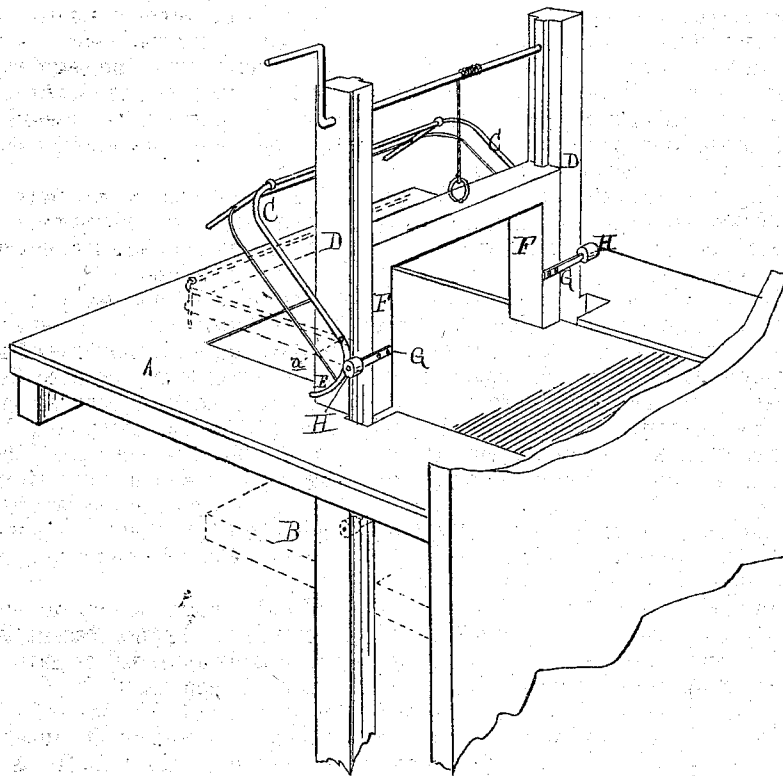


M. J. HINDEN.
Hatchway-Guards.

No. 136,161.

Patented Feb. 25, 1873.



ATTEST :
A. J. Sprague
Chas E. Clouston

INVENTOR:
M. J. Hinden.
By *Atty-*
Wm S. Sprague

UNITED STATES PATENT OFFICE.

MATHIAS J. HINDEN, OF DETROIT, MICHIGAN, ASSIGNOR TO CORYDEN B. PALMER, OF SAME PLACE.

IMPROVEMENT IN HATCHWAY-GUARDS.

Specification forming part of Letters Patent No. 136,161, dated February 25, 1873.

To all whom it may concern:

Be it known that I, MATHIAS J. HINDEN, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Hatchway-Guard; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which my invention is shown in perspective.

The nature of this invention relates to the construction and operation of a guard or fence inclosing one or more sides of a hatchway, and which is compelled to open and close, as occasion requires, by the ascent or descent of the elevator. The invention consists in the peculiar construction and arrangement of the various parts, as more fully hereinafter described.

In the accompanying drawing, A represents the floors of a building provided with the usual hatchways, as shown, and an elevator, B, of any desired construction. C is a fence or guard, made of wire or any suitable and convenient material, and shown in the drawing as surrounding three sides of the hatchway; still it may be so arranged as to protect as many sides of the hatchway as may be necessary. This guard is pivoted to the two guide-rails D, as shown at *a*, and the ends terminate in a true segment of a circle, E. Secured to the slides F of the elevator are rigid arms G, the outer ends of which are journals upon which rotate the friction-wheels H, so

placed that as the platform of the elevator, in its ascent, arrives near the floor, the wheels will engage with the segments E, and, in the further ascent of the platform, open the guard until the platform has passed upward through the floor, when the guard assumes its original position.

In the descent of the platform the operation is the same—the movement of the platform automatically opening or closing the guard, as occasion requires.

Should it be necessary to protect four sides of the hatchway, it is very readily done by duplicating such portions of the above-named parts as would be required for that purpose.

By this arrangement all posts at the corners of the hatchway are done away with, leaving the floor clear, so that the platform may be approached from all points.

I am aware of the patent for hatchway-gate issued to J. W. Meaker, on the 3d day of September, 1872, and claim no part in that invention; but

What I claim as my invention, and desire to secure by Letters Patent, is—

A hatchway guard or gate, whose ends terminate in segments E of a true circle, and which is pivoted to the rails D, and which is operated by wheels H suitably journaled on the elevator, substantially as set forth.

MATHIAS JOSEPH HINDEN.

Witnesses:

THOS. S. SPRAGUE,
H. S. SPRAGUE.