

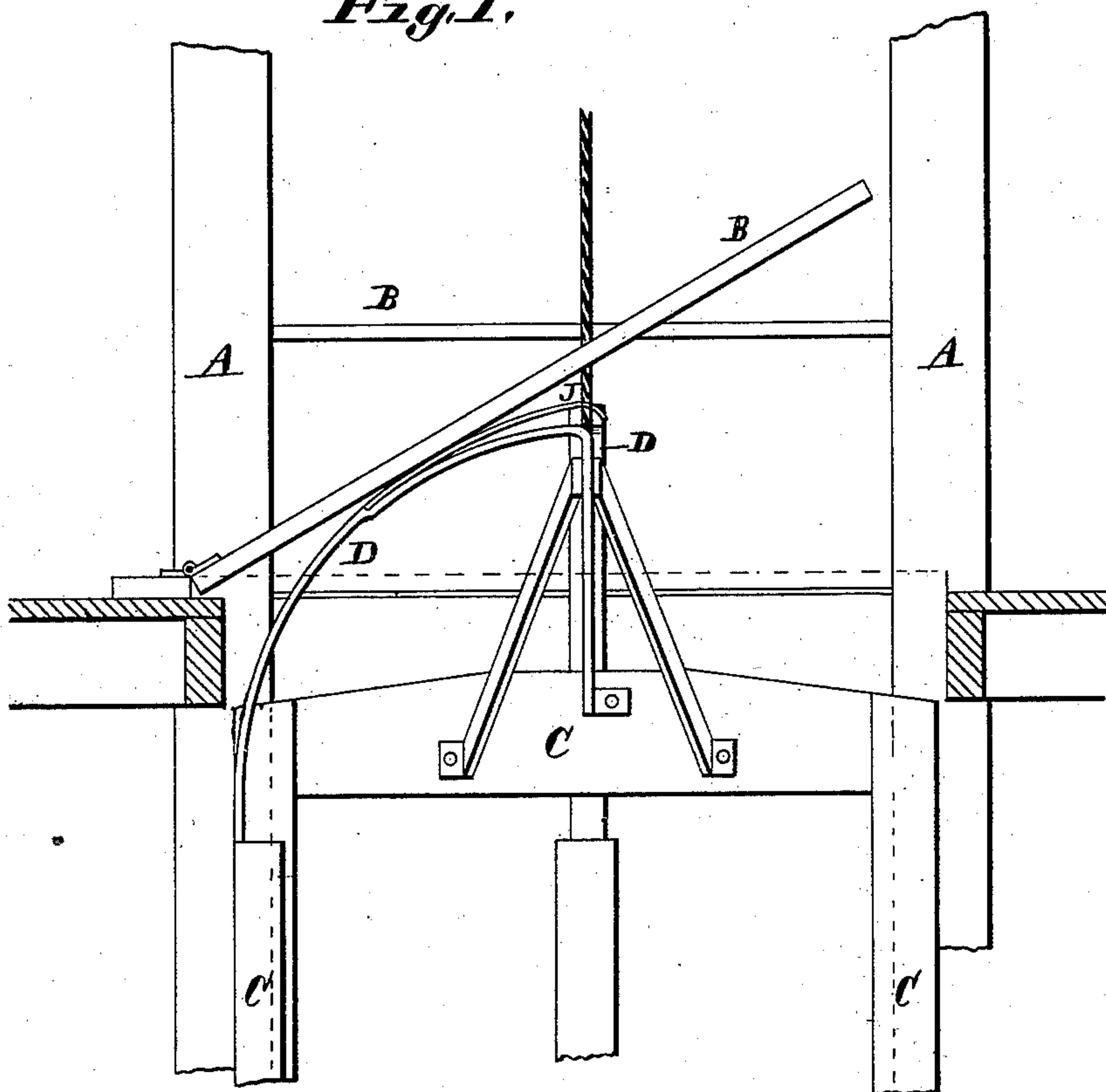
(No Model.)

R. D. THACKSTON.  
SELF CLOSING HATCHWAY.

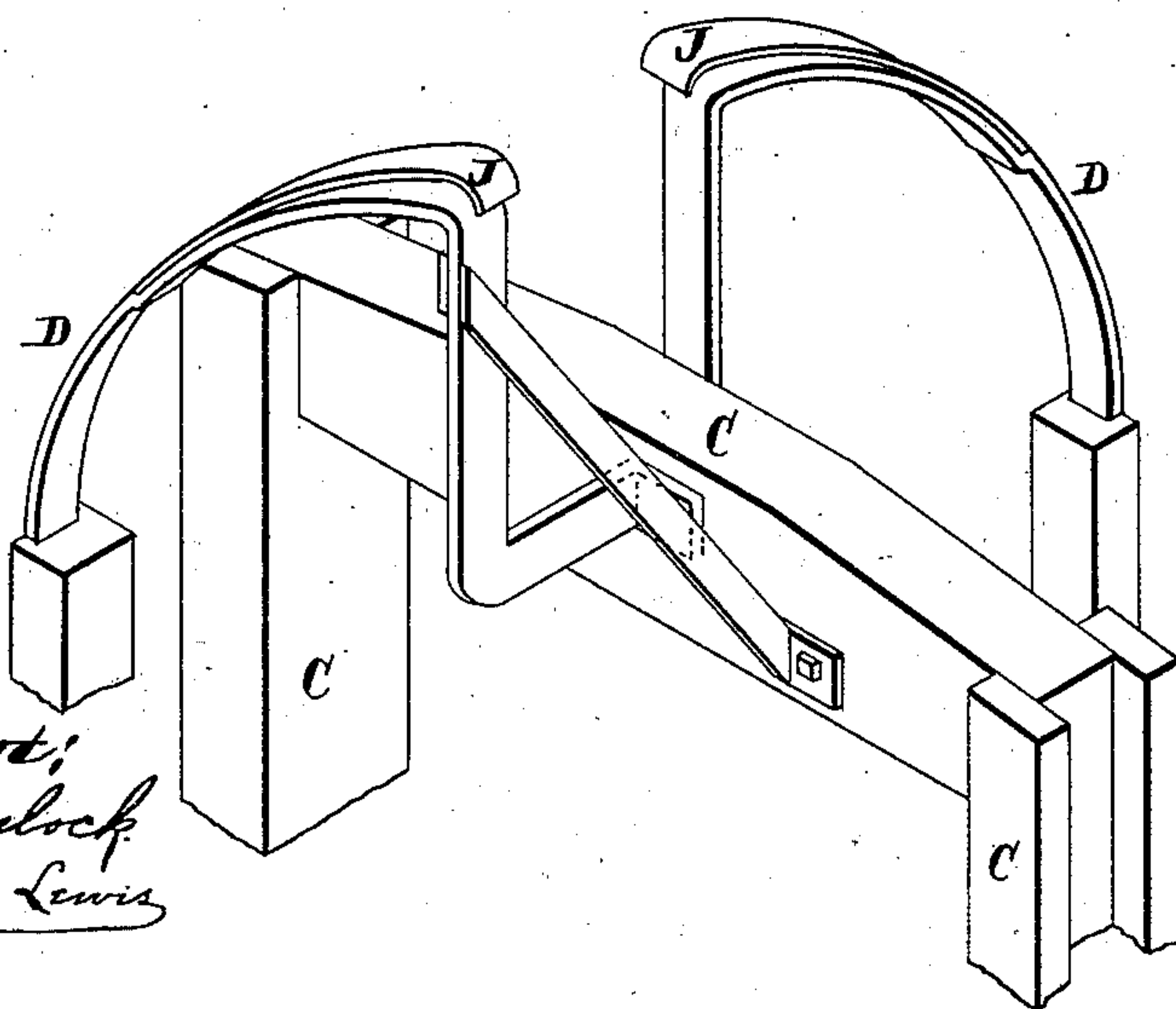
No. 311,091.

Patented Jan. 20, 1885.

*Fig. 1.*



*Fig. 2.*



*Attest:*  
*Geo. Wheelock*  
*Victor A. Lewis*

*Inventor:*  
*R. D. Thackston*  
*By Wright Bros*  
*Attys*

# 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. 311,091, dated January 20, 1885.

Application filed June 6, 1884. (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  
5 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—

10 Figure 1 is an elevation showing the doors, parts of the uprights, and part of the cage of an elevator; and Fig. 2 is a perspective view of the upper part of the cage.

15 This invention relates to an improvement in self-closing hatchways, more particularly intended for fast-running elevators.

20 This invention consists in a spring of such a form and secured to the cam in such a manner that should it be broken the cam will still continue to do the work of opening the door, as more fully described hereinafter.

25 Referring to the drawings, A represents part of the uprights; B, the doors; C, part of the cage; and D, the cams secured to the cage for opening the doors. I have shown two doors and consequently two cams; but one of each

could be used. Secured to each cam is a spring, J, that comes against the door in advance of the cam, to prevent a too sudden opening of the door, thereby avoiding noise and injury to the door. The spring preferably consists of a flat piece of spring metal, and is so secured to the cam that should it be broken, the cam will not be affected thereby, but will continue to do its work in opening the door, thus avoiding all danger of loss of time arising from broken springs and also all danger incident thereto.

I claim as my invention—

1. In a self-closing hatchway, in combination 40 with a cam for opening the door, the spring connected to the cam in advance thereof, as and for the purpose set forth.

2. In a self-closing hatchway, in combination 45 with a cam for opening the door, the flat metal spring J, secured to the cam, to strike the door in advance thereof, as set forth.

RICHARD D. THACKSTON.

In presence of—

GEO. H. KNIGHT,  
SAML. KNIGHT.