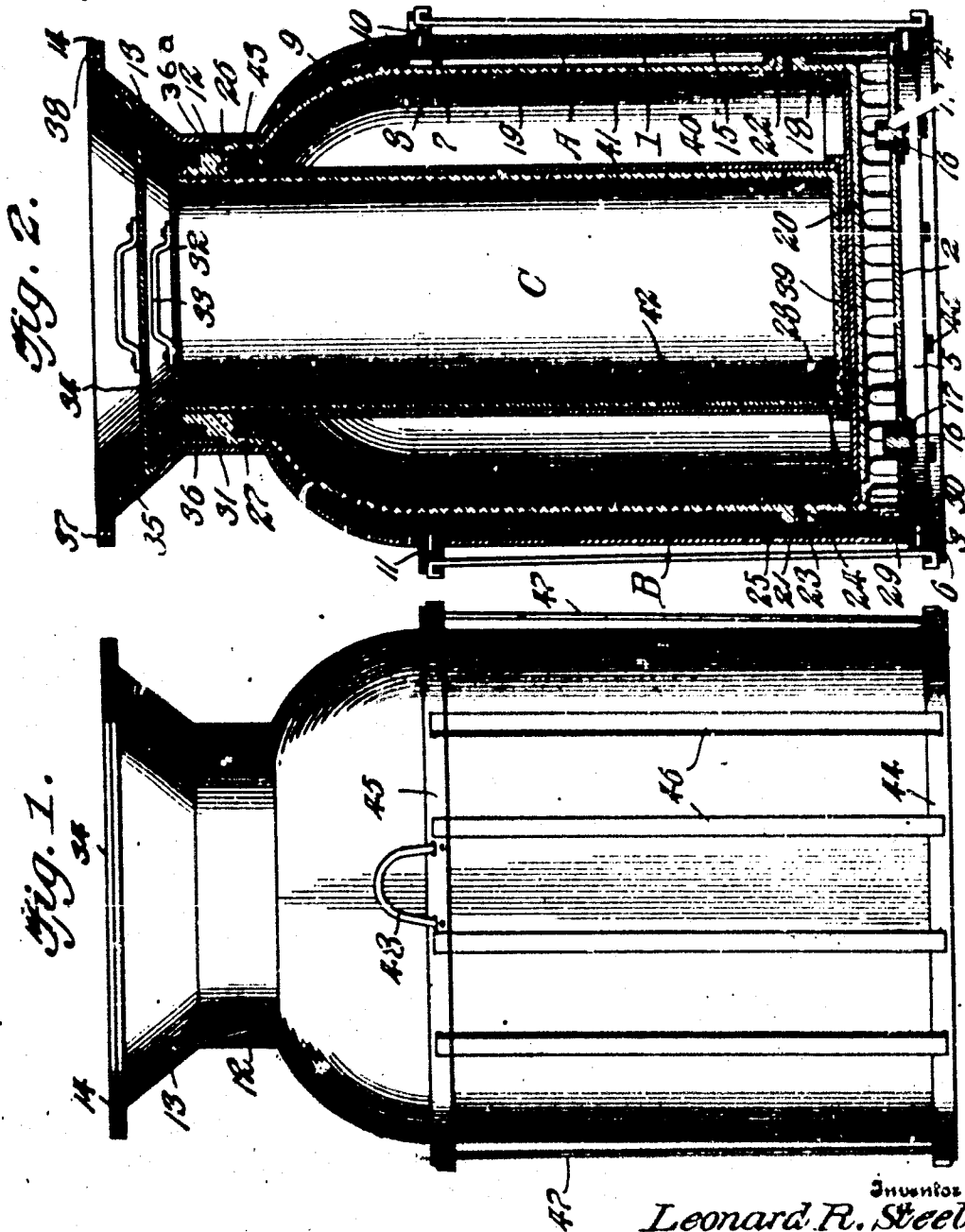


L. R. STEEL.
MILK CAN.

APPLICATION FILED NOV. 4, 1908.

Patented Dec. 6, 1910

977,979.



Leonard R. Steel

Witnesses
Frank B. Hoffman
J. F. Byrne

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

LEONARD R. STEEL, OF MILWAUKEE, WISCONSIN.

MILK-CAN.

977,979.

Specification of Letters Patent.

Patented Dec. 6, 1910.

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To all whom it may concern,

Be it known that I, LEONARD R. STEEL, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Milk-Cans, of which the following is a specification.

My invention relates to improvements in milk cans and is designed primarily as an improvement on the construction of the milk cans disclosed in my co-pending applications filed Nov. 4, 1908 and respectively serially numbered 461,973.

The invention consists in the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawing, wherein:—

Figure 1 is a view in side elevation of a milk can constructed in accordance with my invention, and Fig. 2 is a sectional view thereof, the section being taken on a plane extending vertically and centrally through the can.

Like reference characters are employed to designate corresponding parts throughout the several views.

A designates an outer casing which comprises a sectional body, the lower section 1 being cylindrical and fully open at its upper and lower ends. The lower end of the section 1 is closed by means of a circular bottom 2 which is secured in applied position by means of rivets 3, the rivets passing through the section and through the annular flange 4 which is formed upon the periphery of the bottom 2. The rivets also secure in applied position annular members 5 and 6, said members reinforcing the bottom of the can. The upper end of the section 1 is offset inwardly to provide an annular upstanding flange 7 and a shoulder 8 which is disposed at the base of the flange. The upper section of the casing A comprises a dome shaped portion 9 which incloses the flange 7 and which rests at its lower edge upon the shoulder 8, said section being secured to the lower section 1 by means of rivets 10 which also secure in applied position an annular member 11. The upper section also comprises a restricted annular neck 12 and an upwardly flaring mouth 13 which is provided at its upper edge with a horizontally disposed flange 14.

A casing B which is preferably constructed of glass is mounted within the casing A, and the side and bottom walls of the

casing B are spaced from the side and bottom walls of the casing A whereby to provide a space 15 from which the air is exhausted. The air may be exhausted from the space through openings closed by plugs 16 which are removably mounted in bushings 17. The inner casing B is cylindrical and comprises a lower section 18 and an upper section 19. The lower section 18 has a bottom wall 20 formed integrally therewith and is provided with a bead 21 which has its outer side screw threaded. The lower end of the upper section 19 is provided with a bead 22 which has its outer side screw threaded. The sections are secured together by means of a threaded coupling 23 which is mounted upon the beads 21 and 22, a washer 24 being interposed between the sections to provide an air tight connection therebetween. The coupling 23 has its upper end formed to provide a flange 25 which engages the upper surface of the bead 22, while the lower end thereof is bent into engagement with the under side of the bead 21, the connection between the coupling sleeve and bead being such that it is impossible for the sections to become accidentally disconnected. The upper end of the upper section 19 is reduced and formed to provide a neck 26 which is threaded as at 27 for engagement with the threads formed on the inner side of the neck 12 of the outer casing A, the inner casing B being thus supported within the outer casing A above the bottom 2 of the latter casing.

The lower end of the inner casing B is carried by a support 28 which is annular and which embraces said lower end, the bead 21 resting upon the upper edge of the support. The support 28 is provided with openings 29 which extend from the bottom wall 20 of the inner casing to and through its outer edge, said outer edge resting in a groove 30 formed in the inner side of the bottom 2 of the outer casing. The upper portion of the neck 26 of the inner casing is reduced at a point above the threads 27 to provide between itself and the neck 12 of the outer casing an annular recess 31. At a point above said reduced portion the neck is again reduced to receive a cap 32 which has threaded engagement with the neck and which closes a receptacle C mounted within the inner casing. The cap 32 is provided with a handle 33.

The casing A is covered by a closure which

comprises a head 34, flaring flange 35 which engages the mouth 13, an annular flange 36 which fits in the recess 31 and contacts with the neck 12, and an annular vertical flange 37 and a horizontally disposed flange 37 which contacts with the flange 14, the flanges 14 and 37 being provided with perforations 38 which permit the use of a seal.

The receptacle C is cylindrical and fully open at its upper end, the lower end thereof being closed by means of an integrally formed bottom wall 39. The side wall of the receptacle C is spaced from the side wall of the inner casing B, providing a dead air space 40. The vacuum between the inner and outer casings, the dead air space between the inner casing and the receptacle, and the space between the head 34 of the closure of the outer casing A and the cap 32, prevent liquid contained in the receptacle from absorbing heat from the atmosphere, and prevents the heat of the liquid from radiating thereby enabling liquid to be kept in the receptacle at a predetermined temperature without the use of a refrigerating or heating medium.

The inner casing B is provided on its inner side with a lining 41 while the receptacle C is provided on its outer side with a lining 42. The linings 41 and 42 are constructed of tin which is provided with a mercurial coating. The upper ends of the linings 41 and 42 are connected together by means of a member 43. The linings assist the vacuum and dead air space in preventing the absorption of heat by the contents of the receptacle C and the radiation of heat from such contents.

The can is adapted to be carried in a crate which consists of a lower annular member 44 and an upper annular member 45 which are united by slats 46 and 47. The slats 46 are secured at their ends to the upper annular member 45 and pass through and across the lower members 44, those portions of the slats which cross the member forming a support for the can. The slats 47 are respectively secured at their ends to the members 44 and 45. The crate is provided with handles 48 which are secured to the upper member 45.

It should be apparent from the above description, taken in connection with the accompanying drawing, that I provide a can in which milk may be kept at a predetermined temperature without the use of a refrigerating or heating medium, one which

is simple of construction and which may be manufactured and sold at a comparatively low cost.

Having thus described the invention what is claimed as new is:--

1. A milk can comprising an outer casing having a contracted neck, an inner casing disposed within the outer casing and spaced from the body thereof, said inner casing being provided with the contracted neck fixed to the contracted neck of the outer casing and having an annular recess at the base of said neck, a perforated ring supporting the bottom of the inner casing from the bottom of the outer casing, a receptacle disposed within the inner casing and spaced from the sides thereof, said receptacle having its upper end extending through the neck of the inner casing, a closure for said receptacle engaging said neck, a lining upon the inner wall of the inner casing, and a jacket or lining surrounding the receptacle, said linings having their upper edges fitted and interlocked in the base recess of the neck of the inner casing.

2. A milk can comprising an outer casing having a contracted neck portion, an inner casing spaced from the outer casing and having a contracted neck portion secured to the neck portion of said outer casing, said inner casing being formed of glass and comprising body and base sections having outwardly extending flanges, a coupling engaging said flanges and uniting said sections, an annular supporting member enclosing said base section and resting against the flange thereof and extending below the same and resting upon the bottom of the outer casing, the depending portion of said supporting member being provided with an annular series of perforations, a glass receptacle arranged within and spaced from the sides of the inner casing and having its upper end extending through the neck of said casing, a cover engaging said neck and closing the receptacle, a lining for the inner casing, and a jacket or lining surrounding the receptacle, said linings having their upper edges interlocked and disposed in a recess in the base of the neck of the inner casing.

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

LEONARD R. STEEL.

Witnesses:

JOHN G. LEWIS, Jr.,
GUSTIE A. REICHWALD.