

J. W. MEIKLE.

Elevator.

No. 161,892.

Patented April 13, 1875.

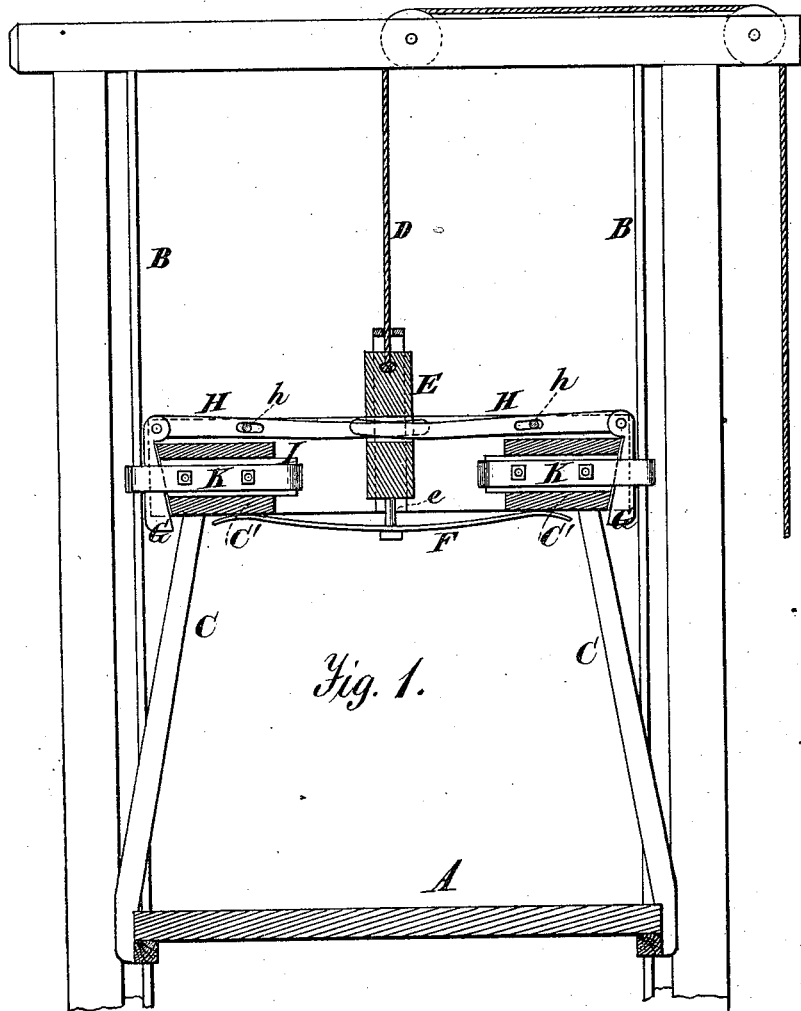
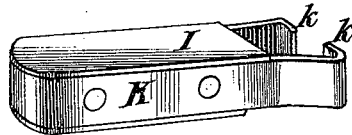


Fig. 1.

Fig. 2.



Witnesses.
A. Ruppert.
S. M. Pool

J. W. Meikle
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D. P. Holloway & Co
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UNITED STATES PATENT OFFICE.

JAMES W. MEIKLE, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN ELEVATORS.

Specification forming part of Letters Patent No. **161,892**, dated April 13, 1875; application filed February 17, 1875.

To all whom it may concern:

Be it known that I, JAMES W. MEIKLE, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Elevators, of which the following is a specification:

This invention relates to that class of elevators (such, for instance, as shown in United States Patent of D. H. Chamberlain, No. 83,461, October 27, 1868,) in which the platform-frame is combined with wedges and means intermediate between them and the block, to which the hoisting rope or cable is attached, in such a manner that in the event of the breaking of the rope the wedges will automatically jam between the ways and the platform-frame, and stop the descent of the platform.

My improvement consists in combining, with such wedges, sliding blocks provided with stirrups, which, grasping around the ways, will aid in the wedging action by binding on the ways, and thus provide for greater security against accident from the breaking of the hoisting rope or cable.

In the annexed drawings, Figure 1 is a sectional elevation of so much of an elevator as is necessary to illustrate my improvements. Fig. 2 is a perspective view of one of the sliding blocks with its stirrup, drawn on an enlarged scale.

The same letters of reference are used in all the figures in the designation of identical parts.

The platform A slides, as usual, on the ways B, which may be made either of T-iron or I-iron. In either case the head of the ways should project some little distance from the posts of the elevator-frame. The platform carries the ordinary frame C, rising to the proper distance above it. The hoisting-rope D is secured to the drop-block E, connected

by bolt *e* to leaf-spring F, upon the ends of which the cross-timbers C' C' of the platform-frame rest. The side of the cross-timbers C' adjacent to the ways B is made slanting, as clearly shown, at the point where the wedges G are inserted between them and the ways. The upper protruding ends of the wedges are respectively pivoted to the levers H H, fulcrumed at *h* to the platform-frame, and extending into a slot in the drop-block E.

It will be observed that on breaking of the rope the drop-block E will fall, its action being accelerated by spring F, and, oscillating the levers H, lift the wedges G, so that they will become jammed between the timbers C' of the platform-frame and the ways B, stopping the descent of the platform. To make this stoppage more certain than the use of the wedges only can guarantee, I insert in a mortise formed in each of the cross-timbers C' a sliding block, I, cut slanting at the end in contact with the wedge, and provide these sliding blocks with stirrups K, the hook ends *k* of which grasp around the respective heads of the ways B. Thus, at the same time as the wedges rise and become jammed between the platform-frame and the ways, they push the sliding blocks I inward, causing their stirrups to clamp or bind firmly on the ways.

What I claim as my invention, and desire to secure by Letters Patent, is—

The platform, ways, and automatically-operating wedges G of an elevator, in combination with the sliding blocks I and stirrups K, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

J. W. MEIKLE.

Witnesses:

JOHN TRAINOR,
F. MAGUIRE.