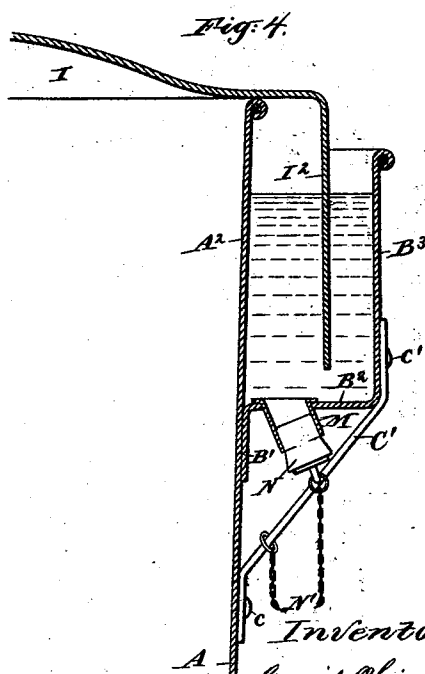
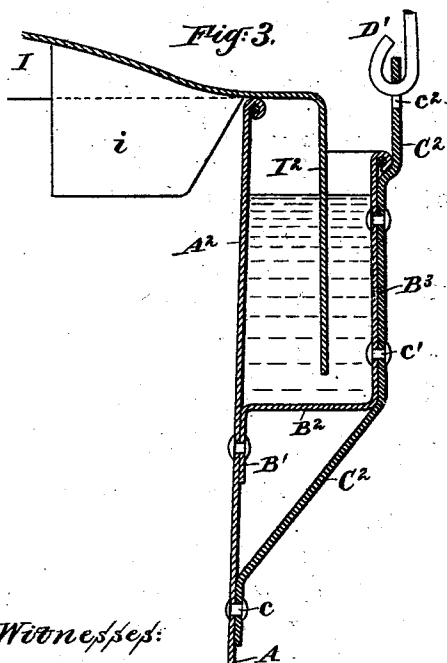
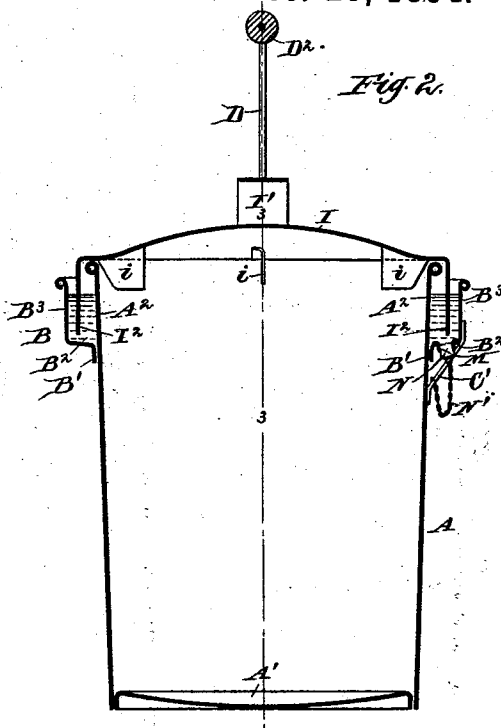
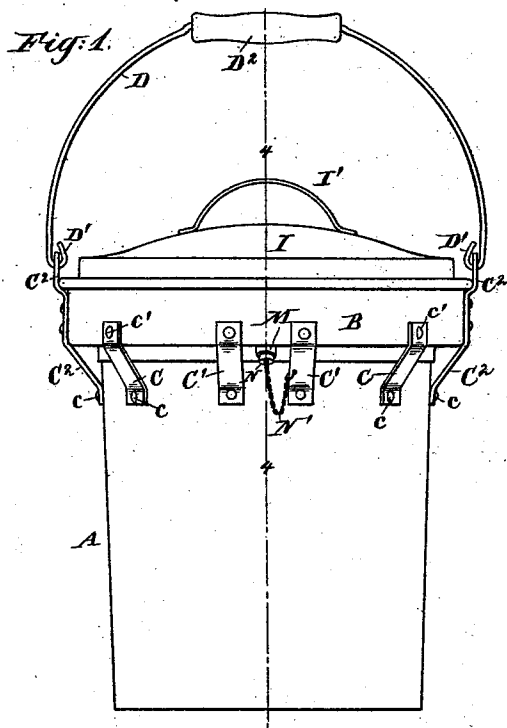


(No Model.)

G. HIGBIE.
LIQUID SEAL PAIL.

No. 531,313.

Patented Dec. 25, 1894.



Witnesses:

Robinson P. Gable.
Patrick M. Dorney

Inventor:
Garrit Higbie,
by his attorney
Charles R. Searle

UNITED STATES PATENT OFFICE.

GARRIT HIGBIE, OF BROOKLYN, NEW YORK.

LIQUID-SEAL PAIL.

SPECIFICATION forming part of Letters Patent No. 531,313, dated December 25, 1894.

Application filed October 15, 1894. Serial No. 525,861. (No model.)

To all whom it may concern:

Be it known that I, GARRIT HIGBIE, a citizen of the United States, residing in Brooklyn, county of Kings, and State of New York, have invented a certain new and useful Improvement in Liquid-Seal Pails, of which the following is a specification.

The improvement relates to receptacles having an annular trough surrounding the upper edge, into which a depending lip or flange on the cover is received. Water, or a liquid disinfectant poured into the annular trough, forms a seal between the interior of the vessel and the external atmosphere, effectually preventing the escape of offensive odors or germs of disease given off by the contents. By providing a drain-tube from the trough, with its discharge orifice directed outward from the body of the pail and closed by a stopper, which may be a plug of cork attached to an adjacent portion of the pail by a short flexible connection, many serious objections to pails of this class are avoided.

The freezing of the liquid in the trough when the pail is placed out of doors in winter weather is a source of much annoyance, it being impossible to empty the trough without spilling the contents of the pail. In my improved form, the water in the trough may be drained away, and the trough re-filled upon bringing the pail again in-doors.

My pail may be emptied more neatly than the old forms by first removing the plug and allowing the liquid disinfectant to escape, and then throwing out the contents, thus avoiding the spilling of the disinfectant in the act of emptying the pail.

It is often desirable to remove the liquid from the trough for the purpose of replacing it with fresh disinfectant without removing the cover or disturbing the contents, or too much liquid may have been inadvertently poured into the trough and it is necessary to remove a portion. These changes can be made with perfect cleanliness by the use of my improvement.

I mount the trough with its upper edge lower than the upper edge of the pail, insuring that the bruising by contact with the ground when the pail is reversed shall be borne by the edge of the pail without injury to the trough. Braces of heavy sheet-iron are

attached to the exterior of the pail at properly spaced points below the trough to aid in supporting the latter. They extend up around the angular lower edge nearly to the top of the trough. At the opposite points in the circumference the braces are continued still higher and serve as ears for the attachment of the bail. The inclined drain-tube is protected against injury by two braces similar to those first described, set on each side of the tube, with sufficient space between to allow the cork to be easily removed and replaced.

My improved pail is particularly well adapted for use in hospitals where contagious diseases are treated, and it is of the greatest importance that the dejecture be immediately covered and sealed.

The accompanying drawings form a part of this specification.

Figure 1 is a side elevation of the pail. Fig. 2 is a vertical section at right angles to Fig. 1. Fig. 3 is a vertical section of a portion on a larger scale. It is on the line 3—3 in Fig. 2. Fig. 4 is a similar view of a portion on the line 4—4 in Fig. 1.

Similar letters of reference indicate the same parts in all the figures.

A is the body of a pail formed of sheet-iron, and slightly tapered, as shown, and A' is the bottom, attached in the ordinary manner.

B is a sheet-iron ring surrounding the pail near the top. In section, it is L-shaped, with a downwardly projecting flange at the end of the horizontal portion, by which it is soldered or riveted to the body. This lower portion is marked B'. The horizontal portion is marked B² and forms the bottom of the trough. Another portion B³ extends upward, and with the portion A² of the pail body forms the vertical walls of the trough. The edge of the portion B³ is smoothly finished by being turned over an inclosed wire in the well-known manner, and is somewhat lower than the similarly formed edge of the pail so that the trough is protected when the pail is reversed and struck against any object to loosen the contents.

C, C, are braces of heavy sheet-iron, riveted to the body at c, c. They extend outward angularly, and are bent upward around the projecting angle of the trough and are secured to the latter at c', c'. Two of these braces

C', C', are set one on each side to inclose the drain-pipe, to be presently described, and protect it from being bruised or broken by striking against surrounding objects, and also
 5 lessen the liability of the stopper to be accidentally displaced in the rough handling to which such receptacles are subjected. The two braces C², C², at opposite points in the circumference are extended upward beyond
 10 the edge of the trough, and are provided with holes c² into which the hooked ends D' of the bail-wire D are engaged.

D² is the ordinary wooden handle encircling the mid-length of the bail.

15 I is the cover, larger in diameter than the top of the pail body, and provided with a handle I'. It has an annular depending lip or flange I² at its periphery which engages in the trough and reaches nearly to the bottom
 20 B² of the latter, when the cover comes to rest upon the top of the pail. Pieces of sheet metal i, i, having inwardly inclined outer edges, are soldered to the under face of the cover to aid in centering the latter.

25 M is a short tube set in the bottom B² of the trough and extending downward and outward between the braces C', C', above described. It is closed by a cork or other stopper N attached to an adjacent portion of the pail by
 30 a light chain N' sufficiently long to allow the cork to be easily removed and replaced.

The stopper N being inserted, the disinfecting or antiseptic liquid is poured into the trough until it is nearly filled and the pail is
 35 ready for use. Immediately upon receiving the offensive or deleterious matter the cover is replaced, with its flange I² engaged in the trough and extending well down into the liquid, thus forming a seal. In this condition the
 40 pail is safe, and may be removed and emptied when convenient, or it may remain in the room until filled. In the latter case it may be desirable to renew the liquid in the trough at intervals. This may be accomplished by

loosening the stopper and allowing the liquid 45 to escape slowly into any convenient vessel, care being taken to stop the flow before the seal has been broken. The trough may then be again filled with fresh liquid.

The inclination of the tube M away from 50 the oppositely inclined body of the pail allows the liquid to be discharged without danger of wetting the floor.

The construction shown renders the pail cheap, light, strong and cleanly.

I claim as my invention— 55

1. In a liquid seal pail, the cover I and depending flange I², the annular trough, formed by the upper portion A² of the body and the portions B² and B³ of the ring, in combina- 60 tion with the drain-tube M set in the portion B² of the trough and projecting downwardly from the latter and outwardly from the oppositely inclined surface of the pail, to direct the drainage away from the pail and with the 65 stopper N for closing the tube, all substantially as herein specified.

2. In a liquid seal pail, the cover I and depending flange I², the annular trough, formed by the upper portion A² of the body and the 70 portions B² and B³ of the ring, in combination with the drain-tube M set in the portion B² of the trough and projecting downwardly from the latter and outwardly from the oppositely inclined surface of the pail, to direct 75 the drainage away from the pail the stopper N for closing the tube, and with the braces C', C', located one on each side of the said tube to protect it against accidental blows and also to support the trough, substantially 80 as herein specified.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

GARRIT HIGBIE.

Witnesses:

ROBT. CONNOR,

PATRICK E. COLLINS.