Oct. 25, 1955 K. H. FAHLE 2,721,672

CAN COVER AND PUNCH

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Fig. 1.

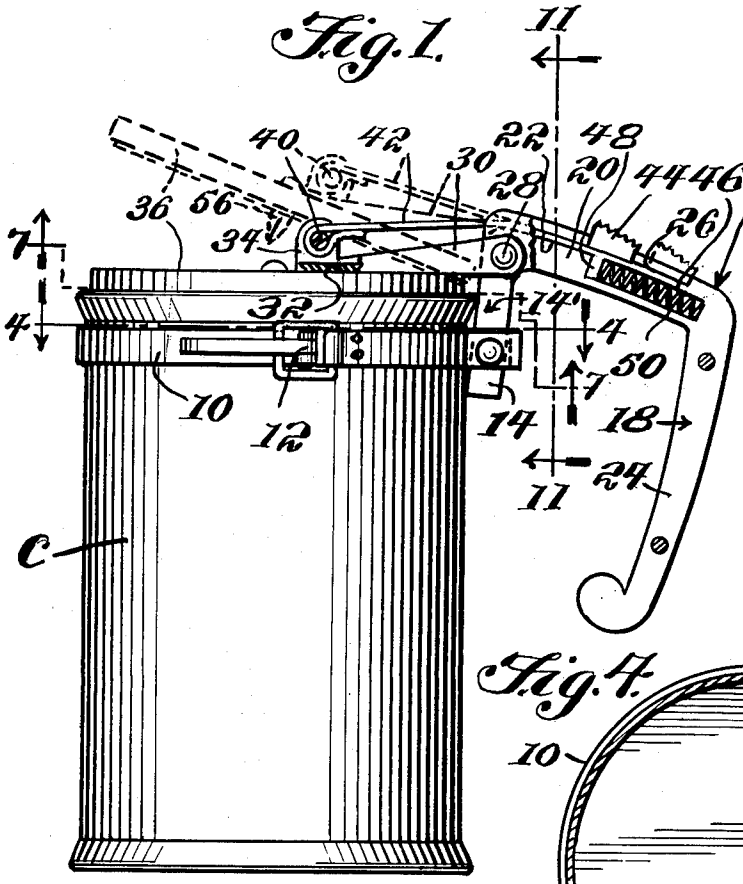


Fig. 3.

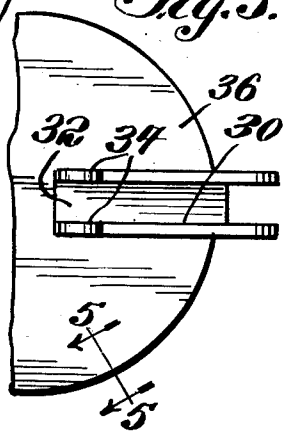


Fig. 4.

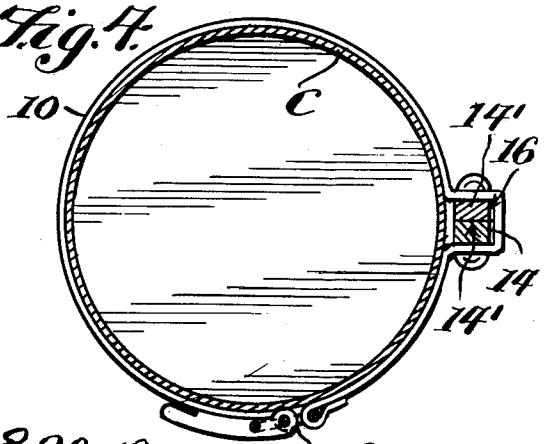


Fig. 2.

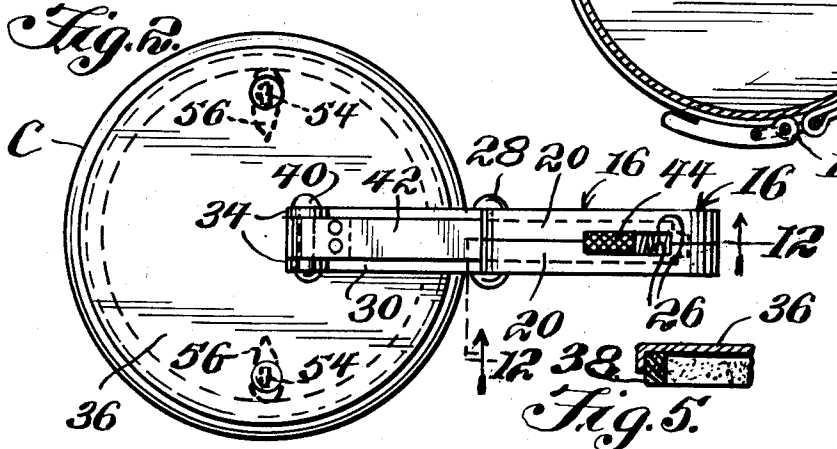


Fig. 5.

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Fig. 6.

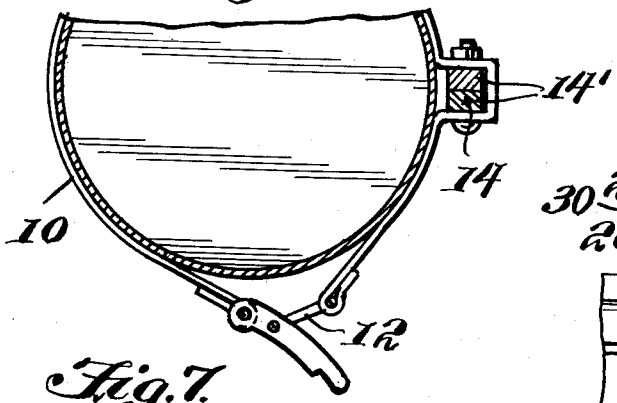


Fig. 11.

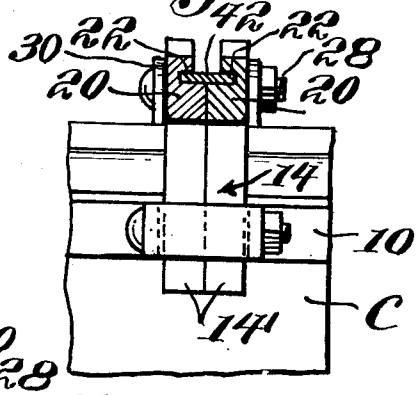


Fig. 7.

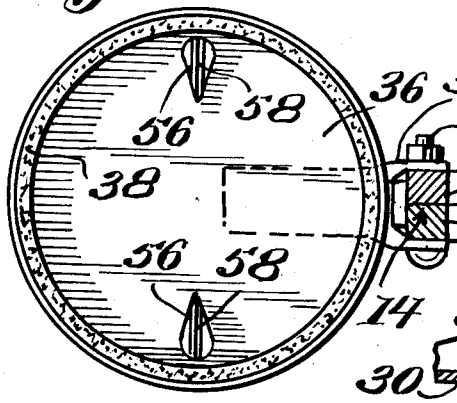


Fig. 12.

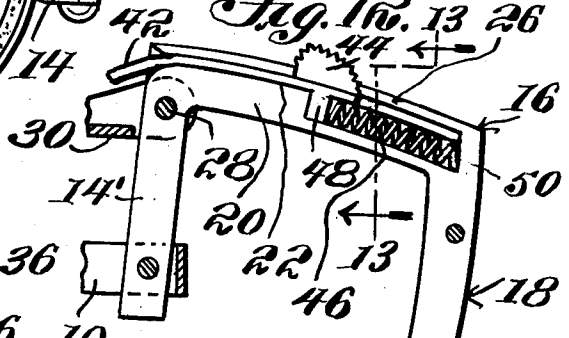


Fig. 8.

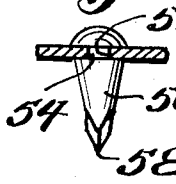
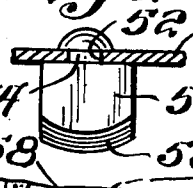


Fig. 9.



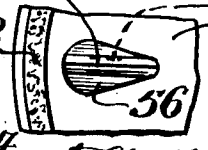


Fig. 13.

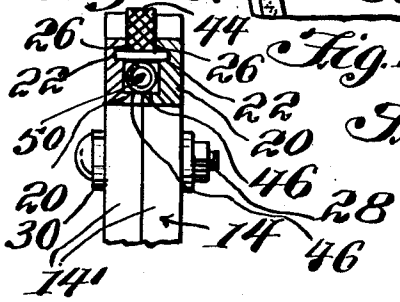


Fig. 10.

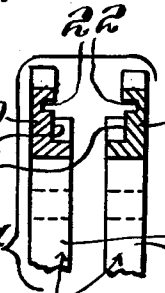


Fig. 14.

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CAN COVER AND PUNCH

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Application August 6, 1954, Serial No. 448,255

1 Claim. (Cl. 220—51)

This invention relates to a can cover and punch and has for its primary object to protect the contents of an opened can from the collection of dust and dirt.

Another object is to facilitate the rapid opening of a can such as is employed to contain evaporated milk or the like by the punching of spaced holes in the top thereof through which the contents of the can may be removed.

A further object is to maintain the punched openings in the can closed until such time as removal of the contents is desired, and to automatically return the can cover to closed position after it has been opened.

The above and other objects may be attained by employing this invention which embodies among its features a band removably mounted on a can in encircling relation thereto adjacent the top thereof, a handle carried by the band and extending radially outwardly therefrom adjacent one side thereof, a can cover mounted on the handle to move in a vertical arcuate path above the band, a slide mounted on the handle to move across the top thereof, said slide being operatively connected to the can cover for moving it in its arcuate path as the slide moves across the top of the handle, a spring carried by the handle and engaging the slide to yieldingly urge it toward the band and the cover advanced into closing relation to the can, and a punch carried by the cover for piercing the top of the can.

Other features include a guideway carried by the handle and extending longitudinally along the top thereof, a can cover pivotally carried by the handle for movement in a vertical arcuate path above the band, a strip of resilient flexible material mounted in the guideway for movement longitudinally therein, one end of said strip being pivotally connected to the cover for moving it in its vertical arcuate path as the strip moves in its guideway, a slide carried by the strip and extending upwardly therefrom above the handle, a lug carried by the slide and extending downwardly therefrom, a spring carried by the handle and engaging the lug for moving the slide toward the band and holding the cover in closing relation to the top of the can, and spaced punches carried by the cover and projecting downwardly therefrom for piercing the top of the can.

In the drawings:

Figure 1 is a side view of a can showing this improved can cover and punch mounted thereon;

Figure 2 is a top plan view of Figure 1;

Figure 3 is a fragmentary plan view of the cover showing the arm by which the cover is connected to the handle;

Figure 4 is a horizontal sectional view taken substantially on the line 4—4 of Figure 1;

Figure 5 is a fragmentary sectional view taken substantially on the line 5—5 of Figure 3;

Figure 6 is a view similar to Figure 4, showing the band tightener;

Figure 7 is a horizontal sectional view taken substantially on the line 7—7 of Figure 1;

Figure 8 is an enlarged fragmentary sectional view through the can cover showing the punch and the manner in which it is mounted;

Figure 9 is a side view of Figure 8;

Figure 10 is a bottom plan view of Figure 8;

Figure 11 is a sectional view taken substantially on the line 11—11 of Figure 1;

Figure 12 is a fragmentary sectional view taken substantially on the line 12—12 of Figure 2;

Figure 13 is a transverse sectional view taken substantially on the line 13—13 of Figure 12; and

Figure 14 is a fragmentary view similar to Figure 13, showing the handle unit separated.

Referring to the drawings in detail, a band **10** is provided with a suitable extensible coupling **12** by means of which the band may be placed in encircling relation about a can C and locked in place thereon. Carried by the band and extending upwardly therefrom is a post **14** of a handle designated generally **16** which comprises a pair of mating handle units **18**, each comprising a pair of mating post units **14'** carrying at their upper ends outwardly extending arms **20** which are provided in their adjacent faces with longitudinal grooves **22** which, when the handle units are joined together, define a guideway, the purpose of which will hereinafter appear. Carried by the outwardly extending arms **20** and depending therefrom adjacent the outer ends thereof are mating legs **24** which define a grip about which the hand of the user may be clenched. The arms **20** are provided with mating recesses **26** which open through the upper sides of the arms **20** to define an elongated longitudinal slot adjacent the junction of the arms **20** with the legs **24**.

Pivotally connected as at **28** to the handle **16** adjacent the junctions of the post elements **14'** and arms **20** is a rock arm **30** carrying adjacent its end remote from the pivot **28** a pad **32** carrying upwardly extending spaced parallel ears **34**, the purpose of which will hereinafter appear. Welded or otherwise secured to the pad **32** is a can cover **36** carrying on the side thereof remote from the pad **32** a cushioning ring **38** which, when the cover is closed, is adapted to rest on the top of the can upon which the device is mounted.

Carried by the ears **32** and extending therebetween is a pivot pin **40** to which is pivotally connected one end of a resilient flexible strip **42** which is slidably mounted in the guideway defined by the grooves **22**, and carried by the strip and projecting upwardly therefrom adjacent the end thereof remote from the pivot pin **40** is a slide **44** which projects through the slot defined by the recesses **26** to form a thumbpiece by means of which the strip **42** may be moved longitudinally in the guideway. Carried by the slide **44** and projecting downwardly into a chamber in the handle defined by mating recesses **46** is a lug **48** and contained within the chamber is a compression coil spring **50**, one end of which bears against the end of the chamber remote from the band **10** and at its opposite end on the lug **48** to yieldingly urge the slide **44** toward the band and the cover **36** into contact with the top of the can C. Extending through the cover **36** are spaced openings **52** for the reception of shanks **54** carried by punches **56** which project downwardly from the underside of the cover **36** and are provided adjacent their lower ends with sharpened edges **58** to facilitate the puncturing of the top of the can C.

In use, it will be evident that the band **10** is clamped about a can C adjacent the top thereof, and while the band is being so clamped, the cover **36** will assume the inclined broken line position illustrated in Figure 1 with the punches **56** lying above the can top. After having secured the band **10** in place, pressure is exerted on the cover **36** to force the punches **56** through the can top to form spaced openings therein. The forcing of the

punches **56** through the can top will cause the cover **36** to move downwardly against the can top as in the full line position in Figure 1 to cause the sealing gasket **38** to rest on the can top and exclude dust and dirt from the space between the cover **36** and the can top. When it is desired to use the contents of the can, pull is exerted on the slide **44** to move it against the effort of the compression spring **50** and thereby move the cover **36** in a vertical arcuate path above the can top and above the band **10** so as to extract the punches **56** from the openings produced thereby in the can top and permit the user to pour a selected volume of the contents of the can through one or the other of the openings produced by the punches. After the substance has been poured from the can, the cover **36** will automatically close upon release of the slide **44** to permit it to advance under the influence of the spring **50** toward the end of the handle member adjacent the standard **14** and to thereby move the slide **42** in a direction to move the lever **30** downwardly and the gasket or cushion **38** into close contact with the top of the can. Simultaneously, with the downward movement of the cover **36**, the punches **56** will enter the holes punched thereby in the can top to further seal the contents of the can therein.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

What is claimed is:

A can cover and punch comprising a band removably mounted on a can in encircling relation thereto adjacent the top thereof, a handle carried by the band and extending radially outwardly therefrom, a guideway carried by the handle and extending longitudinally along the top thereof, a can cover pivotally carried by the handle for movement in a vertical arcuate path above the band, a strip of resilient flexible material mounted in the guideway for movement longitudinally therein, one end of said strip being pivotally connected to the cover for moving it in its vertical arcuate path as the strip moves in its guideway, a slide carried by the strip and extending upwardly therefrom above the handle, a lug carried by the slide and extending downwardly therefrom, a spring carried by the handle and engaging the lug for moving the slide toward the band and holding the cover in closing relation to the top of the can, and spaced punches carried by the cover and projecting downwardly therefrom for piercing the top of the can.

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