

[54] MULTICOMPARTMENT DISPENSER

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Related U.S. Application Data

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[52] U.S. Cl. .... 222/94, 222/136

[51] Int. Cl. .... B65d 35/24

[58] Field of Search ..... 222/548, 553, 94, 212, 222/554, 42

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UNITED STATES PATENTS

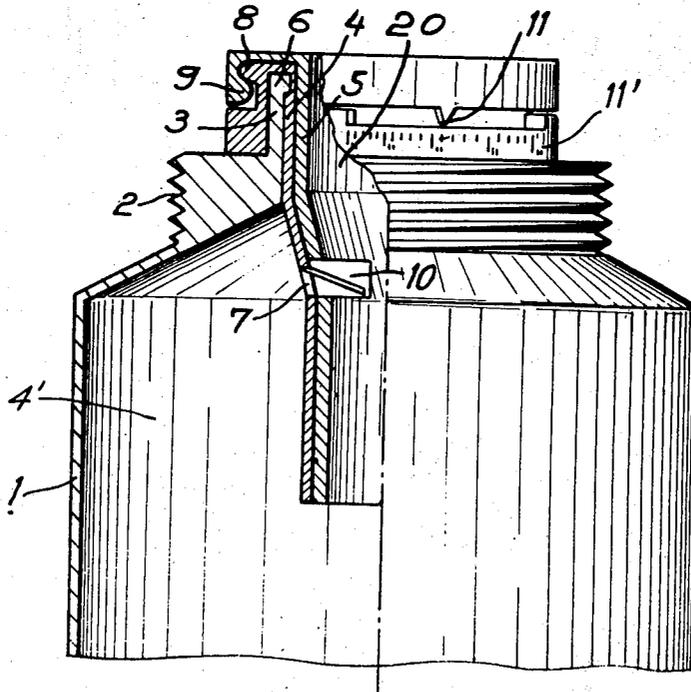
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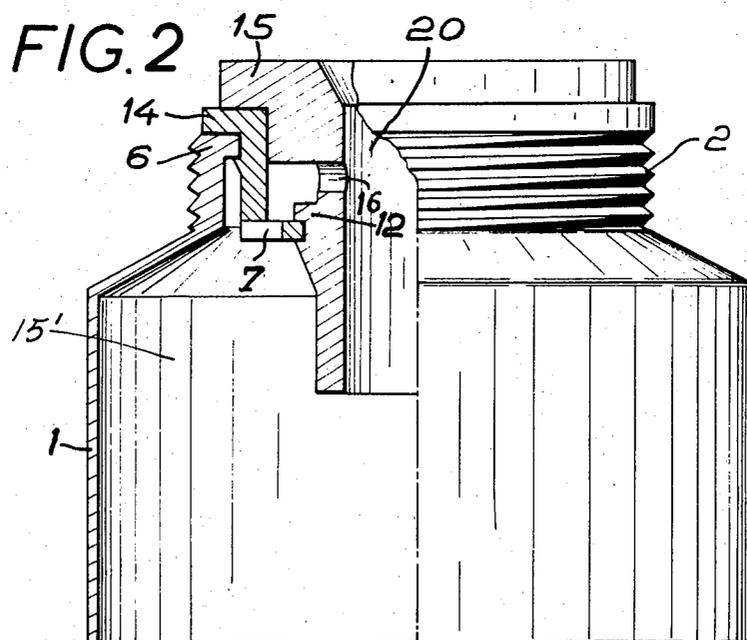
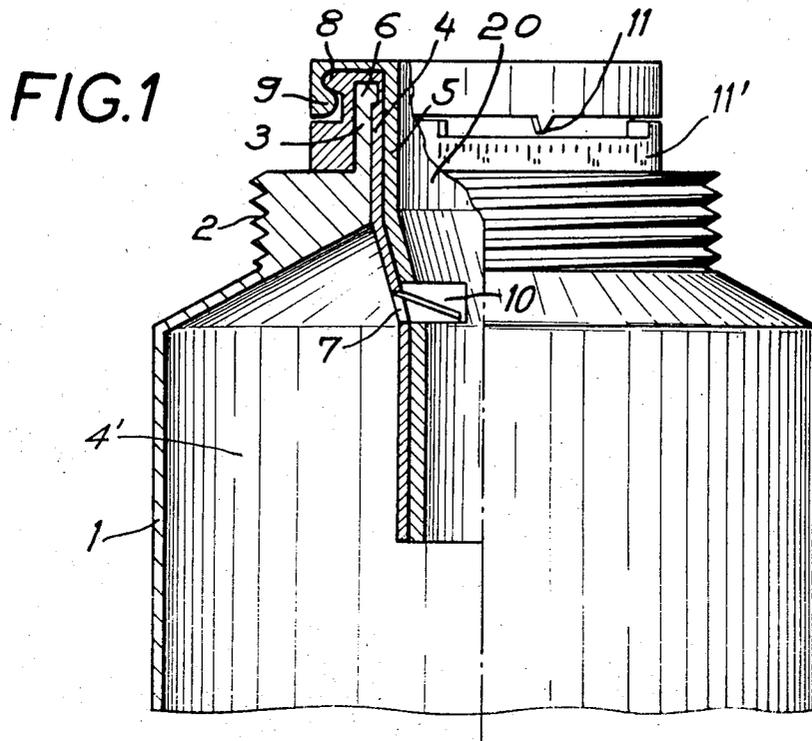
Primary Examiner—Stanley H. Tollberg

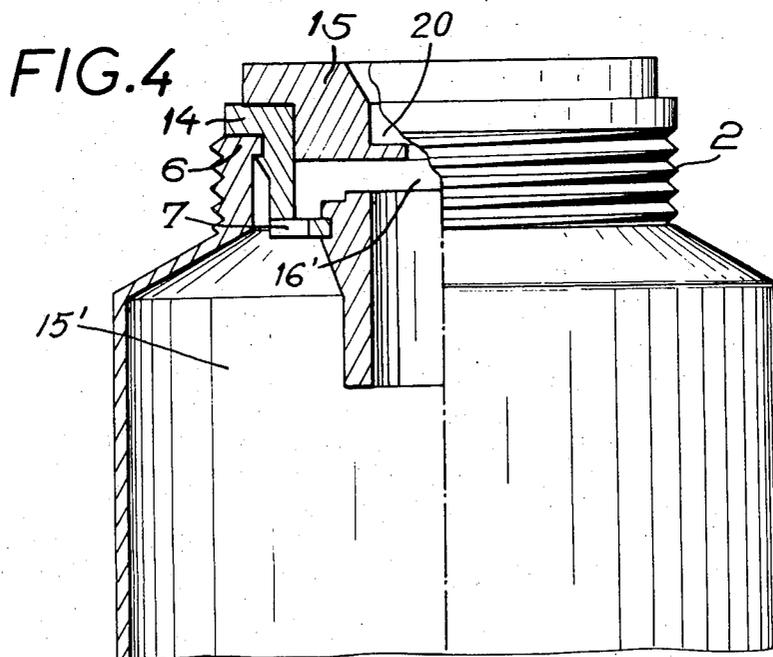
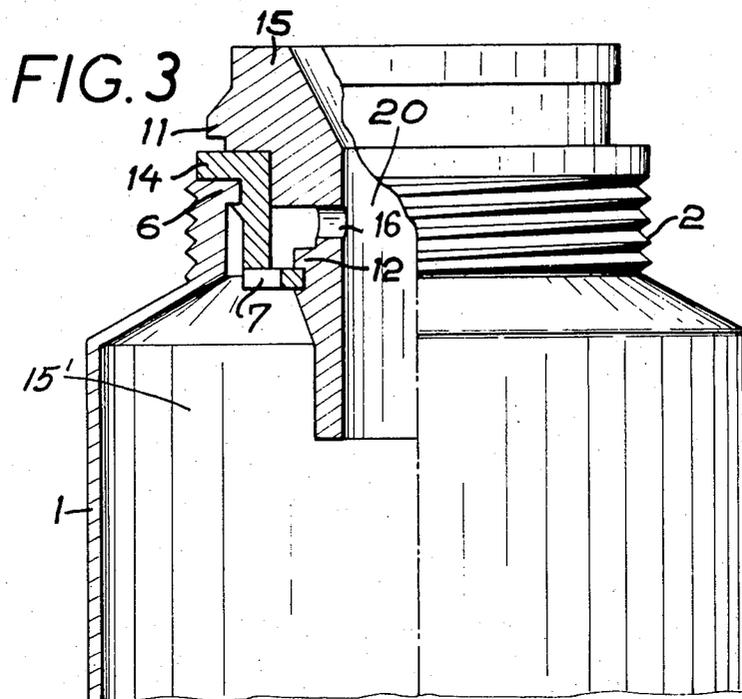
[57] ABSTRACT

A multicompartment dispenser for dispensing paste-like substances including a container having an annular compartment supported therein and a controlled variable aperture communicating the compartment to the container in a manner permitting a controlled proportional mix of the two paste-like substances prior to discharge from the dispenser.

12 Claims, 9 Drawing Figures







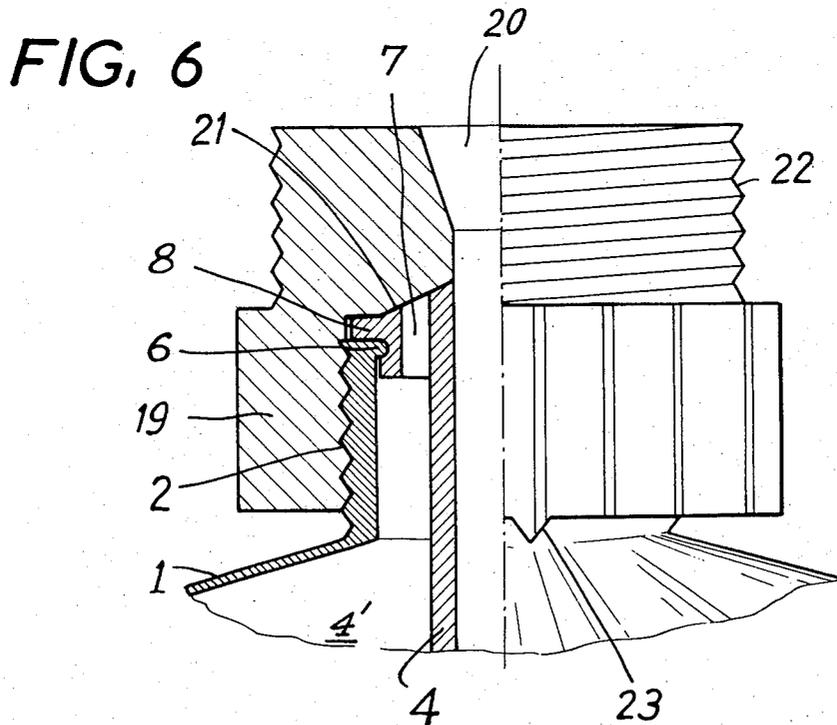
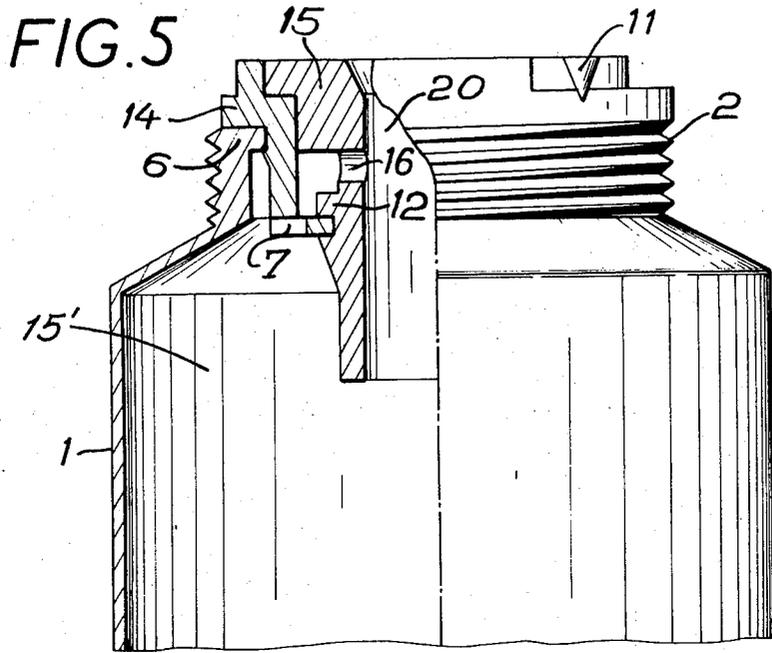


FIG. 7

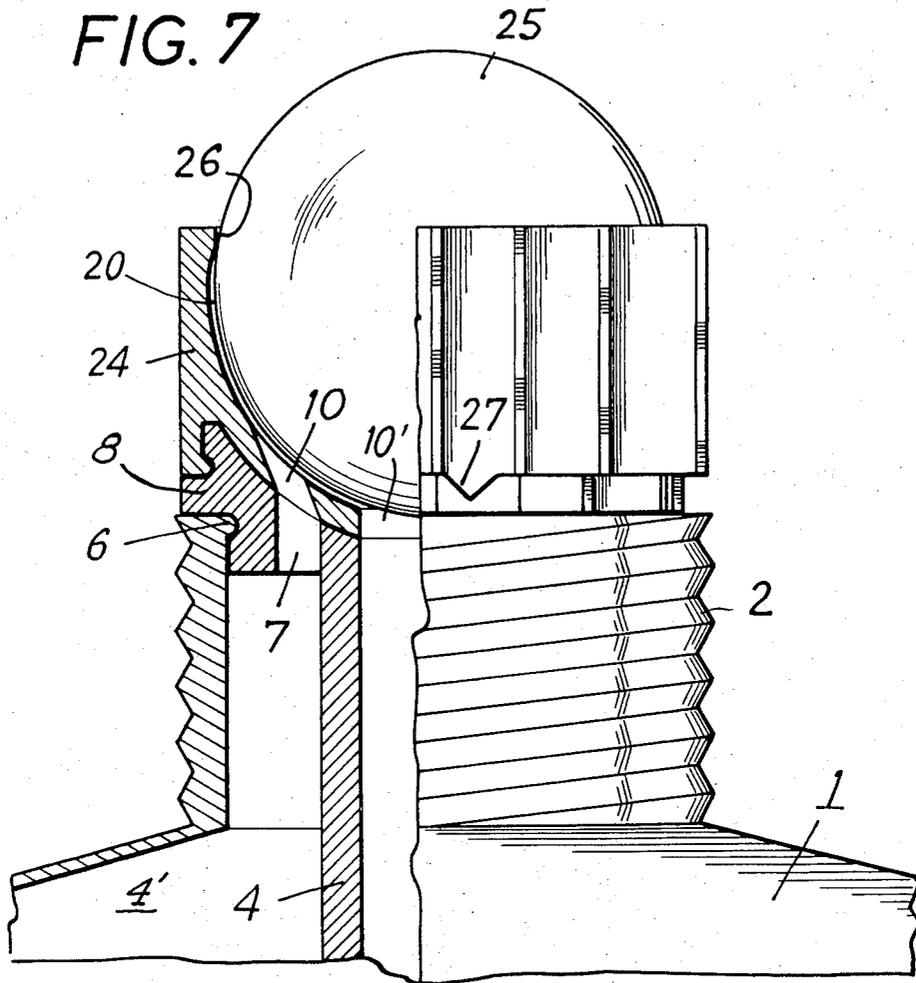


FIG. 8

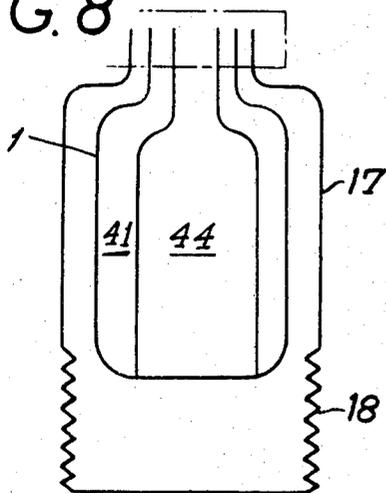
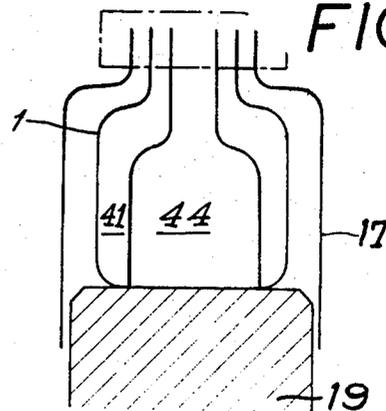


FIG. 9



**MULTICOMPARTMENT DISPENSER**

This is a Continuation-In-Part of our Continuation-In-Part Application Ser. No. 71,513 filed Sept. 11, 1970 abandoned, and entitled "Dispenser For Paste-Like Substances," which is a Continuation-In-Part Application of our Application Ser. No. 840,288 filed July 9, 1969 abandoned, and entitled "Flexible Container For Paste-Like Substances."

**BACKGROUND OF THE INVENTION****1. Field of the Invention**

The present invention relates to a dispenser for paste-like substances.

**2. Description of the Prior Art**

In many applications, such as in medicine, cosmetics, and the food industry, there is a need for a dispensing device in which different paste or paste-like products can be simultaneously stored in different compartments of a single container, and which could then be preferably extruded from the container in a form where the individually stored products are already mixed and containing variable and controlled proportions of the dispensed mixed products held in the dispensing device.

The same problems were encountered in the need for storing liquids separately and then combining such liquids upon their discharge for use of the same. Several devices were developed as solving the problem as to the use of liquids, but none of these solutions proved acceptable when used with paste-like substances as the structures for dispensing liquids subjected the paste-like substances to such a torturous or restricted path of discharge from the containers that the use of the same was found to be highly impractical and an unworkable solution to the problem of mixing and dispensing multiple paste-like substances.

Thus, use of prior art devices developed for dispensing of liquids did not provide the solution as to the dispensing of a multiplicity of paste-like substances from a single dispenser in a manner permitting control over the quantity and proportion of the mix of the substances prior to dispensing.

**SUMMARY OF THE INVENTION**

This invention solves the problems encountered by prior art devices and provides for the simultaneous dispensing of two or more paste-like substances from a single dispenser, such substances being stored separately in the dispenser and properly mixed together just before discharge from the dispenser, with such discharge being in the form of a ribbon or cord of paste of controlled variable composition. This is accomplished by a single dispenser having two or more separate compartments with a mixing chamber intermixing the substances from the compartments, the proportion of mixture being readily controlled by varying the size of the discharge opening from one or more of the compartments into the mixing chamber so as to regulate the flow of the paste in one compartment relative to the flow of paste from the other compartment.

The present invention also allows for the dispensing of two separate paste-like substances from a single dispenser in the form of a mixture or laminate similar to that described above, but with the provision of a ball-type applicator in the dispensing mixture chamber for more evenly applying the mixed composition.

**BRIEF DESCRIPTION OF THE DRAWINGS**

In the accompanying drawings forming a part of this specification, and in which like reference characters are employed to designate like parts throughout the same:

FIG. 1 is a fragmentary side elevational view in partial section illustrating the discharge outlet end portion of a dispenser employing a first embodiment of the invention;

FIG. 2 is a view similar to FIG. 1 but illustrates a second embodiment of the invention;

FIG. 3 is a view similar to FIG. 2 and illustrates a modification of the second embodiment of the invention;

FIG. 4 is a view similar to FIG. 1 and illustrates a third embodiment of the invention;

FIG. 5 is a view similar to FIGS. 2 and 3 and illustrates a further modification of the second embodiment of the invention;

FIG. 6 is a view similar to FIG. 1 and illustrates a fourth embodiment of the invention; and

FIG. 7 is a view similar to FIG. 1 and illustrates a fifth embodiment of the invention; and

FIGS. 8 and 9 are diagrammatic side elevational views illustrating arrangements for discharging the paste from the dispenser.

**DESCRIPTION OF THE PREFERRED EMBODIMENTS**

In the drawings, wherein for the purpose of illustration are shown preferred embodiments of the invention, and referring to the embodiment of FIG. 1, there is illustrated a dispenser comprising a flexible container 1 including a relatively rigid neck portion 2 having a discharge opening extending therethrough. The outer peripheral surface of the neck portion 2 is threaded to enable a cap (not shown) to be threaded thereon. The neck portion 2 includes a cylindrical upwardly projecting member 3 generally surrounding the discharge opening and having a beading or rib 6 integrally formed at the top end of member 3. To provide the desired flexibility, the container 1 is preferably constructed of aluminum tubing or a flexible plastic material.

An inner cylindrical sleeve 4 is inserted within the container 1 and has its top portion attached to the cylindrical member 3 by a collar portion 8 formed integral with the inner sleeve, with the sleeve projecting into the container 1 to form a partition therein thus defining an annular compartment 4' between the inner sleeve 4 and the wall of the container 1, the chamber 4' being open at the bottom for communication with the ingredients in the remaining portion of the container 1. The beading or rib 6 serves to hold the inner sleeve 4 stationary in relation to the container 1 thereby preventing the inner sleeve from being pushed out of the container or turned in relation thereto while the ingredients from the container 1 and compartment 4' are being dispensed from the dispenser.

A discharge outlet and a mixing chamber 20 are defined in the top portion of the inner sleeve 4 in substantial axial alignment with the inner sleeve 4.

A mixing orifice 7, which can be of any suitable shape, such as triangular, trapezoidal, or circular, is formed in a side wall of the inner sleeve 4 adjacent the discharge opening.

It is to be noted that the position of the mixing orifice 7 in relation to the discharge outlet is of some importance and is determined based on various factors, such as the relative and absolute viscosities of the paste-like ingredients to be dispensed from the container 1 and the compartment 4', along with the particular shape and size of the dispenser. In determining the optimum position of the mixing orifice 7, the following considerations should be kept in mind, namely: (a) the mixing orifice 7 should be near enough to the discharge outlet to ensure that whenever pressure is applied to the container 1 (e.g., by squeezing), the paste ingredients emerge simultaneously from both the annular compartment 4' and the container 1; and (b) the mixing orifice should be sufficiently spaced from the discharge outlet for the pastes to be able to mix properly together in the mixing chamber 20 before delivery.

A device (not shown) may be provided within the mixing chamber between the mixing orifice 7 and the discharge outlet so as to facilitate the uniform blending of the paste ingredients prior to their being dispensed from the dispenser.

A sleeve-like member 5 having a collar portion 9 is inserted within the inner sleeve 4 in juxtaposition with the side wall containing the mixing orifice 7, and is rotatably attached thereto by a collar 9 being connected to the collar portion 8 of the inner sleeve 4. Sleeve 5 contains an aperture 10 which can be of a shape similar to, or differing from, the shape of the mixing orifice 7, the aperture 10 being arranged so as to be moved into and out of alignment with the mixing orifice upon the rotation of the sleeve member 5 relative to the inner sleeve 4. By moving the aperture 10 into and out of alignment with the mixing orifice 7, the effective size of the mixing orifice is varied thereby regulating the quantity of paste ingredient discharged from the inner sleeve 4 through the mixing orifice 7 and aperture 10 to mix with the paste ingredient from the container 1 prior to dispensing the combined ingredients from the dispenser. The rotation of sleeve member 5 relative to the inner sleeve 4 is gauged against a stationary scale 11' by means of a pointer 11 carried on the outside of the top part of the sleeve member 5.

As long as the inner sleeve 4 is completely stationary in relation to the container 1, the effective cross-sectional area of the resulting effective opening offered by the combined mixing orifice 7 and aperture 10 can be judged by a reference on sleeve member 5 to any kind of mark on the container 1. However, should the inner sleeve 4 not be completely stationary in relation to the container 1 so that it might undergo some slight rotary displacement, it is then preferable for the cross-sectional area of the resulting effective opening formed by the combination of the mixing orifice 7 and aperture 10 to be gauged directly by reference to the inner sleeve 4, for which purpose the inner sleeve may be equipped with stops or markings acting in conjunction with the pointer 11 carried by the sleeve member 5.

A practical example of the above would be when the mixing orifice 7 is trapezoidal in shape and the aperture 10 is rectangular in shape. It is then possible for a slight displacement of the sleeve member 5 relative to the inner sleeve 4 to provide an effective combined opening of orifice 7 and aperture 10 which would vary rapidly in cross-section. In such a case, the external visible part of the inner sleeve 4 could carry two stops, marked "minimum" and "maximum" respectively, such stops

to indicate the respective positions of the aperture 10 relative to the orifice 7. Further, sleeve member 5 may very well contain a multiplicity of separate apertures 10 of varying diameters and spaced apart from one another so that they would each come into alignment with the mixing orifice 7 on separate occasions thereby providing still a further manner of controlling the effective cross-section area of the mixing orifice.

Referring now to FIG. 2 and the embodiment of the invention shown therein, which is generally similar to the embodiment of FIG. 1, one end of the flexible container 1 includes a discharge opening with a relatively rigid neck portion 2 having external threads to enable a cap to be fitted thereover. A cylindrical beading or rib 6 is formed integral with the upper portion of the neck portion 2.

A sleeve member 14 has a collar portion thereon which is attached to the beading or rib 6 so that the sleeve member projects inwardly of the container 1, with a further sleeve member 15 being attached to sleeve member 14 and projecting within the container 1 providing a partition therein. An annular compartment 15', similar to predescribed compartment 4' in FIG. 1, is defined between the sleeve member 15 and the wall of the container 1, the bottom of the compartment being open to the ingredients in the container.

Sleeve member 14 contains a mixing orifice 7 in communication with the compartment 15', the dimensions and distribution of which is governed by the quantity of paste substance it is desired to extrude from the compartment. The sleeve member 15 is free to rotate relative to sleeve member 14, and is provided with a rim 12 which is partially cut away so that the rotation of sleeve member 15 relative to sleeve member 14 results in the blocking or unblocking of the mixing orifice 7 by portions of the rim 12, thereby preventing or allowing a selectable quantity of the paste substance to discharge from the compartment 15' through the mixing orifice 7 and into the discharge outlet and mixing chamber 20 through an opening 16 formed in sleeve member 15. In this way the proportion of mixture between the paste substance in the compartment 15' and the paste substance contained in the container 1 is readily controlled and mixed in the mixing chamber 20 prior to dispensing from the dispenser.

Referring to the embodiment of the invention shown in FIG. 3, this embodiment is similar to that illustrated and described relative to FIG. 2, the difference being that the shape of the sleeve member 15 has been slightly altered as to being a thicker member in order to provide for a larger mixing chamber 20 as well as providing a pointer 11 for indicating the relative position of sleeve member 15 relative to sleeve member 14 so as to indicate the resultant overall effective opening formed by mixing orifice 7 and rim 12 for regulating the discharge of the paste substance from the annular compartment 15' therethrough.

In the embodiment shown in FIGS. 2 and 3, the cut-away rim 12 is sized so as to permit rotation of the sleeve member 15 relative to the sleeve member 14 through an angle of about 180° in passing from the minimum to the maximum position.

Referring to the embodiment of the invention illustrated in FIG. 4, this embodiment differs from that shown in FIG. 2 by the system of guidance of the paste substance from the compartment 15' to the mixing and discharge chamber 20. In this embodiment, the paste

substance from compartment 15' will be discharged into the chamber 20 through a discharge groove 16' disposed in partial ring-like fashion about the upper interior portion of sleeve member 15. It is thus possible to obtain a variable coloring effect in that the past substance discharged from compartment 15' may be of a color different than the paste substance discharged from the container 1 so as to color such paste substance from container 1 through the ring-shaped discharge groove 16'.

If compartment 15' is divided into a multiplicity of separate compartments, it is then desirable to have several independent outlets for discharging the substance from each separate compartment into the mixing and discharge chamber 20, with each such outlet being adjustable for regulating the paste discharge from each compartment. By such a construction it would be possible, for instance, for various pastes of the same color or different colors to be added to a basic paste contained in the container, so as to vary the properties of the composition in the mixing chamber and thus control the composition of the substance eventually dispensed from the discharge outlet of the dispenser.

Referring to the embodiment of the invention illustrated in FIG. 5, this embodiment is similar to that illustrated and described relative to FIG. 2 and differs therefrom in that sleeve member 15 is provided with a pointer 11 for indicating the relative position of the sleeve member 15 relative to sleeve member 14. Further, the shapes of sleeve member 15 and sleeve member 14 are slightly different in that sleeve member 15 is provided with a collar for rotatable support on a shoulder portion formed in sleeve member 14.

Referring to the embodiment of FIG. 6, there is illustrated a flexible container 1 having a discharge opening and a relatively rigid neck portion 2 with a bead or rib 6 formed on the upper portion thereof. An inner sleeve member 4 is supported within the container 1 by means of a collar member 8 formed integral about the outer upper end portion of the inner sleeve and attached to the container 1 by means of the bead or rib 6 provided thereon. The inner sleeve member 4 forms a partition in container 1 defining an annular compartment 4' between the inner sleeve 4 and the wall of the container 1, the compartment being open at the bottom for communication with the ingredients in the remaining portion of the container. A mixing orifice 7 is provided through the collar member 8. A closure member 19 is threadedly attached to the neck portion 2 and has an outlet opening and mixing chamber 20 in general axial alignment with the inner sleeve 4. A surface 21 on the under side portion of the closure member 19 is adapted to engage the top portion of collar member 8 so as to seal the mixing orifice 7 thereby preventing the extrusion of the paste substance from the container 1.

A passageway connecting the mixing orifice 7 to the mixing chamber 20 is defined between the surface 21 of the closure member 19 and the top of the collar 8, the effective size of this passageway being adjusted by the rotation of the closure member 19 between a position where the mixing orifice 7 is closed and a position wherein the space between the top of the collar 8 and surface 21 is at a maximum so that the mixing orifice 7 is presented with the least resistance so that a maximum amount of paste substance can be extruded from compartment 4' into the mixing chamber 20 through the passageway.

The upper external portion of closure member 19 is provided with threads 22 for the receiving of a threaded cap (not shown) for positively closing the mixing chamber and discharge outlet 20 and preventing the dispensing of the paste substances from the dispenser.

A pointer 23 is attached to the external lower surface of closure member 19 and serves to visually indicate the position of closure member 19 relative to the container 1, such relative indication therefore indicating the size of the passageway defined between the surface 21 and the top of the collar 8.

In operation of the embodiments of FIGS. 1-6, a first paste substance or ingredient is placed in annular compartment 4' or 15', with a second paste substance or ingredient being placed in the remaining portions of the container 1. When the container 1 is compressed, the second paste substance contained therein is dispensed into the mixing and dispensing chamber 20, while the portion of the second paste substance in contact with the first paste substance at the open bottom of the annular compartment exerts a pressure force thereon effecting the discharge of the first paste substance through the control orifices into the mixing and dispensing chamber. The effective size of the control orifice controlling the amount of first paste substance discharged relative to the amount of second paste substance discharged thereby controlling the composition of the intermixed first and second paste substances dispensed from the dispenser.

Referring now to FIG. 7 and the embodiment of the invention disclosed therein, there is illustrated a compressible container 1 having an externally threaded relatively rigid neck portion 2 with an inwardly projecting bead or rib 6 surrounding the top end thereof. An inner sleeve member 4 having a collar member 8 surrounding the upper end thereof is supported within the container 1 by the collar member being rigidly attached to the bead or rib 6. The inner sleeve member 4 forms a partition in container 1 defining an annular compartment 4' between the inner sleeve 4 and the wall of the container 1, the compartment being open at the bottom for communication with the ingredients in the remaining portion of the container. A mixing orifice 7 extends through collar 8 providing a passageway for the discharge of the paste substance from compartment 4'.

A control member 24 having apertures 10 and 10' therein is rotatably mounted on the upper portion of collar 8. Aperture 10' is in substantial axial alignment with the discharge opening of container 1, with aperture 10 being positioned for overlapping engagement with orifice 7 such that rotative movement of control member 24 will bring aperture 10 into and out of general alignment with orifice 7 thereby regulating the effective size of orifice 7 by overlapping and blocking the orifice. This controls the rate and quantity of paste substance discharged from compartment 4' through the combined orifice 7 and aperture 10.

A spherically shaped mixing chamber 20 is provided within the control member 24, and a dispensing ball 25 is captively maintained in a rotatable and longitudinally movable manner in the mixing chamber 20 by means of a peripheral inwardly projecting ridge 26 formed integral with the upper inward portion of the control member 24 so that a portion of the dispensing ball 25 projects out from the control member.

In operation of the embodiment of FIG. 7, upon the compressing of container 1, the paste substances from both the compartment 4' and container 1 are simultaneously discharged into the mixing chamber 20, the paste substance from the container 1 being discharged through aperture 10' with the paste substance from the annular compartment 4' being discharged through the combined orifice 7 and aperture 10. Of course, should orifice 7 and aperture 10 not be in an overlapping arrangement so that orifice 7 is blocked closed by control member 24, then only the paste substance from container 1 would be discharged to the mixing chamber. The dispensing ball 25 is held within the mixing chamber 20 in a manner providing a passageway thereabout such that upon the dispensing of the paste substances from the annular compartment 4' and container 1 into the mixing chamber, the dispensing ball would then be rotated against a surface on which it was desired to apply the dispensed composition such that the composition would be mixed in the mixing chamber 20 and then dispensed along the outer peripheral surface of ball 25, the composition of the dispensed paste substance being controlled by the rotation of control member 24 which controls the effective opening of orifice 7. Indicating means 27 integrally formed on control member 24 serves to visually indicate the relative position of the movable control member 24 relative to the stationary container 1 thereby serving to indicate the position of aperture 10 relative to orifice 7. This provides a visual indication of the proportion of paste substance from the compartment 4' which is being mixed with the paste substance from the container.

Since the ball 25 is permitted longitudinal movement within the mixing chamber 20, it is possible to move the ball downwardly therein so as to blockingly close apertures 10 and 10' thereby preventing the dispensing of the substances from the compartment 4' or the container 1. This depressing movement of the ball 25 within the mixing chamber is obtained by use of a cap (not shown) adapted to be threadedly engaged with the threads on neck portion 2 such that as the cap is threaded onto the neck portion an interior portion of the cap would engage the dispensing ball 25 thereby moving the ball downwardly into the mixing chamber until the outer peripheral surface of the ball engaged and sealingly blocked apertures 10 and 10'.

Referring now to FIG. 8, there is generally illustrated a dispenser as described in the foregoing embodiments except that the container 1 is divided by flexible interior members into a compartment 44 and a compartment 41, each being filled with paste substances that are to be mixed as required. The dispenser is disposed within an overall dispensing housing 17 having a bellows portion 18 at the bottom end portion thereof, the space between the dispenser and the housing 17 being generally filled with a liquid or gas (e.g., air). By manual pressure on the bellows 18, the interior of the housing can be pressurized thereby exerting pressure on the container 1 so as to discharge the pastes contained in compartments 41 and 44.

In an alternative arrangement, the pastes can be discharged by increasing the pressure of the gas or liquid contained in the housing 17 by the use of a source of gas pressure, examples being an aerosol-type can, or by vaporization of a liquid.

Referring now to FIG. 9, there is illustrated a further alternative form for the outer housing 17 than that as

shown in FIG. 8. A member 19 is slidably engaged within the housing with a surface of member 19 in abutting relationship with the bottom portion of the container 1. The movement of the member 19 into the housing 17 compresses the container thereby effecting the extrusion of the paste substances from compartments 41 and 44.

If it is desired that the housing 17 be rechargeable, the housing can be divided into parts so as to enable a fresh dispenser to be fitted therein. The parts of the housing could be threaded together, and the separation between such parts occur at the discharge end of the housing.

The container 1 can be made of extremely flexible plastic or rubber, which has the further advantage of being slightly porous. This advantage lies in the fact that, as the paste substance is discharged from the dispenser, it is replaced by air or other gas within the housing 17.

Alternatively, the container 1 could comprise two or more different materials in that one material could be used for the body of the container with the other material being more porous in nature and utilized for closing the end portion of the container. The replacement of the paste substance by air or other gas as the paste is discharged from the dispenser would then commence from the bottom of the container.

It is thus possible in the flexible dispensers as described hereinabove, to obtain a ribbon, a cord, or laminate of paste, selectively variable in composition.

Further, in some of the embodiments described hereinabove, the paste composition is discharged from the dispenser in the form of a ribbon or cord of paste having a constant outside diameter.

Further, it is also possible to use paste substances of different colors, so that when mixed, they will produce a paste having a resultant color indicative of the composition discharged; such an arrangement having the advantage of providing the user with a simple means of checking the relative quantities of the paste substances making up the final composition as discharged from the dispenser.

It is to be understood that instead of the sleeve members defining annular compartments open at the bottom for communication with the contents of the container, the sleeve members may represent the neck portion of a closed inner container supported within the outer container 1, or the like, such as shown in FIGS. 8 and 9, wherein the paste substances are stored completely separately in each container and mixed together in the mixing and dispensing chamber just prior to dispensing from the dispenser.

It is to be understood that control elements, such as in the form of a cap or the like, can be associated with the dispenser container for regulating the amount and size of paste-like substance extruded from the dispenser.

It is to be understood that the form of this invention herein shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described the invention, we claim:

1. A multicompartment dispenser for paste-like substances comprising:
  - a compressible container having a neck portion;

a partition means defining a separate compartment within the container and in communication with the interior of the container;

a mixing orifice disposed in the partition between the compartment and the interior of the container for mixing the paste-like substance in the compartment with the paste-like substance in the container so as to form a composition thereof prior to dispensing from the dispenser; and

control means operatively associated with the mixing orifice to select the desired proportional mixture of the composition dispensed from the dispenser by selectively varying the effective size of the mixing orifice to regulate the quantity of flow of the paste from the compartment to the container so that as the proportion of paste substance discharged from the compartment to the container is decreased the amount of paste substance discharged from the container increases thereby varying the composition dispensed while maintaining the same quantity of paste substance dispensed from the dispenser, and as the proportion of paste substance discharged from the compartment to the container is increased the amount of paste substance discharged from the container decreases thereby varying the composition dispensed while maintaining the same quantity of paste substance dispensed from the dispenser.

2. A multicompartment dispenser as claimed in claim 1 wherein said partition means comprises a cylindrical sleeve member having a neck portion attached to the neck portion of the container with a body portion extending partially into the container defining said separate compartment between the wall of the container and the sleeve member.

3. A multicompartment dispenser as claimed in claim 1 further comprising a mixing chamber in communication with the compartment and the container for mixing the paste-like substance of the compartment with the paste-like substance of the container so as to form a composition of said paste-like substances for eventual discharge from the dispenser, and a discharge outlet in communication with the mixing chamber for discharging the composition from the dispenser.

4. A multicompartment dispenser as claimed in claim 1 further comprising control means associated with the container for regulating the quantity of composition paste substance dispensed.

5. A multicompartment dispenser as claimed in claim 1 wherein the mixing orifice is disposed in a sidewall of the partition.

6. A multicompartment dispenser as claimed in claim 1 wherein the control means comprises: a member in juxtaposition with a sidewall of the partition having the mixing orifice therein, the member being movable relative to the partition, and an aperture disposed in the member for overlapping the mixing orifice as the member is rotated so as to vary the effective size of the mixing orifice by selectively moving the aperture into and out of alignment with the orifice thereby blocking and unblocking varying portions of the mixing orifice.

7. A multicompartment dispenser as claimed in claim 1 further comprising indicating means operatively connected to the control means for visually indicating the relative effective size of the orifice.

8. A multicompartment dispenser for paste-like substances comprising:

a compressible container having a relatively rigid externally threaded neck portion;

a cylindrical partition defining a separate annular compartment within the container and in communication with the interior of the container, the partition having a neck portion extending within the neck portion of the container defining a container discharge opening;

a collar member disposed about the neck portion of the cylindrical partition and attached to the neck portion of the container for rigidly retaining the partition within the container;

a discharge orifice in the collar member for the discharging of the paste substance from the compartment;

a closure member threadedly attached to the container neck portion and rotatably adjustable to selectively open and close the discharge orifice in the collar member,

a mixing chamber and discharge outlet in the closure member in substantial alignment with the container discharge opening for the discharge of the composition paste substance therethrough, and a passageway defined between the collar and adjacent surface of the closure member and connecting the discharge orifice to the mixing chamber, the size of the passageway being varied from a closed position to various open positions by rotation of the closure member relative to the collar whereby the flow of paste substance from the compartment to the mixing chamber is regulated so as to control the proportion of the composition formed in the mixing chamber between the paste substance in the compartment and the paste substance in the container for eventual dispensing from the dispenser through the discharge outlet.

9. A multicompartment dispenser as claimed in claim 8 further comprising indicating means for visually indicating the size of the passageway.

10. A multicompartment dispenser for paste-like substances comprising:

a compressible collapsible container having a relatively rigid neck portion;

a cylindrical partition defining a separate annular compartment within the container and in communication with the interior of the container, the partition having a neck portion attached to the neck portion of the container defining a container discharge opening;

a collar member disposed about the neck portion of the cylindrical partition and attached to the container neck portion for retaining the partition within the container;

a discharge orifice in the collar for the discharging of the paste substance from the compartment;

a control member associated with the container neck portion and movable relative thereto,

an aperture in the control member for overlapping the discharge orifice as the control member is moved to vary the effective cross-section area of the orifice by selectively moving the aperture into and out of overlapping arrangement with the orifice thereby controlling the quantity of paste substance discharged from the compartment;

a mixing chamber and discharge outlet in the control member into which the paste substance from the compartment and the paste substance from the

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container are discharged through their respective discharge opening and discharge orifice so as to form a mixed composition in the mixing chamber for eventual dispensing, and

a dispensing means movably supported in the mixing chamber for evenly dispensing the mixed composition through the discharge outlet.

11. A multicompartiment dispenser as claimed in claim 10 further comprising a closure member asso-

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ciated with the neck portion of the partition and adapted to move the dispensing means against the control member aperture and the container discharge opening to close the same.

12. A multicompartiment dispenser as claimed in claim 10 wherein the dispensing means comprises a ball-type member supported for both rotative and longitudinal type movement within the mixing chamber.

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