Nov. 9, 1926. 1,606,194

W. H. W. STRAFFORD

RECEPTACLE

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Fig. 1.

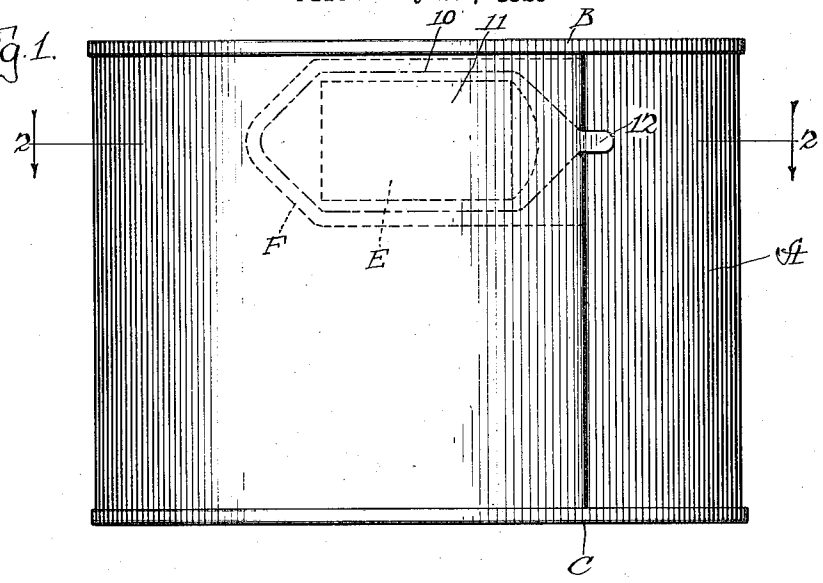
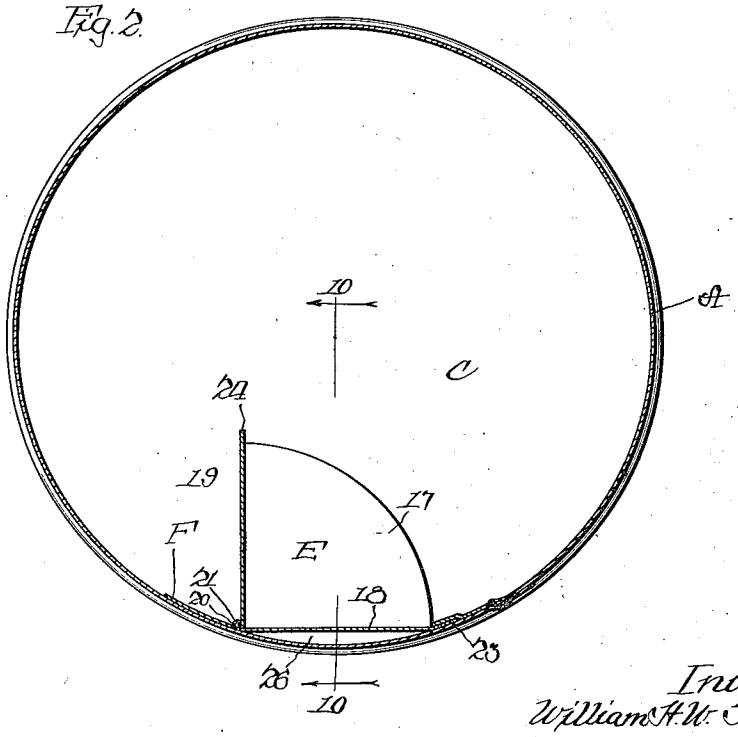


Fig. 2.



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Fig. 3.

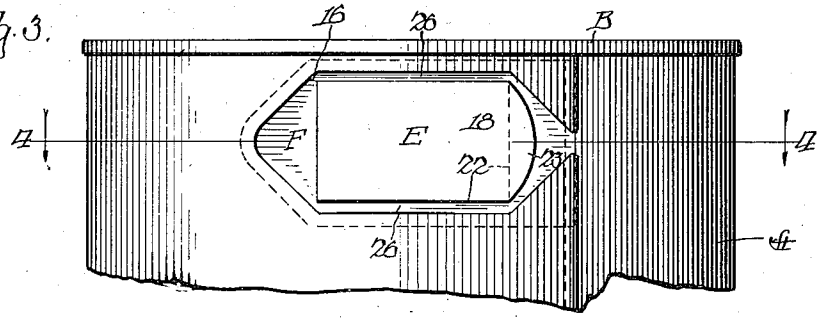


Fig. 4.

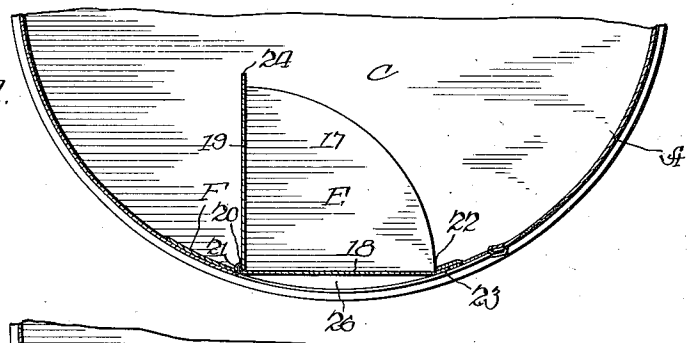
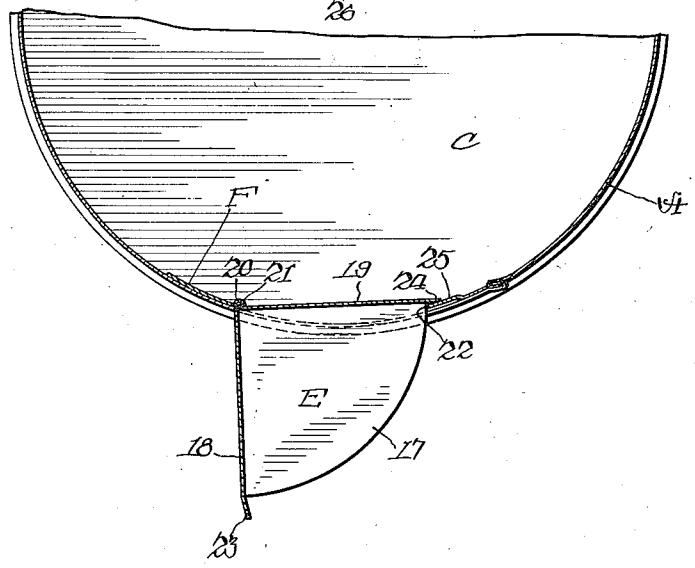


Fig. 5.



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Fig. 6.

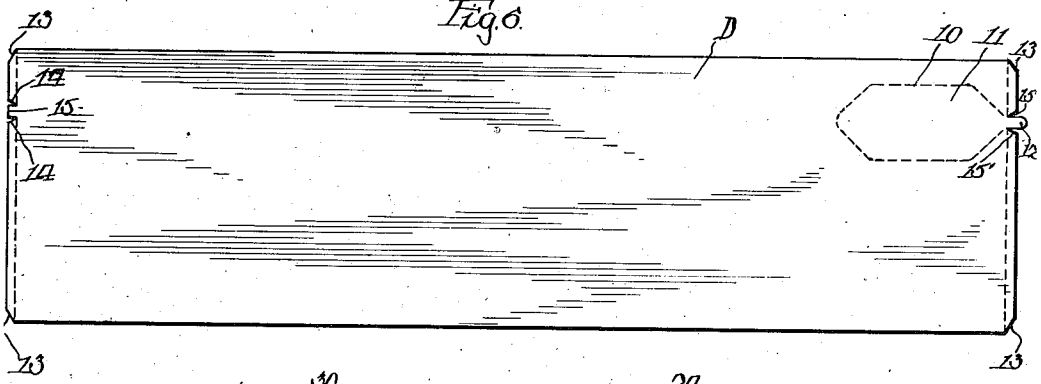


Fig. 8.

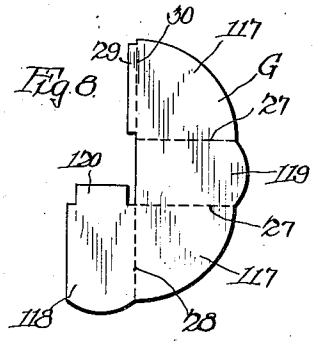


Fig. 7.

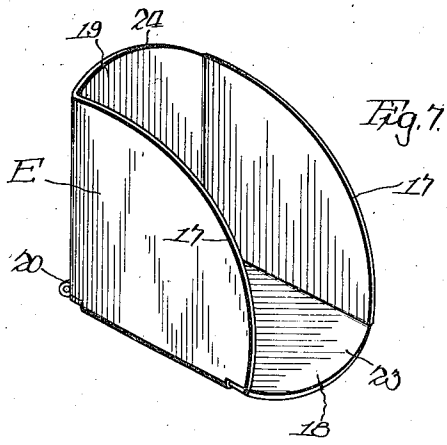


Fig. 9.

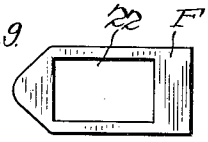
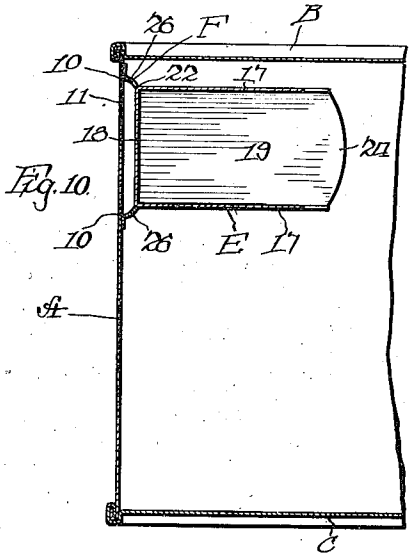


Fig. 10.



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UNITED STATES PATENT OFFICE.

WILLIAM H. W. STRAFFORD, OF CHICAGO, ILLINOIS.

RECEPTACLE.

Application filed July 25, 1925. Serial No. 46,063.

This invention relates to improvements in receptacles.

One object of the invention is to provide a receptacle of the dispensing type, having a combined pouring and measuring spout attached thereto adapted to be enclosed within the receptacle.

Another object of the invention is to provide a hermetically sealed receptacle having a pouring spout attached thereto, adapted to be enclosed and sealed within the receptacle.

Still another object of the invention is to provide a receptacle having a combined pouring and measuring spout permanently attached thereto, normally disposed within the receptacle and adapted to be adjusted to a pouring position.

A further object of the invention is to provide a receptacle having an adjustable, combined pouring and measuring spout attached thereto, which in one position forms a closure for the receptacle and in another position thereof functions as a pouring spout.

A still further object of the invention is to provide a hermetically sealed receptacle having a pouring spout enclosed therein wherein a section of a wall portion of the receptacle is removable to expose the spout for use.

Other objects and advantages of the invention will more fully and clearly appear from the description and claims hereinafter following.

In the drawings forming a part of this specification, Figure 1 is a side elevational view of a receptacle showing my improvements in connection therewith. Figure 2 is a horizontal, sectional view corresponding substantially to the line 2—2 of Figure 1. Figure 3 is a view similar to Figure 1 of the upper portion of the receptacle, showing the tearing strip removed. Figure 4 is a horizontal, sectional view corresponding substantially to the line 4—4 of Figure 3. Figure 5 is a view similar to Figure 4 illustrating the combined pouring and measuring spout in a different position. Figure 6 is a plan view of a blank from which the body of the receptacle is formed. Figure 7 is a detailed, perspective view of the combined pouring and measuring spout. Figure 8 is a plan view of a blank from which the spout is formed. Figure 9 is a reduced plan view of a supporting plate on which the spout is mounted. Figure 10 is a vertical, sectional view, partly broken away, corresponding substantially to the line 10—10 of Figure 2.

In said drawings, A designates the body portion of the receptacle having a top B and a bottom C hermetically seamed thereto by the usual double seam, as most clearly illustrated in Figure 10. The receptacle is preferably formed of sheet metal, although it may be made of any other suitable material. The body portion A is formed from a blank D illustrated most clearly in Figure 6. The blank D is of generally rectangular outline and is scored as indicated at 10 to provide a tearing strip 11 having a projecting tongue 12 adapted to be engaged by the usual key for removing the strip. Adjacent the top and bottom edges the opposite ends of the blank are cut away as indicated at 13—13 so that the blank will have overlapping portions at the top and bottom thereof when the same is formed into a cylindrical body having the usual hooked side seam. The edge of the blank at the opposite end to that having the projecting tongue is notched as indicated at 14—14 to provide a lip 15 adapted to be overlapped by the inner end portion of the tongue 12 so as to form a lap seam section adapted to be soldered. The blank is also notched adjacent the opposite sides of the tongue 12 as indicated at 15′—15′ to facilitate the removal of the tearing strip 11. Inasmuch as the side seam, and the top and bottom seams of the can, as illustrated, are well known in the art, no further description is necessary. However, it is pointed out that the overlapping portions of the blank may be secured by solder or any other suitable means and that the folded seams of the can are so formed as to hermetically seal the can without being soldered. It will be evident, however, that all the seams, including the folded portions, may be soldered if desired, in order to insure the hermetical sealing of the can. As clearly shown in Figure 1, the tongue 12 projects beyond the side seam of the can and the outer portion thereof is left unattached to the body so that the same may be easily engaged by the usual key. As shown in Figures 1 and 6, the blank forming the body portion of the receptacle is scored in such a manner that the tearing strip 11 tapers at its opposite ends to assure separation of the strip from the body portion of the receptacle along the scored lines without mutilating

the receptacle body proper. When the tearing strip is removed, an opening 16 is provided as most clearly shown in Figure 3, the contour of the opening corresponding to the outline of the tearing strip.

A combined pouring and measuring spout E mounted on a plate F is secured to the interior of the receptacle at the opening 16. The supporting plate F, as most clearly illustrated in Figure 9, is of generally rectangular outline and preferably cut away at one end on lines parallel to the converging portions of the opening 16 at the corresponding end thereof. The plate F is of such a size as to overlap the opening 16 at all sides and has the straight edge end thereof disposed adjacent the side seam of the can as clearly shown in Figures 2 to 5, inclusive. The plate F may be secured to the inner side of the side wall of the body of the receptacle in any suitable manner, but is preferably either soldered thereto or spot welded.

The combined pouring and measuring spout, as most clearly shown in Figure 7, comprises top and bottom walls 17—17, side wall 18 and end wall 19. The spout E is provided with a hinge portion 20 adapted to receive a pivot pin 21 secured to the inner side of the plate F, adjacent one end of a rectangular opening 22 formed in the plate. The pivot pin is preferably secured to the blank by soldering the top and bottom ends to the same, although it may be secured in any other suitable manner. The outer ends of the side, end and top and bottom walls of the support are preferably rounded off as shown, and the walls 17 are so spaced that they will be freely accommodated between the top and bottom edges of the opening 22 of the plate F. The rounded edges of the top and bottom walls of the support are curved on arcs concentric with the pivot 21 to provide proper clearance between the support and the corresponding vertical end wall of the opening 22 when the support is swung outwardly. The free end of the side wall 18 projects beyond the top and bottom walls as clearly shown in Figure 7, thereby providing a lip 23 by which the spout may be engaged to swing the same outwardly. The lip 23 extends beyond the corresponding edge of the opening 22 of the plate F and forms a stop to limit the inward swinging movement of the spout. The free end edge of the end wall 19 also extends beyond the adjacent top and bottom walls, thereby providing a lip 24 adapted to engage the inner side of the plate F to limit outward swinging movement of the spout. As most clearly shown in Figure 5, the plate F is inwardly offset adjacent the opening 22 as indicated at 25 to accommodate the lip 23. The plate F is preferably inwardly offset adjacent the top and bottom of the opening 22 as indicated at 26 to provide flanges spanning the space between the side wall of the receptacle and the side wall 18 of the spout when the spout is in its innermost position, thereby preventing loss of the contents of the can through the space between the side wall thereof and the spout.

The spout E is preferably formed from a blank G shown in detail in Figure 8. The blank G has sections 117, 117 which form the top and bottom walls of the spout, and sections 118 and 119 which form the side and end walls respectively. As shown, the blank is so cut as to provide the sections 117, 117, 118 and 119 with curved outer edges which form the rounded edge portions of the top, bottom, side and end walls as hereinbefore pointed out. In forming the spout from the blank G, the blank is folded at right angles on the dotted lines 27 and 27 to bring the sections 117 and 117 in parallel opposed relation, thereby providing the top, bottom and end walls of the spout. The blank is then bent at right angles on the dotted line 28, thereby providing the side wall 18. The section 117 which forms the top wall of the spout is provided with an extension 29 adapted to be bent at right angles on the dotted line 30 to provide a right angle hook portion engaging over the adjacent edge of the side wall 18 to prevent the spout from spreading. It will be evident that the spout may thus be constructed from a single integral blank without the use of solder or any other joining material. The section 118 of the blank G is provided with a tongue 120 on the inner end thereof which is curled to form the hinge section 20 which receives the hinge pin 21.

My improved receptacle may be employed as a container for various materials, but is preferably used as a container for such articles as coffee, tea, sugar, salt, spices, and the like. In order to preserve the quality and aroma of coffee and tea, it is essential that the receptacle be hermetically sealed. By disposing the pouring and measuring spout of my receptacle within the same and double seaming the top and bottom of the can body, and side seaming the main body portion, and providing a removable tearing strip, a hermetically sealed container is provided having a measuring and pouring spout attached thereto which is readily accessible for use. Inasmuch as the measuring spout is permanently attached to the receptacle, all danger of losing the same is eliminated. The measuring spout proper may be made of any suitable size depending upon the substance for which the container is used. For example, when the receptacle is employed as a container for coffee, the measuring spout E is of such a size as to accurately measure an amount of coffee necessary to produce

one cup, or in other words the spout is adapted to hold the equivalent of one tablespoonful.

In using my improved can, in order to dispense the contents of the can, the tearing strip is first removed by engaging the tongue 12 by the usual slotted key and winding the strip on the same, and severing it from the main body of the receptacle along the dotted lines shown in Figure 1. When the strip has been removed, the side wall 18 of the pouring spout is exposed, as most clearly shown in Figure 3. The spout is then swung outwardly on its pivot from the position shown in Figure 4, to the position shown in Figure 5, the lip 24 positively limiting the outward swinging movement of the spout. In this connection, it is pointed out that the lip 23 on the wall 18 which is disposed on the outer side of the plate F, when the spout is in its innermost position, serves as an engaging member by which the spout may be swung outwardly as well as a stop for limiting the inward movement of the spout. It will be evident that the spout may be swung alternately inwardly and outwardly to dispense the desired quantity of the contents of the receptacle.

Although I have herein shown and described the spout E as a measuring device, it will be evident that the invention is not limited to this construction, inasmuch as the end wall 19 of the spout may be entirely omitted, thereby providing an adjustable pouring spout which also forms a closure for the receptacle.

As hereinbefore pointed out, my improved receptacle, including the attached measuring spout, provides an accurate and reliable means for measuring the ingredients of beverages. It will be readily appreciated that it is of great importance in preparing beverages of various kinds that the ingredients be accurately measured to produce the best results. This is particularly true in the preparation of coffee and it is therefore highly important that an accurate and easily accessible measuring means be provided. It has heretofore been the common practice to loosely enclose a measuring device of the proper size within receptacles, but such measuring device is frequently lost after removal of the cover of the receptacle, or its use neglected. Inasmuch as the top and bottom of my improved receptacle are permanently attached, and the measuring spout is the only means by which the contents of the receptacle may be removed, the proper measuring of the quantity of material used is practically assured. By permanently attaching the combined measuring and pouring spout to the receptacle, as hereinbefore pointed out, the same is always available for use and loss thereof is prevented.

While I have herein shown and described what I now consider the preferred manner of carrying out my invention, the same is merely illustrative, and I contemplate all changes and modifications that come within the scope of the claims appended hereto.

I claim:—

1. A receptacle having a cylindrical side wall and top and bottom walls and an opening in the side wall thereof, and a spout movably attached to said receptacle and adjustable through said opening, said spout having a continuous wall forming a closure for said opening in one position of the spout to prevent removal of the contents of the receptacle and a second continuous wall forming a closure for said opening when adjusted to another position in measuring and dispensing the contents of the receptacle.

2. A hermetically sealed receptacle having a spout on the interior thereof to permit removal of the contents of the receptacle, a wall of said receptacle being provided with an integral tearing section continuous with said wall overlying and covering said spout, said wall and section comprising a single ply of sheet material, said section being removable to expose said spout for use.

3. A hermetically sealed receptacle having a spout attached thereto, said spout being normally enclosed by a wall of the receptacle, said wall comprising a continuous sheet of material, said sheet wall being scored to provide a removable section overlying said spout, said spout being adjustably mounted and adapted to be moved to operative position upon removal of said tearing section.

4. A hermetically sealed receptacle having each of the walls thereof composed of a single thickness of material, one of the walls thereof being scored to provide a removable tearing section and having a combined pouring and measuring device secured to the inner side of said wall and normally covered by said section, said device being exposed for use upon removal of said scored section of said wall and adapted to close the opening provided by removal of the tearing section and being adjustable to effect removal of the contents of said receptacle.

5. In a receptacle, the combination with top, bottom and side walls, said side wall being hermetically seamed to said top and bottom walls, said side wall being continuous and having a section thereof scored to provide a removable tearing strip; of a plate fixed to the inner side of said side wall, said plate having an opening therein normally covered by said strip; a combined measuring and pouring spout pivotally mounted on said plate and adapted to swing through the opening thereof, said spout being normally covered by the tearing strip and adapted to be exposed upon removal of said strip.

6. In a receptacle, the combination with top, bottom and side walls, one of said walls having a removable section; of a plate secured to the interior side of one of said walls, said plate being provided with an opening normally covered by said removable section and adapted to be exposed upon removal of said section; a combined pouring and measuring element swingingly supported on said plate and adapted to swing through said opening; and means for limiting the swinging movement of said element.

7. A blank for forming a spout having side, top, bottom and end walls, said blank comprising a continuous sheet of material having four adjacent sections and adapted to be bent along lines forming the boundaries of said sections, two adjacent sections forming the bottom and end walls of said spout when the blank is bent upon one of said lines and the remaining two adjacent sections forming the top and side walls of said spout when the blank is bent on the remaining lines, one of said last named boundary lines being at right angles to the other and at right angles to said first named boundary line.

8. The method of forming a spout from a continuous blank of sheet material comprising the following steps: bending the blank along parallel lines and bringing two sections thereof into opposed, parallel relation, thereby providing an end wall and top and bottom walls of the spout; bending the remaining portion of the blank at right angles to the adjacent wall portion and bringing the inner edge thereof into juxtaposition to the inner edge of the section forming the end wall, thereby providing a side wall for said spout; and curling the said inner edge of the portion of the blank forming the side wall to provide a hinge section between said side and end walls adapted to receive a pivot pin.

In witness that I claim the foregoing I have hereunto subscribed my name this 11th day of July 1925.

WILLIAM H. W. STRAFFORD.