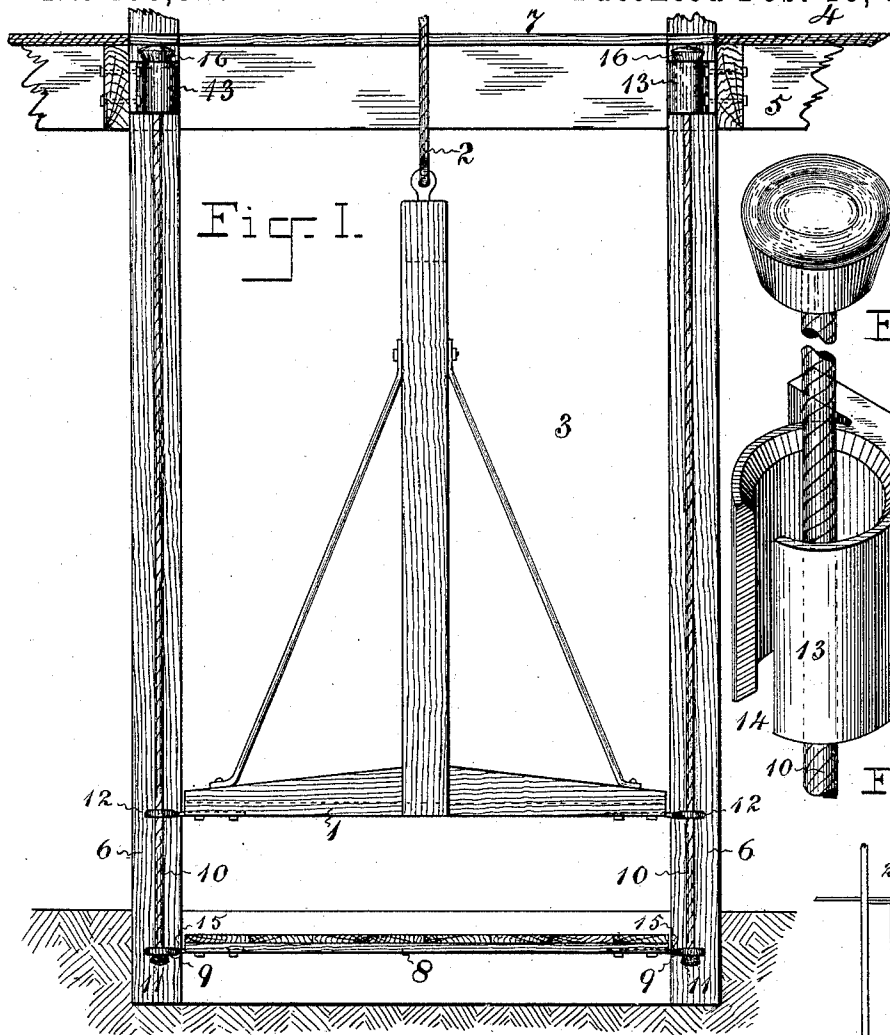


Fig. I.

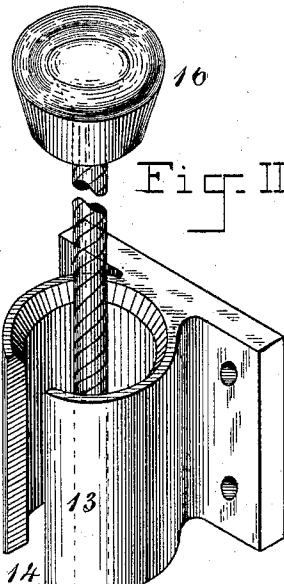


Fig. III.



Fig. IV.

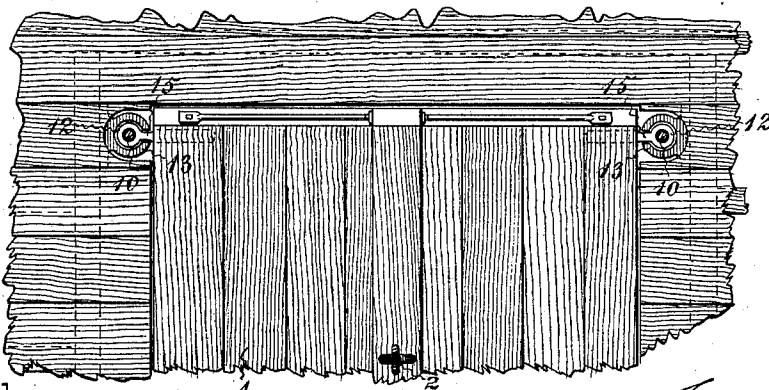


Fig. II.

Witnesses

Lillie Hanna
Chas. McComm.

Inventor

John J. McBride
By Knight & Prosser
Attys

UNITED STATES PATENT OFFICE.

JOHN J. MCBRIDE, OF RIDGEFIELD PARK, NEW JERSEY, ASSIGNOR TO
HENRY I. COE, OF ST. LOUIS, MISSOURI.

ELEVATOR-HATCHWAY.

SPECIFICATION forming part of Letters Patent No. 468,820, dated February 16, 1892.

Application filed April 13, 1891. Serial No. 388,733. (No model.)

To all whom it may concern:

Be it known that I, JOHN JAMES MCBRIDE, a citizen of the United States, residing at Ridgefield Park, in the county of Bergen, State of New Jersey, have invented a new and useful Improvement in Doors for Elevator-Hatchways, of which the following is a specification.

My invention relates to an improvement in what are known as "carrying-doors" for elevator-hatchways, and has particular reference to such doors when located below the elevator cage or platform. In the customary arrangements those carrying-doors which are situated below the cage are paired from the upper doors or suspended by long cords or chains which, being carried over sheaves on the stanchions, terminate in counter-weights.

My present improvement wholly dispenses with counter-weights and sheaves and greatly reduces the necessary length of the suspenders.

Referring to the accompanying drawings, which form a part of this specification, Figure I is a vertical section of a form of my invention adapted for a one-story lift. Fig. II is a horizontal section thereof. Fig. III is a perspective view showing the upper end of a suspender and the slotted hanger therefor. Fig. IV is a diagram to show the adaptation of my improvement to several stories.

1 may represent any customary or suitable elevator-platform; 2, its suspending and elevating cord; 3, the shaft or wellway, and 4 a floor supported by suitable girders 5.

6 are stanchions.

7 represents the opening or hatchway.

8 represents a carrying-door.

9 represents two of four similar eyes, of which one projects horizontally from each corner of the carrying-door.

10 are two of four suspenders, preferably of wire cable, of which each, being knotted or provided with a button 11 at its lower end, is passed upward through said eye 9 and through

a like eye 12, of which one extends from each corner of the platform and finally through a stationary eye, bracket, or hanger 13, (fixed at any point in the hatch or shaft,) whose slot 14 permits the passage of the necks or shanks 15 of said moving eyes. Each suspender has at its upper end a head 16, which ordinarily rests upon the slotted bracket 13, the carrier-door then hanging at its lowest or normal position. (See Fig. I.)

When in using the elevator the platform rises above the floor 4, the platform-eyes 12, passing upward through the slotted brackets 13, engage the heads 16 of the suspenders 10 and elevate the carrier-door.

Where the elevator-shaft extends through more than one floor another carrier-door is added with a complete set of suspenders, eyes, and brackets so disposed as not to interfere with each other. (See Fig. IV.)

Having thus described my invention, the following is what I claim as new therein, and desire to secure by Letters Patent:

1. In an elevator-shaft, the combination, with a platform or cab having eyes and with slotted brackets, of one or more carrier-doors beneath the same, of which each door has eyes, and suspenders 10, having heads 16, substantially as and for the purpose set forth.

2. The combination of the elevator-shaft, the platform or cab traveling therein, having eyes, fixed attachments in the well, said attachments also having eyes and one of said sets of eyes being slotted, suspenders passed through both sets of eyes, and one or more doors hung removably by said suspenders from the fixed attachments and adapted to be lifted on the upward movement of the platform or cab, substantially as set forth.

JOHN J. MCBRIDE.

Witnesses:

WM. H. HENDEE,
M. V. BIDGOOD.