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JOHN M. ABBOTT'S
ELEVATING-RAILWAY. PATENTED MAR 29 1870

Figure 1-

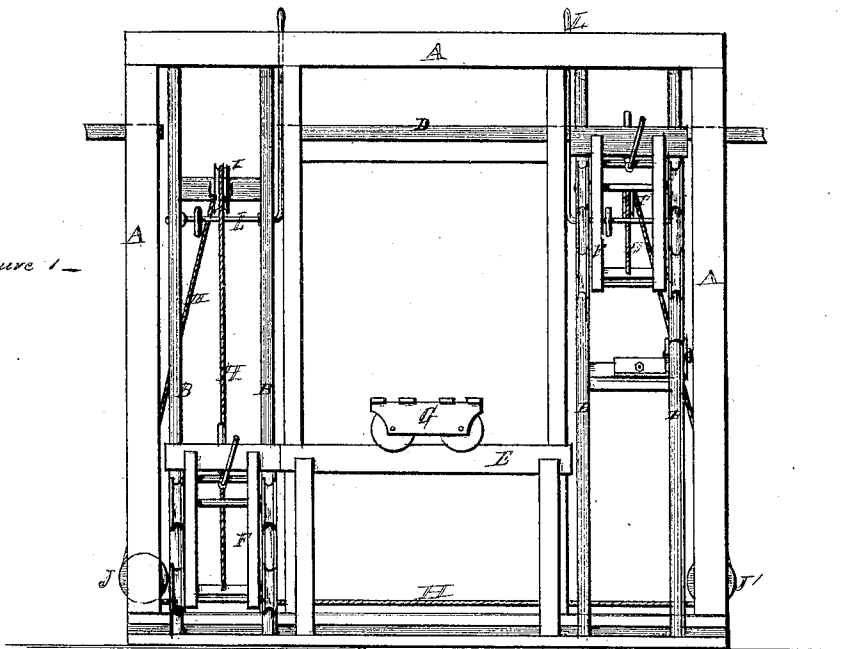


Figure 3-

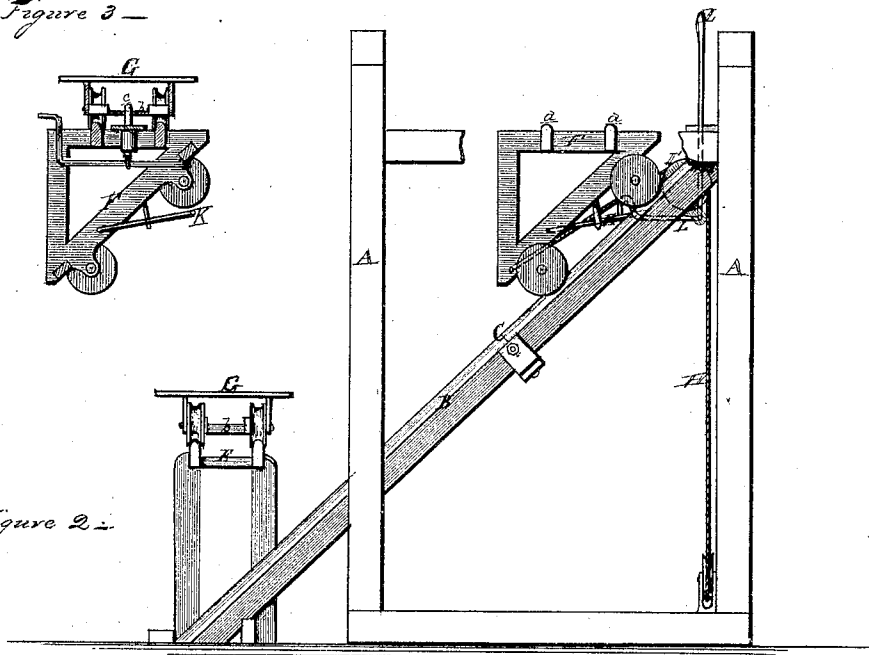


Figure 2-

ATTEST:
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United States Patent Office.

JOHN M. ABBOTT, OF HILLSDALE, MICHIGAN

Letters Patent No. 101,204, dated March 29, 1870.

IMPROVEMENT IN ELEVATED RAILWAYS.

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

To whom it may concern:

Be it known that I, JOHN M. ABBOTT, of Hillsdale, in the county of Hillsdale and State of Michigan, have invented a new and useful Improvement in Elevating Railway; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a front elevation of my railway as employed in the construction of a building,

Figure 2 is a side elevation of the same; and

Figure 3 is a vertical section through a car on one of the transfer-trucks.

Similar letters of reference indicate corresponding parts in each figure.

The nature of my invention relates to the construction and method of operating a pair of inclined-plane railways provided with suitable transfer-trucks and cars, for elevating material up into a building in process of construction.

It consists in the peculiar construction and arrangement of a pair of movable tracks, transfer-trucks, and platform-cars; also, in the arrangement of a rope and certain pulleys in such a manner that while the horse is drawing up a loaded car an empty one is descending for its load, and in the general arrangement of the various parts as hereinafter more fully shown and set forth.

In the drawings—

A represents the walls of a building in course of erection, the filling being dispensed with, to show the operation of my improvement.

B are railway-tracks, two in number, which are erected after the walls of the lower story are up, entering the walls either through the door or window openings at either end, or, if more convenient, one track may enter the front and the other the rear end of the building; the track, or each section of it, terminates just above the plane of the floor-joists, and as another story is erected, another section is spliced to it, as shown at C, fig. 2, and secured to the joists above, across which is laid a temporary track, D.

E is a platform-track laid in the front of the building, between the lower ends of the inclined tracks, and in close proximity to the material used in the construction of the building.

F are transfer-trucks, supported by grooved or flanged wheels moving on the inclined tracks, the floors of said trucks being horizontal and provided with a short section of track, *a*, of the same gauge as the tracks D and E.

G is a platform-car or truck, upon which the material to be elevated is placed; on its under side is a curved plate, *b*, provided with an opening in its center.

c is a spring-bolt or latch projecting upward through

the center of a plate on the transfer-trucks, and is depressed by a lever, *d*.

H is a rope secured to one of the transfer-trucks, passing up over a pulley, I, at the top of its track, thence down around a pulley, I, at the lower corner of the building, thence across to a similar pulley, J, at the other rear corner of the building, thence up over a pulley, I, at the top of the other inclined track and make fast to the other transfer-truck. The rope is of such length that when one of the trucks is at the foot of the inclined track the other is at the head of its track.

K is a bale or latch hinged under each transfer-truck, which automatically engages with a bell-crank hook, L, at the top of the inclined track, so that when the transfer-truck reaches the top thereof it is held until released by disengaging the lever from the latch.

To operate the improvement advantageously, two cars should be employed, one on each transfer-truck; the material being conveniently near the track E, as far as it is needed, it is loaded on one of the trucks, which is then pushed onto the transfer-truck standing at the end of said track; as it runs on the transfer-truck, its curved plate *b* depresses the spring-bolt *c* until reaching the center, when said bolt enters the opening in the plate; the horse is then started forward, being hitched to the rope near one of the pulleys J, the transfer-truck with its loaded car is elevated to the top of the inclined track, and the horse stopped and turned about; the car is detached from the bolt *c* and run on the track D and unloaded; meantime the other transfer-truck has descended the inclined track on the other side of the structure and its empty car run on the track E to be loaded, enabling the builder to elevate his material, after the walls of the first story are up, at one one third the cost of doing it by hand.

What I claim as of my invention, and desire to secure by Letters Patent, is—

1. The double inclined sectional tracks B, transfer-trucks F, rope H, pulleys I, J, cars G, and tracks D and E, substantially as and for the purpose set forth.

2. The spring-bolt *c*, lever *d*, and curved latch-plate *b*, arranged with relation to each other and the cars G and transfer-trucks F, in the manner and for the purpose set forth.

3. The latch-bale K and lever-hook L, arranged with relation to each other and the inclined tracks B and transfer-trucks F, substantially as described, and for the purpose specified.

JOHN M. ABBOTT.

Witnesses:

H. F. EBERTS,
H. S. SPRAGUE.