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1,464,237

H. A. BEYER

METAL BOX

Filed Feb. 9, 1918

Fig.1.

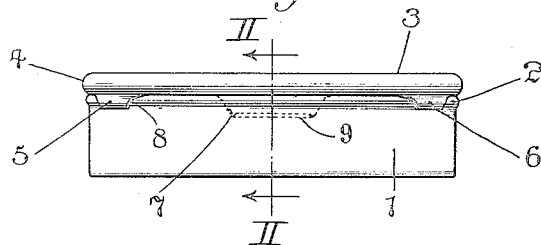


Fig. 2.

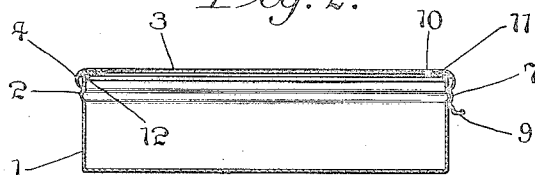


Fig. 3.

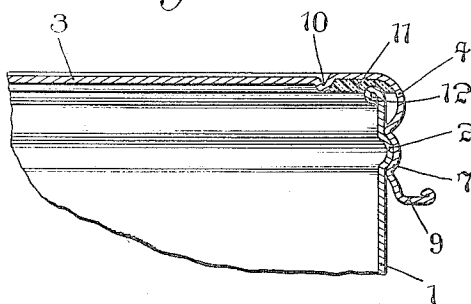


Fig. 4.

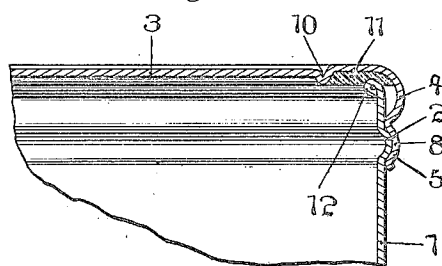
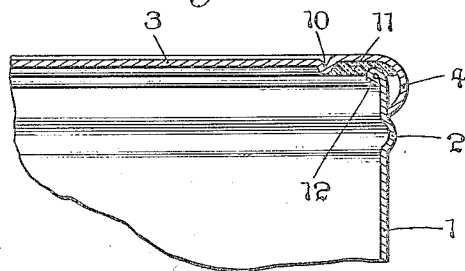


Fig. 5.



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UNITED STATES PATENT OFFICE.

HENRY A. BEYER, OF CORONA, NEW YORK, ASSIGNOR TO PARAGON CAN & CAP COMPANY, INC., OF BROOKLYN, NEW YORK, A CORPORATION OF NEW YORK.

METAL BOX.

Application filed February 9, 1918. Serial No. 216,244

To all whom it may concern:

Be it known that I, HENRY A. BEYER, a citizen of the United States, and resident of Corona, Long Island, in the county of Queens and State of New York, have invented a new and useful Improvement in Metal Boxes, of which the following is a specification.

This invention relates to improvements in receptacles having removable covers, and more particularly to sheet metal boxes such, for instance, as shoe blacking boxes and the like.

The object of the invention is to provide an article of this character which is very cheap to manufacture and which has a slip-on cover that may be quickly and easily applied and removed, and which will firmly retain its proper position upon the receptacle and form a satisfactory closure therefor during a very considerable period of use.

Another object is to provide certain improvements in the form, construction and arrangement of the several parts whereby the above named and other objects may be effectively attained.

A practical embodiment of my invention is represented in the accompanying drawings in which,

Fig. 1 represents a side elevation of the box.

Fig. 2 represents a vertical central section therethrough, taken on the line II—II of Fig. 1, looking in the direction of the arrows, and

Figs. 3, 4 and 5 represent enlarged detail sections showing the shape of the cover and its engagement with the box at different points of the circumference.

The box or receptacle is denoted by 1 and may conveniently be formed by stamping or drawing sheet metal. It is provided with an outwardly projecting bead 2, near its top, which bead may be formed by a rolling operation or in any other convenient manner.

The cover is preferably composed of some relatively springy sheet metal, such as tinned or lacquered sheet iron or steel. It comprises a flat body portion, denoted by 3, and a peripheral flange 4 which extends substantially at right angles to the body portion 3. It will be noted that this flange 4 is bowed or rounded so that its lower part presents, throughout the major part of its

length, an edge to the box. The depth of the flange is such that when in position on the box, its lower edge impinges against the upper side of the bead 2, as clearly shown in Fig. 5.

At several points throughout the periphery of the flange 4, ears are projected downwardly. Three of these ears are shown in the present instance and are indicated by 5, 6, 7. The ears 5 and 6 are similar and are each provided with a bellied or curved part 8, adapted to fit over the bead 2, so as to yieldingly hold the cover on the box, as clearly shown in Fig. 4.

The ear 7 includes a bellied or curved part similar to that of the ears 5 and 6, but it is projected in the form of a tail 9 which extends downwardly and outwardly from the box when the cover is in position thereon, in order to provide means for the manual removal of the cover.

The body 3 of the cover preferably has a depressed annular groove 10 formed therein and spaced a short distance from the periphery thereof. This groove takes the form of a ridge on the inside of the body portion 3 of the cover and, together with the inside of the flange 4, forms a seat for a suitable washer or packing ring 11, which may be composed of some material such as rubber, gum or other suitable composition.

It will be noted that when the cover is seated in position on the box, the washer or packing ring 11 is compressed slightly between the cover and the upper edge of the box, which latter is provided with a roll 12 which acts as a stiffening agent and also eliminates the unsightly appearance and scraping or cutting propensity of a straight raw edge of sheet metal.

In operation, the cover may be applied to the box by first sliding two of the ears down over the bead 2 and then swinging the other side of the cover down into position, or it may be applied by a straight downward movement which causes all three of the ears to simultaneously engage the box. The shape and resiliency of the flange 4 and ears 5, 6, 7, cause them to readily expand sufficiently to slip over and engage the bead 2; and it may be noted that this expansion of the ears in riding up on the bead has a tendency to contract the flange intermediate of the ears so as to compress its edge firmly against the side of the box and thus assist

in forming a tight closure and retaining the cover in position.

It will be understood that various changes may be resorted to in the composition, form, construction and arrangement of the several parts without departing from the spirit and scope of my invention, and hence I do not intend to be limited to the details herein shown and described except as they may be specifically included in the claims.

What I claim is:

1. An article of the character described comprising, a receptacle having an annular bead, a cover having a bowed depending flange, the lower edge of said flange being inwardly disposed and fitted to engage the upper side of said bead, and ears depending from the flange and having a curved portion arranged to engage and conform to the bead.

2. An article of the character described comprising, a receptacle having a rolled upper edge and an annular bead spaced from said edge, and a cover having a bowed depending flange, the lower edge of said flange being inwardly disposed and fitted to engage the upper side of said bead leaving a space between the rolled edge of the receptacle and the cover.

3. An article of the character described comprising, a receptacle having a rolled upper edge and an annular bead spaced from said edge, a cover having a bowed depending flange, and an inwardly extending annular ridge spaced from the flange to form a channel for the reception of a packing ring, the lower edge of the flange being inwardly disposed and fitted to engage the upper side of said bead leaving a space between the rolled edge of the receptacle and the cover.

4. An article of the character described comprising, a receptacle having an annular bead, a cover having a bowed depending flange, the lower edge of said flange being inwardly disposed and fitted to engage the upper side of said bead, and ears depending from the flange and having a curved portion arranged to engage and conform to the bead, one of said ears having a downwardly and outwardly extending tail to facilitate the manual removal of the cover.

In testimony, that I claim the foregoing as my invention, I have signed my name this sixth day of February, 1918.

HENRY A. BEYER.