

No. 751,283.

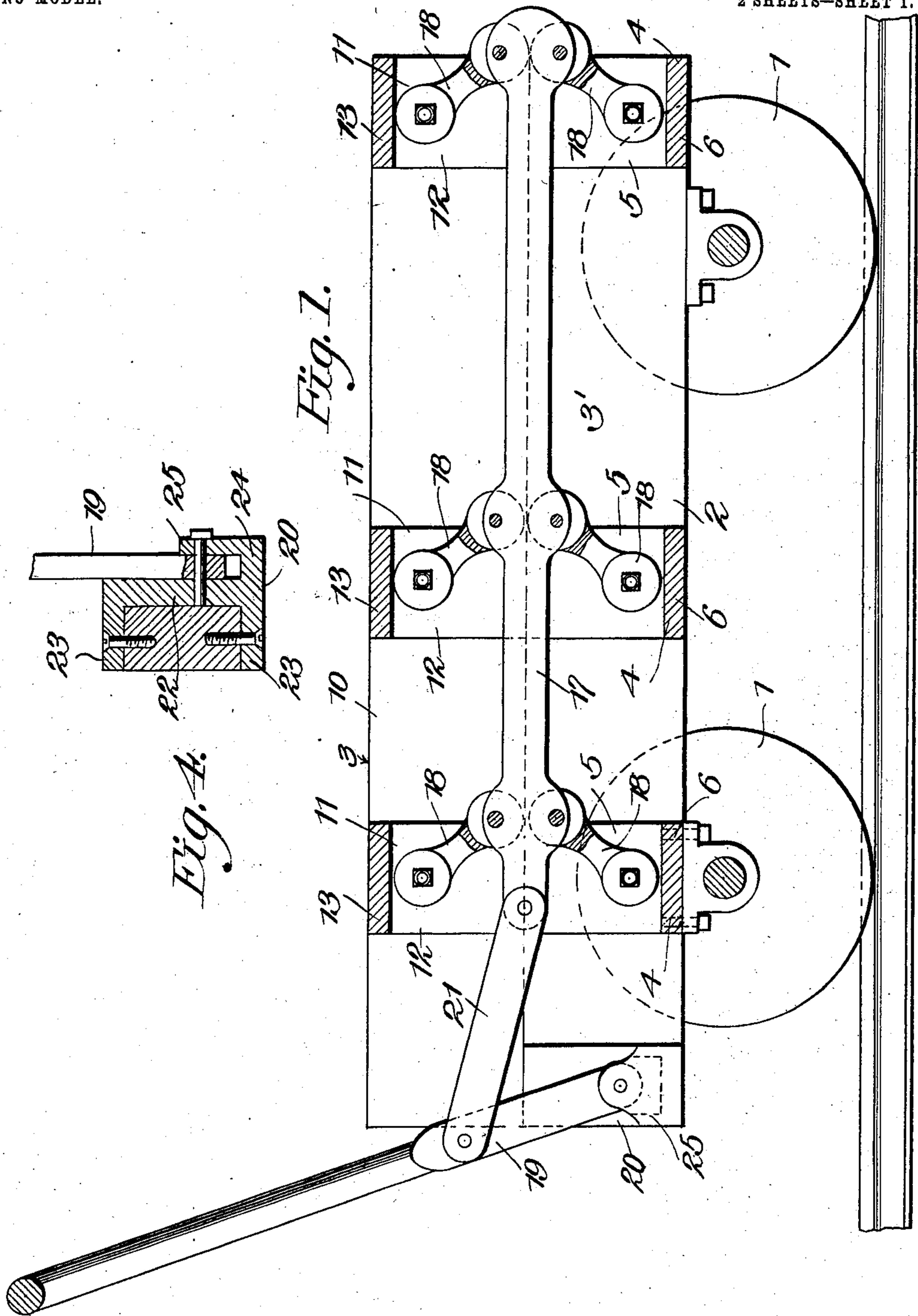
PATENTED FEB. 2, 1904.

W. L. HARBIN.
BRICK TRUCK.

APPLICATION FILED JULY 6, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
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W. L. Harbin, Inventor.
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2 SHEETS—SHEET 2.

Fig. 3.

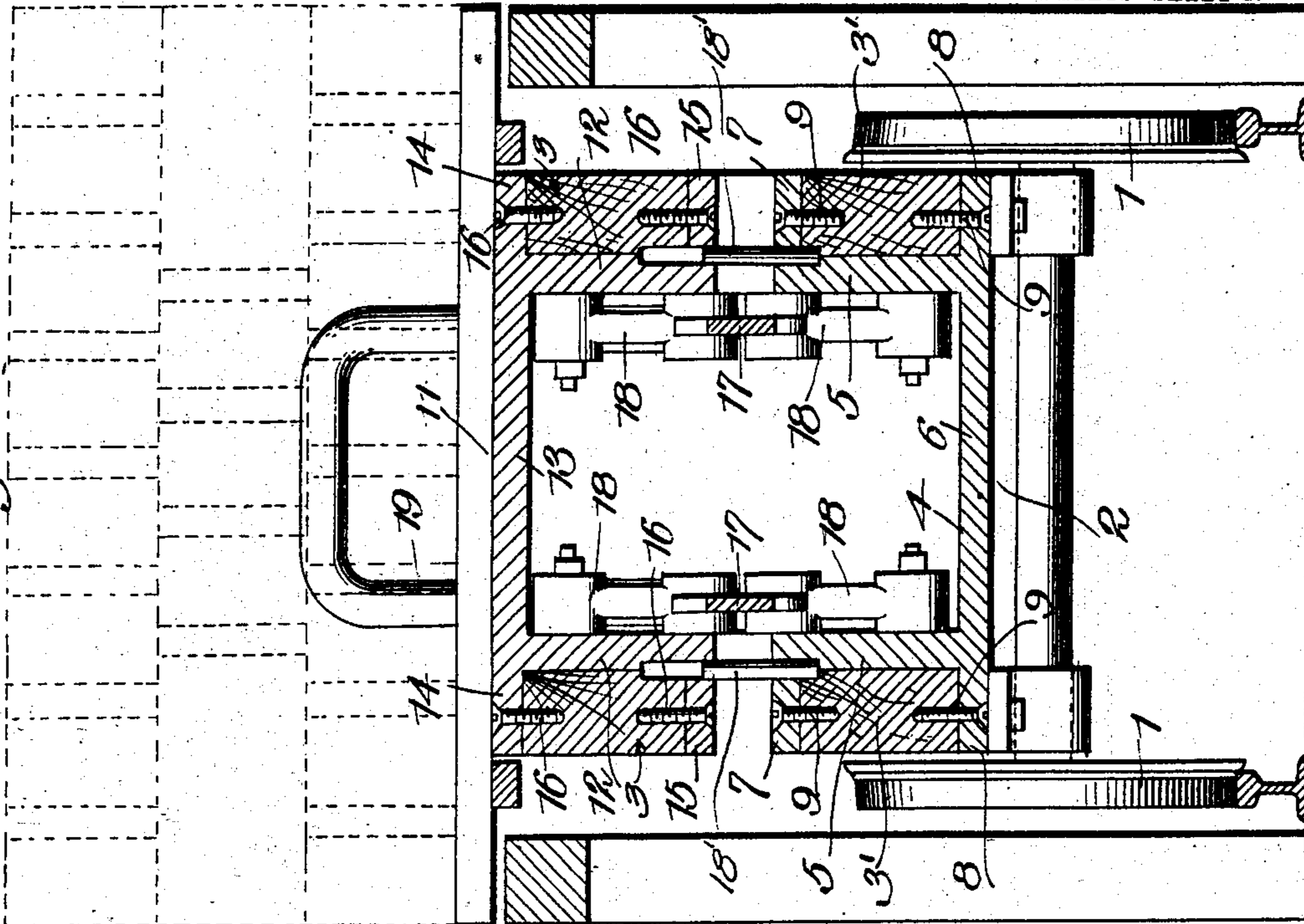
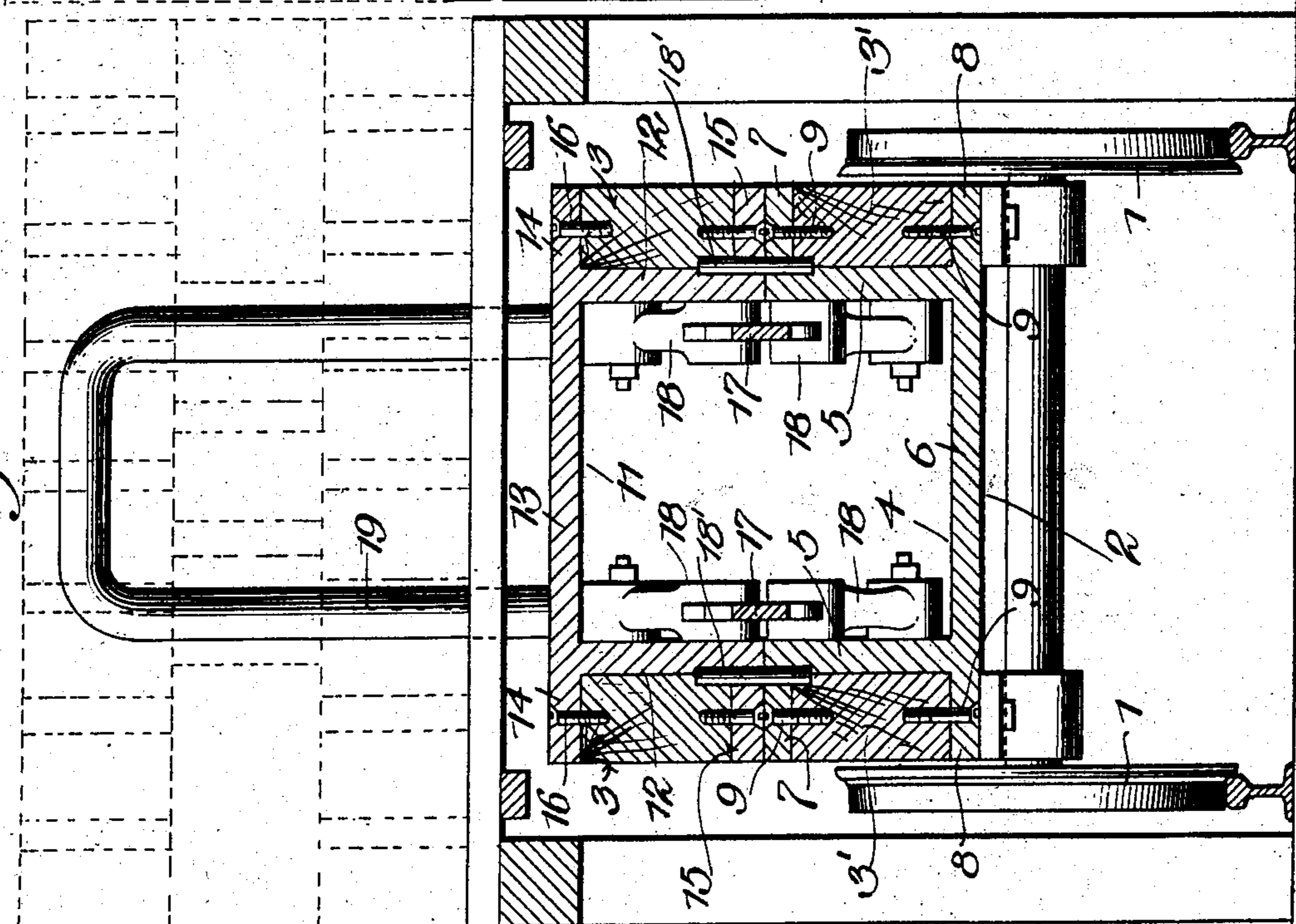


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILLIAM LEE HARBIN, OF LEXINGTON, NORTH CAROLINA.

BRICK-TRUCK.

SPECIFICATION forming part of Letters Patent No. 751,283, dated February 2, 1904.

Application filed July 6, 1903. Serial No. 164,459. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LEE HARBIN, a citizen of the United States, residing at Lexington, in the county of Davidson and State of North Carolina, have invented a new and useful Brick-Truck, of which the following is a specification.

My invention relates to brick-trucks such as are employed in brick-yards for transferring the loaded pallets from the brick-machine to the drying-sheds and to the kiln, and has for its objects to produce a device of this character of simple construction, which will be efficient in operation, and one which may be readily manipulated for elevating the loaded pallets from or lowering them to the pallet-supporting rails or frame.

To these ends the invention comprises the novel details of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a vertical longitudinal section centrally through my improved truck. Fig. 2 is a transverse sectional elevation showing the truck beneath the pallet preparatory to raising the same. Fig. 3 is a similar view showing the truck raised. Fig. 4 is a detail perspective view of one of the end castings.

Referring to the drawings, my improved truck is mounted for travel on wheels 1 and consists of a primary stationary frame 2 and a secondary relatively-movable frame 3, which overlies the main frame and is movable toward and from the same in a vertical plane.

The main frame 2 consists of a pair of longitudinally-extended parallel side beams or boards 3', connected and sustained by a plurality of castings 4, preferably three in number and disposed at intervals throughout the length of the beams. The castings are each in longitudinal section of the general form of the letter U and present a pair of vertical arms or webs 5 and a horizontal crown portion 6, which connects the vertical arms and is of a length equal to the desired width of the truck. The vertical arms of the castings are provided at their upper ends each with an outwardly-extending horizontal flange 7 and at their lower ends with a similar flange 8, arranged parallel with the connection portion 6 and vertically

beneath the upper flange 7. The flanges 7 8 receive between them the longitudinal side beams of the frame and are of a length equal to the thickness of the latter. The beams are secured in position between the flanges by means of screws or the like 9, extended through suitable perforations in the flanges, as shown in Figs. 2 and 3. The upper frame 3 is likewise composed of a pair of longitudinal beams 10, connected by a plurality of castings 11, corresponding in number to the number of castings of the lower frame above and in continuation of which they are arranged, as seen in Fig. 1. The castings 11 are each in the form of an inverted U and have a pair of vertical arms or webs 12 and a horizontal connecting or crown portion 13 extended beyond the vertical arms to form outer horizontal flanges 14, while the lower ends of the arms are provided with similar flanges 15, the beams 10 being received between said flanges and secured by screws 16, extended through perforations in the latter, as in the case of the primary frame.

For raising and lowering the secondary frame I provide upon the inner face of each side of the truck a longitudinal bar or member 17, preferably disposed at the vertical center of the truck, or, that is, at the point of juncture of the upper and lower frames. Each bar 17 has pivoted thereto the inner ends of a series of links 18, which are arranged in pairs to extend upwardly and downwardly from the bar. There are preferably three pairs of these links, the outer ends of which are pivoted to the upper and lower frames, respectively, and upon the inner faces of the frame-castings, the upper links being pivoted to the castings 11, while the lower links are pivoted to the castings 4, as herein shown. At this point it will be observed that the bars or members 17 are adapted for longitudinal reciprocation, and that when moved in one direction the links will be actuated for raising the secondary frame directly and vertically upward relative to the primary frame, and that when the bar is moved in the other direction the links will be actuated for lowering the same. The secondary frame is guided in its vertical movement toward and from the primary frame by means of vertical guides, preferably in the form of pins 18', fixed

at their lower ends in sockets formed in the primary frame and working at their upper ends in corresponding sockets formed in the secondary frame, these guides serving to maintain the secondary frame at all times in vertical alinement with the primary frame and to insure the proper vertical movement of the movable frame.

For operating the members 17 I provide a lever 19 in the form of an inverted U and pivoted at its lower end in end castings 20, carried one by each of the side bars 3' of the lower frame and at the rear end thereof, the main arms of the lever being connected each with one of the bars 17 by a link 21, pivoted at its opposite ends, respectively, to the rear end of the bar and the arm of the lever. The castings 20, in which the lower ends of the lever-arms are pivoted, each consists, as shown in Fig. 4, of a vertical plate 22, provided at its upper and lower end with outwardly-extending horizontal flanges 23, which receive the side bar 3' between them, as in the case of the castings 4, and at its lower end with an inwardly-extending flange 24, having a vertically upwardly extending portion 25, between which and the inner face of plate 22 the arm of the lever is pivoted. It is apparent that when the lever 19 is pulled downward, as shown in dotted lines in Fig. 1, the members 17 will be simultaneously operated for causing the links to raise the secondary frame, the movement of the links at opposite sides of the frame being in unison, thus exerting a uniform lifting power upon opposite sides of the frame.

From the foregoing it will be seen that I produce a device of simple construction, which is admirably adapted for the attainment of the ends in view; but it is to be understood that I do not limit myself to the precise details herein set forth, inasmuch as minor changes may be made therein without departing from the spirit of the invention.

Having thus described my invention, what I claim is—

1. The combination with a primary frame comprising a plurality of substantially U-shaped castings each having its vertical arms provided with a pair of vertically-spaced horizontal flanges and side beams or boards seated between said flanges and sustained by the castings, of a secondary vertically-movable frame comprising a plurality of substantially U-shaped castings each having its vertical arms provided with a pair of vertically-spaced horizontal flanges and side beams or boards seated between said flanges and sustained by the castings, means for raising and lowering the secondary frame, and means for guiding said frame in its movements.

2. The combination with a primary frame comprising a plurality of substantially U-shaped castings each having its vertical arms provided with a pair of vertically-spaced horizontal flanges and side beams or boards seated between said flanges and sustained by the castings, of a secondary vertically-movable frame comprising a plurality of substantially U-shaped castings each having its vertical arms provided with a pair of vertically-spaced horizontal flanges and side beams or boards seated between said flanges and sustained by the castings, a longitudinally-reciprocatory member, upper and lower links pivotally connected at their inner ends with the member and at their outer ends respectively with the frames, means for reciprocating the member to raise and lower the secondary frame, and means for guiding said frame in its movements.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM LEE HARBIN.

Witnesses:

T. S. F. DORSETT,
J. W. LINDSAY.