

Oct. 11, 1949.

M. SIMMONS

2,484,531

ATTACHABLE HANDLE FOR VESSELS

Filed June 28, 1948

FIG. 1.

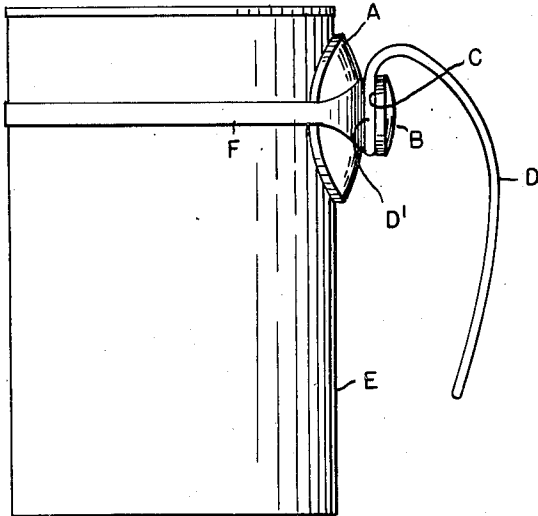


FIG. 6.

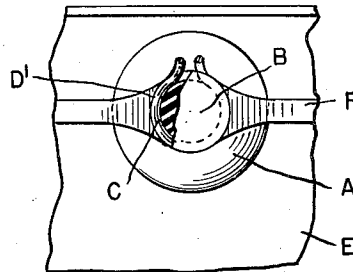


FIG. 2.

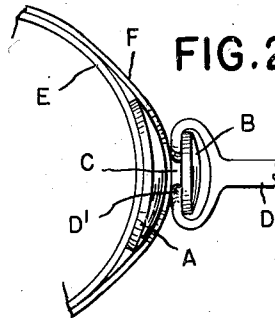


FIG. 3.

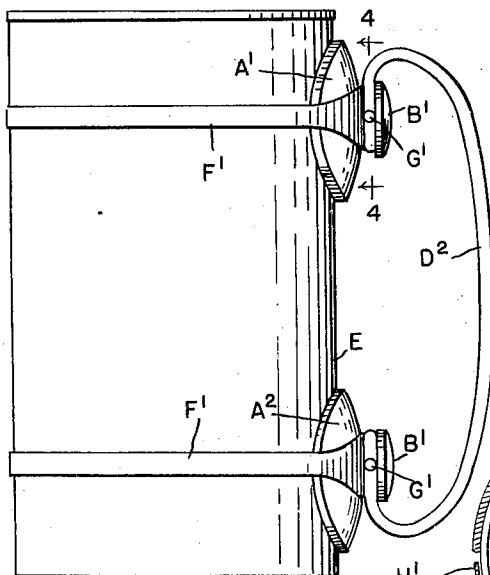


FIG. 7.

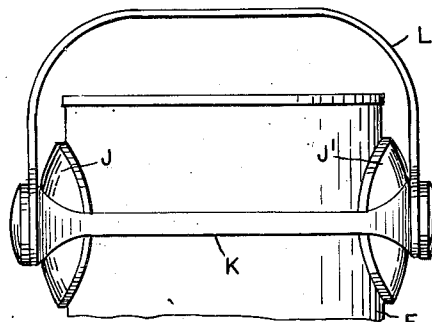


FIG. 5.

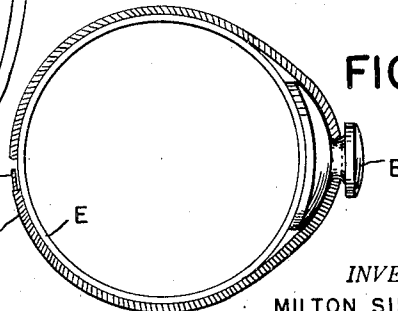
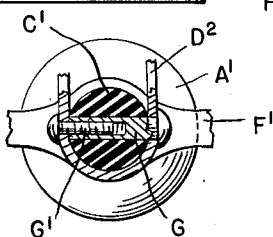


FIG. 4.



INVENTOR.
MILTON SIMMONS

BY

Whittemore Hulbert + Belknap

ATTORNEYS

UNITED STATES PATENT OFFICE

2,484,531

ATTACHABLE HANDLE FOR VESSELS

Milton Simmons, Detroit, Mich.

Application June 28, 1948, Serial No. 35,682

5 Claims. (Cl. 294—27)

1

The invention relates to attachable handles for vessels, and it is the object of the invention to obtain a construction which utilizes a suction cup as securing means but which is also provided with a safety attachment in case the suction should at any time be broken. To this end the invention consists in the construction as hereinafter set forth.

In the drawings:

Fig. 1 shows my improved attachable handle in engagement with a cylindrical can;

Fig. 2 is a top plan view thereof;

Fig. 3 is a side elevation showing a modified construction for use on larger vessels;

Fig. 4 is a cross-section on line 4—4, Fig. 3;

Fig. 5 is a plan view showing another modification;

Fig. 6 is a front elevation of the construction shown in Figs. 1 and 2; and

Fig. 7 is an elevation showing another modification.

Suction cups have been used for attachment of various members to each other and will produce a strong bond therebetween. There is, however, always danger that the suction may be broken in which case the members fall apart. Therefore, if a suction cup is used for attaching a handle to a vessel, particularly one which has a liquid content, the breaking of the suction would be followed by disastrous results.

It is a primary object of my invention to guard against the dropping of the vessel even where the suction of the cup is broken, which is accomplished by the following construction. As shown in Figs. 1 and 2, A is a suction cup preferably formed of rubber or rubber-like material, and which is provided with an outwardly extending knob portion B with the grooved neck portion C between the same and the cup. A hand grasp member D is attached to the cup preferably by having a bifurcated portion D' which embraces the neck portion C of the knob. Thus if pressure applied to the knob B presses the cup against the outer surface of a vessel, such as a cylindrical can E, upon release of such pressure sufficient suction will be produced to sustain the load of the can and its content.

To guard against dropping of the can, if the suction should be broken, I have provided an elastic band F, preferably formed of rubber, which is secured to the outer face of the cup A and is of sufficient size to embrace vessels varying in diameter within certain limits. This band alone would not produce an effective attachment between the handle and the vessel but it is sufficient

2

to prevent separation of the same where the suction of the cup is broken. Furthermore, if this breaking of the suction does occur, it is only necessary to press the knob B inward to again restore the suction and the firm connection with the handle.

If the handle is to be applied to larger or heavier vessels, I may employ two suction cups A' and A² with a hand grasp D² extending between the same and secured to the knobs thereof. Each of these cups A' A² is provided with an elastic band F' similar to the construction previously described. If thought necessary, the hand grasp member D² may be securely attached to the knob B' by a pin G passing centrally through the neck portion C' and secured by a screw G'.

In Fig. 5 I have shown another modification in which in place of a rubber band, I employ a helical wire coil H which passes through an aperture in the neck of the knob. The opposite ends of this coil may be secured to each other preferably by providing a screw portion H' at one end which may be threaded into the helix of the opposite end after first reverse twisting to produce a torque which will screw the parts to each other. Such construction can be used where the load is heavy. With all the modifications, the handle is secured to the vessel by pressing on the knob B and will ordinarily serve to safely carry the load. However, in an emergency if the suction is broken the elastic band will still retain the vessel until the user can again apply the suction.

In the modified construction shown in Fig. 7, two suction cups J and J' are used on opposite sides of the receptacle, being connected to each other by the elastic band K. There is also a bail member L connected to the knobs of the two suction cups and extending over the top of the receptacle. With this construction if suction should be broken in either of the suction cups, the band will hold it and the bail L in place until suction can again be restored by pressure on the knob.

What I claim as my invention is:

1. An attachable handle for vessels comprising a suction cup having an outwardly extending knob portion, a hand grasp member secured to said knob, and an elastic band secured to said suction cup adapted to embrace the vessel to retain the same should suction be broken.

2. An attachable handle for vessels comprising a suction cup having an outwardly extending knob portion, with a grooved neck portion between the same and the cup, a hand grasp member provided with a bifurcated portion for engaging the

3

groove in said neck, and an elastic band secured to said cup and adapted to embrace the vessel to which the cup is to be attached.

3. An attachable handle for vessels comprising a pair of suction cups each provided with an outwardly projecting knob portion, a hand grasp member extending between said knobs and secured thereto, and an elastic band for each cup adapted to embrace the vessel to which the cup is to be attached.

4. An attachable handle for vessels comprising a suction cup having an outwardly extending knob portion and a neck between the same and the cup, a hand grasp member secured to said cup, and an elastic band formed of a helical wire coil passing through the neck of said cup and adapted to embrace a vessel to which the cup is to be attached, one of the ends of said coil having a reduced screw portion for threaded engagement with a helix at the opposite end of the coil.

4

5. An attachable handle for vessels comprising a pair of suction cups, each provided with an outwardly projecting knob portion, said cups being positioned on opposite sides of the vessel, a hand grasp member extending between said cups and attached thereto, and an elastic band embracing the vessel and secured to said cups to retain the same should suction be broken in either one.

MILTON SIMMONS.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
2,131,687	Kaplan	Sept. 27, 1938