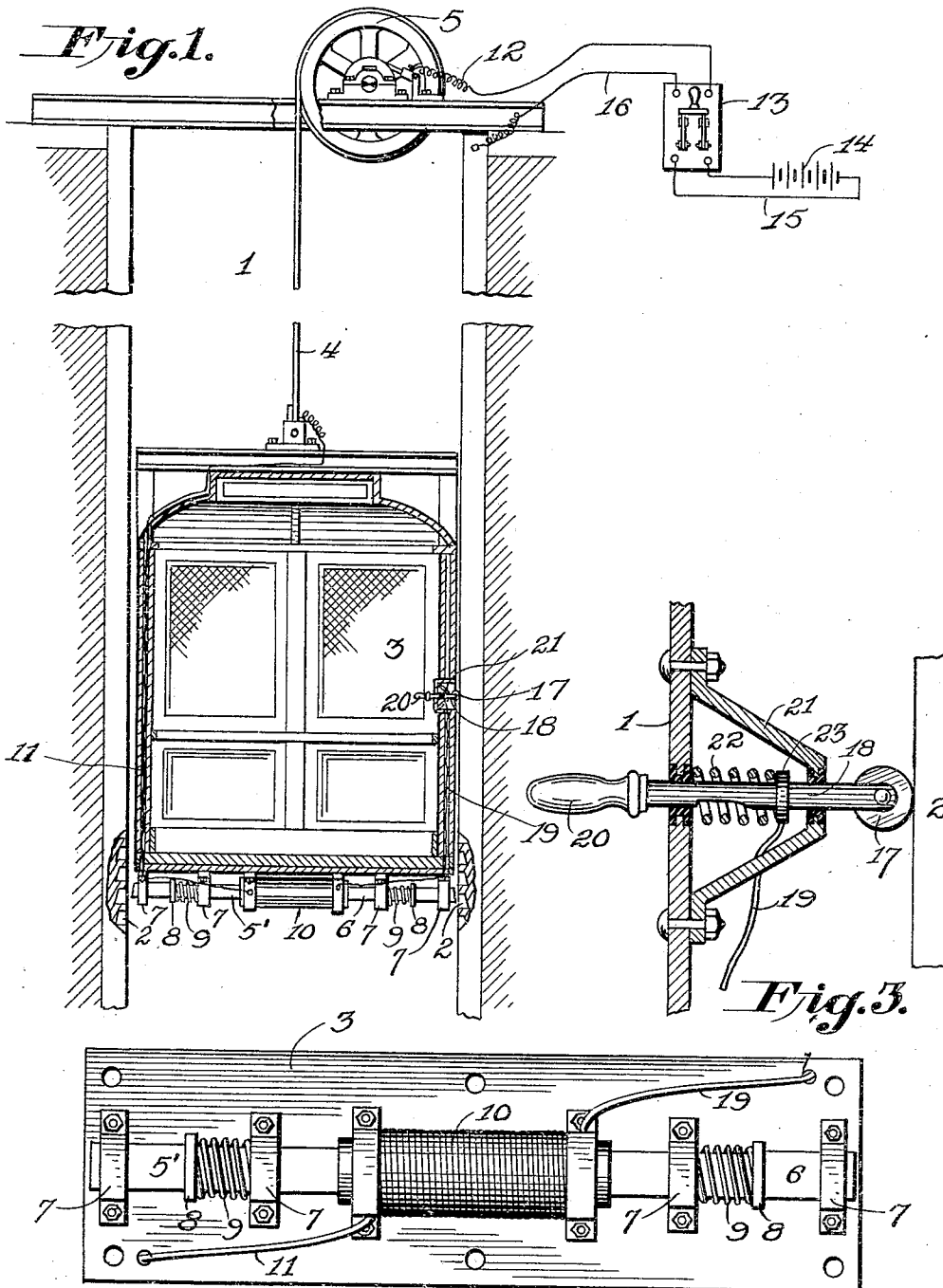


C. E. & B. BAUMER.
SAFETY ATTACHMENT FOR ELEVATORS.
APPLICATION FILED SEPT. 22, 1909.

958,580.

Patented May 17, 1910.



Witnesses
C. Everett Lancaster.
H. J. Woodruff.

Fig. 2.

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UNITED STATES PATENT OFFICE.

CLARENCE E. BAUMER AND BERTHA BAUMER, OF TROY, OHIO.

SAFETY ATTACHMENT FOR ELEVATORS.

958,580.

Specification of Letters Patent.

Patented May 17, 1910.

Application filed September 22, 1909. Serial No. 518,895.

To all whom it may concern:

Be it known that we, CLARENCE E. BAUMER and BERTHA BAUMER, citizens of the United States, residing at Troy, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Safety Attachments for Elevators, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to elevators, and the object of the same is to provide means whereby the movement of the elevator car may be readily stopped by the operator on the inside of the car.

15 In carrying out the object of the invention generally stated above it will be understood, of course, that the essential features of the same are necessarily susceptible of changes in details and structural arrangements, certain practical and efficient embodiments of which are shown in the accompanying drawings, wherein—

Figure 1 is a vertical sectional view of an elevator car showing the means for locking the same to the well. Fig. 2 is a bottom plan view of the locking device for the elevator car. Fig. 3 is a detail sectional view of a portion of the elevator car showing the pull rod for controlling the locking device.

25 Referring to said drawings by numerals, 1 designates an elevator well which is provided with the usual oppositely disposed rack bars 2. An elevator car 3 is mounted in said well, said elevator car having the usual hoisting cable 4 which passes over a drum 5 at the top of the well. Two locking bars 5'—6, are slidably mounted in guides 7 on the bottom of the elevator car, each bar being provided with a collar 8 against which one end of a spring 9 coiled about the bars bears, the other end of said spring bearing against one of the guides, said spring constantly exerting a tension to force the bars into engagement with the side racks of the well. A magnet 10 is fast on the bottom of the elevator car, said magnet being included in a circuit including the wire 11 which extends through the walls of the elevator car, the hoisting cable 4, drum 5, wire 12, switch 13, battery 14, a second wire 15 from the

battery to said switch, a wire 16 from the switch to one of the rack bars, a roller 17 carried by the outer end of a pull rod 18 slidable through the wall of the elevator car and having a wire connection 19 with the magnet 10. The pull rod 18 is equipped with a handle 20 which projects into the elevator car, said pull rod having its major portion slidable through a housing 21 and which also incloses a spring 22 one end of which bears against a collar 23 on said pull rod, the other end of said spring bearing against the elevator car wall and exerting a constant tension to force the pull rod outward so that the roller 17 will be held in contact with the rack bar which is included in the magnet circuit, whereby said magnet 10 will be energized and caused to hold said locking bars 5'—6 out of engagement with the racks 2 against the tension of the springs 9. It will be seen from the foregoing that in the event of the hoisting cable breaking, the circuit to said magnet will be broken, thereby releasing the locking bars 5'—6 so that their springs 9 will automatically force them into engagement with the racks 2 and thereby lock the elevator car immovably to said racks. And it will also be seen that in the event of the cable slipping, which obviously would not break the circuit, the pull rod 18 may be manually pulled inward of the elevator car against the tension of the spring 22, thereby removing the roller 17 from engagement with the rack bar, which breaks the circuit and releases the locking bars 5'—6, whereupon they will automatically spring into engagement with the rack bars 2.

From the foregoing it will be understood that the invention provides means whereby the elevator car will be automatically stopped when the hoisting cable thereof breaks, and also means whereby it may be manually stopped in the event of the cable slipping.

What we claim as our invention is:—

In an apparatus of the character described the combination with the well racks, the elevator car, and its hoisting cable, a magnet carried by the elevator car, locking bars adapted for engagement with said racks, a

circuit including said magnet, cable, and one of the racks, a circuit closing pull rod slidable through said elevator car, a roller carried by one end of said pull rod, a spring
5 for normally holding said pull rod with its roller in contact with one of said racks to energize said magnet and thereby hold the locking bars from engagement with said racks, and a handle carried by said pull rod
10 whereby the same may be withdrawn from engagement with its rack to break said circuit and thereby permit the magnet to release the locking bars.

In testimony whereof we hereunto affix our signatures in presence of the witnesses. 15

CLARENCE E. BAUMER.
BERTHA BAUMER.

Witnesses as to signature of Clarence E. Baumer:

GAMALIEL A. BRANNAN,
CHARLES F. FAUST.

Witnesses as to signature of Bertha Baumer:

M. A. LOCHRIDGE,
MARION E. SENTELL.