Feb. 26, 1929. 1,703,367

S. H. SKINNER

CAN PERFORATOR

Filed Feb. 28, 1928

Fig. 1

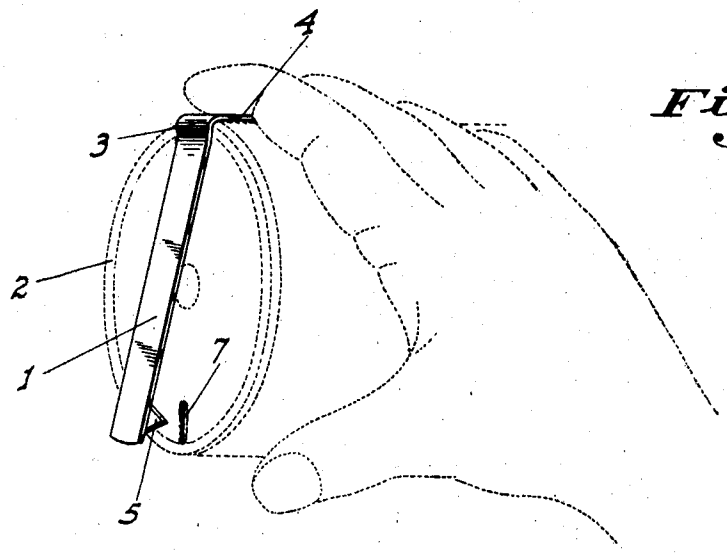


Fig. 2

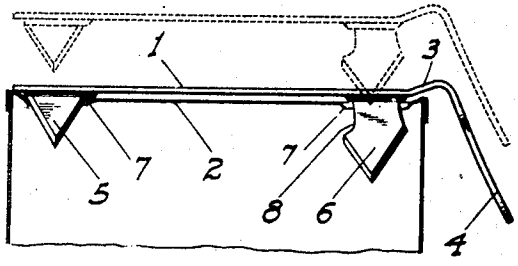


Fig. 3

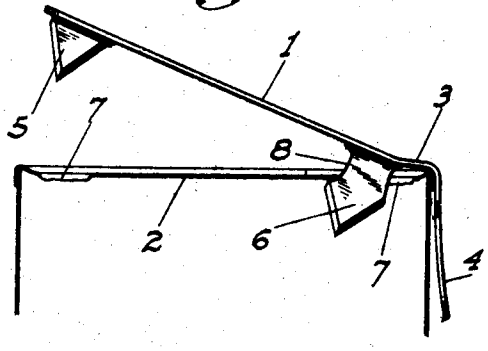
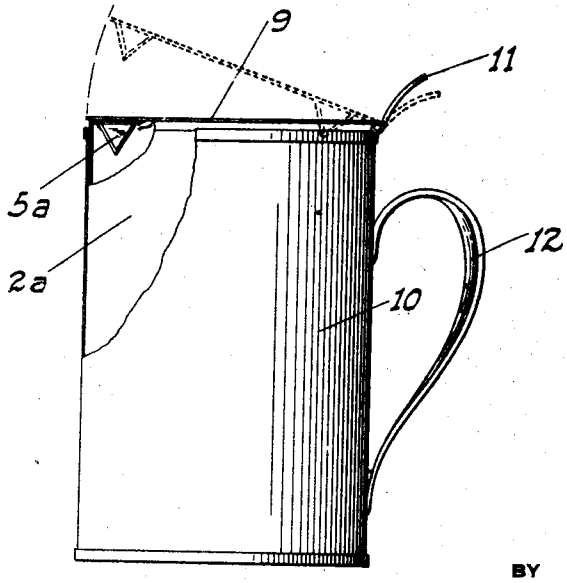


Fig. 4



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UNITED STATES PATENT OFFICE.

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CAN PERFORATOR.

Application filed February 28, 1928. Serial No. 257,603.

This invention relates to devices for perforating or puncturing cans to enable liquid to be drawn therefrom, being particularly useful in connection with condensed milk cans.

The principal objects of my invention are to provide a device which will perforate opposed openings simultaneously in the top of the can, which can then be immediately removed if desired but which if left in place then forms a closure for the openings so as to retard evaporation and keep dirt and insects out of the can; and which without removal from the can may be manipulated so as to enable the contents to be dispensed from one of the openings made by the perforator.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views:

Fig. 1 is a fragmentary perspective outline of a can showing my perforator applied thereto and in the position occupied when liquid is being dispensed from the can.

Fig. 2 is a fragmentary cross section of a can showing the perforator in its normal position.

Fig. 3 is a similar view showing the perforator in its tilted or liquid dispensing position.

Fig. 4 is a side elevation partly broken out of a modified form of perforating appliance mounted as a permanent part of a can holding receptacle.

Referring now more particularly to the characters of reference on the drawings and particularly at present to Figs. 1–3, the device in its preferred form comprises a rigid flat strip 1 of metal, of a length to extend across the top 2 of a can from side to side. At one end the strip is formed with an upwardly bent extension 3 which projects at an acute angle to a horizontal plane and extends beyond the adjacent side edge of the can. In its outer end this extension is bent down at an acute angle to the side of the can or to a vertical plane to form a tilting pad 4, adapted to be engaged by one finger of the operator grasping the can when the liquid is being dispensed as shown in Fig. 1.

Secured to and depending from the strip 1 centrally of its width are flat V shaped prongs or punches 5 and 6, which are spaced so as to punch radial slits 7 in the can adjacent its opposite sides. The sides of the prong 5 which is farthest from the pad 4 are straight, but the side edge of the other prong 6 which is farthest from the said pad is cut in or notched intermediate its ends as indicated at 8.

In operation the device is located across the top of a can in proper position as indicated in dotted lines in Fig. 2, and the strip is then pressed downwardly so that the prongs will penetrate the can to form the desired slits or openings. This pressure is maintained until the strip lies adjacent the top of the can. If the device is then left in place the prongs and strip form closures for the openings preventing the holes from clogging or evaporation of the contents of the can from taking place, and also effectually keeps dirt and insects from entering the can through the openings.

When it is desired to dispense the contents from the can it is only necessary to tilt the can after pressing the pad 4 toward the adjacent side of the can. This causes the strip 1 to be tilted upwardly toward its opposite end, the device rocking about and being then supported by the portion 3, which with such tilting movement assumes a position parallel to the can and resting on the top thereof. At the same time this pressure on the pad causes the device to move diametrically of the cam somewhat, so that the notch 8 of the prong 6 passes under and engages the adjacent end of the opening previously made by said prong as shown in Fig. 3, and prevents the device from further diametrical or upward movement. The other prong 5 is then raised clear of its opening so that it offers no interference with the pouring of the liquid from the corresponding opening. Although the prong 6 remains engaged with its opening it does not then of course form an airtight seal therewith sufficient to prevent the necessary entrance of air to the can while the liquid is being dispensed. As soon as the grip of the pad 4 is released, the device will drop back of itself to its normal horizontal position, the wedge shape of the prong 5 as it engages its opening causing it to assume

its proper centralized position in said opening. The flat side of the prong 6 which constantly remains engaged with its opening prevents the device from shifting laterally on the can so that the prong 5 is always in vertical alinement with its opening.

In the structure shown in Fig. 4, the perforating prongs 5^a depend from a lid 9 which is permanently hinged onto a receptacle 10 in which the can of milk or other liquid 2^a is placed. With this arrangement the lid is provided with a short finger grip member 11 which overhangs the handle 12 of the receptacle, so that one finger of the hand being used to grasp said handle can be used to depress the member 11 and thus tilt the lid so that the contents of the can held by the receptacle can be poured out.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

1. A can perforator including a rigid strip to extend over the top of a can, prongs depending from the strip to puncture the can at opposed points, and means formed with the strip to enable one end thereof to be tilted upwardly from the can, whereby to then raise the adjacent prong out of its opening in the can; the other prong and strip tilting means being formed relative to each other and to the can to prevent longitudinal, lateral and vertical movement of the strip on the can when said strip is tilted.

2. A can perforator including a rigid strip to extend over the top of a can, prongs depending from the strip to puncture the can at opposed points, and a depending member formed on one end of the strip to project alongside the can at an acute angle thereto when said strip is resting flat on top of the can, the prong adjacent said member being flat in a plane longitudinally of the strip and being formed with a notch on its edge farthest from said member.

3. A can perforator including a rigid strip to extend over the top of a can, prongs depending from the strip to puncture the can at opposed points, and a notch in one prong on the side edge thereof nearest the other prong to allow the strip to be shifted diametrally of the can only when the other prong is tilted out of the opening in the can made thereby.

In testimony whereof I affix my signature.

SEWARD H. SKINNER.