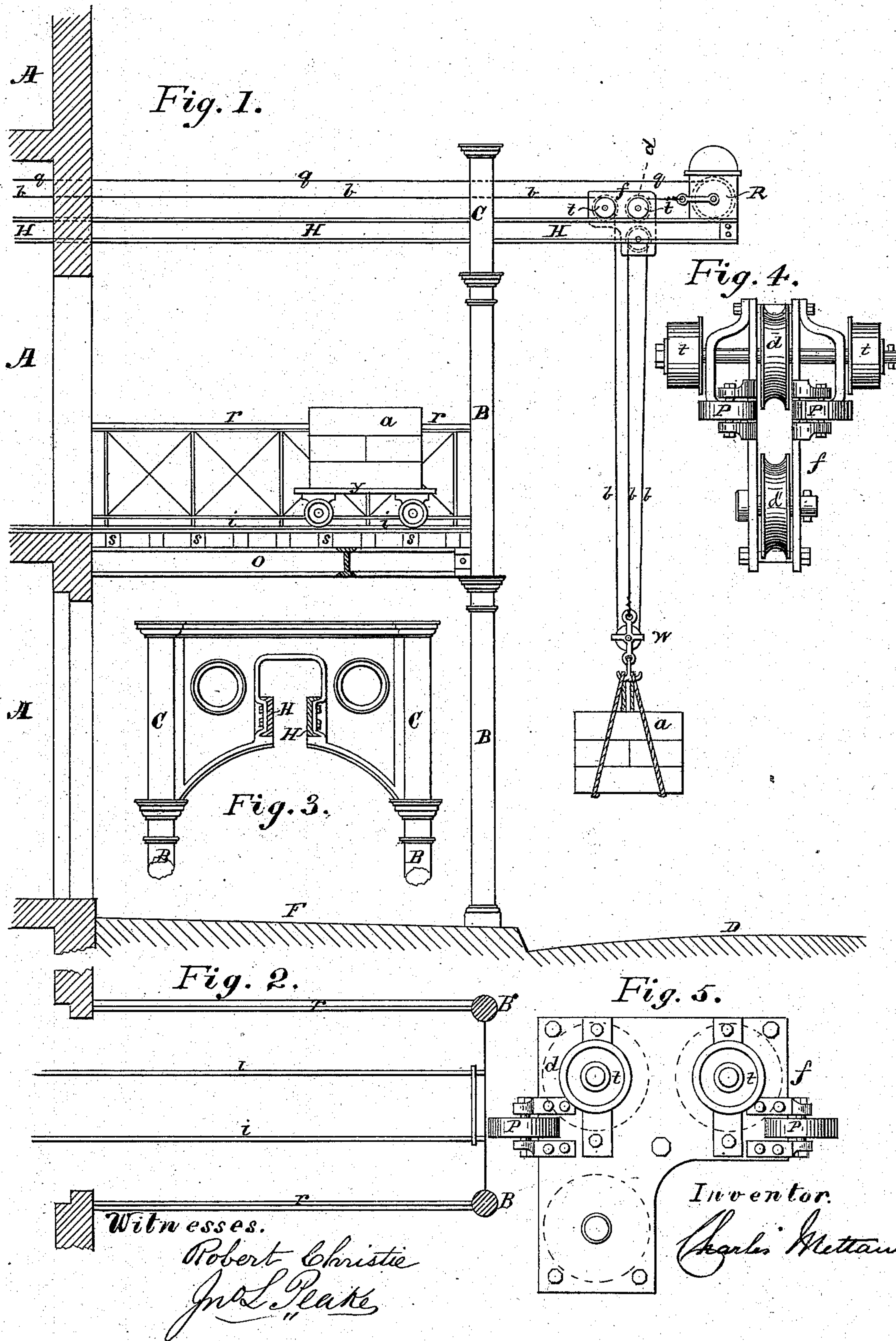


(No Model.)

C. METTAM.
HOISTING APPARATUS.

No. 288,586.

Patented Nov. 13, 1883.



UNITED STATES PATENT OFFICE.

CHARLES METTAM, OF NEW YORK, N. Y.

HOISTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 288,586, dated November 12, 1883.

Application filed July 29, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES METTAM, architect, of 395 Canal street, in the city of New York, county and State of New York, have invented certain new and useful Improvements in Hoisting Apparatus, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my hoisting apparatus, showing a portion of a building in section, and also showing the sidewalk and street. Fig. 2 is a plan of the tramway running into the building. Fig. 3 is a front elevation of the upper part of the structure erected on the sidewalk. Fig. 4 is an enlarged front view of the traveling hoist, and Fig. 5 is a side view of the traveling hoist.

Similar reference-letters indicate like parts in all the figures.

A is the building, showing various stories. B B are columns erected on the sidewalk, and supporting the outer ends of the floors for the tramways and the guides for the traveling hoist. C is an arched connecting-piece, to which the guides are fastened, and is so shaped as to offer no obstruction to the traveling hoist in passing backward and forward. D is the street or roadway. F is the sidewalk. H H are guides or beams on which the traveling hoist runs. *i i* are rails or tramways on which the truck Y runs. O O are supporting beams or ties and flooring for the tramway. P P are friction-rollers, to keep the traveling hoist in position. *q q* are ropes for adjusting the position of the traveling hoist. R is a sleeve or pulley over which the ropes *q* pass. *s s* are wooden ties. *t t* are rollers on which the hoist moves backward and forward at will. *d d'* are small pulleys over which the rope *q* runs to regulate the tension of the rope and position of the hoisting apparatus. *r* is a guard-rail. *f* is the frame of the traveling gear. W is the hoisting-tackle. *a* represents a load to be hoisted.

The object of my invention is to construct a hoisting apparatus for the unloading and taking in, or the taking out and loading, goods and merchandise from stores and warehouses in cities, so that the work will be done quicker and at a less expense, and at the same time offer no obstruction whatever to persons passing on the sidewalk, and thus remove one of

the annoying obstructions incident to all business streets of every city.

A description of the present system of unloading boxes for a store or warehouse in the city of New York is applicable to every large city in the United States. A cart or truck backs up to the curb, and the boxes are tumbled off and rolled over and over across the sidewalk into a building. This system is alike annoying and dangerous to passers by, and among trivial casualties is the tearing of clothes, particularly those of ladies. Frequently the cart or truck backs upon the sidewalk, so as to make the delivery of goods directly on the stoop or into the building, and the public, deprived temporarily of its rights, is forced to pass around into the street to get by the unlawful obstruction.

It will be seen that I erect a set of supporting-columns, B, on the sidewalk at the curb-line. These take up no more room than a lamp-post or a hitching-post. Extending from the building at about the height of the second floor I stretch suitable supports, O, upon which to lay a floor and rails or tramways. This floor of course offers no obstruction to passers by, being above their heads, and indeed is like an awning, and a protection from the sun and rain. At about the height of the third-story floor I stretch a pair of channel beams or guides, on which I place a traveling hoist, so arranged by pulleys and ropes as to be entirely controlled as to its movements by the porter or man in charge of taking in the goods. A cart drives up to the curb. It does not even have to back up. An ordinary rope sling is put around a box or boxes which are on the cart. The traveling hoist is run out, an attachment is made to the sling by the suspension-tackle, the steam or hand hoist inside the building is set in motion, the load rises, the traveling hoist is run back slightly, and the load is duly deposited on the small hand-truck running on the tramway of the sidewalk-structure. When the hand-truck is sufficiently loaded, it is pushed into the building, either onto the platform of the inside elevator or run across to any part of the floor. In taking goods out from the warehouse and loading the operation is similar.

The channel-beams on which the traveling

hoist runs may be extended to any portion of the building inside, so that the load may be brought directly within the building and there deposited, instead of being deposited on the tramway-truck, as before described.

The general arrangement of my structure may be varied, so as to adapt itself to special cases, and made in height to accommodate as many stories of a building as becomes necessary. If more than one tramway-floor be required, then a slot or opening must be provided in the respective floors, so that the fall or ropes and tackle can pass inwardly and outwardly without obstruction.

The general structure may be made as ornate as desired, corresponding more or less with the style of architecture of the building.

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

In a hoisting apparatus, substantially as described, having posts B and tracks *i*, corresponding with the several stories of a building, and in combination with the arch C, having secured thereto guides H, a traveler adapted to ride along said guides, and having friction-rolls P P, to prevent lateral displacement, the hoisting pulleys and rope, and the rope *q* and pulley R, for adjusting the traveler or carriage, as set forth.

CHAS. METTAM.

Witnesses:

ROBERT CHRISTIE,
JNO. L. PEAKE.