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E. RÜDIGER

3,273,704

CONTAINER FOR THE PREPARATION OF BATH SALTS

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2 Sheets-Sheet 1

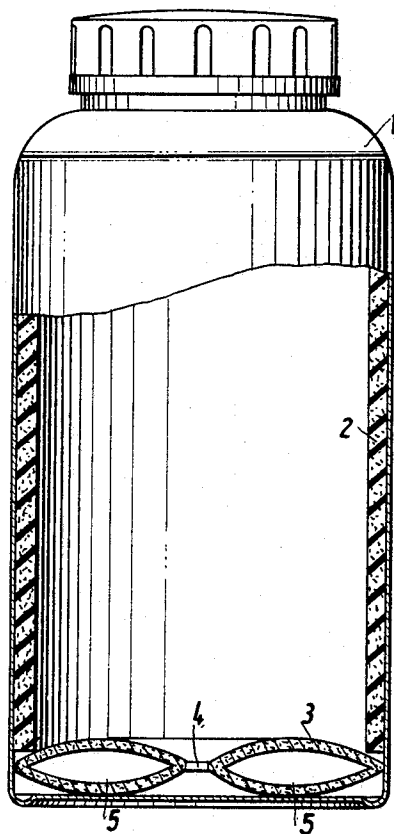


Fig. 1

Inventor:
Ernst Rüdiger
BY

H. Edward Western

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Fig. 5

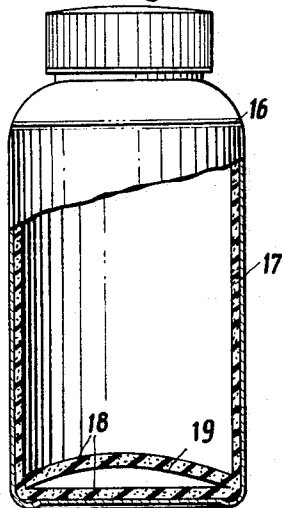


Fig. 2

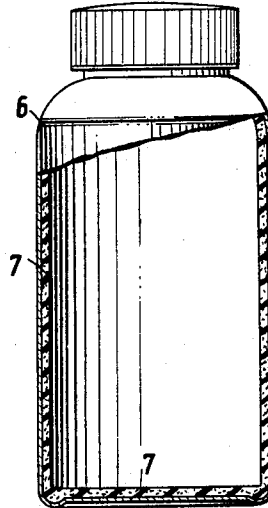


Fig. 3

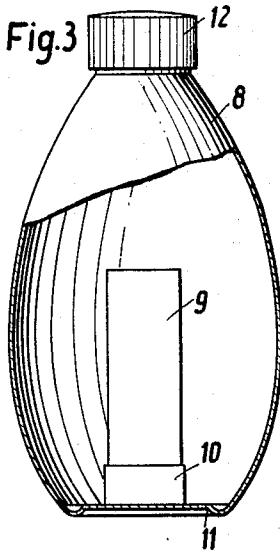
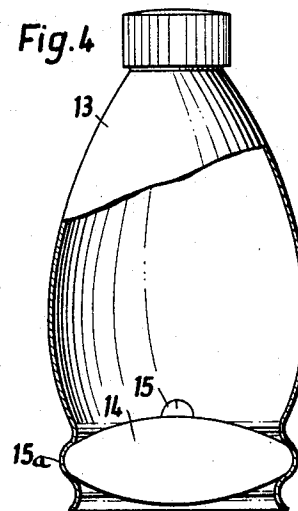


Fig. 4



Inventor:
Ernst Rüdiger

BY

H. Edward Mesterni

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3,273,704 CONTAINER FOR THE PREPARATION OF BATH SALTS

Ernst Rüdiger, Schonburgstrasse 12,
Berlin 42, Germany

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11 Claims. (Cl. 206—47)

The invention relates to novel containers for the preparation of bath salts. More particularly, it relates to containers with the aid of which the user can prepare his own bath salts, in quantities sufficient for a single bath, if desired, and in combinations to suit his own taste.

As is known, commercial bath salts usually consist predominantly of common salt (NaCl) or of a mixture of that salt with baking soda (sodium bicarbonate). This salt or salt mixture serves as a carrier for perfumes, foaming agents and other materials, e.g., pharmacologically active substances, and for mixtures thereof.

The invention is based on the premise that common salt and also baking soda are available in every household and devises a container which permits an intimate mixing of the salt with the desired bath additives which may consist of perfumes, colorants, foaming agents (so-called "bubble baths"), pharmacologically active ingredients and their mixtures.

It is an object of the invention to devise a container which can be used by anybody without special training for mixing salt with the additives named whereby the correct proportions of additives to salt are assured.

Another object of the invention is a container for the preparation of bath salts comprising a closable hollow body whose inside is provided with a liner or similar device which contains the bath additives in concentrated form and which is of a consistency suitable to assure the discharge of fine particles and uniform distribution of these particles on and/or in the bath salt present in the hollow body upon a shaking motion exerted thereon.

A particularly suitable embodiment of such a hollow body is a bottle of a size sufficiently large to accommodate a quantity of the bath salt to serve for a single bath or else for a plurality of such baths. The salt introduced in said bottle should use approximately half the space of the bottle, and the latter is then closed by means of any appropriate closure, i.e., a screw top, stopper, or in any other convenient manner.

The inside of the container is provided with a porous body which houses the bath additives, e.g., essential oils, herb extracts, etc. Furthermore, powdered concentrates may be inserted in the container, for instance in a porous pouch which, e.g., may be disposed on the bottom of the container. For instance, a bottle, provided with a porous liner or a similar porous internal device housing the materials named above and having a porous pouch containing solids disposed on its bottom, is filled with the required amount, up to approximately half its capacity, of salt, the bottle closed and shaken in a backward and forward motion several times. Thereby the salt repeatedly hits the porous internal device and also the pouch. A portion of the powdered contents of the pouch penetrates the walls and mixes with the moving salt. Simultaneously, the salt grains, during contact with the porous internal device, accept a part of the essential oils or other contents. After several shakes of the bottle the salt is uniformly enriched with the bath additives and thus constitutes a complete bath salt. It is understood that the pouch also may be disposed within the closure of the bottle, or even on its side, if desired and practical, without diminishing the effectiveness of the mixing process.

The user of a container according to the invention for

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the preparation of bath salts can choose the concentration of the desired bath additive in a simple manner, i.e., by shaking the container filled with salt either for a prolonged period of time or else only a few times.

In this manner, the container can be employed for a very long time. The consumption of the agents extracted becomes evident, e.g., optically, when a coloration of the bath water no longer occurs or when no more foam forms therein. When perfumes or other materials of characteristic odor are present, the lack of such odor likewise indicates that the contents of the bottle are spent.

Further details and advantages of the mixing container according to the invention will now be explained with reference to the accompanying drawings which show several preferred embodiments. However, it should be understood that these are given merely by way of illustration, and not of limitation, and that numerous changes may be made in the details without departing from the spirit and the scope of the invention as hereinafter claimed.

In the drawings,

FIG. 1 is a side view, partly in section, of a container provided with a compressible hollow body at its bottom.

FIG. 2 is another embodiment, showing a container in side view, partly in section, having a liner along its walls and bottom.

FIG. 3 is a side view, partly in section, of a container provided with a free-standing insert, attached solely to the bottom of the container.

FIG. 4 is a side view, partly in section, of an embodiment representing a bottle clad with a porous wall and bottom liner and a pouch on the bottom, connected to the bottom part of the liner.

FIG. 5 is a side view, partly in section, of a mixing bottle provided with a porous wall liner and a pouch, connected to the liner, at the bottom of the bottle.

Referring now to these drawings, mixing bottle 1 has a porous liner 2 which, for instance, may consist of a viscous sponge material or any other suitable spongy substance. The sponge is impregnated with a fragrant substance, e.g., an essential oil or an herb oil. Furthermore, an annular pouch 3 is disposed on the bottom of the bottle provided with a passage 4. Pouch 3 consists of particularly finely porous material. The hollow space 5 within pouch 3 is filled with a finely powdered substance consisting of colorants, e.g., fluorescein, and/or foaming agents, such as saponin or a suitable detergent. Body-building, pharmacologically active substances also may be present in pouch 3 because, upon pouring the prepared bath salt out of the bottle, the powder concentrates, knocked out during preparation and coming to lie under pouch 3, can trickle out.

In the embodiment shown in FIG. 2 the entire inner wall of the mixing bottle 6 is lined with a solid layer 7. This layer 7 can be cast from a dry substance carrying an essential oil or else of soap which acts as a carrier for the concentrates, such as odorants, colorants, pharmacologically active substances, and other materials or their mixtures. Casting of the liner, of course, can be carried out by heating a suitable quantity within the bottle or preheating it and introducing it into the bottle, swirling the same and allowing the liner to cool and set. When the layer 7 is of soap, it is opportune to employ a porous soap which offers less resistance to abrasion when the bath salt is prepared.

The third embodiment, shown in FIG. 3, provides a free-standing body 9 within a mixing bottle 8. Body 9 may be made of soap and contain the desired concentrates, but also may consist of molten crystals or cold-pressed powders. Body 9 is disposed in a holder or mounting 10 which, in turn, may be disposed either on bottom 11 of

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bottle 8 or in closure 12. Furthermore, body 9 can be shaped in such a manner as to offer the largest amount of surface possible, e.g., by shaping the surface in wave form, by making its cross section star- or cross-shaped, by hollowing body 9 as an open tube, or by a combination of such measures.

FIG. 4 presents an embodiment wherein a mixing bottle 13 is provided, at its bottom, with a compressible hollow body 14 equipped with a lip valve 15. Hollow body 14 may contain a highly concentrated liquid bath additive. The body 14 can either be rigidly connected to the bottle 13 or else can be inserted in corresponding recesses 15a. In the latter case, the bottle 13 may be open on the bottom.

In FIG. 5 the mixing bottle 16 contains a porous liner 17 which has a porous and elastic bottom portion 18 which together form a hollow space 19. The latter is filled with a finely powdered mixture of a composition as repeatedly named above, whereas the liner 17 is saturated with odorants, e.g., essential oils.

It should be pointed out that the constructional details can be varied over a wide range, and that the additives also can be varied over and above the combinations hereinbefore described. The advantage of the invention of providing a simple, inexpensive and readily manipulated container for preparing bath salts in a do-it-yourself manner thereby is not restricted or diminished.

I claim as my invention:

1. A container for preparing at least one dose of a bath salt comprising, in combination, a hollow body; a porous solid substance attached therein, said substance being impregnated with and, when said body is vigorously shaken, yielding liquid ingredients of a bath salt; and a closure for said hollow body; said substance, upon partially filling said body with a salt, closing and repeated shaking, releasing its impregnants which are absorbed by said salt thus forming a dry bath salt; the intensity and number of shakes determining the quantity of impregnants released and thus the number of doses of said bath salts which can be prepared.

2. A container for preparing at least one dose of a bath salt comprising, in combination, a bottle; at least one porous solid substance attached therein, said substance being impregnated with and when said bottle is vigorously shaken, yielding liquid ingredients of a bath salt; and a closure for said bottle; said substance, upon partially filling said bottle with a salt, closing and repeated shaking,

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releasing its impregnants are absorbed by said salt thus forming a dry bath salt; the intensity and number of shakes determining the quantity of impregnants released and thus the number of doses of said bath salts which can be prepared.

3. The container as defined in claim 2, wherein said porous substance is in form of a liner along the bottle walls.

4. The container as defined in claim 3, wherein said liner is elastically compressible in the manner of a sponge.

5. The container as defined in claim 3, wherein the wall liner extends about the bottom of said bottle as an integral unit.

6. The container as defined in claim 2, wherein, in addition, a pouch filled with further solids is disposed near the bottom of said bottle.

7. The container as defined in claim 6, wherein said pouch is finely porous, yielding said solids through its pores.

8. The container as defined in claim 6, wherein said pouch is elastically compressible and provided with a valve which opens under the pressure of the shaking salt and releases its contents.

9. The container as defined in claim 2, wherein said solid substance is a free-standing body attached solely by one end, and protruding into the interior of said bottle substantially concentrically.

10. The container as defined in claim 9, wherein said body is a hollow tube.

11. The container as defined in claim 9, wherein said body is a solid rod.

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THERON E. CONDON, *Primary Examiner*.

J. M. CASKIE, *Assistant Examiner*.