

(No Model.)

2 Sheets—Sheet 1.

O. C. BERCHTOLD & E. I. LAUFFER.

SAFETY ATTACHMENT FOR ELEVATORS.

No. 290,202.

Patented Dec. 18, 1883.

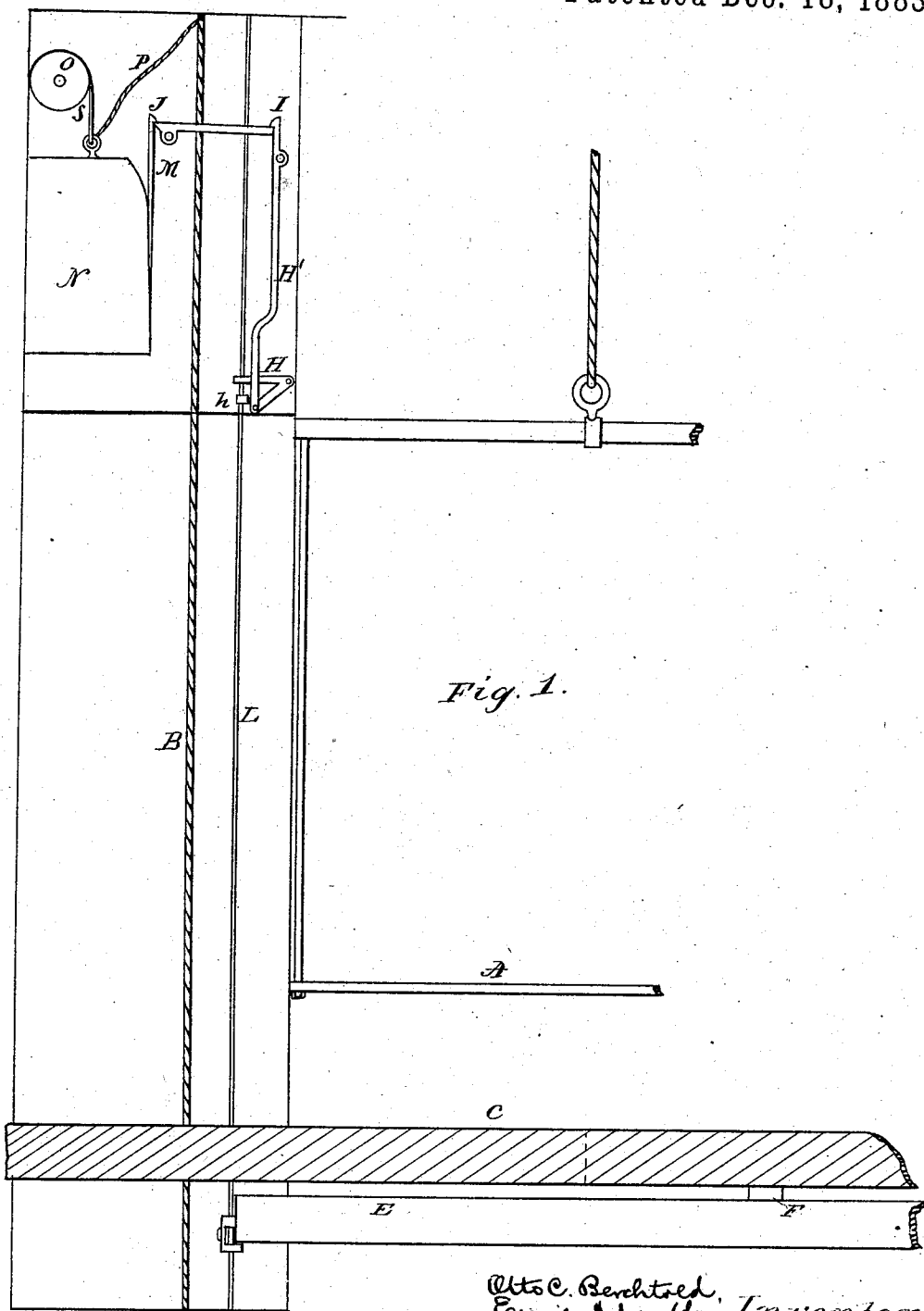


Fig. 1.

Witnesses.
H. H. Schuman
H. H. Haines

Otto C. Berchtold,
Emil I. Lauffer, Inventors
By Geo. C. Tracy & Co.,
Attorneys.

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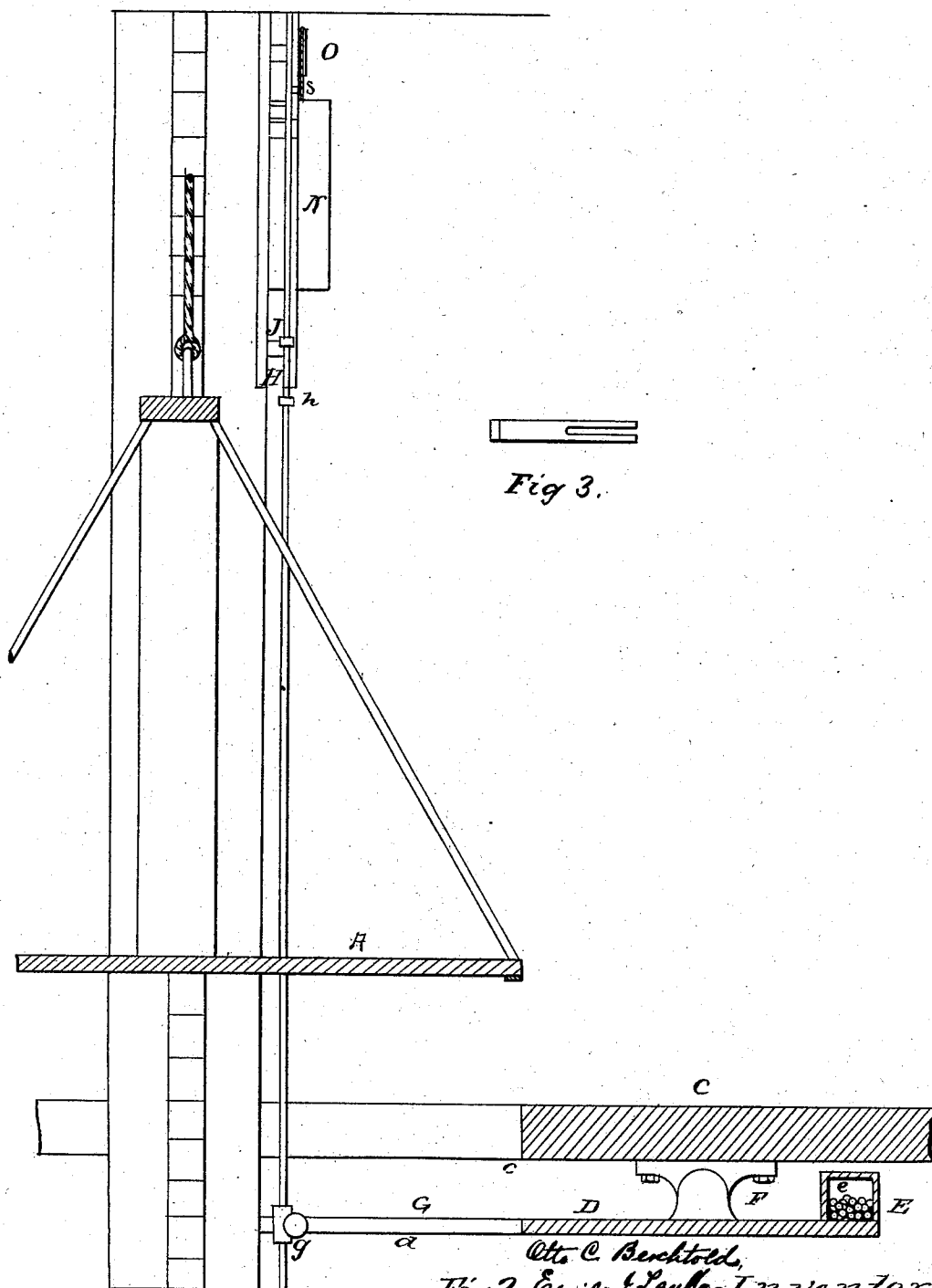


Fig 3.

Witnesses.
H. H. Scheer
J. J. Haines

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Eduard I. Lauffer, Inventors.

By Geo. Tracy & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

OTTO CHAS. BERCHTOLD AND EMIL I. LAUFFER, OF CLEVELAND, OHIO;
SAID LAUFFER ASSIGNOR, BY MESNE ASSIGNMENTS, TO HENRY J. LEH-
MAN, OF SAME PLACE.

SAFETY ATTACHMENT FOR ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 290,202, dated December 18, 1883.

Application filed April 25, 1883. (No model.)

To all whom it may concern:

Be it known that we, OTTO C. BERCHTOLD and EMIL I. LAUFFER, of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and Improved Safety Attachment for Elevators; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to certain improvements in elevators or hoisting apparatus, and has for its object the construction of such attachments as will prevent any liability of persons or articles of merchandise upon the platform being caught between the floor and the said platform and injured thereby. We accomplish this object by means of the device illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation, and Fig. 2 a vertical section through the dotted line in Fig. 1. Fig. 3 is a top view of the lever or catch J, Fig. 1.

A is the elevator-car, which is raised and lowered through the medium of any suitable cable, B, and attachments to the engine or other source of power.

C is the floor shown in section.

D is a tilting bar or beam, having upon one of its extremities the receptacle E, containing the shot or other suitable weights, the other end of the beam being in the same plane as the edge of the hatchway and fastened to the rod L by the sleeve g. This beam is hung on a bearing at F, and is so weighted that it balances upon it. Now, if the elevator-car is ascending and there is any article or a person standing so that they project beyond the edge of the platform, before reaching the floor at C they would strike the edge of the beam D. This will throw the end at E down, so that its weight will act upon and raise the opposite end, which is suitably connected to the rod L by a sleeve at g. The rod, rising, will push the collar h against the projecting end of the compound lever H H', releasing the catches I J, and obviously dropping the weight N, which is attached to the starting and stopping cable B, thus at once throwing its full weight upon the cable, and by drawing it down reversing the

moving power, and either stopping the ascent of the car or causing it to descend, as may have been arranged, thus preventing its further movement in a direction which would cause serious injury to the person or merchandise; and the elevator itself being simple and perfectly automatic in its action, it is always ready to perform its work, and is not an expensive addition to the cost of an elevator. These tilting beams may be so arranged on one or all sides of an elevator shaft or hatchway at each floor that one being moved will by its connection move the other, and thus release the catches and drop the weight on whatever side the obstruction happens to be. When the weight has been dropped, it may be raised again into place from any floor by pulling down upon the rope S, which runs over the pulley O and down through the various floors of the building, as the spring-catch M, when pushed against the horizontal lever, will catch at J, and at the same time at I, bringing the levers H H' back into their original position, and the device is ready for working in the manner before described.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The tilting beam E, weighted at one extreme end, designed to move the levers H H' and drop the weight N, in the manner and for the purposes set forth and described.

2. A safety attachment for elevators, consisting of the tilting beam E, the rod L, the levers H H', catches I J, spring M, and weight N, operating substantially as and for the purposes set forth and described.

3. A safety attachment for elevators designed to reverse or stop the car or platform by the releasing of a weight through the medium of tilting beam or beams and combined levers and catches, substantially in the manner and for the purposes set forth and described.

This specification signed and witnessed this 24th day of February, 1883.

OTTO CHAS. BERCHTOLD.
EMIL I. LAUFFER.

Witnesses:

GEO. C. TRACY,
JNO. T. BOURKE,