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CLOSURES FOR DISPENSING CONTAINERS

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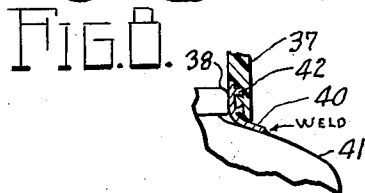
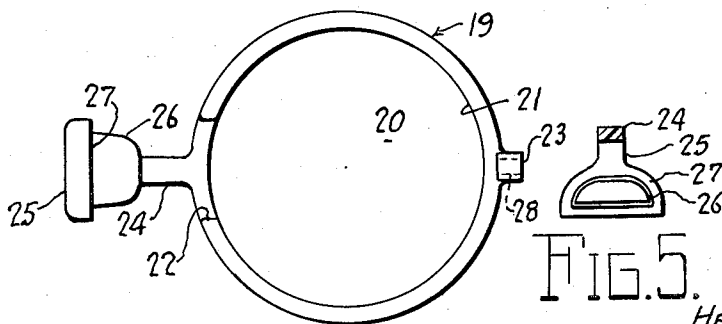
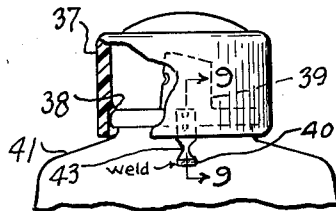
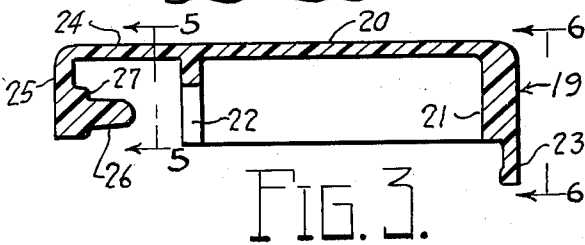
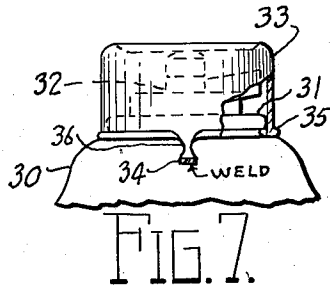
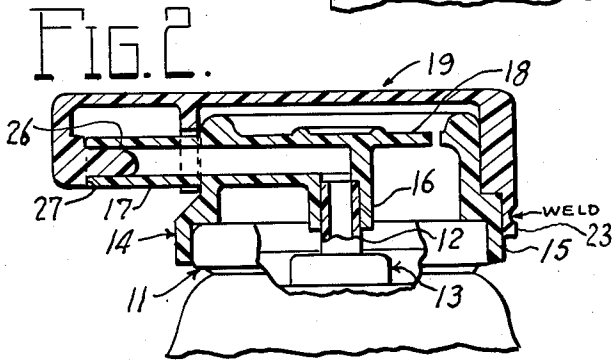
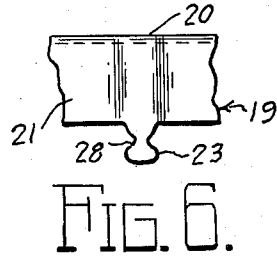
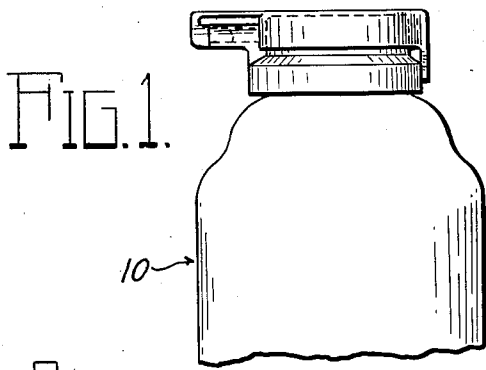


FIG. 4.

FIG. 5.

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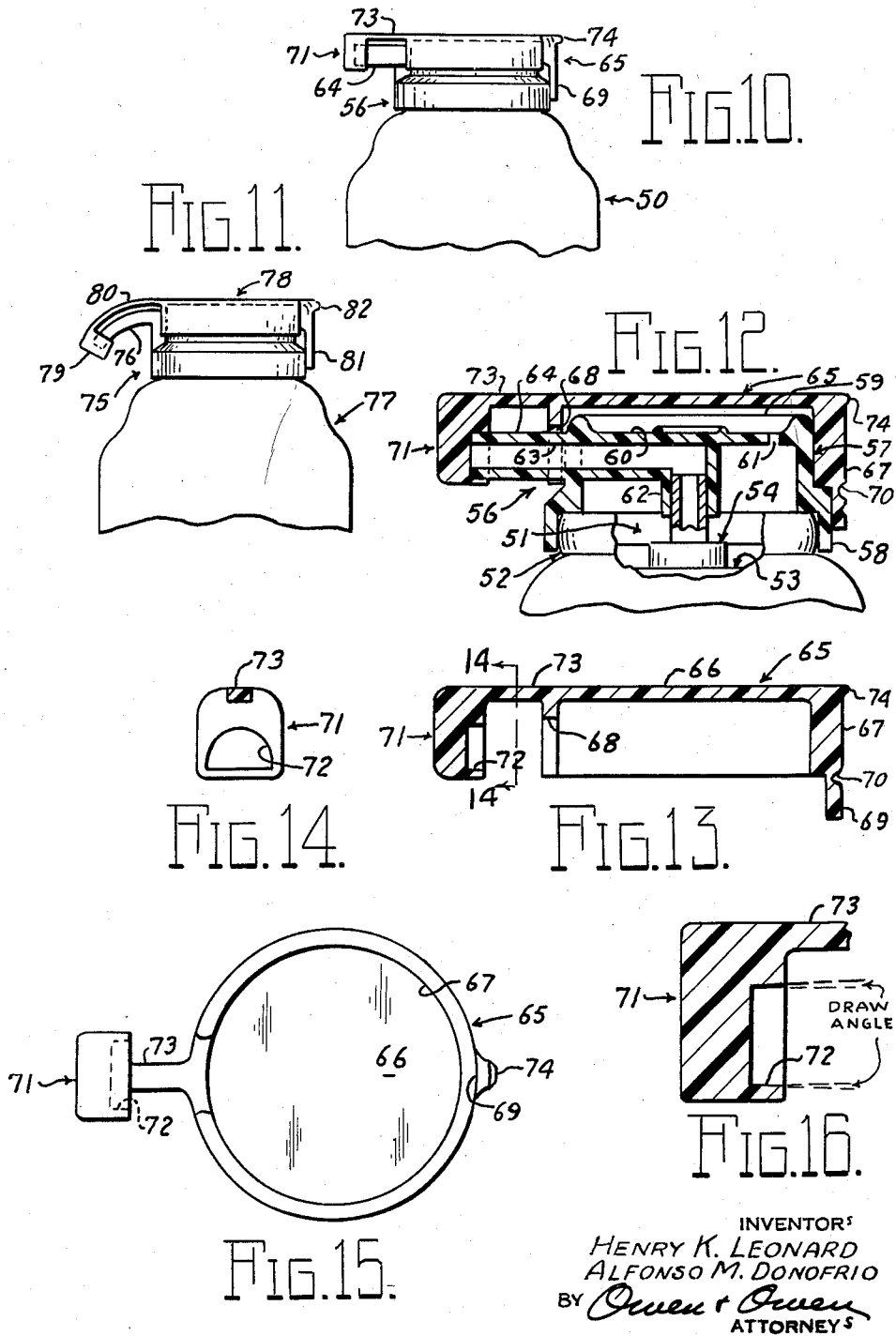
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2 Sheets-Sheet 2



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2,982,448

CLOSURES FOR DISPENSING CONTAINERS

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9 Claims. (Cl. 222—153)

This application is a continuation-in-part of our co-pending joint Leonard and Donofrio application Serial No. 721,798, filed March 17, 1958, now abandoned, and of a co-pending sole Leonard application Serial No. 723,936, filed March 24, 1958, now abandoned.

This invention relates to closures for dispensing containers, and more particularly to improvements in closures for pressurized containers of the type referred to as aerosol cans in which products to be dispensed are packaged under gas pressure and discharged by actuation of valves usually located at the tops of the containers.

Several standard types of containers and a number of different types of valve mechanisms have come into general use on the market. However, most of the containers have open circular tops and the valve mechanisms have annular flanges which are crimped over the edge of the container opening to seal the container. In a filling plant the material to be dispensed is placed in the container, the valve mechanism is inserted and its flange firmly crimped in place in the neck of the container to seal the container. A spray head or discharge control spout is then placed on the upper end of the valve. Either the head or spout itself serves as an actuator for the valve or it has an actuator built into it. In order to prevent accidental actuation of the valve and to permit the cans to be handled and stacked, it has become conventional in the trade to cover the valve actuator with a closure. Several types of closures or caps have been developed, some of them being specifically designed for use with particular valve mechanisms, and others constituting merely inverted cups which are usable with numbers of different types of valve mechanisms.

All of these various closures which have so far been developed are readily removable from the containers, because they extend down around the outer edge of the crimped edges of the valve sealing flanges and are held held in place merely by friction. It is thus possible for a customer to readily remove the protective closure and to actuate the valve in order to sample the fragrance or nature of the product contained in the can. After repeated samplings of this kind, the quantity of material in the can is seriously reduced and a subsequent purchaser of the depleted can is frequently dissatisfied.

Another and more important problem results from the use of these readily removable caps which is particularly noticed in supermarkets and other self-service stores. Often the retail selling price of the container is stamped upon the upper, flat surface of the closure when the container is removed from the carton and placed on the shelf. An unscrupulous or dishonest person may remove the closure from a low priced container and exchange it for the closure on a higher priced container, thus succeeding in purchasing a high priced product at a low price. In the hurry of a checking out counter it is almost impossible for the cashier to detect the change which the dishonest customer has effected.

Some closures have been developed which are threaded

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onto elongated valve stems or nozzles but these closures are also readily removable for testing or substitution.

It is, therefore, one of the principal objects of the present invention to provide a closure for a pressurized dispensing container which not only prevents the testing of the product by a prospective customer or by an idle curious person, but also prevents the exchange of a closure bearing a higher price for a closure bearing a lower price. In addition, a closure embodying the invention permits the packager to seal the container at the plant, thus assuring the customer that the product has not been contaminated.

A recent development in the trade is the use of pressurized containers for the dispensing of materials in liquid and paste form rather than as sprays, foams or mists. Such materials as dentifrice, flavored syrup such as chocolate, caramel, etc., soft drink flavoring syrups, and other liquid materials which are to be consumed by human beings or placed in the mouth are now appearing for sale in this type of container. Discharge valves for containers for materials of this kind usually have spouts to direct the discharge of the material, the spouts extending horizontally or being turned downwardly at their ends. Such spouts protrude horizontally beyond the rims of the crimping seals on the cans in order to permit discharge directly onto a toothbrush, onto a dish of ice cream, into a glass, etc. The ends of spouts which extend beyond the rims of the sealing flanges cannot be covered by conventional inverted cup-type closures. Discharge valves of this type have usually been equipped with simple cap-like closures which merely fit over the valves and allow the spouts to protrude beyond the caps. Such a closure prevents accidental operation of the valve but it leaves the discharge spout exposed where it is subject to being contaminated during storage and handling both prior to use and between uses.

As an example of a product dispensed from a container by a valve mechanism of this general type, dentifrice may be cited. A pressurized container of dentifrice has a horizontally extending spout by which the dentifrice is directed onto a toothbrush. Desirably, the spout itself should be sealed or at least fairly tightly closed in the filling plant, so that the interior of the spout remains sanitary until the ultimate purchaser first opens the container. It is equally desirable that the closure should be so designed as to prevent its being removed and replaced without that fact being indicated so as to prevent curious persons in stores from merely testing the container to see what it discharges and to prevent closure exchange. With respect to pressurized dentifrice, it is also desirable that the discharge spout should be re-closed between uses in order to prevent the drying out of the dentifrice in the spout from its exposure to air. Similar points also exist, of course, with respect to containers for other internally consumed products. A factory-sealed closure for an internally consumed product also guarantees the purity of the product to the purchaser.

The objects of the instant invention are to overcome all of the foregoing objections to currently available closures for containers of this type, and to provide inexpensive modifications in standard closures by which these objections are overcome.

Modifications of the invention as adapted to various types of pressurized container valve closures and the objects achieved by each will be better understood from the specification which follows and by reference to the drawings, in which:

Fig. 1 is a fragmentary view in elevation of a pressurized container of the type used for the dispensing of products such as dentifrice, syrups, etc., as equipped with a closure embodying the invention;

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Fig. 2 is a fragmentary, vertical sectional view on an enlarged scale, illustrating a conventional valve mechanism for such containers and a closure designed therefor according to the invention;

Fig. 3 is a view similar to Fig. 2 but illustrating a valve closure embodying the invention in vertical section;

Fig. 4 is a bottom view in elevation of the valve closure illustrated in Figs. 2 and 3;

Fig. 5 is a fragmentary, vertical, sectional view taken along the line 5—5 in Fig. 3;

Fig. 6 is a fragmentary view in elevation taken from the position indicated by the line 6—6 in Fig. 3;

Fig. 7 is a fragmentary view similar to Fig. 1, with parts broken away, and showing the modification of a conventional metal closure of the cup-type according to the invention;

Fig. 8 is a view similar to Fig. 7 but showing a conventional plastic closure of the cup-type as provided with elements modifying it to embody the invention;

Fig. 9 is a fragmentary, vertical, sectional view taken along the line 9—9 of Fig. 8.

Fig. 10 is a fragmentary view in elevation of a pressurized container employing a straight, laterally extending spout as provided with a closure embodying a modification of the invention;

Fig. 11 is a view similar to Fig. 10 but illustrating a container provided with a downwardly curved spout and equipped with a closure embodying a modification of the invention;

Fig. 12 is a fragmentary, vertical sectional view of the dispensing head including a spout and valve actuator as equipped with a closure embodying the modification of the invention illustrated in Fig. 10, and shown on an enlarged scale;

Fig. 13 is a vertical, sectional view of a closure embodying the modification of the invention illustrated in Fig. 10 and shown in place in Fig. 12;

Fig. 14 is a fragmentary, vertical sectional view taken along the line 14—14 of Fig. 13;

Fig. 15 is a bottom plan view of the closure illustrated in Fig. 13, and

Fig. 16 is a further enlarged fragmentary sectional view of a portion of a closure embodying the modification of the invention shown in Figs. 10, 13 and 15 and illustrating a draw and sealing angle which preferably is formed on the interior of the sanitary cap portion of the closure.

A conventional pressurized container, generally indicated by the reference number 10 in Fig. 1, is filled with a quantity of the material to be dispensed, in this case a liquid or pasty substance such as dentrifice, chocolate syrup and the like, and a valve mechanism, generally indicated at 11 (Fig. 2), is placed in the open upper neck of the container 10 and its flange 12 crimped in position to seal the container. A suitable charge of a propelling gas, such as nitrogen, the lower chlorofluoroalkanes, for example those sold by Du Pont under the trademarks "Freon 11," "Freon 12," "Freon 114," or similar gases, or other propelling gases, is charged into the container 10 through an open stem 13 of the valve mechanism, generally indicated at 11. A unitary spout and valve actuator 14 for the dispensing of products such as those mentioned above has a downwardly extending annular skirt 15 of such size as to closely embrace the edge of the crimped-over flange 12 of the valve 11 and a central nipple 16 which leads to a discharge spout 17. When the skirt 15 is forced downwardly over the crimped flange 12 the nipple 16 also is forced downwardly over the stem 13. In this form of spout, an actuating plate 18 is integral with the nipple 16. Because the spout and actuator 14 is made of flexible plastic material such as polyethylene and the plate 18 is connected to the skirt 15 only at the front (left in Fig. 2), the plate 18 can be depressed relative to the skirt 15. By pressing downwardly on the plate 18 the stem 13 is depressed, opening the

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valve mechanism 11 and allowing the substance under pressure to be forced upwardly through the stem 12 into the nipple 16 and out the spout 17.

A closure 19 (see Figs. 3 and 4) embodying the invention comprises an inverted cup-like portion consisting of a flat top 20 and an annular rim 21. The annular rim 21 is cut away forming a notch 22 which fits over the horizontally protruding spout 17. The rim 21 closely embraces the upper part of the skirt 15 of the spout and actuator 14. The closure 19 also has a tab 23 located at the rear of the rim 21 and extending downwardly over the skirt 15 of the spout and actuator 14. The closure 19 also has a forwardly extending arm 24 terminating in a downwardly extending finger 25 having a plug 26 on its lower end. The lengths of the arm 24 and finger 25 are such that the plug 26 extends into the open end of the spout 17 when the closure 19 (see Fig. 2) is in closing position. The lower end of the finger 25 is transversely enlarged and formed with a flat ledge 27 lying in a vertical plane and around the base of the plug 26. As can be seen particularly in Fig. 2, the ledge 27 abuts the end of the wall of the spout 17 when the plug 26 is inserted in the end of the spout 17.

The closure 19 preferably is molded from a semi-stiff flexible plastic, such as polyethylene, both in order to permit the molded closure 19 to be stripped from its mold and also to permit it to be flexed during placement over the spout and actuator 14 and during removal from such position. In the filling plant an operator inserts the plug 26 in the end of the spout 17 and then swings closure 19 in a clockwise direction to snap its rim 21 downwardly over the exterior of the main body of the spout and actuator 14. The tab 23 presses against the exterior of the flange 15. The operator then touches the tab 23 against a heated point which fuses the tab 23 to the flange 15 at the point indicated by the word "Weld" in Figure 2. As can be seen in Figure 6, the tab 23 preferably is made with a narrow neck 28 so that a purchaser who desires initially to open the container may break the tab 23 at the neck 28 by the use of a simple instrument or even by the pressure of a finger nail. After the tab 23 is broken, the closure 19 may be removed by lifting its rear edge or by disengaging the plug 26 from the spout 17 and swinging the closure 19 rearwardly. After each use, i.e., after each discharge of a portion of the content material through the spout 17, the user replaces the closure 19, reinserting the plug 26 in the end of the spout 17 and thus not only preventing accidental depression of the actuator plate 18 but also materially reducing the exposure of the content material in the spout 17 to air.

Inasmuch as the tab neck 28 is readily visible, for example by a check-out cashier in a supermarket, it is easy to determine whether or not the package is still sealed at the time it is sold. Similarly, a purchaser picking up one of the containers in the store can also determine whether or not that container has been previously opened. The necessity for breaking the tab 23 is a strong deterrent to curious persons who might otherwise remove the closure 19 to try out the container to see what is discharged when the actuator plate 18 is pressed. Substitution of closures from cheaper products similarly requires that the tab 23 be broken, probably on both packages.

The object of the invention which concerns itself with the prevention of unauthorized testing of such containers and also with the prevention of the substitution of a closure carrying a lower price for a similar closure carrying a higher price is further illustrated in Figs. 7, 8 and 9. In Figure 7, the upper portion of the container, fragmentarily indicated at 30, is shown as having an annular, valve crimp rim 31 in which there is positioned a valve mechanism, generally indicated at 32. In this instance, the entire valve mechanism has a diameter less than the diameter of the rim 31 so that a conventional inverted cup-type closure may be employed to cover the valve

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mechanism 32 in order to prevent accidental discharge of the contents. According to the invention, a closure 33 also of inverted cup shape has one or more tabs 34 depending from its lower rim 35 and lying against the body of the container 30. In Fig. 7, it is presumed that the closure 33 as well as the container 30 is fabricated from metal. In this case, after the closure 33 is placed on the container 30, the tab 34 is spot welded to the shoulder of the container 30. The tab 34 is made sufficiently thin or is weakened by scoring at its neck 36 so that a purchaser may readily break the tab 34 to permit removal of the closure 33.

The necessity for actually breaking the tab 34 to remove the closure 33 inhibits dishonest persons who might otherwise trade caps on such containers and provides a readily apparent signal to the check-out cashier that the closure 33 embodying the invention has been removed prior to the presentation at the check-out counter. Again, according to the invention, each purchaser is assured that she is buying an unopened package as long as the tab 34 remains intact.

In Figures 8 and 9 a similar inverted cup closure 37 also embodying the invention is illustrated. In this instance, the closure 37 is molded from a plastic material and again is forced downwardly over the exterior of the valve crimping rim 38. In this instance, the valve mechanism, generally indicated at 39, is of the type employed for the discharge of aerosol mists or fine sprays, for example, of insecticide, deodorant, polish, cleaner, etc. According to the invention, the closure 37 is provided with one or more tabs 40. Because the closure 37 is a molded plastic part, and assuming that the container, fragmentarily indicated at 41, is made of metal, a tab 40 is illustrated as being set into the lower rim of the closure 37 (see Fig. 9), for example, by small metallic ears 42 or by rivets or other fastening means. As in the case of the tab 34 of Fig. 7, the metal tab 40 of Figs. 8 and 9 may be spot welded to the metal body of the container 41 and, similarly, to the tabs 23 and 34, the tab 40 preferably should have a narrow or weakened neck indicated at 43.

As in the case of the closure embodying the invention and illustrated, respectively, in Figs. 1-6 and 7, the closure of Figs. 8 and 9 prevents the initial opening of a pressurized container without revealing the fact that the container has been opened. This inhibits the action of curious persons desiring to test the contents of the container and dishonest persons who seek to substitute caps bearing lower prices for those bearing higher prices. Similarly, the tab 40 indicates immediately to a checker or other clerk that the closure 37 has been removed prior to presentation for payment.

A pressurized container, generally indicated by the reference number 50 in Fig. 10 is partially filled with a quantity of the material to be dispensed, for example toothpaste. The container is then closed by a valve head, generally indicated at 51 in Fig. 12, which comprises a sealing flange 52, a web 53 and a centrally located valve 54 having a tubular upwardly extending nipple 55. The sealing flange 52 is pressure crimped over a lip (not shown) at the upper end of the container 50 and when the flange 52 is crimped in place the entire container 50 is sealed by the valve head 51. A charge of propelling gas, preferably nitrogen in the case of toothpaste, is charged into the container through the tubular nipple 55 of the valve 54. In order to dispense the toothpaste from within the container 50, it is necessary only to depress the valve nipple 55 which opens the valve 54, permitting the gas in the container 50 to force the toothpaste material upwardly through the nipple 55.

A dispensing head for material such as toothpaste, which has been almost universally accepted for this purpose, consists of a unitary plastic body molded preferably from a flexible resinous material such as polyethylene. The unitary dispensing head, generally indicated by the

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reference number 56, has a cylindrical body 57 with a depending annular skirt 58 which fits snugly down over and around the crimped-over sealing flange 52. The body 57 has a top rim 59 which surrounds a valve actuator disc 60. The disc 60 is integrally molded with the body 57 but is connected to the body 57 only at the forward part of the body 57, there being a slot, generally indicated at 61, which extends, say, 340° or 350° around the disc 60.

Also integrally molded with the body 57, rim 59 and disc 60 is a downwardly extending sleeve 62 which is coaxially located relative to the skirt 58, and of such size as to snugly fit over the end of the valve nipple 55. The sleeve 62 is in communication with a horizontally extending spout passageway 63 which leads to a horizontally extending spout 64. The spout 64 extends horizontally beyond the margins of the skirt 58 and substantially beyond the crimping flange 52. The spout 67 cannot, therefore, be enclosed by any closure or cap which is readily placeable over the dispensing head 56.

Release of material from the interior of the container 50 is accomplished by depressing the actuator disc 60 which depresses the valve nipple 55, opening the valve 54 so that gas within the container 50 exudes the material upwardly through the nipple 55 and into the sleeve 62, passageway 63 and out of the open end of the spout 64.

Conventional caps or closures for valves of the type just described consist merely of an inverted cup which fits downwardly over the main body portion 57 of the head 56 and has an arcuate slot cut in its skirt in order to accommodate the spout 64. Such a closure does not cover the open end of the spout 64 and thus cannot prevent the ingress of contaminating substances thereinto during packaging, shipping and display on the shelves of stores or between uses by the consumer. Furthermore, once the valve 54 has been actuated and a quantity of the material, i.e., toothpaste, has been dispensed from the spout 64, the passageway 63 and spout 64 are full of the material. The ingress of air into the open end of the spout 64 dries out the toothpaste or similar material and causes it to form a rather stiff plug in the end of the spout 64. Upon subsequent actuation of the valve 54, pressure is built up behind this plug and, as a consequence, the plug may be violently discharged from the spout 64, causing the toothpaste or other material to sputter or be sprayed over the person using it or over fixtures or other objects in the vicinity of its use. With a cap of the type conventionally used as just described, it is impossible for a packager of toothpaste to state that the product reaches the consumer in a sanitary condition.

A closure embodying a modification of the invention is generally indicated in the drawings by the reference number 65 and is shown in place on the dispensing head 56 in Fig. 12 and in vertical section in Fig. 13. The closure 65 comprises a body 66 which overlies the valve actuator and, as in the earlier embodiments illustrated in Figs. 2, 3 and 4 has a downwardly extending skirt 67 which closely embraces the body 57 of the dispensing head 56. The skirt 67 has a notch 68 molded in its front wall and adapted to drop over the spout 64. The closure 65 may also have a depending tab 69 at its rear which extends downwardly closely adjacent the skirt 58 of the dispensing head 56 and may be heat welded or otherwise adhered thereto, to seal the closure 65 in place on the container 50 when it is packaged at the factory. This sealing tab prevents the removal of the closure 65 from the container and thus the unauthorized actuation of the valve 55 until a consumer has purchased the product. The tab 69 may be made thin or otherwise weakened at a neck 70, so that the purchaser may readily break off the tab 69 when he desires to initially open the package.

Also in common with the closure of Figs. 2, 3, and 4, a closure 65 embodying the invention as illustrated in Figs. 10-16, has a spout cap 71 which is designed to close the

open end of the spout 74. In the embodiments of the invention illustrated in the Figs. 10-16, the cap 71 is formed with a recess 72 which corresponds in its internal contour to the external contour of the spout 64, i.e., which may be said to be congruent to the end of the spout 64. The cap 71 is carried on the forward end of an arm 73 integrally molded with the body 66 of the closure 65 and extending forwardly therefrom, generally parallel to and overlying the discharge spout 64.

The closure 65 of Figs. 10-16 is placed upon a dispensing head of the type described by engaging the end of the spout 64 in the recess 73 and then swinging the entire closure 65 downwardly in a clockwise direction, snapping the skirt 67 over and around the body 57 of the dispensing head 56 with the tab 69 swung downwardly against the skirt 58 of the dispensing head 56. The operator may then momentarily hold the tab 69 against the heated point of a welding device in order to fuse the plastic material from which the closure 65 is molded to the plastic material from which the dispensing head 56 is molded, sealing the closure 65 in place. This sanitarily seals the dispensing head 56, preventing the ingress of contaminating substances into the open end of the spout 64, preventing the accidental actuation of the valve 54, preventing curious persons from deliberately moving the closure 65 to test the container, i.e., to find out what is in it, and also preventing dishonest persons from exchanging closures from lower priced containers with closures from higher priced containers; it being customary for the prices of containers of this kind to be stamped upon the top surface of the container closures.

When a purchaser wishes to open a container equipped with a closure embodying the invention, he breaks off the tab 69 at its neck 70 with a finger nail or sharp instrument. He then engages his fingernail beneath a lifting lip 74 molded at the upper rear side of the closure 65 and swings the closure upwardly and to the left in a counterclockwise direction to disengage its skirt 67 from around the body 57 of the dispensing head 56 and to remove the cap 71 off of the end of the nozzle 64. After use the closure may be replaced by reversing the just preceding operations and the end of the spout 64 is maintained in sanitary condition, air is prevented from causing drying out or hardening of the material in the nozzle 64 and that material is prevented from dripping from the end of the nozzle 64.

The recess 72, see Figure 16, is made with an inclined peripheral wall with the size of the recess 72 at its bottom being just slightly smaller than the outer dimensions of the spout 64 with which it is used and the size of the recess 72 at its open end being slightly larger than the size of the spout 64. This difference is indicated in Figure 16 by the legend "Draw Angle" and the angular shape of the wall of the recess 72 has two purposes, viz., (1) to facilitate removal of the molded closure 65 from the mold, and (2) to exert inward compressive force on the flexible material from which the spout 64 is molded in order to tightly seal the cap 71 around the end of the nozzle 64 to prevent as far as possible the ingress of air and the consequent hardening of material in the spout 64.

Some containers for materials such as dentifrices, shaving creams and other substances, are provided with a different type of standard dispensing head, such as the dispensing head 75 illustrated in Figure 11. The dispensing head 75 is similar to the dispensing head 66 in all of its details except for its discharge spout 76. The discharge spout 76 (Figure 11) extends horizontally forwardly and curves down rather than extending straight as does the discharge spout 64. This downwardly curving type of discharge spout 76 is used by certain packagers in order to encourage consumers to hold the container, generally indicated at 77, in an upright position during use, for example during the spreading of toothpaste upon a toothbrush. A closure embodying the invention, generally indicated at 78 in Figure 11, is also highly similar

to the closure 66 of Figures 10 and 13-16, with the single exception that its cap 79 is carried by a downwardly bent arm 80 so that it is in position to close the end of the spout 76. Like the closure 65, the closure 78 preferably is provided with a sealing tab 81 and a lift lip 82. The closure 78 of Figure 11 is placed upon a container, removed from a container, and replaced upon a container in the same manner as the closure 65 described above.

We claim:

1. For a pressurized container assembly comprising a material and gas holding body having a filling opening in the top, a dispensing valve, a flange sealing said valve in said opening, an actuator and an open-ended discharge spout for said valve, said spout extending horizontally beyond the edge of said flange, the improvement consisting of a removable closure for said container, said closure having an inverted cup-like body adapted to enclose said valve actuator, a sealing tab depending from said body and welded to a non-removable part of said assembly and a spout plug integral with said cup-like body and closing said spout when said closure is in position overlying said actuator.

2. For a pressurized container assembly comprising a material and gas holding body having a filling opening in the top, a dispensing valve, a flange sealing said valve in said opening, an actuator and an open-ended discharge spout for said valve, said spout extending horizontally beyond the edge of said flange, the improvement consisting of a removable closure for said container, said closure having an inverted cup-like body adapted to enclose said valve actuator, a breakable sealing tab depending from said body and welded to a non-removable part of said assembly and a spout cover integral with said cup-like body and closing said spout when said closure is in position overlying said actuator.

3. In combination, a discharge spout and valve actuator for a pressurized liquid container and a sanitary closure for said container, said spout and actuator consisting of an integral plastic assembly having a downwardly extending skirt adapted to closely embrace a valve sealing flange, a centrally located downwardly extending hollow nipple adapted to closely embrace a valve tube, a discharge spout communicating with said nipple and extending horizontally beyond said skirt and an actuator for depressing said nipple and the valve tube embraced thereby for releasing pressurized material through said valve stem into said nipple and out of said spout for use; said closure consisting of an integral, flexible plastic assembly comprising an inverted cup-shaped body removably covering said actuator, a breakable tab extending downwardly from said body and welded to said spout and actuator skirt, an arm extending over said spout and a spout plug on the end of said arm, said plug being removably insertable into the open end of said spout when said closure is positioned on said container.

4. A closure for a pressurized container assembly, said assembly comprising a material container, a dispensing valve, flange means for sealing said valve in an opening at the top of said container, said valve having a discharge spout protruding horizontally beyond said flange means, and an actuator for said valve mounted above said valve, said closure comprising a cup-shaped body adapted to be removably placed over said actuator, said body having a downwardly extending skirt surrounding at least the upper part of said valve, a tab attached to the lower edge of said skirt and welded to a non-removable element of said container, and an integral element extending over and removably closing the end of said spout.

5. A closure for a pressurized container assembly, said assembly comprising a material container, a dispensing valve, flange means for sealing said valve in an opening at the top of said container, said valve having a discharge spout protruding horizontally beyond said flange means, and an actuator for said valve mounted above said valve, said closure comprising a cup-shaped body

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adapted to be removably placed over said actuator, said body having a downwardly extending skirt surrounding at least the upper part of said valve and an integral element extending over and removably closing the end of said spout.

6. A closure for the dispensing head of a pressurized container, said head having a cylindrical body, a valve actuator at its central top portion and a discharge spout extending radially and generally horizontally away from said cylindrical body, said closure comprising a body adapted to seat on said head and to overlie said valve actuator, an arm extending forwardly from said closure body generally parallel to and overlying said discharge spout and a cap depending from the end of said arm and having a recess adapted tightly to enclose the end of said discharge spout for preventing ingress of contaminating substances and air into and egress of material out from said discharge spout.

7. A closure according to claim 6 having a depending tab at the lower rear edge of said closure body, said tab being adapted to be sealed to the cylindrical body of the dispensing head.

8. A reusable sanitary closure for a pressurized con-

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tainer having a dispensing valve on its upper end, an actuator for said valve mounted above said valve and a dispensing spout communicating with the interior of said container when said valve is open and the spout having an outer end protruding laterally beyond the body of said actuator, said closure comprising an inverted hollow body adapted to be removably placed over said actuator, a downwardly extending skirt on said body, an outwardly extending integral element overlying said spout and having a downwardly extending wall on the end of said element extending across the open end of said spout.

9. A reusable closure according to claim 8, in which the wall at the end of the element lies vertically beneath at least a portion of the open end of the spout, whereby said closure cannot be removed by vertical translation thereof.

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