

(No Model.)

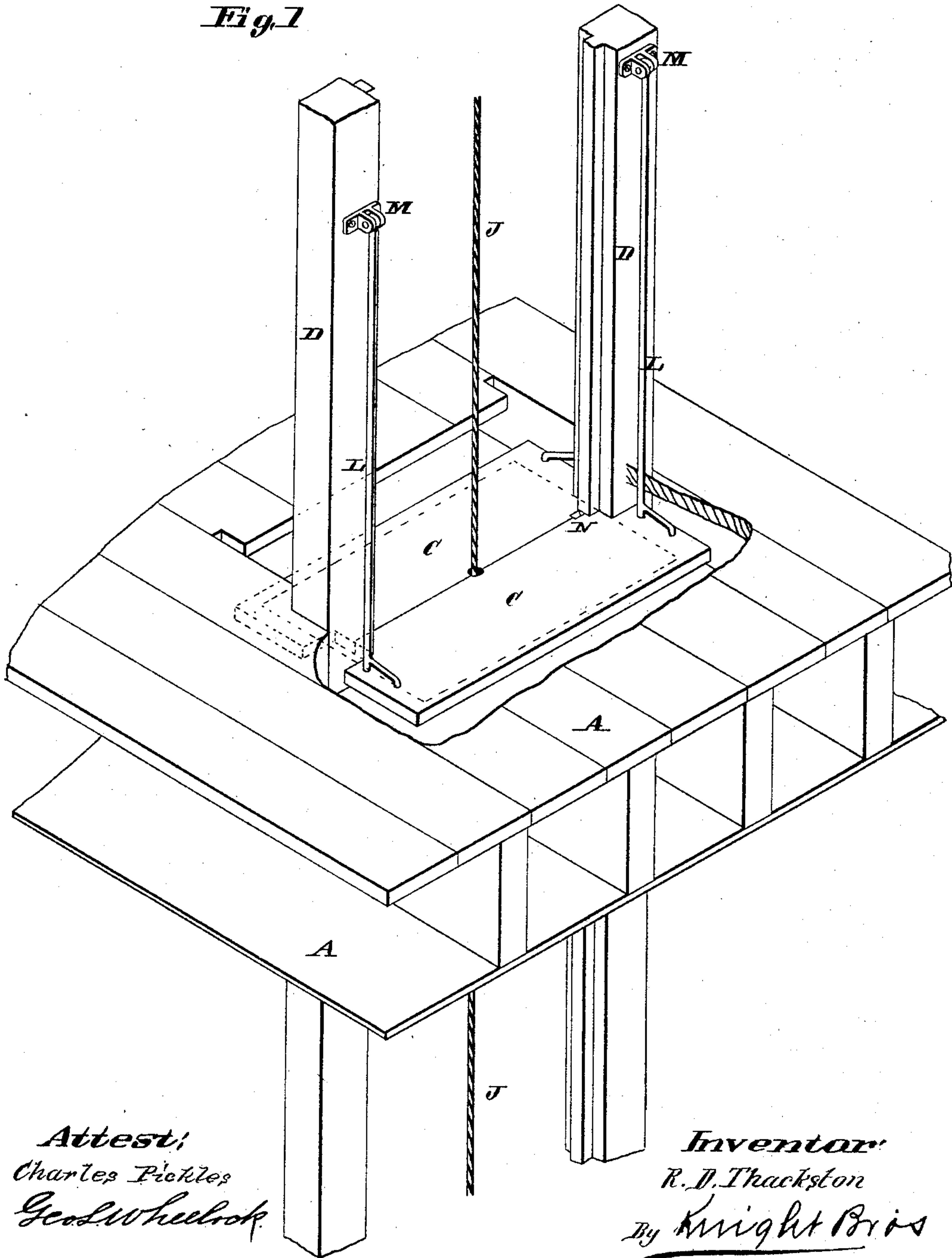
2 Sheets—Sheet 1.

R. D. THACKSTON.  
SELF CLOSING HATCHWAY.

No. 328,361.

Patented Oct. 13, 1885.

*Fig. 1*



*Attest:*  
Charles Pickles  
Geo. Wheelock

*Inventor:*  
R. D. Thackston  
By *Knight Bros*  
*Atty's*

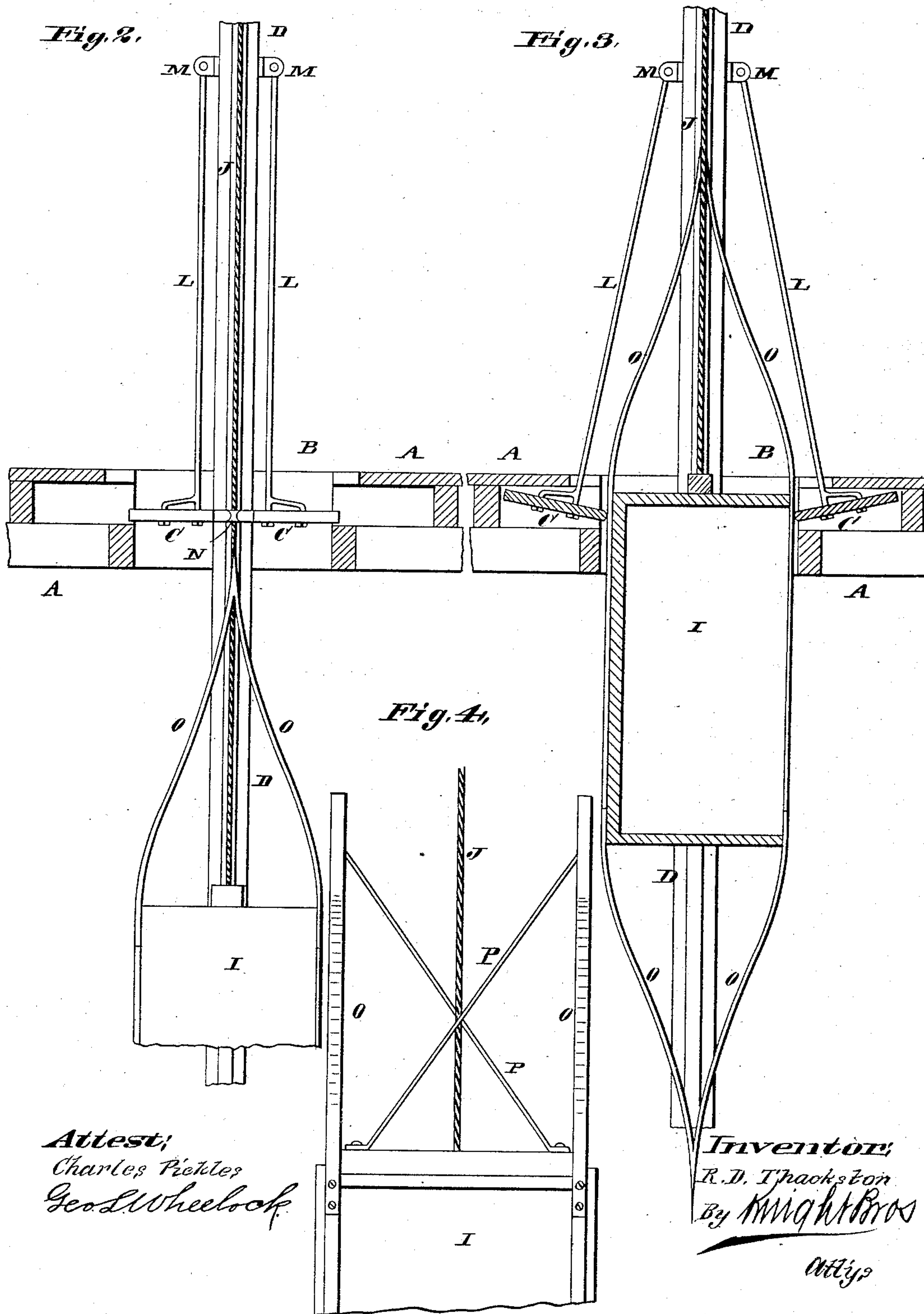
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# UNITED STATES PATENT OFFICE.

RICHARD D. THACKSTON, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF  
TO HENRY I. COE, OF SAME PLACE.

## SELF-CLOSING HATCHWAY.

SPECIFICATION forming part of Letters Patent No. 328,361, dated October 13, 1885

Application filed March 17, 1885. Serial No. 159,155. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD D. THACKSTON, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Self-Closing Hatchways, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a perspective view of my improved self-closing hatchway. Fig. 2 is an elevation showing the doors closed, and Fig. 3 a similar view with the doors opened. Fig. 4 is a detail view of the cage, showing the upper cams in side view.

My invention relates to a self-closing hatchway adapted to either passenger or freight elevators, or to dumb-waiter elevators; and my invention consists in certain details of construction, as hereinafter described, and pointed out in the claims.

Referring to the drawings, A represents a floor and ceiling of a building; B, the hatchway; C, the doors for closing the hatchway; D, the uprights or guides of the elevator, and I the cage that has hoisting and lowering rope or cable J. The doors are suspended or supported on arms L, hinged by brackets M, or other suitable means, to the uprights D or other fixtures. The arms are preferably bifurcated at their lower ends to afford means for a more rigid attachment to the doors. The doors are notched out at N, to permit the entrance between them of the sharp points of the cams O, secured to the top and bottom of the cage on one or both sides, preferably both, as shown in Fig. 4, tied together by brace-rods P. These cams taper to a sharp point,

and as the cage ascends and descends they swing the doors open, as shown in Fig. 3, and after the cage has passed the doors swing shut, bearing against the cams on the bottom of the cage, if the cage is going up, and against those on the top of the cage, if the cage is going down.

The doors are preferably located between the floor and ceiling of the building, as shown.

By my improved arrangement the door or doors can be opened with very little power, and can be constructed and put up at a small expense.

I claim as my invention—

1. In a self-closing hatchway, the combination of the door and hinged arms, the door being supported by the arms in such a manner as to swing shut of its own weight, substantially as shown and described.

2. In a self-closing hatchway, the combination of the door and arms, the door being supported by the arms, and the arms extended inward and upward from the door and hinged at their upper ends to a support, the whole being constructed and arranged substantially as shown and described, whereby the door closes by its own weight, as specified.

3. In a self-closing hatchway, in combination with the uprights, the brackets M, secured to the uprights, inclined arms L, hinged to the brackets, and doors C, secured to the lower end of and supported by the arms and adapted to close by their own weight, substantially as set forth.

RICHARD D. THACKSTON.

In presence of—

GEO. H. KNIGHT,  
BENJN. A. KNIGHT.