J. GOLDBERG.

ADJUSTABLE SPOUT ATTACHMENT FOR CANS.

APPLICATION FILED MAY 4, 1916.

1,245,333. Patented Nov. 6, 1917.

Fig. 1.

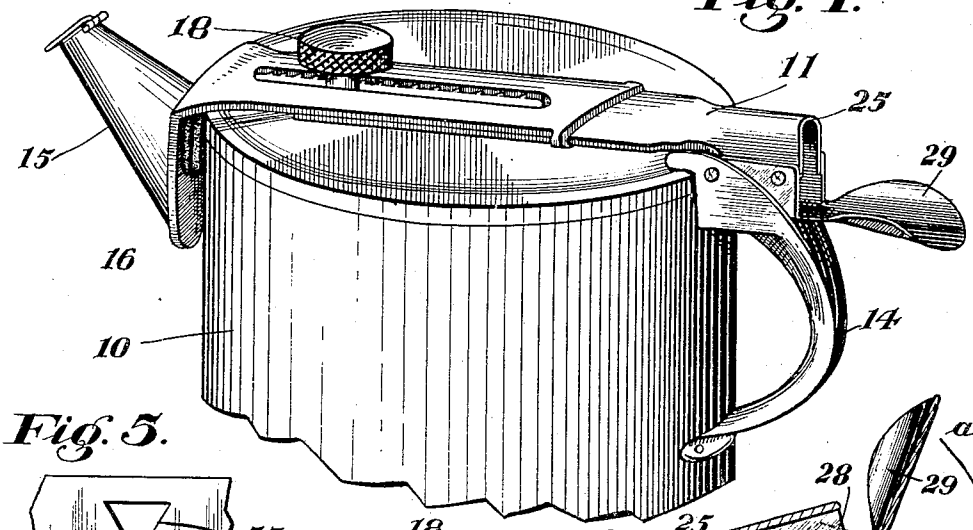


Fig. 5.

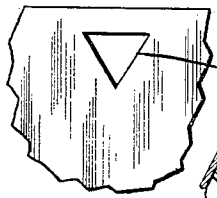


Fig. 2.

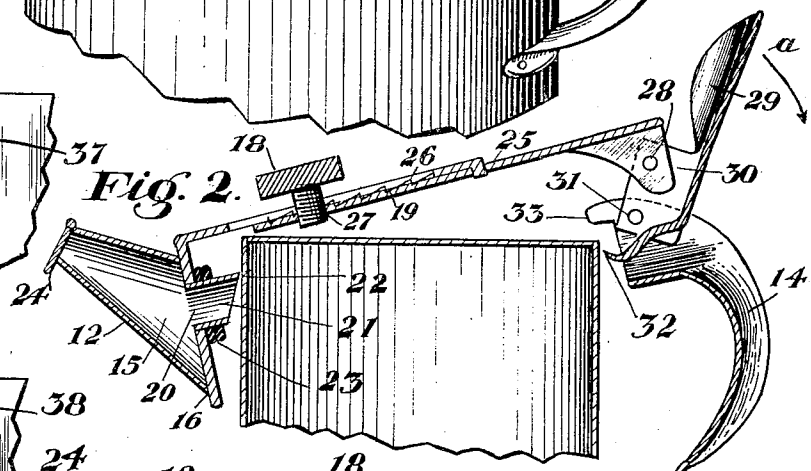


Fig. 6.

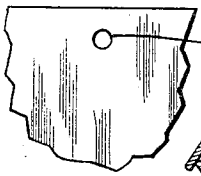


Fig. 3.

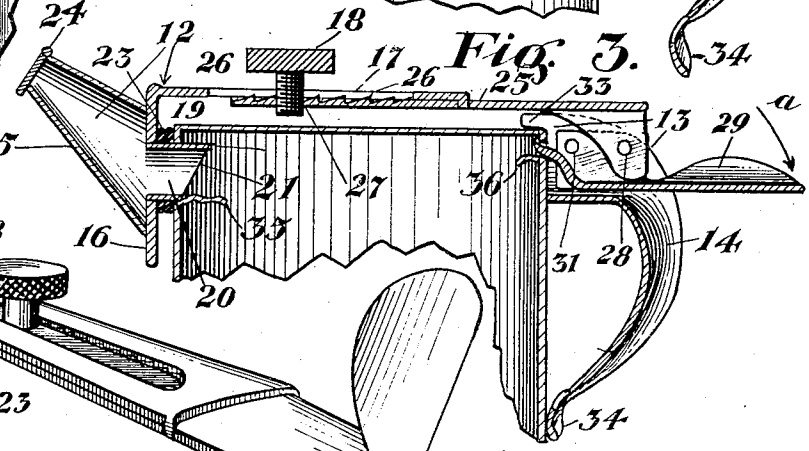


Fig. 4.

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UNITED STATES PATENT OFFICE.

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ADJUSTABLE SPOUT ATTACHMENT FOR CANS.

1,245,333. Specification of Letters Patent. Patented Nov. 6, 1917.

Application filed May 4, 1916. Serial No. 95,480.

To all whom it may concern:

Be it known that I, JACK GOLDBERG, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Adjustable Spout Attachments for Cans, of which the following is a specification.

This invention relates to an adjustable spout attachment for containers and particularly pertains to a spout attachment for use upon thin sheet metal cans containing fluids such as evaporated milk and the like.

It is an object of this invention to provide an attachment spout for application upon cans and which will act automatically as it is clamped upon the can to form a pouring aperture and a vent hole for the passage of air.

Another object is to provide a spout attachment which may be demountably clamped upon a can and which is provided with adjustment means so that it will fit various sizes of containers.

It is a further object to provide a spout member which is formed in connection with a perforating member and provides communication between the spout and the can when the perforating member has punctured the wall of the can.

Another object is to provide a clamping member which performs the double function of perforating the can wall for an air vent and securing the device upon the can.

It is another object to provide an attachment spout with a handle member to facilitate in handling and pouring the fluid from the container.

It is an object to provide the device with adjustable means for lengthening the reach of the device to accommodate various sized cans, said adjustment means being formed in a manner that will prevent the longitudinal slippage between the parts involved.

It is a further object to provide a detachable spout member which is formed of few parts, is positive in its operation, and is not liable to get out of order.

Other objects will appear hereinafter.

The invention is illustrated in the accompanying drawings in which:

Figure 1 is a view in perspective showing the spout attachment as applied to a can.

Fig. 2 is a view in transverse section as seen along the center of the spout attachment and shows the initial position in applying the device to the can.

Fig. 3 is a view similar to Fig. 2 and illustrates the fixed position of the device as clamped upon a container.

Fig. 4 is a view in perspective of the device and illustrates particularly the spout perforating member.

Fig. 5 is a fragmentary view of the can showing the form of perforation made by the spout perforator.

Fig. 6 is a fragmentary view similar to the one shown in Fig. 5 and illustrates the form of perforation made by the clamping member.

Referring to the drawings more particularly, 10 indicates a can which may be rectangular or round in shape. Owing to the fact that most fluid containers are round, the application of the device has been shown upon a can of that shape. Mounted upon the can is a spout attachment 11 which is the embodiment of this invention. The relation of the spout attachment to the can when in its operative position is particularly shown in Fig. 3 where the device is illustrated as comprising a spout member 12, a clamping member 13 and a handle member 14. The spout member 12 comprises a cylindrical tapered spout 15 which is secured in a suitable manner upon an angular bracket 16, one leg of which extends downwardly and substantially parallel to the side wall of the can 10. The other leg of the bracket 16 lies at right angles to the downwardly extending leg and horizontally across and above the top of the can. The last mentioned leg member is formed with a longitudinally extending slot 17 within which a set screw 18 is allowed free movement. The under side of the horizontally extending leg member of bracket 16 is formed with a series of serrations 19 having their square shoulders in a position to oppose movement of an engaging part toward the opposite side of the can from the spout 15. Mounted upon the vertically extending portion of the bracket 16 and secured within an opening 20 which communicates with the spout 15, is a triangular perforating member 21 which is hollow and is formed with a cutting edge 22 of sufficient sharpness to puncture the wall of the can. A series of washers 23 are slipped over the perforating member and when pressed between the

bracket 16 and the wall of the can, effect a suitable seal for preventing the leakage of the fluid when it is being poured through the spout. The spout has mounted upon its open end a hinged cover 24 which is closed by gravity when the can is in its upright position.

Lying adjacent and parallel to the horizontal portion of the bracket 16 is a clamping member 25 which has a lug 26 formed upon its upper face to engage with one of the serrations 19 within the lower face of the horizontal member. A threaded aperture 27 is formed through the member 25 and is adapted to receive the threaded end of the set screw 18. The outwardly extending end of the clamping member 25 is bent in a U-shape and has mounted therethrough a pivot pin 28 upon which a can perforating thumb-piece 29 is pivotally secured.

The thumb-piece 29 is formed with an extension 30 within which a bearing is provided for a pin 31 around which the thumb-piece rotates in coöperation with the pin 28 to secure the device upon a can. Formed adjacent the portion 30 and integral therewith is a vent perforating point 32 which is of suitable shape to perforate the can wall and remain in an engaged position.

The pivot pin 31 upon which the thumb-piece 29 swings is suitably secured within the upper portion of the handle member 14 which is of suitable configuration to allow it to be conveniently grasped. A pair of positioning lugs 33 are formed at the upper end of the handle and insure its being properly placed upon the can. The lower end of the handle 14 is formed with an out-turned bearing portion 34 which is adapted to rest against the can and form a suitable support while the device is being clamped in position.

When the attachment spout is to be applied to a container, it is placed over the end of the container in the manner shown in Fig. 2 of the drawings. The spout member and the handle member are positioned upon substantially diametrically opposite sides of the can. The set screw 18 is released and the members 16 and 25 moved in relation to each other until the device will properly fit the can, after which the lug 26 will engage a serration 19 and be secured therein by the binding action of the set screw 18 as it is tightened and draws the horizontal member of the bracket 16 against the clamping member 25. The positioning lugs 33 are next placed over the end of the can and the thumb-piece 29 is pushed downwardly in the direction indicated by the arrows on the drawings. This action draws the handle portion 14 down against the can and allows it to bear along the side wall of the can by means of its member 34. The eccentric action due to the movement of the pins 28 and 31 as the thumb-piece moves causes the spout perforating member 21 to enter one side of the can wall and the vent perforating member 32 to enter the opposite side simultaneously. The metal cut by these perforating members will be bent downwardly and form tangs 35 and 36 beneath the pouring orifice 37 and the vent 38, respectively. When the thumb-piece is in the position shown in Fig. 3, the device is locked upon the can and may not easily be removed, save by the movement of the thumb-piece to its initial inoperative position.

It will thus be seen that I have provided an attachment spout for application upon containers of metallic construction which readily and by a single operation perforates a can for the removal of its contents, connects the device rigidly upon the can, and disposes a spout over the pouring opening in a manner to allow the fluid within the can to be discharged without difficulty.

I claim:

1. In an attachment spout, the combination of a spout member formed with an angular body comprising a vertical and a horizontal leg, a spout mounted upon the vertical leg of said angular body, a closure pivotally mounted over the end of the spout, a can perforator mounted within said vertical leg member and provided with means for allowing communication between the can and the spout, the horizontal leg formed upon said angular member and adapted to lie parallel to the end of the can, a longitudinal slot extending substantially the length of said member, a series of serrations formed upon the under side of said member, a clamping member adapted to lie beneath said horizontal member, means for holding said clamping member against said horizontal member, engaging means formed upon said clamping member and adapted to engage the serrations upon the horizontal leg, a thumb-piece pivotally mounted at the outer end of said clamping member, a handle member pivotally mounted in relation to the thumb-piece, a vent hole perforator formed integral with said thumb-piece, positioning means formed upon said handle, and means effected by the movement of the thumb-piece whereby the can perforator will be forced through the wall of the can simultaneous with the forming of a vent opening by the vent hole perforator and the clamping of the device upon the can.

2. In an attachment spout, the combination of a spout member formed with an angular body comprising a vertical and a horizontal leg, a spout mounted upon the vertical leg of said body, a can perforator secured to the inner face of said vertical leg member and adapted to establish communication between a can and the spout, a clamping member adapted to lie beneath said hori-

zontal leg member and thereagainst, serrations formed along the under face of said horizontal leg member to bear against the clamping member, means for adjusting said clamping and leg members in relation to each other and forcing the serrated face of the leg member against the face of the clamping member, a thumb-piece pivotally mounted at the outer end of the clamping member, a handle member pivotally mounted in relation to the thumb-piece, positioning means formed upon said handle, a vent hole perforator formed integral with said thumb-piece, and means whereby downward movement of the thumb-piece will cause the can perforator and the vent hole perforator to simultaneously protrude into the walls of the can and lock the spout attachment thereon.

In testimony whereof I have signed my name to this specification.

JACK GOLDBERG.