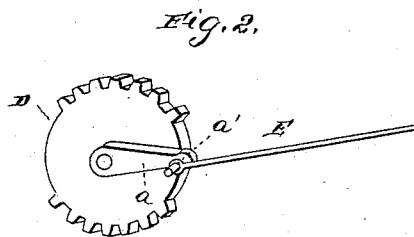
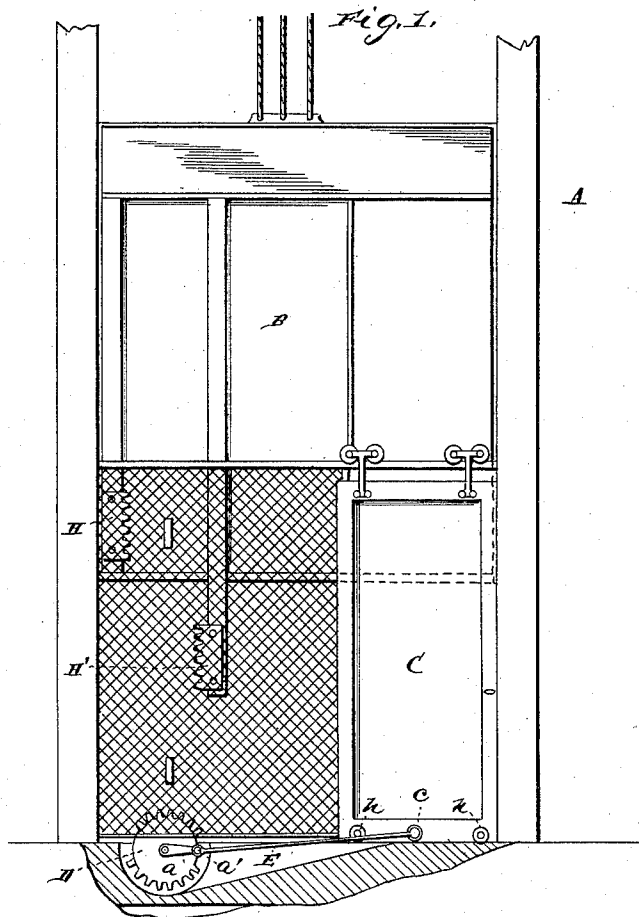


(No Model.)

J. B. BAILEY.
ELEVATOR.

No. 468,756.

Patented Feb. 9, 1892.



Witnesses
Philip C. Mass.
Geo. M. Anderson

Inventor
Jas. B. Bailey
by E. W. Anderson
his Attorney

UNITED STATES PATENT OFFICE.

JAMES B. BAILEY, OF WEST LIBERTY, OHIO, ASSIGNOR OF ONE-HALF TO
JAMES G. REDMOND, OF SAME PLACE.

ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 468,756, dated February 9, 1892.

Application filed July 31, 1891. Serial No. 401,276. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. BAILEY, a citizen of the United States, and a resident of West Liberty, in the county of Logan and State of Ohio, have invented certain new and useful Improvements in Elevators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a front elevation, partly in section; and Fig. 2 is a detail view.

My invention relates to certain improvements in door opening and closing devices for elevators; and it consists in the novel construction and combination of parts, as hereinafter described, and pointed out in the claim.

In the accompanying drawings illustrating the invention, the letter A designates the shaft or well, and B the cage or car therein.

C represents the door of the shaft, and which is shown as of the usual sliding form.

On each floor of the building, at one side of the shaft or well A, is hung the toothed or cog wheel D, having rigidly secured thereto an arm *a*, provided with a wrist *a'*, to which is connected one end of a rod E, the other end of which is connected to the door C at any suitable point, as at *c*.

H H' represent two segments or racks carried by the cages or cars, one below and one above the floor thereof, and in position to engage the toothed wheel D on opposite sides.

The operation of the parts is as follows: Upon the ascent of the car or cage the up-

per rack H will engage the teeth of wheel D just before the car reaches the level of the floor, turning said wheel and, by means of the wrist and rod connection, sliding the door open as the floor is reached. As the car continues to ascend, the lower rack H' will engage said wheel on the opposite side, turning it in the reverse direction and operating to close said door. Upon the descent of the car the rack H' will first engage the cogs to open the door, which will be closed by the rack H as the car continues to descend. One or more small anti-friction rollers *h* may be placed under the lower end of the door to prevent binding when operated.

It is obvious that a swinging door might be employed, the point of connection therewith of the rod E being so located as to open and close it by the operation of said rod.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The door-operating device for elevators, comprising the rotary toothed segments located at the landings and having an arm *a* rigidly secured thereto and provided with a wrist, and a rod connected at one end to said wrist and at its opposite end to the door or gate, in combination with the rack-bars carried by the car, one above and one below its floor, and adapted to engage opposite portions of said segments, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES B. BAILEY.

Witnesses:

JOS. H. F. MOPPS,
GEO. F. BAILEY.