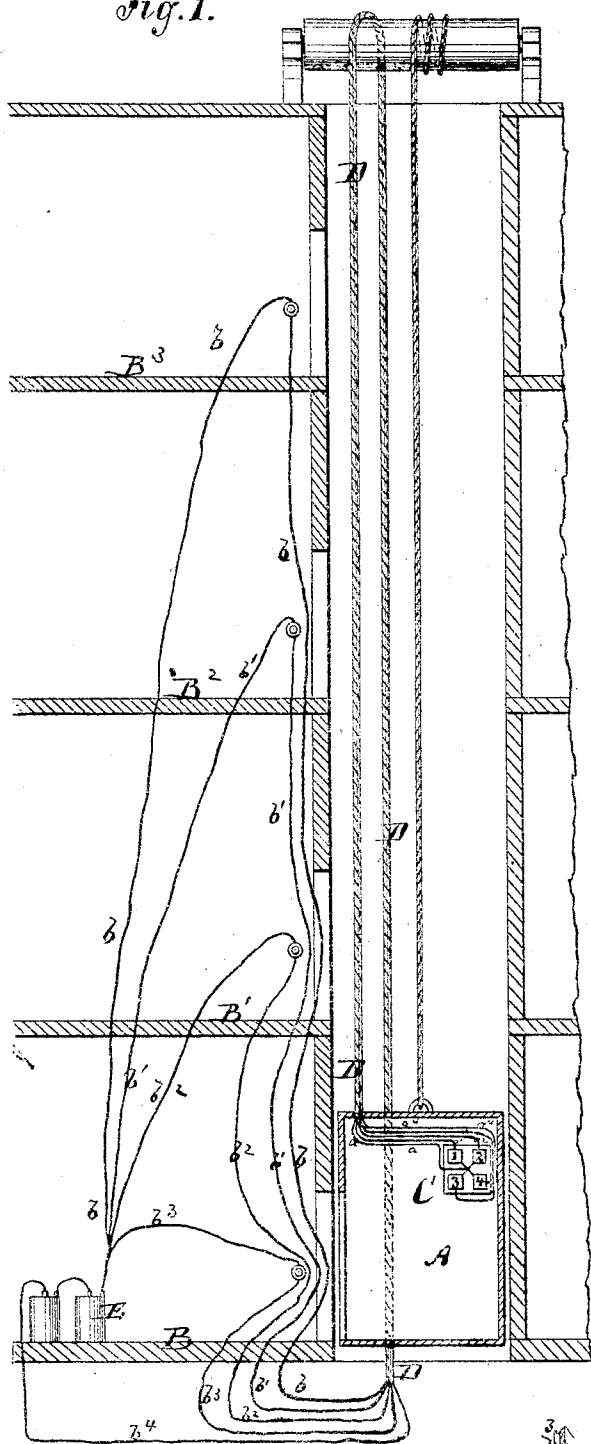


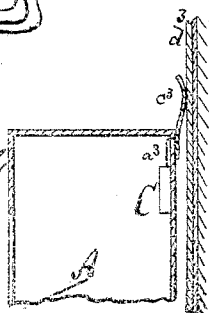
EDWIN HOLMES.
No. 121,620.

Fig. 1.



Witnesses:

A. B. Newman of
Francis M. M. M.



Electric Insulators for Elevators.
Patented Dec. 5, 1871.

Fig. 2.

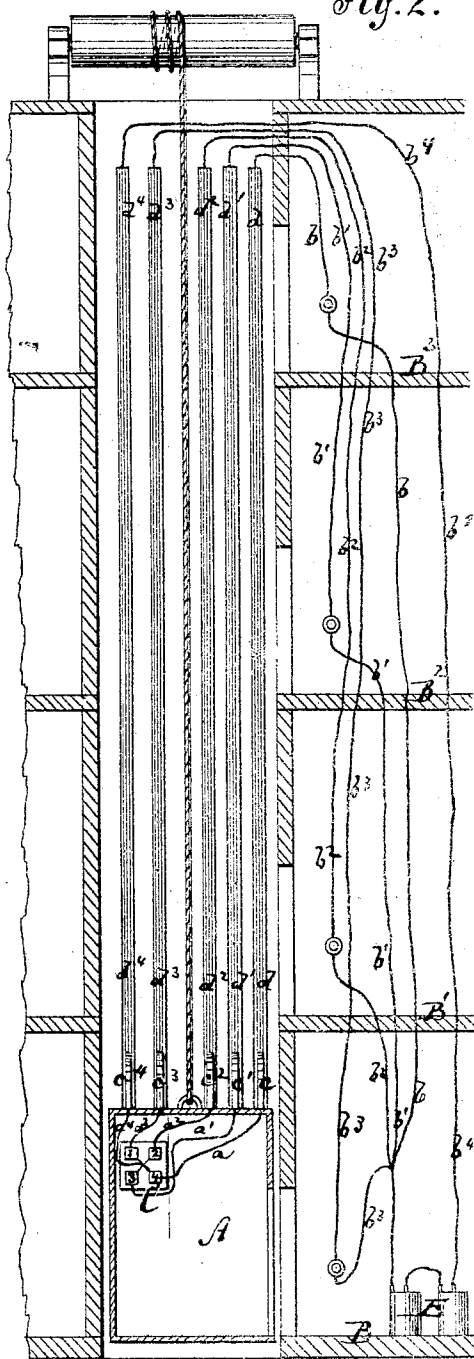


Fig. 3.

Inventor:

E. Holmes
PER
Attorneys.

UNITED STATES PATENT OFFICE.

EDWIN HOLMES, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN ELECTRIC INDICATORS FOR ELEVATORS.

Specification forming part of Letters Patent No. 121,620, dated December 5, 1871.

To all whom it may concern:

Be it known that I, EDWIN HOLMES, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Electric Indicating Elevators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a sectional elevation of my invention. Fig. 2 is a sectional elevation of a modification of the same. Fig. 3 is a detail transverse section of the latter.

Similar letters of reference indicate corresponding parts.

This invention relates to a novel combination of an elevator in hotels and other buildings with stationary electrical apparatus, with the object of causing the production of visible and audible signals within the elevator by electrical impulses given by the closing of circuits on the several floors. By electrical means the persons controlling the elevator can thus be conveniently informed on which floor the elevator may be wanted. The invention consists in combining the movable elevator, which contains a suitable indicating instrument with a flexible or movable series of conductors leading to the several floors, and thence to the operating battery. As the elevator moves up or down the flexible or movable conductors retain the metallic connection between the parts of the indicator and the stationary conductors that extend from the battery.

A, in the drawing, represents an elevator of suitable style and construction, arranged within a suitable building having floors, B B' B'', &c., and suspended and moved up and down by suitable means. C is an indicator or recording instrument, secured within the elevator and provided with pointers, or equivalent devices, of a number equal to the number of stories in the building or more. From the instrument C extends to the top, side, or bottom of the elevator as many conducting wires, $a a^1 a^2 a^3$, &c., as may be required for the purpose of working said in-

strument. These wires are continued separately and properly insulated in a rope, D, which extends from the elevator up or down as may be found preferable, to a fixed part of the building, where its constituent wires are again separately connected with wires $b b^1 b^2 b^3$, &c., that lead respectively to the switches on the several floors, and thence to the battery, one, b^4 , leading direct to the battery E. Continuous metallic connection is thus obtained between the wires $a a^1 a^2$, &c., and the wires $b b^1 b^2$, &c., respectively, so that in whatever position the elevator may be when a circuit is closed by the switch or knob on any one floor the corresponding pointer will be moved on the indicator or other visible or audible notice given that the elevator is wanted on such a floor. During the up-and-down motions of the elevator the flexible conductors in the rope D yield to the changes of positions. In place of the rope D the wires $a a^1 a^2 a^3$, &c., may lead to springs, ears, or rollers $c c^1 c^2 c^3$, &c., respectively, that project from the elevator and are in respective contact with metallic rods $d d^1 d^2 d^3$, &c., that are arranged along the course of the elevator, the wires $b b^1 b^2 b^3$, &c., extending from the ends of these rods, substantially as indicated in Fig. 2.

Other modifications in the arrangement of the flexible or movable conductors may be substituted for those hereinbefore named, and I do not confine myself to their or any special arrangement thereof.

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

1. The combination of an elevator, which contains an indicator, C, with a series of flexible or movable metallic conductors, which connect the wires $a a^1 a^2 a^3$, &c., on the elevator with the wires $b b^1 b^2 b^3$, &c., in the building.

2. The combination of a movable elevator with an indicator moved by electrical impulse from stationary floors of a building.

EDWIN HOLMES.

Witnesses:

JAMES TONMEY,
T. B. MOSHER.