

(No Model.)

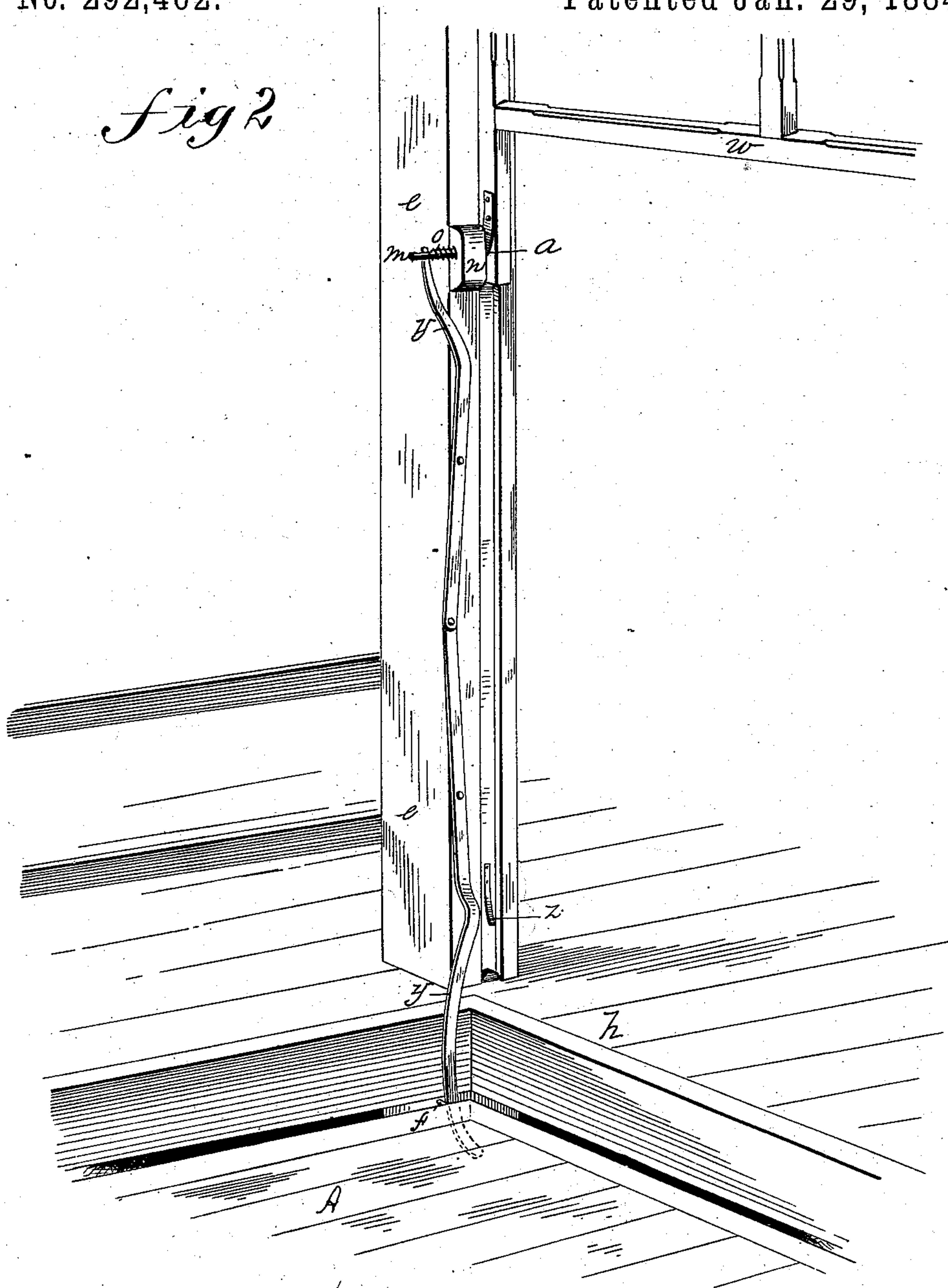
2 Sheets—Sheet 2.

F. K. BARTLETT.
SAFETY GATE FOR ELEVATORS.

No. 292,462.

Patented Jan. 29, 1884.

fig 2



WITNESSES:

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SAFETY-GATE FOR ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 292,462, dated January 29, 1884.

Application filed July 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANK K. BARTLETT, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Safety-Gates for Elevators, of which the following is a specification.

This invention relates to improvements in safety-gates for elevator-wells; and it consists in the combination, with a suspended gate, of improved appliances interposed between said gate and the elevator carriage or platform, whereby the gate is caused to drop down and close the entrance to the elevator when the carriage moves away from the landing-floor.

In the drawings forming part of this specification, Figure 1 is a view, partly in section, of portions of a building and elevator appliances having connected with them a safety-gate and operating mechanism constructed according to my invention. Fig. 2 is a similar view to Fig. 1, but illustrating a manner of operating the gate from the elevator-platform instead of from the frame-work above.

In the drawings, *h* represents the landing-floor around the elevator-well. *D* *e* are two of the guide-posts within which the elevator moves. *A* is the elevator-platform, and *b* one of the posts of its frame-work. *c* is a cam-block on post *b*. *v* is a lever. *m* is a stop-pin. *o* is a spring. *n* is a pin-block. *w* is the gate. *x* is a cord. *a* is a stop-spring.

The elevator, consisting of the platform *A* and upper frame-work, of which the post *b* is a part, is, together with the post construction surrounding the elevator-well, of which posts *D* and *e* are a part, of the ordinary construction. The front corner-posts of the elevator-well, of which *e* is one, are grooved on their opposite faces, to receive between them a gate, *w*, adapted to be moved up and down in the grooves in said posts and open and close the entrance to the elevator. The gate *w* has a cord, *x*, attached to each side or end of it, which cord runs over rollers in post *e* to the outside of it, and has attached thereto a weight, as shown in dotted lines in Fig. 1. The weights, which are attached to gate *w*, as aforesaid, are adapted to assist in raising the gate; but the weight of the latter is greater

than that of said weights, so that when it is unobstructed it will drop down and close the entrance to the elevator. The gate has a flexible stop-spring, *a*, attached to it, as shown. A lever, *v*, is pivoted to a suitable supporting-block on post *D*, and pivoted to said lever is a pin, *m*, one end of which passes through a block, *n*, on post *e*. A spring, *o*, on pin *m* is located between the outside of block *n* and a pin passing through pin *m*, whereby the latter is drawn back to retire its end within block *n*. A cam-block, *c*, is secured on the side of post *b*, and is adapted to be carried by the elevator against the free end of lever *v* when the elevator approaches the landing-floor *h*, and so move pin *m* as to cause one end thereof to project beyond the side of block *n* when the platform *A* is at or near the said floor.

The operation of my above-described improvements is as follows: The gate *w* is found in the down position shown in Fig. 1 when the elevator-platform approaches the floor *h*, and the movement of the elevator brings the cam-block *c* in contact with the free end of lever *v*, swinging the latter, and pushing pin *m* through block *n*. The elevator having been stopped at floor *h*, the gate *w* is raised up to open the entrance to the platform, causing the end of spring *a* to catch on pin *m* and hold the gate up. The elevator then being started up or down, the cam-block *c* is carried away from lever *v*, allowing spring *o* to act and carry pin *m* from under the end of spring *a*, thereby letting the gate drop and close the elevator-entrance as soon as the elevator moves away from the floor *h*.

Fig. 2 illustrates the manner of operating the pin *m* and the gate *w* by connections with the platform *A* when it is inconvenient to arrange the connections as above described, or when the platform is devoid of upper frame-work. A compound lever, *y y*, is hung on the side of post *e*, one end of which engages with a pin, *f*, at one edge of the platform; and the upper end engages with the pin *m*. A spring, *z*, breaks the force of the fall of the gate.

What I claim as my invention is—

1. The combination, with the elevator *A*

and the gate *w*, having the spring *a* thereon, of the pin *m*, lever *v*, spring *o*, and the cam-block *c*, substantially as set forth.

2. In combination, the gate *w*, having the
5 spring *a* thereon, the elevator *A*, the pin *m* and spring *o*, and mechanism, substantially as described, for moving pin *m*, to carry its end

beyond the side of block *n* when the elevator approaches the landing-floor *h*, substantially as set forth.

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Witnesses:

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