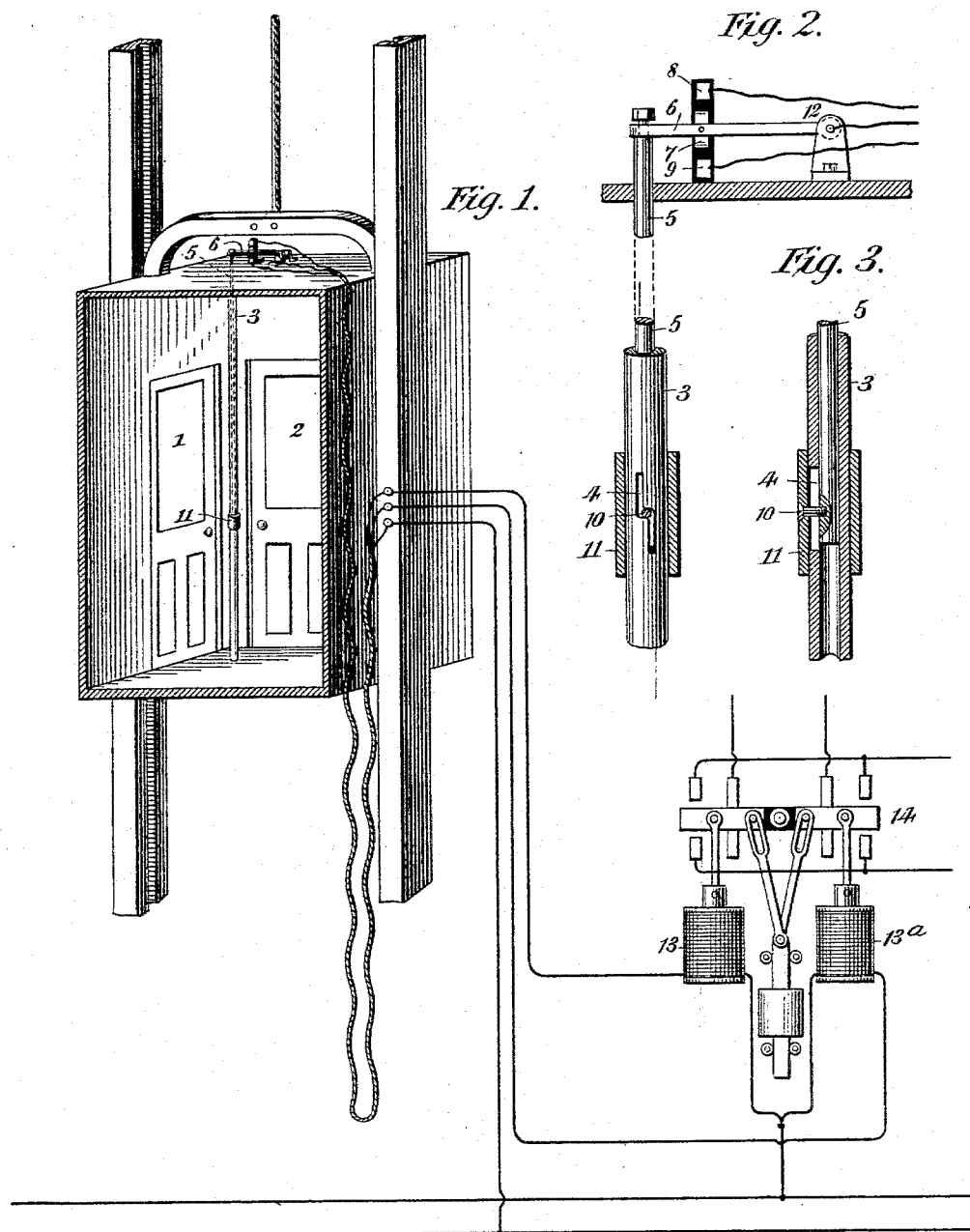


(No Model.)

A. B. SEE & W. L. TYLER.
ELEVATOR.

No. 533,500.

Patented Feb. 5, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

ALONZO B. SEE AND WALTER L. TYLER, OF BROOKLYN, NEW YORK.

ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 533,500, dated February 5, 1895.

Application filed November 27, 1894. Serial No. 530,168. (No model.)

To all whom it may concern:

Be it known that we, ALONZO B. SEE and WALTER L. TYLER, citizens of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Elevators, of which the following is a specification.

This invention relates to elevators.

The object of the invention is to provide a simple and effective switch-operating mechanism for the control of an elevator operated by an electric motor.

In carrying out the invention we preferably provide the elevator car with two entrances on adjoining sides, and in the corner formed by the two sides we place the controller for operating the elevator so that the operator may without changing his position open or shut a door leading to either entrance and at the same time have under his control the controlling mechanism. The electric controller comprises a reversing switch mounted on the top or bottom of the car and connected with a rod within a tubular guide, through a slot in which projects a handle by which the rod may be shifted so as to operate the switch. The slot is preferably provided with a horizontal bend at the center of its length, the walls of the bend constituting stops which limit the extent to which the rod may be shifted in stopping the elevator.

These several features of novelty of the invention will be hereinafter more fully described, and will be definitely indicated in the claims appended to this specification.

In the accompanying drawings, which illustrate the invention, Figure 1 is a perspective view, partly in diagram, showing the elevator equipped with our improvements. Fig. 2 is a detail view partly in section of the switch-controlling mechanism, and Fig. 3 is a longitudinal sectional view of a portion of the switch-controlling mechanism.

In Fig. 1 we have shown a car provided with two entrances upon adjacent sides, a construction of great advantage where it is desirable to take on or let off passengers from two hallways at an angle to one another. In such a case the two doors, 1, 2, are placed upon adjacent sides of the car, and in the corner formed by the sides is placed the controller so that

the operator may manage either door and yet have within perfect control the controller.

As a simple means of controlling the movements of the car we provide within the elevator car and extending from top to bottom a tube or guide 3 provided at an intermediate point in convenient reach of the operator with a slot 4 having a right angle bend at its middle point, as indicated in Figs. 2 and 3. Within the tube 3 is a rod 5 connected at its upper extremity by a loose joint with a switch arm 6 which carries a contact shoe 7 adapted to be shifted into engagement with a contact 8 or 9 according to the desired direction of travel. The lower end of the rod 5 is provided with a pin or arm 10 projecting through the slot 4 and carrying a sleeve or handle 11 to afford a grip for the hand of the operator. With this construction it will be understood that the handle 11 may be shifted vertically between the right angle bend in the slot and either end of the same so that the contact shoe on the switch arm may be brought into engagement with contact 8 or 9, but it will be impossible for the operator by reason of the bend in the slot in stopping the elevator to reverse the same, since before reversal is possible the handle 4 must be shifted in the bend in the slot so as to bring the pin 10 in alignment with the reversing limb of the slot. The contacts 8 and 9 and the pivotal pin 12 of the switch arm are connected with three conductors preferably united in a flexible cable as shown in Fig. 1, which lead to some stationary portion of the frame work, and thence by conductors to the electric supply mains and to solenoids 13 and 13^a, by which the reversing switch 14 controlling the electric motor may be operated. If the handle 4 be shifted upwardly the contact shoe of the controlling switch will engage contact 8 and therefore lead current through one of the solenoids, say 13, thus depressing the left end of the reversing switch 14 and operating the electric motor in one direction. If the handle be shifted in the opposite direction so that the controlling switch engages contact 9, solenoid 13^a will be brought into operation and will depress the right end of the reversing switch 14, thus reversing the direction of current in the motor.

We deem it unnecessary to describe in de-

tail the motor connections of the reversing switch as this forms no part of the present invention, and has, moreover, been fully described in another application filed by us, Serial No. 531,185, filed August 24, 1894.

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

1. An electrically operated elevator provided with a guide fixed in the car, a rod accessible to the operator mounted within the guide and extending through the car, and a controlling switch mounted upon the outside of the car connected to the rod.

2. A controller for an electric elevator comprising a tube mounted on the frame of the

car, a rod passing through said tube a controlling switch connected to said rod on the outside of the car, an arm projecting from the rod through a slot formed in the tube, said slot being provided with a bend at an intermediate point to check the direction of movement of the rod, and a handle mounted on the arm.

In testimony whereof we have hereunto subscribed our names, at Brooklyn, New York, November 23, 1894.

ALONZO B. SEE.
WALTER L. TYLER.

Witnesses:

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