A. J. JUDGE.

ELEVATOR-WAY.

No. 192,335. Patented June 26, 1877.

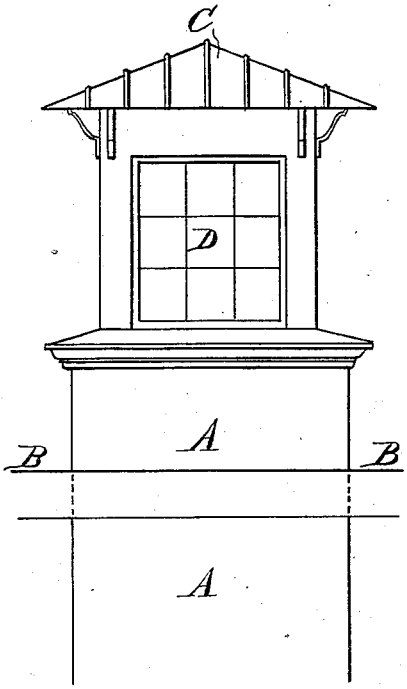


Fig. 1.

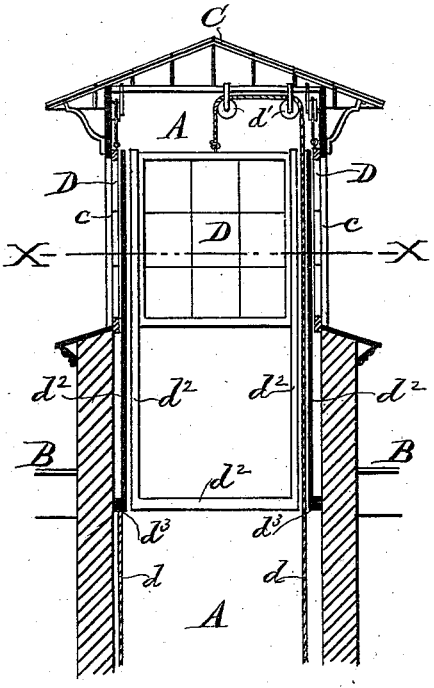


Fig. 2.

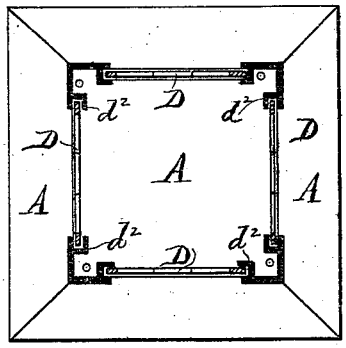


Fig. 3.

Witnesses;
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# UNITED STATES PATENT OFFICE.

ARTHUR J. JUDGE, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN ELEVATOR-WAYS.

Specification forming part of Letters Patent No. **192,335**, dated June 26, 1877; application filed April 25, 1877.

*To all whom it may concern:*

Be it known that I, ARTHUR J. JUDGE, of St. Louis, in the county of St. Louis and State of Missouri, have invented Improvements in the Construction of Elevator-Ways, of which the following is a specification:

This invention relates to improvements in the construction of elevator-ways, or passage-way for the elevator in buildings.

The elevator-way, as ordinarily constructed, communicates to the different floors, passage-ways, and parts of the building, and in case of fire said construction draws the flames, gases, smoke, &c., to the elevator-way. From thence the flames, smoke, &c., rapidly communicate and spread to the upper parts of the building.

According to my invention the elevator-way is built to extend, reach, or be above the roof of the building, and provided with a roof or skylight, also windows, which are controlled in such a manner that in case of fire the windows shall automatically open to permit free escape of the smoke, gases, &c., and thus cause the elevator-way to act virtually as a stack or flue.

Of the drawing, Figure 1 is a front elevation of my improved elevator-way built above the roof. Fig. 2 is a sectional elevation, showing also the arrangement of the parts to control the windows. Fig. 3 is a cross-section on line *x x* of Fig. 2.

A represents the elevator way or passage. B represents the roof of the building. As shown in Figs. 1 and 2, the elevator-way A is built to extend above the roof B, and, by preference, the walls or sides thereof, throughout its entire height, should be made fire-proof. C is the roof or skylight for the top of the elevator-way.

In that part of the elevator-way above the roof B I provide window-openings *c*. (See Fig. 2.) Each opening is controlled by a sliding window, D, and these are connected to a rope or ropes, *d*, passing over pulleys, at $d^1$, at top, and which reach below to be fastened within reach.

Each window operates in a suitable frame, $d^2$, made part of each wall on the inside, said frame being further adapted to allow the window to slide to its lowest point at $d^3$, and there remain seated, and leave the openings *c* free, for the purposes hereinafter to be described. The iron frame $d^2$, in which each window slides, serves also to guide the same when raised or lowered.

A weight can be hung at the lower end of each rope, instead of permanently fastening the end thereof.

The rope should be of combustible material, in order that, in case of fire, it can be consumed, and, in case the windows are closed, to cause them to slide or drop to their seats, and create openings above the roof for the purpose of affording a quick means of exit for flames, smoke, &c.

When the windows are seated at their lowest point, or when the openings existing above the roof are free or in open condition, the elevator-way becomes and performs the functions of a stack or flue. Further, when acting as a flue, it affords the necessary exit for the flames, smoke, &c., out of the building and over the roof, and thus, instead of being the cause of spreading a fire, and the means of incurring danger and loss to property and to lives, my improved elevator-way is a means to save property and life.

As apparent, it matters not whether the windows be closed or open, the construction here shown and described always insures the elevator-way acting as a flue or smoke-stack when the emergency or need requires this change of purpose.

My improved construction also insures the further advantages of admitting more light to the building, and for ventilation it is also serviceable.

The ropes reach down to the cellar or basement, and hence can be operated by any one, in case of emergency, either for fire or ventilation.

What I claim is—

1. The elevator-way constructed to project above the the roof of a building, as and for the purpose set forth.

2. The openings above the roof in the elevator-way, controlled by a sliding window

and rope attachment, or equivalent automatic-acting device, as and for the purposes set forth.

3. The combination of the windows, automatically controlled, as shown and described, and the elevator-way, said parts being built and arranged above the roof of buildings, as and for the purposes set forth.

In testimony of said invention I have hereunto set my hand.

ARTHUR J. JUDGE.

Witnesses:
WILLIAM W. HERTHEL,
JOHN W. HERTHEL.