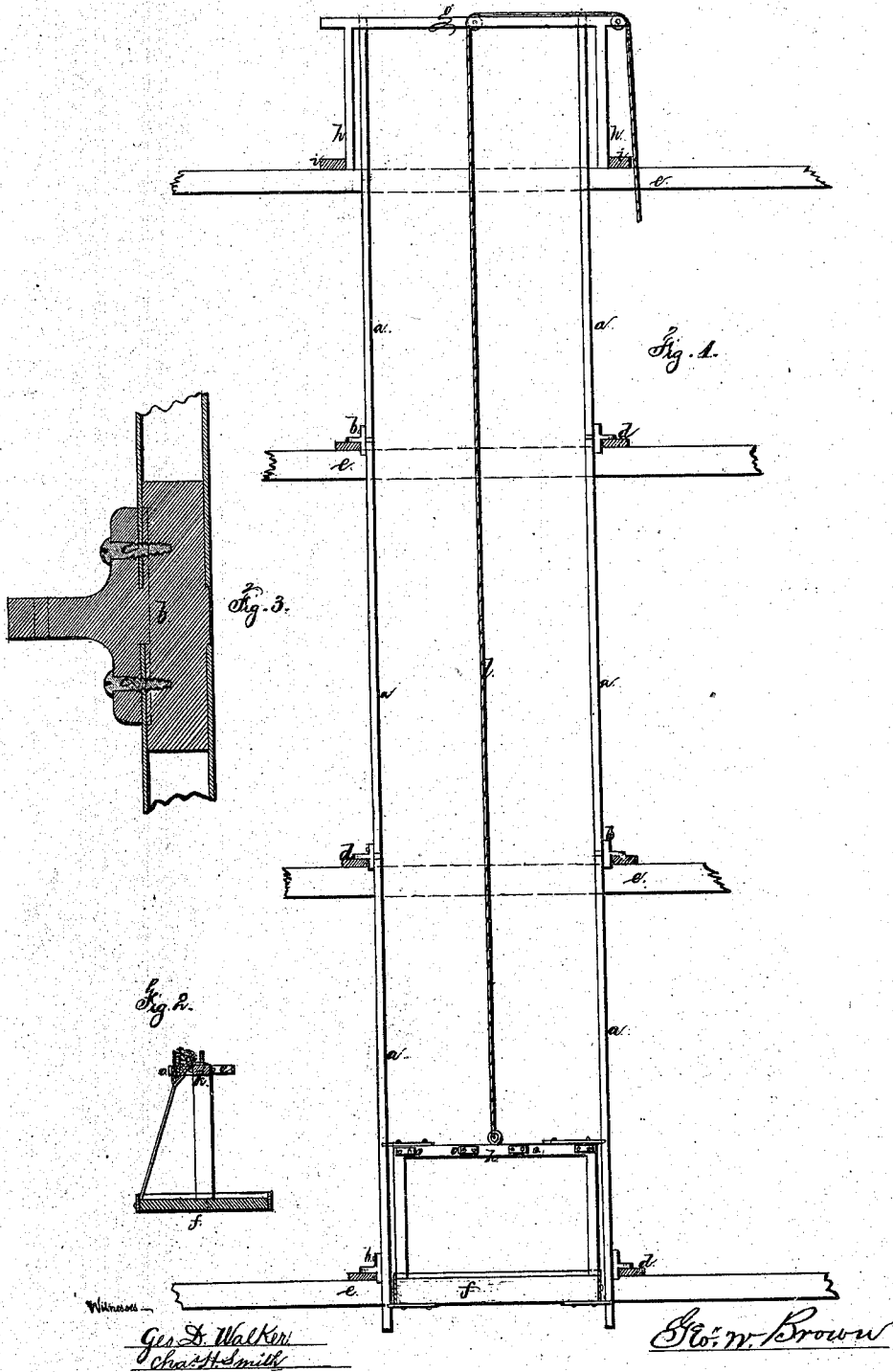


G. W. BROWN.
HOISTING APPARATUS.

No. 103,292.

Patented May 24, 1870.



United States Patent Office.

GEORGE W. BROWN, OF NEW YORK, N. Y.

Letters Patent No. 103,292, dated May 24, 1870.

IMPROVEMENT IN HOISTING APPARATUS.

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

To all whom it may concern:

Be it known that I, GEORGE W. BROWN, of the city and State of New York, have invented and made a new and useful Improvement in Hoisting Apparatus for Buildings; and the following is declared to be a correct description thereof.

In the construction of buildings, it has been usual to employ men to carry the bricks and mortar up ladders to supply the masons in their work.

To avoid the cost of this tedious manual labor, a hoisting apparatus has been devised to be operated by steam or horse power.

In some cases this apparatus has been constructed for the particular building, and in other cases, temporary or portable hoist-ways have been fitted up, but in consequence of the space occupied, the difficulty of application, the costliness, or the risk of injury from the same to the workmen, such portable hoisting apparatus has met with but little favor, especially in the erection of ordinary buildings.

My invention is devised with a view to portability, compactness, and ease of application, so as to be available in buildings generally.

My invention relates to the construction of a portable elevator of tubular slides, set together in lengths and adapted to being secured to the beams without the use of special framework, and I make use of a platform constructed to receive hods set to lean against a central support in such a position that but little width is required, hence the apparatus can be applied to any building by simply leaving out or moving aside one of the beams in each floor until after the walls of the building have been run up.

In the drawing—

Figure 1 is an elevation illustrating the manner in which this apparatus is employed.

Figure 2 is a cross-section of the hoisting-platform; and

Figure 3 is a section, in larger size, of the connection for the tubular slides.

In constructing buildings, the foundation and first tier of beams are to be prepared in the usual manner, also the walls for the first story above the street, and in the second tier of beams, at a convenient place, one beam is to be left out or slid aside from position, except in cases where a stair-way or hoist-way can be availed of, so as to put up the tubular slides for the platform.

These tubular slides *a* are made of wrought-iron pipes, in sections of convenient lengths, and I employ a connection or coupling-block, *b*, between the respective lengths.

This block *b* is made with studs entering the ends of the tubes so as to form supporting shoulders for the ends of the tubes, and screws, *c*, may also be used to connect the tubes and blocks *b*, and each of

these blocks has a projecting flange to be attached by a spike or otherwise to a cross bearer or block, *d*, placed upon the beams *e* or other convenient support.

These tubular slides, it will now be seen, are not interrupted by any inward projections, hence become a reliable guide for notches upon the ends of the platform *f*, and these tubular slides can be extended from story to story, as the building progresses, and the upper ends of the tubes project into or pass through the head-piece *g* of the movable frame *h i* that is to be lifted from one floor to another as the tiers of beams are laid, so as to form a support for the upper ends of the tubes and allow the platform *f* to be drawn up to the level of the upper tier of beams.

The platform *f* has a central bearer, *k*, against which the sides of the hods are laid, as shown in fig. 2, and the length of this platform *f* and bearer *k* is to be such as to contain two or more hods, and in this manner hods, some with bricks and others with mortar, in the proper proportion, can be drawn up to the top floor and taken off by a set of men who successively stand upon the platform a previously emptied hod and take off one of the filled hods; and another set of hod-carriers is required upon the ground floor to place full hods upon the platform and take off the empty ones, so that the full hods are drawn up and the empty ones brought down each time the platform is moved up and down.

Steam or other power is to be employed to act upon the rope *l*, and the platform is lowered by means of a suitable brake or otherwise.

The bearer *k* should have projections, *o*, to prevent the hods slipping, and the edge of the platform should have a ledge or rim to retain the lower ends of the shanks or handles of the hods.

In this construction, the hods can be handled without the carriers stepping upon the platform, hence, risk of personal injury by the fall of the platform is avoided.

What I claim as my invention is—

1. The tubular slides for the hoisting apparatus, formed in sections to be set together and secured in the building, substantially as specified.

2. The blocks *b*, constructed as set forth, and employed for connecting the sections of the tubular slides and securing them in place, as specified.

3. The movable frame *g h i* and platform *f*, in combination with the aforesaid tubular slides, substantially as and for the purposes specified.

Signed by me this 5th day of April, A. D. 1870.

GEO. W. BROWN.

Witnesses:

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