April 18, 1950 H. B. LERMER 2,504,850

BOX CONSTRUCTION

Filed Nov. 1, 1947

Fig. 1

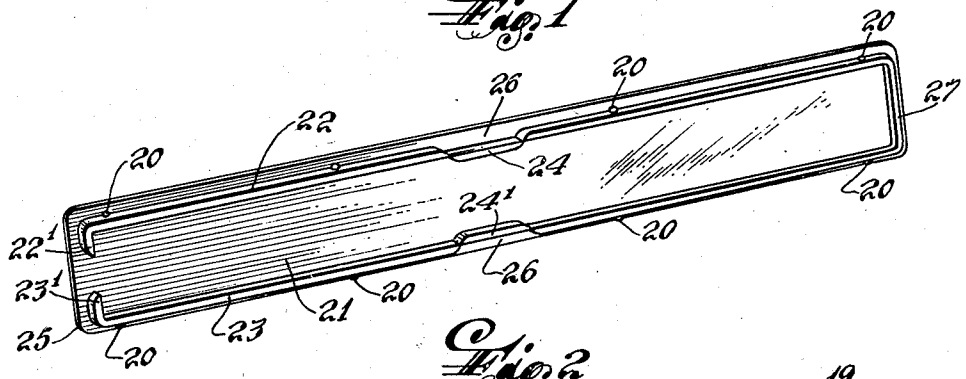


Fig. 2

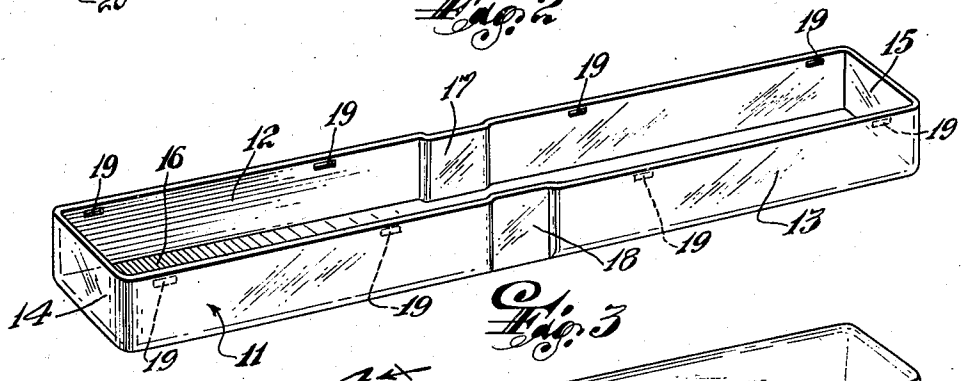
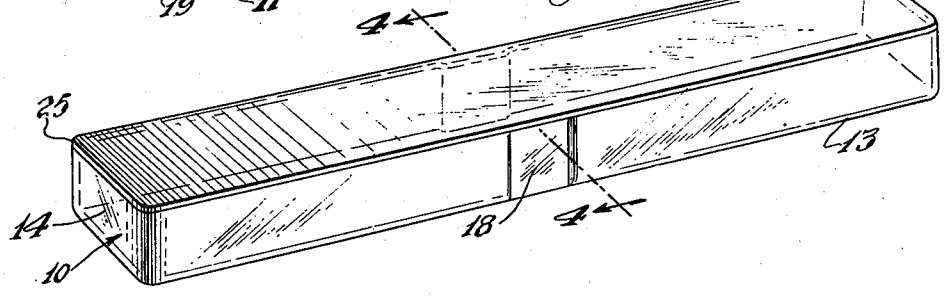


Fig. 3



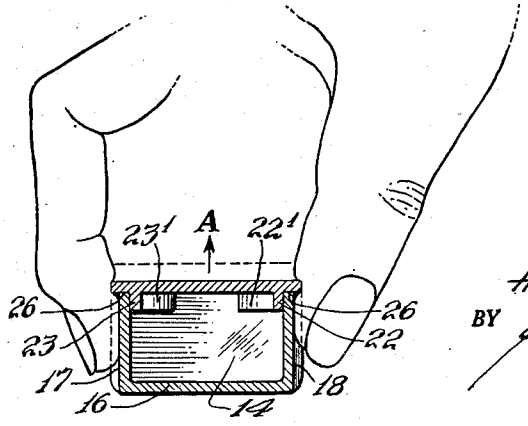


Fig. 4

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BOX CONSTRUCTION

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3 Claims. (Cl. 220—60)

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This invention relates to improvements in boxes and similar receptacles for holding articles. It is old in the art to provide body portions of boxes with covers removably secured thereto. This has been done, for example, by providing the body portion with a cover longitudinally slidable in grooves in the body portion. Such structures have been found objectionable from a manufacturing and practical standpoint.

Other forms of boxes with removable covers have likewise been found objectionable from a practical, cost and manufacturing standpoint.

The invention herein disclosed provides a box with a cover removably secured to the body portion thereof, said box being of novel, efficient and practical structure, and lending itself readily to manufacture at low cost.

These and other advantageous objects, which will appear from the drawings and from the description hereinafter, are accomplished by the structure of my invention of which one embodiment is illustrated in the drawings. It will be apparent from a consideration of said drawings and the following description, that the invention may be embodied in other forms suggested thereby, and such other forms as come within the scope of the appended claims are to be considered within the scope and purview of the instant invention.

In the drawings:

Fig. 1 is a perspective view of the cover of the box of my invention, taken from the underside thereof,

Fig. 2 is a perspective view of the body portion of the box of my invention,

Fig. 3 is a perspective view of the box in closed condition, and

Fig. 4 is a transverse, vertical, sectional view, taken on line 4—4 of Fig. 3, and showing the manner in which the box cover may be grasped to remove the same from the body portion.

As shown in the drawings, the box 10 comprises a body portion 11 having spaced, parallel, side walls 12 and 13, end walls 14 and 15, and bottom wall 16. The side walls are provided with medially recessed or inwardly off-set portions 17, 18 for a purpose presently explained. The body portion 11 and cover 21 are provided with complementary interlatching means 19 and 20 respectively. Said means may comprise any desired or convenient interlatching members which will separate upon movement of the cover away from the body portion. In the form shown in the drawings, said interlatching means comprises studs 20 or the like provided on the cover or

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body for registry with recessed portions 19 provided on the other member of said box. Thus, when the cover is positioned upon the box and pressed downwardly, said projections 20 will snap into said recesses 19 and interlock the parts.

In the form shown in the drawings, the cover 21 is provided with depending flanges or registering rails 22, 23 spaced inwardly of the margin 25 of the cover, said rails being provided with the projections 20, the ends 22', 23' of said rails being inturned. Said rails are further provided with recessed or inwardly off-set portions 24, 24' corresponding to the recessed or off-set portions 17, 18 of the side walls of the body portion.

The cover and body portion are preferably made of a material which is sufficiently flexible or resilient to provide for the projections 20 being forced downwardly along the inner faces of the side walls of the body portions until they are in registry with and snap into the recessed portions 19 thereof. The registering rails 22, 23 facilitate the initial positioning of the cover on the body portion and the proper registry of the parts. When the box is closed, as above described, the cover is held tightly upon the body portion so as to present a unitary and neat appearance; the parts are held against accidental displacement by the interlocked studs 20 and recesses 19.

The box is opened by lifting the cover from the body portion, as, for example, shown in Fig. 4, holding the body portion firmly and positioning the thumb and forefinger partly in the recesses 17 and 18 of the body portions and against the perimeter 25 of the cover, which, at that medial portion of the box, overhangs the recessed portions 17, 18 in the form of overhanging medial ledges 26. The cover is thus grasped so that it may be readily medially lifted upwardly to the position schematically indicated by the dotted line and arrow A in Fig. 4, causing the projections 20 to cam out of the recesses 19, to open the box.

It will be apparent that the recesses 19 and projections 20 may be of such number, of such form and in such location as is found convenient. The box may be made of any suitable or desired material and can be conveniently molded of transparent or translucent plastic material, if desired, to provide for economical manufacture in large quantities. The box preferably oblong but may be of any suitably desirable outline, the rails 22, 23 being of corresponding outline to that of the body portion of the box. The rails 22, 23 may be molded or otherwise formed on the cover

21, or, if desired, they may comprise stepped portions or flanges formed integral with the cover. Such variations are embraced within the term "rails" as used herein. The ends of the rails may be spaced apart, as indicated at 22', 23', or may be joined as indicated at 21.

The box may be made of suitable plastic material such as "Alvar" (vinyl acetal); "Ameroid" (casein); "Arcolite" (a phenolic substance); "BCA" (casein andurea); "Bu Cre A" (urea-formaldehyde); "Catalin" (phenolformaldehyde); "Coltwood" (a phenolic substance); "Crystalite" (acrylic molding powder); "Enameloid Cloisonné" (cellulose acetate and methyl methacrylate); "Ethofoil" (ethyl cellulose); "Hycoloid" (cellulose nitrate); "Lustron" (polystyrene molding compound); etc.

If desired, the inwardly offset portions 17, 18 of the body member 11 may be dispensed with, the ledges 26 would in such case be extended beyond the perimeter 25 of the cover at the medial portion thereof.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A box comprising an oblong body portion having upstanding side and end walls, said side walls having inwardly extending medially located recessed portions constituting finger recesses, and an oblong cover for said body portion, said cover having a flat uninterrupted top portion and rails on the underside thereof, said rails being continuous along the side edges of said cover and telescopically engaging the interior of said body portion, said rails having medially located recesses complemental to the medially recessed portions of said body, said rails and body portion having cooperating complemental interlatching bosses and recesses, said cover having a continuous edge portion, the medial portion on each side edge of the cover projecting over the medial recessed portions of said body portion whereby said cover may be removed from said body portion by grasping the edges of said cover at the medially recessed portions of said body portion.

2. The construction set forth in claim 1 in which the box is rectangular and the edges of the cover being straight edges spanning said medial recessed portions.

3. The construction set forth in claim 1 in which said body portion constitutes an integral structure and in which the cover is also an integral structure, said cover having continuous rails along two side edges and along one of its ends and said ribs being interrupted at its opposite end.

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