Jan. 5, 1943. C. H. DAHLGREN 2,307,028

CONTAINER

Filed Sept. 9, 1939

Fig. 1

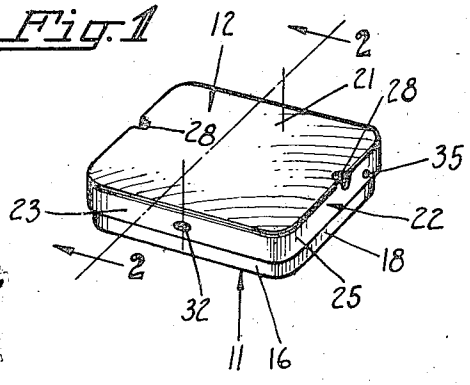


Fig. 6

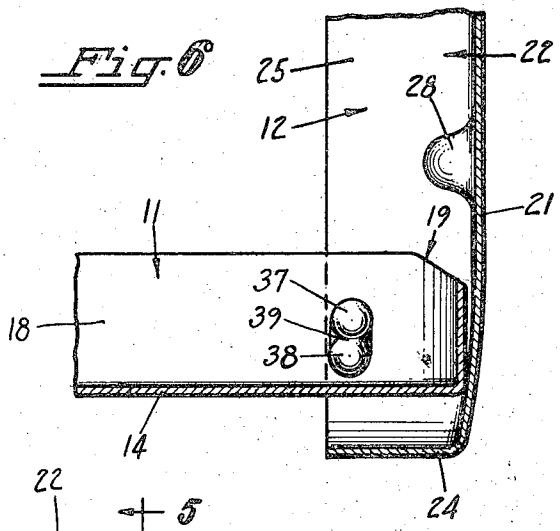


Fig. 2

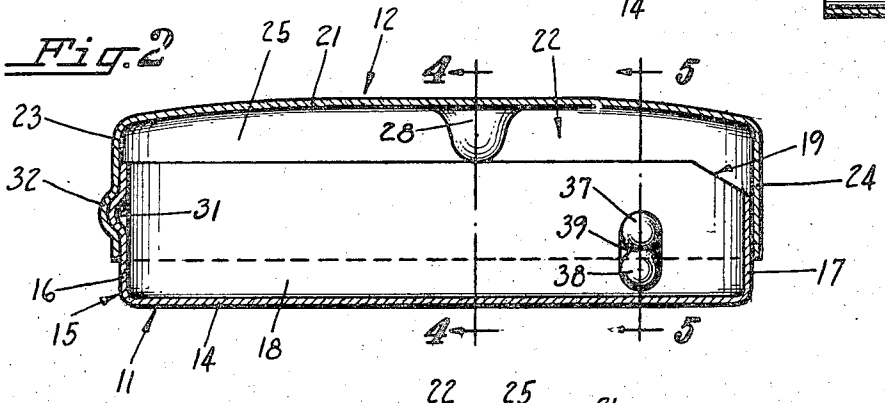


Fig. 3

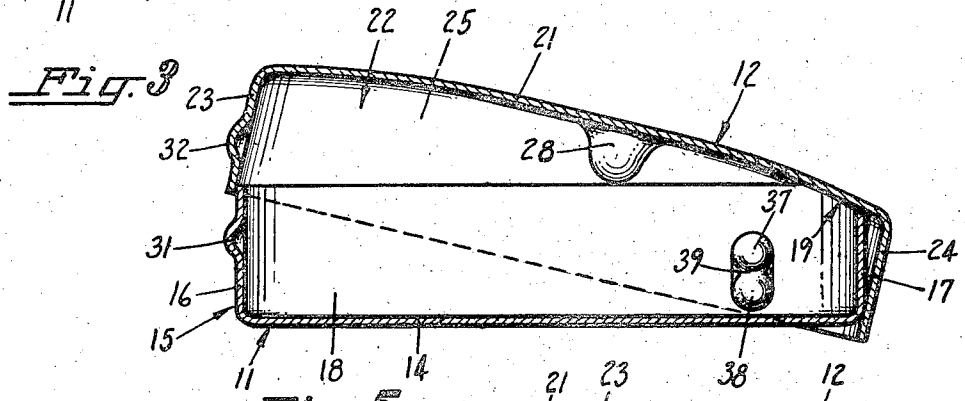


Fig. 4

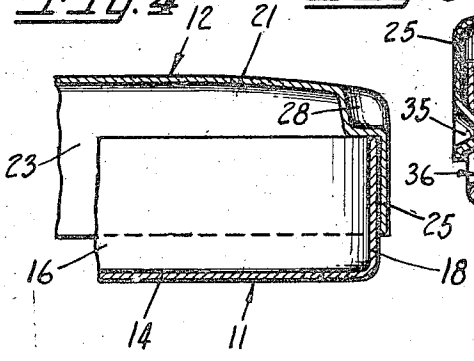
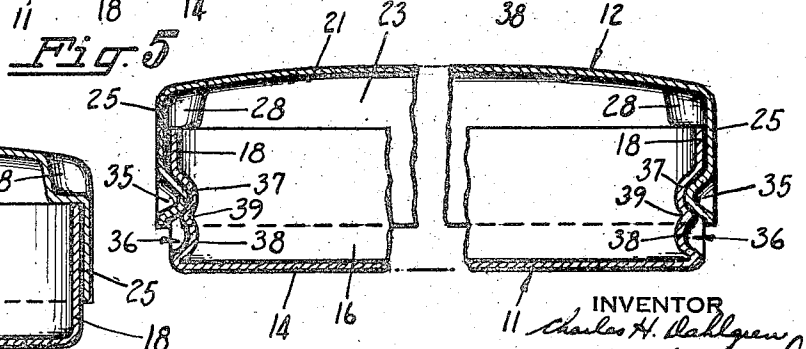


Fig. 5



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CONTAINER

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Application September 9, 1939, Serial No. 294,193

3 Claims. (Cl. 220—31)

The present invention relates to containers such as hinge cover tablet boxes or the like and has particular reference to a pintleless hinge having a locking feature which is adapted to retain the cover in predetermined positions on the box.

An object of the invention is the provision of a hinge cover tablet box or the like wherein the cover is permanently secured to the box by a pintleless hinge which is designed to lock the cover against accidental opening when it is in closed position and is also designed to retain the cover in unlocked position when it is released and partially open.

Another object is the provision of such a tablet box hinge which is readily adaptable to that type of box cover which is released and partially opened by pinching the box along one edge or a corner thereof.

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 tablet box embodying the instant invention, the view showing the box cover in closed position;

Figs. 2 and 3 are enlarged sectional views taken substantially along a plane indicated by the lines 2—2 in Fig. 1, the views showing the cover of the box in different positions;

Figs. 4 and 5 are fragmentary sectional details taken substantially along the lines 4—4, 5—5 in Fig. 2; and

Fig. 6 is a fragmentary sectional view similar to Fig. 3 showing the cover in fully open position.

As a preferred embodiment of the invention the drawing illustrates a rectangular shaped sheet metal tablet box which includes a body member 11 and a cover member 12. These members are preferably of shallow one-piece die drawn construction.

The body member 11 comprises a flat bottom wall section 14 (Fig. 2) which is surrounded by a continuous upright wall 15. The upright wall includes a front wall section 16, a rear wall section 17, and a pair of connecting side wall sections 18. The side wall sections 18 are cut away adjacent the rear wall section 17 as indicated by the numeral 19, and the rear wall is made correspondingly lower so that free hinging action of the cover may be had as will be explained hereinafter.

The cover member 12 comprises a semi-flattened dome shaped top wall section 21 which at its edges merges into a surrounding and continuous depending flange wall 22. The flange wall includes a front wall section 23, a rear wall section 24, and a pair of connecting side wall sections 25. When the cover is on the body 11 these flange wall sections extend down adjacent to and outside of the corresponding upright wall sections of the body.

The cover 12 is adapted to be rocked on the body 11 by pressure applied to it along the rear edges of the box to initially open it. For this purpose the cover is formed with a pair of fulcrum lugs 28 (Figs. 1, 2 and 4) which are located in the cover top wall section 21 adjacent to and extending into the cover side wall sections 25. The lugs are preferably pressed inwardly from these two wall sections 21, 25 and rest on the top terminal edges of the body side wall sections 18 when the cover is in a closed or partially opened position as shown in Figs. 2 and 3.

When the cover is in closed position it is held against accidental opening along its front wall section 23 and along its side wall sections 25 adjacent its rear wall section 24. At the front of the box this is effected by a pair of interlocking nodes, lugs, protuberances or projections 31, 32 which are formed in the respective wall sections 16, 23 of the body and cover members.

At the rear of the box the locking is effected in hinge elements which include a pair of inwardly extending nodes or projections 35 (Figs. 1 and 5) which are formed in the cover side wall sections 25. There is one of these hinge nodes on each side of the cover and it extends into and operates in an elongated or oblong recess 36 formed in each side wall section 18 of the body. The bottom of each recess is formed with a pair of spaced, upper and lower, inwardly extending, round depressions 37, 38 having a locking ridge 39 between them. It is in these depressions that the locking nodes 35 engage.

When the cover is in closed position the hinge nodes 35 are seated in the upper locking depressions 37. The ridges 39 retain the corresponding nodes in the upper depressions and thus cooperate with the front locking nodes 31, 32 in locking the cover against accidental opening.

When it is desired to open the cover, a slight pressure applied to the rear edge of the box, as by pinching the cover and body rear edges together, rocks the cover on its fulcrum lugs 28. This rocking action raises the cover along its front edge and disengages the locking lugs 31, 32 thereby releasing the cover and allowing it to

snap into an initially opened position as shown in Fig. 3.

This same rocking action depresses the rear edge of the cover and forces each hinge node **35** out of the corresponding upper hinge locking depression **37**. During such shifting action, the nodes ride over the locking ridges **39** as they snap into the lower hinge depressions **38** after which they are locked by the ridges **39**. These lower depressions thereupon become hinge elements as the cover is raised by hand from its initially opened position into a full open position, as shown in Fig. 6. This latter position gives full access to the interior of the box.

Upon closing the cover again, the hinge nodes **35** remain in the lower hinge depressions **38** until the cover is brought down into the position shown in Fig. 3. In such position the fulcrum lugs **28** again come into engagement with the top edge of the body side walls **18** and thereupon begin to function as fulcrum points. Continuous closing of the cover now rocks it on these fulcrum points and the hinge nodes **35** are forced back into the upper hinge locking depressions **37**. At the same time the front locking nodes **31**, **32** are reengaged as shown in Fig. 2 and the cover is thus securely locked against accidental opening.

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:

1. A hinge cover tablet box and the like, comprising a body member, a cover member, and a pair of hinge elements including a hinge node in each of two opposite walls of one of said members and a guide recess in each of two corresponding walls of the other of said members, each of said recesses having a pair of spaced locking hinge depressions in which said nodes operate and in which said nodes may be shifted from one to the other, one of each pair of said depressions retaining said cover in locked position on the body, and the other of each pair of depressions serving as hinge elements on which the cover is opened when the hinge nodes are shifted from one set of depressions to the other.

2. A hinge cover tablet box and the like, comprising a body member having a front wall section and a pair of sidewall sections, a cover member also having a front wall section and a pair of side wall sections, hinge elements including a pair of hinge nodes formed one in each side wall section of one of said members adjacent its rear edge and also including a pair of elongated recesses formed one in each side wall section of the other of said members, each of said elongated recesses having a pair of spaced rounded depressions one above the other, said hinge nodes selectively occupying either the upper or the lower of said depressions one location providing for locking of the cover member in closed position the other providing a hinging action to permit moving of said cover member into fully opened position, a pair of locking projections in the front wall sections of the members for cooperating with said hinge nodes in locking said cover member closed, and a pair of fulcrum lugs in said cover member and bearing against said body member to provide for initially opening said cover member by applying a pressure at the rear edge thereof.

3. A pintleless substantially rectangular hinge cover box for tablets and the like, comprising in combination a box body member with front rear and side walls, a complementary cover member adapted to hingedly telescope over said body member, means on one of said members engaging the other member to obtain a rocking movement of said cover into open and closed position relative to said body member when a pinching pressure is applied to the box, and a hinge connection between said body and cover members comprising a pair of projections, one in each side wall of one of said members and two complementary depressions in each side wall of the other of said members, a said projection entering and hinging in first one and then in the other of said depressions when the cover is opened and closed.

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