

Sept. 18, 1928.

1,684,399

J. F. LAMB ET AL

CONTAINER

Filed March 21, 1925

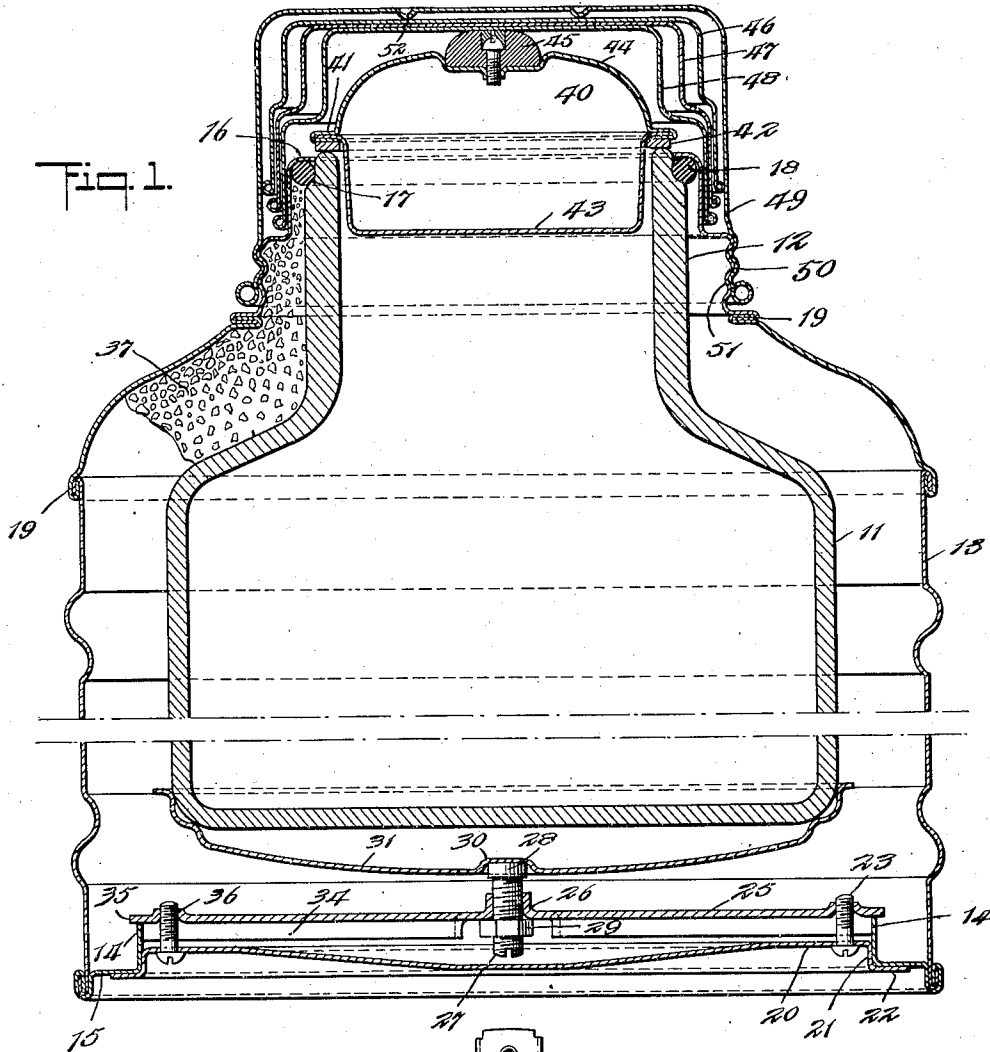
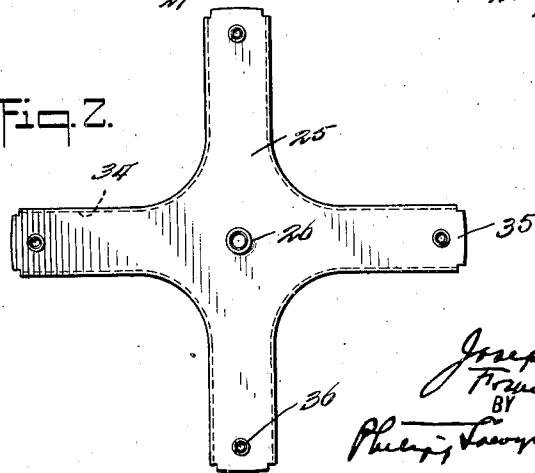


Fig. 2.



INVENTOR
Joseph F. Lamb
Frank W. Shade
BY
Philip J. Lanyon, Ric. Howard
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOSEPH F. LAMB AND FRANK W. SCHADE, OF NEW BRITAIN, CONNECTICUT, ASSIGNORS
TO LANDERS, FRARY & CLARK, OF HARTFORD, CONNECTICUT, A CORPORATION OF
CONNECTICUT.

CONTAINER.

Application filed March 21, 1925. Serial No. 17,169.

This invention relates to improvements in containers and particularly to containers of the type in which the contents may be kept, for a time, at a given temperature.

5 It is one of the principal objects of the invention to provide a container of the type in which an inner receptacle or crock is insulated by a filling material between it and an outer casing, in which a damaged receptacle
10 or crock may be readily removed and a new one substituted at small expense compared with the cost of a complete container.

It is a further object of the invention to provide effective and convenient closure
15 means for the container mouth and to provide a container having a number of cups conveniently associated therewith.

With these general objects in view the invention consists in the features, combinations,
20 details of construction and arrangements of parts which will first be described in connection with the accompanying drawing and then more particularly pointed out.

In the drawing:

25 Figure 1 is a vertical sectional view of a container constructed in accordance with the invention; and,

Figure 2 is a plan view (reduced) of one of the parts.

40 Referring to the drawing, the container illustrated as an exemplifying embodiment of the invention, comprises an inner receptacle in the form of a crock 11 having a somewhat narrowed mouth portion 12. The mouth,
35 however, is fairly large so that the container is available for other food products than thin liquids. The container further comprises an outer metal casing 13 which encloses the inner receptacle and is spaced a substantial
40 distance therefrom. This casing has a bottom opening that is larger in diameter than the largest diameter of the inner receptacle so that the receptacle must pass therethrough. In the embodiment illustrated as an example,
45 this bottom opening is defined by the upright wall 14 of a shouldered flange 15 on the casing. At the top, the casing has a narrowed neck roughly conforming to the shape of the crock. The uppermost part of the casing
50 neck is close to the crock and terminates in flange 16 extending inwardly to the crock. Between the shoulder formed by flange 16 and a shoulder 17 formed on the crock is a resilient gasket 18. This construction provides a seat

for the upper part of the crock and closes the
55 space between the crock and casing to confine the filling material later described. The casing 13 may be constructed in various ways, that shown being formed of several pieces permanently secured together by turning
60 over the adjoining edges as shown, for example, at 19.

Forming a part of the casing but removably associated therewith is a closure for the bottom opening. In the embodiment here illustrated as an example, there is provided a
65 closure plate 20 having at its periphery a downwardly extending wall 21 terminating in an outwardly extending flange 22. The shoulder formed by flange 22 is arranged to embrace closely the shoulder formed by
70 flange 15, in the manner indicated in Fig. 1. The closure plate 20 is removably secured in this position. As here illustrated the closure plate is secured by four screws 23 taking into
75 a part later described.

There is provided supporting means for the inner receptacle and this may conveniently include a yieldable seat and means for placing
80 said seat under tension. Although capable of various constructions, in that here shown as an example, a four armed spider 25, supported as later described, has a central boss 26 through which is threaded a screw 27 provided with an abutment head 28. Below
85 the boss is a check nut 29. The abutment head of the screw engages a central depression 30 in a cup-shaped support 31. This support, near its edge, is shouldered as shown to receive the bottom of the crock 11. The cup-shaped support 31 is supported on the head
90 of screw 27 and when the screw is tightened, the support is placed under some tension. This construction provides a suitable resilient support for the crock, and one particularly
95 adaptable to containers of the type shown which are relatively large and heavy.

The arms of spider 25 have downwardly extending flanges 34 and at the ends the arms have suspension lugs 35 extending outwardly
100 beyond the ends of flanges 34. In assembling the container the spider is inserted into the bottom opening of the casing 13 and its suspension lugs 35 are freely seated on the top edge or ring of the upright wall 14. The
105 spider may be centered by the engagement of the ends of flanges 34 with the upright wall 14. In this connection, it is noted that there

is enough space above and outside of wall 14 to permit manipulation of the spider into the position just described.

In the embodiment illustrated as an example, each arm of spider 25 has a tapped boss 36 for receiving the screws 23. When the parts are in position and the screws 23 tightened, the closure plate 20 is clamped firmly against the shouldered flange of the casing and at the same time the spider is secured in position.

There is provided in the space between the inner receptacle and the casing, a filling of heat-insulating material. While this filling may be of any suitable form, in the embodiment illustrated there is a filling of granular cork 37. This filling serves to insulate the inner receptacle, whereby the temperature of the contents, whether hot or cold, may be retained for a substantial length of time.

The parts described are assembled with the casing inverted. The inverted crock 11 is inserted and positioned with its shoulder 17 engaging gasket 18. Then a portion of the granular cork is packed in. The inverted support 31 is placed on the bottom of the crock, and more cork packed in. The spider 25 carrying screw 27 is put in place and the screw tightened up to place support 31 under tension. The final amount of cork is inserted and the closure plate 20 is secured in place as described.

Should the crock become damaged, the parts may be disassembled in the reverse order. That is, the container is inverted, the screws 23 and the closure plate 20 removed, the freely suspended spider 25 is taken out, sufficient cork is removed to give access to the support 31 which is also removed. The receptacle or crock and the remaining cork may be ejected in any desired manner. A new crock may then be substituted, the assembly being as above described.

The construction described makes possible a container of the insulating-filling type in which the inner receptacle may be replaced at relatively small cost and, at the same time, one in which a large heavy receptacle may be properly supported.

There is provided a closure for the container mouth and in constructions embodying the invention to what is now considered the best advantage, the closure is arranged to be loosely associated with the container and to be pressed into sealing relation when the container is to be transported and the like. Although capable of various constructions, in that here shown as an example, the closure 40 comprises a hollow sheet metal body having a peripheral suspension flange 41 on the underside of which is secured a resilient gasket 42 of rubber or the like. This gasketed flange is arranged to seat freely on the rim of the container mouth to suspend the closure there-

from. The closure 40 has a downwardly extending portion 43 which fits loosely into the mouth of the receptacle to center the closure, and a dome-shaped upper portion 44 rising upwardly from the flange. The central part of the dome 44 is dished to receive a resilient abutment 45 of rubber or the like, for a purpose to be described.

The closure may be pressed into sealing relation with the container in various ways. This may conveniently be accomplished by a set of nested cups which are pressed against the closure by an anchoring member which may be an additional cup. In the embodiment here illustrated as an example, there is provided a set of three cups 46, 47, 48 which have their side walls formed with offsets progressively varying in degree, so that the cups may be nested with the bottom of one cup engaging the bottom of the next cup. The nested cups may be inverted over the closed neck of the container so that part of the inner cup engages part of the closure. In the embodiment shown, the inverted inner cup 48 has its bottom resting on and supported by the abutment 45 of the closure and it is centered by its rim in cooperation with the uppermost part of the neck of the casing 13.

The anchoring element in the present embodiment is an additional cup 49 capacitated to be inverted over the set of cups above described. This anchoring element or outer cup and the container have cooperating parts for securing the cup on the container. As here shown, the rim of cup 49 is formed with a coarse screw thread portion 50 to engage a cooperating thread 51 formed in the metal of the casing 13. As shown in Fig. 1, the neck of the casing is offset inwardly just above the threaded portion 51 to provide a space between the uppermost part of the neck and the cup 49 for the rim of the intermediate cups. In order that the outer or anchoring cup may transmit pressure to the intermediate cups, it is provided with an inward bead 52 arranged to engage the next inner cup.

When the container is to be closed, the closure 40 is suspended freely on the rim of the container mouth and the nested intermediate cups inverted thereover. The outer cup 49 is inverted over the intermediate cups, in the nature of a cap element, and screwed down on the neck of the casing to secure the parts in place. When the parts are so positioned the bead 52 is pressed against the bottom of the next inner cup 48. This pressure is transmitted through cup 47 to cup 46, and the latter is thus pressed against abutment 45. This pressure of the cups on the closure 40 presses the same firmly against its seat to establish sealing relation with the receptacle. This not only seals the container mouth but also conveniently stores the several cups while the container is being transported or the like.

When the contents of the container are to be consumed, the outer cup is unscrewed and the intermediate cups removed, all these cups being thus available for use as utensils. By 5 keeping the closure 40 on its seat the container may be kept covered during a period when frequent access to the contents is desired but it is quickly and easily removed and replaced. Moreover, the closure is of a type that is not 10 easily damaged by use or made obsolete by wear.

The construction described makes possible a convenient means of closing the container mouth and at the same time provides, in a simple 15 and convenient way, a number of cups for use with the container.

What we claim is:

1. A container comprising a metal casing, a crock within the casing and spaced therefrom, the casing having a bottom opening 20 capacitated for passage of the crock, the casing having an upright shouldered flange defining said opening, a supporting element seated on the edge of said flange, a yieldable 25 seat for the crock supported from said supporting element, a heat-insulating filling material in the space between the crock and casing, a closure for the bottom opening having a shoulder embracing the shoulder of the 30 flange, and screws removably securing the closure to said supporting element.

2. A container comprising an inner receptacle, an outer casing spaced therefrom and having a bottom opening capacitated for passage 35 of the receptacle, the casing having an upright shouldered flange defining said opening, a spider having its arms removably supported on said flange, a yieldable seat for the receptacle, a pin threaded through the hub 40 of the spider and engaging said seat to tension the same, a heat-insulating filling material in the space between the casing and receptacle, a closure plate having a shoulder

embracing the shoulder of said flange to close the bottom opening, and screws for removably 45 securing the closure plate to the spider.

3. In combination with a container comprising an inner receptacle and an outer casing, a closure for the mouth of the receptacle having a portion seating freely on the rim of 50 the receptacle, a set of cups having their side walls formed with offsets of progressively varying degree whereby the cups may be nested with the bottom portion of one cup engaging the bottom portion of the next cup, 55 a resilient abutment on the closure for engagement by the inner cup of said set when the cups are inverted over the container neck, and a cover cup capacitated to be inverted over the inverted set of cups, said cover cup 60 and the casing having cooperating screw threads for removably securing the cover cup to the container, the cover cup having a portion for engaging the outer cup of said set, whereby the closure is pressed against its seat 65 when the cups are in secured position.

4. A container comprising an inner receptacle, an outer casing spaced therefrom and having a bottom opening capacitated for passage 70 of the receptacle, the casing having an upright flange defining said opening, a spider having downwardly extending flanges on its arms, the arms having end portions extending beyond said flanges for seating on the rim of said upright flange, whereby the spider 75 may be centered by engagement of the ends of said spider flanges with said upright flange, a yieldable seat for the receptacle supported from said spider, a closure plate for said bottom opening, and screws for removably securing 80 the closure plate to the spider.

In testimony whereof, we have hereunto set our hands.

JOSEPH F. LAMB.
FRANK W. SCHADE.