

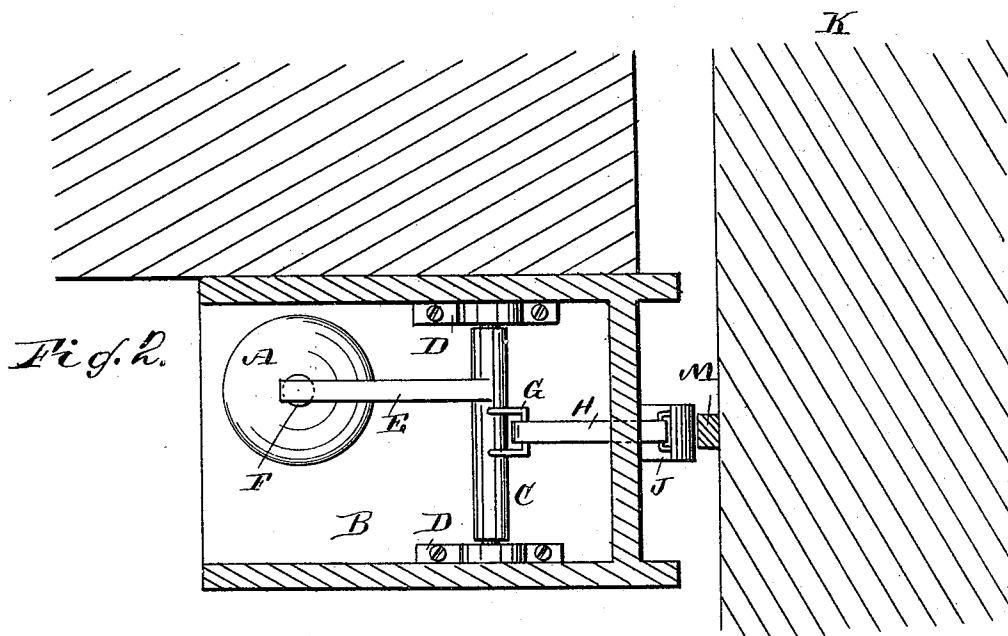
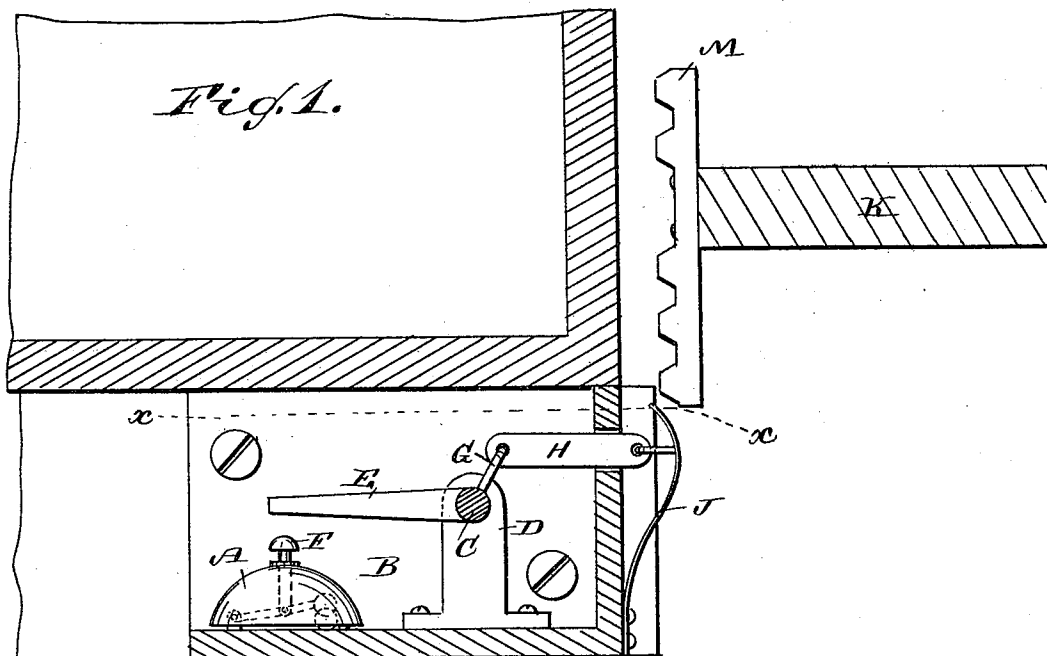
(No Model.)

J. W. METZ.

BELL ALARM FOR ELEVATOR CARS.

No. 350,146.

Patented Oct. 5, 1886.



WITNESSES:

Theo. G. Hoston.
C. Sedgwick

INVENTOR:

J. W. Metz
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN W. METZ, OF MANCHESTER, OHIO.

BELL-ALARM FOR ELEVATOR-CARS.

SPECIFICATION forming part of Letters Patent No. 350,146, dated October 5, 1886.

Application filed September 15, 1885. Serial No. 177,213. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. METZ, of Manchester, in the county of Adams and State of Ohio, have invented a new and Improved Bell-Alarm for Elevator-Cars, of which the following is a full, clear, and exact description.

The invention consists of the combinations of parts, including their construction, substantially as hereinafter described, and pointed out in the claims.

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 longitudinal sectional view of my improved alarm device for elevators, showing the same secured on a car. Fig. 2 is a sectional plan view of the same on the line *x x*, Fig. 1.

The gong A is secured on the upper surface of the bottom of the box B held below the elevator-car on the side of one of the floor-joists. A shaft, C, is journaled in standards D on the upper surface of the floor of the box B, and said shaft is provided with an arm, E, which has its free end above the push-button F of the bell, which push-button operates a hammer within the bell. An arm, G, of the shaft C is connected by a link, H, passed through the end of the box B, with the free curved end of a spring-strip, J, secured at the opposite end on the outer side of the end of the box B.

On the edge of the opening formed in the floor K of the building a vertical rack, M, is secured in such a position that the rounded end of the spring J can be acted upon by the teeth of the rack when the car moves up or down. The teeth of said rack are extended above and below the level of the floor, but one of the same is omitted opposite the floor, whereby as the car approaches and leaves the

floor the alarm mechanism will be operated by the rack; but when the car arrives on a level with the floor said mechanism will not be operated by the rack. The box B is at one side of the guide of the elevator, and the rack M is placed in a corresponding position in the edge of the floor-opening. When the car runs up or down, the spring J is acted upon by the teeth of the rack M, and thereby the arm E of the shaft C is worked up and down very rapidly, and, striking the push-pin of the bell, sounds an alarm.

By providing the alarm the person running the elevator is automatically notified every time the floor of the building is reached, and persons desiring to ride up and down are also notified that the car is just arriving at or departing from the floor.

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

1. In an alarm for elevator-cars, the combination, with the rack fixed to the floor, of the gong, the rock-shaft having an arm actuating the gong-hammer, and a spring connected by a link to a second arm of the said shaft, said spring having contact or engaging with said rack, substantially as and for the purpose specified.

2. In an alarm for elevator-cars, the combination, with the gong, the rock-shaft having an arm for actuating the gong-hammer and the spring connected or linked to a second arm of said shaft, of a rack fixed to the floor and engaging with said spring, said rack having teeth extending above and below the level of the floor and being toothless opposite the floor, substantially as and for the purpose set forth.

JOHN W. METZ.

Witnesses:

WM. P. STEPHENSON,
JOHN K. DUNBAR.