L. R. STEEL.

INSULATED GLASS LINED CANTEEN.

APPLICATION FILED MAR. 4, 1911.

1,098,850.

Patented June 2, 1914.

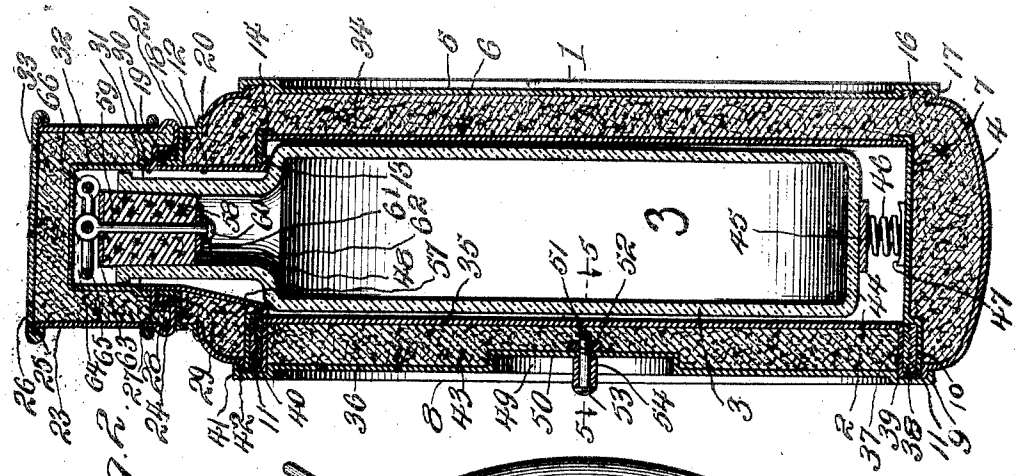


Fig. 2.

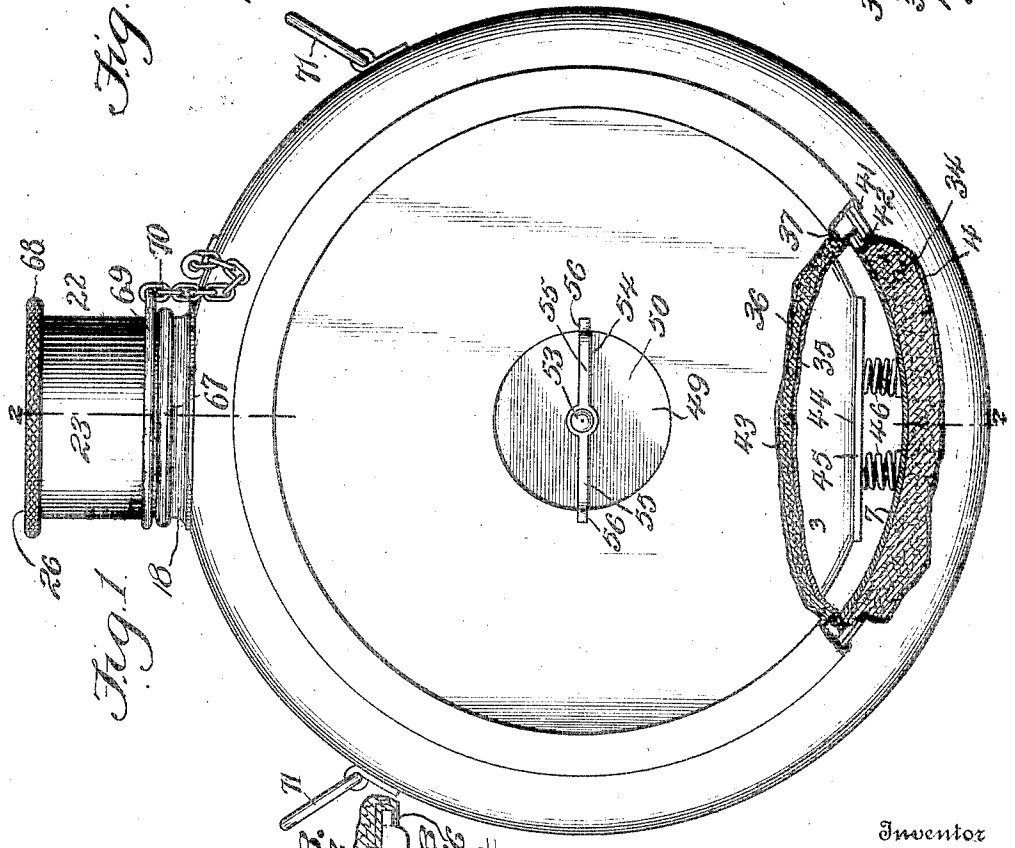


Fig. 1.

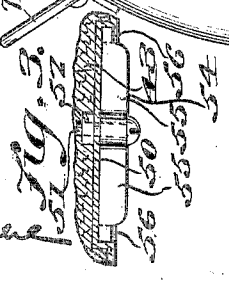


Fig. 3.

Witnesses

J. L. Wright.

James A. Keene

Inventor

Leonard R. Steel

By Victor J. Evans,

Attorney

UNITED STATES PATENT OFFICE.

LEONARD R. STEEL, OF CLEVELAND, OHIO.

INSULATED GLASS-LINED CANTEEN.

1,098,850. Specification of Letters Patent. Patented June 2, 1914.

Application filed March 4, 1911. Serial No. 612,237.

To all whom it may concern:

Be it known that I, LEONARD R. STEEL, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Insulated Glass-Lined Canteens, of which the following is a specification.

This invention relates to an insulated glass lined canteen, the object of the invention being to provide a sanitary construction of device of this character wherein the liquid can be kept substantially at a predetermined temperature for a considerable length of time.

Another object of the invention is to provide an outer jacket and an inner receptacle, the former having a removable portion which can be removed when it is desired to remove the inner receptacle for cleaning purposes or for the purpose of replacing a broken receptacle by a new one.

In the drawings, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a side view of the canteen. Fig. 2 is a vertical section therethrough taken on the line 2—2 of Fig. 1. Fig. 3 is a section on line 5—5 of Fig. 2.

The device comprises an outer jacket 1 which is formed with a chamber 2. A glass receptacle 3 of a configuration conforming substantially with that of the chamber is located in the chamber, as shown. The outer receptacle comprises preferably a circular wall 4, the spaced heads 5 and 6, a substantially cylindrical member 7 and a removable portion 8, the latter being designed to close the chamber 2 at one side, as shown in Fig. 2. The wall 7 is preferably secured to the wall 4 by soldering the walls at 9. The wall 7 is constructed to provide a circular concavity 10 in which is soldered an interiorly threaded ring 11. A neck member 12 is soldered or otherwise suitably secured at 13, to the member 7. The wall 4 is provided at one side with a flange 16 which is embraced by the flange 17 on the head 5, the said flanges being connected with each other by solder.

The neck 12 is embraced by an external neck 18, the same being secured to the internal neck 12, at 19, and to the wall 4, at 20. This neck is formed to provide a horizontal shoulder 21 for a purpose to be hereinafter explained. A cover 22 is provided for closing the jacket, and as shown, it embodies a circular wall 23 having a base flange 24 and an upper flange 25. The upper flange is secured to the cap plate 26. The base flange is stamped or pressed to form an annular vertical portion 27 to which is secured an interiorly threaded ring 28. This ring is adapted to engage an exteriorly threaded ring 29 which is carried by the flange 19 of the external neck 18. Adjacent to the vertical portion 27, the base portion of the wall 23 is formed to provide a vertical flange 30 which is seated and secured in the recessed portion 31 of the inner member 32 of the closure.

The inner member 32 of the closure is spaced from the cap plate 26 and from the circular wall 23 and the intervening space is occupied by an insulating material 33 of mineral wool, asbestos, cork, felt, cardboard, or other non-heat conducting material. The internal neck 12 is spaced from the wall 4. The walls 4 and 7 and the heads 5 and 6 are spaced from each other and as shown, such spaces are occupied by a similar non-heat conducting material 34.

The detachable portion 8 of the jacket comprises inner and outer members 35 and 36 which are of circular configuration. The inner member is formed with a peripheral horizontal flange 37 and with a similar vertical flange 38, the latter being secured to the outer member 36, at 39. The peripheral flange 37 of the inner member has secured thereto an exteriorly threaded ring 40 which screws into the ring 11 hereinbefore described. The outer member 36 is preferably provided with an inwardly extending flange 41 which embraces a similar flange 42 on the wall 4. The intervening space between the inner and outer members 35 and 36 is filled with non-heat conducting material 43.

The receptacle 3 is provided with a flat bottom portion 44 against which a plate 45 is yieldingly pressed by springs 46 interposed between the plate 45 and a similar plate 47, the latter being seated upon the wall 7 of the jacket. These springs operate to hold the vessel 3 in a position whereby the neck 48 of the vessel will be extended into the internal neck 12, the portion of the vessel in proximity with the lower end of the neck being engaged against the lower end of the internal neck, as shown. The outer member 36 is formed with a central concavity 49, the inwardly pressed portion

50 of the member having a central opening therein through which extends a bolt 51. This bolt is provided with a clamping nut 52 which is adapted for clamping engagement against the portion 50 of the member 36 so as to hold the bolt against displacement. The bolt is headed at its outer end at 53, and interposed between the head and the portion 50 in the outer member 36 is a manipulating device 54. This member carries wings 55 which are adapted to be grasped by the hand so that the portion 8 of the jacket can be readily disconnected from the ring 11. In order to prevent any possible rotation of the member 54 I preferably seat the ends of the wings 55 in recesses 56 in the outer member 36. In addition to the above it is preferable to wipe the threaded portion of the bolt with solder so as to positively prevent the nut of the bolt from working loose. The diameter of the chamber 2 exceeds the diameter of the vessel 3 so that the latter can be freely moved therein. When it is desired to clean the vessel 3 or sterilize the same the removable portion 8 of the jacket is removed. Pressure is then exerted downwardly on the vessel 3 and by tilting the vessel it may be withdrawn from the jacket. To accommodate the tilting movement of the vessel during the act of removing the same from the jacket I preferably provide the internal neck with a downwardly and forwardly flared portion 57.

A cock plug 58 is designed to close the neck of the vessel 3, and as shown, this plug has extended therethrough the shank 59 of an extracting element. The lower end of this element is headed, at 60, and confined between the lower face of the plug and the said headed portion are washers 61 and 62 which operate to prevent withdrawal of the stem 59 from the plug. The top of the plug is covered by a metal cap 63. The upper end of the stem 59 extends through the cap and it is formed with an eye 64 to which the extracting rings 65 and 66 are pivotally connected.

The bottom of the cover 22 is provided with a shoulder 67. The top 26 of the cover is provided with a similar stop 68. The walls 23 of the cover are embraced by a retaining ring 69, the same being mounted on the cover so as to permit the latter to be revolved in the ring. This ring is attached to one end of a chain 70, the latter being suitably supported on the canteen. The wall 4 of the canteen is provided at opposite sides with members 71 to which the terminals of a suitable shoulder or belt strap, (not shown), may be attached.

I claim:—

1. A canteen comprising an insulated jacket having a neck, said jacket having an opening in one of its sides, a vessel removably mounted in the jacket and having a neck extending through and beyond the neck of the jacket, a closure for the neck of the vessel, a closure for the neck of the jacket, and a closure adjustably mounted in the opening at the side of the jacket.

2. A canteen comprising an insulated jacket having a neck, said jacket having an opening in one of its sides, a vessel removably mounted in the jacket and having a neck extending through and beyond the neck of the jacket, a closure for the neck of the vessel, a closure for the neck of the jacket, and a closure adjustably mounted in the opening at the side of the jacket, one of the walls of the neck of the jacket being flared downwardly in the direction of the opening in the side of the neck and being spaced from the neck of the vessel so as to permit the latter to be tilted, in combination with yieldable means mounted in the jacket and bearing against the vessel so as to hold the neck of the latter normally in the neck of the jacket.

3. A canteen comprising an insulated jacket having a neck, said jacket having an opening in one of its sides, a vessel removably mounted in the jacket and having a neck extending through and beyond the neck of the jacket, a closure for the neck of the vessel, a closure for the neck of the jacket, and a closure adjustably mounted in the opening at the side of the jacket, the vessel having a flat bottom, and a yieldable plate supported by the jacket and bearing against the flat bottom of the vessel and operating to hold the neck of the vessel in the neck of the jacket.

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

LEONARD R. STEEL.

Witnesses:
JOHN D. LLOYD,
ROBT. J. STEEL.