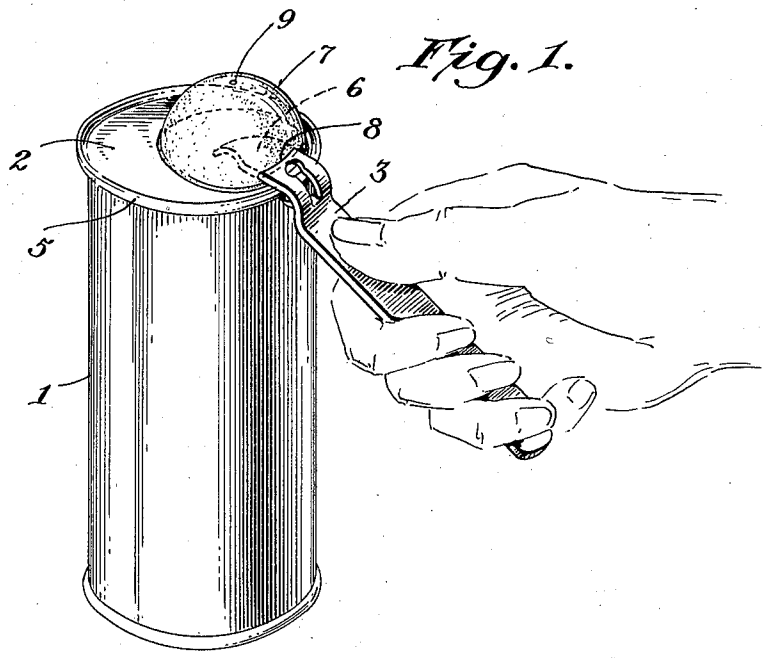
May 11, 1937. C. L. MUMAUGH 2,080,090

CAN OPENER

Filed Dec. 2, 1935

Fig. 1.



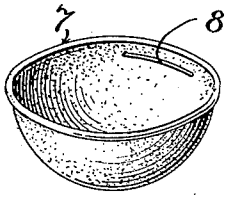
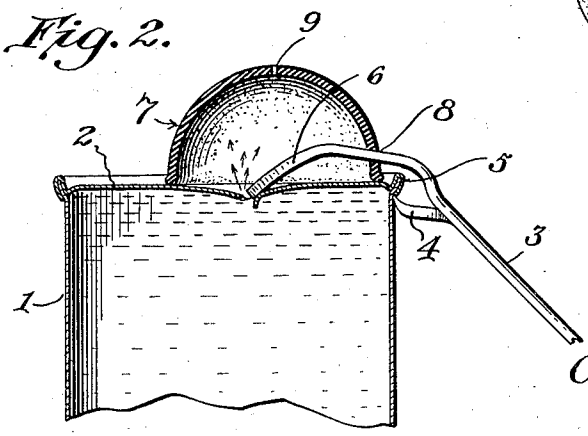


Fig. 3.

Fig. 2.



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CAN OPENER

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Application December 2, 1935, Serial No. 52,605

6 Claims. (Cl. 164—119)

This invention relates to can openers generally but has special reference to can openers of the type in which pressure is applied to the top of the can to rupture a portion of the top and bend it inwardly of the can so as to provide a discharge opening.

In the use of can openers of this type the pressure of the tool on the top of the can causes a substantial depression of the can top before the metal is ruptured. This depression of the can top tends to create a pressure on the contents of the can, and when the contents consist of liquids, such as beer, a fine spray will be ejected at the time the tool penetrates the metal of the can. This premature discharge of the contents is highly objectionable, and the primary object of the present invention relates to the provision of means to control the discharge in a way which will avoid damage to the clothing of the operator or to adjacent furniture, etc.

Another object of the invention consists in providing a deflector cup which may be readily applied to or removed from the conventional opening device.

A further object of the invention resides in the provision of a deflector made of flexible material whereby it may be collapsed and packed in the standard size box in which the opening device itself is now packed.

A still further object of the invention consists in the formation of a deflector from a material, such as rubber, so as to intimately contact the material of the can and thereby avoid or minimize leakage from the spray.

Other objects and advantages of the invention will be apparent from the following description when taken in connection with the accompanying drawing, in which,

Figure 1 is a perspective view of a can showing the combined can opener and deflector or shield in use.

Figure 2 is a vertical sectional view through the upper portion of a can and through the deflector cup applied thereto, and

Figure 3 is a perspective view of the cup in inverted position.

Referring to the drawing in greater detail, the numeral 1 indicates a can provided with a head 2 seamed thereto, of the type in which beer is being packaged at the present time.

The numeral 3 indicates an opener which is used for providing a discharge outlet in this type of can by bending downwardly and inwardly a more or less triangular section of the top of the can. The opener comprises primarily a prong or lug 4 adapted to be engaged under the edge of the seam 5 which joins the top 2 to the body of the can, and a pointed or tapered portion 6 which is forced downwardly through the top of the can as the handle portion of the tool is raised upwardly.

Numeral 7 indicates a substantially semi-spherical cup member, preferably made of rubber or other flexible and liquid-proof material which may be collapsed to the extent necessary to permit it to be packed with the can opener in the usual small elongated carton in which can openers of the type described are packed.

The cup 7 is shown as provided with a slit 8 through which the operative portion 6 of the can opener is passed when the device is ready for use. This mounting of the deflector cup is illustrated in Figures 1 and 2, and it will be understood of course that the cup may be removed when not in use, for cleaning.

As will be seen from an inspection of Figure 2, the edge of the cup is brought into intimate contact with the top 2 of the can and is thereby effective in confining the spray from the can to the area surrounded by the cup. Moreover, the cup is maintained in this position by the movement of the can opener itself inasmuch as that portion extending through the slot 8 presses against the lower wall of the slot during the process of opening the can.

In the center of the cup 7 a vent or air hole 9 is provided. The purpose of this vent is to prevent the creation of a vacuum in the cup which might otherwise be caused by reason of the partial collapsing of the cup by the left hand of the operator in manipulating the opener.

The operation of the deflector cup and opener is fairly simple and need not be described in particular detail. When it is desired to open a can the part 6 of the opener is passed through the slit 8 and the opener is then brought into the position shown in Figure 1 and the handle is raised so as to force the portion 6 through the top of the can in a manner that will be readily understood. The force applied to the top of the can will of course cause a depression in it prior to the actual rupturing of the metal. This deformation of the can top creates a pressure on the contents, with the result that when the tool penetrates the metal a portion of the contents is forcibly ejected through the aperture.

The flexible cup 7 being tightly held against the top of the can by the opener 3, receives any liquid escaping from the can and either directs it back into the can or at least confines it to

that portion of the can which is encircled by the cup. By means of this attachment therefore, it will be apparent that damage to clothing, etc., by reason of uncontrolled spraying of the liquid is avoided.

From the foregoing description and the accompanying drawing, it will be apparent that I have devised a simple attachment for can openers which is highly efficient in controlling the spray usually created when opening cans of beer and the like; that the means employed is capable of being easily attached to or removed from can openers in common use; that it is made of flexible material so as to intimately engage the top of the can; and that it may be collapsed and packed in the small cartons in which the openers are now individually packed.

In accordance with the patent statutes I have described what I now believe to be the preferred form of construction, but inasmuch as various minor changes may be made without departing from the spirit of the invention it is intended that all such changes be included within the scope of the appended claims.

What I claim is:

1. An attachment for can openers comprising a substantially cup-shaped member formed of rubber, and provided with a slit parallel with its rim for receiving a portion of the opener.

2. In combination with a can opener of the seam-engaging, rocker type, a substantially cup-shaped member of flexible rubber detachably connected thereto.

3. In combination with a can opener of the seam-engaging, rocker type, a substantially cup-shaped member of flexible rubber provided with a slit adjacent its rim, a portion of the can opener extending through said slit.

4. In combination, a can opener having a portion adapted to be pressed against the top of a can to rupture the metal thereof, and a substantially cup-shaped member of flexible rubber connected to the can opener and adapted to encircle and seal-off that portion of the can to be ruptured.

5. In combination, a can opener of the seam-engaging, rocker type, and a substantially cup-shaped member of flexible material provided with a vent detachably connected to the can opener and adapted to encircle that portion of the can to be ruptured.

6. In combination with a can opener of the seam-engaging, rocker type, a substantially cup-shaped member of flexible material adapted to be collapsed for packing, said member provided with a vent and with a slit through which a portion of the opener extends, and adapted to encircle that portion of the can which is to be opened.

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