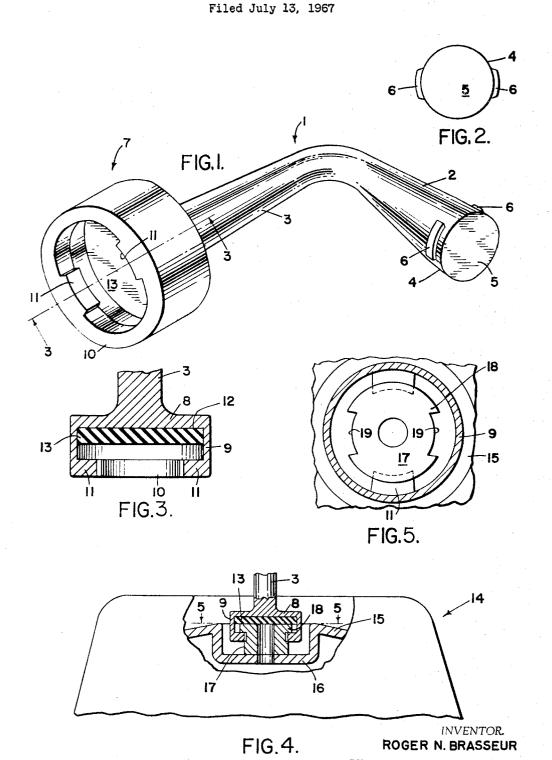
CONTAINER LIFTING DEVICE



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1

3,429,606 CONTAINER LIFTING DEVICE Roger N. Brasseur, 6260 Dewhirst, Saginaw, Mich. 48603 Filed July 13, 1967, Ser. No. 653,110 U.S. Cl. 294—26 Int. Cl. B65g 7/12, 65/24; F16b 7/20

4 Claims

ABSTRACT OF THE DISCLOSURE

A device for lifting a container such as a beer barrel or the like having an opening in one wall thereof surrounded by a peripheral flange having circumferentially spaced, radially extending slots, the lifting device having at one end thereof a number of projections capable of passing through the flange slots for rotation into underlying relation with the flange so as to enable the container to be lifted by the lifting device. The lifting device preferably includes a resilient cushioning member that is adapted to bear against the container flange so as frictionally to retain the lifting device in its operative position relative to the container flange.

The invention disclosed herein relates to a device which is particularly adapted for use in lifting and carrying empty containers such as beer barrels and the like. Most beer barrels have bung openings of one of two types. One type of bung opening comprises an axially bored thimble terminating at its upper end in a flange having two diametrically opposite slots therein. The other type of bung opening comprises a sleeve set into one wall of the barrel and having a radially inwardly projecting flange 35 between its ends provided with diametrically opposite, radial slots. Regardless of the type of bung opening provided in a barrel, a cork or other stopper seals the bung opening and is adapted to be displaced by a siphon or pump apparatus when the contents of the barrel are to be drained. When the barrel has been emptied, the siphon or pump apparatus is removed from the bung opening.

Although the materials from which beer barrels and similar containers currently are manufactured are relatively lightweight, thereby making it possible for one person to carry two barrels at one time with relative ease, a barrel is a bulky and awkward object to carry in one's arms, so it is the practice for empty barrels to be carried by inserting one's finger in the bung opening of the barrel and carrying the latter by the one finger. Such practice is uncomfortable and may cause cutting or other serious injury of the person's finger. The practice does, however, enable one person to carry two barrels simultaneously.

An object of this invention is to provide a lifting device which will enable one person to carry an empty barrel or 55 similar container without subjecting any part of the person's body to discomfort or likelihood of injury.

Another object of the invention is to provide a lifting device of the character described which is adapted for use with barrels having different kinds of bung openings.

A further object of the invention is to provide a barrel lifting device which is light in weight, durable and easy to use.

Other objects and advantages of the invention will be pointed out specifically or will become apparent from the 65 following description when it is considered in conjunction with the appended claims and the accompanying drawing, in which:

FIGURE 1 is a perspective view of a barrel lifting device constructed in accordance with the invention;

FIGURE 2 is an elevational view of one end of the lifting device;

2

FIGURE 3 is a sectional view taken on the line 3—3 of FIGURE 1:

FIGURE 4 is a fragmentary view partly in elevation and partly in section of a typical barrel and illustrating the manner in which the lifting device may be used; and

FIGURE 5 is a sectional view taken on the line 5-5 of FIGURE 4.

A lifting device constructed in accordance with the disclosed embodiment of the invention comprises a body member 1 formed of lightweight metal such as aluminum or magnesium and having two generally cylindrical handles or limbs 2 and 3 substantially normal to each other. The limb 2 terminates in a head 4 having a flat face 5. A pair of diametrically opposite, radially outwardly extending, 15 circumferentially spaced lugs or flanges 6 are secured to the head 4 at a zone axially spaced from the face 5. The purpose of the flanges 6 will be explained hereinafter.

At the free end of the limb 3 is a head 7 in the form of a sleeve having an end wall 8 from which extends an annular wall 9 that terminates in a free end 10. Extending radially inwardly from the annular wall 9 and flush with the free end 10 is a pair of diametrically opposed, circumferentially spaced flanges or projections 11, the axial thickness of which is less than the axial length of the annular wall 9. The end wall 8 has a smooth inner surface 12 on which is adapted to seat a resilient, rubber or rubber-like cushioning disc 13 having a diameter corresponding substantially to the inside diameter of the wall 9 and preferably being loosely accommodated within the latter.

The head member 7 is adapted for use in conjunction with a beer barrel or other container 14 having an end wall 15 provided with a dropped center portion 16 to which is secured an upstanding, bored thimble 17 terminating at its outer end in a peripheral flange 18, the bore constituting the bung opening of the barrel. As is best shown in FIGURE 5, the flange 18 is interrupted at diametrically opposed zones to provide two gaps or spaces 19 of such size as to pass the projections 11. The projections 11 are of such radial length that, when the head 7 is rotated through 90°, the projections 11 underlie the flange 18, as is shown in FIGURES 4 and 5.

The thickness of the resilient cushion 13 with relation to the space between the confronting surfaces of the wall 8 and the members 11 preferably is such that the space between the members 11 and the lower surface of the cushion 13 is somewhat less than the thickness of the flange 18. The purpose of this construction is to require axial compression of the member 13 to enable the members 11 to be located beneath the flange 18. The compression of the member 13 enables the member 13 frictionally to prevent inadvertent rotation of the head 7 relative to the thimble 17.

When the head 7 is utilized on barrels having the corresponding bung construction the limb 2 is utilized as a handle to effect rotation of the head 7 and to enable the user to lift the barrel without risking injury. However, other barrels have bungs so constructed that the head 4 may be utilized to lift such a barrel. Although not shown in the drawing, a barrel adapted for use in conjunction with the head 4 has a bung opening comprising a hollow thimble provided with an inwardly projecting flange intermediate its ends, such flange having diametrically opposed slots or openings at its inner periphery through which the projections 6 may pass. Once the projections 6 have passed through the slots in the flange, the limb 3 may be used to rotate the head 4 so as to cause the ribs to underlie and engage the unslotted portions of the flange, whereupon the limb 3 may be utilized to lift such a barrel. That portion of the head 4 between the face 5 and the projections 6 functions as a guide to assist in the fitting of the device in the bung opening.

I claim:

1. A device for lifting a container having in one wall thereof an opening surrounded by a peripheral flange having a number of circumferentially spaced apart arcuate slots in its periphery, said device comprising a sleeve having a closed end and an open end; a plurality of projections carried by said sleeve at said open end, said projections being axially spaced from said closed end, and being circumferentially spaced from one another a distance to enable them to pass through said slots; resilient means accommodated in said sleeve between said closed end thereof and said projections; and handle means secured to said sleeve.

2. The device set forth in claim 1 wherein said resilient means has a thickness less than the distance between said 15 closed end of said sleeve and said projections.

3. The device set forth in claim 2 wherein the spacing

4

between said resilient means and said projections is less than the thickness of the flange of said container.

4. The device set forth in claim 1 wherein said resilient means comprises an imperforate disk.

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