Jan. 1, 1963 F. W. WALES 3,071,268

MECHANICAL DRUM DUMPING DEVICE

Filed Nov. 21, 1961

Fig. 1

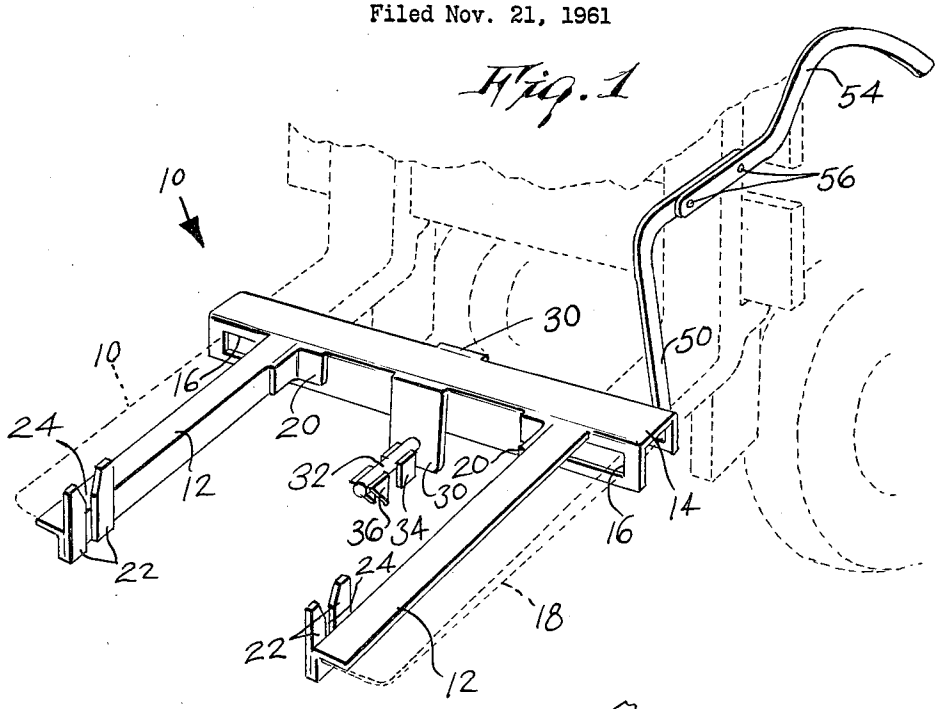
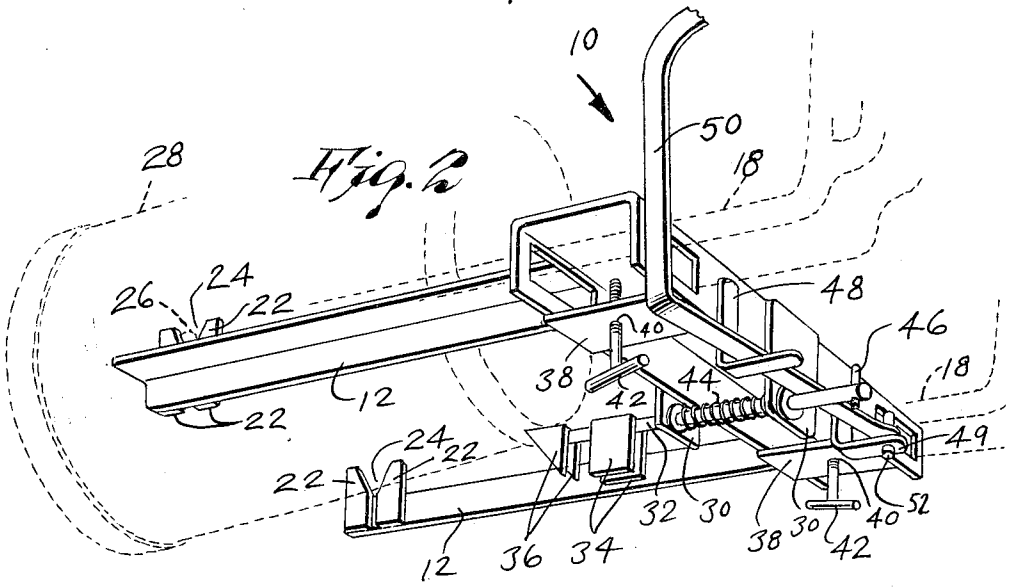



Fig. 2




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# MECHANICAL DRUM DUMPING DEVICE

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2 Claims. (Cl. 214—620)

This invention relates to improvements in lifts and more particularly to vehicle lifts.

It is an object of the present invention to provide a dumping device attachment for lifts that may be manually or operated by power.

Another object of the present invention is to provide a substantially portable attachment for lifts for dumping drums.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in conjunction with the accompanying drawing, in which:

FIGURE 1 is a perspective view comprising the main embodiment of the present invention;

FIG. 2 is a perspective view showing the underside of the invention.

Referring now more in detail to the drawing, a fork lift attachment 10 made in accordance with the present invention is shown to include a pair of substantially parallel and L-shaped bars 12 which are fixedly secured at their rearmost end and flush with the upper surface thereof substantially elongated inverted U-shaped cross bars 14 extending substantially perpendicular thereto the L-shaped bars 12. A plurality of substantially rectangular openings 16 receive slidably the parallel lift fork arms 18, and a pair of substantially L-shaped and opposed brackets 20 affording additional strength to the attachment 10 are fixedly secured thereto the inside of bars 12 and fixedly secured to the front surface of bar 14. A pair of substantially spaced apart lifts 22 are fixedly secured to the inner sides of bars 12 and extend substantially upwardly of bars 12 at the foremost end defining retaining slots 24 which pivotally receive pins 26 of drum 28. A pair of spaced apart brackets 30 depend downwardly and are substantially centrally located on the outer surfaces of cross bar 14. A shaft 32 of substantially circular configuration is slidably received substantially centrally therethrough the depending brackets 30 and near the foremost end of shaft 32 a pair of parallel spaced apart brackets 34 are fixedly secured thereto, and at the foreward end of shaft 32 a pair of substantially spaced apart triangular brackets are fixedly secured thereto and depend therefrom shaft 32 and urge against the bottommost periphery. A pair of substantially rectangular plates 38 having an opening 40 are fixedly secured to the under edges of cross bar 14 and threadedly receive the substantially T-shaped set screw bolts 42 which urge in abutment therewith the lift arm 18 and securing bars 12 to arms 18 of attachment 10. A compression coil spring 44 slidably receives therethrough shaft 32 in abutment therebetween brackets 30, and a stop pin 46 extends transversely therethrough shaft 32 near the rearmost end.

An L-shaped bracket 48 is fixedly secured to the rear side of bars 14 and is parallelly spaced apart from bracket 49. A substantially L-shaped lever 50 slidingly rests on bracket 48 and is pivotable about pin 52 which is fixedly secured therewithin the outer end of bracket 49 and extends upwardly substantially at right angles to

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bracket 49. An extension arm of substantially arcuate configuration at its outer end is fixedly secured to lever 50 at its upper end by a pair of fasteners 56. In operation, when it is desired for a fork lift to empty drums, the attachment 10 is slid onto the arms 18 of the fork lift and are adjusted and tightened thereto by the set screw bolts 42 and a drum 28 is lifted up onto the bars 12 by the pins 26 which rest in the grooves 24 of the lifts 22, and when the workman urges the lever 50 forward, the brackets 36 urge slidably against the rear, bottom outer surface of the drum 28, thus pivoting the rear of the drum 28 upwardly and dumps the contents of the drum 28.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claims.

What I claim as new and desire to protect by Letters Patent of the United States is:

1. A fork lift attachment comprising, in combination, a pair of parallel spaced apart L-shaped bars, a cross bar secured to one end of said L-shaped bars, said cross bar being of inverted U-shaped configuration having downwardly projecting sides and a horizontal connecting portion, openings within said cross bar for receiving a pair of fork lift arms of a fork lift vehicle to enable said fork lift arms to extend transversely through said cross bar and under one side of each of said lift elements secured near the opposite ends of said L-shaped bars, said lifts on each of said L-shaped bars defining a groove, said cross bar at its center between its opposite longitudinal ends having a pair of depending plates, each one of said depending plates being affixed to the outer side of said cross arm, an opening near the lower portion of said depending plates, said openings being in alignment, a shaft extending through said openings, a pair of triangular blocks secured adjacent one end of said shaft, remote control means for movement of said shaft through said openings comprising a vertically extending pin adjacent the opposite end of said shaft, an L-shaped bracket affixed to one of said sides of said cross bar, said side being opposite the side adjacent the said L-shaped bars, a horizontally extending lever pivoted at its one end to said L-shaped bracket, said lever extending adjacent and across said shaft between said depending plate and said vertically extending pin, said lever being connected to a control lever and said shaft having a compression spring, one end of said spring being affixed to said shaft, the other end of said spring bearing against one of said depending plates, said lever providing movement of said shaft in one direction and said spring providing movement for return of said shaft in the other direction.

2. The combination according to claim 1, wherein a pair of horizontal spaced apart rectangular plates are secured across the lower edges of the sides of said cross bar, each of said plates carrying threadingly engaged therein a T-shaped set screw bolt for abutment against the underside of said fork lift arms.

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