June 17, 1941. R. A. MAY 2,245,798

BOX AND SIMILAR RECEPTACLE

Filed April 9, 1940

Fig. 1.

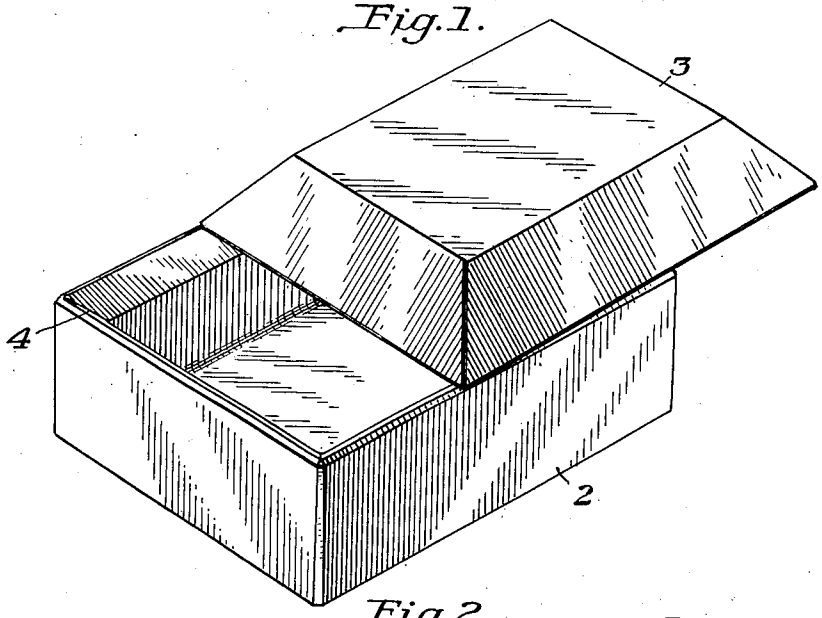


Fig. 2.

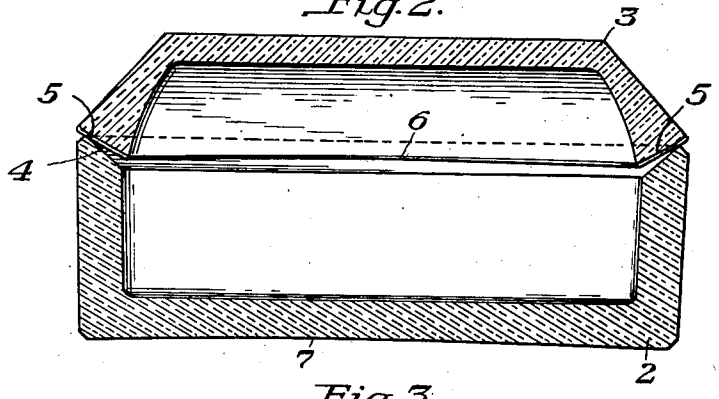
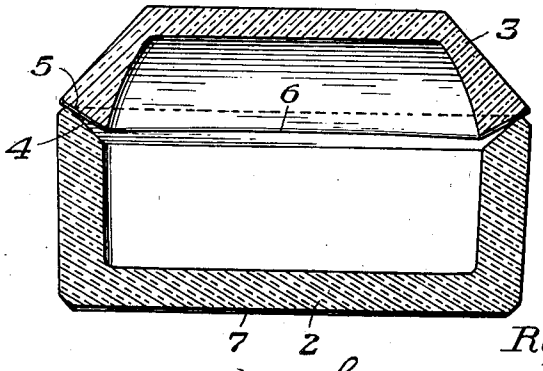


Fig. 3.



INVENTOR

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by [illegible]

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BOX AND SIMILAR RECEPTACLES

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Application April 9, 1940, Serial No. 328,657

3 Claims. (Cl. 215—1)

This invention relates to boxes and similar receptacles. While in certain features it is of general adaptability the invention has been found to be particularly useful when embodied in boxes of relatively small size such as may be employed for holding cigarettes, candy and the like.

One of the features of my improved box is that the cover while naturally seating itself in closed position may easily be moved to open position simply by pushing it with the fingers in a direction generally parallel to the plane of the box rim. This enables the box to be opened, an object to be removed therefrom and the box to be closed with a minimum of effort and with only one hand without picking up the cover and laying it aside. No special grooves or slides for the cover are necessary.

The box and cover preferably have beveled rim portions adapted to interfit when the cover is applied to the box to close the same, the cover being slidable to and from closed position relatively to the box upon portions of the rims of the box and cover. The beveled rim portions form inclined surfaces upon which the cover rides to and from closed position. Preferably, and in the embodiment hereinafter specifically to be described, the box and cover both have downwardly and inwardly beveled rim portions so that when the cover is applied to the box it seats within the beveled box rim. I find it to advantage to make the beveled rim portions of the box and cover diverge, preferably in the direction from the outside toward the inside of the box. This lessens the area of contact between the box and cover and reduces the friction therebetween when the cover is pushed to open position. The box may have any desired shape but is preferably polygonal. Portions of the material of the rim of at least one of the box and cover adjacent corners thereof preferably project somewhat toward the rim of the other thereof relatively to the material of the intermediate portion whereby the cover may be slid relatively to the box largely upon said projecting portions to keep to a minimum the friction between the box and cover upon such sliding.

Other details, objects and advantages of the invention will become apparent as the following description of a present preferred embodiment thereof proceeds.

In the accompanying drawing I have shown a present preferred embodiment of the invention, in which—

Figures 1 is a perspective view showing a box with the cover in partially open position;

Figure 2 is a vertical central longitudinal cross-sectional view through the box shown in Figure 1 but with the cover in closed position; and

Figure 3 is a vertical central transverse cross-sectional view through the box shown in Figures 1 and 2, also with the cover in closed position.

Referring now more particularly to the drawing, there is designated at **2** a box and at **3** a cover therefor. The particular box shown in the drawing is a glass cigaret box adapted and intended for use as on a living room table or the like for holding cigarets. Both the box **2** and the cover **3** shown in the drawing are molded out of glass. The box (including the cover) may however, be made of various other materials. Certain advantages accrue when the box is molded, as will presently appear, and if molded it may be made of various synthetic materials such, for example, as Bakelite.

The box has a beveled rim portion **4** and the cover has a beveled rim portion **5**. As shown in Figures 2 and 3, these beveled rim portions of the box and cover cooperate to seat and center the cover on the box when the box is closed. If the cover should be applied to the box slightly off-center it will automatically assume centered position by reason of the beveled or inclined surfaces **4** and **5**.

In the form shown the beveled rim portions of the box and cover are beveled downwardly and inwardly and the beveled rim portion of the box is inclined at a greater angle to the plane of such rim portion than the rim portion of the cover. This results in the beveled rim portions of the box and cover diverging in the direction from the outside toward the inside of the box as shown in Figures 2 and 3. Also each of the beveled rim portions of the cover is slightly curved in a generally vertical plane as shown at **6** in Figures 2 and 3. In a polygonal box if each of the sides is thus curved the result is that the portions of the material of the cover rim adjacent the corners thereof project somewhat toward the box rim and serve as bearing portions so that when the cover is slid relatively to the box the area of contact between the box and cover is very small.

Due to the beveled rim portions of the box and cover the cover may be slid by pushing the same generally parallel to the plane of the box rim, the forward edge of the cover in the direction of movement riding up on the inclined box rim and the trailing edge of the cover in the direction of movement resting on the side rim portions of the box. Thus the cover may easily be slid to open and closed position and an article removed

from the box by using only one hand and yet without the necessity of picking up and laying aside the cover.

The bottom 1 of the box is preferably slightly concavely curved longitudinally of the box so that any distortion of the material will not result in the box wabbling when set down upon a flat surface. The joint above described between the box and the cover also inherently allows for molding inaccuracies such as would render uncommercial a molded box having the cover fitted thereto in usual manner. Thus the box can be fabricated at very low cost yet it will function with entire satisfaction despite slight molding irregularities.

While the beveled surfaces 4 and 5 of the box and cover respectively are shown as being generally planar (although they are slightly curved vertically as above explained) they may also, if desired, be curved transversely to some extent while still performing the function described.

While I have shown and described a present preferred embodiment of the invention it is to be distinctly understood that the invention is not limited thereto but may be otherwise variously embodied within the scope of the following claims.

I claim:

1. A rectangular receptacle comprising a body and a cover, the body having a rim facing the cover and the cover having a rim facing the body, one of said rims lying generally inside the other when the cover is directly superimposed on the body, one of the body and cover having a surface inclined to the general plane thereof adjacent its rim engaging the rim of the other thereof so that the cover may be slid atop the body to partially open position and said inclined surface will cause an edge of the cover to ride up thereon whereafter further sliding of the cover in the same general direction is accompanied by contact of rim portions only of the body and cover at the raised portion of the cover whereby frictional resistance to sliding of the cover relatively to the body is minimized.

2. A rectangular receptacle comprising a body and a cover, the body having a rim facing the cover and the cover having a rim facing the body, the cover rim lying generally inside the body rim when the cover is directly superimposed on the body, the cover having a surface inclined to the general plane thereof adjacent its rim engaging the body rim so that the cover may be slid atop the body to partially open position and said inclined surface will cause an edge of the cover to ride up thereon whereafter further sliding of the cover in the same general direction is accompanied by contact of rim portions only of the body and cover at the raised portion of the cover whereby frictional resistance to sliding of the cover relatively to the body is minimized.

3. A rectangular receptacle comprising a body, and a cover, the body having a rim facing the cover and the cover having a rim facing the body, one of said rims lying generally inside the other when the cover is directly superimposed on the body, one of the body and cover having a surface inclined to the general plane thereof adjacent its rim engaging the rim of the other thereof, portions of the material of the rim of at least one of the body and cover adjacent corners thereof projecting somewhat toward the rim of the other thereof relatively to the material of the intermediate portion, so that the cover may be slid atop the body to partially open position and said inclined surface will cause an edge of the cover to ride up thereon while the cover slides relatively to the body largely upon said projecting portions whereafter further sliding of the cover in the same general direction is accomplished by contact of rim portions only of the body and cover and the raised portion of the cover whereby frictional resistance to sliding of the cover relatively to the body is minimized.

ROBERT A. MAY.

CERTIFICATE OF CORRECTION.

Patent No. 2,245,798. June 17, 1941.

ROBERT A. MAY.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 2, second column, line 38-39, claim 3, for the word "accomplished" read --accompanied--; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 22nd day of July, A. D. 1941.

Henry Van Arsdale,
Acting Commissioner of Patents.

(Seal)