

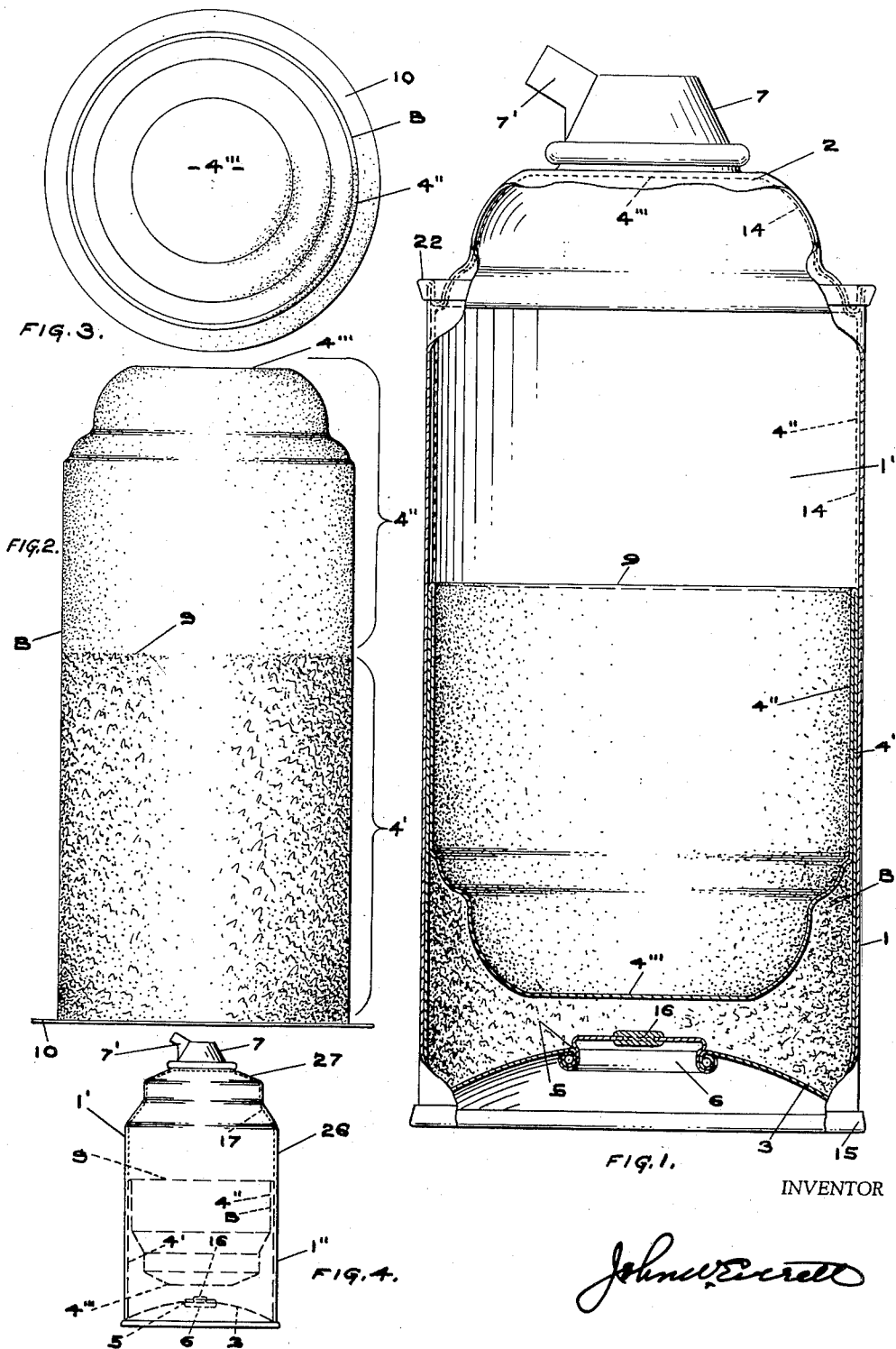
June 26, 1962

J. W. EVERETT
PRESSURE CAN HAVING A FLEXIBLE MATERIAL
HOLDING BAG THEREIN

3,040,933

Filed Jan. 5, 1959

4 Sheets-Sheet 1



June 26, 1962

J. W. EVERETT
PRESSURE CAN HAVING A FLEXIBLE MATERIAL
HOLDING BAG THEREIN

3,040,933

Filed Jan. 5, 1959

4 Sheets-Sheet 3

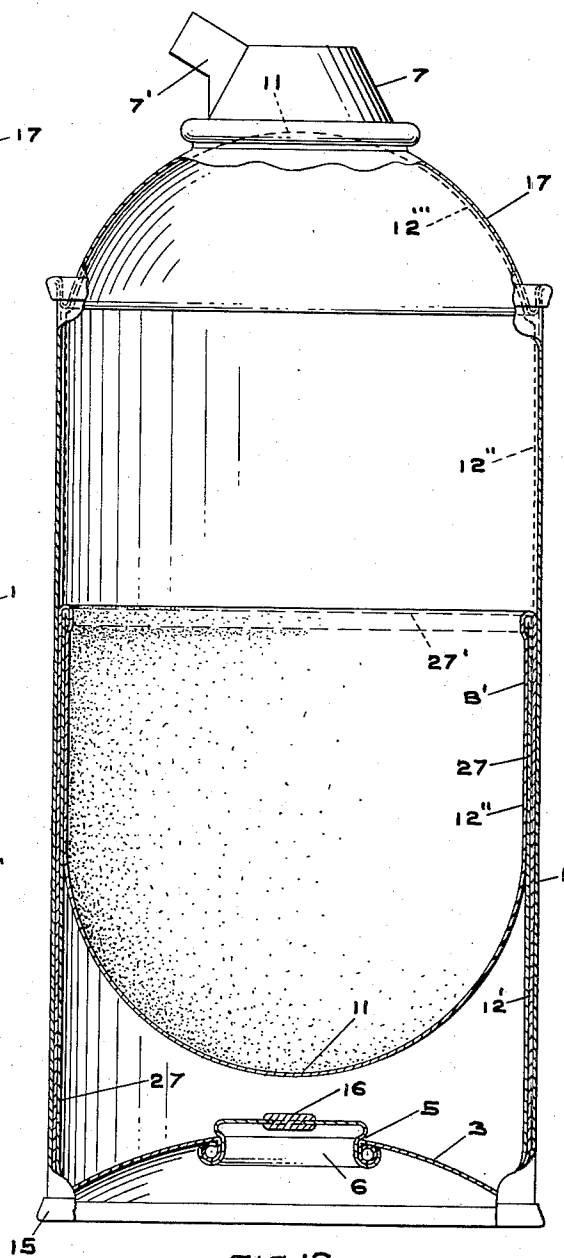
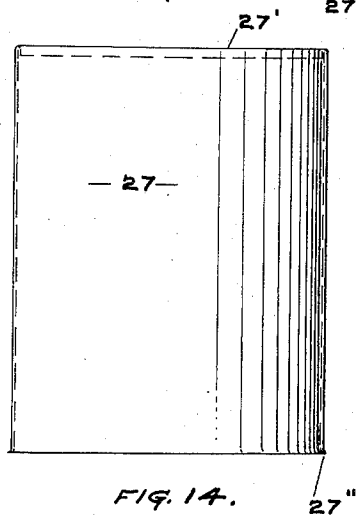
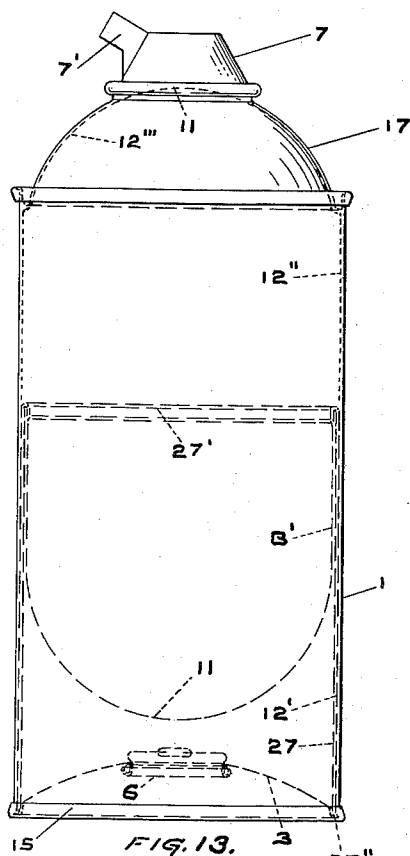


FIG. 12.

INVENTOR

John W. Everett

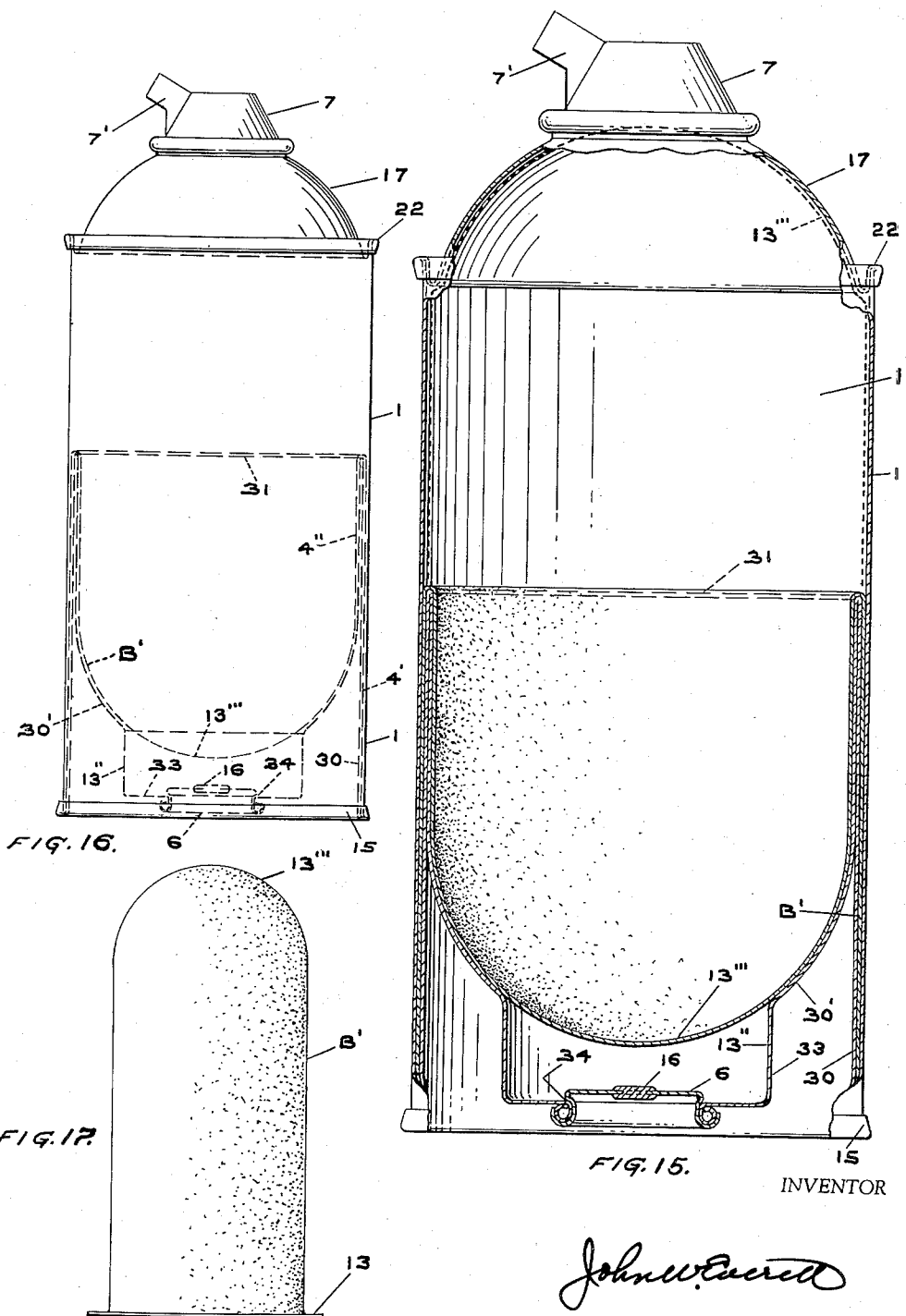
June 26, 1962

J. W. EVERETT
PRESSURE CAN HAVING A FLEXIBLE MATERIAL
HOLDING BAG THEREIN

3,040,933

Filed Jan. 5, 1959

4 Sheets-Sheet 4



INVENTOR

John W. Everett

1

3,040,933

PRESSURE CAN HAVING A FLEXIBLE MATERIAL HOLDING BAG THEREIN

John W. Everett, 3748 Beech Ave., Baltimore, Md., assignor of one-fourth to Edgar A. Poe, Jr., one-fourth to Gordon C. Murray, and one-fourth to Karl J. Eisenhardt, all of Baltimore, Md.

Filed Jan. 5, 1959, Ser. No. 785,086

7 Claims. (Cl. 222-95)

The present invention relates to an improved pressure container and the method of making the same.

The invention has to do with the type of pressure container in which the material carried by the container is maintained in a separate compartment from the medium used in creating pressure in the container for expelling the material. The container is especially designed for use with a pressure producing evaporating liquid such as "Freon," a trade name for a product sold by E. I. du Pont de Nemours & Company of Wilmington, Delaware, but does not exclude the use of other liquids of similar nature and pressure medium such as nitrogen gas, etc. The advantage of a liquid type pressure medium is that it can be compounded to evaporate at relatively low pressures and at the desired pressure for a particular product, which makes it ideal for pressure containers.

The present container is constructed with a combination rigid and flexible bag made preferably from an organic plastic substance and one which is for all practical purposes impervious to the passage of a gas. Such a material is now available in the form of a product known by the trade name "Mylar," also distributed by the E. I. du Pont de Nemours & Company. While a product such as "Mylar" has the advantage of being impervious to gas, it has practically no elasticity and therefore the use of such a bag made of this material must be so constructed and incorporated within the container as to expel all the contents from the container with very little or no stretching of the bag.

While "Mylar" is at present one of the best known materials for its imperviousness to gas, other materials also have a high degree of imperviousness such as "Pliofilm" manufactured by the Goodyear Company of Akron, Ohio. Therefore, it is not intended that only certain particular materials may or can be used. The kind of product being carried in the container may have a great deal to do with the kind of material used in the bag. If the product being carried is not for consumption, such as lubricating oil, the material from which the bag is made may not be required to be as impervious to gas as one carrying a food product such as liquid coffee, catsup, syrup, etc., materials such as natural rubber and more porous plastics may be used where small amounts of the expelling fluid does not matter too much when mixed with the material being dispensed.

There are various types of known pressure containers having the material carried in a bag. However, the present invention provides a container of this class, that will not island (that is, choke off a portion of the material in the bag) and at the same time afford a greater capacity for material carried by the container, than is possible at the present time with similar containers.

The primary object of the invention is to provide a separate air-tight compartment for the material to be dispensed and a separate compartment for the medium used as the expelling agent, in which the compartments are separated by a combination rigid and flexible bag.

Another object of the invention is to provide a rigid hermetically sealed container including a combination rigid and flexible bag having an open and closed end, fitted to the inside of the container and having its open end secured to either the bottom or top of the container

2

for dividing the container into two air tight compartments whose sizes vary inversely to each other by moving the closed end of the bag from top to bottom and vice versa.

A further object of the invention is to provide means for fixing the side area of the bag adjacent one of the ends of the container in extended rigid position from the end of the container to a predetermined point along the sides of the container, which is designated as the fold line for the bag.

Still another object of the invention is to provide that that bag be only flexible from the fold line along its side portion to and including its closed end and rigid from its fold line to the open end of the bag, the flexible end of the bag being foldable inwardly through the rigid portion of the bag to place the closed end of the bag adjacent the bottom or top of the bag as the case may be.

While the principal objects of the invention have been set forth, other objects, uses and advantages may be apparent to those skilled in the art, however, in general the invention consists in its novel construction, combination and arrangement of its several parts as described in detail in the specification to follow, and illustrated in the accompanying drawings, in which:

FIGURE 1 is an enlarged sectional view showing one form of the container.

FIGURE 2 is a detail elevational view of the bag shown in full scale.

FIGURE 3 is a plan view of the same.

FIGURE 4 is a view in elevation of a container of a different standard form, on a reduced scale, in which the top is formed integrally with the side of the container.

FIGURE 5 is a view in elevation of a modified form of bag.

FIGURE 6 is an enlarged sectional view taken on the line 6-6 of FIGURE 5 illustrating the wall of the bag having additional thickness and/or having additional material combined with the original bag material for making the lower portion of the bag rigid.

FIGURE 7 is a view in elevation of another modified form of the bag.

FIGURE 8 is an enlarged sectional view taken on the line 8-8 of FIGURE 7.

FIGURE 9 is an elevational view, on a reduced scale, of a rigid sleeve of organic plastic material for supporting the lower area of the bag in extended position.

FIGURE 10 is still another view in elevation of another modified form of the bag showing the supporting means for the lower portion of the bag on the inside.

FIGURE 11 is an enlarged sectional view taken on the line 11-11 of FIGURE 10.

FIGURE 12 is a fragmentary sectional view on an enlarged scale of a modified form of container showing a separate rigid support for supporting the lower area of the bag in extended vertical position.

FIGURE 13 is a view in elevation, shown in full scale, of the form of container shown in FIGURE 12.

FIGURE 14 is a view in elevation of a separate metal rigid support for the lower area of the bag, used in connection with the container shown in FIGURES 12 and 13.

FIGURE 15 is a fragmentary sectional view on an enlarged scale, of still another form of container showing the bottom of the container formed to support the lower area of the side wall of the bag in extended vertical position.

FIGURE 16 is a view in elevation, in full scale, of the form of container shown in FIGURE 15.

FIGURE 17 is a view in elevation on a reduced scale of the flexible bag used in the container illustrated in FIGURES 15 and 16.

In describing the invention, like numerals are used to

3

designate like and similar parts throughout the several views.

For convenience and clarity the invention is illustrated in three forms, one form being illustrated in FIGURES 1 to 11, another in FIGURES 12 to 14, and still another in FIGURES 15 to 17.

A number of the parts of the several forms are identical, therefore they will carry the same reference characters.

Referring first to FIGURES 1 to 11, the container comprises a rigid outer body member 1, a rigid cover member 2, a rigid bottom member 3 and a collapsible bag B. The container body 1 is preferably of cylindrical shape and the top is preferably of convex shape, or any suitable convex configuration and the bottom 3 is preferably of concaved shape. However, the detailed shapes of the top and bottom members may be changed without altering their function so far as the present invention is concerned. It will also be noted in FIGURE 1 that the bottom 3 is provided with an opening 5 which is closable by a closure 6. The cover is also provided with a top opening (not shown) and is adapted to receive a combination closure and valve mechanism contained in the valve housing member 7.

The bag B, as shown in FIGURES 1 to 3 inclusive, is generally first constructed of a flexible organic plastic substance and preferably of "Mylar," but other materials may also be used. While most of these plastic materials at present are not as impervious to gases as "Mylar," they are, for certain purposes, equal and sometimes better for certain kinds of products such as dispensing of tooth paste, oils, paints and in general products that are not intended for human consumption. The bag B is formed with a closed and open end and made to fit snugly within the container, having its outer wall surface conforming with the inner side wall of the rigid body portion 1 and the rigid cover 2, shown in full and dotted lines in FIG. 1. The bottom portion 4' of the bag B is treated, or covered with a material, or supported in a manner to be hereinafter described to support the lower portion of the bag in a vertical rigid position. The upper portion 4'' of the bag is flexible and foldable inwardly and downwardly into the lower portion 4', shown best in FIGURE 1. The closed end 4''' of the bag extending downwardly to a point adjacent the bottom of the container. When the bag is folded inwardly and downwardly it will fold along a line at the top of the rigid portion 9, which will be referred to as the fold line of the bag, and is designated by the numeral 9, the upper edge 9 of the rigid portion 4' will determine how far the bag is folded downward, and at the same time the rigid portion 4' adjacent the side wall of the container will keep a minimum amount of material from getting between the outside surface of the bag and the inside rigid wall surface of the lower portion of the container body.

The rigid body member including the top cover of the container and bag are assembled by first starting with the rigid body portion 1 and a cover 2 which is provided with an opening (not shown) through which the container is filled and which is adapted to receive a closing and valve assembly 7, however, in the assembly of the container the cover is without the closure and valve mechanism 7. The bag B, as shown in FIG. 2, is inserted into the bottom of the rigid body portion 1 in extended form. The bag is designed to fit substantially snug within the container body 1, as shown in full and dotted lines 17, in FIG. 1, that is, the side wall of the bag fits close to the inside surface of the wall of the body portion and the top portion 4''' of the bag fits into the cover 2. It is to be understood that the cover 2 and the shape of the closed end 4''' of the bag may be of any preferred form. The bag B is provided about its open end with a flange 10 extending outwardly from the plane of the outer surface of the bag, for engaging the seam between the container body 1 and the bottom 3. After the bag has been inserted within the

4

container, the flange 10 on the open end of the bag will extend outward over a flange on the lower end of the can body (not shown as this is old in the art, and also shown in patent application Serial No. 758,431 filed September 2, 1958), after which the bottom 3 is placed over the bottom of the container which is also provided with a flange, and which extends over the flanges of both the bag and the body member, whereby the flange 10 of the bag member is rolled into the gas tight seam 15 between the flanges of the container body and bottom. The bottom 3 is seamed to the body of the container without the closure 6, which is inserted later and will be referred to more in detail subsequently in the specification.

After the bag B and bottom 3 have been seamed about the lower end of the container body, the top of the bag is folded inwardly and downwardly into the lower portion of the bag, as shown in FIGURE 1, until the closed end 4''' of the bag is adjacent the bottom of the container. The bag may be folded inwardly and downwardly in a number of ways, one being by air pressure applied to the opening in the cover 2, another way being, by pulling a vacuum on the bottom of the container through the opening 5 or, by forcing the closed end of the bag down by filling the container through the opening in the top.

Referring again to the closure 6 in the opening 5, in the bottom of the container, the closure preferably is provided with a plug of soft substance 16 which is compounded to melt at a predetermined temperature, such as "Woodsmetal" which we will say, would melt at 250 degrees F. This would allow for sterilization and testing of the container, but in case the container was subjected to excessive heat, such as an incinerator, the plug would melt and release the impelling gas, thereby preventing an undue explosive effect, such as the bursting of the can due to the heat causing the impelling gas to expand unduly. In operation, the material to be dispensed is placed within the container through the opening in the cover 2, filling the inverted upper portion 4''' of the bag and the upper portion 1' of the container body, after which the combination closure and dispensing valve 7 is inserted and sealed within the opening in the top of the container body, the container is then inverted and through the opening 5, in the bottom 3, "Freon" or other corresponding liquid is introduced for pressurizing the container, after which the closure 6 is inserted and sealed in the opening 5. As the temperature of the "Freon" liquid begins to rise the liquid turns to a gas and creates pressure on the inverted end 4''' of the bag forcing the bag and material upwardly toward the top of the container. By operating the valve in the valve member 7 the material will be dispensed through a suitable nozzle 7'. As the material is expelled from the container the flexible side of the bag will roll up the inside wall of the container body and the folded down closed end of the bag will move toward the top 2. When all the material has been expended, the bag B will be extended at full length as shown by the dotted line 17 in FIGURE 1, contacting the inside surface of the side wall of the container body and the inside surface of the container cover 2.

It is readily seen by this construction and operation, that the material has been completely dispensed without being in contact with the impelling medium.

The bags may have various forms and construction, as shown in FIGURES 5 to 11. The bottom portion of the bag may be made rigid or held in extended position in a number of ways. One way being, to coat the portion of the bag, which it is desired to be rigid with an adhesive, such as the area 4'. Or this area may not be wholly coated as shown, but in bands, with at least one band being adjacent the fold line 9 for defining the line upon which the bag is folded. This adhesive may take the form of one that may be applied to either, or both the inner wall of the rigid body portion 1 and the bag and united by pressure, heat or other known methods.

5

The adhesive may also be applied in any of the well known methods of dipping, spraying, brushing, etc.

Another method of holding the bag in extended position is to stiffen the bag itself. This may be done by the use of a catalysis which would cause the flexible material from which the original bag is made to become rigid in the desired areas.

Another method of stiffening the lower portion of the bag is to place a coating, or thin sheet of stiff material, such as that shown at 18 in FIGS. 10 and 11 on the inside of the bag. Still another method of stiffening the lower portion of the bag is to place the stiffening member or material on the outside of the bag, as shown at 19 in FIGS. 7 and 8. This additional stiffening member may be in the form of preformed cylinders, or a coating may be sprayed on which is illustrated in FIG. 5 by the spray nozzle 20. In FIG. 6, it is illustrated at 21 that the sprayed stiffening material is so combined with the original material of the bag as to be intermingled with each other. FIG. 9 shows an elevational view, on a small scale, of a separate stiffening cylinder 22 made of plastic material for the bag. This cylinder may be made to fit on either the inside or outside of the bag, and may be glued thereto by any of the well known compounds, such as by a solvent solution. It will be noted, that the top of the bag in FIGS. 5 to 11 are spherical, and are so shown in the remaining views and designated by the numeral 11, however, these different shapes operate in substantially the same manner as the shapes of the bag shown in the form illustrated in FIGS. 1 to 3.

In using the form of container shown in FIG. 4, the top of the bag will of course be shaped to fit within this particular form. This container is designated 1" and is the type in which the top 27 is formed as part of the container body, by either a spinning or stamping operation in place of the seam 22 for securing the top 2 to the container body, as shown in FIG. 1. This type container is very much in use at the present time, and the present bag is equally adaptable to this type container, as it is with the container in which the top is seamed to the container.

A modified form of container is shown in FIGS. 12 to 14. As many parts of this container are exactly the same as those shown and described for the type of container shown in FIGS. 1 to 3, they will carry the same number except where they may differ in shape, when a new number will designate such part. In this form, the bag and container cover are slightly different, the cover 15 is shown as of spherical shape in place of the multiple curved surface of the top 2, shown in FIG. 1. The bag in this and subsequent views is slightly different from the bag shown and described in FIGS. 1 to 3, in that, the lower portion of the bag is supported by a separate support and therefore will be referred to as B'. Instead of having the lower portion 12' of the bag B' treated, or combined with a substance to hold it in a fixed vertical position adjacent the inner surface of the side of the container body, there is provided a separate member 27 which engages the inner surface of the bag holding it in an extended position from the bottom of the container to a predetermined line along the side wall of the container. The support 27 may be constructed of a plastic material, metal, etc., its function being to keep the bottom of the bag extended. The upper edge 27' of the support defines a fold line for the bag when the top of the bag is folded inwardly and downwardly within the bottom portion, as shown in full lines in FIG. 12 and in dotted lines in FIG. 13. If the support 27 is constructed of metal the upper edge 27' is preferably rolled to prevent injury to the bag. The support is further provided about its bottom edge with a lip 27" to prevent the bottom of the support from extending beyond the bottom of the container. This lip 27" will engage the inner slope of the turned out seam flange on the bottom

6

of the body portion 1 (not shown) and retain the support in its normal bottom position within the container, as shown in FIG. 13. In this form the bottom is the same as used in the container shown in FIG. 1 and is seamed to the bottom of the container, as described for FIG. 1, having the flange 13 (see FIG. 17) of the bag contained in the seam 15 between the bottom and body portion of the container as shown in applicant's application Serial No. 758,431. While the member 27 has been described as being installed in the bottom of the container, it may be inserted in the top of the container and the open end of the bag sealed between the upper end of the body portion and the top cover member.

It should be noted that some plastic materials, such as "Pli-o-film," have a limited amount of stretch before increasing their porosity to any appreciable extent. Therefore, in using these materials the upper flexible portion of the bag may be made slightly smaller than the inner dimensions of the rigid body and top whereby the upper portion of the bag is stretched outwardly toward the inner surface of the rigid body and top members by the pressure within the container as the last of the ingredient in the container is being expelled.

The bottom is provided with the closure 6 and a fuse plug 16 as shown and described for FIG. 1. The bag B' when inserted in the bottom of the container body as previously stated, extends the full length of the container body having its closed end adjacent the top of the container, as shown by the dotted line 12" in FIGURES 12 and 13, after which the closed top 11 and the upper portion 12" and 12'" of the bag B' are reversed to receive the material to be dispensed. The bag, is shown in full lines in recessed position in FIG. 12. An expandable fluid material such as "Freon" is deposited in the bottom of the container as previously described for the form of container shown in FIG. 1, after which the cap 6 is sealed into the opening 5 in the bottom of the container. As the fluid rises in temperature, it creates a pressure by expanding and is transferred into gas, which pressure will be exerted on the surface of the bag adjacent the bottom of the container, forcing the top 11 of the bag B' and ingredients contained therein upwardly toward the top 17 of the container, where the contents will be dispensed through the dispensing valve mechanism 7.

A still further modification of the container is shown in FIGS. 15 and 16. In this form, the bottom is substantially different from the bottom of the other two forms and is formed to support the inverted top 13'" of the bag. This particular formed bottom is drawn preferably from metal, but is not limited thereto. The bottom is provided with a wall 30 extending upwardly from the bottom of the container adjacent the lower portion of the bag B' to a line 31 where the bag is folded. This forms the fold line for the bag. The wall 30 is then reversed and is folded back along the inside surface, of the first surface 30. As the wall 30' reaches a point adjacent the bottom of the container, it is off-set downwardly from the curvature of the upper end of the bag, as shown at 13" in FIG 15 to form a reservoir as shown at 33. At the very end of this reservoir there is an opening 34 into which a closing cap 6 will fit, as used for closing the opening after the pressure material has been added. The reservoir is designed for receiving just the right amount of pressure fluid for collapsing the bag for forcing the ingredients carried therein to the top of the container under pressure to be dispensed through the dispensing valve.

FIG. 17 illustrates the bag of the shape and type used in the spherical shaped covers and one which is used with a separate supporting means for supporting the lower portion of the bag.

All forms of the container operate in substantially the same manner. When the container is filled with material, which includes the folded in portion 4 of the bag

and the upper rigid portion 1' of the container body and pressure is applied as described, the top of the bag will be forced upwardly when material is released through the dispensing valve mechanism 7. In this type of container the difference in pressure on each surface of the bag itself is very small, that is, if there is thirty lbs. of pressure created by the pressure creating fluid on the inverted upper end of the bag, the pressure on the material side of the bag is practically the same. The bag acts as a diaphragm between the pressure fluid and the material being dispensed. Therefore, there is very little tendency for the pressure fluid to go through the bag into the material chamber. By using a material in the making of the bag that is impervious to gas, or one that is nearly so, there will be little intermingling of the two, which is very desirable for certain products such as foods and for material that would be changed chemically by the addition of a gas from a pressure fluid, or from the liquid itself, if the expelling medium is originally in the form of a liquid. This type of operation provides for an even and constant pressure on the ingredients being dispensed with a liquid expelling medium down to the very last amount of liquid left in the lower chamber of the container, which may be calculated to the amount necessary to be transformed into gas of the predetermined pressure to fill the container when the bag is fully extended.

Of course, it is not intended that the invention be limited to the exact details of construction herein shown and described as these may be varied within the scope of the appended claims.

Having illustrated and described the invention, what is claimed as new and useful and desired to be covered by Letters Patent is:

I claim:

1. A pressure container for dispensing materials comprising in combination, an outer rigid body portion of greater vertical height than its diameter, an outer rigid bottom upon which the container may be independently supported hermetically fixed on one end of the body portion and an outer rigid top cover hermetically enclosing the opposite end of the body portion including an opening for receiving a closure and a valve mechanism fixed within the opening through which the material is introduced and dispensed, a bag having a side wall, a closed end and an open end, a portion of the side wall of the bag adjacent the open end at least being slidably receivable into and fitted to the inside surface of the rigid body portion having its closed end formed to substantially fit into the top of the container when fully extended in an upward position, the bag having its open end hermetically sealed about one end of the body portion, means cooperating with the side wall of the bag for rigidly supporting a portion of the same adjacent its open end in an extended position and adjacent the inside surface of the body portion of the container to a point substantially one half the height of the container, the closed end of the bag and the portion of the side wall beyond the inner edge of the fixed extended portion being readily flexible and foldable into the inner end of the fixed extended portion of the bag, the inner end of the fixed extended portion of the bag providing a fulcrum about which the flexible portion of the bag is folded into the inner end of the fixed extended portion, whereby the flexible wall and closed end portion of the bag is movable longitudinally of the container from the top thereof to a point adjacent the bottom of the container for receiving the material to be dispensed, the length of the flexible portion of the bag being substantially the same length as the distance from the inner edge of the fixed extended portion of the side wall of the bag to the top of the container, said container being provided, with a space between the bottom of the container and the closed end of the bag when the closed end of the bag is in a downward position within the container for receiving an ex-

pandable fluid for exerting pressure on the surface of the bag presented towards the bottom of the container for forcing the flexible portion of the bag and the material upwardly toward the top of the container for dispensing the material through the said dispensing valve mechanism.

2. A two compartment pressure container for dispensing materials comprising, a rigid tubular body portion having a rigid bottom hermetically fixed on one end of the body portion and a rigid top cover hermetically enclosing the opposite end of the body portion having an opening for receiving a closure and a dispensing valve fixed within the opening through which the material is dispensed, a bag having a closed end and an open end, the open end at least of the bag being slidably receivable into and fitted to the rigid body portion and its closed end extending to a point adjacent the top of the container when the bag is in fully extended position having its open end hermetically sealed to the lower end of the container between the lower end of the container body and the bottom, a rigid fixed support for fixedly supporting a portion of the side wall of the bag adjacent its open end in an extended position and adjacent the inside surface of the body portion of the container to a point substantially one half the height of the container, the closed end of the bag and the portion of the side wall beyond the inner edge of the extended portion being readily flexible and adapted to be folded inwardly and downwardly over the inner edge of the rigid support into the lower portion of the bag with its top adjacent the bottom of the container for receiving along with the upper portion of the rigid container body and top the material to be dispensed, the container being provided with a space between the bottom of the container and the bag for receiving an expandable fluid for forcing the closed end of the bag and material upwardly towards the top of the container for dispensing the same through the said dispensing valve mechanism.

3. A two compartment pressure container for dispensing materials comprising a rigid body portion of greater vertical height than the diameter thereof, the body portion having a rigid bottom hermetically sealed to the bottom of the body portion and a rigid top cover hermetically enclosing the opposite end of the body portion including an opening for receiving a cover and a dispensing valve mechanism fixed in the said opening through which the material is dispensed, a separate bag having a closed end and an open end, the open end at least being slidably fitted into the lower portion of the rigid body portion and its closed end extending to a point adjacent the rigid top of the container and having its open end hermetically sealed in the bottom seam securing the rigid bottom to the rigid container body, a rigid support for fixedly supporting a portion of the side wall of the bag adjacent its open end in an extended position and adjacent the inside surface of the body portion of the container to a point substantially one half the height of the container, the closed end of the bag and the portion of the side wall beyond the inner edge of the extended portion being readily flexible and adapted to be foldable into the inner end of the fixed extended portion of the bag, the inner end of the extended portion of the bag providing a fulcrum about which the flexible portion of the side wall of the flexible portion of the bag is folded when in one of its extended positions, the container having a space between the folded end of the bag and the bottom of the container for receiving an expandable fluid for exerting pressure on the surface of the bag adjacent the bottom of the container for forcing the foldable top portion of the bag and the material upwardly toward the top of the container for dispensing the material through the said dispensing valve mechanism.

4. In a pressure container as claimed in claim 1 in which the means cooperating with the side wall for fixedly supporting the same comprising, a portion of the bottom of the container formed to extend inwardly along the

9

inside surface of the bag for a distance equal to substantially one half the vertical height of the container and having its center extending downwardly to a position adjacent the bottom of the container and of such form as to conform to the closed end of the bag for supporting the bag when the top is fully extended downwardly adjacent the bottom of the container.

5. A pressure container as claimed in claim 1 in which the bag is constructed of an organic plastic material and the fixed extended portion of the side wall of the bag being treated with a hardening compound for stiffening the same.

6. A pressure container as claimed in claim 1 in which

10

the original bag is constructed of a flexible organic material having incorporated in the fixed extended portion of the side wall of the bag a material having more rigidity than the material from which the original bag is made.

7. A pressure container as claimed in claim 1 in which the bag is constructed of a flexible organic material having the fixed extended portion of the side wall of the bag supported by a separate supporting member.

References Cited in the file of this patent**UNITED STATES PATENTS**

2,731,297	Meyer	Jan. 17, 1956
2,889,078	Thomas	June 2, 1959