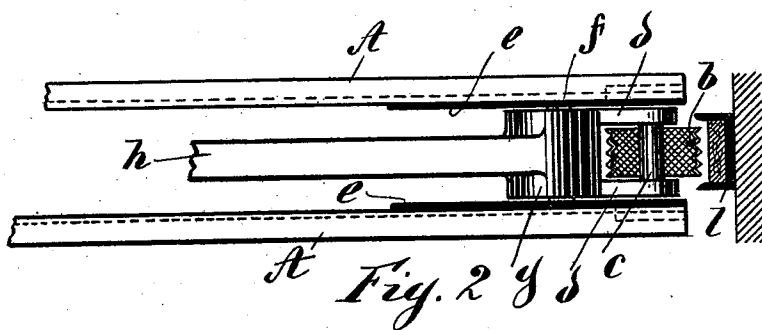
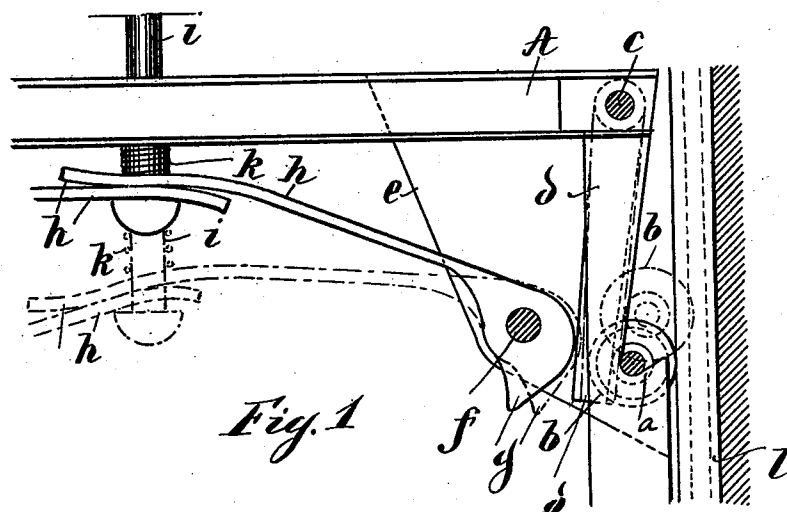


(No Model.)

L. ROSSLER.
SAFETY APPARATUS FOR CAGES.

No. 583,125.

Patented May 25, 1897.



Witnesses

Otto Munk
E. A. Scott

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UNITED STATES PATENT OFFICE.

LUDWIG RÖSSLER, OF AIBLING, GERMANY.

SAFETY APPARATUS FOR CAGES.

SPECIFICATION forming part of Letters Patent No. 583,125, dated May 25, 1897.

Application filed September 2, 1896. Serial No. 604,684. (No model.)

To all whom it may concern:

Be it known that I, LUDWIG RÖSSLER, a citizen of Germany, and a resident of Aibling, Bavaria, Germany, have invented certain new and useful Improvements in Safety Apparatus for Cages, of which the following is a specification.

The present invention is a safety apparatus for elevators which in case of the cable breaking acts automatically.

In Figure 1 a front view of the apparatus attached to the half of an elevator is shown. Fig. 2 shows a horizontal section thereof.

As shown in the drawings, the apparatus is attached to the top of the elevator and is arranged as follows: On the side of the elevator-cage A is an incline extending from the top downwardly and inwardly, terminating in a pocket *a*, which supports a roller *b*, loosely held therein. Two arms *d* press on each side of the hub of the roller *b*, these arms being pivoted at the upper corner of the elevator-cage at *c*. An eccentric *g*, pivoted in the plate *e* at *f*, presses against the arms *d*. The eccentric *g* has an arm engaging the bolt *i*, carrying the elevator-cage. Between the arm *h* and the upper cross-rails of the elevator-cage a strong spiral spring *k* is located, which as long as the cable bearing the elevator-cage is drawn taut is compressed by the tension of the bolt *i*. The bolt *i* is so constructed that even if the cable breaks it cannot fall out of the head or top of the elevator-cage, so that the spiral spring is always kept in its place. The guiding-rails *l* at the sides of the elevator-cage well are coated inwardly with wood, Fig. 2.

When the cable breaks, the strain or tension on the bolt *i* ceases and the spring *k* is freed. The spring *k* quickly expands and

presses the arm *h* firmly downward. By the long lever-arm the eccentric is pressed tightly against the downwardly - hanging arms *d*, which in their turn press the roller *b* out of its bearing in the pocket *a* upwardly against the wood in the guiding - rails. The roller slides with the hub upwardly along the arms *d*, and by the friction instantly exerts a stopping action till the roller grips so firmly the wood that it is firmly fixed, thereby preventing a further descent of the elevator-cage. The stop is very rapid, yet not so sudden as to produce a violent shock. The action is rather an elastic one, calculated to prevent accidents which might arise from a sudden shock, so that persons or objects would not be thrown out of the elevator-cage.

What I claim is—

1. A safety apparatus for elevators comprising a loosely - supported roller, pivoted arm *d* in contact with the same, an eccentric for moving the pivoted arm and a connection between the eccentric and the elevator-cable, substantially as described.

2. A safety device for elevator-cages comprising the inclined supports having the pockets *a*, the roller therein, an arm operating between the supports pivoted at its upper end and free at its lower end and means for operating the arm to throw the roller out of the pocket and to present an incline for forcing the roller into gripping action.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

LUDWIG ROSSLER.

Witnesses:

A. S. BÜSING,
M. SUPPLE.