Nov. 23, 1937. R. H. LEHEW 2,100,167

DETACHABLE CLOSURE AND SPOUT FOR CONTAINERS

Filed April 8, 1936

Fig. 1.

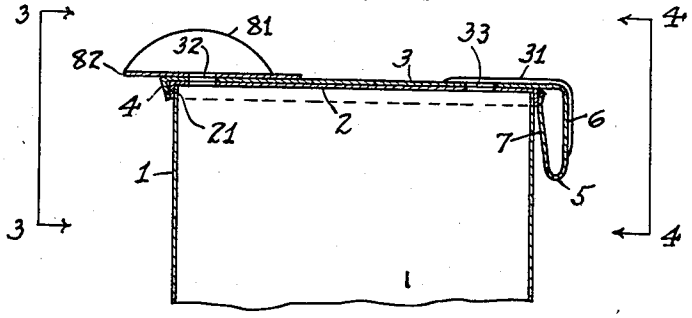



Fig. 2.

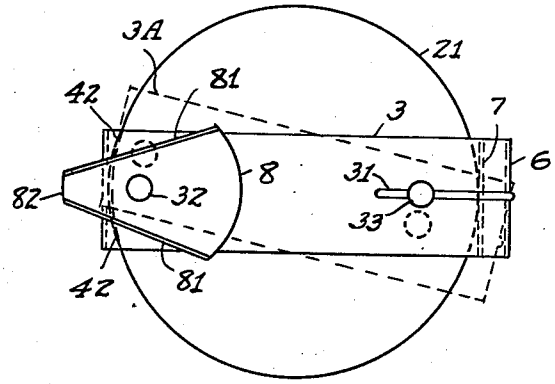



Fig. 3.

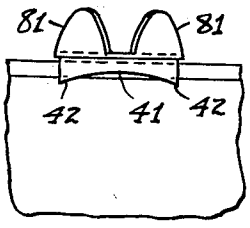
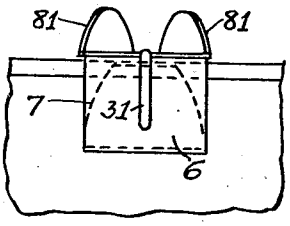



Fig. 4.




INVENTOR—

Robert H. Lehew

Patented Nov. 23, 1937

2,100,167

# UNITED STATES PATENT OFFICE

2,100,167

## DETACHABLE CLOSURE AND SPOUT FOR CONTAINERS

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Application April 8, 1936, Serial No. 73,245

3 Claims. (Cl. 221—23)

My invention relates to detachable closures and spouts more particularly applicable to metal containers of the type employed for condensed milk, syrups, beer, and similar products, and its principal object is to provide means whereby the contents of the container may be more conveniently dispensed.

According to the present practice in handling products of the character referred to, two holes are punched in the lid of the container at diametrically opposed points, one of the said holes being used for pouring out the contents, while the other hole is employed for the admission of atmospheric pressure in order to facilitate the pouring action. After these holes have been made, the contents are discharged by tipping the container to the required extent but the said contents, not being guided in any way, are splashed out in an irregular and untidy manner.

When a portion only of the contents is discharged in the manner above described, the residual contents are exposed to contamination by the entrance of dust and dirt through the openings as well as to the attacks of flies, ants, and other insects, so that it is often necessary to discard the container while a portion of the contents is still retained therein. According to the present invention I have provided a device which is easily and quickly applied to and detached from a container, the said device having thereupon a spout through which the contents may be conveniently poured, and being at the same time adapted to form a closure for the openings and thus protect the contents while being stored.

With these and other objects in view I will now describe a preferred embodiment of my said invention with reference to the accompanying drawing in which—

Figure 1 is a fragmentary vertical sectional view taken upon the center line, showing the upper portion of a container having my device applied thereto.

Figure 2 is a plan view of the same.

Figure 3 is a fragmentary side elevation taken on line 3—3 of Figure 1, and

Figure 4 is a similar elevation taken on line 4—4 of Figure 1.

Like characters designate corresponding parts throughout the several views.

1 is the barrel of the container having the usual cover 2, and 3 is the body of my device which consists essentially of a flat strip of steel or other resilient material having at one end a downwardly and inwardly extending projection 4 adapted to engage the rim 21 of the container and at the other end a downwardly extending U-shaped portion 5, the outer leg 6 of which is continuous with the portion 3, while the inner leg 7 has its upper free end so formed as to resiliently engage the rim and at the same time to yieldingly press the portion 4 against the said rim.

It will be observed that the engagement of the container by the members 4 and 7, respectively, occurs at diametrically opposed points upon the periphery of the rim 21. The portion 4, however, is hollowed out as indicated at 41 in Figure 3 so that the actual contact with the rim takes place at points 42 in the same figure. Since then, the engagement of the member 7 with the rim is tangential, it follows that the device as a whole has a three point bearing upon the rim so that it may be rotated around the axis of the container without becoming detached therefrom.

The member 3 is provided at 31 with a stiffening rib which extends partially along the outer face of the leg 6, and upon the center line of the member 3 are the openings 32, 33, the former serving for the pouring operation while the latter serves as the air inlet. Secured to the upper face of the member 3 by soldering, spot-welding or other means is a disc 8 which surrounds the opening 32 and has in itself a corresponding opening. The disc 8 has upwardly turned edges 81 which form a spout, the width of which tapers, the wider part being positioned toward the center of the container while the narrower part extends beyond its periphery as indicated at 82.

In operation the device, being held by the U-shaped portion 5 which serves as a handle, is placed over the container with the portion 4 engaging the rim 21, and the handle portion is pressed down until the member 7 snaps over and engages the rim. Due to the three point contact of the device with the rim of the container, it will be now located substantially coincident with the axis. Holes are now punched in the cover 2, using the openings 32, 33 as guides, so that when the container is tipped in the proper direction the contents will be discharged through the opening 32 and over the spout and will emerge from the opening 82 of the spout. After the required quantity has been discharged, the device is rotated around the axis of the container until it occupies the position indicated in broken lines at 3A in Figure 2, in which position the solid portions of the member 3 will cover the openings in the container and protect the remaining contents from damage as above stated.

While I have herein described and shown a preferred embodiment of my invention, it will be

readily understood that the same may be modified in various ways to suit any particular requirements without departing from the spirit of my invention as defined in the appended claims.

Having thus described my said invention, what I claim and desire to secure by Letters Patent of the United States is:

1. The combination, with a container having in its cover a pair of diametrically opposed openings, of a flat resilient strip of metal adapted to engage the periphery of said container, said strip having a pair of openings adapted to coincide with said first-mentioned openings and being of sufficient width to form a closure for said first-mentioned openings when said strip is rotated about the axis of said container.

2. The combination, with a container having in its cover a pair of diametrically opposed openings, of a flat resilient strip of metal adapted to engage the periphery of said container, said strip having a pair of openings adapted to coincide with said first-mentioned openings and being of sufficient width to form a closure for said first-mentioned openings when said strip is rotated about the axis of said container, said strip being provided upon its upper surface with a member having an opening coincident with one of said last-mentioned openings and having a pair of upstanding convergent walls adapted to form a spout.

3. The combination, with a container having in its cover a pair of diametrically opposed openings, of a flat resilient strip of metal adapted to engage the periphery of said container, said strip having a pair of openings adapted to coincide with said first-mentioned openings and being of sufficient width to form a closure for said first-mentioned openings when said strip is rotated about the axis of said container, said strip being provided upon its upper surface with a member having an opening coincident with one of said last-mentioned openings and having a pair of upstanding convergent walls adapted to form a spout projecting outwardly beyond the periphery of said container.

ROBERT H. LEHEW.