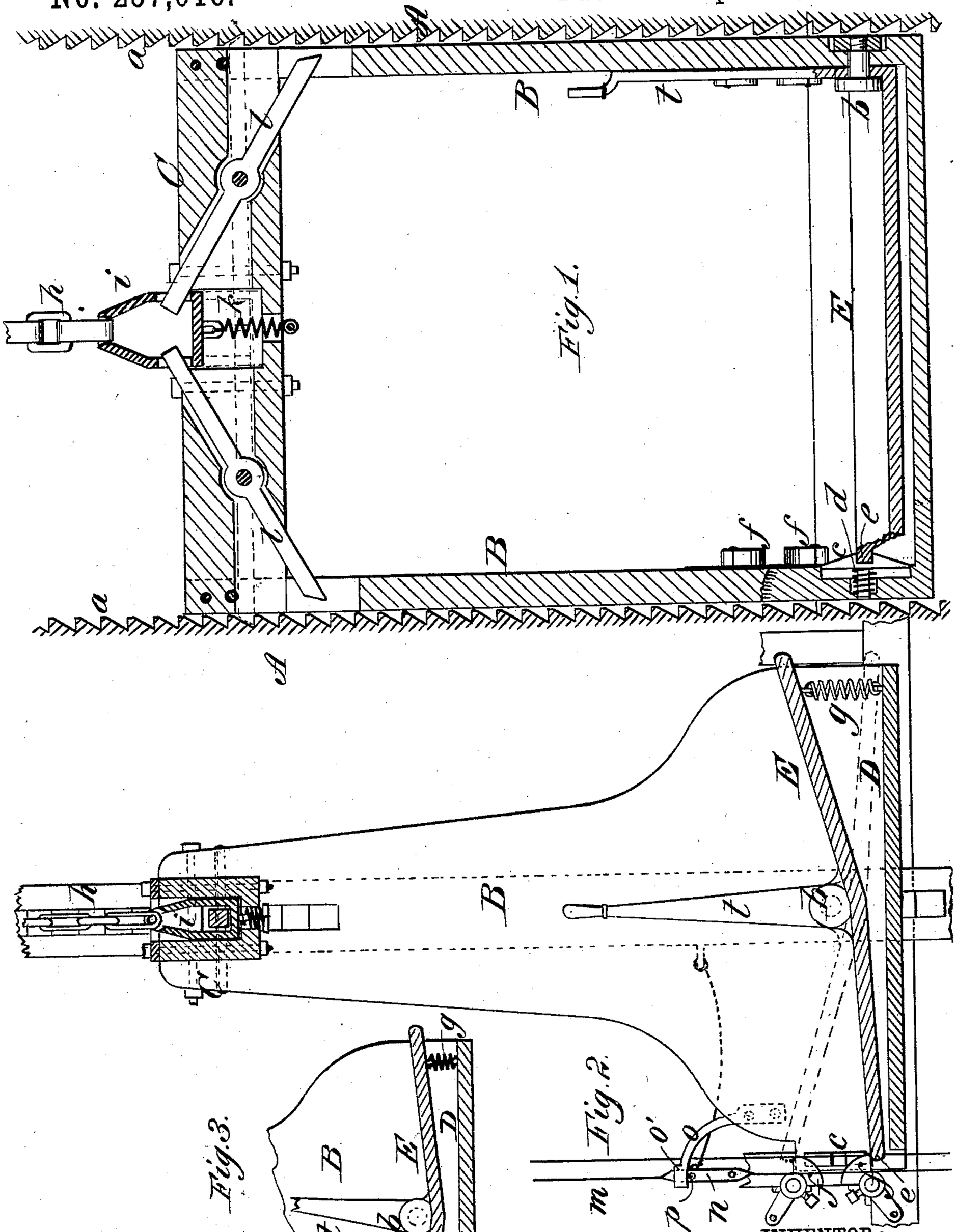
(No Model.)

# T. KEITH.

## PLATFORM ELEVATOR.

No. 257,016. Patented Apr. 25, 1882.

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# UNITED STATES PATENT OFFICE.

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## PLATFORM-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 257,016, dated April 25, 1882.

Application filed November 25, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS KEITH, of the city, county, and State of New York, have invented a new and useful Improvement in Platform-Elevators, of which the following is a full, clear, and exact description.

My improvement relates to platform-elevators for use in hoisting and lowering barrels, bales, and other packages, with the object to save handling as much as possible.

The invention consists in a rocking or tilting platform and trippers, and in safety devices combined with the elevator-frame, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical section of an elevator of my improved construction. Fig. 2 is a vertical transverse section of the same, and Fig. 3 is a section of the platform in its normal position.

A A are the vertical guide-posts of the elevator, provided with racks *a a*, as usual, between which is the frame, consisting of side standards, B B, top bar, C, and bottom D.

E is the rocking platform, hung by pivot-bolts *b b* on the standards B. The platform E is of double-inclined form for convenience of delivery at either side. On one standard B is a beveled and notched latch-piece, *c*, projected by a spring, *d*, behind it into engagement with a lug, *e*, projecting from the side of the platform, whereby the platform is held in position for receiving freight, as shown in Fig. 3.

On a fixed post at one side are pivoted tripping-dogs *f f*, placed so that the latch-piece *c* shall pass behind and be pressed back by the dogs as the elevator passes the floor. The dogs are also placed to come in contact with the edge of platform E to press the same down or up, as the case may be, and thus cause the barrel or bale to roll off or be discharged.

Two dogs, *f*, are shown, one for use when freight is being lowered and the other when it is being hoisted, the discharge being at the side of the platform that is lowered. The dog not in use will be turned out of the way.

Beneath one side of the platform is a spring, *g*, for restoring it to its locked position after the load is discharged. A hand-lever, *t*, is also provided for the same purpose, and may be used without the spring.

The elevator is suspended by a flat-link chain, *h*, connected to a shackle, *i*, that is in a recess formed in the top bar, C, a spring, *k*, beneath connecting the bar and shackle. Pawl-levers *l l*, pivoted on bar C, extend by their inner ends into connection with shackle *i*, and at their outer ends are beveled for engagement with racks *a* to sustain the elevator. The weight draws up the shackle as far as permitted by the spring, and in that position the ends of levers *l* are free from the racks; but in case the chain breaks the spring draws the shackle down and the levers engage the racks.

I provide for automatically stopping the elevator by the devices shown in Fig. 2, as follows: *m* is the stopping and starting chain extending at the side of the elevator. *n* is a block on the chain, provided with two holes placed at a suitable distance apart, one above the other. *o* is an arm extending from one side standard, B, of the elevator, and provided at its outer end with an eye, *o'*, through which the chain *m* passes. *p* is a pin, which may be placed in either hole of the block *n*. The chain is moved to stop the elevator by contact of the arm *o* with pin *p*, and the place of stopping is regulated by the position of the pin. In one position of the pin the elevator stops at the floor-line to receive goods, and in the other position the elevator is stopped slightly above the floor-line for convenient discharge of the load.

In the operation of the elevator the freight is placed on the platform, and the elevator being then raised or lowered, when the floor at which the tripping-dog is set is reached the platform is tipped and the freight rolls or slides off upon the floor.

This elevator is especially adapted for situations where the available space is contracted.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In elevators, the rocking platform E, hung by pivots *b*, combined with the elevator-frame

and provided with latching devices, substantially as shown and described.

2. In elevators, the latch-piece *c* and tripping-dog *f*, in combination with the pivoted platform E, substantially as shown and described, for operation as set forth.

3. In elevators, a tilting platform retained normally in place by a latch, and tripping devices placed to release and tip the platform, combined for operation substantially as shown and described.

4. In elevators, the combination, with a double-inclined platform pivoted at its mid-length, of spring *g* and latch *c*, substantially as shown, for the purposes set forth.

5. The combination, with an elevator, of the stopping and starting chain *m*, having thereon a two-holed block, *n*, the standard-arm O, having end eye, *o'*, and the pin *p*, all arranged as shown and described.

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Witnesses:
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