July 8, 1952 C. L. BAENDER 2,602,566

LIQUID DISPENSER

Filed July 5, 1947

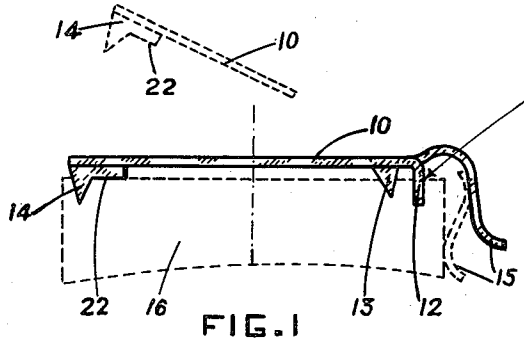


FIG. 1

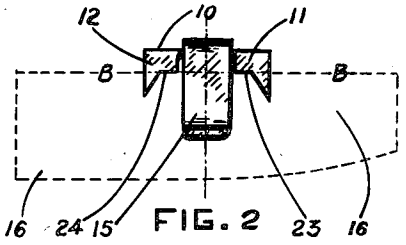


FIG. 2

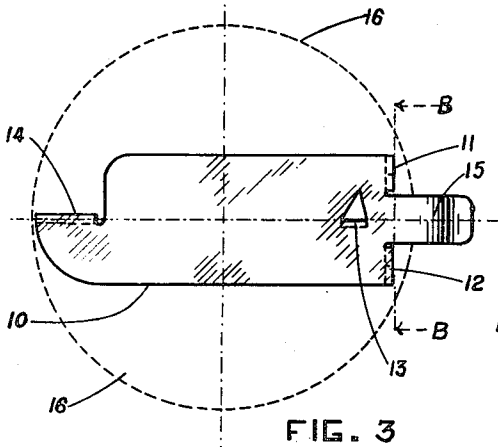


FIG. 3

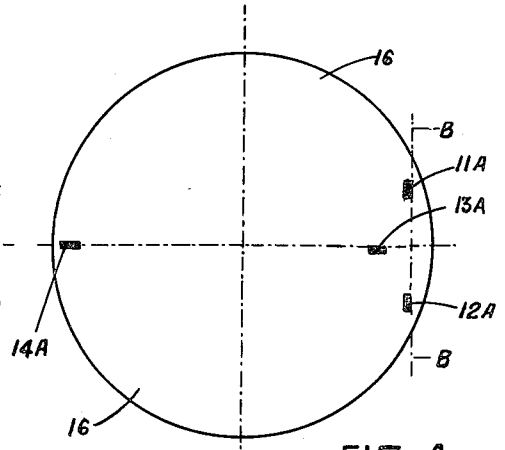


FIG. 4

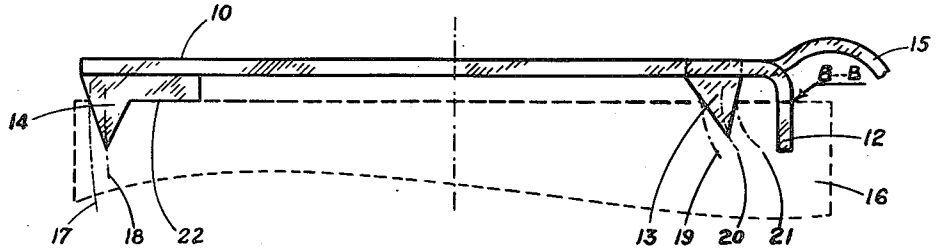


FIG. 5

INVENTOR

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Patented July 8, 1952 2,602,566

UNITED STATES PATENT OFFICE

2,602,566

LIQUID DISPENSER

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Application July 5, 1947, Serial No. 759,230

3 Claims. (Cl. 220—51)

1

This invention relates generally to liquid dispensers for dispensing milk, or other liquids, from cans.

An object of the invention is the provision of a simple and convenient means for puncturing holes in the top of a can of milk which could easily be opened for pouring and for admitting air into the can, and easily closed by simply setting the can down.

Another object of the invention is the provision of a dispenser made up of elements all of which form one piece.

With these and other objects in view the invention consists of novel features of construction as will more fully be described and pointed out in the claims.

In the accompanying drawings:

Figure 1 is a side view of one embodiment of the invention; Figure 2 is a view looking to the left at Figure 1; Figure 3 is a view looking down on Figure 1; Figure 4 is a view looking down on the can when the dispenser is removed, and Figure 5 is an enlarged view of Figure 1.

Referring more particularly to the drawings, 10 is the body of the dispenser, which is shown with four puncturing points, 11, 12, 13 and 14, and 15 is the lever with which the dispenser is operated. 16 is the can body, shown by broken lines in Figures 1, 2, 3, and 5, and by full lines in Figure 4. In this figure are also shown holes 11A, 12A, 13A and 14A which are made in the can by points 11, 12, 13 and 14 respectively.

The line B—B is the axis of rotation of the dispenser when lever 15 is operated, and the dot-and-dash lines 17, 18, 19, 20 and 21 in Figure 5 show extensions downward of some of the puncture points. These dot-and-dash lines show graphically that the various puncturing points of this dispenser cannot be prevented from functioning by any part of the top of the can being in the orbit of rotation of any one of the puncturing points.

The operation is as follows: The device is placed centrally on top of a can and given a blow so that the four puncturing points will be driven through the top of the can until shoulders 22, 23 and 24 will come into contact with the top of can 16. The can is then picked up so that a finger of the hand will engage lever 15 and press it against the can, when point 14 will rise to the position indicated by the broken lines in Figure 1 and point 13 will be lifted from its port 13A. The can may now be tilted to the pouring position, when air will flow into the can through port 13A as milk flows from port 14A. When the can is set down all of the ports will close,

2

Having thus described my invention I claim:

1. A device for puncturing openings in the top of a can to permit dispensing liquid from said can comprising, a strip of relatively rigid material adapted to extend horizontally across the top of such can having one pointed can-puncturing element at one end and a pair of spaced can-puncturing elements of equal length at the opposite end, all of said can-puncturing elements depending from said strip with their pointed ends directed downwardly for puncturing said top and for extending through the latter when said strip is over said can and is forced downwardly, said pair of elements being positioned along a line extending at right angles to the longitudinal axis of the latter, spacing means integral with said strip projecting therefrom a distance less than that to which said pair of elements extend for engaging said top to space said strip above the latter and to provide a fulcrum at the point of engagement between said means and said top for swinging said one element into and out of the hole that it is adapted to form in said top with said pair of elements in the openings they are adapted to form during such swinging, a fourth pointed can-puncturing member rigid with said strip depending therefrom at a point between said one can-puncturing element and said pair of can-puncturing elements and substantially closer to the latter than to said one can-puncturing element for forming an air inlet opening upon said strip being so forced against said top.

2. A device for puncturing openings in the top of a can to permit dispensing liquid from said can comprising, a horizontally disposed metal strip adapted to extend across the top of such can having one pointed can-puncturing element at one end and a pair of spaced can-puncturing elements of equal length at the opposite end disposed along a line extending at right angles to the longitudinal axis of said strip, a fourth can puncturing element equally spaced from the can puncturing elements of said pair between said pair of elements and said one element and on said axis but closer to said pair of elements than to said one element, all of said can-puncturing elements depending from said strip and integral therewith with their pointed ends directed downwardly for puncturing said top and for extending through the latter when said strip is over said can and is forced downwardly, an extension on said strip in continuation thereof at the end adjacent said pair of elements providing a handle for manually swinging said one element and said fourth element about an axis extending through said pair of elements and out of the holes

said one and said fourth element are adapted to form in said can.

3. A device for puncturing openings in the top of a can to permit dispensing liquid from said can comprising, a horizontally disposed metal strip adapted to extend across the top of such can having one pointed can-puncturing element at one end and a pair of spaced can-puncturing elements of equal length at the opposite end disposed along a line extending at right angles to the longitudinal axis of said strip, a fourth can puncturing element equally spaced from the can puncturing elements of said pair between said pair of elements and said one element and on said axis but closer to said pair of elements than to said one element, all of said can-puncturing elements depending from said strip and integral therewith with their pointed ends directed downwardly for puncturing said top and for extending through the latter when said strip is over said can and is forced downwardly, an extension on said strip in continuation thereof at the end adjacent said pair of elements providing a handle

for manually swinging said one element and said fourth element about an axis extending through said pair of elements and out of the holes said one and said fourth element are adapted to form in said can, spacing members respectively integral with said one element and with the elements of said pair spaced between said strip and the lower pointed ends of said elements providing a three-point support for supporting said strip on said top and for limiting the degree of penetration of said elements through said top.

CHARLES LEWIS BAENDER.

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