No. 832,240. PATENTED OCT. 2, 1906.

S. CONSTABLE.

CART OR WAGON.

APPLICATION FILED JUNE 7, 1904. RENEWED MAR. 8, 1906.

2 SHEETS—SHEET 1.

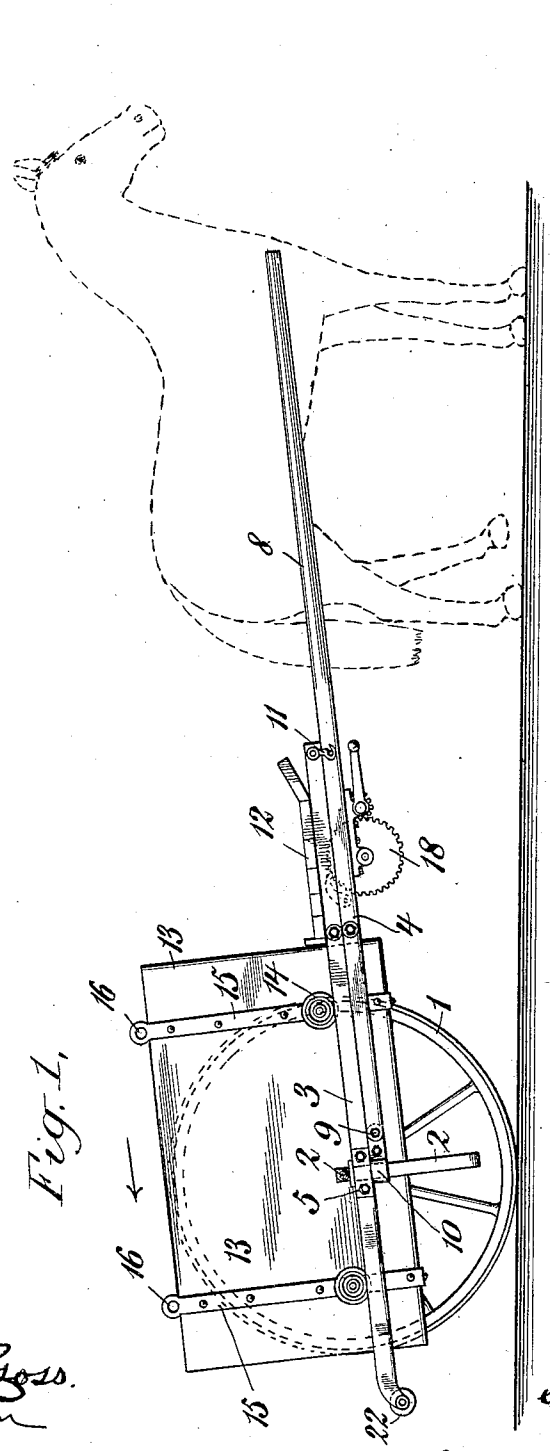


Fig. 1.

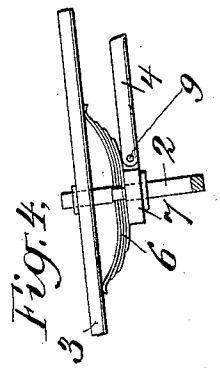


Fig. 4.

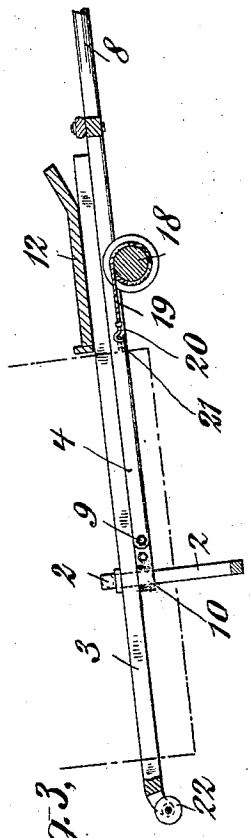


Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 2.

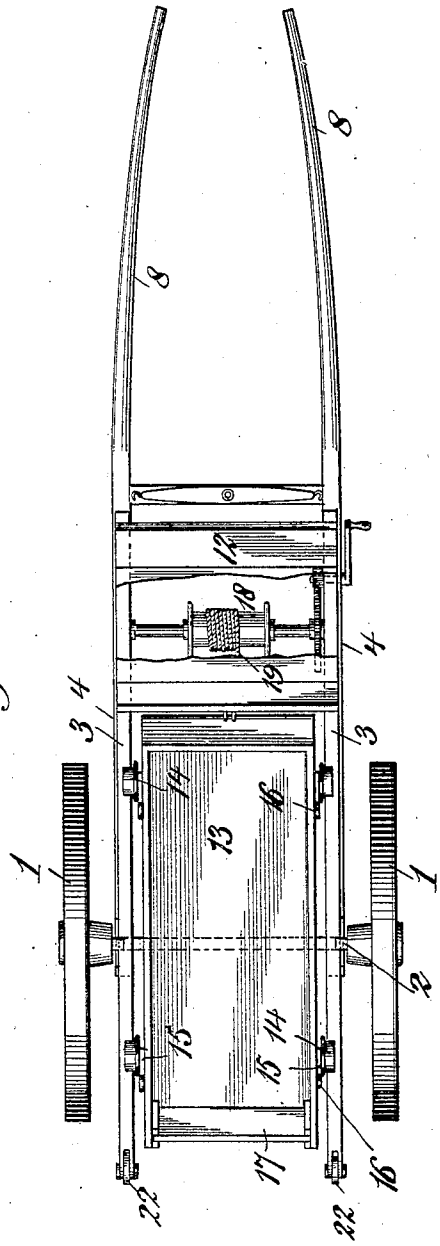


Fig. 6.

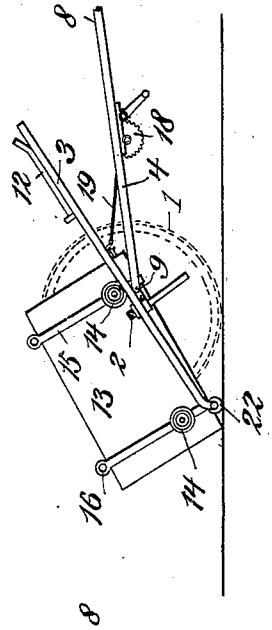
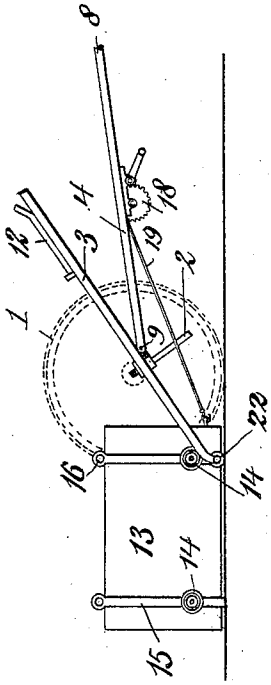


Fig. 5.



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CART OR WAGON.

No. 832,240. Specification of Letters Patent. Patented Oct. 2, 1906.

Application filed June 7, 1904. Renewed March 8, 1906. Serial No. 304,902.

To all whom it may concern:

Be it known that I, STEVENSON CONSTABLE, a citizen of the United States of America, and a resident of New York city, county, and State, have invented certain new and useful Improvements in Carts or Wagons, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to improvements in carts or wagons, and particularly to carts or wagons employed for the purpose of handling building and other material ordinarily handled in bulk.

The cost of conveying such material from place to place is largely enhanced by reason of the number of times it ordinarily has to be loaded and unloaded. For instance, in shipping brick from a yard to the place where it is to be used it is often loaded and unloaded five or six times. Each operation is an expensive one, not only because of the actual time spent in loading and unloading, but because also of the deterioration of the material through breakage, &c. In my present invention I have designed a cart or wagon the body of which is removable and which contains means for readily loading and unloading the body from and into position, whereby the cart-body may be packed or loaded at a brick-yard or other place where the material is made or stored, the cart-body acting as a package in which the material may be shipped by rail or steamer and whereby the same may be readily and easily loaded onto the running-gear of the cart or wagon, and thus delivered to the place of use. At such place the cart-body may be deposited upon the ground or may, if desired, be bodily lifted to the particular location at which the material is required, as upon the upper stories of a building in the course of erection, the running-gear being used for the purpose of taking an empty cart-body back or a cart-body loaded with material to be taken elsewhere—as, for instance, excavated material, &c. By making the cart or wagon bodies interchangeable with the running-gears and by making them readily self-loading and unloading I provide a convenient means for conveying material from one place to another with less handling than is otherwise possible.

Where steam-derricks are employed, it is of course a simple matter to lift the bodies into positions upon the running-gears, but in places where derricks are not employed it is essential that the cart or wagon should have some self-contained means for thus unloading and loading the body from and into position.

My invention also consists in means for tilting the body without necessarily removing it from the running-gear, so that material may be dumped when desired.

I will now proceed to describe a cart or wagon embodying my invention and will then point out the novel features in claims.

In the drawings, Figure 1 is a view in side elevation of a cart or wagon embodying my invention. Fig. 2 is a top view of the same. Fig. 3 is a view in central longitudinal vertical section, showing the running-gear and the tilting ways thereof. Fig. 4 is a detail view showing a spring-support for the tilting ways. Figs. 5 and 6 are diagrammatic views showing the operation of unloading and loading the body from and into position upon the ways.

In the present embodiment of my invention the running-gear comprises two wheels 1 1, connected by an axle 2, tilting ways 3, and draft members 4. The axle 2 may be rigidly secured to the tilting ways 3 by clips 5, as is shown in Figs. 1, 2, and 3 of the drawings, or may have a spring connection therewith, as is shown in Fig. 4 of the drawings, 6 being the spring, rigidly secured to the axle 2 by means of clips 7, the ways 3 being arranged to slide loosely upon vertical portions of the axle 2. The axle 2 is constructed with a cranked or depressed central portion, so as to pass beneath the wagon-body and permit same to be set down below the axis of rotation of the wheels. The draft members 4 in the present instance include shafts 8, and said draft members are pivotally connected to the axle at 9 by means of clips 10, clamped thereon. By this means the ways 3 may tilt with respect to the draft members 4, as is clearly shown in Figs. 5 and 6. Hooks 11 lock the ways and draft members in running position, which hooks may be released from operative engagement when it is desired that the ways be tilted. A platform 12 acts as a brace to secure the front end of the tilting ways 3 together and also serves as a platform and footboard for the driver.

The cart or wagon body 13 is a rectangular receptacle arranged to fit between the ways 3 and is provided with antifriction-rollers 14, which engage the said ways and act as a support for the said body. The body is also provided

with straps 15, which terminate in eyes 16, to which hooks and chains may be attached for lifting the body by means of a derrick or the like. At the rear the body may be provided with a sliding or swinging door 17, whereby material may be dumped through the end of the body, if desired.

The running-gear is provided with a windlass 18, around which a cord or chain 19 may be wound, the end of the cord or chain provided with a hook 20, which engages with an eye 21 at the front end of the cart or wagon body.

In Figs. 1 and 2 the cart or wagon body is shown in running position upon the running-gear and may be considered to be loaded. When it is desired to remove the wagon-body from the running-gear, the hook 11 will be disengaged and the windlass 18 allowed to slowly unwind, the body moving by gravity along the ways in the direction of the arrow, Fig. 1. As the center of gravity passes the axial center of the tilting ways the said ways will be tilted, permitting the lower rear end of the wagon-body to rest on the ground, as is shown in the diagrammatic view, Fig. 6. Preferably the rear ends of the tilting ways are provided with small wheels or rollers 22, so that the running-gear may freely travel for a short distance along the ground in this position. When the parts are as shown in Fig. 6, the material may be dumped, if desired, in which case the door 17 will be opened or removed. If it is not desired to dump the material, but merely to remove the wagon-body, the running-gear will be drawn forward while the windlass is revolved in unison therewith until the body is gradually lowered to the ground, as shown in Fig. 5. The end of the cord or chain 19 may then be removed from connection with the wagon-body, and the running-gear member and cart or wagon body will be entirely separated. The running-gear may be now employed in connection with another body, which may be loaded into position by a reversal of the foregoing operations. The running-gear will be backed into position with respect to the body, as shown in Fig. 5, and the cord or chain 19 connected therewith. Power being applied to wind up the windlass, the body will gradually be drawn along the ways until finally it comes into the position shown in Figs. 1 and 2. The ordinary pawl or other locking device of the windlass will hold the body in proper position upon the ways, and the hooks 11 will secure the ways against accidental movement.

When the body is removed, as shown in Fig. 5, it may be treated as a package or bucket and raised to the upper floors of a building or lowered into an excavation by derricks in the same manner as buckets are ordinarily employed. If loaded with brick or similar building material, it may be raised to the various floors where such material is desired to be used and may be stored upon these floors, avoiding the extra handling usually necessary in dumping or reloading the material. When emptied, it may be loaded up with material to be carried away and then lowered to the ground to await the arrival of another cart or wagon whose body it may replace, and thus be carried away.

It will be obvious that the foregoing is but one embodiment of my invention and that the same is capable of many and varied modifications within the spirit and scope of my invention and, further, that certain parts may be employed in connection with other parts of different construction. Hence I do not desire to be limited only to the precise details of construction and combination of parts herein.

What I claim is—

1. In a cart or wagon, the combination with running-gear including tilting ways upon which the body is normally supported, of a removable body having means for engaging the tilting ways, and means for unloading the body from, and loading it upon, the tilting ways.

2. In a cart or wagon, the combination with running-gear including tilting ways upon which the body is normally supported, of a removable body having antifriction-rollers for engaging the said tilting ways, and means carried by the running-gear for hauling the wagon-body along said tilting ways.

3. In a cart or wagon, the combination with running-gear including draft members, and tilting ways pivoted thereto, said tilting ways forming the normal support for the cart or wagon body, of a removable body having means for engaging said tilting ways, and means carried by said draft members for unloading the body from, and loading it upon, the tilting ways.

4. In a cart or wagon, the combination with wheels, an axle connecting said wheels together, and tilting ways supported intermediate their ends by said axle, said tilting ways adapted and arranged as the normal support for the cart or wagon body, of draft members pivotally connected at a point in proximity to said axle, a removable body adapted for engagement with said tilting ways, and means for unloading the body from, and loading it upon, said tilting ways.

5. In a cart or wagon, the combination with wheels, an axle connecting said wheels together, and tilting ways supported intermediate their ends by said axle, said tilting ways adapted and arranged as the normal support for the cart or wagon body, of draft members pivotally connected to said tilting ways, in proximity to said axle, means for locking said draft members and tilting ways together against relative movement, a removable body adapted for engagement with said tilting ways, and means for unloading

the body from, and loading it upon, said tilting ways.

6. In a cart or wagon, the combination with running-gear including draft members, and tilting ways pivoted intermediate their ends thereto, said tilting ways carrying wheels at their rear ends adapted to roll upon the ground when the said ways are tilted, of a removable wagon-body having means for engaging said tilting ways, and means carried by said draft members for hauling the body into position upon said tilting ways.

7. In a cart or wagon, the combination with running-gear including wheels, and an axle, tilting ways carried by said axle and projecting forwardly and rearwardly thereof, and draft members pivoted thereto, of a removable wagon-body having means for engaging said tilting ways, and means for hauling said body along said ways.

8. In a cart or wagon, the combination with wheels, an axle connecting said wheels together, tilting ways secured to said axle, a platform across the front end of said tilting ways, and draft members pivotally secured to said axle, of a removable wagon-body having means for engaging said tilting ways, and a windlass carried by said draft members arranged to haul said wagon-body along said tilting ways.

9. A cart or wagon running-gear comprising wheels, draft members and tilting ways pivotally connected intermediate their ends to said draft members, said tilting ways adapted to receive and support a removable cart or wagon body, when in running position.

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Witnesses:

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