Feb. 27, 1923. 1,447,117

P. A. BALISON ET AL

CONTAINER CLOSURE AND POURING SPOUT

Filed Nov. 22, 1921

Fig. 1.

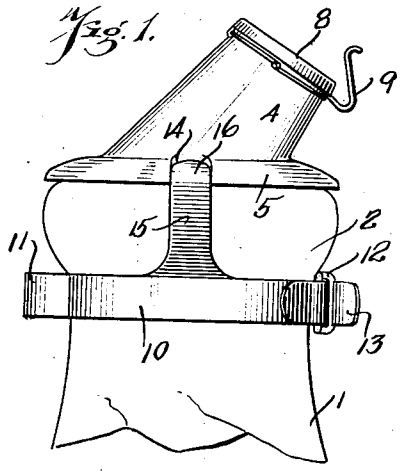


Fig. 2.

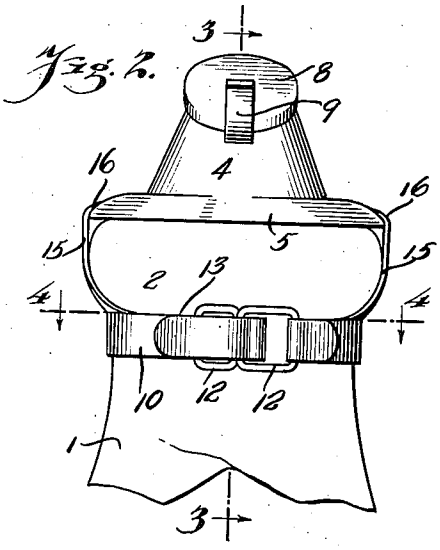


Fig. 3.

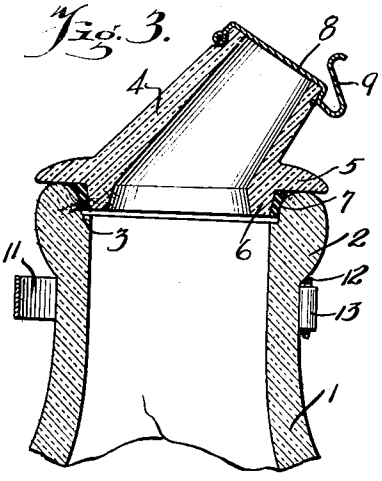


Fig. 4.

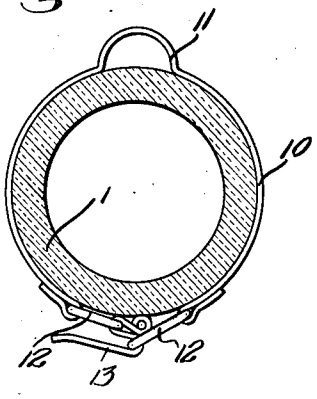


Fig. 5.

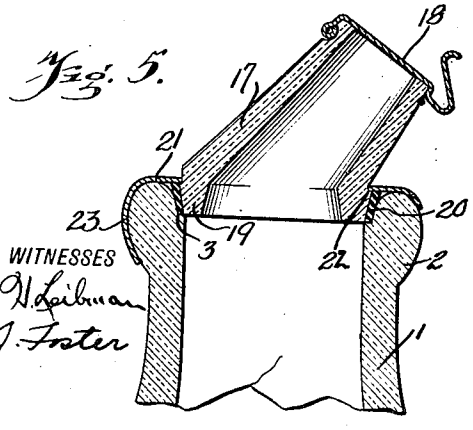
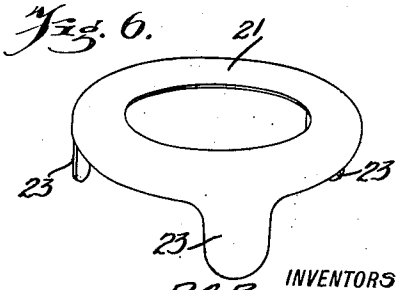


Fig. 6.



WITNESSES

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Patented Feb. 27, 1923. 1,447,117

UNITED STATES PATENT OFFICE.

PAUL A. BALISON AND IOANNES G. STATEROPOULOS, OF GRANTWOOD, NEW JERSEY.

CONTAINER CLOSURE AND POURING SPOUT.

Application filed November 22, 1921. Serial No. 517,052.

To all whom it may concern:

Be it known that we, PAUL A. BALISON, a subject of the Sultan of Turkey, and IOANNES G. STATEROPOULOS, a citizen of the United States, and both residents of Grantwood, in the county of Bergen and State of New Jersey, have invented a new and Improved Container Closure and Pouring Spout, of which the following is a full, clear, and exact description.

This invention relates to improvements in sanitary dispensing closures for milk bottles and similar vessels, an object of the invention being to provide a device of this character, which will not only prevent the entrance of extraneous matter into the milk, but which will facilitate the pouring of milk from the bottle.

A further object is to provide a device of this character, which can be very quickly applied and firmly retained in place, and a device which will be simple and practical in construction, durable and efficient in use, and capable of ready sterilization.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings:

Figure 1 is a fragmentary view of a milk bottle showing our improved attachment in applied position;

Figure 2 is a similar view taken at right angles to Figure 1;

Figure 3 is a view in section on the line 3—3 of Figure 2;

Figure 4 is a view in section on the line 4—4 of Figure 2;—

Figure 5 is a view similar to Figure 3, and illustrating a modification; and

Figure 6 is a perspective view of the retaining means for the closure shown in Figure 5.

Referring in detail to Figures 1, 2, 3 and 4 of the drawings, it will be seen that we have indicated a conventional type of milk bottle at 1. This bottle is provided with the usual rounded external flange 2 adjacent its mouth and is formed inside the mouth with the conventional shoulder 3 adapted to support a paper stopper. The invention in this case resides in the provision of an improved pouring spout and closure for the bottle, and an improved means for retaining the same in place. The pouring spout is indicated by the reference numeral 4 and is integral with a flange 5 resting upon the top of the bottle 1 and with a depending flange or shoulder 6, which projects into the bottle. A packing ring or rubber gasket 7 around the flange 6 frictionally fits within the mouth of the bottle and insures a tight connection.

It will be noted that the pouring spout 4 is located at an angle to the vertical axis of the milk bottle and is tapered toward its outer end. A hinged cover 8 closes the mouth of the spout and a suitable handle 9 is provided at the free edge of the cover for lifting the same. The cover 8 tightly fits the spout. We have shown the body portion or spout 4 formed of glass, but it will be apparent that various other materials might be used in its construction.

In order to securely retain the spout in place, a metal strap 10 is provided. This strap encircles the neck of the bottle below the flange 2 and an offset bowed portion 11 intermediate the ends of the strap lends resiliency to the same and gives sufficient spring action so that the strap will firmly grip the neck of the bottle. Links 12 are carried by opposite ends of the strap and a hook shaped member 13 pivoted on one link is engageable with the other link to securely hold the strap in gripping relationship to the neck of the bottle.

It will be noted that the flange 5 is provided at diametrically opposed points with recesses 14 and spring arms 15 carried by the strap include inwardly presented spring fingers 16 engageable in the recesses to securely grip the flange and hold the container closure against accidental removal. It will be seen that the tapered spout facilitates the pouring of milk from the bottle and that the whole closure is both airtight and sanitary.

In Figures 5 and 6, we have illustrated a slight modification, wherein a spout 17 similar to the spout 4 is provided. This spout is equipped with a cover 18 similar to the cover 8 and includes a base 19 seating within the mouth of the body and encircled by a rubber gasket 20 to insure a tight connection. Instead of the flange 5, however, there is provided a metal ring 21 which encircles the lower end of the spout and seats on a narrow shoulder 22 around the base of the spout. This ring is curved, as seen most clearly in Figure 6 to conform to the round-

ed shape of the bottle mouth and carries a plurality of depending spring fingers 23 which firmly grasp the flange 2 of the bottle and prevent the accidental removal of the bottle closing spout.

It will be apparent from the foregoing description that with either form of the device the danger of germs getting into the milk is reduced to a minimum and that both forms of the device may be conveniently sterilized after use.

Although we have illustrated certain of the preferred embodiments of our invention, it will be evident that various slight changes and alterations might be made in the general form and arrangement of the parts described without departing from the invention, and hence we do not wish to limit ourselves to the precise details set forth, but shall consider ourselves at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of the appended claims.

We claim:

1. The combination with a container and a removable cover, including a flange resting on the mouth of the container, of a spring metal strap encircling the neck of the container and being provided with an integral spring loop intermediate the ends thereof, upwardly extending curved spring fingers integral with the strap and adapted to overlie and frictionally engage the flange and means for uniting the free ends of the strap against the tension of said spring loop.

2. The combination with a container and a removable cover, including a flange resting on the mouth of the container, of a spring metal strap encircling the neck of the container, upwardly extending curved spring fingers integral with the strap and adapted to overlie and frictionally engage the flange, said strap including an offset spring loop at its intermediate portion and interengaging devices at its ends to draw said ends together against the tension of the spring loop.

3. The combination with a container and a removable cover, including a flange resting on the mouth of the container, of a spring metal strap encircling the neck of the container, upwardly extending curved spring fingers integral with the strap and adapted to overlie and frictionally engage the flange, said strap including an offset spring loop at its intermediate portion, and interengaging devices at its ends, said interengaging devices comprising eyes pivoted to the ends of the strap, and a hook pivotally connected to one of the eyes.

4. The combination with a container, of a removable pouring spout including a flange adapted to fit within the container mouth, a tapered hollow body portion integral with the flange, and located at an angle to the vertical axis of the container, a cap hinged to the mouth of the spout and adapted to be hingedly held in closed position, a handle member integral with the free edge of the cap, and means engaging the container and the spout to prevent accidental removal of the spout from the container.

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IOANNES G. STATEROPOULOS.