Sept. 25, 1934. J. J. HOEDL, JR 1,974,675

BARREL HOIST, STAND, AND TRUCK

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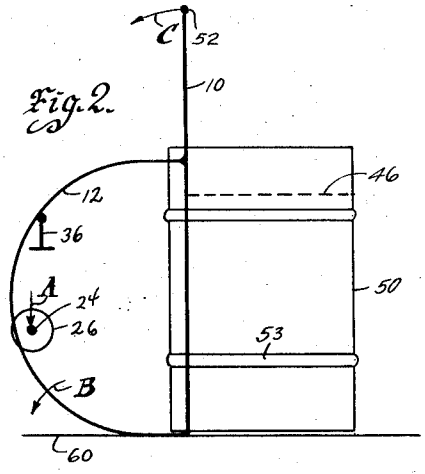


Fig. 2.

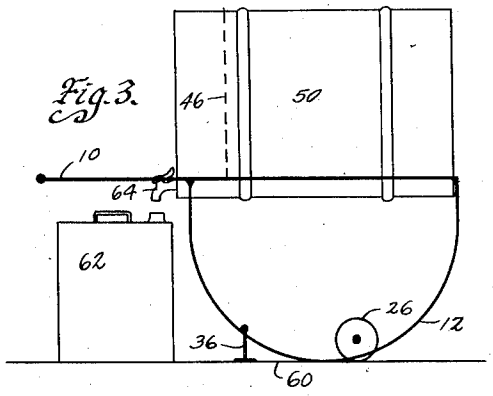


Fig. 3.

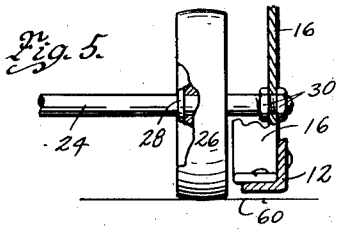


Fig. 5.

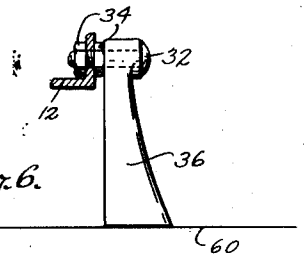


Fig. 6.

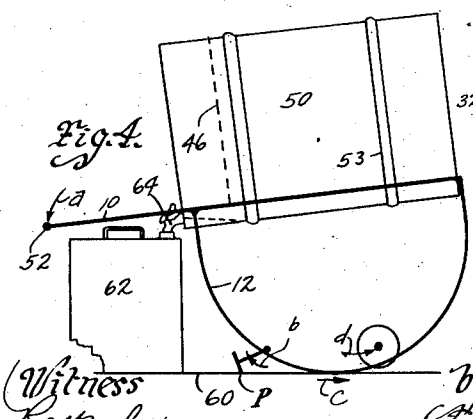


Fig. 4.

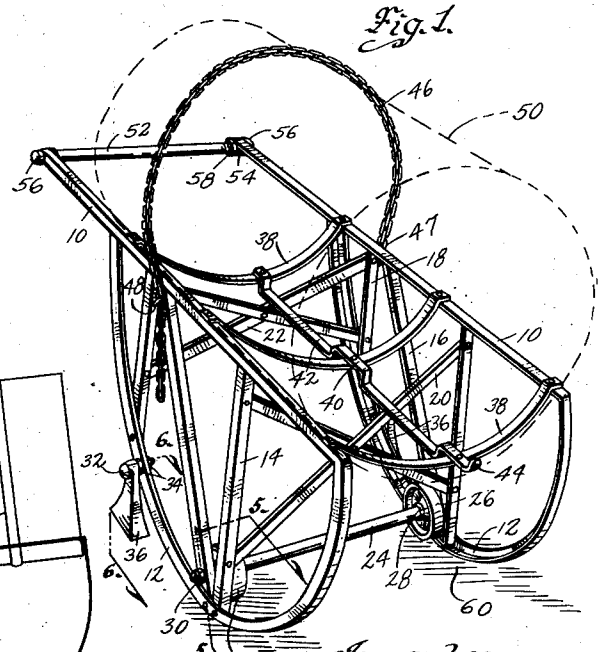


Fig. 1.

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BARREL HOIST, STAND, AND TRUCK

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Application April 14, 1933, Serial No. 666,147

3 Claims. (Cl. 248—55)

The object of my invention is to provide a barrel hoist, stand and truck which is simple, durable and comparatively inexpensive to manufacture.

A further object is to provide a barrel hoist, stand and truck having constructional features whereby a barrel, such as an oil barrel, many of which weigh 500 lbs. when filled, may be engaged while in vertical position on a supporting surface and conveniently rocked and thereby hoisted to a horizontal position sufficiently spaced above the surface and retained there, so that the contents of the barrel can subsequently be emptied into small containers, such as ten gallon cans or the like, a device of this character being especially useful for bulk oil stations and automobile filling stations.

More particularly, it is my object to provide a barrel hoist, stand and truck having a frame with means for supporting a barrel relative to the frame, the frame being provided with rockers for rocking the barrel from vertical to horizontal position, wheels being provided on the rockers so that the device can be used as a truck if desired and swinging legs being provided to retain the barrel in a horizontal position so that it can be normally left in this position and thus in readiness for discharge of its contents from a faucet or the like.

Still a further object is to provide swinging legs which will permit easy rearward inclination of the barrel for draining the last of the oil or other fluid therefrom.

With these and other objects in view of my invention consists in the construction, arrangement and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of a barrel hoist, stand and truck embodying my invention, a barrel being shown supported thereon in dotted lines and a retainer chain for the barrel being drawn in the position it would assume for retaining such barrel on the device.

Figure 2 is a side elevation shown diagrammatically of my device showing it being connected with a vertical barrel.

Figure 3 is a similar diagram showing the barrel raised to a horizontal position.

Figure 4 shows the device diagrammatically in a rearwardly inclined position; and

Figures 5 and 6 are enlarged detailed sectional views on the lines 5—5 and 6—6 respectively of Figure 1.

On the accompanying drawing, I have used the reference numeral 10 to indicate side frame members. These are preferably formed of angle iron and have semicircular rockers 12 extending from their forward ends, then rearwardly and connected again with the frame members 10 at a point spaced ahead of the rearward ends thereof. The rockers 12 are of substantial diameter for placing a barrel a substantial distance from the ground surface when in horizontal position, as will be hereinafter disclosed.

Each rocker 12 is braced by uprights 14, 16 and 18. The uprights 16 are rearwardly inclined for bracing effect. The uprights 14 and 18 are braced against side strains by cross braces 20 and 22.

A shaft 24 is provided having wheels 26 thereon. Collars 28 are formed on or secured to the shaft 24 to limit the wheels 26 against undesired inward movement. They are limited against outward movement by the uprights 16. The shaft 24 is connected with the uprights 16 by extending through them, lock nuts 30 being provided on each side of each upright 16 (see Figure 5).

Bolts 32 are connected with the rockers 12 rearwardly of the wheels 26, lock nuts 34 being provided to retain the bolts rigid relative to the rockers 12 (see Figure 6). Freely pivoted on the bolts 32 are legs 36. The legs have substantial fore-and-aft bottom surfaces, as shown in Figure 1.

A plurality of transverse cradle bars 38 are connected with the side frames 10. A longitudinally extending bar 40 is connected with the cradle bars 38 at their centers to brace them. Depressed portions 42 are provided in the bar 40, while the forward end of the bar terminates in a hook 44.

A chain 46 has one end connected at 47 to the side frame 10 or upright 18, its other end being free but capable of any link thereof coacting with a hook 48. The chain is adapted to partially encircle a barrel 50 when supported on the cradle bars 38, the proper link for tightening the chain being hooked under the hook 48.

A handle 52 is connected to the rear ends of the frame members 10. It extends through eyes formed of one flange of each side member and is retained in position by pipe caps 56 and lock nuts 58 threaded thereon.

When the barrel is in the position shown by dotted lines in Figure 1, annular corrugated reinforcements 53 thereof do not interfere with the

bar 40 because of the depressed portions 42 thereof. The hook 44 of the bar is adapted to engage the chime on the forward end of the barrel 50 to prevent it from sliding forwardly.

When the barrel 50 is in the vertical position of Figure 2 and it is desired to hoist it to the horizontal postion of Figure 3, the truck is brought to position associated with the barrel, as shown in Figure 2, with the hook 44 first placed under the lower end of the barrel after tipping the barrel slightly forwardly and then the barrel is retained on the cradle bars 38 by hooking the chain 46 on the hook 48.

The next step in the operation is for the operator to place his foot on the axle 24 and press downwardly, as indicated by the arrow A, while at the same time pulling rearwardly on the handle 52, as shown by the arrow C, which will swing the rockers 12 as indicated by the arrow B.

This operation is continued through ten or twenty degrees and then the operator can remove his foot from the axle and still use the handle 52 for rocking the barrel to the position of Figure 3, the rockers serving to hoist the barrel to a position substantially above a supporting surface 60 on which the barrel was originally supported directly in vertical position.

During the hoisting operation, the legs 36 will remain in vertical position because of being pivoted and will finally engage the surface 60 after the wheels 26 have engaged it and then the rockers 12 back of the wheels re-engage it. During this operation the wheels 26 assist in the final portion of the movement of the barrel to its horizontal position. When in horizontal position, a can, such as indicated at 62, can be filled from the barrel, barrels of this kind usually having faucets as indicated at 64 for the purpose of emptying them.

When the barrel is nearly empty and it is desired to drain the last of the liquid therefrom, the handle 52 can be pushed downwardly, as indicated by the arrow *a* in Figure 4, which will cause the legs 36 to pivot at P and swing as indicated by the arrow *b*. This will slide the rockers 12 forwardly as indicated by the arrow *c* and move the wheels forwardly and upwardly as indicated by the arrow *d*. Thus the barrel can be rearwardly inclined and the remaining fluid therein, as indicated by the dotted lines adjacent the faucet 64, can be drained from the barrel after which it can be rocked to vertical position and the truck used for another filled barrel.

Some changes may be made in the construction and arrangement of the parts of my device without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents, which may be reasonably included within their scope.

I claim as my invention:

1. In a barrel hoist, a pair of side bars adapted to extend longitudinally of a barrel with one end of each extending beyond one end of the barrel to provide operating handles, cradle bars connecting said side bars and adapted to partially encircle a barrel for supporting it, rocker bars formed substantially semicircular and having ends connected with said side bars at points adjacent each end of a barrel when on said hoist, a leg member pivoted to each rocker bar at a point spaced from the center thereof, said leg members being independent of each other and a cross element connecting said rocker bars at points spaced from said leg members, said rocker bars being free of cross elements from said mentioned cross element to said side bars and at said leg members.

2. In a barrel hoist, a pair of side bars adapted to extend longitudinally of a barrel with one end of each extending beyond one end of the barrel to provide operating handles, cradle bars connecting said side bars and adapted to partically encircle a barrel for supporting it, rocker bars formed substantially semicircular and having ends connected with said side bars at points adjacent each end of a barrel when on said hoist, a leg member pivoted to each rocker bar at a point spaced from the center thereof, said leg members being independent of each other and a cross element connecting said rocker bars at points spaced from said leg members, wheels carried by said cross element and projecting slightly beyond the periphery of said rocker bars, said rocker bars being free of other cross element from said mentioned cross element to said side bars and at said leg members.

3. In a barrel hoist, a pair of side bars adapted to extend longitudinally of a barrel with one end of each extending beyond one end of the barrel to provide operating handles, cradle bars connecting said side bars and adapted to partially encircle a barrel for supporting it, rocker bars formed substantially semicircular and having ends connected with said side bars at points adjacent each end of a barrel when on said hoist, a leg member pivoted to each rocker bar at a point spaced from the center thereof, said leg members being independent of each other and a cross element connecting said rocker bars at points spaced from said leg members, said rocker bars being free of cross elements from said mentioned cross element to said side bars and at said leg members, each leg member having a foot which is substantially widened in a direction longitudinal of said barrel hoist.

JOSEPH J. HOEDL, JR.