Aug. 31, 1937. L. T. STERINO 2,091,723

REFRIGERATING BOTTLE

Filed Feb. 1, 1937

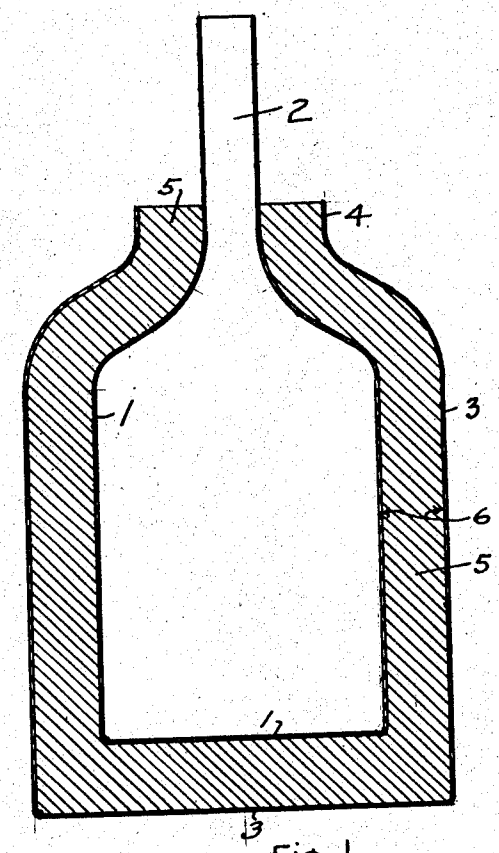


Fig. 1.

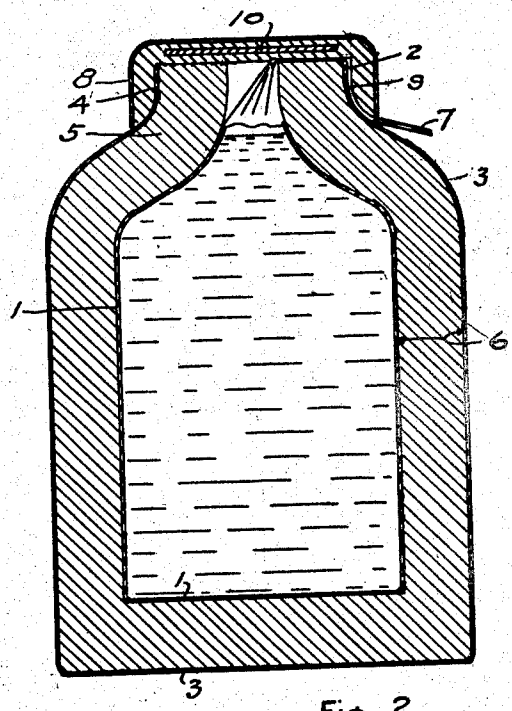


Fig. 2.

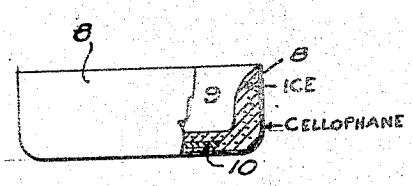


Fig. 3.

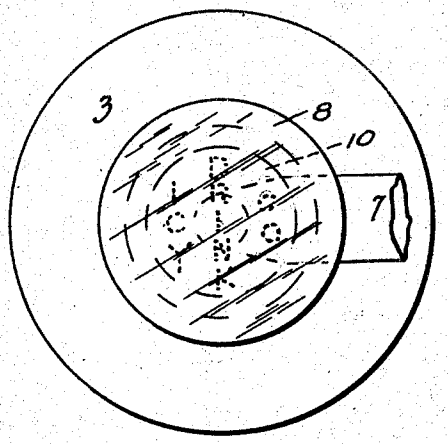


Fig. 4.

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REFRIGERATING BOTTLE

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5 Claims. (Cl. 62—143)

My invention relates to containers adapted to hold a beverage, and to keep it cool for a considerable length of time, so that it may be prepared in one place and used, after the lapse of some time, in another place.

The objects of my invention are, first, to provide such a bottle of cheap materials so that when once used it may be discarded; second, to provide a bottle which may be collapsed, disassembled, folded or rolled and preserved for future use; third, to provide a bottle which may be shipped flat in bundles from the factory to the dealer or consumer; fourth, to construct such a bottle of tough, pliable material so that it can not be readily broken, even with rough handling; fifth, to provide an ice-enclosed bottle which, when empty, may be collapsed and removed from the ice; sixth, to provide an integral closure for such a bottle; seventh, to provide a seal for such bottle closure which may be broken away without damaging the bottle or the closure; and eighth, to provide a means for enclosing an advertising or notice card within the bottle closure, and yet out of contact with the contents of the bottle.

I attain these and other objects by the devices, and arrangements illustrated in the accompanying drawing, in which—

Fig. 1 is a vertical cross-section, showing the bottle assembled, frozen, and ready to receive the beverage; Fig. 2 is a similar view with the beverage in the bottle and the closure applied and sealed thereto; Fig. 3 is a side elevation, partly in section of the closure cap; and Fig. 4 is a plan view of the sealed container.

Similar numerals of reference refer to similar parts throughout the several views.

My improved refrigerating bottle comprises two separate containers, one within the other, and separated by a space filled with frozen water or other suitable refrigerant. Each of these containers is made of a very thin, water-resistant, tough, pliable, transparent material such as "cellophane".

Referring to the drawing, it will be seen from Fig. 1, that the inner bottle 1 is provided with a long, contracted, tubular neck 2, and that the outer container 3 is provided with a short neck 4. In certain cases the neck 4 of the container 3 may be folded inwards to cover the ice 5 in the neck 4, while in other cases the ice in the neck may be left exposed in order to freeze the hereinafter described cap thereto to seal the closure of the bottle. The space 6 between the bottle 1 and the container 3 is filled with ice, preferably originally frozen in the space, though cracked ice chips may be used if desired. The long neck 2 of the inner bottle 1 extends from the ice in the outer container 3 and, when the bottle has been filled with the beverage, this neck 2 is collapsed and folded down to lie outside of the short neck 4 of the outer container 3. A cap of ice (Fig. 2) is then frozen over the neck 4 of the outer container 3 to close the bottle, such cap being of such size that the tip or end of the neck 2 protrudes from under the said cap, thereby providing a tab 7 which may be grasped and lifted to break the ice cap off from the bottle and thus unseal and open the bottle.

The ice cap comprises a cup 8 made of the same material as the bottle 1 and the outer container 3, inside of which a cup 9 made of ice is formed. This outer cup 8, containing the inner cup of ice 9, is inverted and placed over the short neck 4 of the outer container 3 and on top of the folded neck 2 of the bottle 1, and is frozen in place, thereby effectively sealing the bottle 1.

If desired, a small card 10 may be frozen in the bottom of the outer cup 8, and said card may have suitable printed matter thereon, readable through the bottom of the cup (Fig. 4).

After the bottle 1 has been emptied of the beverage a portion of the ice may be removed from the neck 4 and then the bottle 1 may be collapsed and drawn out of the container 3; then the remainder of the ice may be broken up and removed from the container, by pressing on the said container, and both the bottle 1 and the container 3 may be folded or rolled and kept for future use.

It is, of course, to be understood that the invention as illustrated and described herein is in the preferred form but that many variations may be made therein without departing from the spirit of my invention as outlined in the appended claims; the words and terms in the description and claims being chosen for convenience but are intended to be as generic in their meaning as the art will permit.

Having, therefore, described my invention what I claim and desire to secure by Letters Patent is:—

1. In a refrigerating bottle the combination of an inner bottle of pliable material and adapted to contain the liquid to be cooled; an outer container enclosing said inner bottle; an ice jacket between said outer container and said inner bottle; the neck of said inner bottle extending above the ice jacket and being folded down over said outer container; and a cap closing said folded bottle neck.

2. A refrigerating bottle as set forth in claim 1, wherein said cap comprises an inverted cup of ice and is frozen to the ice in the neck of said outer container.

3. A refrigerating bottle as set forth in claim 1, wherein said cap comprises an inverted cup of transparent material enclosing an inverted cup of ice; together with a card frozen in the said ice cup and readably visible through said transparent cup.

4. A refrigerating bottle as set forth in claim 1, wherein said folded bottle neck extends below said cap to form a tab adapted to remove the cap and open the bottle.

5. A refrigerating bottle as set forth in claim 1, wherein said cap comprises an inverted cup of ice and is frozen to the ice in the neck of said outer container; and wherein said folded bottle neck extends below said ice cap to form a tab adapted to remove the cap and open the bottle.

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