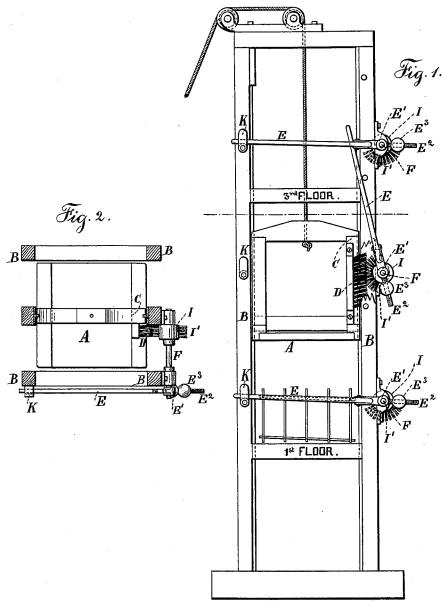
## J. H. PREATER.

ELEVATOR GATE.

No. 386,605.

Patented July 24, 1888.



Witnesses: J Stail-J Char N. Smith, Inventor: James H. Preater, per Lemuel W. Serrell.

## United States Patent Office.

JAMES H. PREATER, OF BROOKLYN, NEW YORK.

## ELEVATOR-GATE.

SPECIFICATION forming part of Letters Patent No. 386,605, dated July 24, 1888.

Application filed April 25, 1888. Serial No. 271,811. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. PREATER, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in 5 Guards or Gates for Elevators, of which the

following is a specification.

In the construction of elevators for storehouses or warehouses for transporting goods as distinguished from passengers only, it is 10 necessary at each floor-level to provide a gate or guard of some description which will act to prevent persons falling down the hatchway, and many devices of this kind have heretofore

My invention relates to a guard or gate for elevators having in view the objects before named.

My invention consists in a pivoted guard arm or gate connected to a rock-shaft, which 20 rock-shaft is supported in bearings secured to the uprights or timbers forming the hatchway of the elevator, and upon said rock-shaft I secure a hub, in which hub I form a segmental brush of long bristles, and upon the 25 side of the elevator-guideway I place a brush of bristles, the latter bristles being placed at an inclination upwardly, and as the elevator is raised the bristles of its brush engage the bristles of the segmental brush on the rock-30 shaft, and the meshing bristles as the elevator is raised turn the rock-shaft and elevate the pivoted guard arm or gate, and as the elevator passes upwardly the bristles are freed from each other and the guard or gate falls back to 35 place.

I provide a counter-weight connected to the pivoted guard-arm, so that the weight to be raised can be regulated to a minimum.

In the drawings, Figure 1 is an elevation of 40 the elevator, pivoted guard-arm, and connected parts. Fig. 2 is a sectional plan of the same. The elevator A and the parts forming the hatchway and guides B for the elevator may be of any desired construction. Upon the side

45 of the elevator, and upon one of its upright guideways C, I place a brush, D, of long stiff bristles, which bristles are set in the brush at an inclination upwardly. The pivoted guard arm or gate E suffices to divide or separate the 50 apartments from the hatchway, and said piv-

oted guard arm may consist of simply the arm E, as shown in the drawings, or there may be upon said arm a gate of the well-known lazytongs construction. This guard arm E is connected to a hub, E', which hub is secured upon 55 the rock-shaft F, and upon said hub is a threaded rod, E', upon which is a weight, E<sup>3</sup>. The rock shaft F is journaled in bearings upon the uprights or hatchway, and upon said shaft is the hub I, in which is made a segmental 60 brush of bristles, I'. These bristles are set in lines radiating from the rock-shaft F, and they are long and stiff, and this segmental brush in its normal position is upon the under side or beneath the hub I.

As the elevator is raised, the bristles of the brush D come against the bristles of the brush I', and the bristles mesh similar to the teeth of cog - wheels, turning the hub I, the rockshaft F, and raising the guard arm or gate E. 70 As the elevator passes upward, and as the bristles of the brush D pass above the bristles of the brush I', the guard arm and its rockshaft are no longer held, but are free to return to their normal position, the guard arm or gate 75 at its outer end resting in the latch K and closing the passage-way to the elevator. As. the elevator descends, the bristles of its brush pass easily by the bristles of the brush I', the inclination of the bristles of the brush D allow- 80 ing them to bend easily in the operation. I may prefer to employ brushes of spring-wire or similar material instead of bristles, the action being the same.

It is obvious that felt or rubber pads may 85 take the place of the bristles, the movement with these devices being the same, practically, as with the bristles; but as these do not possess the advantageous features of the bristles I prefer to employ the bristles as more effect- 90 ive in their operation, it being possible, by means of the threaded rod E2 and the movable weight E3, to so nearly counterpoise the pivoted guard arm or gate E that the bristles in operation will not be obliged to lift much ac- 95 tual weight.

I claim as my invention-

1. The combination, with the pivoted guard arm or gate, of the rock-shaft F, to which said guard arm or gate is connected, the segmental 100 brush I upon said rock-shaft, and the brush D upon the side of the elevator guideway,

substantially as set forth.

2. The combination, with the pivoted guard 5 arm or gate E, of the hub E' for the same, a threaded rod, E', and counter-weight E', the rock shaft F, to which the hub E' is connected, bearings for the rock shaft, a hub, I, and segmental brush I', and a brush, D, upon the side of the elevator-guideway C, substantially as set forth.

3. The combination, with the pivoted guard arm or gate E, of the hub E' for the same, a threaded rod, E<sup>2</sup>, and counter-weight E<sup>3</sup>, the

rock-shaft F, to which the hub E' is connected, 15 bearings for the rock-shaft, a hub, I, and segmental brush I', and a brush, D, upon the side of the elevator guideway C, the bristles or wires of the brush I' being set in lines radiating from the rock-shaft F, and the bristles or wires of the brush D being set at an inclination upwardly, substantially as set forth.

Signed by me this 11th day of April, 1888.

JAS. H. PREATER.

Witnesses: GEO. T. PINCKNEY, WILLIAM G. MOTT.