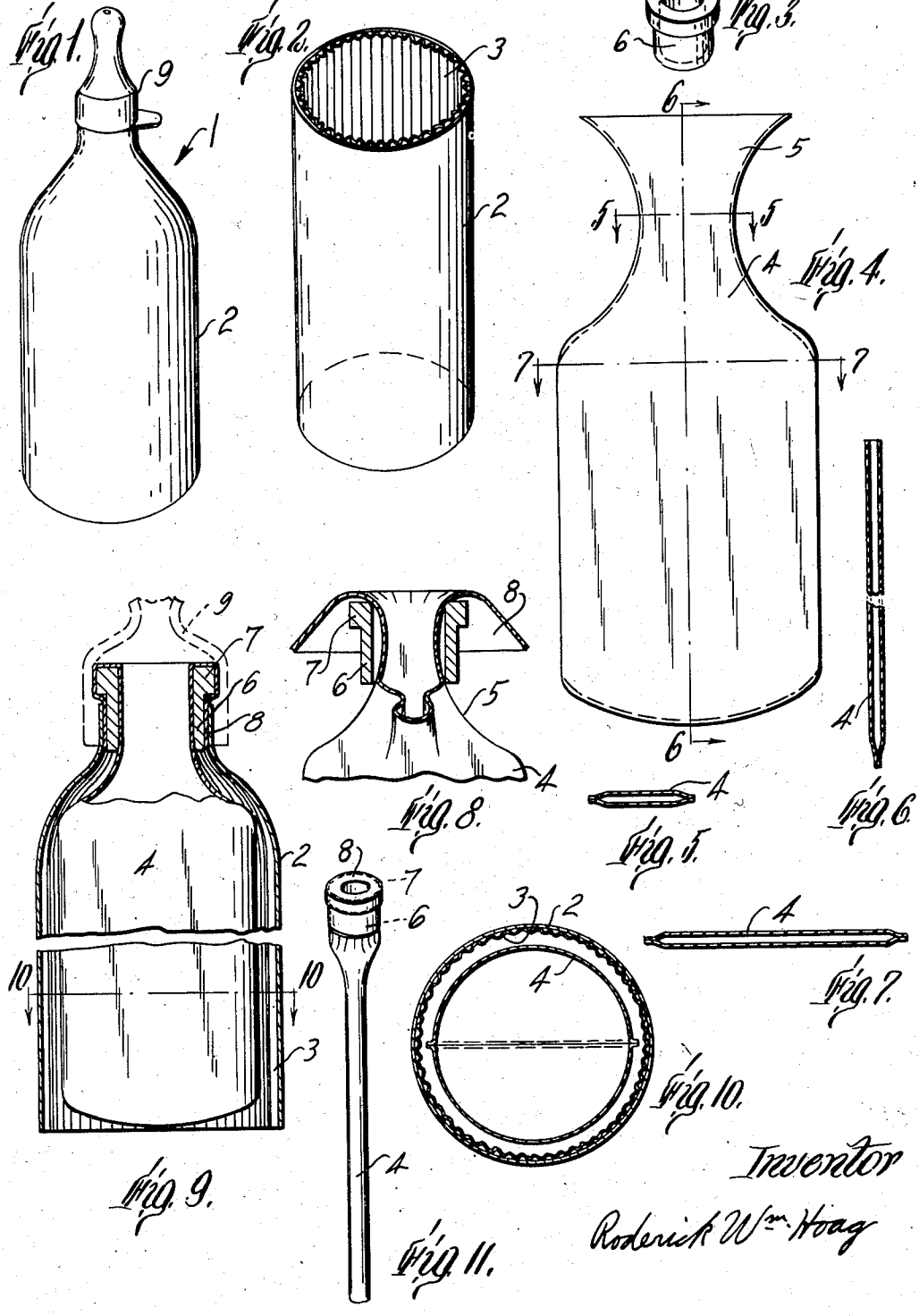
March 11, 1958 R. W. HOAG 2,826,324

NURSING BOTTLE

Filed Nov. 5, 1954



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United States Patent Office 2,826,324
Patented Mar. 11, 1958

2,826,324

NURSING BOTTLE

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Application November 5, 1954, Serial No. 467,053

1 Claim. (Cl. 215—11)

The present invention relates to improvements in nursing bottles and has reference more particularly to a bottle that is adapted for a single use and then discarded.

One of the important objects of the present invention is to provide a nursing bottle that is of a collapsible nature so that it can be packaged and shipped very easily.

Another important object is to provide a nursing bottle that includes an outer casing having an inner corrugated liner that will serve as an insulating medium for the body of the bottle, thereby maintaining the temperature of the contents of the bottle from changing quickly.

A still further object is to provide a nursing bottle of the above mentioned character wherein the casing is open at its bottom to form an upright support for the bottle while the latter is being filled.

A still further object is to provide a nursing bottle that will be inexpensive and simple in its manufacture and sale.

Other objects and advantages will become apparent during the course of the following description.

In the accompanying drawing forming a part of this specification and in which like reference characters designate corresponding parts throughout the several views:

Figure 1 is a perspective view of the complete nursing bottle with a nipple attached to the mouth of the bottle.

Figure 2 is a perspective view of the cylindrical outer casing forming a salient part of the present invention.

Figure 3 is a perspective view of the flanged sleeve.

Figure 4 is a side elevation of the inner bag unit.

Figure 5 is a transverse section taken on the line 5—5 of Figure 4.

Figure 6 is a vertical sectional view taken on the line 6—6 of Figure 4.

Figure 7 is a transverse section taken on the line 7—7 of Figure 4.

Figure 8 is a fragmentary view showing the flanged sleeve disposed around the open upper portion of the bag unit.

Figure 9 is a vertical sectional view through the assembled bottle.

Figure 10 is a transverse section taken on the line 10—10 of Figure 9, and

Figure 11 is an edge elevation of the bag unit with the flanged sleeve attached thereto.

In the drawing, the numeral 1 designates generally my improved nursing bottle construction, the same comprising an outer cylindrical casing 2 formed of any suitable material, preferably cellophane. This casing is open at its respective ends as clearly illustrated in the drawing.

A corrugated liner 3 is provided on the interior of the casing as more clearly shown in Figure 2 and the purpose of this liner will be presently described. The vertically

corrugated liner may be united to the inner surface of the cellophane casing 2 by an adhesive. Further, the liner extends for the full height of the casing.

Forming a salient part of the bottle construction is the flexible bag member 4 formed of any suitable material such as plastic or the like. This bag is open at its top and is normally flat as shown in Figures 5, 6 and 7. The open upper end portion of the bag is flared as indicated at 5, for a purpose, also to be presently described.

A sleeve 6 is formed with an outwardly extending flange 7 at its top. The flared upper end portion of the bag 4 is disposed through the sleeve 6 and the outer extremity 8 of the flared portion 5 is disposed over the flange 7 and downwardly against the outer face of the sleeve 6 and united thereto in any suitable manner so that the flanged sleeve coacts with the open upper end of the bag to provide a mouth therefor.

In assembling the bottle, the flexible bag and its attached sleeve are disposed within the outer casing 2 and the upper portion of the casing is restricted and sealed around the outer face of the sleeve 6 and the portion 8 of the bag that surrounds the sleeve. This is clearly illustrated in Figure 9 of the drawing.

With the parts thus assembled, the bag may be filled with a suitable quantity of powdered milk through its mouth, after which water is added, also by pouring the same into the bag through its mouth. The bottle may be shaken to thoroughly mix the contents. A nipple 9 may be placed over the mouth of the bottle as shown in the drawing.

While my improved, disposable, collapsible nursing bottle is intended principally for feedings made from powdered milk or special formulas in powdered form, it may, of course, be used for feedings of whole milk or other liquid.

When the bag is filled it will of course be extended and touch the corrugated liner 3. This liner serves to insulate the bag so that the contents may be kept warm or cold for a longer period, thus keeping the temperature of the contents of the bottle from quickly changing.

By having the lower end of the casing open and extending slightly below the bottom of the bag, the casing will serve as an upright support for the bottle while the bag is being filled.

After the bottle has been used once in feeding a child, the same may be discarded.

It will thus be seen from the foregoing description that I have provided a single use nursing bottle and due to its simplicity the same can be manufactured and assembled at a very low cost. Further, the bottle structure is collapsible for easy packaging and shipping.

While I have shown the preferred embodiment of my invention, it is to be understood that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claim.

Having thus described my invention, what I claim is:

A nursing bottle adapted for a single use, comprising a flexible and expansible inner bag having a cylindrical body portion, a restricted neck portion and an outwardly flared extremity, a cylindrical sleeve having a radially outwardly projecting flange at one end thereof, said restricted bag neck portion extending through said sleeve from the end thereof opposite said flange and secured to the inner wall thereof, and said outwardly flared extremity being folded outwardly over said sleeve and being in

engagement with the outer end thereof, the peripheral surface of said flange, the lower edge of said flange and the outer cylindrical surface of the sleeve and being secured thereto, and an open ended outer cellophane casing surrounding said inner bag and being provided with a corrugated liner adhesively secured thereto, said casing having a restricted neck portion surrounding the portion of said bag engaged with the outer cylindrical surface of said sleeve and being secured thereto.

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