

Sept. 30, 1941.

L. HERMANI

2,257,682

BOX

Filed Feb. 18, 1938

Fig. 1.

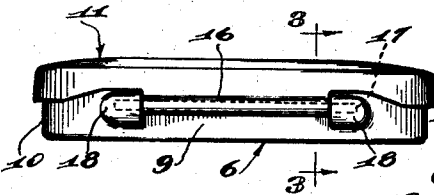
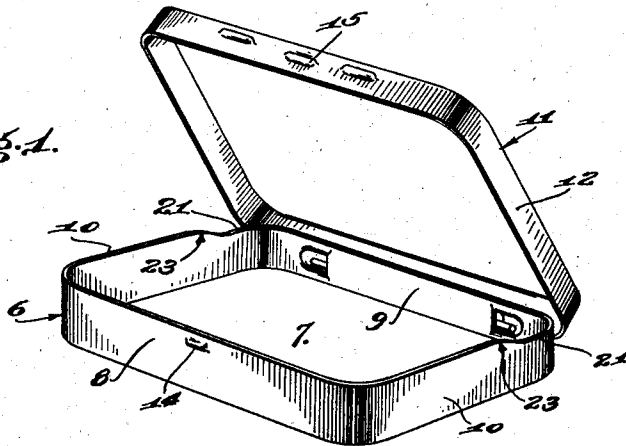


Fig. 2.

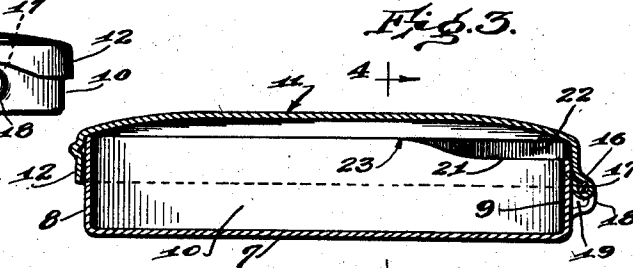


Fig. 3.

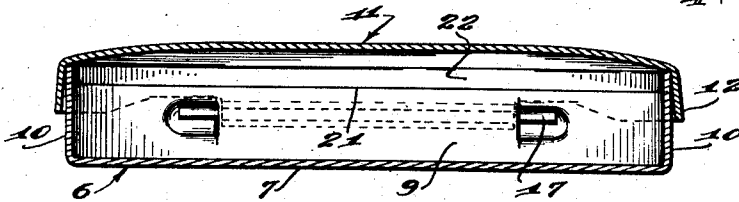


Fig. 4.

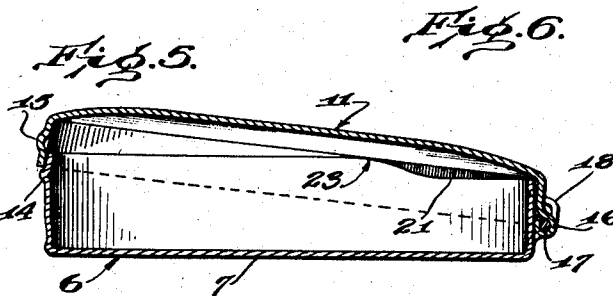
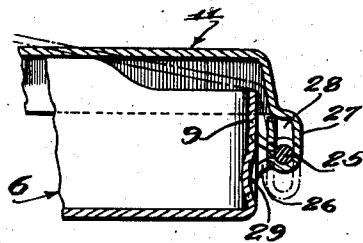


Fig. 5.

Fig. 6.



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UNITED STATES PATENT OFFICE

2,257,682

BOX

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Application February 18, 1938, Serial No. 191,176

1 Claim. (Cl. 220—36)

The present invention relates to improvements in metallic boxes or the like having hinged lids, and particularly the type adapted for holding tablets, powders and similar products and is of a design which renders the product readily accessible without the hazard of spilling or otherwise upsetting the contents.

In metal boxes of the type in which the lids are hinged thereon and particularly boxes of small size and extremely shallow depth such for example as aspirin boxes, much difficulty is encountered in disengaging the cover thereof due to the inability to firmly grasp both the box and cover. Boxes of the above type are usually provided on the side opposite the hinge with co-acting projections and recesses which are held in engagement by spring tension of the closely fitting depending lid flange. It therefore requires at times considerable effort to overcome the tension with the result that at the sudden release thereof the contents of the box are inadvertently discharged. It is a primary object of the present invention to provide a box of the above general type which may be at least partially opened by the application of a small amount of pressure on the bottom and cover at or near the hinge.

Another object of the invention is the provision of a box having a lid hinged on one side and constructed at either end to provide means for raising the edge of the lid opposite the hinge.

Another object is the provision of a box having a cover yieldably hinged on one side thereof and so constructed that pressure exerted over the hinge disengages the side of the lid opposite thereto.

Other objects and features of novelty will become apparent during the course of the following description.

In the drawing:

Fig. 1 is a perspective view of a box constructed in accordance with my invention;

Fig. 2 is an elevational view of the hinged side of the box;

Fig. 3 is a vertical sectional view through the box taken on line 3—3 of Fig. 2;

Fig. 4 is a vertical transverse sectional view taken on line 4—4 of Fig. 3;

Fig. 5 is a vertical sectional view through the box showing the lid in partially raised position; and

Fig. 6 is a vertical sectional view of a modified form of the invention.

The invention comprises a container or box formed of sheet metal or like material having a

bottom 7, front and rear end walls 8 and 9, respectively, and side walls 10. A cover 11 for the box is provided with a continuous depending peripheral skirt 12 having side and end walls or flanges which when the cover is in closed position, overlie the side and end walls 8 and 9 and snugly engage a major portion of these box walls. An outwardly extending projection 14 on the front end wall 8 is adapted to engage a coacting recess 15 formed in the front end flange of the skirt 12 to provide a latching means for the box cover.

The cover is hinged to the end wall 9 of the box and includes an extension 16 formed on the skirt 12 and bent or otherwise formed to enclose the medial region of a hinge pin 17. The pin 17 lies substantially in the plane of the rim of the skirt 12. The projecting ends of the pin 17 are received in outwardly projecting bosses 18 formed on the wall 9. The bosses are provided with openings 19 slightly elongated in a plane parallel to the wall 9 and into which the ends of the pin 17 are received to permit vertical movement thereof for the purpose to be described presently. With the cover 11 in closed position, as shown in Figs. 3 and 4, the hinge pin 17 bears against the upper end of the opening within the boss in position to exert sufficient pressure to hold the cover in place when the projection 14 and recess 15 are frictionally engaged.

The rear portions of the side walls 10 and the entire rear end wall 9 are reduced in height as at 21 to provide a peripheral space 22 between the cover and the upper margin of the walls. The space terminates at the upwardly and convexly curved margin of the walls 10 to provide fulcrums 23 about which the cover may be caused to pivot when pressure is applied to the cover and box in the region of the space. It will be noted that as the cover and box are squeezed together rearwardly of the fulcrums 23, the hinge pin 17 will move downwardly in the opening 19 thereby reducing the space 22 and by such leverage on the fulcrums 23 causing the front wall 8 of the box to be exposed as shown in Fig. 5. It is further obvious that pressure applied at any point along the rear wall or near the rear corners of the box will cause the front of the cover to lift thereby making the contents readily accessible while the box is held securely. Only a slight pressure is necessary to raise the cover due to the spaced relation of the fulcrums and the point at which pressure is applied.

Fig. 6 illustrates a modified form of hinge in which a hinge pin 25 is secured in bosses 26

formed on the rear end wall 9 of the container 6. The cover 11 is provided with a hinge member 27 enclosing the pin 25, having an elongated opening 28 or slot therein to permit movement of the cover relative to the pin when the cover and box are pressed together. It will be noted that the pin 25 is spaced slightly from the plane of the wall 9 and a groove 29 or depression is formed in the wall so that when the hinge member 27 is in the broken line position, the cover may be lifted without binding or displacing the hinge.

Modifications may be resorted to without departing from the spirit of the invention or the scope of the appended claim.

I claim:

In a rectangular sheet metal container, a bottom having vertical side walls and front and rear end walls, a cover having depending side walls and front and rear end walls embracing

the side and end walls of the bottom in the closed position of the cover, the overall height of the rear wall and adjacent portions of the side walls rising therefrom being less than the height of the remaining portions of the side and front walls and providing a fulcrum point in proximity to said rear wall whereby the cover is tilttable about the fulcrum to expose substantially the entire area of the front end wall of the latter, and a hinge connection between the rear walls of said cover and bottom including an inwardly rolled hollow bead provided at the lower margin of the rear wall of the cover, a hinge pin extending through the bead lengthwise thereof and projecting beyond its ends and a vertically elongated bearing for each end of the hinge pin, each bearing consisting of a portion of the rear wall of the bottom section punched outwardly therefrom.

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