(No Model.) 2 Sheets—Sheet 1.

# J. GIBBINS.

## OPERATING ELEVATOR GATES.

No. 387,224. Patented Aug. 7, 1888.

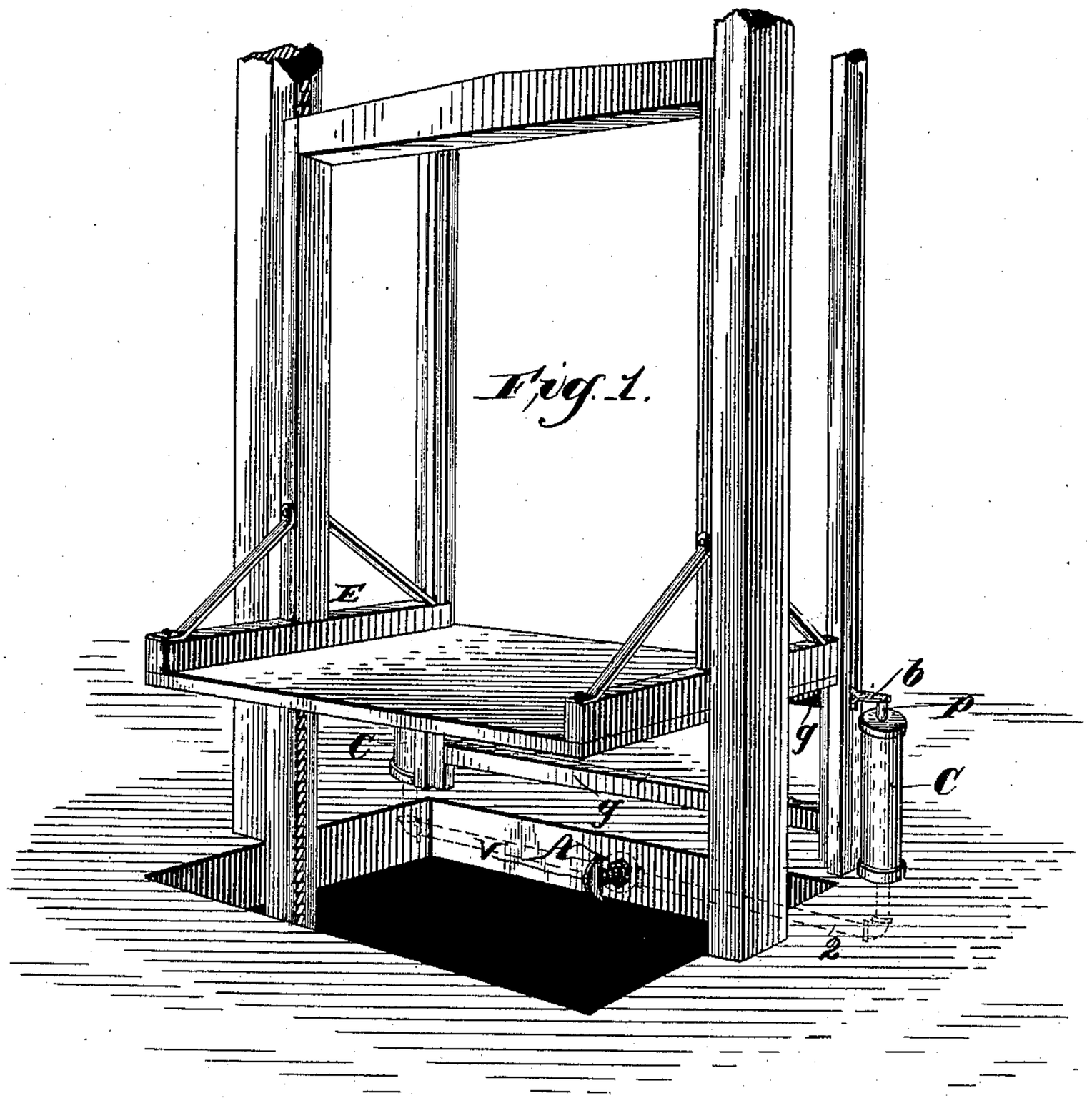


Fig. 1.

Witnesses—
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(No Model.) 2 Sheets—Sheet 2.

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## OPERATING ELEVATOR GATES.

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Fig. 2.

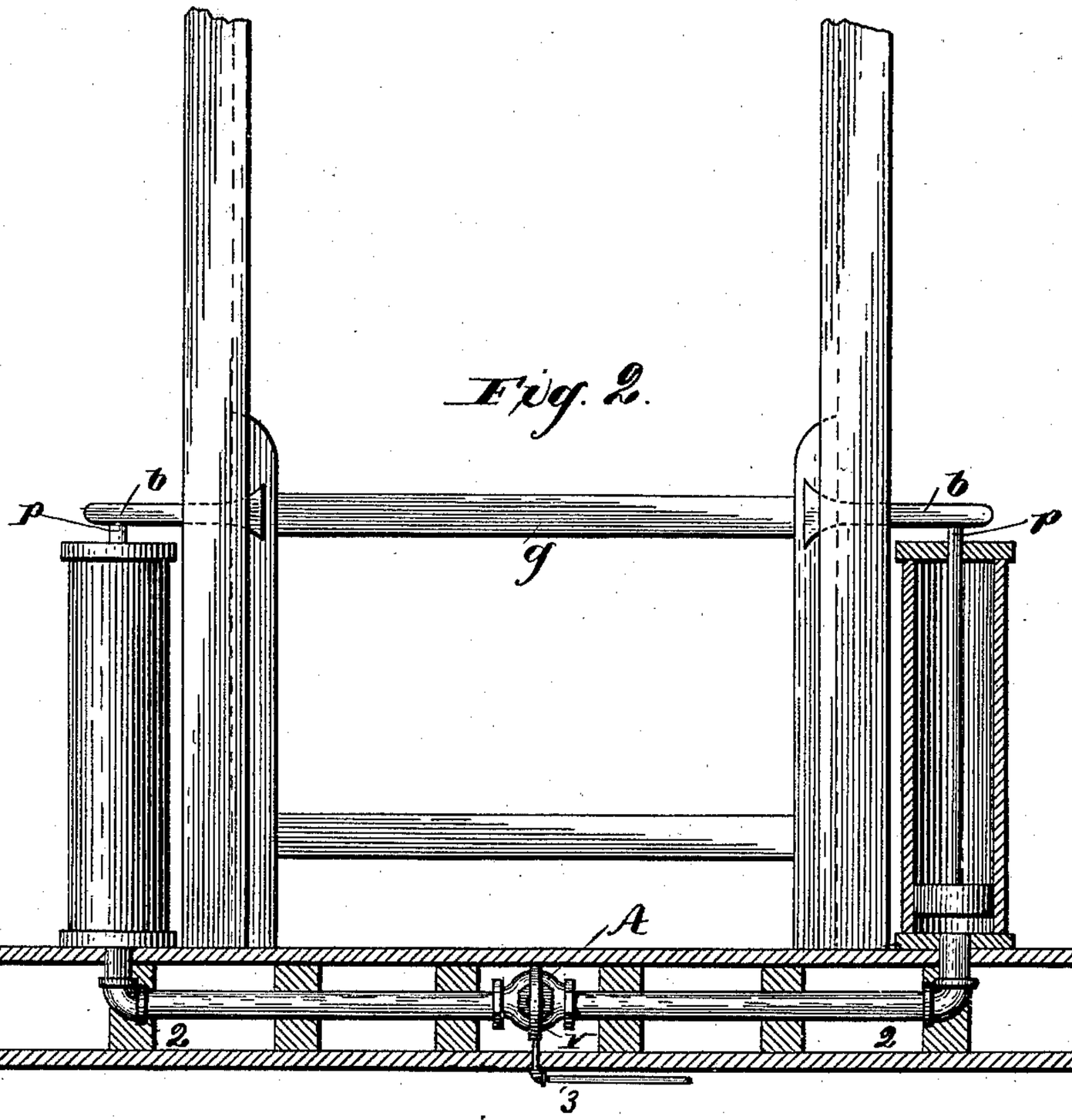
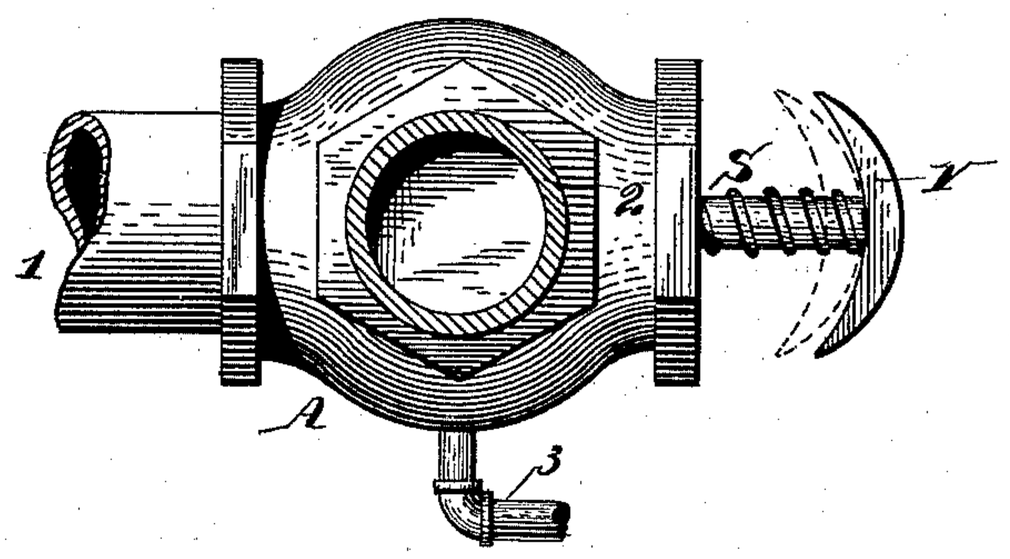



Fig. 3.

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# UNITED STATES PATENT OFFICE.

JAMES GIBBINS, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO STEPHEN H. HOWLAND, OF SAME PLACE.

## OPERATING ELEVATOR-GATES.

SPECIFICATION forming part of Letters Patent No. 387,224, dated August 7, 1888.

Application filed July 22, 1887. Serial No. 245,039. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES GIBBINS, of Springfield, Hampden county, State of Massachusetts, have invented Improvements in Operating Elevator-Gates, of which the following is a specification.

My invention has for its object to automatically open and close the door or gate placed between an apartment and an elevator-way by the presence of the elevator through the intermediate action of mechanism made operative by a liquid or fluid pressure, which pressure is preferably from a source of supply independent of the power employed to propel the elevator; and to this end my invention consists, primarily, in the combination, with a guided elevator or car, of pressure-actuated mechanism having connections to a pressure-controlling valve in the path of said elevator, substantially as hereinafter described.

My invention further consists in subcombinations, to be hereinafter described.

In the accompanying drawings, Figure 1 represents an elevator that is provided with my invention; Figs. 2 and 3 are views of details of my invention.

C C represent cylinders provided with pistons having piston-rods that project from their upper ends, on which the projecting bars *b b* of gate *g g* rest, so that the lifting up of the rods *p p* will lift bars *b b* and with them the gate *g g*. When the rods *p p* again enter the cylinders C C, the gate *g g* by its gravity follows down and assumes the position termed "closed."

The pressure to force up the piston-rods *p p* enters the cylinders C C from pipe 2, through a pressure-controlling valve mechanism, A, which is placed at either floor of a building in the elevator-way, the part V projecting so that the passing of the elevator car or platform will cause the part V to be pressed in opening a way between inlet-pipe 1 and the pipe 2, so that a pressure of air, steam, or water would flow from pipe 1 through mechanism A and pipe 2 to the cylinder C C, and if the elevator came to rest, as it frequently would, at a level with the floor, the pressure upon the part V being thereby continued, the pistons with their rods *p p* would be forced up to their full limit, fully opening the gate *g g*.

When the elevator passes on, relieving the pressure on part V, the said part V is pushed out to the position shown in Fig. 3 by the spring S, thereby closing the way between pipes 1 and 2 and opening the way between pipe 2 and waste-pipe 3, allowing the pressure to escape from the cylinders C C, resulting in the rods *p p* and gate *g g* assuming the position shown in Fig. 2. The passing of the elevator car or platform and its contact with and brief depression of the part V does not allow the filling of the cylinders and consequent raising or opening of the door or gate that is joined to said cylinders, as would result if the passing car or platform was caused to dwell in contact with and depressing the part V.

I am aware that my invention is applicable to station-gates on elevated railways and other analogous uses; that the door or gate may be slid, swung, or raised, and that a vacuum may be used in place of pressure without departing from my invention.

What I claim is—

1. The combination, with an elevator, of a pressure-actuated motor that comprises the cylinders C C, pistons in said cylinders, an inlet-pipe and a waste-pipe connected to said cylinders and provided with a valve, A, having a spring, S, and part V, projecting in the path of said elevator, and a gate joined to and movable with said piston, substantially as described.

2. The combination, with the elevator E and a motor that comprises cylinders C C, pistons in said cylinders, the inlet-pipe 2 and a waste-pipe 3, connecting to said cylinders and provided with a valve, A, having a spring, S, and a part, V, that projects in the path of said elevator, and a gate joined to and movable with said piston, the whole arranged and operating substantially as described.

JAMES GIBBINS.

Witnesses:

CHARLES E. BUELL,

S. H. HOWLAND.