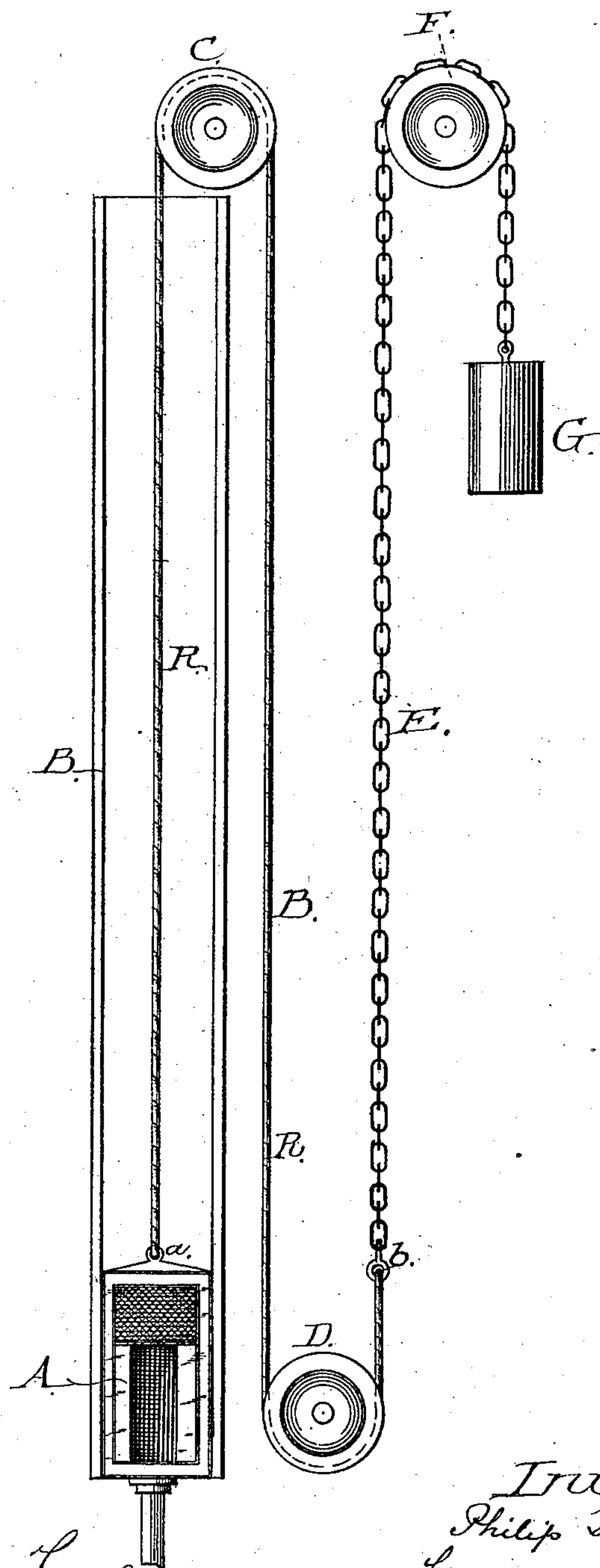


(No Model.)

P. HINKLE.
ELEVATOR.

No. 268,233.

Patented Nov. 28, 1882.



Attest;

Walter Fowler,
E. J. Redmond.

Inventor,
Philip Hinkle

by
J. H. Evans & Co
Atty.

UNITED STATES PATENT OFFICE.

PHILIP HINKLE, OF SAN FRANCISCO, CALIFORNIA.

ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 268,233, dated November 28, 1882.

Application filed November 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, PHILIP HINKLE, of the city and county of San Francisco, and State of California, have invented certain Improve-
5 ments in Elevators; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, in which the figure is a side ele-
10 vation, partially in section, illustrating my invention.

My invention relates to elevators for hoisting loads, and is particularly an improvement on the patent issued to Henry R. Plimpton,
15 dated September 18, 1877, No. 195,305.

The object of my invention is, first, to avoid the vibration of the cage due to the passing of the chain sustaining the counterpoise over a sheave located over the elevator-well; and,
20 second, to avoid the great and obvious danger of the heavy chain used parting above the cage and precipitating its enormous weight upon the grating or roof of the cage.

My invention consists in a rope or wire cable interposed between the elevator-cage and the chain carrying the counterpoise, and also in said interposed rope combined with sundry sheaves and the chain and counter-balance.

In order that those skilled in the art may
30 make and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing, A is the elevator car or cage, and B B the ways in which it slides. I
35 attach a rope, of wire or other material, R, to the top of the cage at *a*, and pass it up through

the center of the elevator-well over sheave C, and thence down below sheave D, and secure its end *b* to a chain, E, similar to one described in Plimpton's patent, before mentioned, which
40 passes over sheave F and sustains the counterpoise-weight G. All these agencies used—rope, sheaves, chain, and weight—are hid in pockets or housings, as will be well understood by those skilled in the art of building eleva-
45 tors.

By the construction herein shown and described all the jar due to the vibration of the sheave over the elevator-well is removed from the cage, and the chain, whose weight still plays
50 the part of a shifting partial counterpoise, is removed from over the elevator-cage to a point where if it should break it would not precipitate its weight upon the elevator-cage under any condition whatsoever.
55

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

1. In an elevator wherein the chain acts as a partial or shifting counterpoise and sustains
60 the counterpoise-weight, the chain E, out of line or to one side of the elevator well or shaft, substantially as set forth.

2. The cage or car A, chain E, counterpoise-weight G, and sheave F, in combination with
65 the interposed rope R and sheaves C D, all constructed and arranged as set forth.

PHILIP HINKLE.

Witnesses:

WM. K. SHRYOCK,
R. KENNEDY.