

E. HARLOW.  
Elevators for Hods, &c.

No. 140,195.

Patented June 24, 1873.

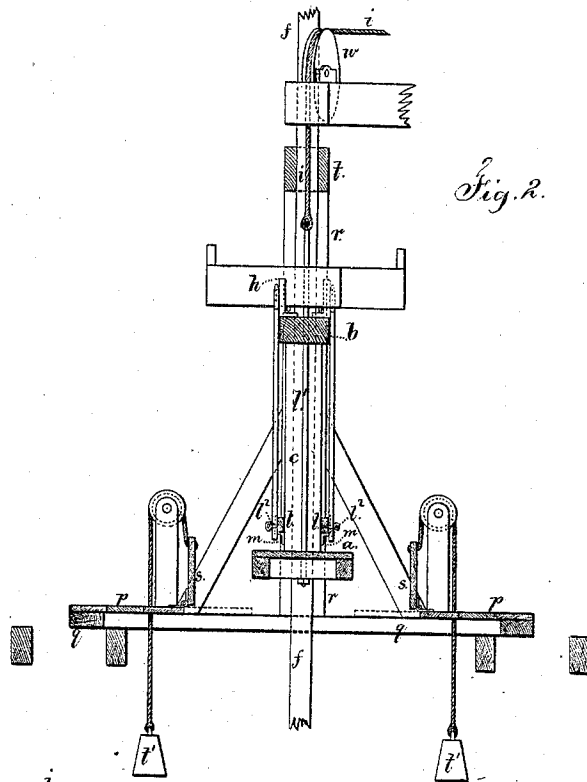


Fig. 2.

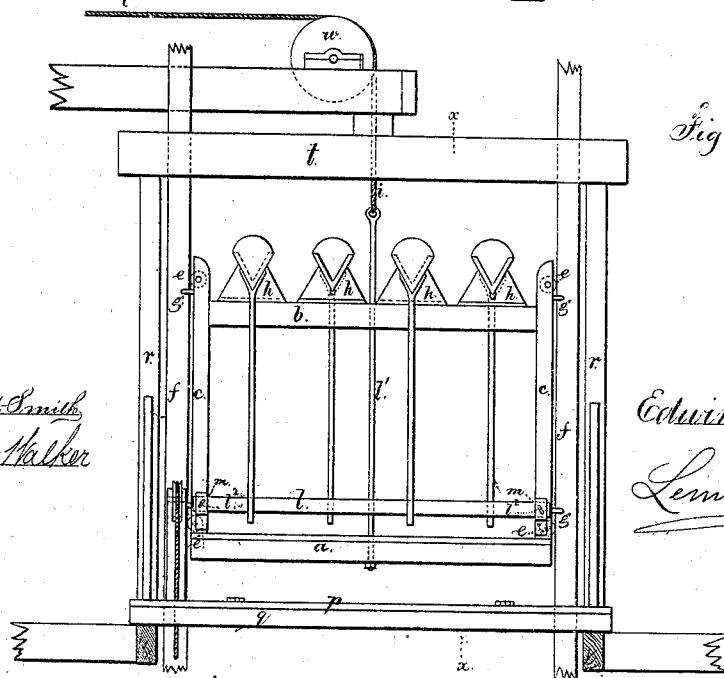


Fig. 1.

Witnesses  
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# UNITED STATES PATENT OFFICE.

EDWIN HARLOW, OF NEW YORK, N. Y.

## IMPROVEMENT IN ELEVATORS FOR HODS, &c.

Specification forming part of Letters Patent No. **110,195**, dated June 24, 1873; application filed February 18, 1873.

*To all whom it may concern:*

Be it known that I, EDWIN HARLOW, of the city, county, and State of New York, have invented an Improvement in Elevators for Hods, &c., of which the following is a specification:

This invention relates to an elevator which is constructed so that it can be used for carrying up hods containing mortar or bricks, or it can be used for elevating lintels, copings, or other materials not usually carried up in hods. Said invention also relates to a swinging platform, which is made so as to insure the safety of the workmen in removing or placing the hods upon the elevator.

The elevator is made as a frame composed of two vertical posts connected at the bottom to a platform and at the top to a cross-bar or rail, upon which are V-shaped racks or supports for the hods. These racks are in two rows, and intermediate to each other, so that the hods will not project as far beyond the elevator as if the top rail was made wide enough to receive the hods in two rows on line with each other.

The shanks or handles of the hods rest at their lower ends against removable bars, and the hods are kept from slipping from their supports by a pin on the bottom of each hod sitting behind said support. When the bars are removed from the elevator the platform can be used to receive materials which cannot be placed in the hods, such as sills, lintels, &c.

The platform upon which the workmen stand in placing on or removing hods, stone, &c., from the elevator is made with swinging flaps or doors, which are kept raised by weights, and allow of the free passage of the elevator; but when depressed by the feet of the laborers, they nearly close the space between the stationary platform and the platform of the elevator, and prevent all danger of the laborers falling through said opening, and at the same time free access is given to the elevator.

In the drawing, Figure 1 is a front view of said elevator, and Fig. 2 is a vertical section of the same at the line *x x*.

*a* represents the platform of the elevator, made with a suitable frame connected to the vertical posts *c c*, which are united at their

upper ends by the cross-beam *b*. *e e* are friction-rollers within mortises in the posts *c c*, and these rollers run against the inner faces of the guide-ways or bars *f f*, which extend from floor to floor of the building, and the elevator is guided by the pins *g g*, which project from the posts *c c* and pass at both sides of the ways *f f*. Said guide-pins are preferably rounded at the sides next to the surface of the guide-bars *f*, so as to move freely. *h h* are the racks or supports for the hods upon the cross-beam *b*, and these racks are in two rows, and the racks of one row are opposite to the spaces between the racks of the other row. Each rack is made with a V-shaped opening to receive the hod, and the hods for one row are placed in the racks from one side of the elevator, and in the other row from the other side of the elevator, and said hods coming intermediate to each other, they occupy less space in width than if they were in line with each other; hence the opening between the beams through which the elevator passes can be made correspondingly small. The handles or shanks of the hods rest at their lower ends against the removable bars *l*, which are supported in sockets or loops *m*, upon the posts *c c*, and these bars keep the hods properly in position; and to prevent risk of the hods slipping from their supports, each hod may be provided with a short pin, which projects from its bottom edge and sits behind the support *h*, as seen in Fig. 2. The bars *l l* may be kept in place by pins *l'* passing through the loops *m* and entering said bars, and when these bars are removed the platform *a* can be used for receiving materials which cannot be carried in hods, such as lintels, sills, &c. The stationary platform *p* is bolted to sill-pieces *q*, which are secured to the beams of the floors upon which the materials are to be delivered, and upon these sills *q* are the uprights *r* and cross-beam *t*. In the latter are mortises for the guide-ways *f f*, and also an opening for the hoisting rope or chain *i*. *s s* are flaps or doors hinged to the platform *p*, and kept raised by the weights *t' t'*, which are at the ends of ropes passing over pulleys mounted in short standards upon the platform. The weights *t' t'* merely act as a counter-balance, so that the flap can be depressed

by a laborer placing his foot against it; and when these flaps are not pressed down, the weights raise them, and the elevator and its load can freely pass; but when depressed as aforesaid, they afford a firm standing-place for the laborers as they remove the hods from or place them upon the elevator.

This platform and frame are to be removed from floor to floor as the building progresses. The hoisting rope or chain *i* may be connected to the rod *l'* and led over the pulley *w*, and thence to the hoisting apparatus; but this forms no part of my invention.

I claim as my invention—

1. The removable bars *l*, in combination with the platform *a* and racks *h* for the hods, substantially as set forth.

2. The racks *h*, at the opposite sides of the cross-beam *b*, and arranged as shown, to allow the hods to be applied alternately at the opposite sides of said beam, as set forth.

3. The elevator-platform *a* and frame *b c*, provided with the rollers *e e* and guide-pins *g g* for the ways *f f*, as set forth.

4. The flaps *s*, hinged to the platform *p*, and raised by weights or their equivalents, in combination with the hod-elevating frame, substantially as and for the purposes set forth.

Signed by me this 14th day of February, A. D., 1873.

EDWIN HARLOW.

Witnesses:

CHAS. H. SMITH,  
GEO. T. PINCKNEY.