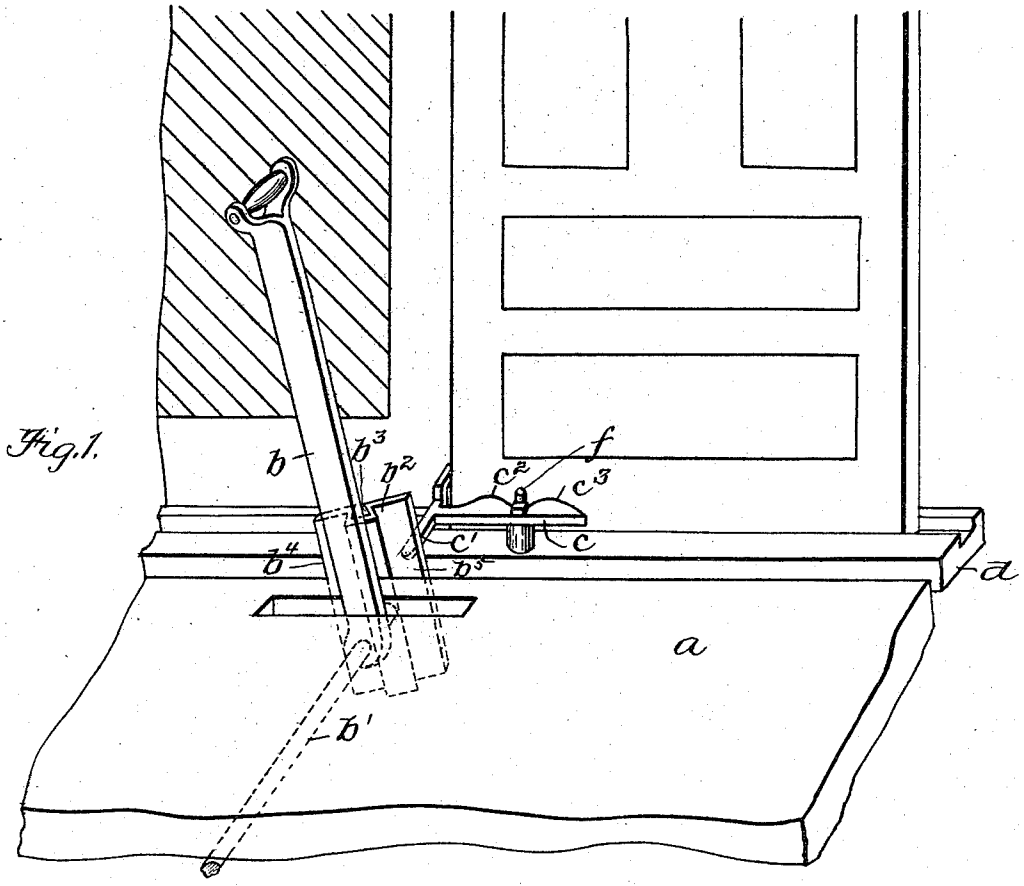
(No Model.)

T. F. SCOTT.

ELEVATOR CONTROLLER AND DOOR LOCK.

No. 535,863. Patented Mar. 19, 1895.

Fig. 1.



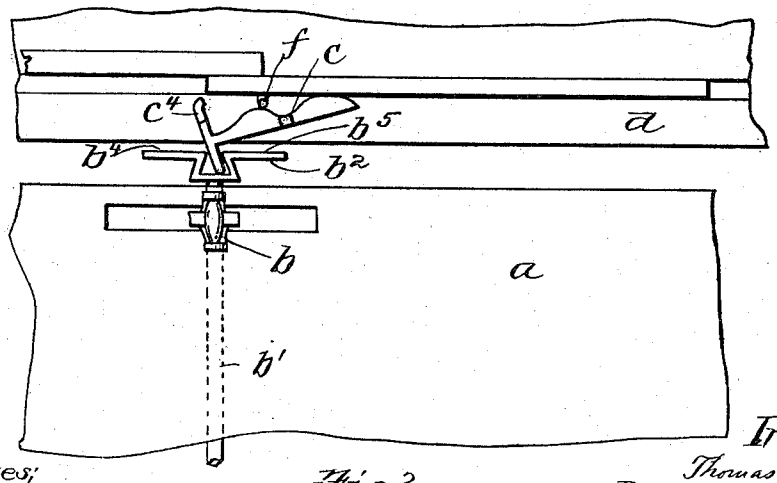


Fig. 2.

Witnesses;
Jno. Tatlow Cully
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UNITED STATES PATENT OFFICE.

THOMAS F. SCOTT, OF EVERETT, MASSACHUSETTS.

ELEVATOR-CONTROLLER AND DOOR-LOCK.

SPECIFICATION forming part of Letters Patent No. 535,863, dated March 19, 1895.

Application filed June 9, 1893. Serial No. 477,054. (No model.)

To all whom it may concern:

Be it known that I, THOMAS F. SCOTT, of Everett, in the county of Middlesex and State of Massachusetts, have invented a new and useful Lock, of which the following is a specification.

My invention is designed for use more especially with the doors of an elevator well and has for its object to prevent the opening of the door when the manipulator for starting and stopping the car is in position to start the car.

A further object is to lock the manipulator and prevent the starting of the car when the door is open.

The invention is shown as embodied in an elevator provided with a manipulator which is the well known lever but it will be understood that the invention can be applied to many different forms of starting and stopping devices.

The invention is the combination of an elevator car; a manipulator traveling with the car, for controlling the car; a door in the elevator well and a catch to engage that door and the traveling manipulator; a grooved plate connected with the manipulator which will prevent the catch from moving when the traveling manipulator is opposite the catch in position to cause the car to move, thus locking the door, but which will permit the catch to be released and the door to open and will engage and lock the manipulator until the door is again closed, when the manipulator is opposite the catch and in a position to cause the car to remain at rest.

In the drawings: Figure 1 is a view in perspective; Fig. 2, a plan view.

The car a is provided with a manipulator which in this instance is the well known lever b by which the car is operated in the well known manner. The shaft b' which is moved by lever b is provided with a plate b^2 having a groove b^3 and the straight surfaces b^4 b^5 at each side of the groove. The opposite walls of this groove are inclined as shown to retain the projection c' of catch c. Catch c is mounted upon landing d so as to swing in a horizontal plane and has the cam projections c^2 c^3 and lip c^4 which is bent so as to allow the passage of projection f. Projection f is secured upon the door in a position to engage the cams c^2 c^3.

When the manipulator b is moved to the right or left to set the car in motion, plate b^2 is moved to present the surfaces b^4 b^5 to the projection c' in which position the catch cannot move to release the door. When however manipulator b is in the middle position and the door moved to the left, the projection f engaging cam c^2 moves catch c, as projection c' of the catch can move into the groove b^3 and thus allow the door to slide open at the same time locking the manipulator in the middle position while the door remains open. When the door is again closed projection f engages cam c^3 and causes lip c^4 to again engage the door.

What I claim as my invention is—

The improved lock for elevators which consists of a car; mechanism fast to and traveling with the car for starting in either direction the motive power of the elevator car and for stopping the same; a plate attached to this mechanism having a groove along its middle; a door upon the elevator well; a double ended catch for engaging the door and the plate, all combined and operating substantially as described.

THOMAS F. SCOTT.

Witnesses:
JONATHAN CILLEY,
JOHN R. SNOW.