No. 618,624. Patented Jan. 31, 1899.

L. STANEK & H. AXT.

ANTISPILLING VESSEL.

(Application filed Dec. 17, 1896.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

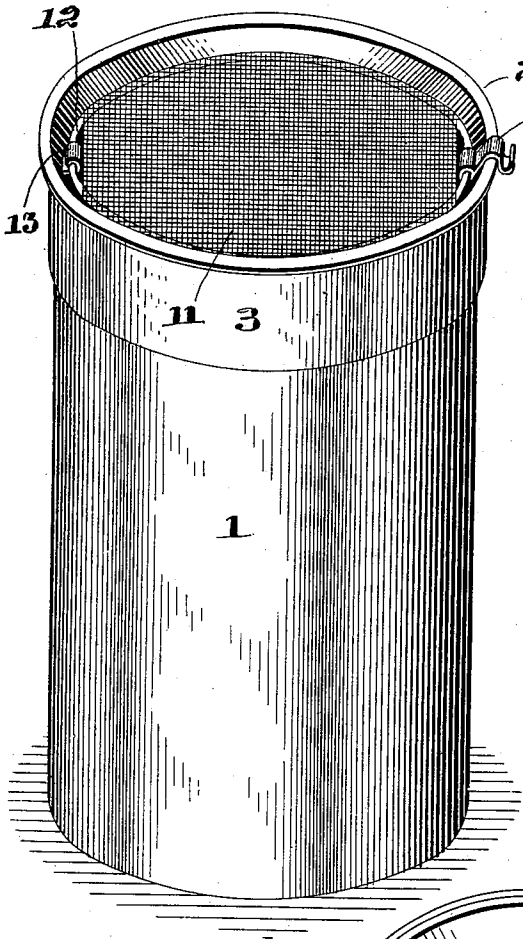


Fig. 2.

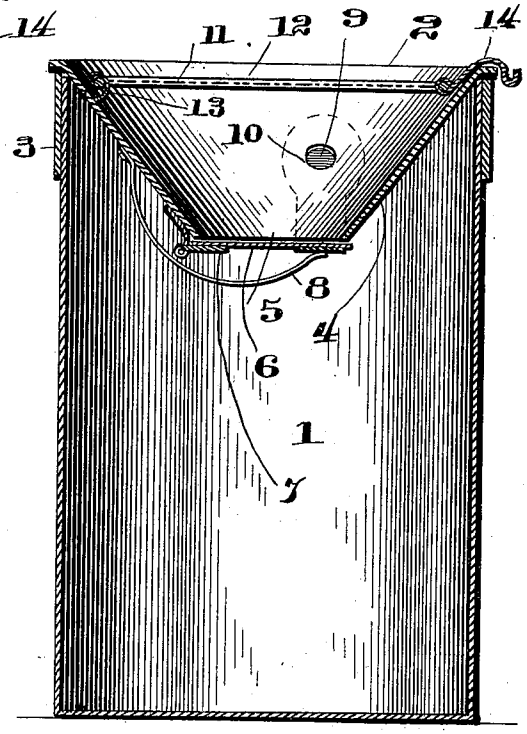
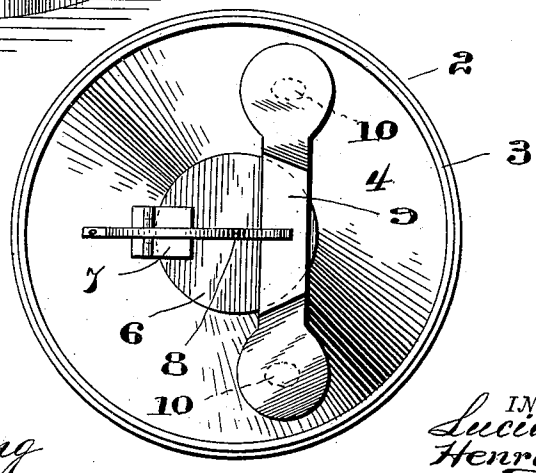


Fig. 3.



WITNESSES

Marcus L. Byng

Henry L. Byrne.

INVENTORS

Lucian Stanek

Henry Axt.

by John Wedderburn Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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Fig. 4.

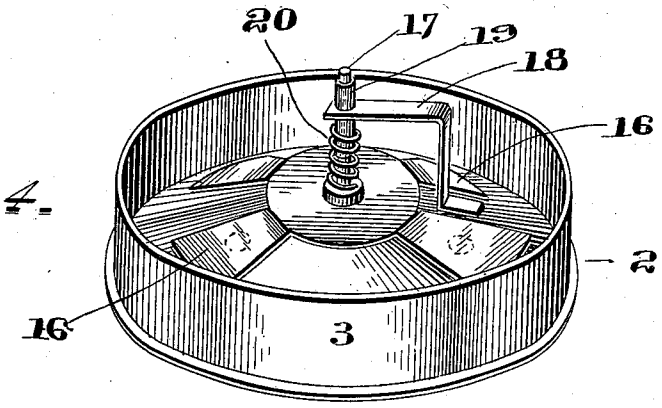
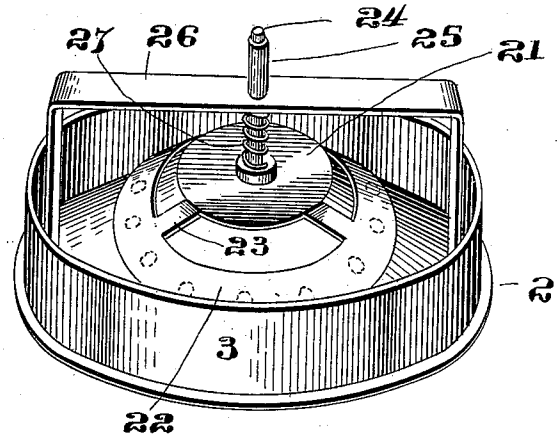


Fig. 5.



WITNESSES

Marcus L. Byng.

Henry A. Byrne.

INVENTORS

Lucian Stanek

Henry Axt.

by John Wedderburn Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LUCIAN STANEK AND HENRY AXT, OF BOSTON, MASSACHUSETTS.

ANTISPILLING VESSEL.

SPECIFICATION forming part of Letters Patent No. 618,624, dated January 31, 1899.

Application filed December 17, 1896. Serial No. 616,088. (No model.)

To all whom it may concern:

Be it known that we, LUCIAN STANEK and HENRY AXT, citizens of the United States, and residents of Boston, (Roxbury,) in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Antispilling Vessels; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to antispilling vessels, and has for its object to provide a vessel with a self-closing top which will admit of liquid being poured therein, but will in the event of the vessel being tipped over close and prevent the wasting of the liquid therein.

The invention consists in certain novel features, details of construction, and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a vessel constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the same, showing a hinged valve. Fig. 3 is a reverse plan view of the removable top of the vessel, showing the hinged valve. Fig. 4 is a reverse perspective view of the top, showing a modified form of valve having radiating portions for closing the air-ports. Fig. 5 is a similar view showing a modified form of valve having an annular face for closing the air-ports in the top.

Similar numerals designate corresponding parts in the several figures of the drawings.

The vessel in connection with which this invention is utilized may be of any desired size or form, and for convenience is shown as consisting of an ordinary metallic can 1, having a movable top or cover 2, flanged, as at 3, to fit over the top edge of the can and provided with an inverted cone 4, the vertex of which is cut away to afford a central circular opening 5, through which the liquid may be introduced into the can.

In the construction shown in Figs. 1 to 3, inclusive, this opening 5 in the top is closed by means of a disk-shaped flap or valve 6, which is connected by a hinge 7 to the cone 4 at one side of the opening 5, said flap or valve being held and normally closed or seated by means of a leaf-spring 8, which is attached permanently at one end to the cone 4 and bears at its free end against the under side of the flap or valve 6.

9 designates a strip which extends across and is secured to the under side of the flap or valve 6, said strip having its opposite ends widened and curved to conform to the under surface of the cone 4, so as to snugly close the air-ports 10, extending through the cone at opposite sides of the central opening 5. By means of this construction as liquid is poured into the vessel through the opening 5 the valve will yield to admit of the introduction of the liquid, and at the same time the air-ports will be opened for permitting the escape of the air displaced by the liquid.

Within the hollow of the cone 4, upon the upper side of the cover or lid, is placed a screen 11, comprising an annular frame 12, over which is stretched wire-gauze or other meshed fabric. At one side of the top is arranged an upwardly-opening hook 13 to engage the annular frame at one side, and projecting from said annular frame at a diametrically opposite point is a spring-clasp 14, which engages over the top edge of the cover 6, thus maintaining the screen in place and allowing the same to be moved by force when desired.

In lieu of the valve just above described a plunger-valve may be substituted, as shown in Fig. 4. This valve comprises a disk-shaped body portion covering the central opening 5 from the under side and a series of radiating wings 16, which simultaneously cover the air-ports in the top. Connected centrally to the body of the valve is a plunger-stem 17, which reciprocates through an arm or bracket 18, secured to the under side of the cone 4 and provided at its end with upwardly and downwardly extending sleeve portions 19 for slidingly receiving the valve-stem. Between the arm 18 and the valve is interposed a coil-spring 20, which normally upholds the valve and keeps the same firmly against its seat.

In Fig. 5 we have shown another modified form of valve, comprising the disk-shaped body portion 21 for closing the central opening 5 and an annular face bearing against the

under side of the cone 4 for closing the air-ports therein, said annular face 22 being connected to the body portion of the valve by means of interposed radiating arms 23. This valve is also provided with a plunger-stem 24, which slides through a sleeve 25, arranged centrally of a bail-shaped bracket 26, secured to the under side of the cover, the valve being held to its seat by means of a coil-spring 27, disposed around the plunger-stem between the body of the valve and said bracket.

In either of the constructions above described it will be seen that in the event of the vessel being overturned the liquid contained therein will be prevented from spilling and wasting by the automatic closing of the top of the vessel, and at the same time when the vessel is in an upright position the liquid may be readily introduced therein. The vessel is particularly useful to persons engaged in milking cows; but it will of course be apparent that the device is susceptible of a variety of uses which will suggest themselves to the mind. It will also be apparent that the valve is susceptible of changes in form, proportion, and minor details of construction, which may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described our invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A vessel, having a top provided with an inlet-opening and air-ports adjacent to such opening, and a valve or flap for automatically closing said opening, said valve or flap being provided with an extension for simultaneously closing the air-ports, substantially as described.

2. The combination with a vessel, of a top movably fitted thereon and made in the form of an inverted cone having its vertex removed to form a central opening, and also provided with air-ports at the side of the opening, a valve or flap consisting of a body portion for closing said central opening and an extended portion for simultaneously closing said air-ports, and means for moving said valve against its seat when the vessel is overturned, substantially as described.

3. A vessel, provided with a top having an opening and air-ports adjacent to such opening, a valve for automatically closing said opening, extensions on said valve for simultaneously closing the air-ports, and a spring for holding said valve and its extensions in such position as normally to close said apertures, substantially as described.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

LUCIAN STANEK.
HENRY AXT.

Witnesses:
BERNARD F. POST,
JOHN A. SCHRAMM.