W. E. KASTENDIKE.

TRUCK.

APPLICATION FILED MAY 27, 1908.

916,324.

Patented Mar. 23, 1909.

Fig. 1.

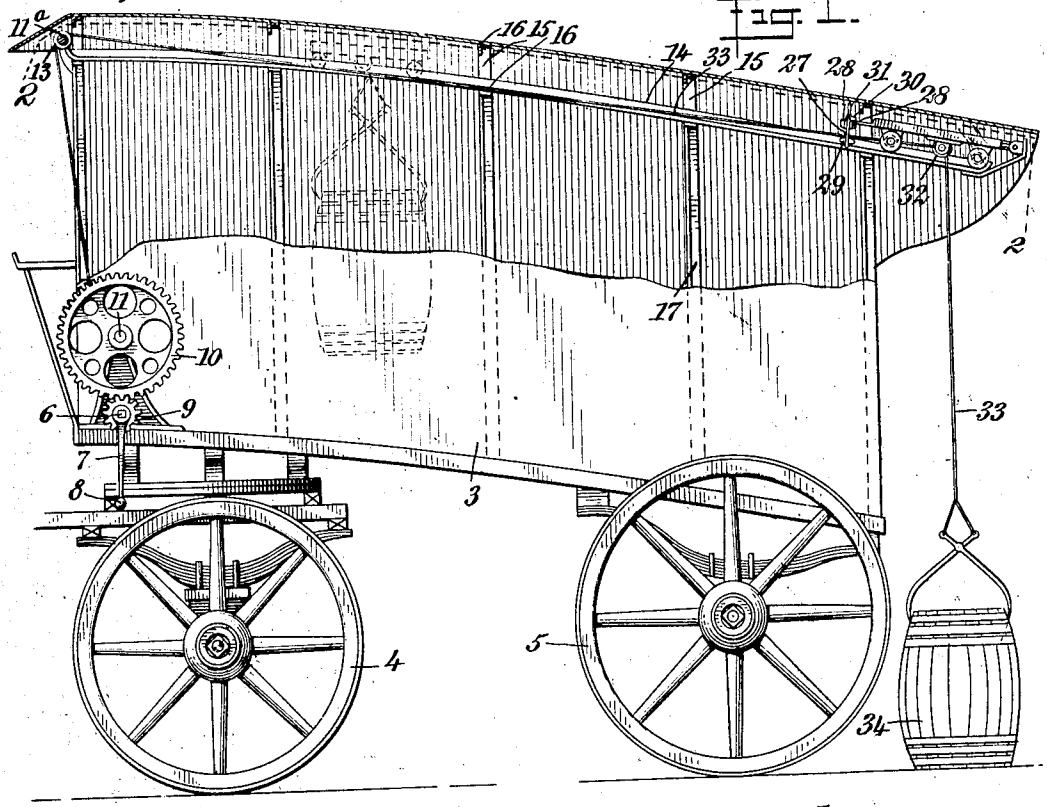


Fig. 2.

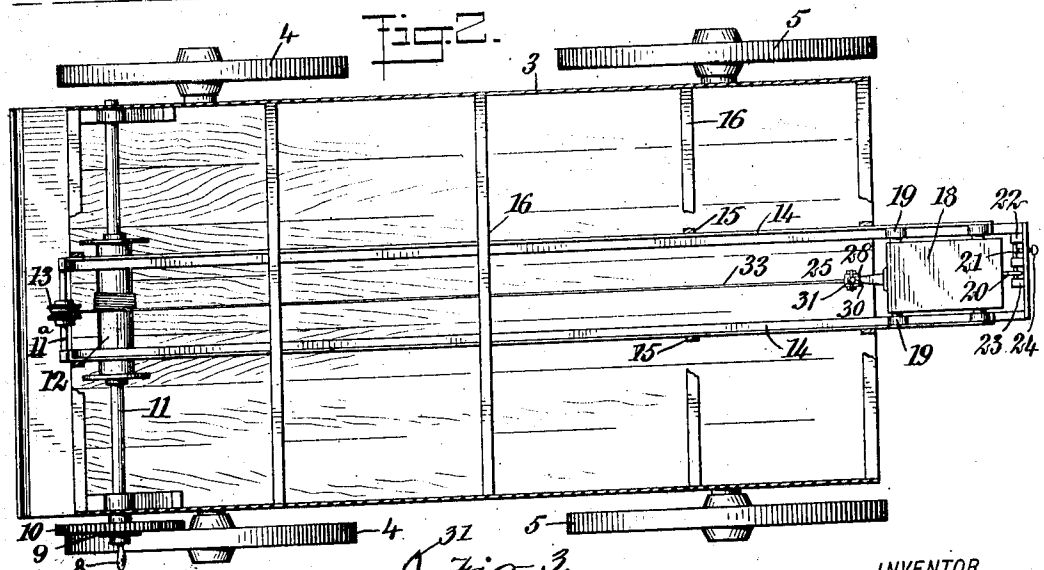
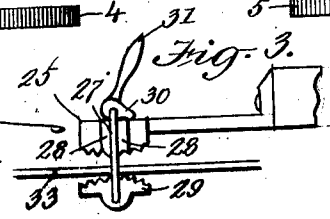


Fig. 3.



WITNESSES

W. Harrison.

INVENTOR

William Edwin Kastendike

BY Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM EDWIN KASTENDIKE, OF NEW MARKET, NEW JERSEY.

TRUCK.

No. 916,324. Specification of Letters Patent. Patented March 23, 1909.

Application filed May 27, 1908. Serial No. 435,301.

To all whom it may concern:

Be it known that I, WILLIAM EDWIN KASTENDIKE, a citizen of the United States, and a resident of New Market, in the county of Middlesex and State of New Jersey, have invented a new and Improved Truck, of which the following is a full, clear, and exact description.

My invention relates to trucks and similar vehicles, my more particular purpose being to provide mechanism whereby loading and unloading may be performed with facility.

More particularly stated, my invention comprises means for raising a load directly upward from the ground, by aid of a windlass and then drawing the weight up an incline carried by a vehicle, so as to facilitate the storing of the load within the vehicle body, and further comprises a carriage movable relatively to the vehicle, and means for locking the carriage relatively to the vehicle body, and also locking the cord or other flexible member used for raising the weight, firmly in relation to the carriage.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a side elevation partly broken away, showing a truck made in accordance with my invention, this view disclosing the carriage, and inclined track upon which the same is movable, a weight to be raised relatively to said carriage and transported by the motion of said carriage, and further showing a latch for holding the carriage while the weight is being raised, and clamping means for securing the rope firmly in relation to the carriage in order to enable the carriage to be drawn upon the track by the rope; and Fig. 2 is a section upon the line 2—2 of Fig. 1, showing how the carriage is fitted upon the track, and further showing the means for actuating the cord, thereby moving the carriage. Fig. 3 is a fragmentary side elevation showing the gripping mechanism for securing the cord, this mechanism appearing in the upper right-hand corner of Fig. 1.

A truck body is shown at 3, and is supported upon wheels 4, 5, these parts being substantially of the usual construction. A shaft 6 is provided with a crank 7 having a handle 8 whereby it is turned. Mounted upon the shaft 6 is a pinion 9 which meshes with a gear wheel 10. This gear wheel is mounted rigidly upon a shaft 11 and secured upon this shaft is a drum 12. Mounted over the drum on a shaft 11^a is a pulley 13. Rails 14 made of angle iron, and having each, a substantially L-shaped cross section are supported upon suspension rods 15, the latter hanging from arches 16, which form continuations of vertical side bars 17 secured directly to the vehicle body.

A carriage 18 is mounted upon wheels 19, the latter running directly upon the rails 14. The carriage is provided with a hook 20 having approximately the form of a staple. A bolt 21 is slidably mounted in bearings 22, 23, and is adapted to extend through the hook 20. This bolt is provided with a handle 24 whereby it is actuated. Mounted upon the carriage 18 is a head 25 the under face of which is slightly convex. A link 27 of metal having generally, a rectangular form, is mounted upon the head 25. This head is provided with lugs 28 disposed upon the opposite sides of the link. A presser pad 29 is mounted firmly in the lower portion of the link and is adapted to engage the under face of the head 25. A cam 30 is journaled upon the link and is provided with a handle 31. By turning this handle the cam raises the presser pad 29 toward the head 25, and by turning the handle in the opposite direction the presser pad is forced away from the head. A pulley 32 is journaled upon the under face of the carriage. A cord 33 engages this pulley, and mounted upon the lower end of this cord is a weight 34 constituting a part of the load for the truck. The cord also passes over the pulley 13 and is wound upon the drum 12.

The operation of my device is as follows: The carriage normally occupies the position indicated in Fig. 1. When it is desired to place a load 34 aboard the vehicle the cord 33 is lowered and in any appropriate manner secured to the load. In order to do this the cord is of course partially unwound from the drum 12 and this is accomplished by merely pulling upon it. The bolt 21 normally holds the hook 20, and consequently, confines the carriage in its lowermost position. When the load is to be raised, the operator turns the handle 7 thereby causing the pinion 9, the gear 10 and shaft 11 to turn the drum 12. This winds up the cord 33 and raises the load 34. When

the load is brought to a suitable height, preferably near the top of the vehicle, the handle 31 is drawn to the right according to Figs. 1 and 3 so as to grip the cord firmly between the head 25 and the presser pad 29. The sliding bolt 21 is now moved back (that is, laterally to the general direction in which the cord 33 extends) by aid of the handle 24, in much the same manner that the bolt of a door is moved backward from a hasp. This releases the carriage 18; the revoluble motion of the handle 8 being now continued, the carriage and the load are drawn forwardly up the incline, as indicated by dotted lines in Fig. 1. The operator or an attendant now turns the handle 31 so as to release the cord relatively to the carriage and this enables the weight to be lowered and at the same time steadied as placed in position within the vehicle body.

By the use of this apparatus, several successive tiers of merchandise can be stowed away in the body of the vehicle, and comparatively heavy weights may be handled by one or two attendants.

In order to unload, the vehicle is backed up to the proper location and the reverse process is followed. The merchandise is raised from within the vehicle and lowered by allowing the carriage to move by gravity down the inclined rails.

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

1. In a truck, the combination of an inclined way, a carriage movable thereupon, a flexible connection for said carriage, means for actuating said flexible connection so as to draw said carriage up said incline, mechanism controllable at will for gripping said flexible connection relatively to said carriage, and means for holding said carriage in a predetermined position while the load is being raised toward said carriage.

2. The combination of a vehicle body, rails mounted therein and normally inclined relatively to the earth, a carriage mounted upon said rails, means controllable at will for gripping said carriage temporarily upon a predetermined portion of said rails, a flexible connection for moving said carriage, means for actuating said flexible connection, and a gripping device for securing said flexible connection firmly in relation to said carriage.

3. In a truck, the combination of a vehicle body, rails mounted therein and disposed adjacent to the top thereof, a carriage mounted upon said rails and movable bodily in relation thereto, a pulley journaled upon said carriage, a flexible connection engaging said pulley for the purpose of raising a load relatively thereto, and mechanism for gripping said flexible connection relative to said carriage in order to enable said carriage to be moved along said rails.

4. In a truck, the combination of an inclined way, a carriage mounted upon said way and movable bodily in relation thereto, a flexible connection, means for temporarily gripping said flexible connection relatively to said carriage in order to actuate the latter, and a fastening device for temporarily holding said carriage stationary while said flexible connection is used for raising a weight.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM EDWIN KASTENDIKE.

Witnesses:
J. J. BRADY,
J. J. SCHENK.