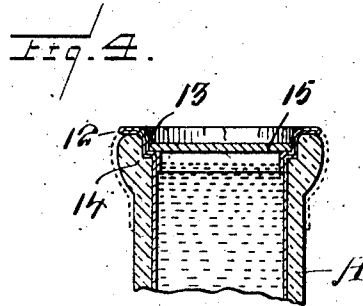
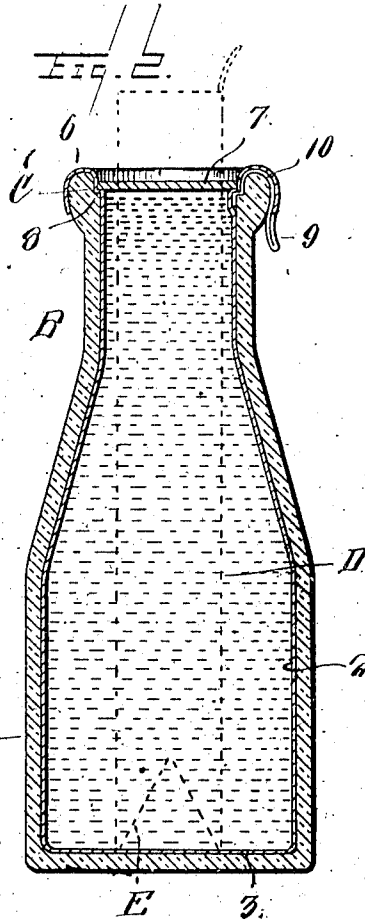
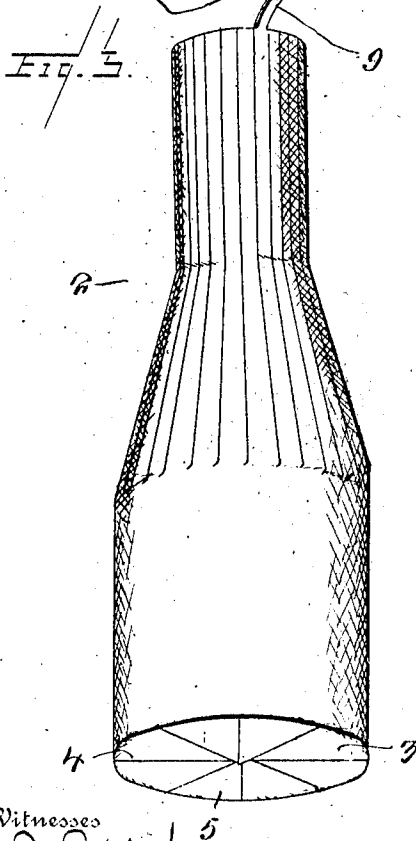
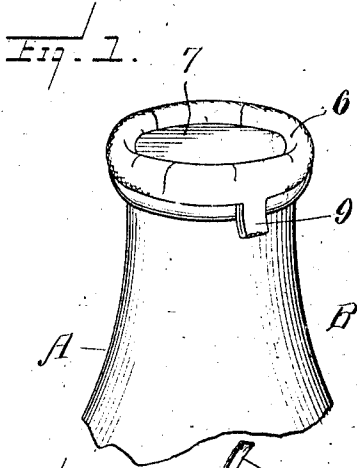


M. G. SEAMANS.
LINING FOR MILK BOTTLES.
APPLICATION FILED NOV. 26, 1911.

1,061,131.

Patented May 6, 1913.



Witnesses
E. Q. Ruppert
James H. H. H.

Inventor
Merritt G. Seamans.
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

MERRITT G. SEAMANS, OF ATLANTA, GEORGIA.

LINING FOR MILK-BOTTLES.

1,061,131.

Specification of Letters Patent.

Patented May 6, 1913.

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To all whom it may concern:

Be it known that I, MERRITT G. SEAMANS, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented new and useful Improvements in Linings for Milk-Bottles, of which the following is a specification.

This invention relates to linings for milk bottles.

10 Under the present custom the dealer requests that the purchaser of a bottle of milk thoroughly clean the bottle before it is returned and reasonably expects that the same will be done with a view of maintaining as far as possible a perfect sanitary condition of the bottle as it is passed from customer to dealer and vice versa. In view of this customary practice the bottles do not undergo such cleansing treatment that will render the same satisfactorily sanitary. It is known that if a bottle is apparently cleaned when collected by the dealer it is used subsequently without being subjected to further sterilization and in view thereof, improperly cleaned bottles containing germs or foreign matter are repeatedly used without any regard to their condition and disease is frequently spread through such neglect or carelessness.

20 It is an object of my invention to cure to the maximum the above noted objections and to provide a perfect sanitary construction of lining for the bottle, whereby the milk will be positively held against contacting with the walls of the bottle and thus held against being subjected to germs or foreign matter which have been carelessly left in the bottle when the latter is improperly washed.

30 Another object of the invention is to provide a lining for milk bottles which will include substantially a receptacle-like member that can be folded to permit of its convenient insertion in the bottle or the removal of the same therefrom.

40 Another object of the invention is to provide a foldable lining which is susceptible to expansion against the walls of the bottle under the weight of the liquid when the latter is poured into the bottle.

50 Another object of the invention is to provide a lining which will include a neck portion to be folded over the neck of the bottle and to be used as a mouthpiece when one is drinking directly from the bottle, thereby holding the lip of the user out of direct contact with the glass neck of the bottle.

A still further object of the invention is

to provide a lining which will include an unseating tab which may be manually operated to effectively unseat the wafer or closure of the bottle and to permit the wafer to be exposed for convenient withdrawal.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views: Figure 1 is a perspective view of a portion of a bottle showing the application of the lining thereto. Fig. 2 is a vertical section through the bottle and through the lining and the bottle closure, showing in dotted lines the collapsed position of the lining and in full lines the distended position of the lining. Fig. 3 is a perspective view of the lining. Fig. 4 is a section through a bottle neck showing the application of a slightly modified form of lining thereto.

While it is described that the lining is intended admirably for use in milk bottles it is said that the same can be used in similar bottles or containers for marketing beverages, such as beer.

For clearness in illustration, a milk bottle A of usual construction and configuration is shown herein. This bottle is provided with a neck B and an interiorly located wafer or closure seat C. The lining 1 is constructed of plain paper, paraffin paper or like foldable material which is preferably impervious. The lining is formed also of a single piece of material which is folded to provide the cylindrical walls 2 which may be collapsed to the dotted line position D, as shown in Fig. 2, and an integral foldable bottom 3 which may be adjusted to assume the dotted line position E in Fig. 2. The said bottom 3 is provided with the creases 4 which are radially disposed with reference to the axial line of the lining and which operate collectively to define upon the bottom substantially dart or triangular sections 5, whereby the bottom can be folded upwardly and inwardly in substantially frusto-conical form to present the downwardly inclined walls, as shown at E in the dotted lines in Fig. 2, which will be exposed wholly to the weight of the milk or liquid as the same is poured into the bottle. The vertical wall 2 of the lining can be folded throughout in any obvious manner so as to permit the lining to be readily inserted into the bottle or removed therefrom as the occasion may demand.

The walls 2 of the lining, after the milk or liquid has been poured into the bottle, are folded over the edge of the neck B, as shown at 6, so as to provide a mouthpiece which 5 may be embraced by the lips of the one drinking directly from the bottle without requiring one to bring his lips directly in contact with the walls of the neck of the bottle. A wafer or closure 7 is used herein 10 as a seal for the bottle and it is adapted to engage against the seat 8, as shown in Fig. 2. The walls 2 have a portion 9 forming a tab to underlie a portion of the disk. This tab is folded on its underside to form the 15 inner reinforcing part 10. The said tab forming portion extends downwardly against one side of the neck of the bottle and it may be used advantageously to partly lift the wafer 7 from its seat in the bottle neck and to expose the wafer for convenient 20 manipulation and removal.

In the modified form of the invention shown in Fig. 4, the lining 11 is provided at its upper end with a portion 12 which is 25 folded on itself so as to provide a part 13 which is normally disposed within the neck of the bottle and held therein and against the seat 14 of the bottle neck by the closure or wafer 15. When the wafer is removed the 30 part 13 of the lining can be folded over the neck of the bottle as shown in the dotted lines and used as a sanitary mouthpiece. It also is used as a guard to prevent the milk as it is poured from the bottle to contact 35 with foreign or objectionable matter which may be left upon the exterior portion of the neck by handling the bottle during vending or marketing thereof.

Now that the essential features of construction of the lining have been described, 40

it is said that the lining is folded into substantially elongated form and then inserted longitudinally into the bottle with the open end of the lining disposed above the plane of the neck of the bottle. The milk or liquid 45 is then poured directly into the lining and under the weight of the liquid the walls of the lining will be distended or expanded against the walls of the bottle, as shown in the full lines in Fig. 2. When the bottle is 50 returned to the dealer the old lining is removed and a new one substituted therefor. While it is proper to exercise care in cleaning the bottle even though the use of the lining disclosed is resorted to, it is obviously 55 seen that the lining, in effect, forms a guard and with its use germs left upon the bottle by a preceding user will not be communicated to the subsequent user.

I claim: 60

The combination with a bottle having a lining removably fitting therein, and a wafer-like closure closing one end of the bottle and embraced by the walls of the lining, of a portion of the lining extending 65 above the plane of the closure and then laterally over the neck of the bottle and then downwardly against the outside of the neck and provided with a tab folded on itself and terminally underlying the downwardly-extending 70 portion of the lining and interposed between said portion and the neck and then terminally extending into the neck to underlie the closure.

In testimony whereof I affix my signature 75 in presence of two witnesses.

MERRITT G. SEAMANS.

Witnesses:

JAMES KOEHL,
BENNETT S. JONES.