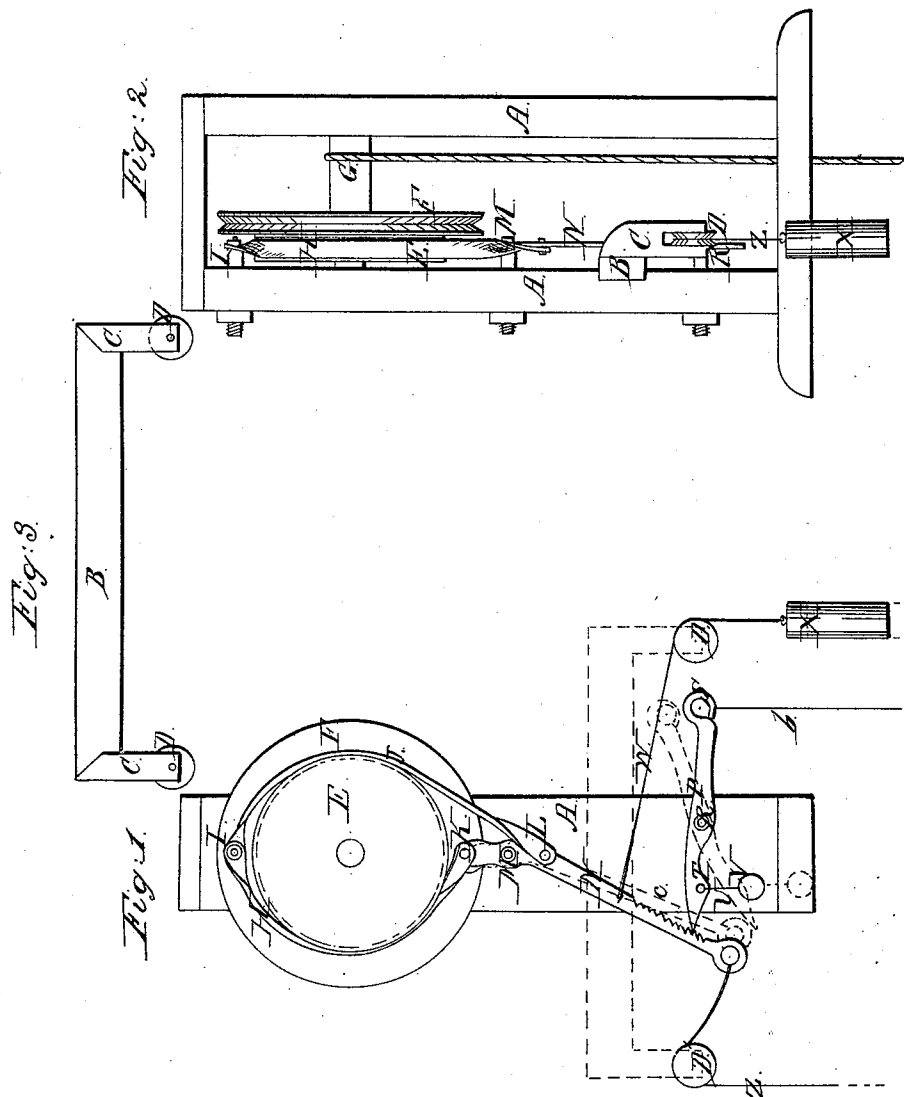


*J. Kennedy,*

## *Elevator*

*N<sup>o</sup> 84, 496.*

*Patented Dec. 1, 1868.*



Witnesses;

A. Hayward,  
Jas. Monquet.

Inventor,  
John Kenedy  
By his attorney,  
J. L. Chapin.

# United States Patent Office.

JOHN KENNEDY, OF CHICAGO, ILLINOIS.

Letters Patent No. 84,496, dated December 1, 1868.

## HOISTING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom this may concern:

Be it known that I, JOHN KENNEDY, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Hoisting-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, and letters marked thereon, in which—

Figure 1 is a sectional elevation of my invention as attached to a hoisting-machine.

Figure 2, an elevation of the same, taken transversely to fig. 1.

Figure 3, an elevation of the cross-tree, removed from the frame of the machine.

The present invention relates to an improvement in the means for reversing the motion of the drum which sustains the ropes of the platform, and holding it in a fixed position; and

Its nature, in part, consists in the application of a two-part spring band, which passes over a wheel on the main drum, and is operated by a rack-lever, which is held in place, when the band is braking the wheel, by a weighted pawl, said lever being operated by ropes or cords passing over pulleys pivoted to a cross-tree.

To enable others to fully comprehend the construction and operation of my invention, I have marked like parts with similar letters, and will now give a detailed description.

A A represent the upper frame-work of an ordinary hoisting-machine, the sections connecting the stories below having any well-known construction, and therefore needing no description.

The drum-shaft G, on which the ropes that sustain the platform are wound, supports a drive-wheel, F, and friction-wheel E, the former wheel being operated in the usual manner by a rope which passes over the wheel and down to the lower story, and the latter wheel being used to control the motion of the drum G, as herein-after shown.

The upper ends of a two-part band, H J, are pivoted to a short journal, I, supported by one side of the frame A, and the lower end of the part H is brought round to the under part of the wheel E, and fastened to rack-lever, N, at K, by a pivot-bolt, and the part J is brought round to the same lever, and pivoted to it at L.

This band, H J, is made of metal, or other suitable material, and it will operate better if it has spring

enough to entirely relieve the wheel E of friction when the drum-shaft G is to turn.

The lever N is pivoted at M to a short journal, supported by the frame A, and it has notches in one edge, in which the end of a pawl, P, locks, as shown at fig. 1, and an eye at its lower end, to which a rope, Z, is fastened.

This pawl is made of iron, and pivoted at R to the frame-work A, fig. 2, and it has a cord and weight, U V, attached to it, at T, to overbalance the weight of the rope b, attached to the pawl at the opposite end, and used to put it in gear with the rack-lever N.

A cross-tree, B, is attached to one side of the frame A, and supports two blocks, C, having pulleys, D D, over which ropes, Z W, pass, the rope Z extending down far enough to be conveniently reached by the operator on the platform or story below.

One end of the rope W is attached to the lever N, and the other end has a weight fastened to it, for the purpose of carrying said lever backward, and loosening the band H J on the friction-wheel E.

### Operation.

To stop the motion of the drum-shaft G, draw on the rope Z, and bring the lever N forward, as shown at fig. 1; then draw on the rope b, and bring the pawl P into position, as shown at same figure. This operation will set the band H J closely against the periphery of the friction-wheel E, and hold it in position, without in any manner straining the shaft on which the wheel runs, as the pressure is concentrated.

To loosen the band H J on the friction-wheel E, draw on rope Z. This operation will loosen the pawl P, and thus permit the weight v to carry the same out of the way of lever N, and allow the weight X to bring it back, as shown by dotted lines c.

Having thus described my invention,

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

The combination of the weighted pawl P, cross-tree B, pulleys D, rack-lever N, weighted rope W, ropes b Z, friction-wheel E, and band H J, the whole being arranged as and for the purpose set forth.

JOHN KENNEDY.

Witnesses:

A. HAYWARD,  
JAS. NORQUET.