(No Model.)

N. P. CLEAVES.

DOOR FOR ELEVATOR WELLS.

No. 304,294. Patented Sept. 2, 1884.

Fig 1

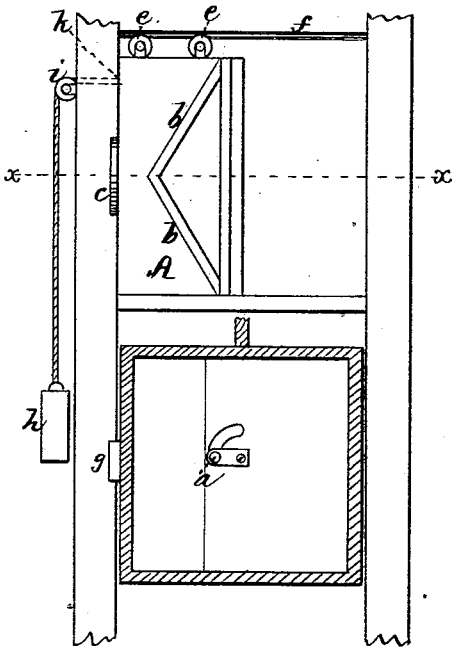

Fig 2

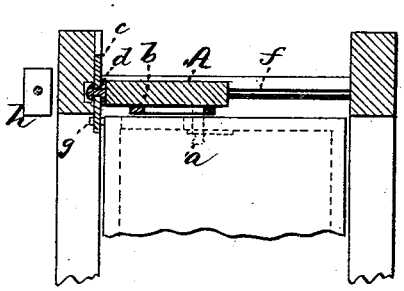

Fig 3

WITNESSES

F. L. Bredeen.

Florence Cleaves.

INVENTOR

N. Porter Cleaves

UNITED STATES PATENT OFFICE.

N. PORTER CLEAVES, OF BOSTON, MASSACHUSETTS.

DOOR FOR ELEVATOR-WELLS.

SPECIFICATION forming part of Letters Patent No. 304,294, dated September 2, 1884.

Application filed December 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, N. PORTER CLEAVES, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Doors for Elevator-Wells, of which the following description, in connection with the accompanying drawings, is a specification.

My invention has for its object the opening of the doors of the entrance to elevator-wells, as the car ascends or descends, by mechanism operated from within the car, or of passing the said doors without their being opened, the whole being at the will of the operator within the car.

Figure 1 is a vertical section of an elevator-well, with its car and operating-pin, with my improvements applied thereto. Fig. 2 is a plan in section on the line *x x* of Fig. 1, and Fig. 3 a detail in elevation.

In the said drawings, *a*, Fig. 1, shows a pin, which, if turned to the left as the car ascends, comes in contact with the slanting projections *b* on the well-door A, causing the door to open to the right, the catch *c* releasing the bolt *d* by the side of the car, (see Fig. 2,) or a projection thereon coming in contact with the curved or inclined surface of the catch *c;* or, if it is wished to pass to an upper floor without opening the well-door A, turning the operating-pin *a* to the right will permit it to pass clear of the slanting projections *b* on such well-doors, and they will remain closed.

The well-door A is made to slide easily by means of the grooved wheels *e*, running on metal or other suitable guides, *f*, although any suitable appliance may be used for guiding or operating the door.

The pin *a*, if desirable, can be made with a spring-catch to hold it in the position required.

The bolt *d* of the well-door passes through a slot in the catch *c*, the curved or inclined side of the catch being toward the inside of the well, so as to come in contact with the side of the car, or a projection, *g*, thereon, as it ascends or descends, thus releasing the bolt *d* and allowing the door to be opened in the manner described. If it is desired to open the well-doors from the hall-floors, the catch *c* may be operated by a suitable key. The door of the well, after being opened in the manner described, is closed by the weight *h*, attached to a cord passing over the pulley *i* and connected with the door at *k;* but any suitable appliance may be used for closing the door.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a door for elevator-wells, the combination of the movable actuating-pin *a*, with projections, as described, on the well-door, whereby the door can be opened, or passed without opening, at the will of the operator within the car, substantially as and for the purposes set forth.

2. The combination of the sliding door A, provided with inclined projections *b*, the catch *c*, operated on by the side of the car, or a projection thereon, and the movable actuating-pin *a*, operated from within the car, all for the purposes substantially set forth and described.

Witness my hand this 18th day of December, A. D. 1883.

N. PORTER CLEAVES.

In presence of—
F. L. BREDEEN,
FLORENCE CLEAVES.