Aug. 16, 1932. W. H. HEGENBERGER 1,872,585

CAN

Filed Aug. 3, 1931

Fig. 1.

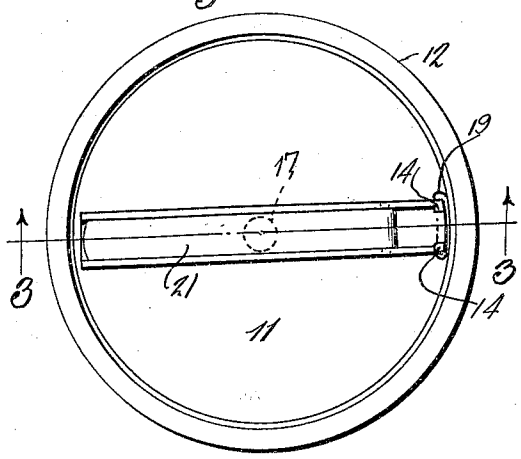


Fig. 2.

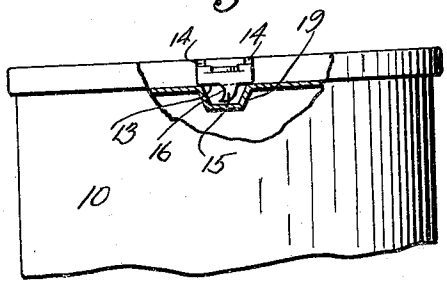


Fig. 4.

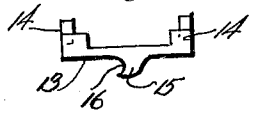


Fig. 3.

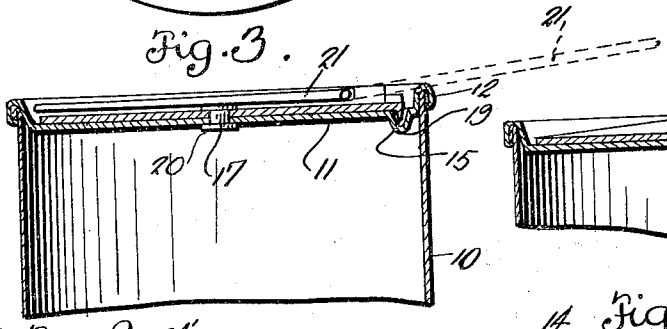


Fig. 8.

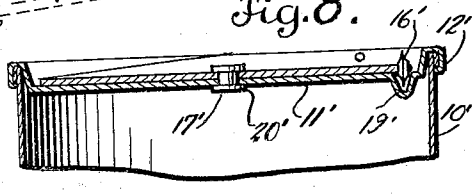


Fig. 9.

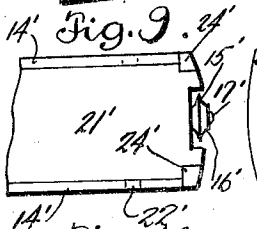


Fig. 5.

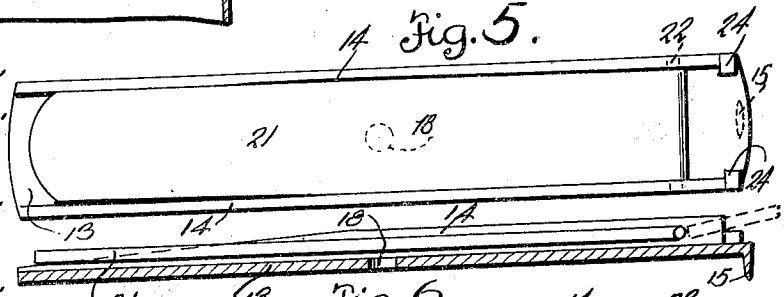


Fig. 10.



Fig. 6.

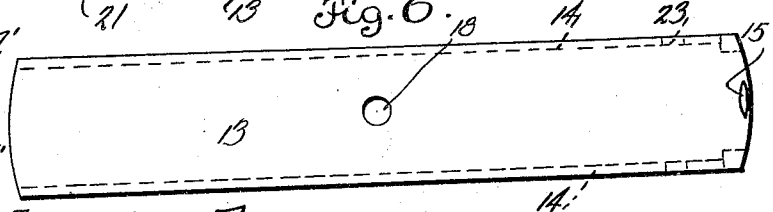


Fig. 11.

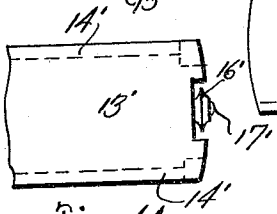


Fig. 7.

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Attorneys.

Patented Aug. 16, 1932 1,872,585

UNITED STATES PATENT OFFICE

WILLIAM H. HEGENBERGER, OF HARTFORD, CONNECTICUT, ASSIGNOR OF ONE-FOURTH TO JAN P. CLARY, OF HARTFORD, CONNECTICUT

CAN

Application filed August 3, 1931. Serial No. 554,897.

This invention relates to improvements in cans and the invention comprises an opening device attached permanently to the can top, said opening device having an extensible handle which may be moved to an unfolded position when it is desired to open the can and which may be moved to its folded position when the cans are stored or packed in receptacles.

The invention further comprises securing the opening device for the can in a permanent fashion so that the can will be hermetically sealed and the device will in no way interrupt the shape or contour of the can top whereby the stacking of the cans in a packing box will not be hindered.

A primary object of this invention is to provide a device of the above mentioned character permanently attached to a can which may be operated in a simple and easy fashion without the requirement of additional instruments or tools intended for the purpose of opening cans.

A still further object of this invention, is to provide an attachment of the above mentioned character adapted to be positioned below the horizontal level of the upper edges of the can in order to dispose the opening device out of the path of other objects or cans.

Other objects and advantages of the invention will become apparent during the course of the following description, forming a part of the specification and in which,

Figure 1 is a top elevation of one embodiment of the invention showing the opening device permanently secured to the can illustrating the manner in which the handle is pivoted to the rotary plate;

Figure 2 is a side elevation of a can showing the invention applied to the top, partly broken away to illustrate in detail the manner in which the cutting element is positioned relative to the can top;

Figure 3 is a vertical cross-sectional view through a can having an opening device in accordance with the invention;

Figure 4 is an end elevation of the opening device showing the same removed from the can top and illustrating the channel-way for receiving the pivoted handle;

Figure 5 is a top elevational view of the can opening device showing the same detached from the can enlarged to illustrate the structural detail;

Figure 6 is a longitudinal cross-sectional view of the opening device illustrating the pivoted handle and the manner in which the same may be folded or unfolded;

Figure 7 is a bottom elevation illustrating in dotted lines, the side flanges and the contour of the cutting member or knife;

Figure 8 is a modified form of opening device adapted to be applied to a can top in a permanent fashion, having a different form of knife or cutter on the end of the pivoted bar;

Figure 9 is a fragmentary top elevation enlarged to illustrate more clearly the construction of the modified form of knife or cutting element;

Figure 10 is a side elevation of the bar enlarged and partly broken away to further illustrate the modified form of cutting knife or disk;

Figure 11 is a bottom elevational view of the modified device illustrating further the manner in which the end of the pivoted bar is formed to allow the projection of the disk or cutting member.

In the drawing, wherein for the purpose of illustrating the invention, and wherein like reference characters will be employed to designate like parts throughout the same, the reference character 10 will generally be employed to designate a can of usual construction having a top or cover 11 pressed to the upper open edge of the can as at 12.

It will be noted that the can top or cover 11 is stamped so that the plain surface thereof is below the horizontal level of the open edge of the can which is the usual construction employed in connection with present day packing cans or tins.

The invention comprises an elongated bar 13 having tapered side flanges 14 extending upwardly and a downwardly extending projection 15 at one end to form a cutting knife having a curved cutting edge 16. The lower

portion of the cutting knife 15 terminates in a point and when the elongated bar 13 is secured to the can top 11 by means of a rivet 17 passing through an opening in the can and an opening 18 in the elongated bar 13, the cutting knife 15 will be received in a recess portion 19 of the can top 11 as more clearly illustrated in Figure 3. If desired, a cutting knife 15 may be formed on each end of the elongated bar 13 and the can top 11 may be provided with opposite recesses 19. After the rivet 17 has been passed through the can top 11 and the elongated bar 13, the same may be soldered from the inside of the can around the edges as at 20 to hermetically seal the can and exclude air therefrom.

A folding handle is pivotally secured to the elongated bar 13 and it is intended to position the folding handle 21 between the side flanges 14 of the elongated bar in order that a pivot pin 22 may pass through the flanges and through one end of the folding handle 21. Instead of employing a pivot pin 22, one end of the folding handle 21 may be provided with projections for being received in openings 23 in the side flanges 14 in order that the folding handle 21 may hinge and extend outwardly beyond the periphery of the can 10 as illustrated in dotted lines in Figure 3. One end of the elongated plate 13 may be provided with vertical lugs 24 for engaging the longitudinal edges of the folding handle 21 when the same is in open position whereby all of the strain will not be at the pivot point 22 when the handle 21 is operated to cause the cutting knife 15 to move in a circle adjacent the edge 12 of the can around the pivot point 17.

The description thus far has been directed more particularly to Figures 1 to 7 inclusive of the drawing and now attention is directed to Figures 8, 9, 10 and 11 more particularly, wherein is illustrated a modified form of the invention.

In the modified form of the invention, the can 10′ is of the same construction as the can illustrated in Figures 1, 2 and 3 and is provided with the same form of cover or top 11′ as at 12′. The elongated bar 13′ is provided with side flanges 14′ which taper from one end of the elongated bar 13 to the other. The difference in construction between the bar 13′ and the elongated bar 13 is that one end is cut out as at 15′ to receive a disk cutting element 16′ pivotally held to the elongated bar 13′ by means of a pivot pin as at 17′.

The elongated bar 13′ is pivotally secured to the can top 11′ by means of a rivet 17′ and may be soldered in place as at 20′ after the elongated bar 13′ has been pivoted thereto. In the form of invention illustrated in Figures 8, 9, 10 and 11, the disk cutting element 16′ is received in a depression 19′ formed in the can top 11′.

Pivotally secured between the tapering flanges 14′ and the elongated bar 13′ is a folding handle 21′ pivoted to the side flanges as at 22′. The handle may be folded outwardly in the same manner as the construction illustrated in Figures 1 to 7 inclusive and lugs 24′ are formed on one end of the elongated bar for the passage of the handle 21′ when the same is in its extended or unfolded position.

If desired, a cutting roller 16′ may be pivoted to each end of the elongated bar 21′ in order to quickly cut the can top 11′ in a circle about the pivot point 17′.

In operation, the operator merely unfolds the handle 21 and holds the can 10 in a stationary manner, turning the handle 21 with the right hand and move the disk cutter or the cutter 15 in a circle about the pivot point 17. After the circle has been completed, the can top 11 and 11′ may be easily removed and the contents of the can 10 may be dispensed from the interior thereof.

It is to be understood that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the sub-joined claims.

I claim:—

1. An attachment for a can comprising an elongated bar having vertical side flanges, a pivot pin passing through the elongated bar centrally and through the can top, a cutting element rigidly secured to one end of the elongated bar, adapted to be presented in a recess in the can top, and an operating handle pivotally secured between the side flanges of the elongated bar.

2. A permanent attachment for a can comprising an elongated bar having vertical side flanges, a pivot pin passing centrally through the bar and through the can top, a cutting element affixed to one end of the elongated bar, and an operating handle pivotally secured between the vertical flanges of the elongated bar, whereby the bar may be folded to a position below the level of the can top.

3. A permanent can opening attachment for receptacles comprising an elongated bar pivotally secured to the top of the receptacle, vertical side flanges formed on the longitudinal edges of the elongated bar, a cutting element affixed to one end of the elongated bar, said cutting elements being adapted to be received in a depression formed in the can top, and a pivoted operating handle secured between the vertical flanges of the elongated bar whereby the same may be folded or unfolded.

4. A can top structure of the character described, comprising a disk having a marginal angular flange, said flange being adapted to be folded over the upper edge of a can, a pivoted bar having vertical side flanges on the longitudinal edges thereof, said bar being pivotally secured to the can top at a

central point thereof whereby the bar will lie below the horizontal surface of the marginal flange, a cutting element on one end of the elongated bar, said cutting element being adapted to be presented in a recess portion in the cover, and a pivoted handle mounted between the vertical flanges on the longitudinal edges of the elongated bar.

5. A can cover construction of the character described, comprising a circular cover having a marginal flanged portion, a pivoted bar having side flanges on the longitudinal edges thereof, a pivot pin passing centrally through the elongated bar and through the central portion of the can top, a cutting element on one end of the elongated bar adapted to be received in a depression in the can top, a pivoted handle mounted between the vertical flanges of the longitudinal edges of the elongated bar whereby the handle may be folded below the level of the marginal flanges on the can cover.

In testimony whereof I affix my signature.

WILLIAM H. HEGENBERGER.