May 12, 1936. C. W. HATHAWAY 2,040,484

CAN OPENER AND DISPENSING MEANS

Filed June 27, 1935

Fig. 1.

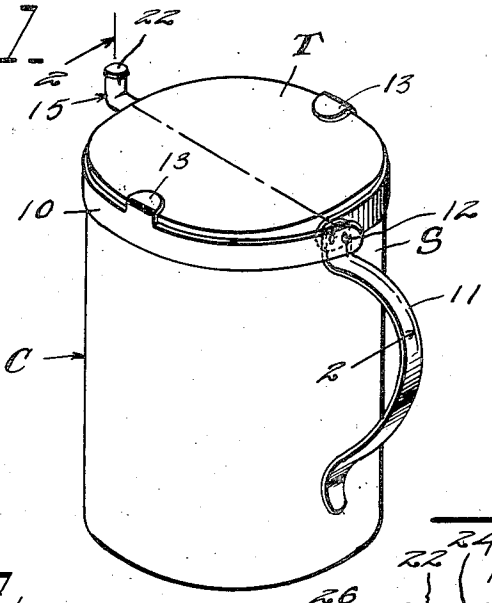


Fig. 2.

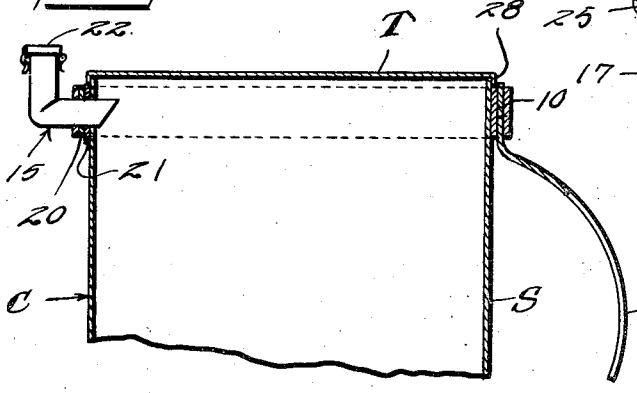


Fig. 3.

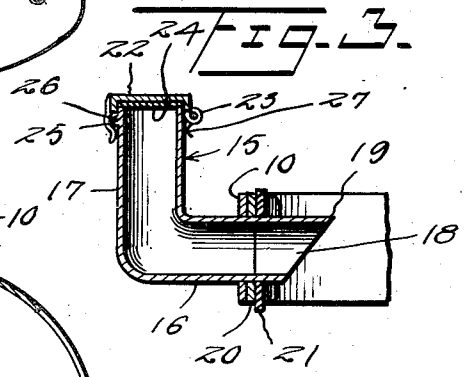


Fig. 4.

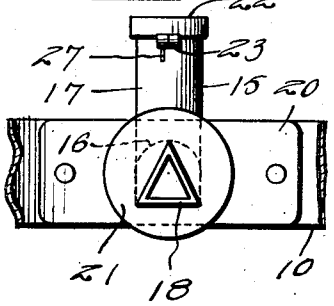


Fig. 5.

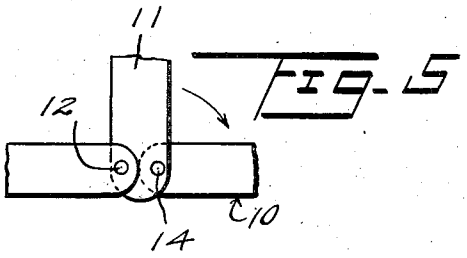
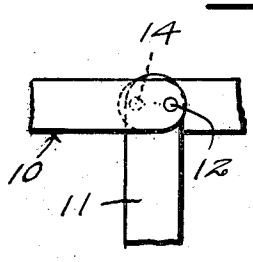


Fig. 6.



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CAN OPENER AND DISPENSING MEANS

Claude W. Hathaway, Wilmington, N. Y.

Application June 27, 1935, Serial No. 28,724

1 Claim. (Cl. 221—23)

This invention relates to dispensing devices and more particularly to a means for removing liquids from cans.

An object of this invention is to provide a means whereby a sealed metal can may be opened and at the same time the opening means will permit dispensing of the fluid from the interior of the can.

Another object of this invention is to provide a dispensing means of this type which is so constructed that it will permit the piercing of a wall of a metal can containing liquid and the piercing means will at the same time provide a channel whereby the liquid may be withdrawn from the can.

A still further object of this invention is to provide a can opening and dispensing means of this type which is so constructed that the operating means for opening the can will act as a handle to permit pouring out the liquid in the can.

A further advantage of this device lies in the fact that the dispensing means will prevent spilling of the contents of the can after it has been opened so that the can may be transported without fear of the contents being spilled, the device being left upon the can until the contents have been entirely poured out therefrom.

The above and various other objects and advantages of this invention will in part be described in, and in part be understood from the following detail description of the present preferred embodiment, the same being illustrated in the accompanying drawing wherein:—

Figure 1 is a perspective view of a device constructed according to an embodiment of this invention mounted on a conventional can containing liquid.

Figure 2 is a fragmentary sectional view taken on the line 2—2 of Figure 1.

Figure 3 is an enlarged sectional view of the spout.

Figure 4 is a fragmentary detail view from the inside of the opening device.

Figure 5 is a fragmentary side elevation of the clamping band in open position.

Figure 6 is a view similar to Figure 5 with the band in clamped position.

Referring to the drawing wherein like characters of reference designate corresponding parts throughout the several views, the letter C designates generally a can which may be of a type conventionally used to contain liquids such as milk or the like and is preferably a metal can provided with a top T which may be either crimped or otherwise sealed to the side wall S of the can.

In order to provide a means whereby the can C may be opened and the liquid therein dispensed at will, and the can resealed, I have provided a clamping band 10 of flexible construction which is adapted to engage about the periphery of the side wall S of the can. This clamping band 10 is somewhat larger than the circumference of the side wall S and is provided at substantially diametrically opposed points with limiting lugs 13 which are adapted to engage over the top T of the can so as to limit the positioning of the band 10 with respect to the adjacent end or edge of the side wall S. A combined lever and handle 11 is secured at one end to the free ends of the looped band 10, the combined lever and handle 11 being secured as by a pivotal member 12 to one end of the band 10 and by a pivotal member 14 to the other end of the band 10. These pivotal members 12 and 14 may be in the form of rivets or the like which may be loose with respect to both the band 10 and the handle 11 or may be fixed with respect to one of these parts and loose with respect to the other part, and preferably one end of the band 10 is disposed on the inner side of the handle 11 whereas the other end is disposed on the outside so that when the handle 11 is in operative position with the band 10 in clamping position, the free ends of the band 10 will overlap each other with the upper end of the handle 11 interposed between the overlapping ends of the band. The pivotal members 12 and 14 are spaced apart a sufficient distance so that when the handle 11 is in released position the band 10 will be substantially larger in circumference than the diameter of the can C and when the handle or lever 11 is swung downwardly to clamping position, the band 10 will tightly engage the periphery of the side wall S of the can.

At a point substantially in the center of the band 10 and diametrically opposed to the free ends of the bands there is positioned a dispensing nozzle, generally designated as 15, which as shown in Figures 1, 2, and 3 is substantially L-shaped in configuration with one leg 16 thereof horizontal and the other leg 17 vertical.

The horizontal leg 16 of the nozzle 15 has a substantially triangular shaped can opening member 18 which is provided with a can piercing point 19 and which extends inwardly through the band 10. A reinforcing strip 20 is secured to the inside surface of the band 10 and extends on opposite sides of the horizontal portion 16 of the nozzle 15 for a sufficient distance to reinforce

the flexible band 10 and thus prevent injury to the band 10 when the handle 11 is being rocked to operative position. Preferably, when the band 10 is being tightened about the can C, a gasket 21 is mounted on the triangular extension 18 so that the nozzle 15 will be sealed in the opening formed by the piercing member 19 and the extension 18.

The upper end of the vertical portion 17 of the nozzle 15 has a cap or closure 22 hinged, as at 23, to the extension 17 and this closure 22 has a gasket 24 on the inside thereof which engages the upper end of the nozzle 15: Preferably, a clip 25 is carried by the cap 22 opposite from the hinge 23 and a projection 26 is provided on the upper end of the vertical portion 17 which is fixed to the nozzle and engageable by the clip 25 so as to hold the cap 22 in closed position. If desired, a spring 27 may be associated with the cap 22 so as to constantly urge this cap to open position.

In the use and operation of this device the handle or lever 11 is initially swung to the released position shown in Figure 5 with the handle 11 at substantially right angles to the band 10 and in an uppermost position. The lugs 13 will engage over the top T of the can and the piercing member 19 will initially loosely engage the side wall S of the can adjacent the top T and at a point below the crimped or overturned portion 28 of the top. The handle 11 is then swung downwardly in the direction shown by the arrow in Figure 5, whereupon the band 10 will be tightened about the periphery of the can and at the same time the triangular extension 18 and piercing member 19 will cut through the side wall S. The pivotal members 12 and 14 are spaced apart a sufficient distance so as to effect a firm tightening of the band 10 about the can C and to effect a movement sufficient to draw the extension 18 and the piercing member 19 inwardly of the can and to press the gasket 21 against the side of the can.

When the handle 11 is swung to a position alongside the can C, as shown in Figure 1, the can may be tilted and the closure 22 opened so as to permit the contents of the can C to be poured out through the nozzle 15. It will, of course, be understood that if the contents of the can C do not flow out at a sufficiently rapid rate through the nozzle 15, an air hole or vent may be cut through the top T of the can at a point diametrically opposed to the nozzle 15.

I claim:—

A device as set forth comprising a looped band having free ends, a pouring spout secured to the band opposite from the free ends, a hollow can piercing member integral with the spout, a reinforcing strip secured to the band and extending on opposite sides of the can piercing member, a gasket about the can piercing member and engaging against the inner side of the reinforcing member, an operating lever, a pair of spaced apart pivotal members secured to the lever and secured one to each end of the band and a pair of lugs carried by the band and engageable over the top of the can to hold the band against longitudinal movement in one direction with respect to the can.

CLAUDE W. HATHAWAY.