W. T. HOLLAWAY.

LOADING AND UNLOADING TRUCK.

APPLICATION FILED SEPT. 27, 1919.

1,342,628.

Patented June 8, 1920.

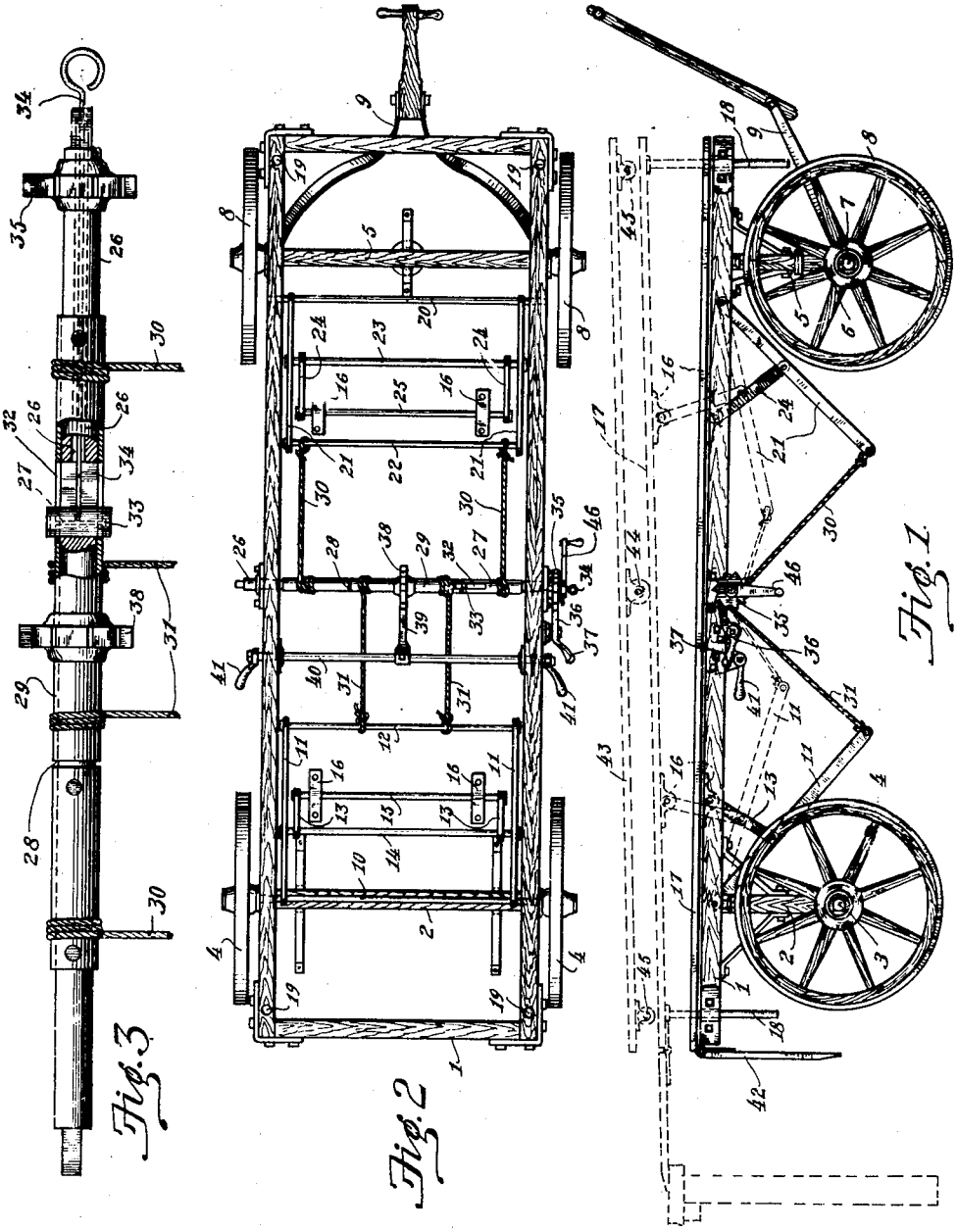


Fig. 1.

Fig. 2.

Fig. 3.

INVENTOR

William T. Hollaway

BY Frease, Markel, Saywell and Bond

ATTY'S.

UNITED STATES PATENT OFFICE.

WILLIAM T. HOLLAWAY, OF ALLIANCE, OHIO.

LOADING AND UNLOADING TRUCK.

1,342,628. Specification of Letters Patent. Patented June 8, 1920.

Application filed September 27, 1919. Serial No. 326,963.

To all whom it may concern:

Be it known that I, WILLIAM T. HOLLAWAY, a citizen of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented a new and useful Loading and Unloading Truck, of which the following is a specification.

The invention relates to improvements in loading and unloading trucks, such as are used for loading express or baggage in railway cars or removing the same therefrom.

The objects of the invention are to provide a truck which will greatly facilitate the handling of merchandise and materials and effects a saving of time in loading or unloading a car, to provide means for quickly or readily raising or lowering the platform of the truck to the level of the car to be loaded or unloaded; to provide means for raising or lowering one end of the platform independently of the other end; and to improve and simplify load handling devices of this character.

With these objects in view the invention consists in the novel construction and arrangement of parts, hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of construction may be made within the scope of the appended claims, without departing from the spirit or sacrificing any of the advantages of the invention.

The invention thus set forth in general terms is illustrated in the accompanying drawings forming part hereof, in which—

Figure 1 is a side elevation of the truck embodying the invention;

Fig. 2, a plan view of the truck with the platform removed; and

Fig. 3, a detail view of the operating shaft.

A practical embodiment of the invention is disclosed in the accompanying drawings, forming a part of this specification in which similar numerals of reference indicate corresponding parts throughout the several views.

The body portion of the truck comprises a rectangular frame 1, from the rear portion of which a bolster 2 depends, the bolster being supported upon the axle 3 upon which are mounted the wheels 4. A body bolster 5 depends from the front portion of the body and is pivotally connected in the usual manner to the axle bolster 6, which is supported upon the front axle 7, the wheels 8 being mounted upon said axle. A tongue 9 is connected to the axle bolster by means of which tongue the truck is propelled.

A shaft 10 is mounted in the rear portion of the body portion 1 and a pair of spaced levers 11 are mounted upon said shaft, said levers being connected at their outer extremities by means of a rod 12. Links 13 are pivotally connected to the levers 11 at their lower ends, intermediate the extremities of the levers, these links being preferably mounted upon a rod 14 carried between the levers 11. The upper ends of the links 13 are connected by means of a rod 15 upon which rod are pivotally mounted the attaching brackets 16, which brackets are secured in any usual and well known manner to the platform 17, which is rectangular in form and of substantially the size of the body 1. Guide rods 18 depend downwardly from the platform adjacent the corners thereof and are received in suitable apertures 19 formed through the body portion 1, these apertures being of sufficient size to allow free movement of the guide rods therethrough.

A shaft 20, similar to the shaft 10 is located in the front portion of the body 1 and has mounted thereon a pair of spaced levers 21 similar to the levers 11, these levers being connected at their outer ends by means of a rod 22. A rod 23 is carried between the levers 21 being connected thereto at a point intermediate their extremities and has mounted thereon the links 24 which are connected at their upper extremities to the rod 25 upon which rod is pivotally mounted a pair of attaching brackets 16, which are connected to the under side of the platform 17 in any suitable and well known manner.

A shaft 26 is transversely journaled through the body 1, at a point half way between the shafts 10 and 20 and is provided with the shouldered portions 27 and 28 which are fixed to the shaft, a tubular shaft 29 being loosely mounted upon the shaft between said shouldered portions. A flexible member 30 is attached to each of the shoulder portions 27 and 28 of the shaft at one end, the other end of each flexible member being connected to the rod 22. Similar flexible members 31 are connected to the tubular shaft 29 at one end and at the other end to the rod 12.

The shouldered portion 27 of the shaft is

slotted as shown at 32, the slot extending into the adjacent end of the tubular shaft 29 and a key 33 is mounted in said slot and connected to an operating rod 34 which is slidably mounted through a central bore in the shaft 26. By pushing the rod 34 inwardly, the key 33 is received in the slotted end of the tubular shaft 29 as shown in Fig. 3, thus coupling the tubular shaft to the shaft 26. By pulling the rod 34 outwardly the key 33 is moved into the position shown in dotted lines, Fig. 3, disconnecting the tubular shaft 29 from the shaft 26.

A ratchet 35 is mounted upon the shaft 26 preferably at a point outside of the body 1 and a pawl 36 is mounted adjacent said ratchet and preferably provided with an operating handle 37. A ratchet 38 is provided upon the tubular shaft 29 and arranged to be engaged by a pawl 39 mounted upon a rock shaft 40 which is journaled through the body 1 and provided upon each end with an operating handle 41 in order that the pawl 39 may be operated from either side of the truck.

A hinged portion 42 is preferably provided at the rear end of the platform 17 to bridge the space between the end of the platform and the car door. A movable platform 43 may also be provided, this platform being provided with a central roller 44 and end rollers 45 preferably of less diameter than the central roller. With this movable platform the entire contents of the truck may be rolled upon the movable platform into the car after the platform 17 has been raised to the desired height.

In operation the material to be loaded into the car is placed upon the truck and the truck moved into the desired position adjacent to the car door. The truck may be either placed for end unloading or side unloading. Where the truck is unloaded from the side the crank 46 is turned in the proper direction to wind the flexible members 30 and 31 upon the shaft 26 and the tubular shaft 29 raising the levers 11 and 21 and through these levers and the links 13 and 24 raising the platform 17 above the body of the truck. When the platform 17 has been raised to the height of the car floor the articles thereon may be loaded into the car.

If it is desired to load the car from the end of the truck, the truck is set to right angles to the car, the rear end thereof adjacent the car door. The crank 46 is then operated to raise the platform 17 to the height of the car door, the hinged member 42 being then dropped upon the floor of the car. The rod 40 is then rocked bringing the pawl 39 into engagement with the ratchet 38, holding the tubular shaft 29 against movement and the rod 34 is pulled outward disengaging the key 33 from the tubular shaft. The rear end of the platform thus remains stationary and the crank 46 is rotated, raising the levers 21 into the position shown in dotted lines in Fig. 1 and when the desired height of the forward end of the platform is reached the pawl 36 is thrown into engagement with the ratchet 35 holding the shaft 26 against movement and maintaining the platform 17 in the elevated position. The merchandise which is carried upon the platform 17 may then be moved down the inclined platform into the car or if the movable platform 43 is used this may be easily rolled into the car.

Although the drawings and above specification disclose the best mode in which I have contemplated embodying my invention I desire to be not limited to the details of such disclosure, for, in the further practical application of my invention, many changes in form and construction may be made, as circumstances require or experience suggests, without departing from the spirit of the invention, within the scope of the appended claims.

I claim:—

1. A loading and unloading truck, including a body, a platform, a pair of levers pivoted near each end of the body, links connecting each pair of levers to the platform, a shaft journaled through the body, a rotatable member upon the shaft, means for locking the rotatable member to the shaft, flexible members connecting one pair of levers with the shaft and flexible members connecting the other pair of levers with the rotatable member.

2. A loading and unloading truck, including a body, a platform, a pair of levers pivoted near each end of the body, links connecting each pair of levers to the platform, a shaft journaled through the body, a rotatable member upon the shaft, means for locking the rotatable member to the shaft, flexible members connecting one pair of levers with the shaft and flexible members connecting the other pair of levers with the rotatable member, and means for locking the rotatable member against rotation and for rotating the shaft independently thereof.

In testimony that I claim the above, I have hereunto subscribed my name.

WILLIAM T. HOLLAWAY.