Feb. 18, 1947. C. H. McKENNA 2,416,016

BARREL LIFTER

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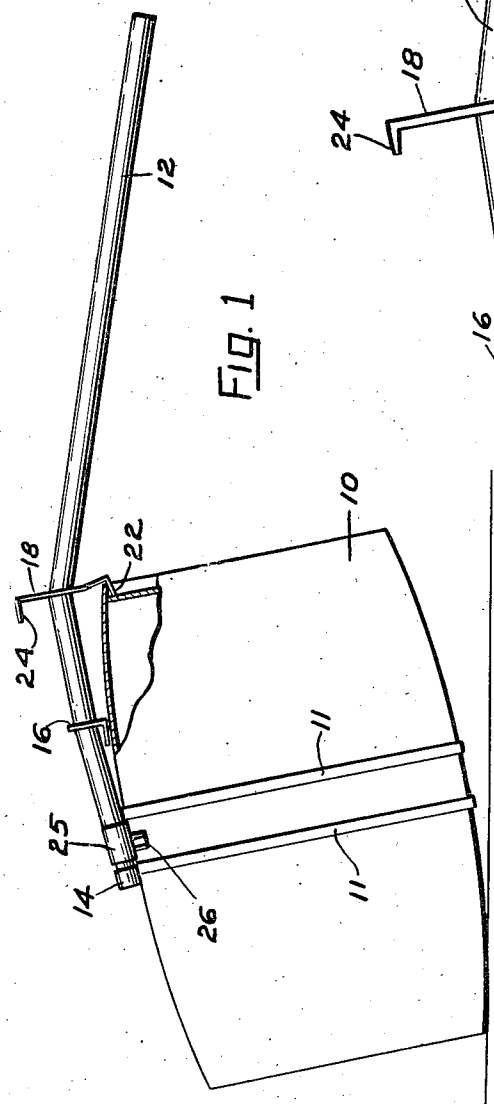


FIG. 1

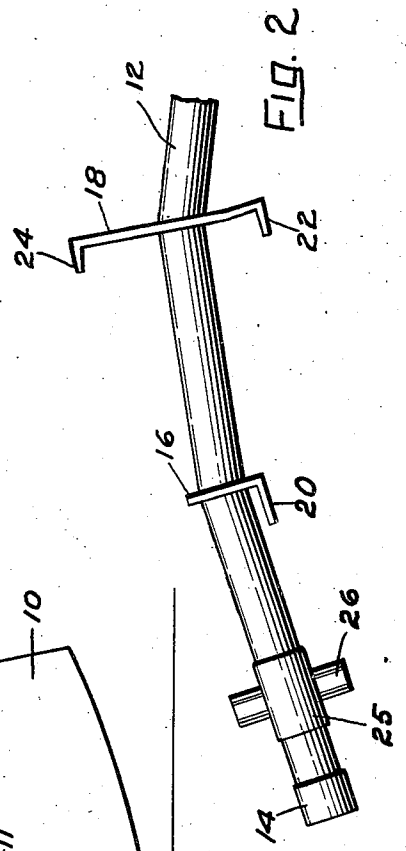


FIG. 2

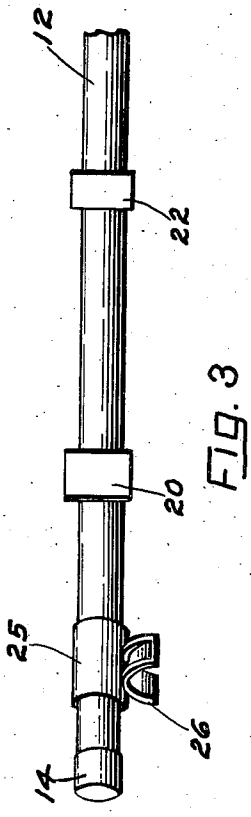


FIG. 3

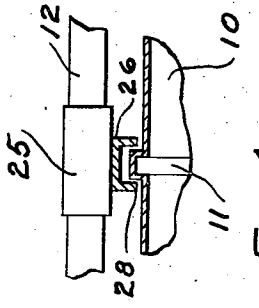


FIG. 4

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BARREL LIFTER

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1 Claim. (Cl. 294—15)

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This invention relates to hand tools of the type sometimes referred to as barrel or drum lifters.

One of the objects of the invention is to provide a tool of the character described which is adapted to be of improved convenience when in use. Another object of the invention is to provide an improved tool of the character described which is adapted to be employed to up-end and turn down barrels or drums of various shapes and dimensions. Another object of the invention is to provide an improved barrel lifter which is adapted to be readily adjusted for either upending or down-turning of barrels and drums or the like. Other objects and advantages of the invention will appear from the specification hereinafter.

In the drawing:

Fig. 1 illustrates a barrel lifter of the invention in action at the beginning of a barrel upending operation;

Fig. 2 is a fragmentary side elevation of the tool of Fig. 1;

Fig. 3 is a bottom plan thereof; and

Fig. 4 is a fragmentary view of a detail of a modified form of the tool stirrup, illustrating its mounting relative to a drum.

The drawing illustrates in Fig. 1 a cask or barrel 10 in process of being up-ended by means of a hand tool of the invention. In this embodiment of the invention the tool comprises a handle or shaft portion 12 which is formed of metal tubing or the like. At its barrel engaging end portion the shaft 12 is fitted with a collar or cap 14; and intermediately of the shaft ends a pair of barrel edge engaging brackets are welded or otherwise positionally fixed upon the shaft 12, as indicated at 16—18, respectively.

The bracket 16 is illustrated to comprise a short section of angle iron slipfitted upon the shaft 12 and welded or otherwise fixed thereto so as to dispose the flat flange portion 20 thereof to extend parallel to the shaft 12. The bracket 18 is similarly formed of metal to include a flange portion 22 extending generally parallel to the shaft 12; but the bracket 18 also includes a second and oppositely extending arm having a second flange 24 extending parallel to the flange 22 but in diametrically opposed relation therewith and with respect to the shaft 12.

The shaft 12 is bowed, as by being bent between the positions of the end collar 14 and the bracket 18 so that the handle portion of the tool which extends beyond the barrel or drum when applied thereto inclines away from the longitudinal axis of the barrel. A stirrup as indicated at 25 which comprises a collar slidably mounted upon the shaft 12 and an arcuately shaped bar 26 welded thereto is mounted by the collar to be freely rotatable upon the shaft 12 and slidable thereon between the positions of the end collar 14 and the lift bracket 16. The bar 26 is curved so as to permit it to straddle and bear against the curved mid-section surface portion of a barrel when the tool of the invention is applied to such barrel as illustrated in Fig. 1 with either one of the lift brackets 16—18 disposed so as to engage its flanged end under the barrel edge caused by extension of the barrel side wall beyond the end wall thereof.

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Thus, it will be appreciated that when the tool is so applied to a barrel or drum when the latter is in horizontal reclining position the handle portion of the tool will be disposed to extend generally horizontally but somewhat downwardly away from the barrel, whereby the operator may grasp the handle portion with ease and lift thereagainst so as to apply an effective lifting and tilting leverage against the barrel or drum so as to bring it into upended position. The inclined attitude of the handle of the tool especially facilitates the final phase of the upending operation because the handle portion of the tool is thereupon inclined toward the operator instead of projecting straight vertically, thereby requiring a lesser reach of the operator's arms.

The bent formation of the shaft 12 and the rotatable nature of the bearing connection between the stirrup 25 and the shaft 12 also provides further convenience and facility in connection with the down-turning or lowering of a previously up-ended barrel into a horizontal reclining position. For this purpose the stirrup is simply rotated through 180° upon the shaft 12 relative to the position thereof illustrated by Fig. 1 and then disposed to rest against the mid-section of the vertically standing barrel. The shaft 12 will be thereby disposed to extend generally vertically along the side of the barrel to as far as the position of the bracket 18 thereof, whereupon the flange portion 24 of the bracket 18 hooks over the adjacent end lip of the barrel while the handle portion of the shaft 12 extends therefrom in a direction vertically and obliquely away from the direction of the longitudinal extension of the barrel. Thus, the handle portion of the tool is again disposed in a position providing for maximum convenience and ease of use of the tool; the handle being thereupon simply pulled by the operator so as to drag the barrel over sufficiently

to start it to fall into a horizontal reclining attitude.

As shown in Fig. 4, the stirrup 26 may be formed to present a pair of downwardly extending ledges 28—28 which are adapted to straddle the hoop portion 11 of the drum, whereby the stirrup will be anchored upon the hoop to further facilitate operation of the tool.

It will be appreciated that the combination of the bent formation of the shaft 12 and the provision of the rotatable stirrup 25 thereon permits the operator to swivel the tool to various adjusted positions whereby to more conveniently engage barrels under various handling conditions; and that this feature of the invention is attained through use of only structurally simple and rugged parts such as may be relatively easily and inexpensively manufactured and assembled to provide a tool which is fool-proof in its operation.

It will also be understood that although only one form of the tool of the invention has been shown and described in detail it will be apparent to those skilled in the art that the invention is not so limited but that various changes may be made therein without departing from the spirit of the invention or the scope of the appended claim.

I claim:

A hand tool of the barrel lifter type comprising a hand shaft mounting at one end a rotatable stirrup for engaging a side surface of a barrel, a pair of hook brackets extending from said hand shaft at positions spaced from said stirrup for engaging behind an end edge portion of the barrel to be lifted, said hand shaft having a handle portion extending beyond the positions of said brackets and obliquely of the direction of extension of said hand shaft between the positions of said stirrup and said brackets.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
264,778	Shellaberger	Sept. 19, 1882
417,578	McNeill et al.	Dec. 17, 1889
1,657,100	Wilson et al.	Jan. 24, 1928
1,714,401	Sigsbee	May 21, 1929