

Nov. 10, 1931.

E. R. PETRIE

1,831,423

CLOSURE CAP AND SPOUT FOR OIL CANS

Filed April 25, 1931

Fig. 1.

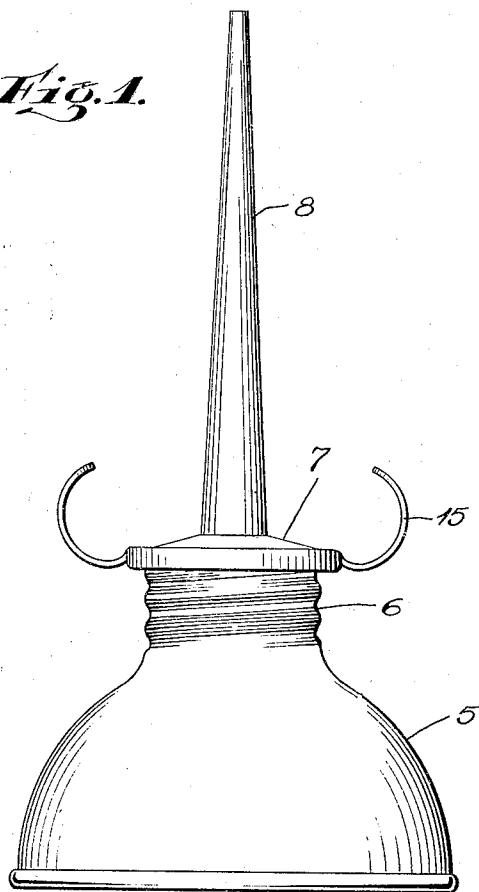


Fig. 2.

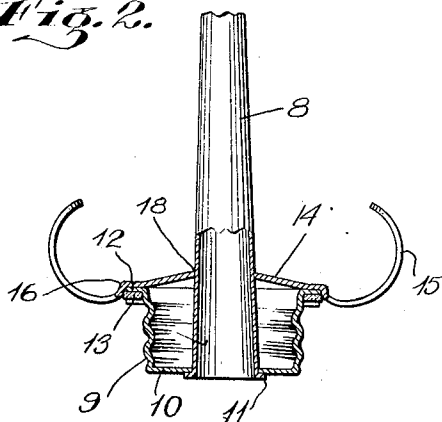
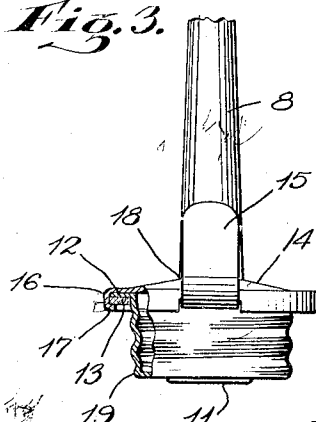


Fig. 3.



INVENTOR.
EDWARD R. PETRIE

BY
Arnold E. Thompson
ATTORNEY

UNITED STATES PATENT OFFICE

EDWARD R. PETRIE, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO NELL M. PETRIE,
OF NEW YORK, N. Y.

CLOSURE CAP AND SPOUT FOR OIL CANS

Application filed April 25, 1931. Serial No. 532,773.

This invention relates to oil cans and particularly to the spouts of cans of this class; and the object of the invention is to provide a spout including a closure cap detachably mounted in connection with the can and to which the spout is fixedly attached, and to the provision of a comparatively heavy top wall to said closure cap including outwardly extending, integral, curved arms or finger pieces forming gripping devices facilitating the support of the can in the hand in the operation of discharging the oil therefrom and in carrying and otherwise supporting the can; a further object being to provide a device of the class described consisting of a threaded tubular body and a top wall formed by a comparatively heavy plate, the periphery edges of which are flared around an outwardly extending flange at the upper end of the threaded body and around a packing gasket disposed beneath said flange to support said gasket in position, in addition to the provision of the extending arms which are formed integral with the peripheral edge of said top plate and extend from the turned peripheral edge of the plate; and with these and other objects in view, the invention consists in a device of the class and for the purpose specified, which is simple in construction, efficient in use, and which is constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Fig. 1 is a side view of an oil can made according to my invention.

Fig. 2 is a transverse, sectional view of the closure cap and spout shown in Fig. 1, detached; and,

Fig. 3 is a side edge view of the structure shown in Fig. 2 with part of the construction broken away and in section.

In Fig. 1 of the drawings, I have shown at 5 the container of an oil can of conventional form, it being understood that this container may be of any size or contour, and includes an upwardly extending threaded

sleeve 6 with which a closure cap 7 is detachably supported in the operation of filling and refilling the container.

My invention relates primarily to the structure of the cap 7 which includes the usual discharge spout 8, the cap including a thimble-shaped threaded part 9 in screw threaded engagement with the projecting sleeve 6, the bottom wall 10 of the part 9 being apertured centrally to receive the lower end of the spout 8, which is secured to said bottom wall by riveting or spinning over the end of the spout as seen at 11. The part 9 includes at its upper end an outwardly extending flange 12, beneath which is arranged a suitable packing gasket or ring 13.

Heretofore, it has been customary to provide a relatively thin top plate, the peripheral edge of which was spun over the edge of the flange 14 and the gasket 13 to finish the top of the cap 7 and to retain the gasket in position. But, instead of employing a top plate of this character, I substitute a heavier top plate 14, the periphery of which includes integral, radially projecting, oppositely disposed curved arms 15 which are curved downwardly and upwardly, the ends being extended inwardly to a slight extent to form finger pieces which aid in supporting the can in the hand in the operation of discharging oil therefrom. The arms or finger pieces 15 join the plate 14 in a downwardly and inwardly curved peripheral wall 16, which is bent under the washer 13 intermediate the arms 15 as seen at 17, Fig. 3 of the drawings, to support the washer against displacement from the cap 7. The central portion of the plate 14 is bulged upwardly to arrange the opening 18 in said plate above the peripheral edge thereof so as to enhance the appearance of the cap and to provide a rigid support for the spout 8. If desired, the latter may be brazed or soldered in the aperture 18.

By constructing a closure cap and spout for oil cans in the manner described, it will be apparent that no material added cost is experienced in including the integral projecting curved arms 15 which give the added utility to the complete device, providing means for more positively gripping and sup-

porting the can in the hand in its use. It will also be understood that these arms will facilitate the movement of the cap into firm engagement with the can to effect a seal between the upper edge of the sleeve 6 and gasket 13. The possibility of tightening the closure cap by using the finger pieces will be apparent. In like manner, these finger pieces facilitate the opening of the cap, obviating the present difficulties in devices of this class, especially when the outer walls of the cap and can become oily.

While I am aware of the fact that finger piece attachments of the general class under consideration have heretofore been applied to oil cans and similar devices, the inclusion of such attachments materially increase the cost of production of the can. Whereas, with my present invention, the cost of manufacture of the closure cap and its several parts is not increased to any material degree. At the same time, a stronger and more efficient cap is provided.

It will be understood that my invention is not necessarily limited to the specific structural details herein shown and described, and various changes therein and modifications thereof may be made within the scope of the appended claims without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. The combination with a container of the class described, of a closure cap, consisting of a part in threaded engagement with the container, and a part permanently secured to said first named part and including integral, radially extending, curved arms, said first named part including an outwardly extending annular flange with a gasket arranged adjacent said flange, and the peripheral wall of the second named part being folded around said flange and gasket in securing said parts together.

2. The combination with a container of the class described, of a closure cap, consisting of a part in threaded engagement with the container, and a part permanently secured to said first named part and including integral, radially extending, curved arms, said first named part including an outwardly extending annular flange with a gasket arranged adjacent said flange, the peripheral wall of the second named part being folded around said flange and gasket in securing said parts together, and a spout arranged centrally in and secured to said first named part, and projecting beyond the second named part.

3. A cap and spout for oil cans comprising a thimble-shaped threaded part including at its open end an outwardly extending flange, the bottom wall of said part being apertured, a spout arranged in said aperture and secured

to said part and projecting beyond the open end thereof, a top plate arranged around said spout and upon the flange of said first named part, said plate including radially projecting, integral curved arms extending from the periphery thereof, and the periphery of said plate being curved outwardly, downwardly and inwardly around said flange to form an integral structure of said first named part, spout, plate and arms.

4. A cap and spout for oil cans comprising a thimble-shaped threaded part including at its open end an outwardly extending flange, the bottom wall of said part being apertured, a spout arranged in said aperture and secured to said part and projecting beyond the open end thereof, a top plate arranged around said spout and upon the flange of said first named part, said plate including radially projecting, integral, curved arms extending from the periphery thereof, the periphery of said plate being curved outwardly, downwardly and inwardly around said flange to form an integral structure of said first named part, spout, plate and arms, and a gasket arranged on the under face of said flange and around which the peripheral edge of said plate passes to retain said gasket in position.

5. A cap and spout for oil cans comprising a thimble-shaped threaded part including at its open end an outwardly extending flange, the bottom wall of said part being apertured, a spout arranged in said aperture and secured to said part and projecting beyond the open end thereof, a top plate arranged around said spout and upon the flange of said first named part, said plate including radially projecting, integral, curved arms extending from the periphery thereof, the periphery of said plate being curved outwardly, downwardly and inwardly around said flange to form an integral structure of said first named part, spout, plate and arms, a gasket arranged on the under face of said flange and around which the peripheral edge of said plate passes to retain said gasket in position, and said arms being curved downwardly, upwardly and inwardly.

In testimony that I claim the foregoing as my invention I have signed my name this 24th day of April, 1931.

EDWARD R. PETRIE.