

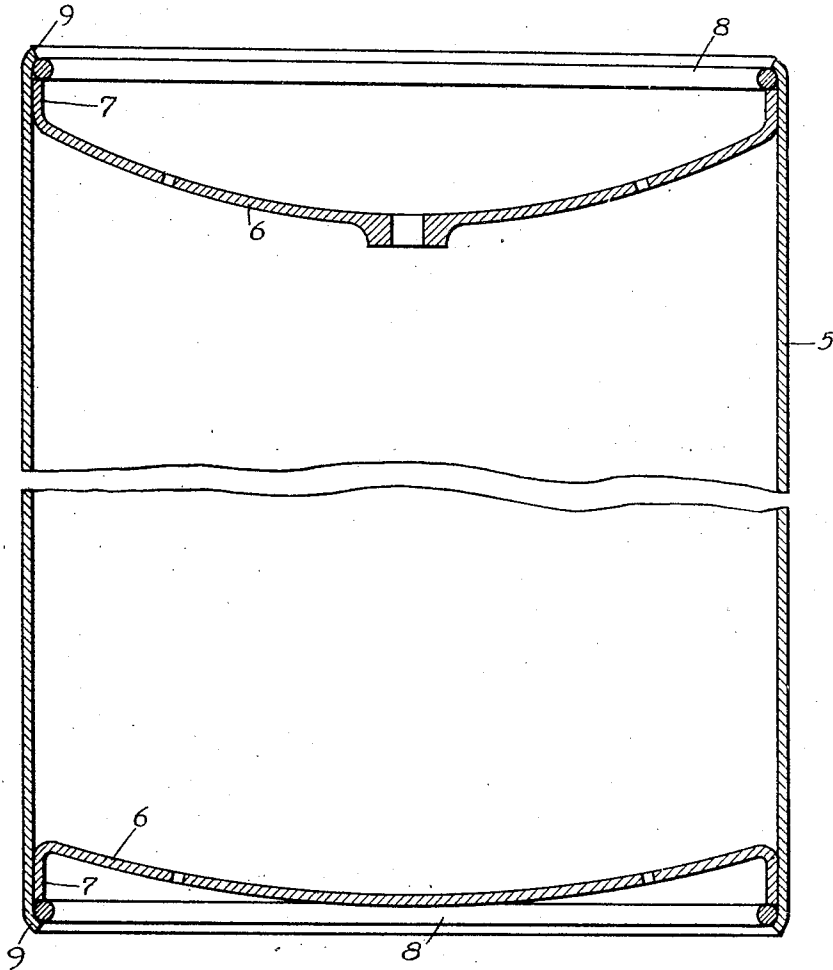
Aug. 28, 1928.

1,681,955

A. M. SCAIFE

CONTAINER

Filed May 4, 1927



INVENTOR

Alan M. Scaife
By Green and McCallister
His Attorneys

UNITED STATES PATENT OFFICE.

ALAN M. SCAIFE, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR TO WM. B. SCAIFE & SONS COMPANY, A CORPORATION OF PENNSYLVANIA.

CONTAINER.

Application filed May 4, 1927. Serial No. 188,677.

This invention relates to containers and more particularly to tanks employed in transportation of liquids, gases and liquefied gases such, for example as volatile hydrocarbons.

5 Tanks of this type are subject to constant handling and lifting and an object of this invention is to provide an improved tank construction of such arrangement as to form rounded gripping surfaces at each end thereof.

A further object is to provide a tank having a gripping surface at the end of such construction and arrangement as to form a reinforcement for the ends of the tank.

15 A still further object is to provide an arrangement of the type set forth which will be simple and rugged in construction and cheap to manufacture and assemble.

20 These and other objects which will be apparent to those skilled in this particular art are accomplished by the invention illustrated in the accompanying drawing which is a broken transverse sectional view of a tank or shipping container constructed in accordance with one embodiment of this invention.

25 The particular embodiment of this invention which has been chosen for the purposes of illustration consists of a cylindrical shell 5, having end closures 6 mounted in each end thereof, as is usual in the art. Each closure or end is provided with an annular flange 7 whose edge is preferably faced outwardly and which is brazed or otherwise secured to the inner wall of the shell and spaced a small distance from the end thereof. An annular gripping member such as a ring 8, preferably of greater diameter than the thickness of the metal forming the flange 7, is secured to the inner surface of the shell directly against the outer edge of each flange 7. As illustrated, each ring is partially covered by peening over the adjacent edge 9 of the shell, which serves as an initial holding means while the rings are permanently secured in place by brazing and in the finished container form a reinforcing means and a protecting edge for the brazed joint of the annular member. Obviously, any other means such, for example, as spot welding may be employed to hold the rings in place during the brazing operation.

50 It will be apparent that the provision of a rounded gripping member or ring 8 which overhangs the edge of the closure flange, together with the peening of the shell end around such member, provides a rounded

gripping surface which is easily gripped by the hand and which is of such construction that the annular ring 8 provides a rounded protuberance of sufficient size to prevent unexpected slipping from the hand. It will also be apparent that the annular ring not only provides a gripping surface but cooperates with the shell to form a reinforcement or backing for the end closure members 6 and at the same time forms a protector for the brazed joint of the closure, so that the resistance of the latter to blowing open as a result of pressure which may be generated within the shell is materially increased without, however, entailing the expense of increasing the size or strength of the joints. The provision of such a gripping member as a part of the circumferential joints greatly increases the wearing qualities thereof due to friction or the result of handling and provides a longer lived structure than has heretofore been possible.

It will thus be seen that a double seal is provided for the heads of the tank which will effectually prevent escape of gases and also the tendency of blowing out the heads by internal pressures is reduced to a minimum, as the brazed ring 8 is united rigidly in position to the tank-walls and to the outside of the flanges of the closure members, and the joints are further reinforced by the inturned edges of the tank walls. Furthermore, the rigidly-fixed annular ring effectually protects the brazed connection of the flanges 7 against destructive impacts which are necessarily had when the tank is moved about.

What I claim as new and desire to secure by Letters Patent is:

1. A container for volatile hydrocarbons including a shell, a closure member having an outwardly-extending annular flange secured by brazing within said shell and spaced from the end thereof, an annular member also secured by brazing within the shell and abutting the edge of the flange of said closure member to form a protecting means against destructive impacts sustained by the brazed joint of the closure member, and an additional means on the shell for retaining the ring in abutting relation to the flange of the closure, said annular member partially overhanging the edge of the closure-flange to provide a hand-grip for the container.

2. A container for volatile hydrocarbons including a shell, a closure member having

an outwardly-extending annular flange secured by brazing within said shell and spaced from the end thereof, and an annular member also secured by brazing within said shell and
5 abutting the flange of said closure member to form a protecting means against destructive impacts sustained by the brazed joint of the closure member, the outer edge of said shell being peened partially around said annular member to serve as an initial holding means 10 for the annular member while it is being brazed in position and also form a reinforcing means and a protecting edge for the brazed joint of the annular member.

In testimony whereof, I have hereunto subscribed my name this 28th day of April, 1927. 15

ALAN M. SCAIFE.