Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 8

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ATTORNEYS
POURING TOP ASSEMBLY FOR CONTAINERS
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Filed under Rule 47(b) and 35 U.S.C. 118) 16 Claims. (Cl. 222—465)

This application is a continuation of the U.S. patent application of Anthony W. Serio which was filed in the Patent Office on September 18, 1961, and assigned Serial No. 138,799, now abandoned.

The present invention relates to a pouring top assembly for a container, and more particularly to an operably pouring top body and handle mechanism which can be attached to an open end portion of a container.

The present invention is directed to pitchers and similar containers which are designed to hold liquids and may serve for holding liquids which are very hot, such as coffee and the like, or very cold liquids. The container itself is generally made of a heat resistant material, such as Pyrex, which is accordingly relatively expensive. It is, therefore, important to prevent damage to this type of container.

In such containers in which various liquids are disposed, it is desirable to provide a pouring spout portion for facilitating dispensing the liquid from the container.

In addition, it is also desirable to provide a means which permits a closure member or lid to be seated in position on the upper portion of the container.

It is an object of the present invention to provide a pouring top assembly for fluid containers that may be readily attached to a container in a heat resistant container to provide a pouring spout therefrom. Furthermore, the container assembly may be quickly and easily attached to any conventional container.

It is another object of the present invention to provide a pouring top assembly for fluid containers that may be used interchangeably with a number of containers so that it is not required that each particular container have a pouring top assembly, but rather permits the use of a single pouring top assembly for a number of such containers.

It is another object of the present invention to provide a pouring top assembly comprising a handle and a pouring top adaptor means that may be preassembled as an integral unit, which unit can be readily snapped onto a fluid container.

It is another object of the present invention to provide a pouring top assembly having handle means which eliminates the use of plastic clips heretofore used in positioning the assembly on a fluid container, and, in addition, the handle of the pouring assembly is more securely seated to the adaptor top and provided with means so that there is no up and down or side play of the handle means with respect to the adaptor body of the complete unit.

It is another object of the present invention to provide a pouring assembly having handle means and adaptor means for disposing it on a fluid container after a liquid sealer means is first applied within the adaptor top so that the entire unit can be readily snapped onto a fluid container.

It is another object of the present invention to provide a pouring top assembly for fluid containers in which the adaptor top comprises a substantially circular member made of a single piece of material in which the base or free ends of the member are permanently secured to each other in abutting and overlapping relationship.

It is another object of the present invention to provide a pouring top assembly in which the handle means is provided with slot means therein to receive the overlap of the adaptor top so that the handle means when properly secured will have no up and down movement or side play with respect to the adaptor top.

It is a further object of the present invention to provide a pouring top assembly having handle means and an adaptor top for snapping onto the top of a fluid container in which the adaptor top has no large projections or protrusions extending therefrom so that the adaptor top when made of metallic material, is therefore easier to polish and grind in the manufacture thereof.

It is still a further object of the present invention to provide a pouring top assembly for fluid containers having slot means in the handle associated therewith which is of greater depth than the depth of the overlap of the adaptor top associated therewith so that the screw means may pull the overlap of the adaptor top into the slot means and, therefore, lock the screw means securely.

Various other objects and advantages of the present invention will be readily apparent from the following detailed description when considered in connection with the accompanying drawings forming a part thereof, and in which,

FIG. 1 is a perspective view of the pouring top assembly of the present invention shown disposed on a liquid container;
FIG. 2 is a side elevation taken from the rear of the pouring top assembly and container embodied in the present invention, with the handle nearest the observer;
FIG. 3 is a side elevation view taken along line 3—3 of FIG. 1;
FIG. 4 is a bottom plan view of the pouring assembly taken along line 4—4 of FIG. 3;
FIG. 5 is a top plan view of the pouring assembly of the present invention similar to FIG. 4;
FIG. 6 is a side elevation view partly in section, taken along line 6—6 of FIG. 5;
FIG. 7 is a detail fragmentary view of the overlap of the adaptor top taken along line 7—7 of FIG. 6; and
FIG. 8 is a front view of the handle embodied in the present invention.

Referring to the drawings, the reference numeral 10 generally designates a liquid glass container that may be made of Pyrex material or other heat resistant material on which is disposed a pouring top assembly 11. The glass container 10 comprises a generally cylindrical lower body section 12 with a generally cylindrical neck section 13 of smaller diameter than the lower section. However, it is readily understood that if desired, the entire vertical wall section of the container may be of substantially the same diameter. The upper end of the neck portion 13 is provided with an outwardly flared lip or rim 14 extending completely therearound. The container 10 is conventional and does not per se form the present invention.

The pouring top assembly is provided with a pouring top 15 preferably made of metallic material, such as chrome plated metal. The pouring top 15 is made of a single piece of material bent or formed into a circular or cylindrical configuration with its opposite free ends 16 and 17 (see FIG. 7) disposed to overlap each other so that the inner surface of the adaptor top forms a substantially smooth cylindrical surface with the free end 17 of one portion of the member 15 being offset outwardly as
best seen in FIG. 7, to form a rectangularly shaped longitutudinal projection 18 on the outer surface thereof.

The free ends 16 and 17 of the adaptor top member are attached to one another by brazing, spot welding or other similar means. The lower end of the adaptor top member 15 is of greater diameter as indicated at 19 than the upper end thereof, and the member is inwardly inclined or progressively tapered inwardly toward its upper end to avoid circumferential indentation. A rib or recess 21 is disposed in member 15 above 20 as shown in FIG. 3, the member thereafter being flared outwardly above the recess 21 to provide a lip portion 23. The lip portion 23 has a front portion 24 of greater height than the rear portion 22, with a relatively pronounced V shaped trough or crease 25 disposed symmetrically adjacent the front portion 24, so as to provide a pouring spout 26 therein. A conventional lid or cover member 27 is provided for resting or seating on the recess 21 or rib formed in the adaptor member to keep the liquid in the container covered.

Resilient locking or cast means 28 are tack welded or secured by similar means to the inner periphery of the adaptor member 15. The cast members are spring clips and comprise a flat central section 29 (see FIG. 6) secured to the inner surface of the adaptor body 33 thereby defining resilient horizontal ears 30, which ears are in spaced relationship with the inner surface of adaptor top 15. The cast members 28 are disposed vertically of 15 adjacent the upper portion thereof so as to provide a vertical space 32 (see FIG. 6) between the upper edge or end of the container member and recess or rib 21 to receive a plastic O ring sealing member 33 therebetween that can be readily deformed when the rim 14 of the liquid container is snapped into place, as hereinafter described.

The handle generally designated 36 is made of a hard plastic material and comprises an elongated rear or outer portion 37 adapted to be grasped by a person using the pouring top assembly. The front end of the handle is provided with a substantially thickly spaced portion 38, the portions 37 and 38 being sufficiently spaced apart to enable a person using the assembly to readily insert the fingers therebetween. The side portion 38 adjacent to abut the member 15 is provided with a lower horizontally extending projection or rib 39 (see FIGS. 3 and 8) and spaced upper horizontally extending projections or ribs adapted to extend into the annular rib or recess 21 of the adaptor top to keep the handle firmly and securely grasped. The lower end of the ribs 39 is spaced a sufficient distance from the upper ribs 40 so that the lower end 19 of adaptor top 15 seats thereon when the ribs 39 project into recess 21. The side portion 38 above ribs 39 is beveled or tapers outwardly as indicated at 41, to receive portion 22 of member 15 thereagainst. The handle is further provided with a vertical rectangular slot 42 (see FIGS. 7 and 8) for receiving the offset portion 18 of the overlap of portions 16 and 17 of the adaptor top. Slot 42 is provided about halfway up with a substantially horizontal bore 43 therein in which is disposed a female threaded member 44 (see FIG. 3) molded into the plastic handle.

The member 15 is provided with an elongated opening or vertical slot 46 therethrough adjacent overlap portions 16 and 17, substantially in alignment with the bore 43 and the threaded member 44 in the handle so that a screw 46 (see FIG. 3) may be inserted through the portion 45 so as to securely fasten the adaptor top 15 to the handle 36. The rectangular slot 42 in the handle is of greater depth than the thickness of the overlap of parts 16 and 17 of the adaptor top so that when the screw is threaded home the member 36 is forced into slot 42 to lock the screw member securely to the handle so it will not inadvertently become loosened.

In operation, when it is desired to secure the pouring top assembly of the present invention to a liquid container, it is, of course, realized that the handle 36 is first assembled or secured to the adaptor body 15 by positioning the member 15 between the lower rib 39 and the upper ribs 40 of the handle so that the ribs are positioned or seated within the annular recess or rib 21 of member 15. Thereafter, the screw member is inserted through slot 45 and tightly threaded home in member 15 so that the adaptor top and handle comprise an integral unit. Thereafter, a plastic O ring seal 33 is positioned within the adaptor top 15 so that it rests or abuts against the lower side of rib 21 and is disposed above the catch members 28, as clearly shown in FIG. 6. Thereafter, the container 10 is inserted upwardly through the bottom of 15 and its rim 14 is over the catch members 28 so that the rim 14 and the inner surface of the adaptor top 15 in a compressed or squeezed fashion to provide a liquid seal therebetween.

Thus, from the foregoing description it is readily apparent that a pouring top assembly has been provided for liquid containers that may be readily snapped on the top of a liquid container, and which is provided with handle means that eliminate the use of a plastic clip as used heretofore, and which handle is more securely fastened to the adaptor top when no up and down side play or twisting of the handle with respect to the adaptor top. It will be further apparent that the present invention provides slot means in the handle that are deeper than the overlap of the adaptor top, so that the screw member which secures the adaptor top to the handle will pull the overlap of this container top into the slot means of the handle and securely lock the screw member therein and prevent it from inadvertently becoming loosened.

The invention also provided an adaptor top that has no large protrusions or projections extending therefrom so that the adaptor top when made from chrome plated metal or other precious metal may be easily polished and ground.

Inasmuch as various changes may be made in the form, location and relative arrangement of the several parts without departing from the essential characteristics of the invention, it will be understood that the invention is not to be limited except by the scope of the appended claims.

The invention claimed is:

1. A pouring top assembly for use with a liquid container comprising a circular member having free ends overlapping one another and permanently secured together, said circular member having an inwardly and peripherally extending rib formed therein, a handle means for attaching said ends to said handle, said handle including means extending within said rib for preventing the handle from twisting with respect to said circular member, and resilient means disposed on said member for snapping the top of a container therein and retaining said top assembly on a container while in use.

2. A pouring assembly for use with a liquid container and the like comprising a circular member including an inwardly and peripherally extending rib formed thereon and having overlapping ends permanently secured to each other to form an offset, handle means for attaching said member thereto, said handle including means extending within said rib for preventing the handle from twisting with respect to said circular member, and handle means for receiving said overlapping ends (therein, means for securing said ends to said handle means, and resilient locking means disposed on said member for snapping the top of a container therein and retaining said pouring assembly on a container while in use.

3. A pouring assembly for use with a liquid container comprising a circular member having overlapping adjacent ends, metal bonding means permanently and immovably securing said ends to each other, said ends shaped to define an offset, handle means having a slot therein for re-
ceiving said offset therein, means accessible only from the inner periphery of said circular member for securing said ends to said handle means, and means on the inner periphery of said circular member and extending inwardly therefrom for engaging a liquid container and for releasably attaching a liquid container thereto.

4. A pouring assembly for use with a liquid container comprising an adaptor member made from a single piece of material having its opposite ends deformed into a circular configuration with the free ends overlapping each other permanently secured together and forming an offset, means on said ends securing said ends and permanently preventing relative movement between said ends, handle means having a slot therein for receiving said offset, means accessible only from the inner periphery of said circular member for securing said ends to said handle means and resilient means on the inner periphery of said circular member and extending inwardly therefrom for detachably connecting a liquid container thereto and comprising the sole means for retaining the pouring assembly on a container while in use.

5. A pouring assembly for use with a liquid container comprising a circular adaptor top having an annular rib therein, said top having overlapping ends secured together and forming an outwardly extending offset, handle means having a slot therein, said offset being disposed in said slot, rib means on said handle extending into said annular rib and inwardly of the lower end of the top to prevent said handle from twisting, means for securing said handle to said top, and resilient locking means on said top for detachably securing said container thereto.

6. The pouring assembly of claim 5 wherein said rib means consists of spaced upper projections and a lower projection which extends continuously along a portion of the handle.

7. A pouring assembly for use with a liquid container comprising an adaptor top for positioning a fluid container, said top having a smooth inner surface formed by a single piece of material having a circular configuration with one free end of said material overlapping the other free end thereof to form an outwardly projecting offset, a handle having a vertical slot in which said offset seats, a lower rib on said handle extending inwardly of the adaptor top, said adaptor top having a continuous inwardly extending recess on its upper end, said handle having spaced inwardly projecting ribs extending into said recess on opposite sides of said offset to prevent said handle from twisting with respect to said adaptor top and means for securing said handle to said top.

8. A pouring assembly of claim 7 wherein the inner surface of said adaptor top is provided with spaced resilient members disposed adjacent and below said recess to detachably engage the rim of a container for securing said container thereto.

9. A pouring assembly for use with a container comprising a cylindrical adaptor top having a lip portion with a pouring spout, said top having overlapping ends forming a smooth inner surface and an offset extending outwardly adjacent said overlap, said top having an inwardly extending recess disposed circumferentially thereof below said lip portion, a handle having an outer depending portion and an inner depending portion providing a space therebetween to permit grasping of the handle by a person using the assembly, said inner portion having an inwardly extending projection on its lower end to fit below said top and inwardly extending ribs on its upper end for extend-

10. The pouring assembly of claim 9 wherein said resilient catch means are spring clips and said clips have their inner ends spaced from said inner smooth surface of said adaptor top.

11. The pouring assembly of claim 9 wherein said catch means are disposed adjacent the upper end of said top and are spaced from the bottom of said recess to permit a sealing ring to be disposed therebetween.

12. The pouring assembly of claim 9 wherein said slot is deeper than the thickness of said offset and securing means are provided to pull said offset into said slot to prevent said securing means from becoming loose.

13. The pouring assembly of claim 9 wherein said slot extends from adjacent said projection and between said inwardly extending ribs.

14. The pouring assembly of claim 9 wherein said top has an elongated opening therein, and said handle has a bore with a threaded insert therein adjacent said slot, and screw means extending through said opening to secure said top to said handle.

15. A pouring assembly for use with a liquid container comprising a circular member having overlapping adjacent ends, metal bonding means permanently and immovably securing said ends to each other, said ends having portions shaped to define an offset, handle means having a slot therein for receiving said offset therein, means accessible only from the inner periphery of said circular member for securing said ends to said handle means, and means for securing a liquid container firmly in engagement with said circular member, whereby said permanently and immovably secured ends prevent a change of dimension of said circular member in the event of twisting of the handle during use.

16. A pouring assembly for use with a liquid container comprising a circular member having overlapping adjacent ends, metal bonding means permanently and immovably securing said ends to each other, said ends having portions shaped to define an offset, handle means having a slot therein for receiving said offset therein, means accessible only from the inner periphery of said circular member for securing said ends to said handle means, whereby said permanently and immovably secured ends prevent a change of dimension of said circular member in the event of twisting of the handle during use.

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Dedication


Hereby dedicates the entire term of said patent to the Public.

[Official Gazette January 19, 1971]