L. S. CHADWICK.

LIFTER.

APPLICATION FILED JUNE 6, 1916.

1,298,662. Patented Apr. 1, 1919.

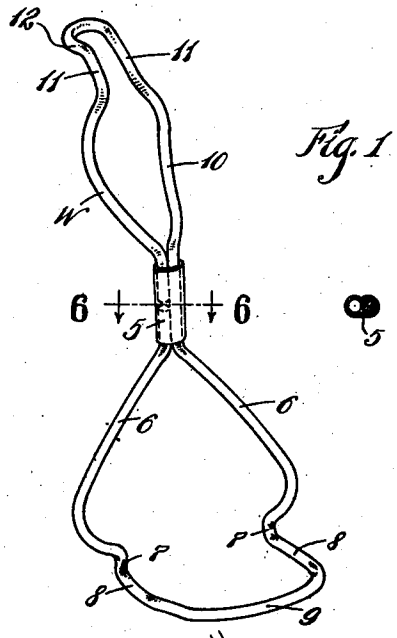


Fig. 1

Fig. 6

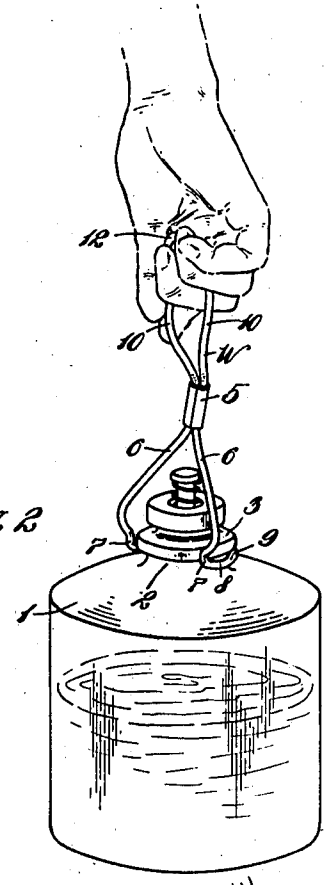


Fig. 2

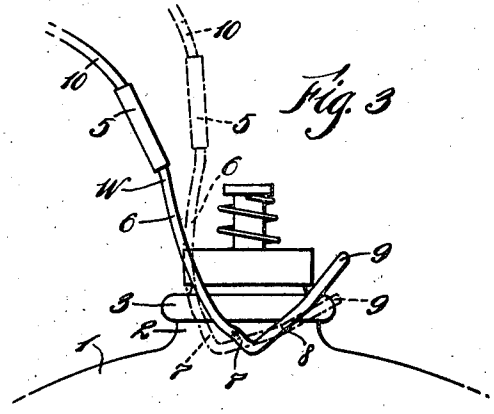


Fig. 3

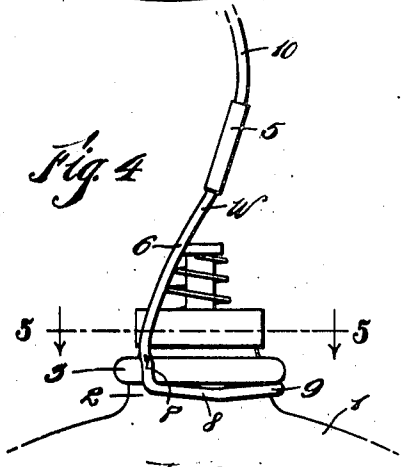


Fig. 4

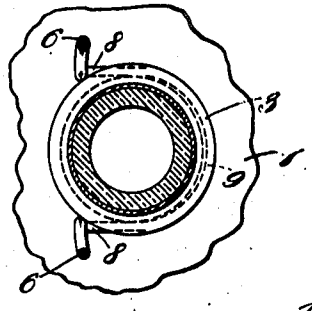


Fig. 5

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UNITED STATES PATENT OFFICE.

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LIFTER.

1,298,662. Specification of Letters Patent. Patented Apr. 1, 1919.

Application filed June 6, 1916. Serial No. 102,064.

To all whom it may concern:

Be it known that I, LEE S. CHADWICK, a citizen of the United States, residing at East Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Lifters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention relates to lifters; and more particularly to a device for lifting such articles as oil receptacles or bottles that are used in connection with certain types of oil stoves, an example of which will be found in my copending application Serial No. 89,572, filed April 7, 1916. The receptacles or bottles referred to have comparatively short necks that are surrounded by a bead constituting a head or enlargement, and beyond the head or enlargement the necks are equipped with suitable valves.

It is the object of my invention to provide a simple and cheap lifter for handling bottles of the above sort which may be comfortably grasped by the user and very easily and naturally applied to the neck of the bottle, the mode of applying the device to the bottle or receptacle being instinctively comprehended by the user because of its shape and nature; to provide a device of the aforesaid character that will encircle the neck of the receptacle and engage the head or enlargement in such manner as to prevent the receptacle from being accidentally dislodged; and to provide a lifter which will have a tendency to more firmly grasp the neck when the bottle is lifted thereby.

A further object of my invention is to construct a lifter of the above character of a single piece of wire bent so as to attain the purposes set forth, and which has its opposed ends secured together and to an adjoining intermediate part of the device preferably by a ferrule which may be cheaply and easily furnished and applied to the joint; and to further provide, at the end of the device opposite that which is used for handling the receptacle, in what I consider at the present time to be the preferred embodiment of my invention, a part which may serve as a stove lifter, to handle the stove lids. In the accompanying drawing I have illustrated such a device, and while I will proceed to describe the same in detail, it will be understood that I reserve the right to modify it to any extent desired so long as I remain within the scope of the accompanying claims.

In the drawing, Figure 1 is a perspective view of the lifter; Fig. 2 is a similar view of the lifter in use; Fig. 3 is a fragmentary side elevation of a bottle or receptacle illustrating the manner of applying the lifter; Fig. 4 shows, in side elevation, the upper portion of a bottle or receptacle suspended by the lifter; Fig. 5 is a section on line 5—5 of Fig. 4; and Fig. 6 is a sectional detail on line 6—6 of Fig. 1.

The object or receptacle wherewith my lifter is herein associated, is shown as a bottle 1 having a neck 2 that is surrounded by a head or enlargement 3 that is spaced a comparatively short distance from the top of the bottle.

In the working out of my invention, I have had in mind the production of a device which can be easily and naturally dropped over the neck of the bottle and swung thereabout to an upright or lifting position and which will assume effective position without the user having to calculate the manner of, or use special care in manipulating it. A further point was to so form the device that when it occupied operative or lifting position, it would so engage the head or enlargement of the neck, that the bottle would be firmly held against accidental dislodgment. A further idea embraced in the conception of my invention was to so shape or construct the device that its grip upon the bottle would be increased, when the latter was suspended free therefrom; and I had in mind, also, to manufacture the device of a single piece of wire so shaped as to accomplish the above purposes, and held in such shape, preferably, by a simple metal clip or ferrule, without the need of further means of connection between adjacent portions of the wire. For convenience, I also incorporated in the device a lifter for stove lids, formed on the end of the device remote from that used for handling the receptacles or bottles.

To these ends I bend a piece of wire W so as to form a loop at each end, one of such loops preferably being made considerably larger than the other; and I then bring the ends of the wire practically together alongside an intermediate portion of it, binding such portion and the ends firmly together by

a clip or ferrule 5, as shown clearly in Figs. 1 and 6. From the ferrule 5, opposed portions 6 of the larger loop diverge until they are turned inward and approach each other and merge into substantially parallel portions 7 that are connected at slightly greater than right angles to portions 8. These portions 8 constitute a part of, and are inclined with respect to the central portion of a U-shaped neck embracing loop 9. The plane of this loop is substantially perpendicular to the mean axis of the handle. The portions 7 are sufficiently short to easily ride under the head or enlargement 3 as the lifter is drawn in an inclined position, across the end of the bottle, as represented in full lines in Fig. 3. When the portions 7 have passed from beneath the diametrically opposite sides of the enlargement 3, they are permitted to rise to the plane of the enlargement and bear thereagainst to prevent the neck from shifting forward in the loop 9. By reason of the central pull upon the diverging portions 6, the lower ends of these portions tend to approach each other as the weight of the bottle or receptacle is hung upon the loop 9, consequently tending to increase the grip of the holder upon the bottle.

The loop constituting the opposite end portion of the device is formed into a hand grip 10 which terminates in substantially parallel portions 11 that are turned slightly to one side and the ends of the portions 11 are connected by the central portion 12 of the loop, which portion is turned still farther in the same direction to produce an angular relation between it and the portions 11. This formation of the end of the device produces a very practical stove lifter, and may be conveniently used as such when the device is held by the portions 6.

It has already been explained how readily the device may be applied to a bottle or receptacle; and it is obvious that the removal of the device is equally as simple and easy.

Having thus described my invention, what I claim is:—

1. A lifter comprising a single piece of wire, a ferrule connecting the ends of the wire together and to an intermediate portion of the wire, thus forming a loop at each end, the loop at one end being shaped to form a handle, and the loop at the other being formed to constitute a neck embracing portion that is at substantially right angles to the mean plane of the handle.

2. A lifter comprising a single piece of wire, a ferrule connecting the ends of the wire together and to an intermediate portion of the wire, thus forming a loop at each end, the loop at one end being shaped to form a handle, and the loop at the other being formed to constitute a neck embracing portion that is at substantially right angles to the mean plane of the handle, the neck embracing portion being substantially U-shaped and having its ends spaced apart and turned toward the handle at substantially right angles, the portions of wire between such right angled portions and the handle diverging from said portions and then reversing and approaching each other as they approach the handle, the central part of the neck embracing portion being bent slightly toward the handle in an inclined plane with respect to the plane of the other portion thereof.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

LEE S. CHADWICK.

Witnesses:
W. E. SHEPPARD.
OPHELIA A. SMITH.