March 31, 1964 E. B. FAIRCHILD 3,127,064

LOCKABLE CONTAINER CLOSURE

Filed July 19, 1961 2 Sheets-Sheet 1

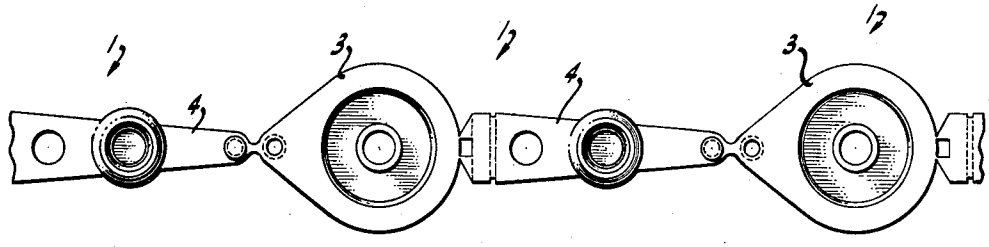


FIG-1

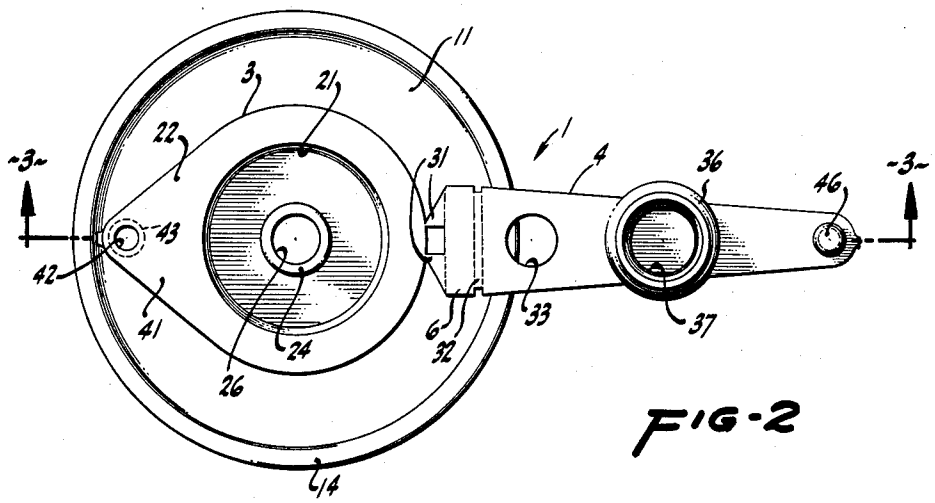


FIG-2

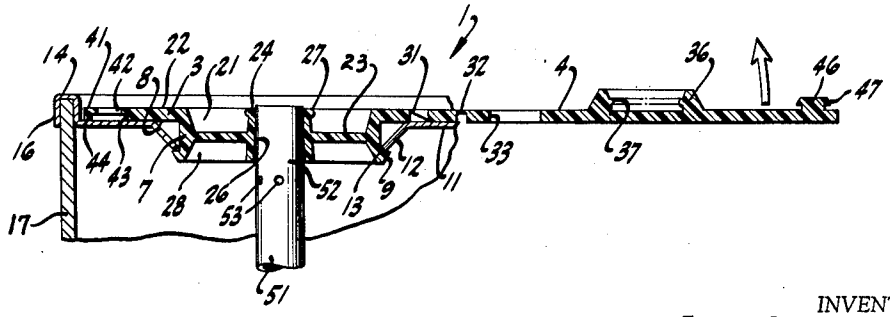


FIG-3

INVENTOR.
EDWIN BRADLEY FAIRCHILD
BY Bialos & Schlemmer
ATTORNEYS

March 31, 1964 E. B. FAIRCHILD 3,127,064

LOCKABLE CONTAINER CLOSURE

Filed July 19, 1961 2 Sheets-Sheet 2

FIG-4

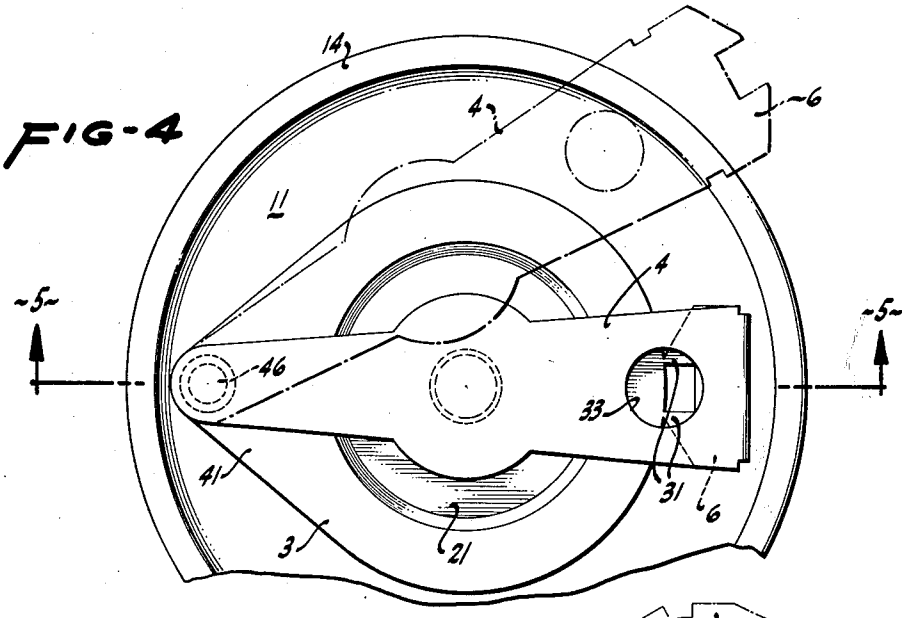
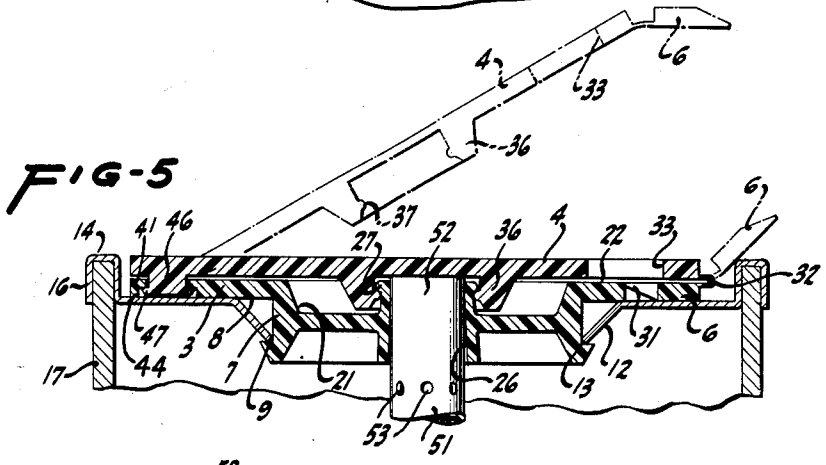


FIG-5



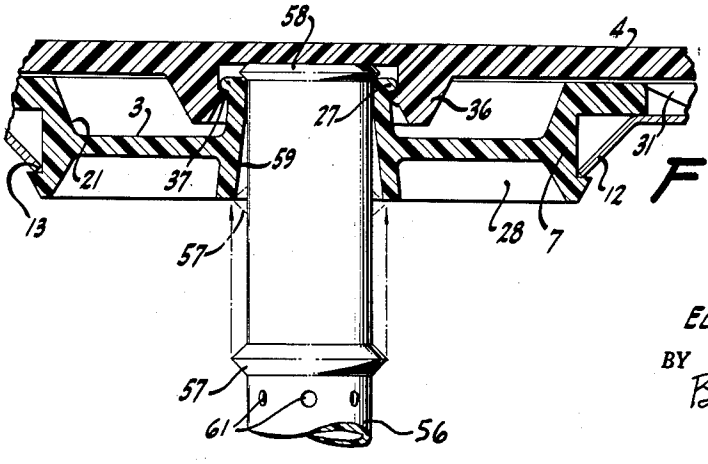


FIG-6

INVENTOR.
EDWIN BRADLEY FAIRCHILD
BY Bialos & Schlemmer
ATTORNEYS

United States Patent Office 3,127,064 Patented Mar. 31, 1964

3,127,064

LOCKABLE CONTAINER CLOSURE

Edwin Bradley Fairchild, 1055 Boranda Ave., Mountain View, Calif.

Filed July 19, 1961, Ser. No. 125,246
10 Claims. (Cl. 222—153)

This invention relates generally to a closure construction for a product container. More particularly, this invention relates to a leak-proof container closure intended to permit or preclude product dispensing through a dispensing opening provided in the closure so that product may be removed selectively from the container in any desired quantity when the dispensing opening is free of restriction.

Still more particularly, this invention relates to a container closure which is well adapted for use with various types of containers intended to package various types of products. That is, the closure is well adapted for use with containers in which the product contained is to be dispensed as a liquid stream or as discrete particles or powders. Detergents, soap powders and particulate food products are typical products of this nature.

Also, an embodiment of the subject closure is particularly well adapted for use with a container in which a fluid or finely divided powdery product is packaged and which is to be dispensed as a fine aerosol mist or dust. Insecticide fluids or powders, and dry fire extinguisher products are typical in this regard.

The subject closure has been found particularly well suited for use with squeeze type dispensing containers of plastic or paperboard. An example of such a resilient squeeze container is generally disclosed in U.S. Patent No. 2,609,126, dated September 2, 1952.

The closure of this invention is broadly similar to the closure construction disclosed in copending application Serial No. 104,063, filed April 19, 1961. However, the subject closure construction embodies improvements over the closure of the aforementioned application, and is employable with a different type container from the container with which the closure of the aforementioned application is usable. That is, the subject closure is designed to be applied to a container top through which only one aperture is provided while the closure of the aforementioned application is attachable to a container which has two apertures through its top. This results in a simpler closure construction and minimizes the possibilities of leakage through the container top.

Furthermore, the subject container closure has a generally flat, compact silhouette when closed to block the product dispensing opening. As a result, the closure does not interfere in any way with stacking of containers one on another.

When the subject closure is attached to the top of a squeeze container intended for dispensing aerosol dusts or mists, a hollow product dispensing tube preferably is provided in conjunction therewith. One end of such tube, which may be referred to as a puffing tube, is positioned in engagement with the closure while the opposite tube end is located internally of the container body adjacent the bottom container end. Product to be dispensed may pass into the tube and through the container closure into the surrounding atmosphere. Preferably, the tube internal diameter is sufficiently large so that the tube defines a mixing chamber in which the product may be thoroughly mixed with air to provide a proper aerosol spray.

An important feature of the invention resides in the fact that the same includes means for positively blocking the product dispensing opening of the closure so that product may not be dispensed therefrom initially so long as the closure body remains intact. That is, the subject closure includes closure structure for blocking the product dispensing opening through the closure and means for locking the closure structure in dispensing opening blocking relationship so that initial opening of the closure is precluded until the closure is severed, preferably at a predetermined location. Following such severing, the closure structure blocking the dispensing opening may be moved to a position free of blocking relationship relative to the opening so that product may readily be removed from the container. Following such initial opening of the container, the closure may be subsequently employed for repeated blocking of the dispensing opening so that the unused quantity of product in the container may be retained therein for subsequent use.

The initial locking feature of the subject closure precludes accidental opening of the container during shipment and handling prior to its purchase by the ultimate consumer, and also precludes tampering by unauthorized persons prior to purchase. In conjunction with the initial locking feature of the closure, means is provided so that a visual determination will readily indicate whether or not the closure has been tampered with or opened prior to purchase.

Desirably, for ease of manufacture and low cost, the subject container closure is of one piece resilient molded plastic construction. Polyethylene, polypropylene, nylon or other readily obtaintable plastics may be employed for this purpose. For economy and simplicity of manufacture, a plurality of the subject closures desirably are simultaneously molded in interconnected strip fashion. Following manufacture, individual closures of a given strip are severed from the remaining closures of the strip for attachment to individual container tops.

The sequence of closure attachment and container filling may vary as desired. For example, a closure may be attached to a container top after the top has been attached to the container and the container has been filled with product through the aperture in the container top. Alternatively, the closure may first be attached to the container top to seal off the top and the product may then be filled into the container from the opposite unopened end thereof. Following such filling, the opposite end may be closed by a suitable cap construction crimped or otherwise attached thereto.

The subject lockable closure construction preferably is of one piece configuration and is defined by a closure body comprising two body sections hingedly interconnected and foldable relative to each other along a hinge section. One of the body sections includes a stopper plug which is to be substantially irremovably and lockingly received in an aperture provided in a preformed substantially rigid container top to be affixed to one end of a given container. Generally, such container tops comprise preformed dished metal or plastic discs having peripheral flanges which are to be crimped over or otherwise secured to the top end of a container body. The subject invention has the decided advantage that it is usable with a container top having only one aperture therethrough as opposed to container tops having two or more apertures.

The subject closure body also includes a second section which includes closure structure for positively blocking the product dispensing opening provided through the stopper plug of the first mentioned section. In conjunction with the subject closure is means for locking the closure closed initially, such means in the embodiment illustrated comprising a lock shank on one of the body sections which is receivable in a lock opening provided in the other body section.

Interengageable means, preferably in the form of a

lip and shoulder, are provided on the lock shank and the opening to maintain the shank substantially irremovably received in the opening both prior to and subsequent to initial container opening. The lock shank after initial container opening provides a pivot axis about which the second body section including the closure structure may be moved from dispensing opening blocking relationship when it is desired to remove product through the stopper plug. In the embodiment illustrated, the lock opening is provided in a flange extension which projects laterally with respect to the stopper plug, and the lock shank is provided on an extension provided in conjunction with the closure structure.

The closure structure for blocking the dispensing opening may take various forms. That is, the same may overlie and be received longitudinally in the opening through the stopper plug, or the same may be received over an upper portion of the stopper plug to positively block the dispensing opening without entering the opening. In the first situation, the closure structure would comprise a stopper shank while in the latter situation such structure would comprise a stopper cap. In the embodiment illustrated, the closure structure comprises a cap member to be snapped over an upper portion of the stopper plug. Irrespective of the particular closure structure employed, such structure is arranged so that, when the two closure body sections are folded relative to each other, the closure structure is positioned to positively block the product dispensing opening.

Desirably, a predetermined portion of the closure hinge section is weakened, as by providing reduced thickness portions or cut-out openings, so that the hinge section may be cut or torn to separate the body sections to permit initial opening of the container closure. It should be understood in this connection that, following severing of the container body at the hinge section, the initial locking feature of the container closure is lost, and that thereafter the dispensing opening may be repeatedly opened or blocked as often as required without subsequent severing of the closure body.

Following initial opening of the closure, the aforementioned lock shank retains the two closure body sections operatively connected so that the closure structure may be repeatedly moved from or into blocking relationship with respect to an upper portion of the stopper plug to permit or preclude withdrawal of product from the container.

From the foregoing, it should be understood that objects of the present invention include the following: the provision of a novel reusable lockable container closure to be operatively engaged in leak-proof fashion with a container top having only a single aperture therethrough; the provision of locking means on a container closure for precluding accidental or unauthorized opening so long as the closure remains intact; the provision of a container closure which will not interfere with stacking of containers one on the other; the provision of a container closure which may be molded in one piece strip fashion with similar closures for economy and ease of manufacture; the provision of a container closure which may be attached to a container top without interferring with container filling or capping operations; the provision of a container closure which is employable with containers adapted to dispense wide and varied types of products, such as mists, dusts, particles, or liquid streams; and the provision of a container closure which, after initial opening, may be re-used to block a product dispensing opening.

These and other objects will become apparent from the following description in which reference is directed to the accompanying drawings.

FIG. 1 is a plan view of a series of container closures connected together in one piece strip fashion;

FIG. 2 is a plan view on an enlarged scale of a container top having the container closure operatively engaged therewith;

FIG. 3 is a vertical sectional view through the container and closure taken in the plane of line 3—3 of FIG. 2;

FIG. 4 is a plan view on a further enlarged scale of the container closure secured to a container top so that the product dispensing opening is blocked and locked; in such figure, the relationship of the closure sections to each other after initial opening is shown in dotted lines;

FIG. 5 is a vertical sectional view through the container and closure taken in the plane of line 5—5 of FIG. 4;

FIG. 6 is a vertical sectional view on a further enlarged scale showing a modified type of product dispensing tube employable therewith.

Referring first to FIG. 1, a plurality of the subject container closures **1** are shown interconnected end-to-end in strip fashion in which such closures preferably are manufactured in a mold. Any predetermined number of closures may be molded together within the capabilities of available machinery. Separation of closures from a strip may be effected in any sequence desired, either before or during attachment of individual closures to individual container tops. As mentioned previously, desirably the subject closures are formed from a sturdy and resilient moldable plastic material, but the exact material chosen may be varied or selected to meet a particular need.

Each closure **1** comprises a closure body defined by two hingedly interconnected body sections. A first body section **3** is connected to a second body section **4** by a hinge section **6** so that the sections are foldable one over the other in the manner illustrated in FIGS. 4 and 5. When thus folded, the first body section **3** underlies the second body section **4**.

The first body section comprises primarily a stopper plug **7** which depends from the undersurface **8** of the first body section, and which terminates in a generally circumferential lip structure **9** by means of which the closure is generally irremovably attachable to an associated dished container top disc **11** as shown in the drawings. That is, the plug lip **9** is snap lockingly engaged with the edge of a depressed frusto-conical portion **12** of the container top disc which defines the single aperture **13** through such disc.

It should be understood that the top disc **11** is of preformed metal or plastic dished construction and includes a peripheral flange **14** which is crimped, as seen at **16** in FIGS. 3 and 5, over the upper end of the container body **17** in the well known manner. Crimping may be effected on conventional can seaming machinery or may be done manually.

An important feature of this invention, as will be noted subsequently, is the fact that the closure, when folded in dispensing opening blocking relationship, terminates substantially flush with the upper surface of the crimped peripheral flange **14** of the container top disc. In this manner, the closure is substantially entirely confined within the dished upper portion of the top disc so that the closure will not in any way interfere with the stacking of containers one on the other. In this regard, it should be understood that a dished disc similar to that shown at **11** is employed at the bottom of the container, but that such bottom disc does not have an aperture therein.

Because the closure when folded in fully operative position does not project appreciably, if at all, beyond the upper surface of the top disc flange **14**, the closure, if desired, may be attached to the disc prior to attachment of the disc to the container or, if preferred, subsequently thereto. Also, the container may be filled through the disc opening **13** before the closure is attached to the disc, or, alternatively, the closure may be attached to the disc prior to filling, and the container may be filled through its open bottom end after which a bottom disc may be seamed in place.

The stopper plug **7** of the closure has a central recess

or depression 21 which extends thereinto from its upper surface 22. From the bottom 23 of such recess projects a reduced neck portion 24 through which a product dispensing opening 26 extends. The dispensing opening is of a size determined primarily by the type of product to be dispensed. Small openings generally are employable for aerosol products while larger openings are preferred for particulate or liquid stream products.

Preferably, the neck portion terminates substantially flush with the upper surface 22 of the stopper plug and is provided adjacent its upper end with a circumferential lip 27 adapted to be lockingly engaged with the closure structure to be described for blocking the dispensing opening. To conserve material, the stopper plug also is provided with a lower central recess 28 and a depending section of the neck 24 is received centrally of such lower recess.

As best seen in FIG. 5, the undersurface 8 of body section 3 around the stopper plug is snugly engaged with the upper surface of disc 11 in leak-proof fashion and is maintained so engaged by engagement of the lip structure 9 of the plug with the edge of aperture 13.

The second body section 4 of the closure is connected to the first section 3 along the aforementioned hinge section 6. Such hinge section comprises, in the embodiment illustrated, a pair of narrow connecting webs 31 integral with the periphery of the stopper plug. Preferably, such webs are reduced in thickness both in the vertical and horizontal directions to facilitate separation of the body sections from each other. If desired, the body section 4 may be folded directly about the webs 31 or, as shown in the embodiment illustrated, the separate reduced section hinge 32 may be employed about which the sections are foldable as seen in FIGS. 3 and 5.

Desirably, means is provided in the body section 4 to permit visual determination as to whether or not the closure has been tampered with prior to initial opening. That is, as seen in FIGS. 2 through 5, a see-through window opening 33 is provided through substantially flat body section 4 which overlies the webs 31 (FIG. 4) when the body sections are folded. In this manner, a visual inspection will readily indicate whether or not the webs have been severed so that a quick determination by a purchaser may be made to determine whether the closure has been initially opened.

Body section 4 includes closure structure for positively blocking the dispensing opening 26 through the stopper plug 7. In the embodiment illustrated, such closure structure includes a cap member 36 integrally connected with the body section 4. When the closure is unfolded, the cap extends in a direction generally opposite from the direction in which the stopper plug extends. That is, the stopper plug in an unfolded closure depends from the first body section while the cap member 36 projects upwardly from the second body section. When the container closure is folded, the cap member overlies the reduced neck portion of the stopper plug and is snappable into engagement therewith.

To insure secure interengagement between the neck portion and the cap member, an internal ridge 37 is provided in the depending portion of the cap member to be engaged beneath the lip 27 provided on the neck portion. The major portion of the cap member 36 is received in the upper recess 21 of the stopper plug so that the flat closure silhouette mentioned previously is provided so that the closure is received substantially within the confines of the dished disc 11.

The means for initially locking the closure with the cap portion snapped in engagement with the stopper plug neck portion preferably comprises interengageable means on the respective body sections. In the embodiment illustrated, such locking means includes a flange extension 41 on underlying body section 3 which projects laterally from the stopper plug from the periphery thereof opposite from the aforementioned webs 31. As seen in the drawings, such flange extension has a lock opening 42 therein which is provided adjacent its upper end with a peripheral internal shoulder 43. That is, the opening 42 is internally stepped to provide an enlarged lower portion 44 directly overlying the upper surface of the container top disc 11.

To effect locking of the overlying body section 4 to the underlying body section 3 of the closure, a lock shank 46 is provided adjacent the free end of the section 4. Shank 46 includes a peripheral lip 47. Such shank is to be substantially irremovably received in the lock opening of the lateral extension 41 of the underlying body section as seen in FIG. 5 with the lip 47 snugly engaged with the shoulder 43 of the lock opening. Removal of the lock shank once the same is inserted in the lock opening may be effected only with substantial difficulty.

So long as the hinge section 6 of the closure remains intact, the lock means described positively precludes unblocking of the stopper plug dispensing opening. That is, the cap member 36 may be moved relative to the neck portion of the stopper plug only a limited minimal amount generally insufficient to unblock the dispensing opening. This insures that the closure cannot accidentally be opened during handling prior to initial purchase. The fact that the interengageable lock means is defined entirely by the closure is important in that it obviates the need to use a container top disc having more than one aperture therethrough.

To permit unblocking of the dispensing opening, it is a simple matter to tear or cut the hinge section of the closure, preferably along the webs 31 (see FIGS. 4 and 5) or along the reduced hinge 32. Following such tearing or cutting, the overlying body section 4 may be moved to the dotted line position shown in FIGS. 4 and 5 to remove all restriction from the dispensing opening so the product may be readily removed therefrom. After initial opening, the hinge section provides a convenient handle as shown in dotted lines in FIG. 5 by which body section 4 may be grasped.

Following removal of the requisite amount of product from the container, the body section 4 may again be moved to the product dispensing opening blocking position and snapped over the neck portion of the stopper plug until additional product subsequently is to be removed. Because the lock shank is substantially irremovably received in the lock opening, opening and closing of the closure may be repeatedly effected with the lock shank serving as a pivot about which the overlying body section may be moved relative to the underlying body section. In this manner, the lock shank precludes loss of body section 4.

As mentioned previously, the subject closure may be used with containers intended to dispense products of various types. In the embodiment illustrated, a hollow plastic product dispensing tube 51 is shown employed in combination with the subject closure so that the closure may dispense more efficiently an aerosol product. That is, while tube 51 is not under all situations essential, its use facilitates aerosol dispensing.

Dispensing tube 51 has its upper end 52 frictionally and snugly received within the dispensing opening 26 through the stopper plug with the outer margin of the tube upper end substantially flush with the upper margin of the neck portion of the stopper plug. To facilitate product dispensing, the hollow tube 51 is provided with a series of openings 53 through the wall thereof, as seen best in FIG. 5, below the bottom end of the neck portion of the closure.

When the container is used upright and squeezed, holes 53 provide passages for air from the container above the product therein while the product is forced upwardly into the lower end of the tube and through the tube. As the product reaches the vicinity of holes 53, it is thoroughly mixed with air passing through the holes to provide the desired aerosol effect.

If the container is inverted during the product dis-

pensing operation, the product will pass through holes **53** in the tube walls and the air from the container will pass into the tube from the bottom tube end to effect mixing to provide the desired aerosol spray.

While the use of such tube is highly desirable when aerosol type products are to be dispensed, it should be understood that the tube also may be employed if liquid stream or particulate products are to be dispensed. For this purpose the holes **53** may be made of larger size than those required for aerosol dusts and mists so that liquid or particulate products may pass therethrough when the container is inverted. The exact size of the holes **53** may vary depending upon the product to be dispensed. It also should be understood that, if desired, tube **51** may be omitted entirely and product dispensed directly through the dispensing opening **26** in the stopper plug.

FIG. 6 shows a modified closure construction combination in which a modified dispensing tube **56** is provided which has a lower shoulder **57** spaced inwardly from its upper marginal end which is defined by an upper shoulder **58** provided thereon. The upper shoulder **58** precludes downward movement of the tube beyond the position shown in FIG. 6 into the container while the lower shoulder **57** limits upward movement of the tube as shown in dotted lines in such figure. The tube shown in FIG. 6 is slidably received in the dispensing opening **59** provided in the stopper plug of the closure. In this embodiment, the dispensing opening preferably is conically tapered upwardly to facilitate tube sliding movement. Also, such conical taper permits the lower shoulder **57** to be wedged in air tight relationship in the lower portion of the dispensing opening to facilitate removal of product from the container. The slidable tube shown may be employed, when extended, as a nozzle for directing the container's product into a given limited area, such as the corner of a room or the like.

Preferably, spaced holes **61** are provided in the tube wall below lower shoulder **57** for the reasons mentioned previously.

From the foregoing, it should be understood that the subject invention is embodied in an initially lockable, repeatedly reusable container closure which may be attached in leak-proof fashion to a container having a top disc with only one aperture therethrough. Having made a full disclosure of this invention, reference is directed to the appended claims for the scope to be afforded thereto.

I claim:

1. A lockable container closure to be positioned in operative engagement with an apertured top of a product container, comprising a one piece closure body defined by two hingedly connected integral sections which are foldable relative to each other along a hinge section positioned therebetween which interconnects said sections, one of said body sections including a stopper plug having a product dispensing opening therethrough, said plug being receivable in an aperture through said container top, said one body section including a lateral flange extension integral with and projecting laterally relative to said plug in a direction generally opposite from said hinge section, said lateral extension having a lock opening therein which is distinct from said product dispensing opening; the other of said body sections including closure structure for overlying an upper portion of said stopper plug for blocking said dispensing opening therethrough when said body sections are folded relative to each other, and lock means comprising a lock shank integral with and projecting from said other section and engageable in said lock opening of said lateral extension of said one body section when said other body section is folded to overlie said one section, said lock shank when said other section is so folded and when said lock shank is inserted in said opening normally positively precluding removal of said closure structure from blocking relationship relative to said stopper plug dispensing opening so long as said body sections remain intact and hingedly connected.

2. A container closure comprising a one piece closure body defined by first and second integral body sections hingedly interconnected by a hinge section, said body sections being folded relative to each other along said hinge section with said first section underlying said second section; said first section comprising a depending stopper plug having an opening therethrough, and a flange extension integral with and projecting laterally relative to said stopper plug in a direction generally away from said hinge section, said extension having a lock opening therein; said second body section including closure structure overlying and contacting an upper portion of said stopper plug and blocking said opening therethrough, and a lock shank depending from said second section and generally irremovably received in said lock opening in said first section extension; and cooperable means on said lock shank and said extension for normally positively precluding removal of said lock shank from said lock opening, whereby unblocking of said stopper opening is precluded so long as said closure body sections remain interconnected.

3. The closure of claim 2 in which a predetermined portion of said hinge section is weakened relative to said body sections to facilitate separation of said body sections so that said second section may be pivoted about the axis of said lock shank to free said closure structure of blocking relationship with respect to said stopper plug opening.

4. The closure of claim 3 in which said second section is provided with an aperture therethrough adjacent said hinge section through which said hinge section weakened portion is visible, whereby it may be determined visually whether said closure has initially been opened.

5. In combination with a product container top having a single aperture therethrough, a container closure operatively engaged with said top for selectively maintaining said aperture closed; said closure comprising first and second body sections hingedly interconnected by a hinge section, said body sections being folded relative to each other along said hinge section with said first section underlying said second section; said first section comprising a stopper plug depending therefrom and received in normally irremovable engagement through said container top dispensing aperture, said plug having a dispensing opening therethrough, and a lateral flange extension projecting relative to said stopper plug, the undersurface of said first body section around said plug and said lateral extension overlying and generally contacting said container top, said extension having a lock opening therein, and shoulder means adjacent the upper portion of said lock opening in said extension; said second body section including closure structure overlying said first section stopper plug and positively blocking the same, and a lock shank depending therefrom and received in said flange extension lock opening, said shank having lip structure thereon engaged with said lock opening shoulder means and normally precluding removal of said shank from said lock opening; said closure body being severable at said hinge section to permit separation of said body sections so that said closure structure may be moved relative to said opening in said plug to unblock the same; said hinge section and lock shank initially cooperating to preclude separation of said body sections so long as said closure body remains intact whereby said dispensing opening prior to severing of said hinge section is positively blocked initially.

6. The combination of claim 5 in which said stopper plug includes a central recess extending thereinto from its upper surface from which a neck portion projects upwardly, said plug dispensing opening extending through said neck portion; said second section closure structure comprising a cap depending from said second section and received in said recess over the top of said neck.

7. The combination of claim 5 in which said container top is of dished configuration and includes a peripheral flange section to be crimped over a container end, said

container closure being received within the dished portion of said top with the upper surface of said second body section substantially flush with the upper portion of said flange.

8. In combination with a product container top having an aperture therethrough, a one piece lockable container closure generally irremovably engaged with said top for selectively maintaining said aperture closed; said closure comprising first and second body sections interconnected with each other by a hinge section therebetween, said body sections being folded relative to each other along said hinge section with said first body section underlying said second body section; said first body section comprising a stopper plug depending therefrom and generally irremovably received in said aperture in said container top, said stopper plug having a dispensing opening therethrough, an integral lateral extension on said stopper plug generally opposite said hinge section overlying said container top adjacent said aperture therein, and lock means on said extension for cooperating with said second body section for maintaining said sections in said overlying folded relationship; said second body section including closure structure overlying and positively blocking said dispensing opening through said stopper plug, and lock means integral with and projecting laterally from said closure structure and overlying said lateral extension of said first body section, said lock means of said second body section being positively and generally irremovably interengaged with said lock means of said first body section; such lock means interengagement positively precluding unblocking of said dispensing opening so long as said hinge section remains intact, whereby initial opening of said container closure may be accomplished upon severing said closure body between said first and second body sections.

9. The combination of claim 8 in which said lock means on said lateral extension of said first body section comprises a lock opening therein, and in which said lock means on said second body section comprises a depending lock shank having lip structure thereon generally irremovably received in said lock opening.

10. A lockable container closure to be positioned in operative engagement with an apertured top of a product container, comprising a one piece closure body defined by two hingedly connected integral body sections which are foldable relative to each other along a hinge section positioned therebetween which interconnects said body sections, one of said body sections including a stopper plug having a product dispensing opening therethrough, said plug being receivable in an aperture through such container top, said one body section including a lateral flange extension integral with said stopper plug and projecting laterally therefrom in a direction generally opposite from said hinge section, said flange extension including lock means thereon for locking engagement with the other of said body sections when said body sections are folded relative to each other with said other body section overlying said one body section; said other body section including closure structure for overlying an upper portion of said stopper plug for blocking said dispensing opening therethrough when said body sections are folded, and other lock means on said other body section integral with and projecting laterally relative to said closure structure, said other lock means overlying said lateral extension of said one body section and said lock means thereon and being generally irremovably interengaged with such lock means on said flange extension when said body sections are folded, such interengagement between said flange extension lock means and said lock means on said other body section when said body sections are folded normally positively precluding unblocking of said stopper plug dispensing opening so long as said body sections remain intact and hingedly connected with each other.

References Cited in the file of this patent

UNITED STATES PATENTS

1,265,177	Coleman	May 7, 1918
2,166,490	Gora	July 18, 1939
2,231,412	McCarthy	Feb. 11, 1941
2,889,089	Herrick et al.	June 2, 1959
2,981,444	Root	Apr. 25, 1961
2,986,309	Larson	May 30, 1961
2,991,913	Goth	July 11, 1961
3,016,168	Larson	Jan. 9, 1962
3,021,976	Tracy	Feb. 20, 1962
3,031,111	Stull	Apr. 24, 1962