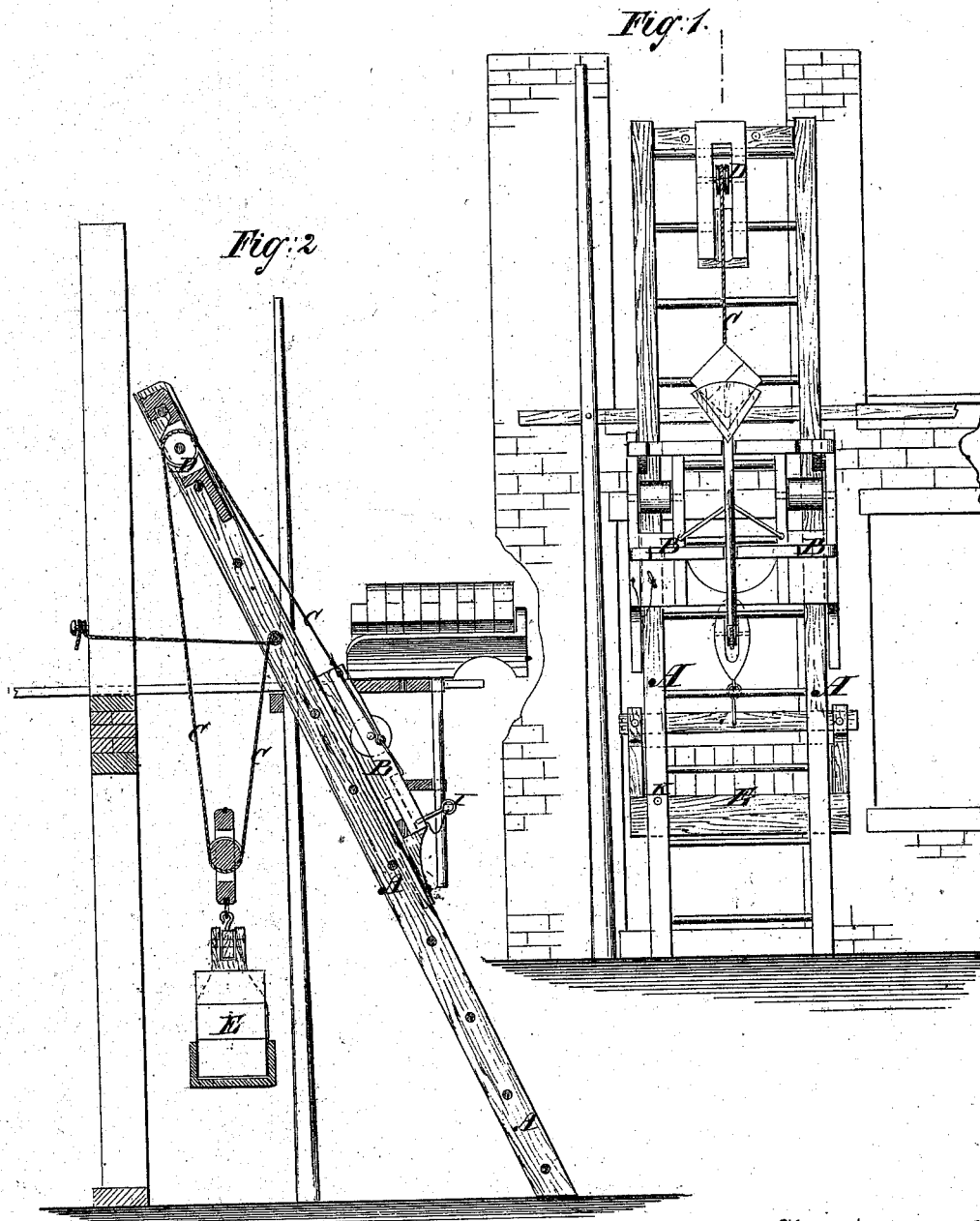


L. BURNELL.

Elevator.

No. 107,868.

Patented Oct. 4, 1870.



Witnesses:

C. Raettig
L. J. Mabey

Inventor:

L. Burnell

PER

M. M. M.

Attorneys.

UNITED STATES PATENT OFFICE.

LEVI BURNELL, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN HOISTING APPARATUS.

Specification forming part of Letters Patent No. **107,868**, dated October 4, 1870.

To all whom it may concern:

Be it known that I, LEVI BURNELL, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and Improved Hoisting Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in apparatus for hoisting building material for building houses; and it consists in a combination of a hoisting-car, a track, and a counterpoise-weight so arranged that the counterpoise-weight may be raised by the weight of the attendant on the unloaded car, and then raise the loaded car, whereby the gravity of the attendant may be used to raise loads as heavy or heavier than he could carry in a manner much less fatiguing than the common way of carrying up the material in hods.

Figure 1 is a front elevation of an arrangement of apparatus for carrying out my invention, and Fig. 2 is a sectional elevation of the same.

Similar letters of reference indicate corresponding parts.

I provide an inclined way for a car, consisting of the two rails A of a ladder standing on the ground and leaning against the wall of a building or scaffold by the side of it.

I make the car in any form suited to the work in hand, and provide it with rollers to run on the said rails. To this car B, I attach a cord, C, and carry it over a pulley, D, at the top of a ladder, thence down to a counterpoise-weight, E, so that, the weight being raised, it will raise the loaded car, and when a superior weight is applied to the car the weight will be raised. This car I arrange for supporting

one or more hods, also for the attendant to ride down on it, and I arrange the counterpoise-weight so that it will be overbalanced by the weight of the attendant. By this arrangement the attendant may, by his own weight applied to the car when unloaded, at the top, without labor raise a weight which will raise the car with a heavier load than he could carry up the ladder. He may also raise a greater number of loads in a given time, for in ascending to follow the car he may go much faster than when loaded, and the weight will raise the car quickly. The operator may be assisted in ascending to some extent by the surplus weight of the counterpoise.

To regulate the speed in going down a rope or side rail may be provided, by which the operator may, by taking hold and pulling or pushing, accelerate or retard the motion of the car, as required.

Any similar system of safety-pawls or stopping apparatus may be applied to the car to stop or hold it and prevent injury to the operator in case the rope breaks or the tackle fails in any way.

When the car arrives at the bottom it may be secured thereat by a pin, I, in the car entering a hole, K, in one of the rails of the way, or by a hook on the one and a staple on the other, or other suitable means.

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

The arrangement of the counterpoise-weight E, cord C, pulley D, ladder A, and hod-car B, all constructed as shown and described, for the purpose specified.

LEVI BURNELL.

Witnesses:

D. N. KASSON,
E. C. MASON.