

(No Model.)

P. COHN.

SAFETY ATTACHMENT FOR ELEVATOR CARS.

No. 315,734.

Patented Apr. 14, 1885.

Fig. 2.

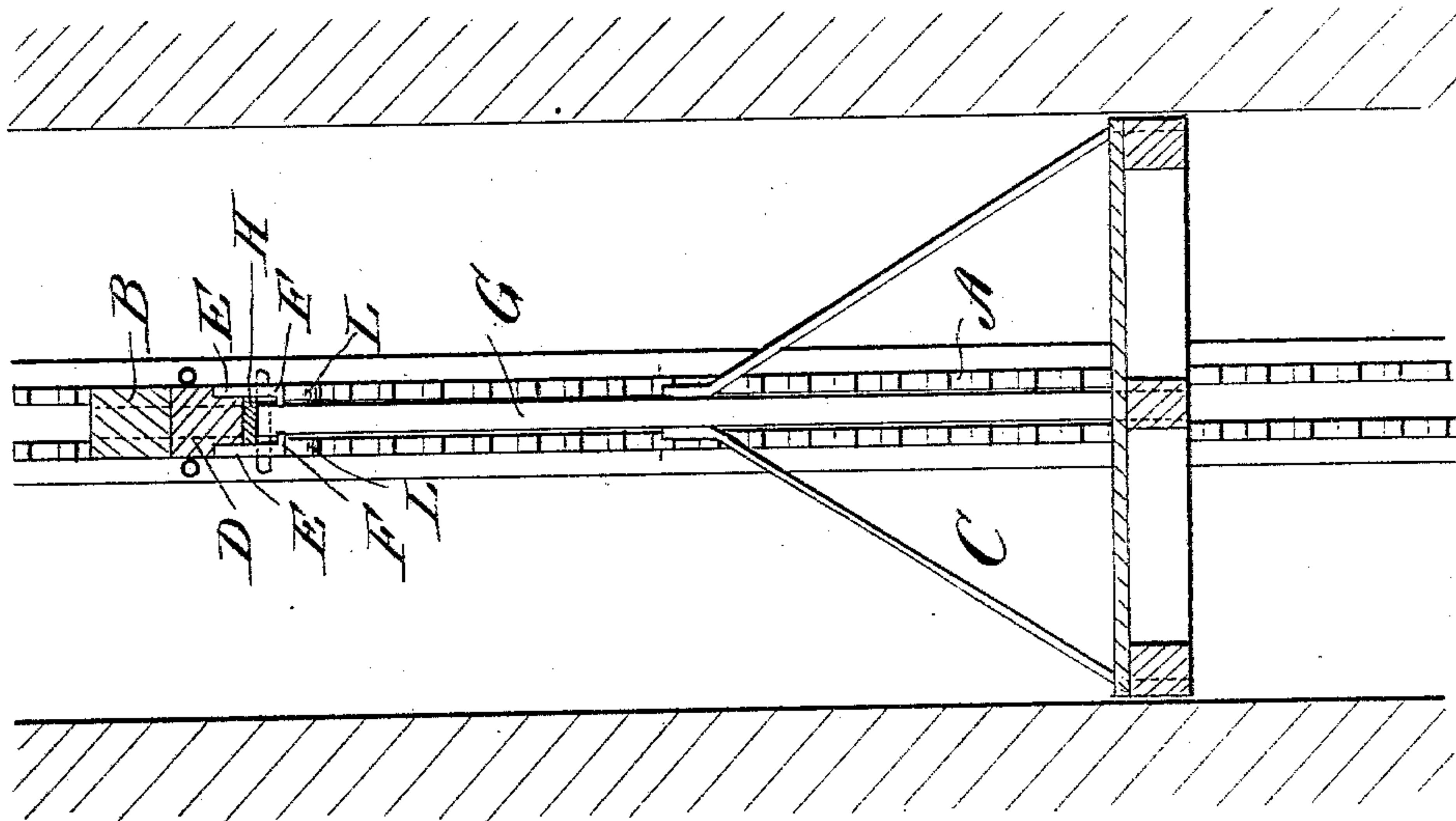
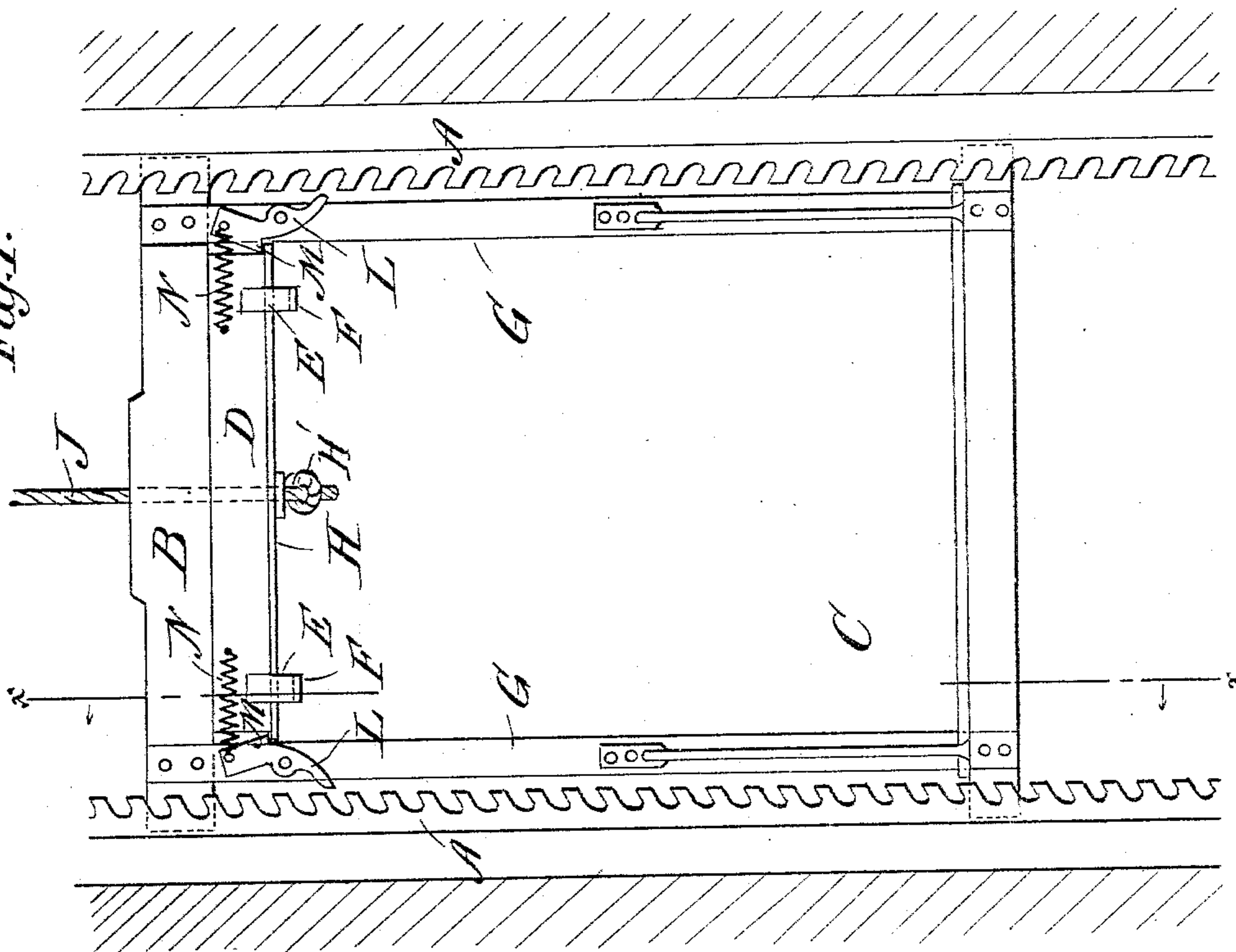


Fig. 1.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

PHILIP COHN, OF NUEVO LAREDO, MEXICO.

## SAFETY ATTACHMENT FOR ELEVATOR-CARS.

SPECIFICATION forming part of Letters Patent No. 315,734, dated April 14, 1885.

Application filed August 6, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIP COHN, of Nuevo Laredo, Mexico, have invented a new and Improved Safety Attachment for Elevator-Cars, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved safety attachment for the cars and cages of elevators, to prevent them from dropping in case the hoisting-cable or the hoisting-gear breaks.

The invention consists in the combination, with an elevator-car, of latches pivoted to the standards and provided with means for throwing them outward, which latches can be locked in place, so as not to catch on racks in the shaft, by a plate held loosely under the cross-beam of the cage and connected with the hoisting-cable, whereby when the hoisting-cable breaks the said bar drops, thus releasing the latches, which are thrown outward and catch on the racks, thus locking the car in place.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a face view of an elevator-car provided with my improved attachment. Fig. 2 is a cross-sectional elevation of the same on the line *x x*, Fig. 1.

On two opposite sides of the elevator-shaft vertical racks A, having upwardly-projecting teeth, are secured.

On the under edge of the cross-beam B of the car or cage C a bar, D, is secured, on each side of which a downwardly-projecting hook-clip, E, is secured at each end, the prongs F of which clip project toward each other and are a few inches below the bottom edge of the bar D. The ends of the bars D are short distances from the standards G of the car or cage. Below the bar D a metal bar, H, is held freely, which rests on the prongs F of the clips E when lowered. The hoisting-cable J passes loosely through the bars B, D, and H, and a knot or head, H', is formed below the bar H, or the end of the cable can be fastened to the bar H in any suitable man-

ner. The ends of the bar H project slightly beyond the ends of the bar D. On each side of each standard a latch, L, is pivoted, which is provided on its inner edge with an offset or shoulder, M, that part of the latch below the shoulder being bent downward and outward.

To the upper end of each latch L a spring, N, is fastened, which has the other end secured to the side of the bar D, thus pulling the upper end of the latch inward and the lower end outward. As the weight of the car is supported by the cable, the bar H is pressed against the bottom edge of the bar D. The shoulders M of the latches L rest on the projecting ends of the bar H, and are locked in place by the pressure of the end parts of the bar H against the shoulders M. The lower ends of the latches are swung inward and cannot engage with the teeth of the racks A, and the springs N are stretched or drawn taut. In case the cable breaks nothing holds the bar H to the bottom edge of the bar D, and thus the said bar H drops on the prongs F of the clips E. Thereby the latches L are released, and their upper ends are pulled inward or toward each other by the springs N, whereby the lower end of the latches are thrown outward and engaged with the teeth of the racks, and thus lock the car in place.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with an elevator car or cage, of latches pivoted to the standards and adapted to engage with the vertical racks in the shaft, a bar held by the hoisting-cable against the bottom edge of the top cross-bar of the standards and adapted to lock the latches in place, and of means for throwing the latches outward when released, substantially as herein shown and described.

2. The combination, with an elevator car or cage, of the latches L, pivoted to the standards and having shoulders M on the inner edges, the bar H, connected with the cable and held by the same against the bottom of the top cross-bar of the car, the said bar H projecting slightly beyond the ends of the

top cross-bar, and of means for throwing the latches outward, substantially as shown and described.

3. In an elevator car or cage, the combination, with the bar D, of the hook-clips E, the  
5 bar H, connected with the hoisting-cable and held below the bar D, the latches L, pivoted

to the standards and having shoulders M, and of the springs N, substantially as herein shown and described.

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Witnesses:

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