

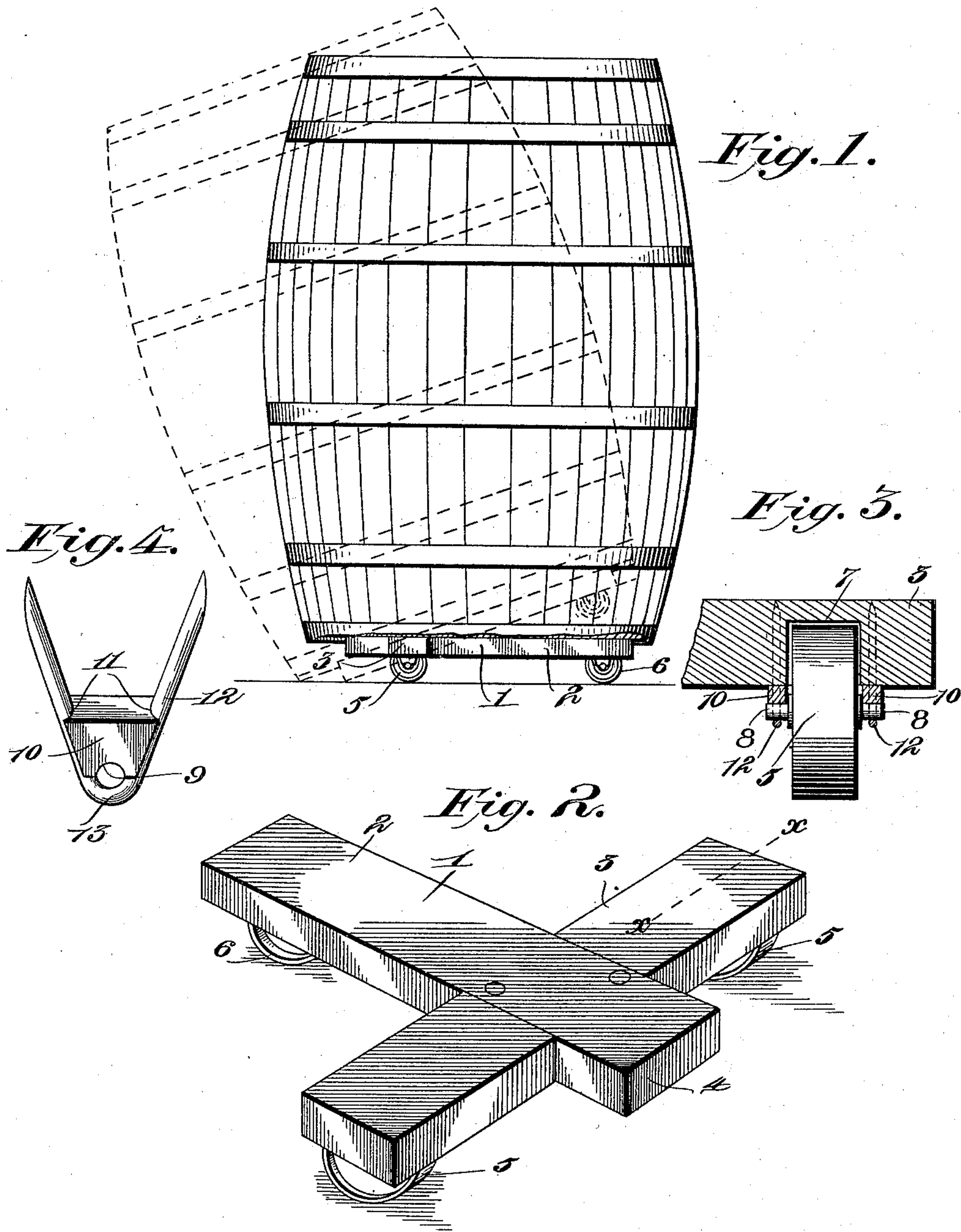
No. 653,129.

Patented July 3, 1900.

G. W. ARNOLD.
BARREL TRUCK.

(Application filed Sept. 5, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE W. ARNOLD, OF GIRARD, OHIO.

BARREL-TRUCK.

SPECIFICATION forming part of Letters Patent No. 653,129, dated July 3, 1900.

Application filed September 5, 1899. Serial No. 729,488. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. ARNOLD, a citizen of the United States, residing at Girard, in the county of Trumbull and State of Ohio, have invented a new and useful Barrel-Truck, of which the following is a specification.

This invention relates to barrel-trucks; and the object in view is to furnish storekeepers and others with such a device as will confine within itself all the advantages of a barrel-swing, by which they are enabled to keep their goods beneath the counter out of the way and also afford means, when desired, to move barrels about a store or other compartment in any direction as freely and quickly as though placed on a common truck, but avoiding the labor incident to the use of the latter.

The invention consists in the construction and arrangement of the parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is an elevation of a barrel, showing the chime broken away and mounted on the improved truck. Fig. 2 is a detail perspective view of the improved truck. Fig. 3 is a section on the line $x x$ of Fig. 2, showing the mode of mounting and fastening the rollers. Fig. 4 is a detail view in elevation, showing the form of bearing devices employed in connection with the rollers.

Similar numerals of reference are employed to designate corresponding parts in the several views.

The numeral 1 designates the frame of the truck, comprising a longitudinal bar 2 and a transverse bar 3, which are mortised at the point of intersection to provide a flush fitting and arranged in the form of a cross, the one terminal of the longitudinal bar 2 projecting beyond the adjacent edge of the transverse bar 3, as at 4. As barrels approximate the same head gage, it will only be necessary to produce these trucks in one size for ordinary uses; but it is obvious that the several proportions may be changed or varied and the size also modified. To the under side of the opposite extremities of the bar 3, and also to the similar part of the one extremity of the bar 2, rollers 5 and 6 are respectively attached. These rollers are free to rotate, but have no swiveled movement, and the bar extremities thereover, as clearly shown by Fig. 3, are recessed, as at 7, to form a housing for

the upper part of each of the rollers and also bring the bars composing the truck-frame close to the surface on which the said rollers have bearing. The extremity of the bar 2 that projects beyond the outer edge of the bar 3, as at 4, is without a roller, and the triangular arrangement of the rollers affords material assistance in directing the movements of a barrel on the truck and with but a small amount of exertion. The gudgeons 8 of the rollers revolve in semicircular seats 9, formed in the lower converged extremities of bearing-blocks 10, which have their opposite side edges 11 formed with curved recesses to fit over the curved legs of bearing-staples 12, the said bearing-blocks 10 being of such dimension as to fit snugly between the legs of the staples 12 to bring the seats 9 close to the bends 13 of said legs. The legs of the staples are divergent and the blocks 10 correspondingly formed, and when applied the said staple-legs are driven into the material of the bars 2 and 3 on opposite sides of the recesses therein for the rollers. When the staples are firmly secured, the upper edges of the bearing-blocks 10 bear firmly against the under adjacent portions of the bars. The gudgeons 8 are thus permitted to freely rotate, but are prevented from having loose play, and the rollers are thereby always held in proper relation to the bars. By interposing the blocks 10 the wear of the gudgeons is removed directly from the bars, and a reinforced construction also results in view of the fact that the bearing-blocks being of hard material and receiving the wear of the gudgeons will allow the use of soft material, such as wood, in the construction of the bars 2 and 3. The staples with the divergent legs also provide means for readily and securely applying the rollers to the extremities of the bars.

When the truck is located under a barrel, there is no part of the same that could get beyond the chime of the barrel, and without the use of any special devices the barrel is prevented from slipping off the truck by the ends of the bars 2 and 3 coming in contact under such conditions with the inner portion of the chime. This enables barrels to be closely arranged, and in the movement of the barrel and truck the rollers rest upon the floor or other surface with equal pressure, thereby

holding the load in a firm position and prevent wobbling. The rollers in the form shown and not having a swiveled movement are materially advantageous over those rollers that do operate with a swivel in that the present form of truck when being moved with a load in a certain direction will not change its course, as in the use of swiveled trucks and particularly in locating barrels under counters. By means of the unswiveled rollers the barrels can be moved back to their places accurately with a slight push, whereas trucks having swiveled rollers will go where the rough floor may direct them. The load being upon three rollers at the same time enables it to be moved back and forth under and outwardly from a counter without stopping to balance it, and the barrel can be turned around by tilting up the longitudinal bar bearing the single roller, very little effort being required to acquire this latter operation. The ease with which a barrel can be loaded on this improved form of truck is a special feature. By placing the truck within the chime of a barrel on the bottom, as shown by Fig. 1, the barrel can be loaded with little effort and without danger of the truck slipping away. Furthermore, the truck with a barrel on it can be tipped part way down and remain in this position without other support, owing particularly to the projecting extremity of the longitudinal bar 2 beyond the outer edge of the transverse bar 3, thereby enabling the use of a scoop in the barrel with ease and also providing means for exhibiting the contents for display purposes.

The bearings on each side of the rollers prevent them from working unevenly or having an unequal wear, and it is preferred that the gudgeons 8 be formed integral with the rollers. There are no projections above the frame at any point, and in swinging the barrel it is unnecessary to use a fulcrum or other fastening on the floor. By avoiding a projection outwardly from the bottom of the barrel resting on the truck a number of barrels not only can be arranged in the same close position as when no truck is used, but projections will be removed, which form a serious obstacle to those passing the barrels or using the same by striking the feet, as in other devices of a kindred nature.

The most important advantage arising from the foregoing construction is the facility afforded in tilting the barrel while in position on the truck, and particularly while located under counters, to give more convenient access to the contents of the barrel. The position of the various parts of the truck when the barrel is tilted is clearly shown in dotted lines in Fig. 1, and it will be observed that the extremity of the bar 2 that projects beyond the bar 3 and without a roller is brought to bear on the floor or base rest, the roller 6 elevated, and the rollers 5 prevented from having movement and causing the barrel to

slip from its position by the said projected extremity of the bar 2, which will form a resistance. The tilting position of the barrel can be obtained with very little effort, owing to the fact that the bar 3 and the projecting extremity beyond said bar of the bar 2 have a position to one side of the central vertical plane of the barrel relatively to its position on the truck. Furthermore, in this tilting operation the truck is held in contact with the bottom of the barrel and therefore always ready for normal arrangement in righting the barrel and without requiring previous manipulation of any character.

Changes in the proportions, size, and minor details of construction may be resorted to without in the least departing from the spirit or nature of the invention.

Having thus described the invention, what is claimed as new is—

1. In a barrel-truck, the combination of a frame comprising bars arranged and secured in planes at right angles to each other, the one end of one bar projecting beyond the adjacent edge of the other a short distance to arrange both bars in the form of a cross, the extremities of the said bars when applied resting against the head of the barrel and completely within the confines of the chime, and non-swivel rollers rotatably secured against the end portion of both extremities of one bar and the one extremity of the other bar and located completely under the bars, whereby the parts of the truck are fully located under the head of the barrel when applied and without projection beyond the chime.

2. In a barrel-truck, the combination of a frame comprising a longitudinal bar and a transverse bar, the transverse bar being attached to the longitudinal bar adjacent one of the extremities of the latter to provide a short projecting portion of said longitudinal bar, and the full length of the bar being such as to be completely confined under the head of the barrel to which they are applied and within the chime, non-swivel rollers having integral gudgeons located under both extremities of the transverse bar and under one extremity of the longitudinal bar, divergent staples for providing hangers for the said gudgeons and bearing-blocks having grooved edges fitted in the staples between the gudgeons and the under adjacent surface of the bars, each roller being similarly held on opposite sides, and all the rollers fully located under the bars and without projections beyond any part of the bottom of the barrel.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE W. ARNOLD.

Witnesses:

JOHN REES, Jr.,
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