W. G. CURTIS.

BARREL TRUCK.

APPLICATION FILED APR. 16, 1915.

1,165,076. Patented Dec. 21, 1915.

FIG. 1.

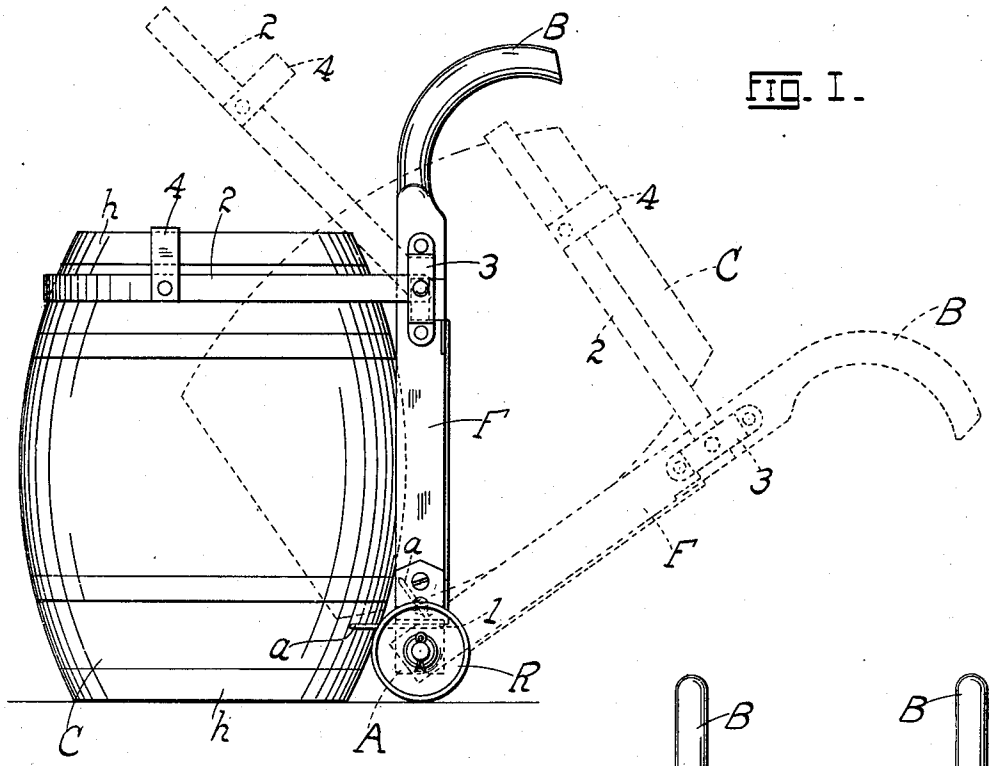


FIG. 2.

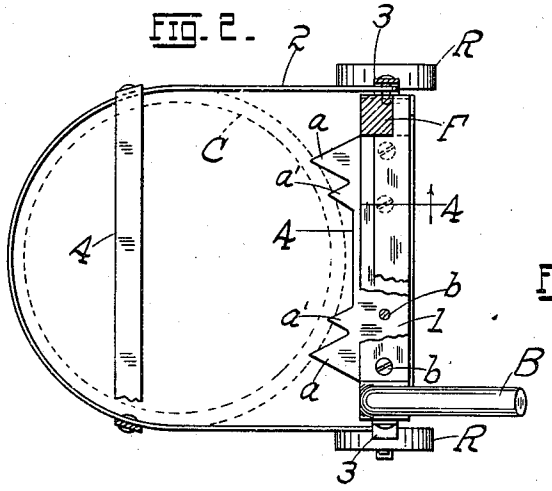


FIG. 3.

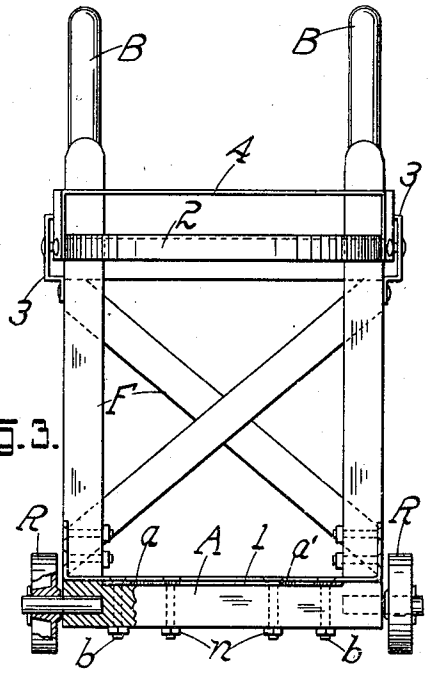
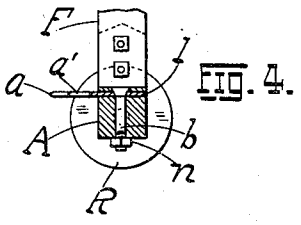


FIG. 4.



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BARREL-TRUCK.

1,165,076. Specification of Letters Patent. Patented Dec. 21, 1915.

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To all whom it may concern:

Be it known that I, WILLIAM G. CURTIS, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Barrel-Trucks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in barrel trucks; and it consists in the novel construction of truck more fully set forth in the specification and pointed out in the claim.

The object of my invention is to construct a truck or wheeled vehicle which may be applied to a barrel (or other object) and the latter loaded on the truck without the necessity of handling the barrel in such loading operation.

The advantages of the invention will be made apparent from a detailed description thereof in connection with the accompanying drawings, in which—

Figure 1 represents a side elevation of the truck applied to a barrel; Fig. 2 is a top plan of the truck shown in Fig. 1, one of the handles being broken away; Fig. 3 is a front elevation of the truck; and Fig. 4 is a vertical sectional detail on the zig-zag line 4—4 of Fig. 2.

Referring to the drawings, F represents a conventional truck frame or barrow mounted on wheels or casters R, R, and provided with the usual handle bars B, B, as well understood in the art. Secured between the truck frame and the axle-bar A of the truck is a lip or plate 1 provided with teeth or serrations *a*, *a'*, on its outer or forward edge, the points of the teeth being disposed in a curve conformable to the curvature of the peripheral surface of the barrel C on any transverse plane of section, such curve approximating in the majority of barrels or casks, the arc of a circle. The terminal teeth *a* should project a suitable distance forward beyond the peripheries of the wheels or casters R to prevent the barrel fouling the casters when the truck is being applied; and the toothed lip or plate 1 should be elevated above the floor to cause its teeth to engage the walls of the barrel, and high enough to clear the bottom iron hoop *h* of the barrel where metal loops are used, as for example on vinegar, beer, cider and liquid holding barrels generally. Hinged to the side bars of the frame is a yoke 2 whose sweep in either direction is limited by straps 3, 3, the yoke being provided with a U-shaped transverse brace or member 4 raised above the plane of the yoke proper, so as to allow the yoke to drop over and around a barrel to be loaded, the brace 4 arresting the yoke by coming in contact with the head of the barrel and thereby preventing the yoke from dropping too low on the barrel, the object being to maintain the yoke when embracing and holding a barrel, in a plane substantially at right angles to the axis of the barrel. Any suitable means (other than that here described) may be resorted to, to secure the toothed or gripper plate 1 to the truck or axle-bar, but it should be made detachable so that the same may be removed at any time should it be desired to renew the plate or for sharpening the teeth of any existing plate. As a rule however a removal of the plate would not be necessary for the mere purpose of sharpening the teeth. In the present example the plate 1 may be detached by removing the nuts *n* on the securing bolts *b* by which the axle-bar and plate are secured to the bottom cross member of the truck frame.

In lieu of teeth, any equivalent formations such as prongs, pointed rods and the like might be substituted without departing from the nature or spirit of my invention; nor need such members lead from a plate as here shown, it being obvious that any equivalent means for gripping, biting or seizing the barrel or other vessel at points above the support or floor on which it rests, that is to say along the peripheral walls of the barrel or vessel, is contemplated by my invention. Neither do I wish to be limited specifically to a "yoke" for engaging the upper portions of the walls of the barrel, any equivalent holder or engaging member falling within the spirit of my invention.

The operation is apparent from the drawings and description, but may be described briefly as follows: When a barrel (or cask or other object) is to be loaded, the truck is wheeled up to the barrel, being tilted to proper position to cause the teeth *a*, *a'*, of the lip or plate 1 to engage the peripheral walls of the barrel, the sharp ends of the teeth biting, or embedding themselves into the wood as clearly shown in Fig. 2 where the dotted outline of a barrel C is illustrated. Thereupon the porter or drayman swings

the yoke 2 over the barrel, the said yoke dropping until arrested by the cross-brace 4, when the barrel is ready to be picked up and wheeled to any point desired, the porter simply tilting the truck downward (see dotted position, Fig. 1) thus picking up the barrel, the teeth *a*, *a'*, preventing the load from slipping off the truck. The barrel being wheeled to any desired point may be deposited where desired by reversing the operations, that is to say tilting the truck upwardly so as to cause the bottom of the barrel to touch the floor, then swinging the yoke out of engagement and wheeling the truck away from the barrel. Neither in the loading or unloading operation need the barrel be touched.

The invention is a decided time saver.

The truck is not limited in its application to barrels or casks but may operate on boxes and the like. In each instance the article to be loaded is seized near the bottom by the serrated lip or plate 1 (or its equivalent) the top or upper portion of the article being held to the truck by the yoke 2 or its equivalent.

The details of the truck construction may be greatly changed without a departure from either the nature or spirit of my invention.

Having described my invention what I claim is:

A barrel truck comprising a barrow-frame, an axle-bar at the lower end of the frame, wheels on the axle, a serrated plate or lip secured between the axle-bar and the base of the frame, the points of the serrations being disposed along a curve conformable to the curvature of the barrel walls on a plane of section transverse to the axis of the barrel to be loaded, for biting into the barrel walls at points above the bottom of the barrel, a yoke hinged to the sides of the frame and closing over the upper portions of the barrel, and a member on the yoke for maintaining the yoke when engaging the barrel walls in a plane substantially at right angles to the axis of the barrel.

In testimony whereof I affix my signature, in presence of two witnesses.

WILLIAM G. CURTIS.

Witnesses:
EMIL STAREK,
ELSE M. SIEGEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."