May 22, 1934. L. GRUNDHAND ET AL 1,960,152

POURING DEVICE

Filed Jan. 11, 1933

Fig. 1.

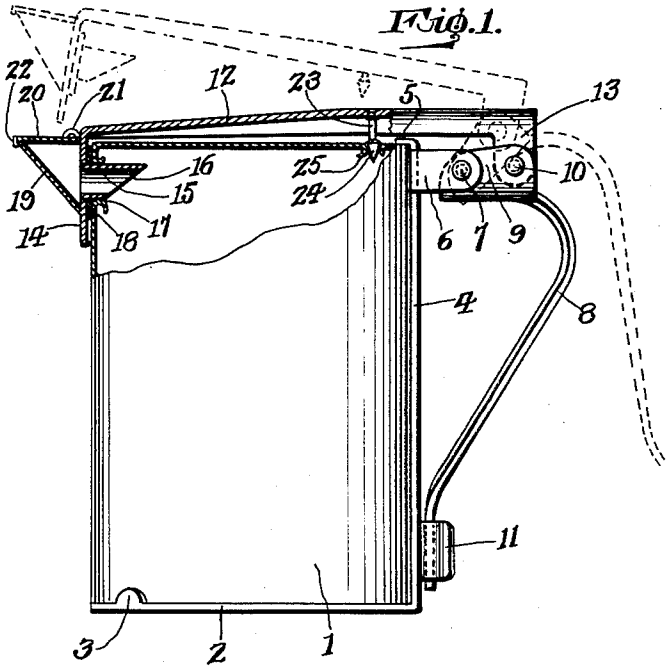


Fig. 2.

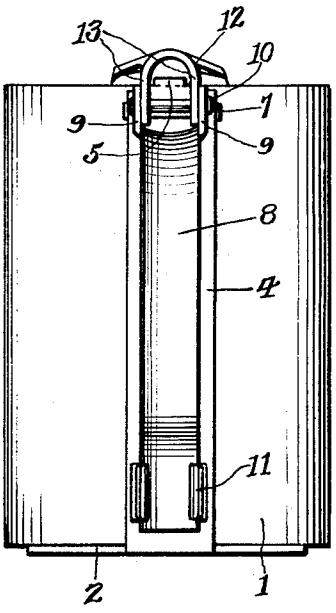


Fig. 3.

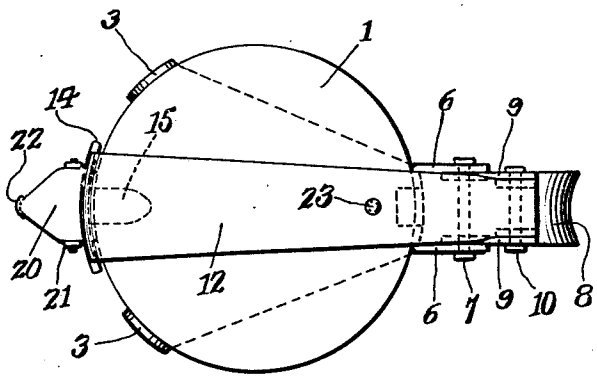
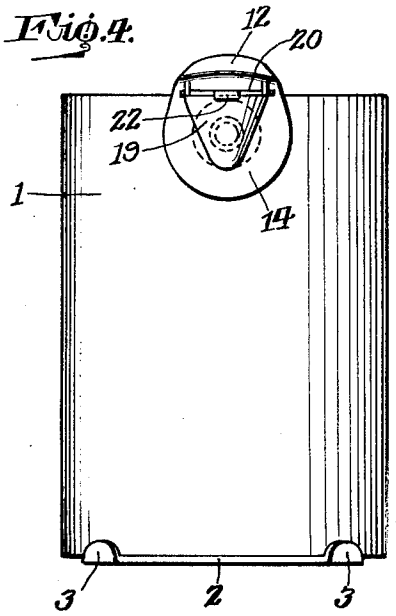


Fig. 4.



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POURING DEVICE

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Salt Lake City, Utah

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3 Claims. (Cl. 65—61)

This invention relates in general to a pouring device, and more particularly has reference to a device to be attached to a metal can of the type now commercially used for the purpose of tapping the same, and providing a convenient means for pouring out its contents.

As is well known, many liquid foods such as milk and cream, syrup and the like are now canned commercially and are put up ordinarily in cans made of sheet metal parts soldered together at their edges. In opening cans of this sort, it is customary to employ some sharp instrument made for the purpose, and either to cut one entire end or side out of the can, or to punch two or more holes in one surface of the can from which the liquid may be poured.

However, when such practices are followed, there is no way of closing the holes to prevent the entrance of dirt in case all of the food is not used at once, nor is there any convenient means provided for pouring out the liquid without spilling it and dripping it over the external parts of the can. No means is present by which the can might be conveniently held without gripping the can itself, and as just mentioned, the outside of the can is apt to be wet from the liquid which has dripped down the outside during or subsequent to the process of pouring.

One object of this invention is therefore to eliminate the disadvantages which have been found to be present in the prior art practices.

Another object of this invention is to provide a device for attachment to sheet metal cans containing liquid substances, which device will form suitable openings to the interior of the can, provide convenient means for holding the can while pouring from those openings, and provide means around those openings to provide for convenient pouring without spilling the contents of the can upon the exterior surface thereof.

Another object of this invention is to provide a device of the type set forth above, in which the openings will be covered or protected during the time that the liquid is not being poured from the can.

Other objects and advantages will become apparent from the following description taken in connection with the accompanying drawing, but it is to be distinctly understood that the same is by way of illustration and example only and is not to be taken as in any way limiting the scope of this invention. The spirit and scope of this invention is to be limited only by the prior art taken in connection with the appended claims.

Referring now more particularly to the drawing in which like numerals indicate corresponding parts throughout:

Figure 1 is a side view partly in section illustrating the device of this invention and its application to a commercial sheet metal can.

Figure 2 is a view of the device embodying this invention attached to a sheet metal can and illustrating the handle side of the same.

Figure 3 is a plan view of the arrangement shown in Figures 1 and 2.

Figure 4 is a view similar to Figure 2 but showing the opposite side of the structure.

The device is illustrated in the drawing as being attached to a sheet metal container 1 of a type in common use commercially, and ordinarily known as a "tin" can. It is well known that various liquid foods are put up and sealed in such containers for the purpose of commercial distribution.

The device as illustrated comprises a base plate 2 adapted to fit against the bottom of the can, and having a pair of upstanding lugs or lips 3 engaging the bottom edges of the can at spaced points adjacent one side thereof.

At the opposite side of the can, the base plate 2 is provided with an upwardly extending portion forming a strap 4. This strap 4 extends the full height of the can, and at its upper end is provided with a lip 5 engaging the edge and top of the can. The lip 5 is comparatively short, so that the base portion 2 might first be placed against the bottom of the can with the lips 3 in engagement with the edge thereof, and the lip 5 then forced past the top edge of the can and allowed to engage the same as shown in Figure 1 by virtue of the resiliency of the support strap 4 and the base 2.

Adjacent the top edge of the can, the strap 4 is provided with outwardly extending parallel ears 6 carrying a horizontal pin 7 between their outer ends for the purpose of pivotally mounting the handle 8. The handle 8 is likewise formed at its upper portion with a pair of upwardly extending parallel ears 9 having openings to receive the pin 7, and carrying at a point spaced outwardly from the pin 7 when the handle is in normal position a second pin 10 parallel to the pin 7 and for a purpose to be later described. The strap member 4 is also provided adjacent the lower end of the handle when the handle is in normal position with a pair of relatively resilient spring clip members 11 for the purpose of receiving the handle when it is pressed down to its normal position and maintain it in that position. These spring clip members may be formed if desired of a single strip of relatively thin resilient material secured intermediate its ends to the outer face of the strap 4, and bent outwardly at its ends to form the outwardly extending clip members 11.

Extending across the top of the can, and having a relatively large lip portion extending down over the edge of the can opposite the lip 5, is a member 12 which may be made of a relatively flat piece of material bent so as to present a substantially cylindrical convex top. This member

12 is provided at its end adjacent the handle with a pair of downwardly extending ears 13 having openings therein to receive the pin 10 carried by the ears 9 on the handle 8.

It will thus be seen that when the handle is moved toward the position illustrated in solid lines in Figure 1 the member 12 will be drawn across the top toward the handle side of the device, and then will be drawn downwardly toward the top and held firmly in that position when the handle is engaged with the clip members 11.

As above mentioned, the member 12 is provided with a lip portion 14 at its end opposite the handle, such lip portion being preferably slightly broader than the member 12, and extending downwardly along the side of the can for a distance approximately equal its breadth. This lip portion 14 is preferably shaped to conform substantially to the contour of the side of the can, and is provided at a point slightly below the top of the can with an opening of sufficient size to allow the liquid contained in the can to flow freely therethrough. Secured in this opening is one end of a tubular cutting member 15. The end of this member that is secured in the opening is preferably cut off at substantially right angles to the axis of the tube, but the opposite end 16, as will be seen from the drawing is cut off at an acute angle with respect to the axis of the tube, and is provided with a sharp edge so that it may be used for the purpose of piercing a hole 17 in the side of the can. Fitted over this tube and lying against the inner wall of the lip 14, so that when in the position shown in Figure 1 it will fall between the lip 14 and the side wall of the can, is a washer member 18 which may be of rubber, cork or any other similar material for the purpose of forming a fluid tight joint to prevent the liquid within the can from leaking through the opening 17 past the tube 15 and running down the sides of the can.

Surrounding the bottom and sides of the opening through the lip 14 on the outer side of this lip is a spout member 19 for the purpose of providing a spout for the liquid as it leaves the can through the tube 15 and the opening in the lip 14. The cap member 20 may be hinged to the top of the spout at 21 for the purpose of closing the spout when liquid is not being poured from the can. This cap member 20 may be provided at its outer edge with a downwardly extending lip 22 for the purpose of engaging the edge of the spout and maintaining it in closed position.

The member 12 is provided adjacent the lip 5 with a downwardly extending projection 23 having a sharpened head 24 adapted to punch a hole 25 in the top of the can for the purpose of allowing air to enter the interior of the can during the time that liquid is being poured out through the tube 15.

It is believed that the operation of this device will be apparent from the foregoing description. However, such operation may be briefly described as follows:

In placing this device upon a can, the base 2 is first placed against the bottom of the can with the support 4 extending up one side of the can and the lip 3 engaging the edges of the bottom of the can at the opposite sides thereof. The lip 5 may then be forced past the top edge of the can so as to hold the base 2 firmly in position. The handle 8 is then pivoted about the pin 7 and raised upwardly to a position above that shown in dotted lines in Figure 1, it being apparent that this movement will raise the member 12 and move it across the top of the can so that the end carrying the tube 15 may be slipped down past the opposite edge of the can until the member 12 engages the top of the can at that edge, while the opposite end of the member 12 will be held up so that the downwardly extending projection 23 will not be in engagement with the top of the can.

With the parts in this position, the handle is then moved downwardy so that the sharp edge 16 of the tube 15 is caused to pierce the side wall of the can forming the opening 17, and upon further movement to fully enter the opening which it has formed. During the latter part of this downward movement of the handle 8, the end of the member 12 adjacent the handle will be pulled downwardly, thus causing the sharpened head 24 of the projection 23 to pierce the top of the can and form an opening 25 for the purpose of allowing air to enter the can as previously described. This latter part of the movement of the handle 8 will also cause the lip 14 of the member 12 to be drawn tightly against the wall of the can and compress the washer 18 between said lip and the wall of the can.

It will now be apparent, that upon disengaging the catch member 22 of the cap 20 from the forward end of the spout 19, and opening such cap member, the liquid within the can may be poured out through the tube 15 of the spout 19 in such a manner as to carry out all of the objects of this invention.

What we claim is:—

1. An attachment for a sheet metal can comprising a base adapted to engage the bottom of the can, a support extending upwardly from the base to a point adjacent the top of the can, a handle pivoted to said support adjacent the top thereof, an arm pivoted to the handle at a point spaced from the point where the handle is pivoted on the support, said arm being adapted to extend across the top of the can, pouring means on said arm adjacent the opposite side of the can from the handle, a downwardly extending ripping point on said arm adjacent the handle, the pouring means and the ripping point being adapted to puncture the can upon movement of the handle about its pivot on the support to its normal position for holding the can, and means for resiliently holding the handle in such normal position.

2. An attachment for a sheet metal can comprising a base adapted to engage the bottom of the can, a support extending upwardly from the base to a point adjacent the top of the can, a handle pivoted to said support adjacent the top thereof, an arm pivoted to the handle at a point spaced from the point where the handle is pivoted on the support, said arm being adapted to extend across the top of the can and having a portion at its opposite end extending downwardly along the side of the can, pouring means on said downwardly extending portion of said arm, and a downwardly extending ripping point on said arm adjacent the handle, the pouring means and the ripping point being adapted to puncture the can upon movement of the handle about its pivot on the support to its normal position for holding the can.

3. A device of the character described comprising a base adapted to engage the bottom of a can, upwardly extending means on said base adapted to engage the bottom edge of the can at spaced points along one side thereof, a support on said base adapted to extend upwardly along the side of the can opposite said upwardly extending

means to a point adjacent the top of the can, means on the upper end of said support adapted to engage the top of the can to position the base and support on the can, a handle pivoted to said support, an arm pivoted to the handle at a point spaced from the point where the handle is pivoted on the support, said arm being adapted to extend across the top of the can, pouring means on said arm adjacent the opposite side of the can from the handle, a downwardly extending ripping point on said arm adjacent the handle, the pouring means and the ripping point being adapted to puncture the can upon movement of the handle about its pivot on the support to its normal position for holding the can, and means for resiliently holding the handle in such normal position.

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