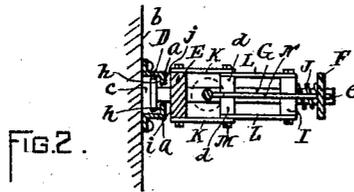
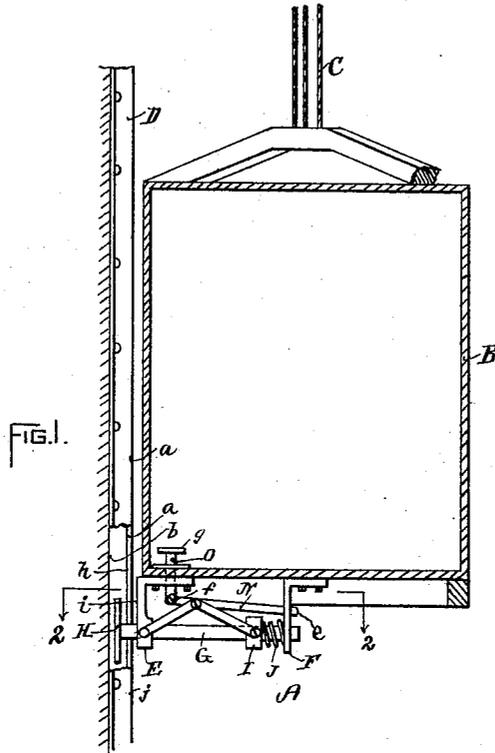


(No Model.)

G. HANCOCK.  
SAFETY BRAKE FOR ELEVATORS.

No. 605,820.

Patented June 14, 1898.



WITNESSES:

*Henry J. Garrison*  
*James M. Beaman*

INVENTOR:

*George Hancock*  
BY *S. Scholfield*  
ATTY.

# UNITED STATES PATENT OFFICE.

GEORGE HANCOCK, OF PROVIDENCE, RHODE ISLAND.

## SAFETY-BRAKE FOR ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 605,820, dated June 14, 1898.

Application filed April 23, 1898. Serial No. 678,663. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE HANCOCK, a citizen of the United States, residing at Providence, in the State of Rhode Island, have invented a new and useful Improvement in Safety-Brakes for Elevators, of which the following is a specification.

The falling of an elevator-car upon the breaking of the hoisting-rope is quite a common occurrence; and it is the object of my invention to provide convenient means for instantly applying a brake to check the descent of the car, the said brake to be operated by the attendant who runs the elevator; and my invention consists in the improved combination of the elevator-car with a slotted clamping-track arranged exteriorly of the car and with pedal-operated toggle-levers and a clamping-head, as hereinafter fully set forth.

In the accompanying drawings, Figure 1 represents a vertical section of the elevator-car, showing a side view of the clamping mechanism of the safety-brake, a portion of the slotted clamping-track being broken away to show the clamping-head. Fig. 2 represents a section taken in the line 2 2 of Fig. 1.

In the drawings, A represents the elevator-well, B the elevator-car, and C the hoisting-ropes attached to the car. The slotted clamping-track D is preferably made of angle-iron bars *a a*, which are bolted to the side *b* of the elevator-well.

The clamping mechanism of the safety-brake is attached to the under side of the car and consists of the pendent brackets E and F, which form the bearings for the sliding bar G, provided at its outer end with the frictional clamping-head H, which passes up and down within the chamber *c* of the clamping-track. To the sliding bar G is firmly secured the collar I, and between the collar I and the bracket F upon the bar G is placed the spiral spring J, which operates to move the bar G in the outward direction, and thus serves to prevent the accidental engagement of the frictional clamping-head H with the

clamping-track. Upon the opposite sides of the bracket E and the collar I are jointed the toggle-links K L K L, which are also jointed together at the opposite ends of the connecting-bolt M, which passes loosely through a perforation made in the lever N, suitable sleeves or collars *d d* being placed upon the connecting-bolt M at the opposite sides of the lever N, thus preserving the proper parallelism of the parts. The inner end *e* of the lever N passes loosely through a perforation made in the bracket F, which constitutes the fulcrum of the said lever, and to the outer end *f* of the said lever is jointed the vertical sliding bar O, the upper end of which forms a pedal *g*, upon which the operator of the elevator is to step upon the breakage of the hoisting-rope, and the weight of the operator transmitted by the lever N to the toggle-jointed bars K L K L will serve to draw the frictional clamping-head H inwardly against the inner side *h* of the clamping-track D, which will cause the car B to swing toward the said track until the frictional side *i* of the bracket E engages with the outer side *j* of the clamping-track, at which time the toggle-jointed links will be in a position to hold the said clamping-head and bracket in firm engagement with the track to prevent the dangerous acceleration of the downward movement of the car.

I claim as my invention—

The combination of the elevator-car, the slotted clamping-track, arranged exteriorly of the car, the sliding bar provided with the clamping-head, the toggle-links for operating the sliding bar in one direction, means for operating the sliding bar in the opposite direction, the lever connected with the toggle-links, and the pedal connected with the lever, substantially as described.

GEORGE HANCOCK.

Witnesses:

SOCRATES SCHOLFIELD,  
HARRY J. GARCEAU.