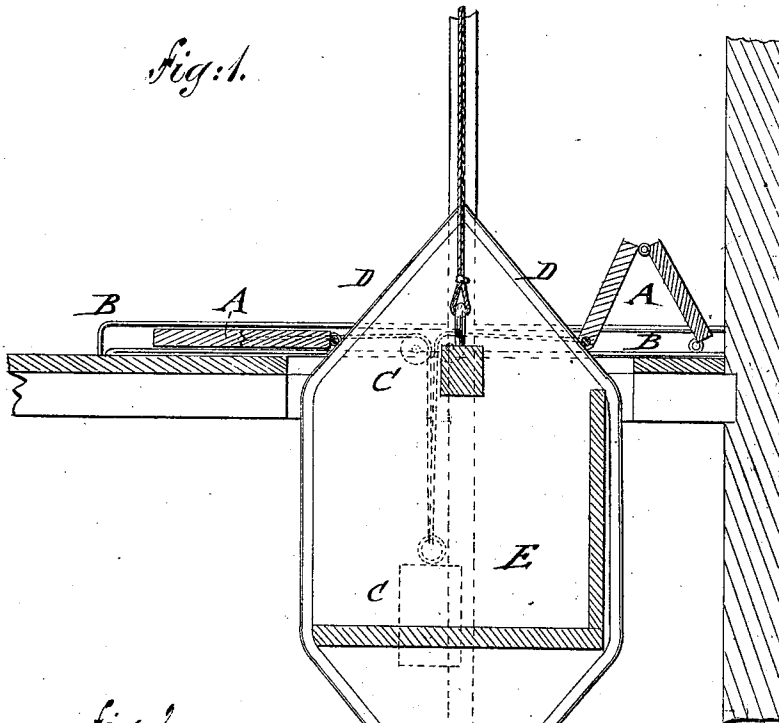


S. W. BELL.  
SELF-CLOSING HATCHWAY.

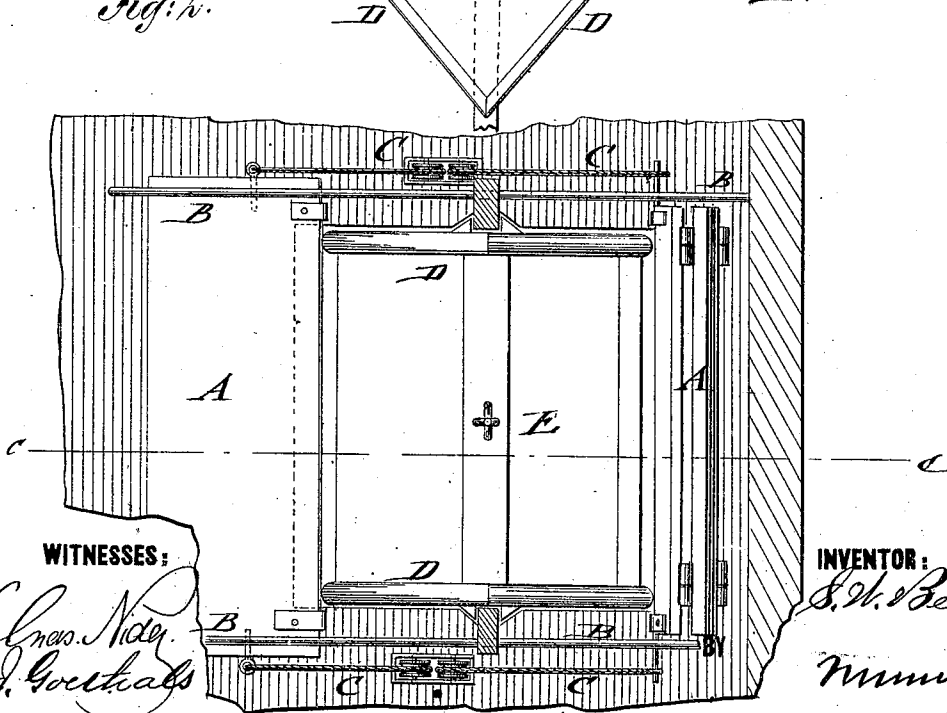
No. 178,356.

Patented June 6, 1876.

*Fig: 1.*



*Fig: 2.*



WITNESSES:

*Chas. Nider*  
*J. Goethals*

INVENTOR:

*S. W. Bell*

*Munn & Co*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

SAMUEL W. BELL, OF BURGETTSTOWN, PENNSYLVANIA.

## IMPROVEMENT IN SELF-CLOSING HATCHWAYS.

Specification forming part of Letters Patent No. **178,356**, dated June 6, 1876; application filed April 25, 1876.

*To all whom it may concern :*

Be it known that I, SAMUEL W. BELL, of Burgettstown, in the county of Washington and State of Pennsylvania, have invented a new and Improved Self-Closing Hatchway for Elevators, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical transverse section on line *c c*, Fig. 2, of my improved self-closing hatchway for elevators; and Fig. 2, a top view of the same.

Similar letters of reference indicate corresponding parts.

My invention relates to a self-closing hatchway for elevators, by which the danger of accidents by persons falling through will be avoided, and also the rapid communication of fire to the other stories prevented.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

In the drawing, A represents the sliding hatchway or trap door, which is made of equal sections, of which one slides to one side of the hatchway, the other to the opposite side, the sections being guided in retaining-rods B, and made of hinged parts, to fold up as shown

in Figs. 1 and 2, to economize space. The sliding doors may be applied to the ceiling or floor, as desired. Both door-sections are provided with cords, pulleys, and weights C, which keep the doors closed until they are opened by the action of the V-shaped top and bottom guard-rods D of the elevator E. The upper or lower guard-rods enter between the joint of the sliding doors, and force them, by the pressure of the V-shaped rods, along the guide-rods sidewise, so as to open sufficiently to allow the passage of the elevator, closing gradually by the action of the weights and the receding V-shaped guard-rods.

The improvement may be attached to any hatchway and elevator at small expense.

I am aware that the retraction of the sliding sections of a hatchway-door by springs or weights is well known; but

What I claim is—

A hatchway-door, opened automatically by a tapering elevator, closed by springs or weights, made in sections, hinged together, and folding in the manner specified.

SAMUEL W. BELL.

Witnesses:

ROBERT LYLE,  
D. M. PRY.