

(No Model.)

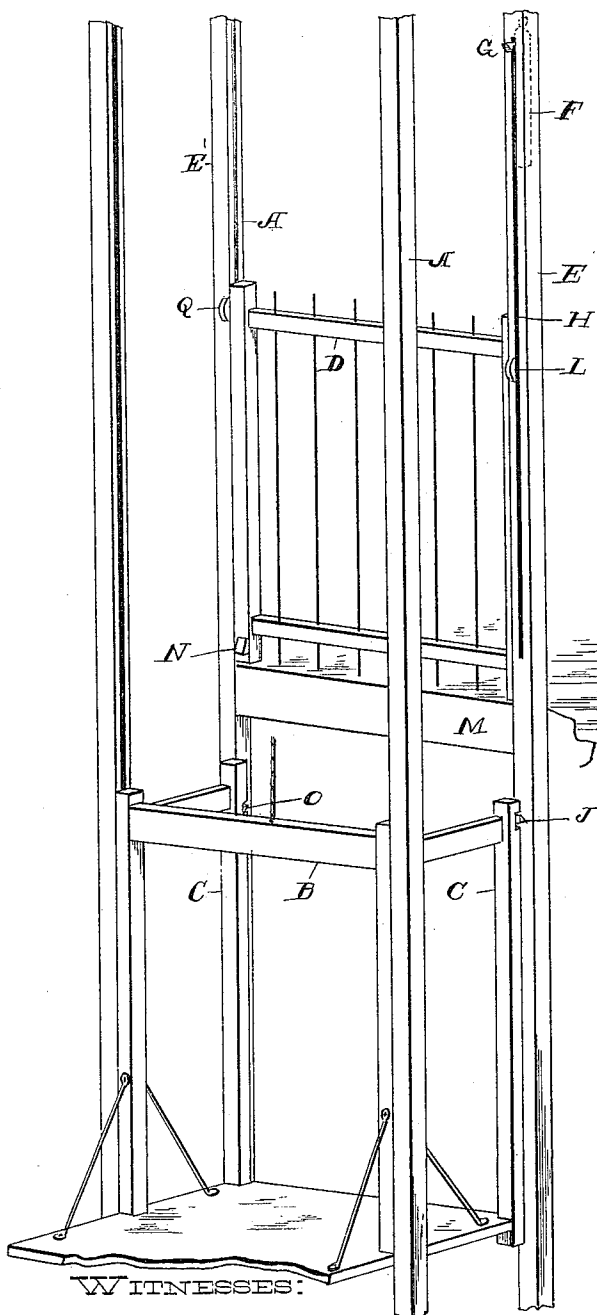
2 Sheets—Sheet 1.

W. MAUS.

MEANS FOR OPERATING ELEVATOR GATES.

No. 362,761.

Patented May 10, 1887.



WITNESSES:

Robert Kirk
Anna D. Torlow.

Fig. 1.

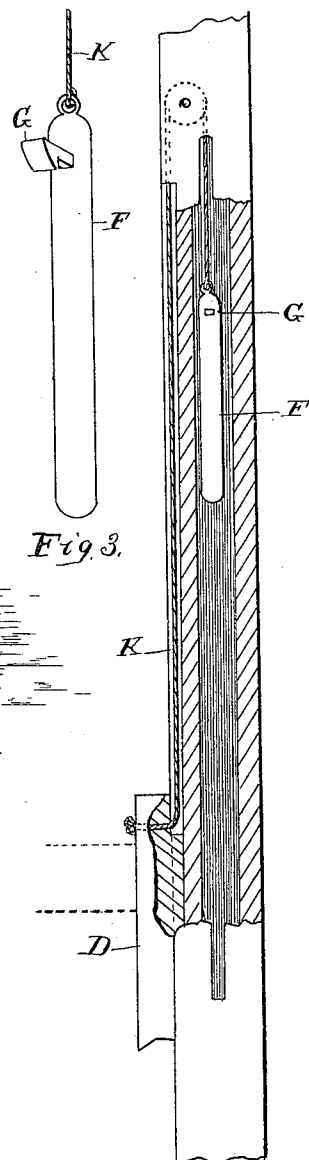


Fig. 3.

Fig. 2.

INVENTOR:

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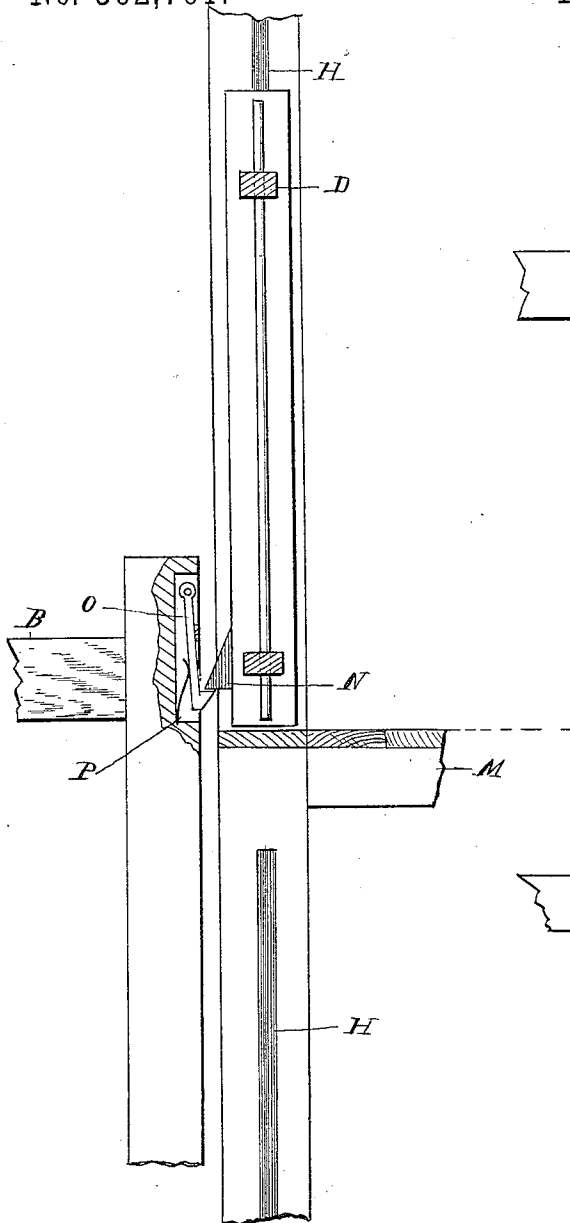


Fig. 4.

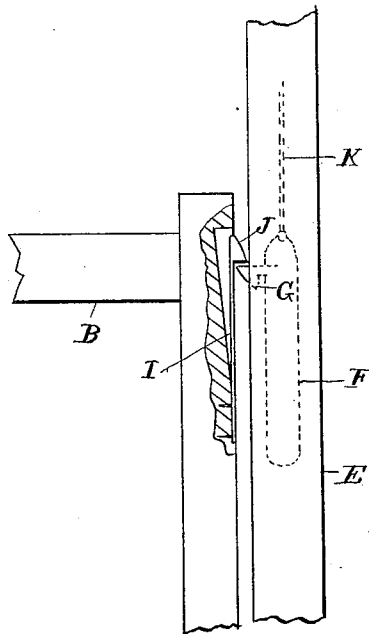


Fig. 5.

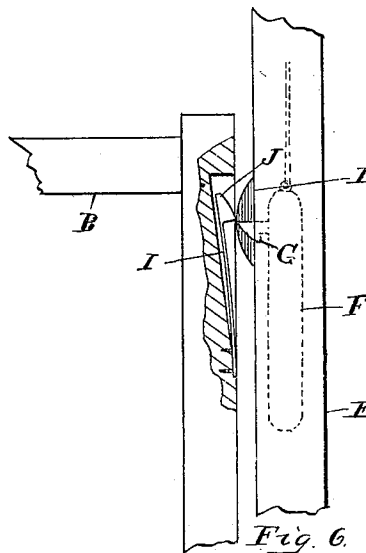


Fig. 6.

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UNITED STATES PATENT OFFICE.

WENDEL MAUS, OF CINCINNATI, OHIO.

MEANS FOR OPERATING ELEVATOR-GATES.

SPECIFICATION forming part of Letters Patent No. 362,761, dated May 10, 1887.

Application filed January 11, 1887. Serial No. 224,015. (No model.)

To all whom it may concern:

Be it known that I, WENDEL MAUS, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Means for Operating Elevator-Gates, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of an elevator, showing my improved gate; Fig. 2, a vertical sectional view of the box-frame and weight; Fig. 3, a perspective view of the weight detached, showing the projecting lug; Fig. 4, a side view of the car, showing it in conjunction with the gate; Fig. 5, a side view showing the connection of the car spring-catch with the weight-lug; and Fig. 6, a view of the same, showing the segmental piece which disengages the said spring.

This invention relates to improvements in elevators; and the novelty consists in the construction and combination of the several parts, whereby the movement of the gate is controlled by the movement of the car, all as will now be fully set out and explained, reference being had to the accompanying drawings.

In the drawings, A represents the ordinary vertical frame of an elevator, and B the ordinary elevator-car.

C represents the side posts of the car, and D the gate moving between the posts E. In either or both of the said posts is a box for the weights F. Upon the weight F is provided a catch, G, which extends outwardly from the post E when the weight is placed in the box, and moves vertically through the slot H as the weight rises or falls. The weight is connected to the gate by means of the cord K.

Upon the side of the post C of the car is provided the spring I, having head J, and this is so disposed that when the car is descending from the floor above, the head of the spring and the catch G engage with each other and raise the gate to a sufficient height for the passage beneath it to and from the car. At the side of the slot H on the inner face of the post E is provided a segmental block, L, placed at such a height above the floor M as that when the car continues its downward motion the head of the spring will be pressed inwardly, so as to be released from the catch G and per-

mit the gate to be lowered and close the opening.

The catch G upon the weight F and the spring I, having the head J thereon, are alone designed to raise the gate in the downward passage of the car. In order, however, that the gate may be raised entirely automatically, a lug, N, is placed upon the opposite side of the car from the spring I. At the upper part of the car, at the outer side of the post C' of the car, is a hinged catch, O, actuated by a spring, P, in such a way that in the downward passage of the car the catch will pass over the lug N, while on the upward movement of the car this catch will engage with said lug and raise the gate sufficiently to allow passage beneath. On the post E', opposite that which has the segmental block L, is placed a similar block, Q, in such position that when the gate has been raised and the car continues its upward movement the said block Q will engage with and press the spring-actuated catch O inwardly, thus releasing the lugs N on the bottom of the gate from the spring-actuated catch O, and allowing the gate to descend to its original position.

The operation of my device is as follows: When the car ascends from the floor below, the spring-actuated catch O of the car C engages with the projecting lug N on the lower part of the gate D and carries it upward until the floor of the car is level with the floor M. By this operation the gate is raised sufficiently for entrance to or egress from the car. When the car moves a short distance upward, the spring-actuated catch O is pressed inwardly by coming in contact with the block Q. This releases the gate and permits it to descend to its normal position. In the return trip of the car the spring-actuated catch J engages with the catch G on the weight F, and as the said weight goes down, the gate D ascends until the floor of the car is level with the floor M. When the car again commences its descent, the spring-catch J is pressed inwardly by the block L, and this permits the gates to descend.

Having described my invention, I claim—

1. The combination, with the elevator-car B, having the spring-catches I and O attached at its upper end on opposite sides, respectively, of the weight F, having the lug G pro-

jecting beyond the face of the box-posts, and said weight connected by a rope with the gate D, substantially in the manner and for the purpose set forth.

- 5 2. In combination with the gate D, having the lug N near its lower end, the box-posts having, respectively, the blocks Q and L on their inner face, the weight F, connected to said gate and having the lug G thereon, and
10 the car B, having catches O and I, substantially as described.

3. An elevator-car provided with spring-catches on its opposite sides, combined with the gate having a lug thereon on one side, and

a weight connected to said gate and having a 15 catch thereon, and with projections on the face of the elevator-frame, whereby the upward and downward movement of the car automatically opens and closes the gate to allow ingress and egress from the car, substantially 20 as described.

In testimony that I claim the foregoing I have hereunto set my hand, this 10th day of November, 1886, in the presence of witnesses.

WENDEL MAUS.

Witnesses:

C. D. ZERBE,
ROBERT KIRK.