COMBINATION PERFORATOR, CLOSURE, AND POURING ATTACHMENT FOR CONTAINERS

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COMBINATION PERFORATOR, CLOSURE, AND POURING ATTACHMENT FOR CONTAINERS.

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To all whom it may concern:

Be it known that I, IRA. T. SKILES, a citizen of the United States, residing at Long Beach, in the county of Los Angeles, in the State of California, have invented certain new and useful Improvements in Combination Perforator, Closure, and Pouring Attachments for Containers, of which the following is a specification:

This invention relates to an attachment for cans containing condensed milk, syrup, or analogous liquids, which are to be dispensed preferably in small quantities from the can or container, and an object of the invention is to provide a device of this nature which comprises a pair of members adapted to form closures for the pouring opening and air vent of the container, each of said members being carried by a spring-controlled lever, the hand grips of which extend in parallel abutting relation and are adapted to project downwardly and outwardly from the upper end of the container, whereby the container may be gripped within the hand of the user, and with the same hand the hand grips are forced toward the container to operate the levers to move said closures out of their respective openings, permitting the pouring of the contents from the container; and further to provide a spout arranged so as to receive liquid poured from a container through the dispensing opening therein.

A further object of the invention is to provide resilient gaskets which are mounted about the closure member for forming air and fluid-tight closures for the openings in the containers, consequently preventing the contamination of the contents of the container, as well as preventing the seeping of any of the contents of the container therefrom about said closure.

Other objects of the invention will appear from the following detailed description taken in connection with the accompanying drawings, forming a part of this specification and in which drawings:

Figure 1 is a perspective view of the improved perforator, closure and pouring spout attachment, showing the same applied to a container.

Figure 2 is a top plan of the device attached to a container.

Figure 3 is a vertical section through a fragment of the container showing the device attached.
gages against the depending extension 12, while the laterally bent end portions 24 thereof engage against the under surfaces or edges of the hand grips 19 and 20 of the levers 17 and 18.

The lever 17 is much shorter than the lever 18 and is bent outwardly to space its free end a short distance away from the adjacent side of the lever 18. The free ends of the levers 17 and 18 have depending wedge-shaped perforating members 25 formed upon their outer ends and extending downwardly at right angles to the main legs of the levers. The lower edges of these wedge-shaped perforators incline upwardly from one end toward the other end as clearly shown in Figure 4 of the drawings, to provide a shearing, perforating cut or action when first being inserted through the top of a container A, providing substantially triangularly shaped perforations, as shown at 26; one near one edge of the can, and the other at a diametrically opposed point adjacent the opposite edge of the can, providing a pouring opening and an air vent, as clearly shown in Figure 1 of the drawings. Annullar disc shaped flanges 27 are formed upon the depending wedge-shaped perforating portions 25 at their junction with the respective levers, the said flanges forming abutments against which suitable gaskets or resilient washers 28 rest, the latter being adapted to engage the outer surface of the top of the container A when the wedges 25 are inserted through the opening 26 formed thereby, providing fluid tight closures for the said openings. A spout 30 is formed upon the band 10 in such position that it will receive the liquid egressing from the container through the pouring opening 26. The cavity formed by the portion of the spout which extends below the upper edge of the rim 10 at the inner end of the spout is filled by suitable filler plug 31, eliminating the forming of a recess in which the liquid could collect during use of the device.

The preferred form of the attaching structure as disclosed in Figures 1 to 5 inclusive is adapted for use in connection with containers made of tin or analogous material, which it is necessary to perforate to permit of the emptying or pouring of the contents therefrom, while the modified structure shown in Figures 6, 7 and 8 is particularly designed for use in connection with containers, such as milk bottles, or the like, where no perforation is necessary, the said containers being provided with mouths to permit the pouring of the contents therefrom.

The modified structure, comprises a disc 40 made of suitable material, such as sheet metal or the like, the central portion of which is dished for insertion into the mouth of the container B. This disc 40 has a plurality of arcuate spring tongues 41 formed thereon at spaced intervals about its circumference, the said tongues curving downwardly and inwardly and having their terminals outwardly as shown at 42. The tongues 41 are adapted to engage the container B to attach the closing and pouring attachment thereto. The disc 40 is provided with spaced perforations 42 and 43, the former being slightly larger than the latter, and is adapted to permit the pouring or outlet of the contents of the container B therethrough, while the opening 43 forms an air vent.

These openings 42 and 43 are normally closed by dished discs 44 and 45 respectively, the disc 44 being carried by a relatively long lever 46, while the disc 45 is carried by a relatively short lever 47 bent outwardly near its free end, as shown at 48, to permit the dished disc 45 to clear the lever 46 during operation of the device. The levers 46 and 47 are pivotally supported by a suitable pivot pin 49, carried by suitable ears formed upon the dished disc 40 and they have hand grips or handle portions 50 formed thereon, the terminals of which are flattened to provide finger grips or engaging portions 51. A spring 52, similar in construction to the spring 51, is provided, for engagement with the container B and the handle end of the levers 46 and 47, for normally maintaining the discs 44 and 45 in their respective openings 42 and 43. The disc 40 has a spout 53 formed thereon, the lowermost portion of which is flush with the upper surface of the disc, preventing the formation of a cavity which might receive and retain any of the liquid contents of the container B, and which spout is positioned upon the disc 40 to receive liquid poured through the opening 42.

From the foregoing description, it is apparent that the springs 51 and 52, of the preferred and modified forms, act on the levers of the improved device so that they may be independently actuated toward the can openings, thus insuring that both of said can openings will be normally closed notwithstanding any unevenness in the part of the can in which the openings may be provided.

While the modified structure illustrated in Figures 6, 7 and 8 is shown applied to a milk bottle, it is to be understood that slight variations may be made therein, adapting it for attachment to various types of containers, analogous to the milk bottle, without departing from the spirit of this invention, and it is to be understood that changes in details may also be made without departing from the spirit of this invention, but;

I claim:

1. A closure attachment for use in connection with containers which have pouring
and air inlet openings therein comprising lever means carried by said container which provides a closure for cooperation with the pouring opening of the container, a second lever means providing a closure for cooperation with the air inlet opening of the container, and spring means cooperating in independent manner with said first and second mentioned lever means to normally maintain the same closed over the pouring and air outlet openings of the container with which they cooperate.

2. A device of the class described comprising an attaching portion, a pair of levers pivotally carried by said attaching portion including remotely positioned closure members, and resilient means acting independently upon the levers to normally urge the closure members in one direction.

3. A device of the class described comprising an attaching band, a spout rigid with the attaching band, a pair of levers of bell crank formation pivotally carried by the attaching band at a point directly opposite the spout carried on said band, each lever including a handle portion and a portion supporting a closure member thereon, said closure member supporting portions of the levers being of different lengths, and spring means co-acting in independent manner on said levers to normally urge the same in one direction.

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