

May 2, 1944.

R. J. WHITE

2,347,724

CONTAINER

Filed Sept. 16, 1939

Fig 1

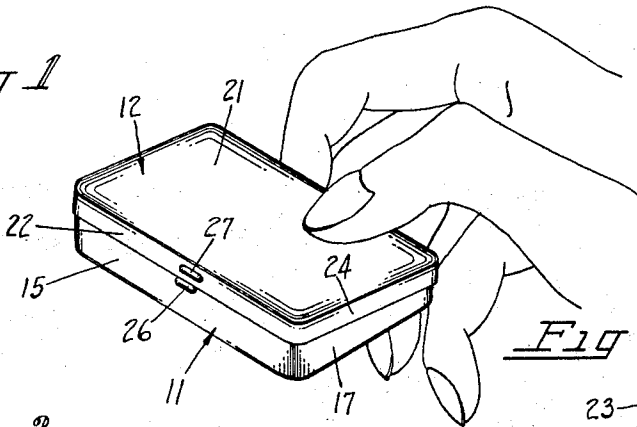


Fig 2

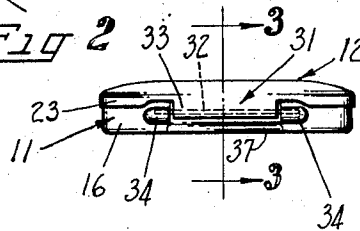


Fig 3

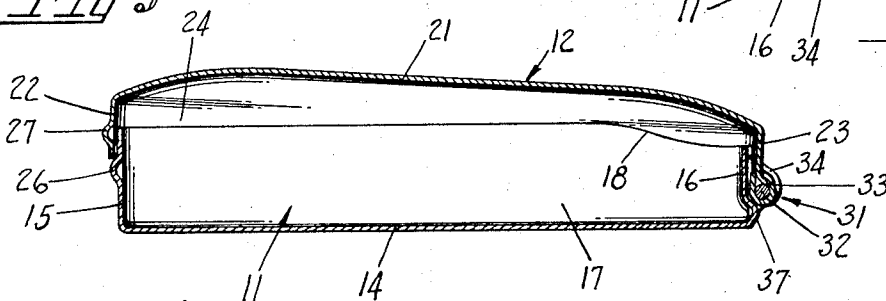


Fig 5

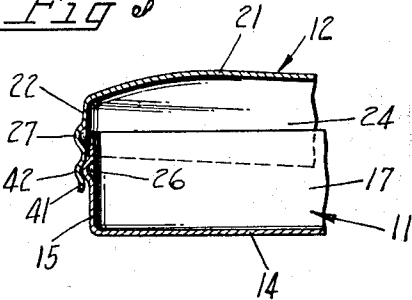


Fig 4

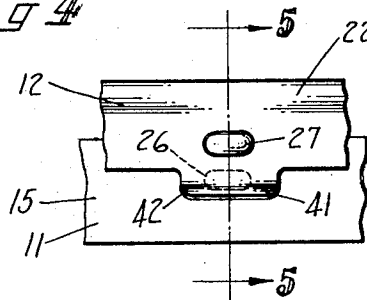


Fig 6

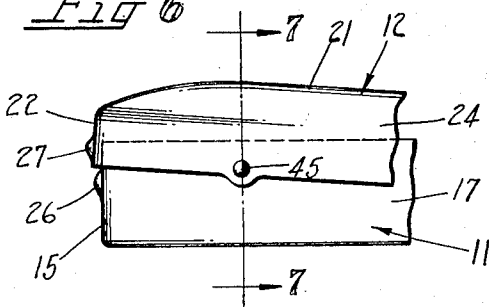
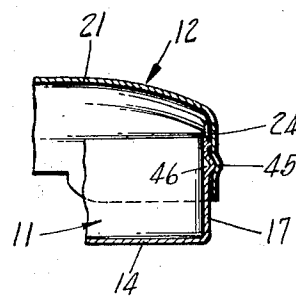


Fig 7



INVENTOR
Richard J. White
BY *Ernest W. Thornburgh*
Charles H. Cyle
ATTORNEYS

UNITED STATES PATENT OFFICE

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CONTAINER

Richard J. White, New York, N. Y., assignor to
American Can Company, New York, N. Y., a
corporation of New Jersey

Application September 16, 1939, Serial No. 295,338

1 Claim. (Cl. 220—36)

The present invention relates to containers such as hinge cover tablet boxes or the like and has particular reference to stop lug features which control the initial movement of the box cover when the box is snapped open.

An object of the invention is the provision of a hinge cover tablet box having a floating hinge in which the cover of the box may be snapped open by pressing along the hinge side thereof and wherein the box is provided with a cover stop lug feature which restricts the initial opening movement of the released cover so that although released, the partially raised cover will be stopped from further automatic movement thereby preventing accidental or intentional removal of the contents from the box until the cover has been fully raised by an additional manual operation.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawing, discloses a preferred embodiment thereof.

Referring to the drawing:

Figure 1 is a perspective view of a box embodying the instant invention and showing the outline of a portion of a hand holding the box, the view showing the box being snapped open by pinching it along its rear edge;

Fig. 2 is a rear elevation of the box shown in Fig. 1;

Fig. 3 is an enlarged section taken substantially along the line 3—3 in Fig. 2 and showing the cover of the box in a partially open position;

Fig. 4 is an enlarged fragmentary front elevation of a modified form of the box shown in Fig. 1, the view showing the cover of the box in an arrested partially open position;

Fig. 5 is a fragmentary sectional detail taken substantially along the line 5—5 in Fig. 4;

Fig. 6 is an enlarged fragmentary side elevation of a second modified form of the box shown in Fig. 1, the view showing the cover of the box in an arrested partially open position; and

Fig. 7 is a fragmentary sectional detail taken substantially along the line 7—7 in Fig. 6.

As a preferred embodiment of the instant invention the drawing illustrates a rectangular shaped sheet metal tablet box which includes a shallow, die drawn, one piece body member 11 and a hinge cover member 12 of similar construction.

The body member 11 comprises a flat bottom wall section 14 (Fig. 3) which merges at its outer edges into a surrounding upright wall includ-

ing a front wall section 15, a low rear wall section 16, and a pair of connecting side wall sections 17. The corners of the side wall sections adjacent the rear wall section are cut away as indicated by the numeral 18. These cut away portions 18 and the low rear wall section 17 facilitate opening of the box as will be hereinafter explained.

The cover member 12 comprises a semi-flattened, dome-shaped, top wall section 21 (Fig. 3) which at its outer edges merges into a continuous depending flange including a front wall section 22, a rear wall section 23, and a pair of connecting side wall sections 24. When the cover is in closed position on the body member the cover top wall section 21 rests on the upper or terminal edges of the body front and side wall sections 15, 17 and the cover flange extends down outside of and adjacent the body upright wall sections.

In the front wall sections 15, 22 of the box the body member and the cover member are formed with outwardly extending co-locking nodes or projections 26, 27. Thus when the cover is in closed position on the body the cover locking node 27 engages over the body locking node 26 and the box is thus secured against accidental opening.

At the rear edge of the box the cover and body members are permanently connected by a floating hinge 31 (Figs. 2 and 3) which permits of pressing the cover open and at the same time disengaging the locking nodes. This hinge includes a wire pintle 32 which is tightly held in a pintle lug 33 formed on the rear wall section 23 of the cover. The ends of the pintle project beyond the pintle lug 33 and extend into a pair of spaced and vertically elongated hinge lugs 34 which are formed on the rear wall section 16 of the body member 11. The ends of the pintle fit loosely within these lugs and have considerable lateral movement therein.

When the cover 12 is in closed position on the body 11 the pintle ends of the hinge are disposed in the upper portion of the elongated body hinge lugs 34 and there is also considerable space between the top edge of the body rear wall section 16 and the top wall section 21 of the cover. Hence to open the box it is merely necessary to pinch it along its rear edge at the hinge or at the corners of the box. This pinching action depresses the ends of the pintle 32 within their elongated hinge lugs 34 and thus rocks the cover on the top terminal edges of the body side wall sections 17 adjacent the forward part of the cut

away portions 18. The front edge of the cover is thus raised away from the front edge of the body and hence the locking lugs 26, 27 snap out of engagement as shown in Fig. 3 and thereby release the cover for further manual opening.

Provision is made for preventing the cover from snapping open so far that the contents of the box will be accidentally spilled out. For this purpose a stop lug ledge or bead 37 is formed in the rear wall section 16 of the body 11. This bead extends outwardly and is located directly under the pintle lug 33 on the cover rear wall section 23.

Hence when the rear edge of the box is pinched to initially snap open the cover, the downward movement of the pintle lug 33 is arrested at the proper time to control the extent of rocking of the cover on its fulcrum points, i. e., the edges of the body side walls adjacent the cut away portions 18 thereof. The cover thus only rocks sufficiently to fully disengage the locking nodes 26, 27. This prevents the cover from lifting far enough for any spilling of the box contents. Thereafter the cover may be easily raised by hand to complete a full opening of the cover.

Figs. 4 and 5 illustrate a modified form of stop lug which accomplishes the same purpose as the stop lug 37 just described above. In this modified form a tongue extension 41 is formed on the front wall section 22 of the box cover 12. The tongue extension is located directly below and in line with the cover locking node 27 and is formed with an auxiliary locking projection or ridge 42.

Thus when the cover 12 is in closed position on the body 11, the locking nodes 26, 27 are in engaged position as in the preferred form of the invention and the auxiliary locking projection then does not function but is below the body locking node 26. Hence when the rear edge of the box is pinched to snap the cover open, the locking nodes 26, 27 disengage as in the preferred form of the invention and at the same time the auxiliary locking projection is carried up and snaps into engagement with the just released body locking node 26. This arrests further opening movement of the cover and thus holds the cover in a released or partially opened condition. The complete opening by hand is effected by merely forcing the auxiliary projection by the locking node as the cover is swung on its hinge.

Figs. 6 and 7 disclose a further modified form of the invention. In this modified form a pair of co-operating auxiliary nodes or projections 45,

46 disposed in the side wall sections of the box are utilized to arrest full opening of the cover when it is snapped open as the usual locking nodes 26, 27 are disengaged. There are preferably two auxiliary locking nodes 45, one on each side of the box and they are formed in the cover side wall sections 24 adjacent the front edge of the box. Similarly there are two auxiliary locking nodes 46 and these are formed in the body side walls 17.

The respective nodes 45, 46 are so disposed relative to their vertical locations that when the cover 12 is fully closed, the cover locking nodes 45 will be below and disengaged from the body locking nodes 46. It is only when the cover is snapped into its partially opened position, as shown in Figs. 6 and 7, that the cooperating nodes 45, 46 are engaged. Further or complete opening of the cover can then be made. At the very beginning such upward cover movement disengages the auxiliary locking nodes, following which is the usual hinge movement of the cover on the box.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

A hinged tablet box comprising a shallow walled body member, a walled cover member, a floating pintle hinge connection including spaced pintle pockets disposed in the rear wall of the box for permanently securing said members together, said hinge connection permitting relative movement of said members towards one another when the box is pressed adjacent said hinge to open said cover, and an integral outwardly projecting stop lug in the rear wall of said body member located between and beneath said pintle pockets adjacent the bottom of the box, said lug engaging the pintle carrying portion of the rear wall of said cover member when the cover is hinged outwardly towards open position while bodily moving said floating hinge connection to limit initial opening of the box cover, whereby said cover is first raised into a released partially open position to avoid spilling of the box contents.

RICHARD J. WHITE.