Aug. 28, 1962 R. V. BURDICK ET AL 3,051,350

CONTAINER WITH SNAP-OFF COVER

Filed Feb. 13, 1959

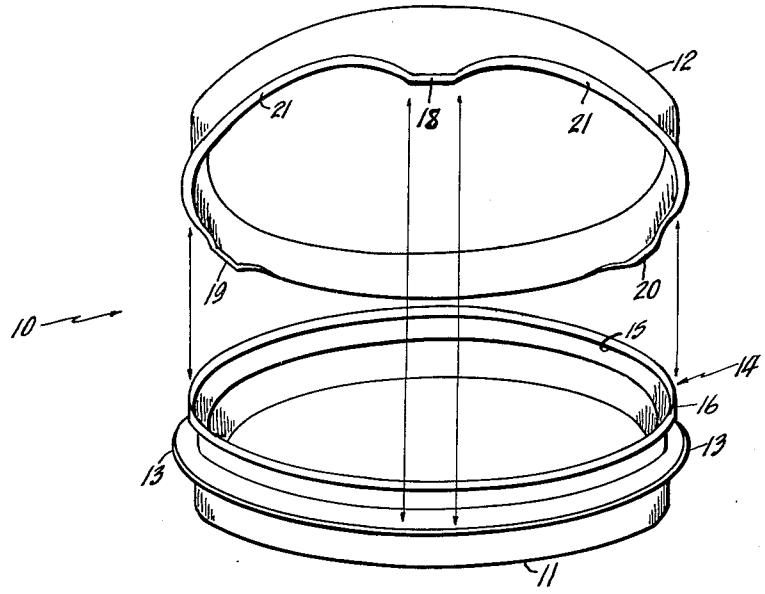


Fig. 1

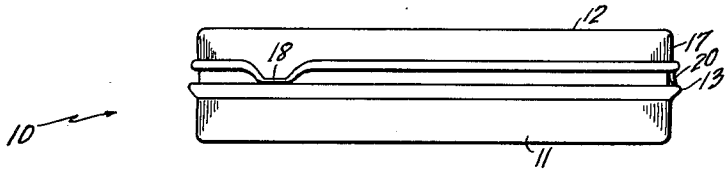


Fig. 2

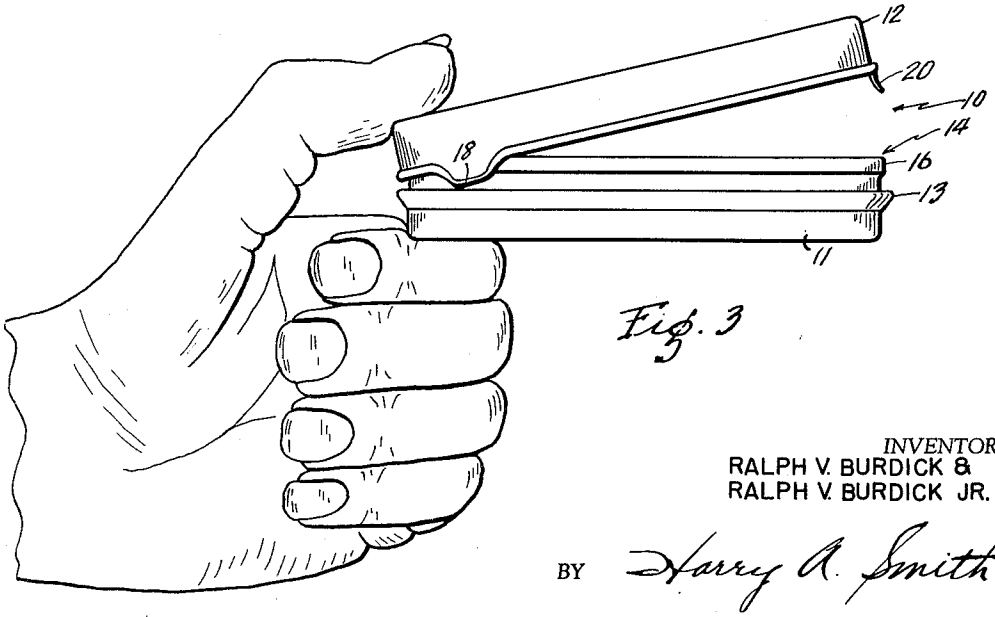


Fig. 3

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CONTAINER WITH SNAP-OFF COVER

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1 Claim. (Cl. 220—43)

This invention relates to boxes made, for example, from comparatively thin sheet metal such as tin plate, black iron, and the like, which are used to contain shoe polish, waxes, ointments, and similar semi-solid materials, having particular reference to improvements in air-tight boxes of the type disclosed in an earlier patent, No. 2,379,680, to Ralph V. Burdick, one of the co-inventors in the instant application, and the provision of such an improved type of box is the principal object of the invention.

In the foregoing patent it is emphasized that boxes which are used as containers for shoe polish and other compositions having volatile constituents must be so designed as to maintain a substantially airtight fit between the cover and the body of the container. The fact that such an airtight fit is required often makes it difficult or inconvenient to remove the cover from a box. This is true of the threaded type, especially when the cover is twisted on the container too tightly. The unthreaded or pry-off type requires the use of a special key or a coin which is not always readily available. Such boxes having tight fitting covers as those described in the above mentioned patent can be removed only by pressure exerted on a certain marginal zone thereof, and it is often difficult or inconvenient to restore it in proper position for subsequent unseating.

Generally, it is an object of the invention to overcome the foregoing difficulties and disadvantages and to provide such a box that is even more economical of manufacture and otherwise equally well suited to the purposes for which it is intended.

A specific object of the invention is to provide a box having a snap-off cover that can quickly and easily be removed merely by downward pressure along almost any marginal zone on the cover.

More specifically, it is an object of the invention to provide a container member and a cover member therefor, the container member including an outwardly formed peripheral ledge below the top cover engaging edge area thereof to function as a stop as well as a seat for the lowermost edges of the cover member, the cover member including a skirt adapted tightly to fit the edge area of a container, the skirt being provided with three equidistantly spaced wing elements forming the lowermost ledge contacting edges, with the skirt portions therebetween being spaced away from the ledge, whereby downward pressure on the marginal zone of the cover at any point between the wing elements will effect a tilting and unseating of the cover as the pressured wing elements rock around the ledge as a fulcrum.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises an article of manufacture possessing the features, properties, and the relation of elements which will be exemplified in the article hereinafter described and the scope of the application of which will be indicated in the claim.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in connection with the accompanying drawing, in which:

FIG. 1 is an exploded perspective view, between the container and the cover member, illustrating the invention;

FIG. 2 is a side or end elevational view of the container and cover member shown in FIG. 1 pressed into sealed engagement rotated through an arc of about 30°; and

FIG. 3 is a view illustrating the unseating of the cover member from the container member.

Referring more particularly to the drawing, there is illustrated generally at **10** a box embodying the present invention which comprises a container member **11** and a cover member **12**, both of which are substantially cylindrical.

The container member **11** includes an outwardly formed peripheral ledge **13** below the top cover engaging edge area thereof, indicated generally at **14**. This edge area preferably terminates in a rolled over bead **15** to present a rounded edge to avoid the sharp corner edge which might become dangerous in handling but, likewise, strengthens such terminating edge of the container around its open top. This area **14** is also formed into an outwardly expanded peripheral bead **16** which also provides a sealing contact for the cover skirt frictionally to encompass the same when the cover member **12**, about to be described, is pressed into engagement with the container member as shown in FIG. 2.

The ledge **13** acts as a stop and a seat for the lowermost edges of the cover member. It also performs the function of the fulcrum when the cover is removed as will more fully be described hereinafter. The ledge, like the other beads, may be integrally formed from the side wall of the container, such as by rolling or spinning.

The cover member **12** includes a skirt portion **17** adapted tightly to fit the edge area **14**, that is, the downwardly expanded peripheral bead portion **16**. The skirt **17** is provided with three equi-distantly spaced wing elements **18, 19** and **20** which form the lowermost ledge contacting edges with the skirt portions therebetween being rolled backwardly toward the top of the cover to provide reenforcing beads **21** against lateral pressure of the container engaging edge area **14**, such bead portions between the wing elements **18—20** therefore being spaced away from the ledge **13**. Since there are three equi-distantly spaced skirt edges **18—20**, there, likewise, are present three equidistantly spaced areas therebetween out of contact with the ledge.

With such a structural arrangement the cover can readily be unseated and removed without the necessity for having the parts threaded together or for the use of a key or coin; and, furthermore, it is not necessary that pressure essentially be brought to bear at any single point. All that need be done is to pick up the container in either hand and bring downward pressure to bear on the cover overlying any area between any two wing elements to cause the latter to act as pivot points to tip the spaced skirt areas therebetween downwardly and against the ledge thereby tipping the opposite side of the cover upwardly of the ledge to unseat the cover.

It will thus be seen that the objects hereinbefore set forth may readily and efficiently be obtained and since certain changes may be made in the above article and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claim is intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

Having described our invention, what we claim as new and desire to secure by Letters Patent is:

In a substantially cylindrical metal box of the character described comprising a cylindrical container and a cylindrical cover therefor; a peripheral sealing bead

formed on the upper edge of said container, an outwardly directed peripheral ledge formed on said container and spaced beneath said sealing bead, a skirt portion on said cover, at least three downwardly extending wings peripherally formed on the skirt of said cover to be integral with said cover, each of said wing portions being equidistantly spaced about the periphery of said skirt, the skirt portions along the periphery between said wing portions being rolled back to form a peripheral skirt reinforcement, said wings being so dimensioned in length that upon the closing of said box said wings each perch on said peripheral ledge to form at least a three point support with said peripheral skirt reinforcement located beneath said sealing bead but vertically spaced therefrom whereby downward pressure on said cover overlying an

area between any two of the wings causes one of the wings to act as a fulcrum and to pivotally tip the spaced skirt downwardly against the ledge while the opposite side of the cover tilts upwardly to unseat the cover.

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