The invention relates generally to container structures, and more particularly to containers having provision for the packaging and dispensing of fill, and it primarily seeks to provide a novel form of container for the packaging and dispensing of a fill in the nature of shortening or comparable viscous masses.

Container structures designed for the packaging of shortening have been provided heretofore, but such known structures have not been entirely satisfactory because of the difficulties experienced in removing fill therefrom, especially in measured quantities. It is a purpose of the present invention to provide a novel form of dispensing container wherein dispensing difficulties found objectionable in prior known containers are avoided.

An object of the invention is to provide a novel dispensing container for fill such as shortening and including a body, a top closure, a dispensing follower slidably mounted in the body and adapted to engage over fill beneath the top closure and having a dispensing opening therethrough so that upon removal of the top closure on a filled container and application of pressure downward on the follower, the latter will press downward on the fill and force some thereof upwardly through the opening, the follower having means thereon for measuring quantities of fill thus displaced upwardly through the follower opening.

Another object of the invention is to provide a container structure of the character stated wherein the measuring means is in the form of a cup-like receiving chamber removably mounted on the dispensing follower and having thereon means for discharging therefrom a measured quantity of fill after removal of the chamber from the container.

Another object of the invention is to provide a container structure of the character stated wherein the means for discharging the measured quantity of fill from the measuring chamber comprises a follower top slidably mounted in said chamber.

A further object of the invention is to provide a container structure of the character stated wherein the removable mounting of the measuring chamber on the dispensing follower comprises an upstanding flange defining the dispensing opening and over which the receiving chamber is telescoped and over which the open bottom of the chamber can be engaged to shape up the measured fill removed with the measuring chamber prior to the dispensing of the measured quantity of fill from the chamber by projection of the follower top therein.

A still further object of the invention is to provide a container structure of the character stated wherein the container top closure includes a central raised portion into which the measuring means extends prior to initial removal of said top closure from a filled container.

With the above and other objects in view that will hereinafter appear, the nature of the invention will be more clearly understood by reference to the following detailed description, the appended claims and the several views illustrated in the accompanying drawings.

In the drawings:

FIGURE 1 is a perspective view illustrating a container structure embodying the invention, the dispensing follower and measuring cup being shown in dotted lines.

FIGURE 2 is a perspective view showing the container of FIGURE 1 with its top closure removed by use of a conventional opener to reveal the underlying dispensing follower and measuring cup.

FIGURE 3 is an enlarged fragmentary vertical cross section taken on the line 3—3 on FIGURE 2.

FIGURE 4 is a horizontal sectional view taken on the line 4—4 on FIGURE 3.

FIGURE 5 is a view similar to FIGURE 3, the dispensing follower being shown as depressed from its initial FIGURE 3 position to receive a measured quantity of fill upwardly into the measuring cup.

FIGURE 6 is a perspective view illustrating the filled measuring cup of FIGURE 5 in the process of being manipulated over the follower flange.

FIGURE 7 is a detail perspective view illustrating the measuring cup with a measured charge of fill therein, a discharging of the fill by downward movement of the dispensing follower top of the cup being shown.

FIGURE 8 is a detail vertical cross section taken on the line 8—8 on FIGURE 7.

In the example of embodiment of the invention herein disclosed, the improved container structure includes the container body, the follower, the measuring cup, the top closure, the upstanding peripheral flange, the measuring cup, and the central raised portion defined by an upstanding flange.

It will be apparent by reference to FIGURES 3 and 5 of the drawings that the follower or dispensing disk flange is disposed to telescopically receive the lower end of an inverted cup-like means designed to measure quantities of fill displaced upwardly thereto through the opening 16. The measuring means comprises a generally cylindrical chamber 18 in which a dispensing follower disk 19 is slidably mounted between upper and lower stop limits. The upper stop means takes the form of an upwardly directed flange 20 at the top of the cylinder 18, and the lower stop means takes the form of an upwardly directed flange 21 at the bottom of the cylinder. It will be apparent that the upper flange limits the movement of the dispensing disk 19 to the position illustrated in FIGURE 5, and the lower flange 21 which is of more limited inward projection serves to prevent inadvertent displacement of the disk downwardly through the open bottom of the measuring chamber. It is to be understood, however, that the disk 19 may be snapped down through the bottom limit flange 21 whenever it is the intent to separate the disk from the cylinder 18.

It will be apparent by reference to FIGURES 3, 4, 7 and 8 that the measuring means cylinder 18 is equipped with a plurality of equidistantly spaced, inwardly projecting ribs 22. These ribs engage in clearances or recesses 23 provided in the peripheral edge of the dispensing or follower disk 19 and serve to guide movement of the disk as it slides upwardly or downwardly in the measuring chamber cylinder 18.

It will be apparent by reference to FIGURES 1 and 3 of the drawings that when the container structure or package containing the fill 11 is in its initially marketed condition the upper extremity of the cup-like measuring means 18, 19 projects into the upwardly extended cham-
When it is desired to dispense the container provided by the raised portion of the top closure. When it is desired to dispense fill from the container, the top closure is removed by cutting the same away in a conventional manner, as by applying any approved form of can opening mechanism as indicated at 25 in FIGURES 2, 3, 5 and 6. By now pressing downward on the follower or dispenser disk 12, the follower will be caused to press downward on the fill 11 and force some thereof upwardly through the opening 16 and into the cup-like receiving chamber telecoping on the follower disk. As the fill is forced upwardly within the measuring means contained in the measuring chamber can then be removed with the measured charge of fill therein and moved about over the upstanding dish flange 17 in the manner illustrated in FIGURE 6, thereby to shape up the measured quantity of fill removed with the measuring chamber by scraping off any excess fill which may tend to cling to the measured mass, thus to provide a smooth bottom measured charge of fill as indicated in FIGURES 7 and 8. By now pressing downwardly on the dispensing disk 19, the measured charge can be dispensed from the measuring chamber in the manner clearly illustrated by the arrows on FIGURES 7 and 8. In this process, the lower stop flange 21 will prevent inadvertent projection of the disk 19 out of the chamber cylinder 18 in which it is intended to operate.

While a container structure of conventional side seam and top closure form is illustrated herein, it is to be understood that containers embodying the invention may be of the type including the well known collars and tear strips providing for reclosure, or the now popular plastic overcaps may be employed as reclosure means. It is to be understood also that other forms of container structures devoid of side seams may be employed.

While an example form of the novel concept is disclosed herein, it is to be understood that modification of part structure an arrangement may be resorted to without departing from the spirit and scope of the invention as defined in the appended claims.

1. A self-contained dispensing container for fill such as shortening or the like comprising a body, a top closure, and a dispensing follower slidably mounted in the body and adapted to engage over fill therein and having a dispensing opening there-through so that upon removal of the top closure a filled container and application of pressure downward on said follower the follower will press downward on the fill and force some thereof upwardly through the opening, said follower having means therein entirely in underlying relation to said closure, for measuring quantities of fill thus displaced upwardly through the follower opening.

2. A container as defined in claim 1 wherein the measuring means comprises an inverted cup-like receiving chamber removably mounted on the follower over its dispensing opening to receive a measured quantity of follower displaced fill therein.

3. A container as defined in claim 1 wherein the measuring means comprises an inverted cup-like receiving chamber removably mounted on the follower over its dispensing opening to receive a measured quantity of follower displaced fill therein, said chamber having a generally cylindrical body and a top in the form of a follower slidable in the chamber body so that it will be displaced upwardly by fill being forced upwardly through the dispensing follower opening and after removal of the measuring means from the dispensing follower may be forced downwardly in the chamber body to discharge therefrom the quantity of fill measured within the chamber body beneath said slidable top.

4. A container as defined in claim 1 wherein the measuring means comprises an inverted cup-like receiving chamber removably mounted on the follower over its dispensing opening to receive a measured quantity of follower displaced fill therein, said chamber having a generally cylindrical body and a top in the form of a follower slidable in the chamber body so that it will be displaced upwardly by fill being forced upwardly through the dispensing follower opening and after removal of the measuring means from the dispensing follower may be forced downwardly in the chamber body to discharge therefrom the quantity of fill measured within the chamber body beneath said slidable top, said chamber body including spaced upper and lower stop means between which the slidable top is movable and serving to limit movement of said slidable top and prevent inadvertent removal thereof from the chamber body.

5. A container as defined in claim 1 wherein the measuring means comprises an inverted cup-like receiving chamber removably mounted on the follower over its dispensing opening to receive a measured quantity of follower displaced fill therein, said chamber having a generally cylindrical body and a top in the form of a follower slidable in the chamber body so that it will be displaced upwardly by fill being forced upwardly through the dispensing follower opening and after removal of the measuring means from the dispensing follower may be forced downwardly in the chamber body to discharge therefrom the quantity of fill measured within the chamber body beneath said slidable top, said chamber body including spaced upper and lower stop means between which the slidable top is movable and serving to limit movement of said slidable top and prevent inadvertent removal thereof from the chamber body.

6. A container as defined in claim 1 wherein the measuring means comprises an inverted cup-like receiving chamber removably mounted on the follower over its dispensing opening to receive a measured quantity of follower displaced fill therein, said chamber having a generally cylindrical body and a top in the form of a follower slidable in the chamber body so that it will be displaced upwardly by fill being forced upwardly through the dispensing follower opening and after removal of the measuring means from the dispensing follower may be forced downwardly in the chamber body to discharge therefrom the quantity of fill measured within the chamber body beneath said slidable top, said chamber body including spaced upper and lower stop means between which the slidable top is movable and serving to limit movement of said slidable top and prevent inadvertent removal thereof from the chamber body.

7. A container as defined in claim 5 wherein the removable mounting of the measuring chamber comprises an upstanding flange defining the dispensing opening on the dispensing follower and over which the cylindrical body of said chamber is telescoped.

8. A container as defined in claim 6 wherein the removable mounting of the measuring chamber comprises an upstanding flange defining the dispensing opening on the dispensing follower and over which the cylindrical body of said chamber is telescoped.

9. A container as defined in claim 5 wherein the removable mounting of the measuring chamber comprises an upstanding flange defining the dispensing opening on the dispensing follower and over which the cylindrical body of said chamber is telescoped, said chamber body including an outwardly extending gripping flange engageable by a hand of a user of the container and serving to facilitate manipulation of the container, lifting it off the dispensing follower and engaging the open bottom of the chamber over the dispensing follower flange in shaping up the measured quantity of fill removed with the chamber.

10. A container as defined in claim 6 wherein the removable mounting of the measuring chamber comprises
an upstanding flange defining the dispensing opening on the dispensing follower and over which the cylindrical body of said chamber is telescoped, said chamber body including an outwardly extending gripping flange engageable by a hand of a user of the container and serving to facilitate manipulation of the measuring chamber while lifting it off the dispensing follower and engaging the open bottom of the chamber over the dispensing follower flange in shaping up the measured quantity of fill removed with the chamber.

11. A container as defined in claim 1 wherein the container top closure includes a central raised portion into which the measuring means extends prior to initial removal of said container top closure from a filled container.

12. A container as defined in claim 6 wherein the removable mounting of the measuring chamber comprises an upstanding flange defining the dispensing opening on the dispensing follower and over which the cylindrical body of said chamber is telescoped, said chamber body including an outwardly extending gripping flange engageable by a hand of a user of the container and serving to facilitate manipulation of the measuring chamber while lifting it off the dispensing follower and engaging the open bottom of the chamber over the dispensing follower flange in shaping up the measured quantity of fill removed with the chamber, and wherein the container top closure includes a central raised portion into which the measuring means extends prior to initial removal of said container top closure from a filled container.

13. A container as defined in claim 1 wherein the dispensing follower is equipped with an upstanding flange defining its dispensing opening and surrounded by a dished annulus which is in turn surrounded by a flat annulus disposed at a level no higher than the level at which the upper extremity of said flange is disposed, and wherein the measuring means comprises an inverted cup-like receiving chamber having an open lower end removably telescoped over said upstanding flange to receive fill displaced upwardly thereinto through the dispensing follower opening upon downward movement of said follower against underlying fill, said chamber having a generally cylindrical body and a top in the form of a follower slideable in the chamber body so that it will be displaced upwardly by fill being forced upwardly through the dispensing follower opening and after removal of the measuring means from the dispensing follower may be forced downwardly in the chamber body to discharge therefrom the quantity of fill measured within the chamber body beneath said slideable top.

15. A container as defined in claim 1 wherein the dispensing follower is equipped with an upstanding flange defining its dispensing opening and surrounded by a dished annulus which is in turn surrounded by a flat annulus disposed at a level no higher than the level at which the upper extremity of said flange is disposed, and wherein the measuring means comprising an inverted cup-like receiving chamber having an open lower end removably telescoped over said upstanding flange to receive fill displaced upwardly thereinto through the dispensing follower opening upon downward movement of said follower against underlying fill, said chamber having a generally cylindrical body and a top in the form of a follower slideable in the chamber body so that it will be displaced upwardly by fill being forced upwardly through the dispensing follower opening and after removal of the measuring means from the dispensing follower may be forced downwardly in the chamber body to discharge therefrom the quantity of fill measured within the chamber body beneath said slideable top, and prevent inadvertent removal therefrom of the chamber body.

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