

Dec. 9, 1941.

G. C. ERB

2,265,154

CONTAINER POURING SPOUT

Filed May 23, 1940

Fig 1

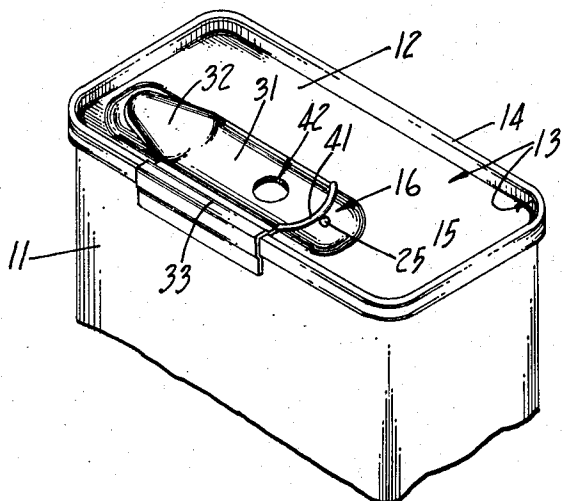


Fig 2

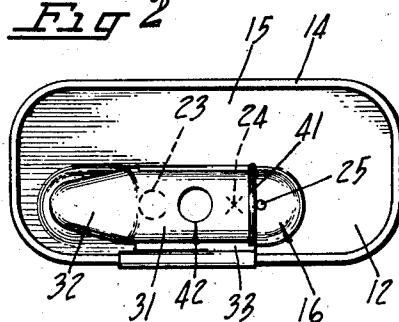


Fig 3

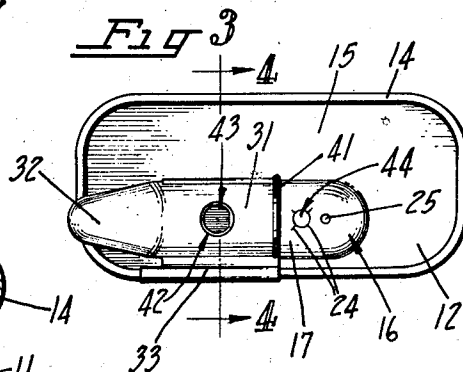
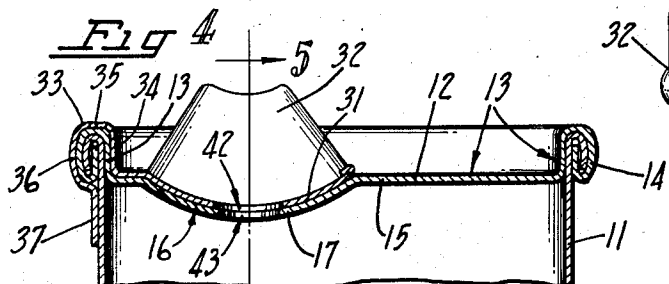
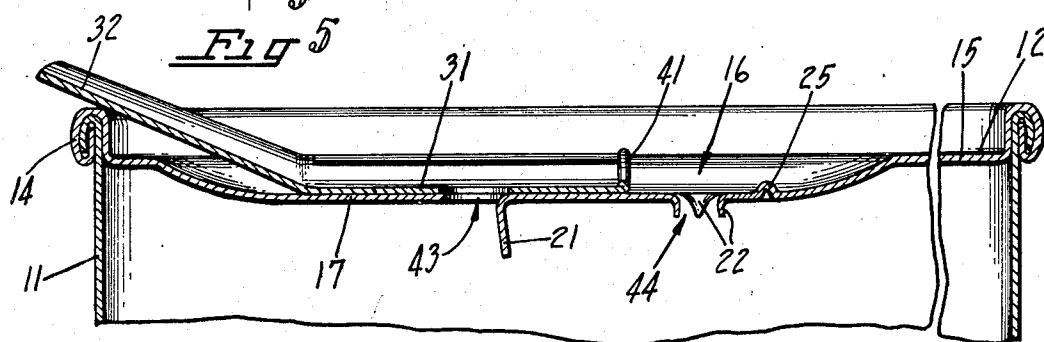


Fig 5



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2,265,154

CONTAINER POURING SPOUT

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Application May 23, 1940, Serial No. 336,866

3 Claims. (Cl. 221—27)

The present invention relates to containers or cans for storing and dispensing liquids and has particular reference to a sealed rectangular can adapted to be opened by perforating, such a can having a sliding pouring spout which may be snapped on a straight side of the can and which will function as a pouring spout to dispense the contents of an opened can or as a reclosure element, the dispensing or reclosing features being selectively obtained by sliding the pouring spout into its proper position. In some respects the can of the present invention is an improvement upon the can disclosed and claimed in the J. M. Hothersall United States Patent 2,013,655, issued September 10, 1935.

An object of the present invention is the provision of a rectangular container provided with a snap-on sliding pouring spout and reclosure member which is simple in construction and which may be quickly assembled into the can in condition for use.

Another object is the provision of a sealed container having a depression formed in an end thereof adjacent a straight side of the can and which functions as a trackway for a sliding pouring spout member which after the can has been opened by perforation of an end wall, becomes effective either as an aid in dispensing the contents of the can by pouring as when in one position or as a reclosure for the opened can, this being in another position.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawing discloses a preferred embodiment thereof.

Referring to the drawing:

Figure 1 is a perspective view partially broken away of a can embodying the present invention and illustrating the snapped on pouring spout in its initial position on the top of a sealed can; Fig. 2 is a top plan view of the can shown in Fig. 1;

Fig. 3 is a similar view showing the pouring spout member in another position, this being its pouring or liquid dispensing position;

Fig. 4 is an enlarged transverse sectional view of the upper part of the can taken substantially along the line 4—4 in Fig. 3; and

Fig. 5 is a longitudinal sectional view of the upper part of the can as taken substantially along the line 5—5 in Fig. 4.

An embodiment of the invention as exemplified in the drawing comprises a can body 11

which may have a suitable bottom member secured thereto in the usual manner. A top end member 12 having the usual countersunk panel structure 13 is secured to the upper end of the can body 11 as by a regular double seam connection 14. The end member 12 is formed with a substantially flat panel wall 15 which adjacent one of the long sides of the can is depressed or recessed in an elongated groove 16 which extends from a point closely adjacent one of the short ends of the can to a position spaced inwardly from the opposite short end.

The groove or channel 16 in cross section is preferably of uniformly curved arcuate configuration, there being formed an inwardly dished bottom wall 17 (Fig. 4). As long as the can is sealed the panel wall 15 is imperforate. Along the longitudinal center of the channel, this being at its lowest point, there is provided a weakened section 21 and a similar section of lesser area 22. The section 21 may be outlined by a circular score line 23 (Fig. 2) and the weakened section 22 may be formed by intersecting straight score lines as in a cross 24. Just beyond the cross 24, the floor of the channel 16 is raised in a stop projection 25.

The channel 16 is adapted to provide a trackway for a sliding pouring spout member. Such a member comprises a uniformly curved or dished body member 31 (Figs. 1 and 4) which is shaped to fit closely to but having a sliding contact on the channel wall 17. A pouring lip 32 is formed at one end of the pouring spout body 31 and is inclined upwardly and outwardly, as best illustrated in Fig. 5.

At one side of the body 31 there is formed a side wall extension 33 which is adapted to snap over and closely engage the adjacent straight section of the double seam 14. For such engagement purpose the wall extension 33 at the seam includes an inner short vertical wall portion 34 which fits closely on the countersunk wall 13 of the end member 12. Wall 34 merges into a top wall 35 which rests upon the top of the seam and this in turn connects with an outer curved wall 36 where it passes over the outer face of the seam. The wall 36 extends under the seam and terminates in a lower tongue part or extension 37 which rests closely against the side wall of the can body 11.

This construction provides a snap-on feature for the pouring spout member and enables a simple assemblage of spout and can. After the spout member has been positioned on the can the spring of the metal effective in the walls 34, 35,

36 and 37 holds the curved spout wall 31 down in close sliding engagement with the curved channel wall 17.

The end of the spout body 31 opposite to the pouring lip 32, is curled over along its edge to provide a finger-hold curl 41 and when the spout member is in a non-pouring position on the can end 12, this curled edge 41 abuts against the projection 25 formed in the base of the channel 16. This is the position illustrated in Figs. 1 and 2 and constitutes the non-pouring position of the spout.

When it is desired to open the can for dispensing of its contents, the spout member may be moved into the position shown in Figs. 3 and 5 by sliding along its channel track toward the adjacent end of the can. In this position an opening 42 cut through the spout body 31 is directly over the weakened area 21, the score line 23 being just inside of the opening 42 of the spout.

The can now may be opened by punching through with a suitable blunt instrument so that the weakened area 21 is pushed down into the can (Fig. 5). This produces a dispensing opening 43 for the can. It will be observed by reference to Figs. 3 and 5 that the cross lines 24 in the channel wall are beyond and free of the pouring spout. Further opening of the can is had by perforating the channel wall at the cross 24. The weakened sections 22 between the cross lines 24 are thus bent into the position shown in Fig. 5. This provides a vent opening 44 for the can.

In this pouring position of the pouring spout member the pouring lip 32 extends over the edge of the double seam 14 at one end of the can and is beyond the outermost part of the can. Dispensing of the liquid contents therefore may be brought about by merely tipping the can and directing the discharging flow of liquid from the pouring lip into the desired place of deposit. Since the can at such time is vented by the opening 44, the liquid flows freely through the openings 43, 42 and along the spout body 31 and out through and over the pouring lip 32.

By reason of the position of the pouring spout member the liquid discharges free of the can and owing to the sharp edge of the pouring lip the pouring action may be quickly cut off by merely righting the can into its vertical position. Any liquid remaining in the pouring lip or in the spout thereupon flows back into the can through the openings 42, 43.

After a dispensing action the pouring spout member is slid back into its normal position, that is, from the position shown in Fig. 3 to that of Fig. 2. The stop 25 provides the limit of such movement so that when the curled edge 41 of the pouring spout member engages the projection, the spout is in proper closing or non-pouring position. During this movement the opening 42 is moved out of register with the dispensing opening 43. At the same time the vent opening 44 is covered by the closely fitting curved bottom wall of the spout body 31, thus effectually resealing the can.

By reason of its snap construction, the pouring spout member may be placed onto the can at the most desirable time and this may be done before the can is filled and sealed or subsequent to such sealing. Furthermore, if it is desirable to remove the pouring spout member from the can at any time subsequent to its initial assemblage it is merely necessary to pull up on the pouring spout member so that the walls 34, 35, 36 and

37 may be separated and detached from the double seam. The spout member thus is removed from the double seam of the can.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

1. A non-circular container for liquids, comprising a tubular body, a top end member double seamed to said body and having an elongated trough-like depression extending parallel to a straight side of the container and located adjacent a section of said double seam, the wall within said depression being closed and adapted to be perforated to form a dispensing opening, and a sliding pouring spout having a trough-like body fitting within said end depression and formed with a side extension having sliding connection with an adjacent portion of said double seam, said spout body being projected at one end into a pouring lip and being cut through with an opening which when the spout is slid along the double seam into pouring position, aligns with the dispensing opening in said end member, in which position the said pouring lip projects above and over the double seam to direct the liquid contents of the container free of the container wall.

2. A non-circular container for liquids, comprising a tubular body, a top end member double seamed to said body and having an elongated trough-like depression of arcuate cross section and extending parallel to a straight side of the container and located adjacent a section of said double seam the arcuate wall of said depression being closed and adapted to be perforated to form dispensing and vent openings, and a sliding pouring spout having a trough-like body also of arcuate cross section and closely fitting within said end depression and formed with a side extension having sliding connection with an adjacent portion of said double seam, said spout body being projected at one end into a pouring lip and being cut through with an opening which when the spout is slid along its double seam connection into pouring position, aligns with the dispensing opening in said end member, the said vent opening being uncovered and located beyond the end of said pouring spout opposite to said pouring lip which latter at such time projects above and over the double seam to direct the liquid contents of the container free of the container wall.

3. A non-circular parallel walled container for liquids, comprising a tubular body, a top end member double seamed to said body and having an elongated trough-like depression of arcuate cross section extending parallel to the straight sides of the container and located adjacent one side and to a portion of said double seam, the arcuate wall of said depression being closed and adapted to be perforated to form dispensing and vent openings, a sliding pouring spout having a trough-like body also of arcuate cross section and closely fitting within said end depression and formed with an extension on one side which is adapted to be snapped over the adjacent portion of said double seam to provide a sliding connection therewith, said spout body being pro-

jected at one end into an inclined raised pouring lip and being cut through with an opening, said pouring spout being selectively movable into pouring and non-pouring positions along said double seam, when in pouring position said pouring lip 5 extending over the double seam with said spout opening aligned with the dispensing opening in said end member with said pouring spout free

of said vent opening, and when in non-pouring position said pouring lip being disposed inside of the double seam covering said dispensing and vent openings, and a stop formed in said end depression and engageable by said pouring spout for locating the same in non-pouring position.

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