No. 736,613. PATENTED AUG. 18, 1903.

J. P. LIND.

TRUCK.

APPLICATION FILED SEPT. 22, 1902.

NO MODEL.

Fig. 1

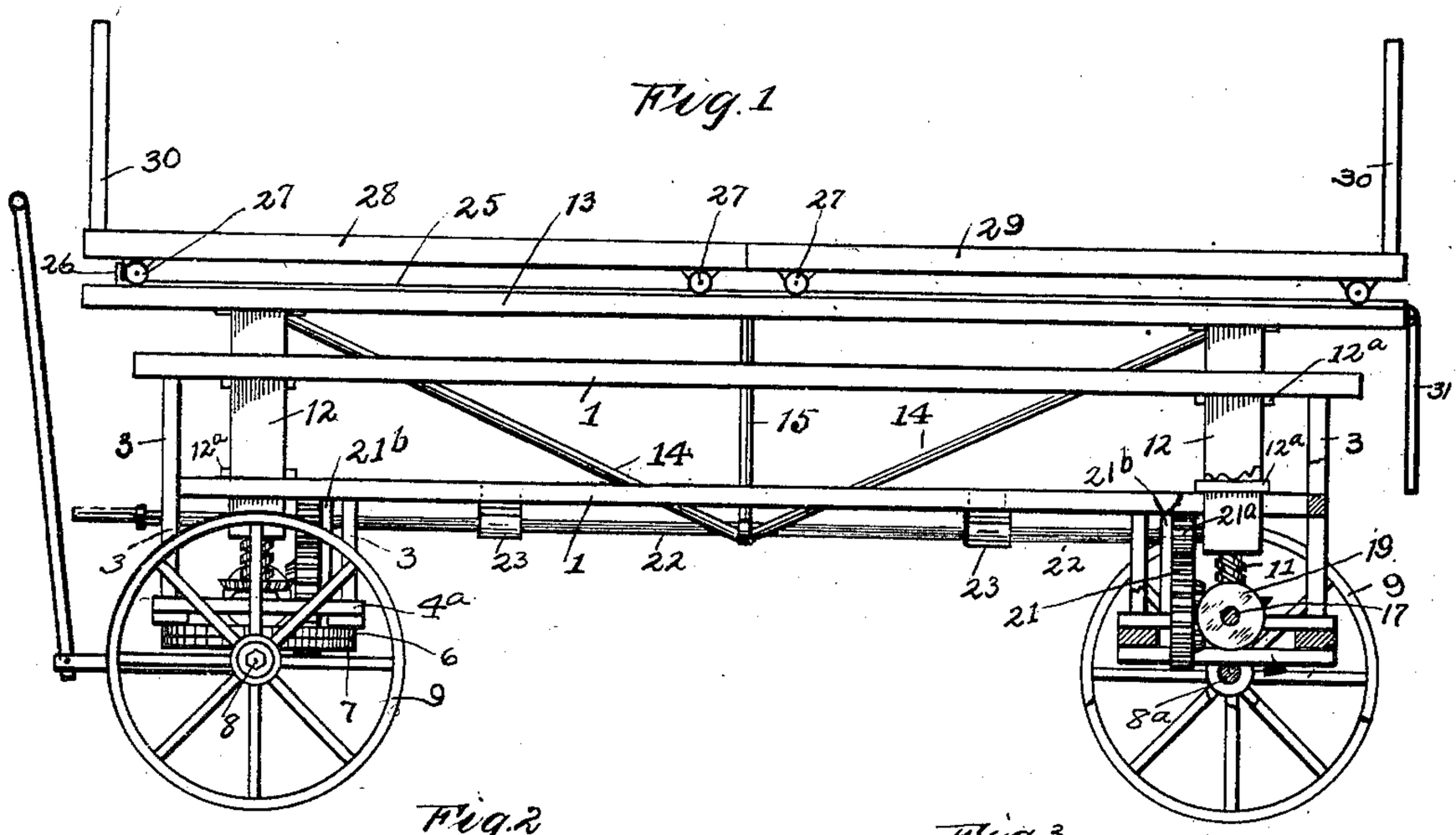

Fig. 2

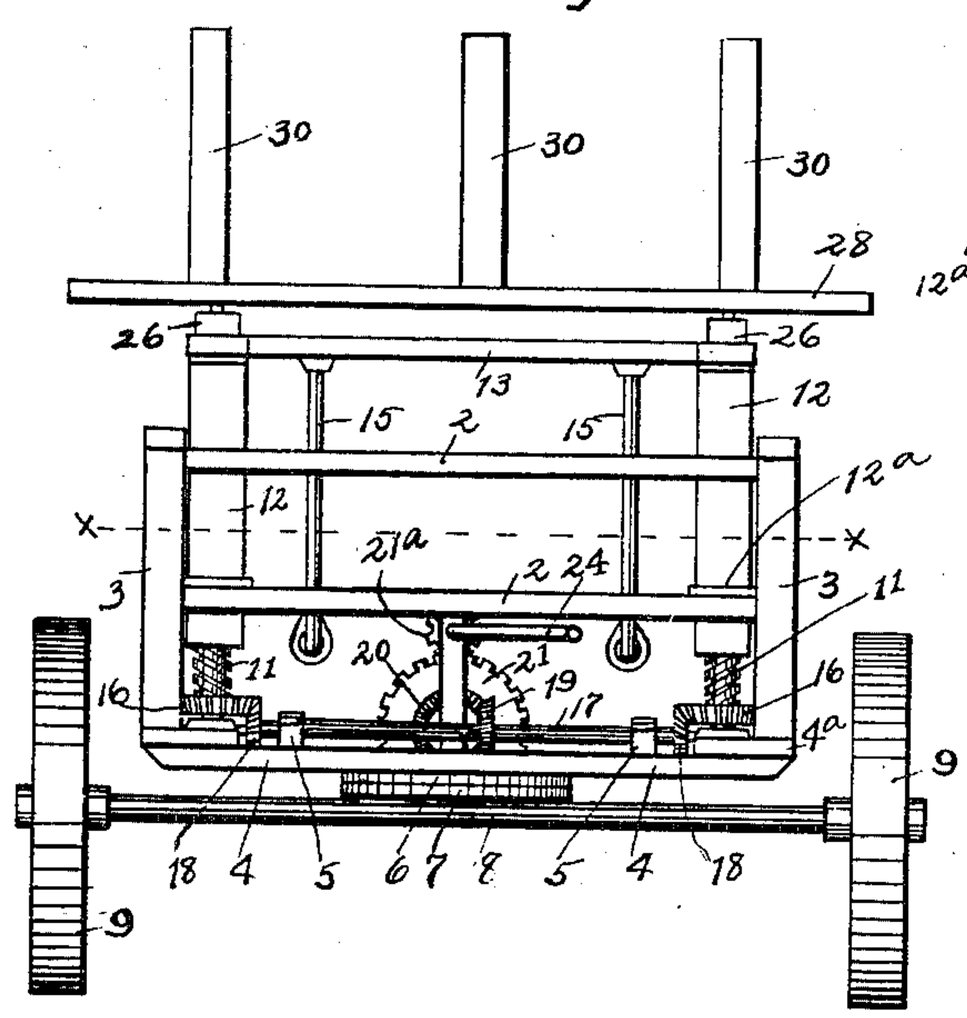

Fig. 3

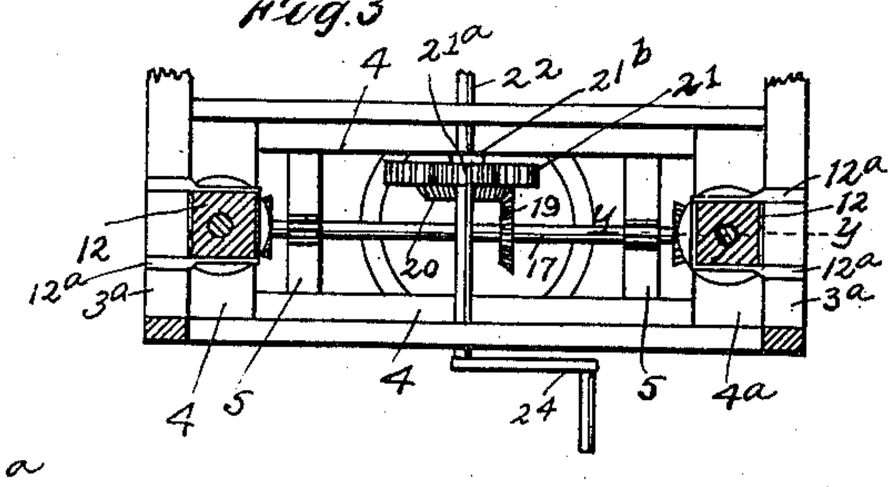

Fig. 4

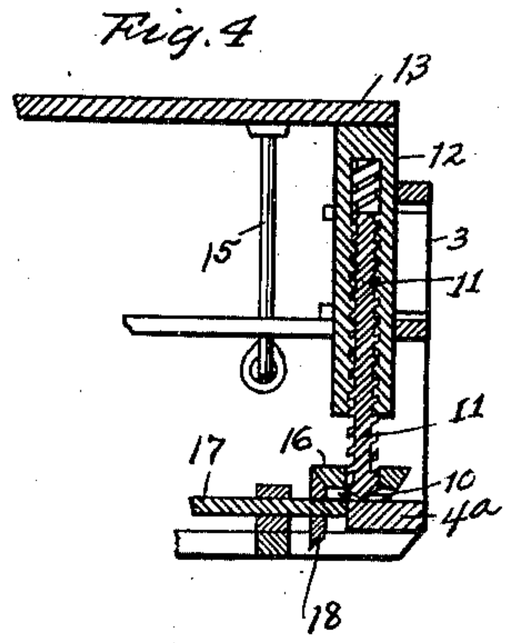

Fig. 5

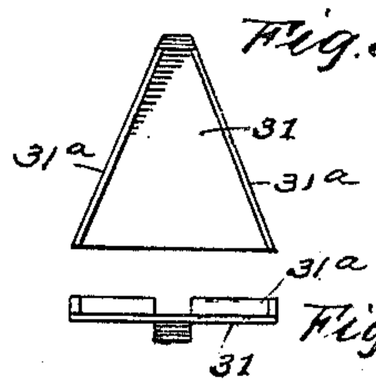

Fig. 6

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No. 736,613. Patented August 18, 1903.

UNITED STATES PATENT OFFICE.

JACOB P. LIND, OF COLUMBUS, OHIO.

TRUCK.

SPECIFICATION forming part of Letters Patent No. 736,613, dated August 18, 1903.

Application filed September 22, 1902. Serial No. 124,300. (No model.)

To all whom it may concern:

Be it known that I, JACOB P. LIND, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Trucks, of which the following is a specification.

My invention relates to the improvement of trucks, and has particular relation to the improvement of that class of hand-trucks which are ordinarily employed by railway and express companies, although it will be understood that my improved construction may be applied to trucks or vehicles of other character.

The objects of my invention are to provide a truck of improved construction and arrangement of parts, to provide in conjunction therewith means for raising and lowering the truck-top or load-supporting floor, to provide improved mechanism and means for removing the load from the truck, and to produce other improvements the details of which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved truck. Fig. 2 is an end view of the same. Fig. 3 is a sectional view through the forward end portion of the truck, said section being taken on line *x x* of Fig. 2. Fig. 4 is a central vertical section on line *y y* of Fig. 3. Fig. 5 is a face view of one of the wheel guide-plates which I employ in the manner hereinafter described, and Fig. 6 is an end view of the same.

Similar numerals refer to similar parts throughout the several views.

In carrying out my invention I employ a suitable truck-frame, which may consist of parallel side frame-bars 1, connected by transverse frame-bars, such as are indicated at 2. From the side frame-bars extend downward toward each end frame-bars 3, which are connected at their lower ends by cross-bars 4, which bars may be connected by transverse connecting-bars, such as are indicated at 5. To the under side of this lower framework at the forward end of the truck, consisting of the bars 3, 4, and 5, is suitably secured the upper ring of a turn-table or fifth-wheel 6, which bears upon a lower ring 7, suitably mounted on a transverse front axle 8, which carries ground-wheels 9. The ends of the frame-bars 4 are also connected by transverse bars 4^a, and upon each of these bars, at the center of its length or in a pivot-plate 10, suitably supported thereon, is pivoted the lower conical end of a vertical screw 11, the upper portion of this screw being adapted to enter a threaded socket formed centrally in a vertical post or standard 12. Upon the four posts thus employed is mounted rigidly the horizontal truck top or floor 13, which may be braced or strengthened by suitable under side truss-rods, such as are indicated at 14 and 15. Projecting inwardly from horizontal frame-bars 3^a, which connect the bars 3, are yoke-like keepers 12^a, through which the posts 12 pass loosely and are held in their proper vertical positions. The lower end portion of each of the screws 11 carries a bevel gear-wheel 16.

17 represents horizontal transverse shafts, one of which is journaled in the lower framework of the truck above the forward axle 8 and one of which is journaled in a similar manner above the rear axle 8^a. On each end of each of the shafts 17 is carried a bevel gear-wheel 18, which gears with the adjoining wheel 16. Near the center of its length each of the shafts 17 carries a bevel gear-wheel 19, which gears with a bevel-wheel 20, which is carried on the face of a larger gear-wheel 21, the latter gearing with a pinion 21^a, which is carried on a horizontal shaft 22, which runs lengthwise of the truck beneath the lower frame-bars 2. This shaft 22 is journaled in suitable boxings 23, supported from the truck-frame, and on its forward end said shaft carries an operating-crank 24. The gear-wheel 21 is pivotally supported in a depending frame-bar 21^b.

Upon the upper side of the truck top or floor 13 I secure longitudinally-parallel track-rails 25, the rear ends of which are provided with suitable upwardly-projecting stops 26. Upon these track-rails are adapted to run and be supported the caster-wheels 27 of a load-carrying platform, which, as shown, is formed in two equal-length sections, which are indi-

cated at 28 and 29. Each of these platforms may be provided, as shown, with suitable upwardly-projecting end standards 30.

Hinged to one end of the truck-top 13, opposite the end of each of the track-rails 25, is the upper and narrower end of a wheel guide-plate 31, the latter being substantially triangular in form and having its longer sides provided with upturned flanges 31ª. These guide-plates 31 normally depend from their points of connection with the end of the truck-top, as shown in Fig. 1 of the drawings.

It will be understood from the construction described that the truck-top, together with the load-carrying platforms, may be raised or lowered with relation to the running-gear and supporting-framework by rotating the shaft 22 in the proper direction. In this operation it will be understood that through the gear connections heretofore described between said shaft 22 and the bevel-wheels 16 at the lower ends of the screws 11 said screws will be rotated, and through their rotary movement in threaded sockets of the posts or standards 12 said standards, together with the truck-top, will be moved vertically.

Assuming that the wheeled platforms 28 and 29 have been loaded with express-packages or other baggage and that it is desired to transfer the same to a railway-car, it will be understood that the truck is moved to the car in the usual manner, after which by the operation above described the load-carrying platforms may be raised until the same are level with the car-floor, thus permitting said platforms being run off the truck-top directly into the car, where they may be readily and conveniently unloaded. Before running the wheeled platforms off the truck the guide-plates 31 may be raised to horizontal or substantially horizontal positions, so as to project within the car and lie upon the floor thereof, so that when the platforms are returned to the car the wheels thereof may be guided onto the track-rails by running the same into the wider ends of said guide-plates.

From the construction herein shown and described it will be seen that simple and effective means are provided for raising and lowering the load carried upon a truck and that by the use of said truck the loading of cars or vehicles will be greatly facilitated.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a truck, the combination with the running-gears and framework and vertically-pivoted screws, of standards having threaded sockets adapted to engage said screws, a truck-top mounted on said standards, track-rails on said truck-top, substantially triangular guide-plates hinged to said truck-top opposite the rails, said guide-plates having upwardly-flanged sides and a wheeled platform adapted to run on said track-rails, substantially as specified.

JACOB P. LIND.

In presence of—
C. C. SHEPHERD,
W. L. MORROW.