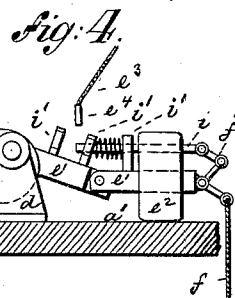
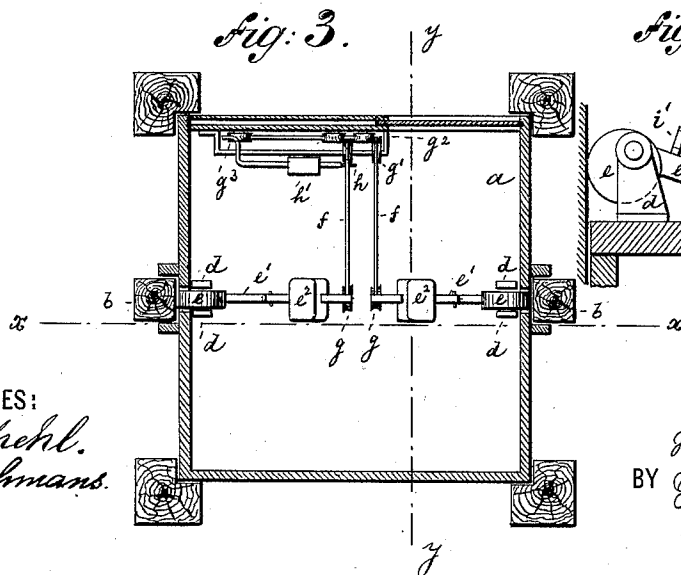
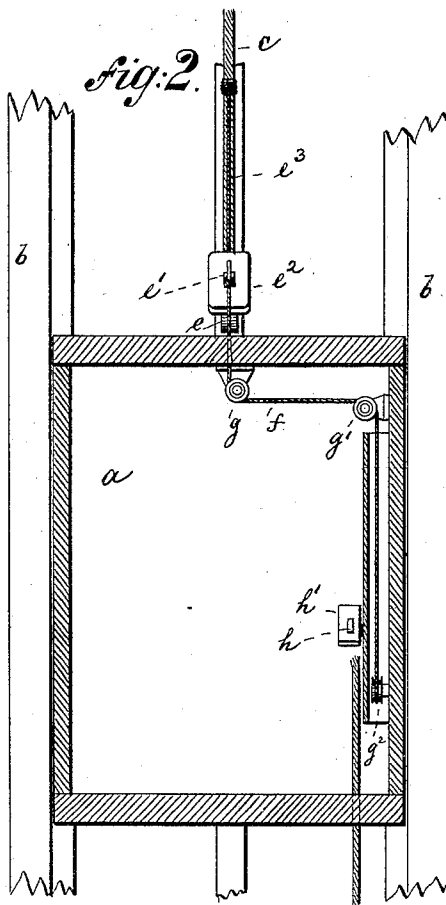
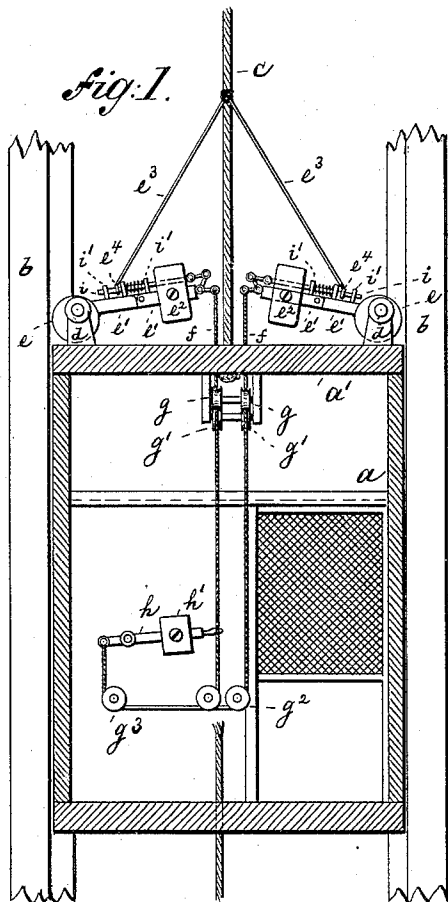


(No Model.)

H. H. THAYER.
SAFETY DEVICE FOR ELEVATORS.

No. 465,585.

Patented Dec. 22, 1891.



WITNESSES:
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UNITED STATES PATENT OFFICE.

HORACE H. THAYER, OF YONKERS, NEW YORK.

SAFETY DEVICE FOR ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 465,585, dated December 22, 1891.

Application filed April 29, 1891. Serial No. 390,938. (No model.)

To all whom it may concern:

Be it known that I, HORACE H. THAYER, of Yonkers, Westchester county, New York, have invented an Improved Safety-Catch for Elevators, of which the following is a specification.

This invention relates to an automatic safety-catch for checking the descent of elevators in case of accident.

It consists in the various features of improvement more fully pointed out in the claim.

In the accompanying drawings, Figure 1 is a vertical transverse section of an elevator provided with my improved safety-catch on line *x x*, Fig. 3; Fig. 2, a vertical longitudinal section of the same on line *y y*, Fig. 3; Fig. 3, a top view, partly in section, of the same and with the roof of the elevator-cage removed; and Fig. 4, a side view of the catch, showing it applied.

The letter *a* represents the cage of an elevator.

b b are the guide-posts, and *c* the operating-cable secured to the roof *a'* of the cage, all as usual.

From the roof *a'* project upwardly two or more bearings *d*, in which turn the eccentric disks *e*, placed opposite to the beams *b*. These disks are provided with jointed levers *e'*, the front arms of which are rigidly secured to the disks, while the rear arms carry adjustable weights *e''*. To the lever *e'* there is attached, by rope *e'''*, the cable *c* in such a manner that

the eccentrics *e* are held out of contact with the beams *b*. I prefer to connect the rope *e'''* to the lever *e'* by means of a spring-bolt *i*, passing through eyes *i'*, projecting upwardly from the lever *e'* and engaging an eye *i''*, secured to the lower end of rope *e'''*. When the cable *c* snaps, the levers *e'* will descend and the disks *e* will be tightly wedged against the beams *b*. The lever-arms *e'* will bend at the joint, Fig. 4, to increase the play of the front lever-arm, while the weight *e''* will be supported by the car-roof. The bolts *i* are connected by bell-cranks *f'* to ropes *f*. These ropes run over pulleys *g g'* and over a common pulley *g''*. The ends of ropes *f f'* are connected to a hand-lever *h*, which is weighted, as at *h'*, to keep the ropes properly taut at all times.

If the elevator-boy wishes to apply the brakes, he depresses the lever *h* to cause the withdrawal of bolt *i* and the consequent disengagement of rope *e'''*.

What I claim is—

The combination of an elevator-cage *a* and cable *c* with bearings *d*, eccentric disks *e*, pivoted thereto, and with levers *e'*, eyes *i'*, bolts *i*, hand-ropes *f*, secured thereto, and ropes *e'''*, having eyes *i''*, through which the bolts pass, substantially as specified.

H. H. THAYER.

Witnesses:

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