Feb. 26, 1935. M. B. SOLOMON 1,992,513

RECEPTACLE

Filed March 13, 1934

Fig. 1.

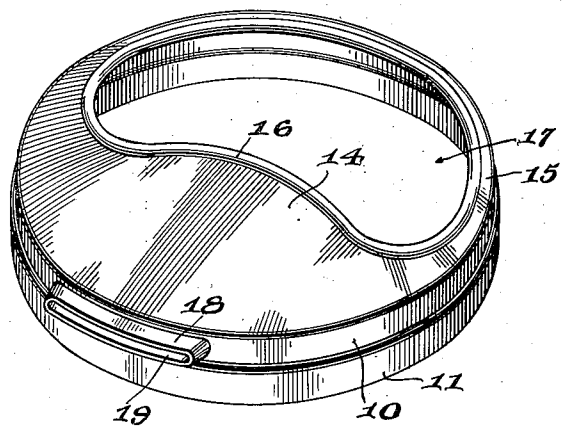


Fig. 2.

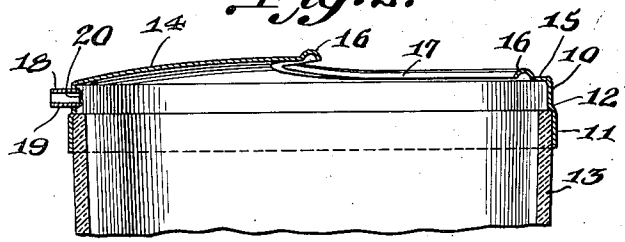


Fig. 3.

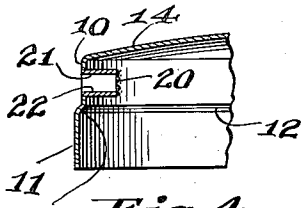


Fig. 5.

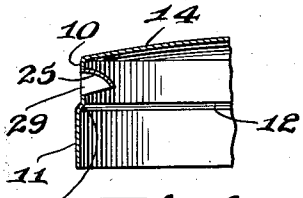


Fig. 4.

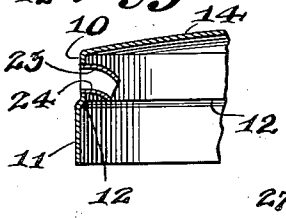


Fig. 6.

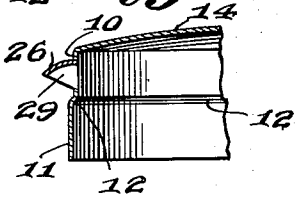
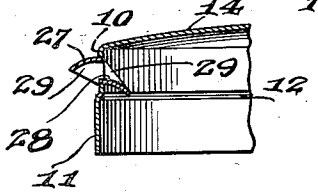


Fig. 7.



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Patented Feb. 26, 1935 1,992,513

UNITED STATES PATENT OFFICE

1,992,513

RECEPTACLE

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Application March 13, 1934, Serial No. 715,262

2 Claims. (Cl. 221—23)

The present invention relates to receptacles, and more particularly to a pouring cap adapted to be placed upon the upper end of a receptacle for pouring the contents therefrom, such as after mixing various ingredients in the receptacle and so that the cap may be quickly and easily positioned and removed with respect to the receptacle.

An object of the present invention is to provide a pouring cap which may be detachably mounted on the upper end of a receptacle and which is provided with a pouring spout at one side and a guard plate or portion adjacent the spout to prevent accidental spilling of the contents of the receptacle as the contents are poured out or distributed into small quantities in smaller or other receptacles.

The invention also aims at the provision of a pouring cap which may be utilized as a strainer and provided within or adjacent to the spout with a screen of suitable mesh for holding back solid particles in the fluid contents of the receptacle so that the contents as poured out through the cap may be strained as desired.

Another object of the present invention is to provide a pouring cap which is provided with a pouring spout so disposed in relation to the structure of the cap that the spout may project outwardly from the cap or inwardly relative thereto so that the pouring cap may be of various modified constructions to suit conditions and is adaptable where caps are desired with free and uninterrupted exterior surfaces or flanges.

The invention also embodies a pouring cap structure which may be economically produced and which lends itself to various finishes and fanciful configurations as desired and in conformity with the uses to which the cap may be placed.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawing, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 is a perspective view of a pouring cap constructed according to the present invention.

Figure 2 is a longitudinal section taken through the same as applied to the upper end of the receptacle.

Figure 3 is a fragmentary sectional view taken through the forward end of the cap showing a modification wherein the spout extends inwardly from the side wall of the cap to leave the latter free and unobstructed.

Figure 4 is a like view showing a further modification of the cap and wherein the spout extends inwardly and is curved downwardly.

Figure 5 is another fragmentary sectional view through the forward portion of the cap showing another modification wherein the upper wall of the spout extends inwardly and downwardly and the lower wall is removed.

Figure 6 is a similar view showing a further modification wherein the spout comprises an upper wall extending outwardly and curved downwardly from the flange or side wall of the cap, and

Figure 7 is another fragmentary sectional view showing a further modification wherein the top wall of the spout is curved outwardly and downwardly and the lower wall thereof is curved inwardly and downwardly.

Referring now to the drawing, and first to the construction shown in Figures 1 and 2, the cap comprises a body portion having a marginal ring or side wall 10 terminating at its lower edge in an outwardly offset skirt or flange 11 providing between the wall 10 and flange 11 an interior downwardly facing shoulder 12 adapted to engage the upper edge of a receptacle 13 of glass or the like, as shown in Figure 2. The shoulder 12 may be of any suitable depth and the relative proportions of the diameters of the wall 10 and the flange 11 may be as desired to accommodate the cap to receptacles 13 of various sizes.

The body portion of the cap is partly closed at its top by a guard plate 14 which is substantially of crescent or sector shape as shown and which extends inwardly from the forward side of the cap and is preferably bulged upwardly to a slight extent as shown. The plate 14 extends inwardly from the upper marginal edge of the wall 10 and the side and rear portions of the plate 14 comprise an inturned shallow flange 15 serving to strengthen the body portion of the cap and for supporting a marginal bead 16 defining a vent and inspection opening 17 in the top of the cap. This opening 17 may be of any desired size and configuration and may also serve as a finger receiving opening for grasping the under side of the shield or guard 14 in order to lift the cap from the receptacle 13, and for otherwise handling the cap. The forward side or end of the cap, opposite the wide portion of the guard 14 is provided with a spout of suitable size and suitable circumferential length located in the wall or ring 12 of the cap so that the spout is at all times maintained above

the upper edge of the receptacle 13, the latter engaging the shoulder 12. The spout comprises a tubular member relatively flat having a top wall 18 and a bottom wall 19, and as shown in Figures 1 and 2, these walls 18 and 19 may project radially from the cap in the general plane of the cap so as to dispose the spout horizontally when the cap is seated on the upper end of the receptacle 13, as shown in Figure 2.

If desired, the spout may be provided with a screen 20 of suitable mesh secured across the inner end of the spout to prevent solids or other relatively heavy matter from flowing out through the spout as the contents are poured. The guard 14, being disposed above the spout and extending rearwardly and laterally thereof, maintains the contents of the receptacle from spilling during the pouring operation. The cap is adapted to fit upon the upper end of the receptacle 13 with sufficient friction not only to hold the cap in place but to seal the cap on the upper end of the receptacle and prevent spilling of the contents while pouring.

The bead 16 may be of suitable size and configuration not only to strengthen the guard 14 about the marginal edge of the opening 17, but also to materially strengthen the cap body and to provide a neat finish to the marginal edge of the opening 17.

In the modification shown in Figure 3, the spout has its upper and lower walls 21 and 22 extending inwardly and horizontally through the wall 10 and above the shoulder 12. The screen 20, like in the preferred form shown in Figure 2, is mounted on the inner end of the spout. With this construction the outer surface of the wall 10 is left free and unobstructed of all projections so that the pouring caps may be suitably stacked in compact relation and in large numbers for storage, shipment and the like.

In the form shown in Figure 4, the upper and lower walls 23 and 24 of the spout not only extend inwardly from the side wall 10 of the cap, but are also curved downwardly on a suitable radius so as to escape the shoulder 12 and the upper edge of the receptacle 13 and to receive the contents of the receptacle during the pouring operation.

It will be noted from Figure 4 that the strainer or screen 20 may be eliminated if desired, and this, of course, may be done with respect to all of the forms of this invention.

Figure 5 shows a modified form of spout wherein the upper wall 25 is curved inwardly and downwardly from the top of the spout opening in the wall 10 of the cap, but wherein the lower wall of the spout is eliminated.

In the modification shown in Figure 6, the spout has its upper wall 26, curved outwardly and downwardly from the side wall 10 of the cap and the lower wall of the spout is eliminated. The further modification shown in Figure 7 shows the spout having its upper wall 27 curved outwardly and downwardly and its bottom wall 28 curved inwardly and downwardly. Thus, the bottom wall may act as a separator for certain of the ingredients in the container while the top wall 27 effectively directs or guides the out-pouring stream during the pouring operation.

It will be noted that in the constructions wherein single walls are used, such as in Figures, 5, 6 and 7, the walls are provided at opposite ends, preferably, with end flanges 29 for closing in the opposite sides of the spout and thus the stream of the contents is concentrated and directed as desired for pouring.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims.

What is claimed is:—

1. A pouring cap comprising a body portion adapted to seat on the upper end of a receptacle and having an annular wall supported above the receptacle, said annular wall having a spout opening therethrough, and a spout carried by the annular wall in register with the opening and provided with an upper wall portion curved outwardly and downwardly from the upper marginal edge of the spout opening and a lower wall portion curved inwardly and downwardly from the lower marginal edge of the spout opening.

2. A pouring cap for an open container comprising a top having a filler opening therethrough equal to substantially more than one half the area of the top and disposed adjacent an edge of said top, a marginal depending flange secured to the top, said flange including a lower flange portion adapted to telescope the upper portion of the container and an upper flange portion offset from said lower portion and providing a shoulder between said two flange portions, and a pouring spout secured to said upper flange portion between the shoulder and the top and disposed diametrically of said filler opening.

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