

F. E. SPRAGUE.
METAL BOX.

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1,062,859.

Patented May 27, 1913.

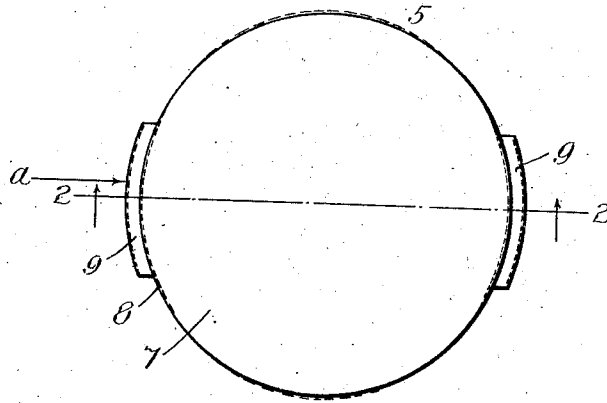


Fig. 1.

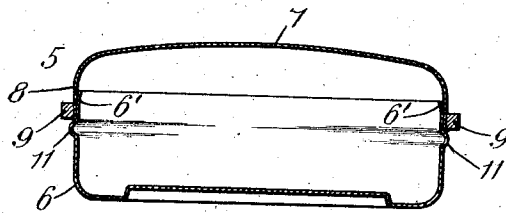


Fig. 2.

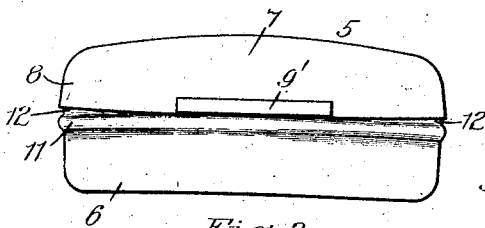


Fig. 3.

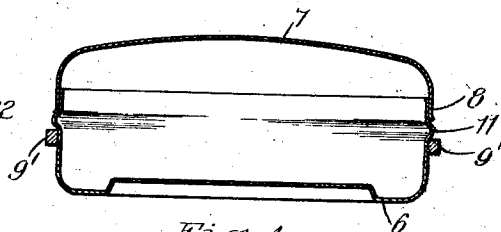


Fig. 4.

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UNITED STATES PATENT OFFICE.

FRANK E. SPRAGUE, OF NASHUA, NEW HAMPSHIRE.

METAL BOX.

1,062,859.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK E. SPRAGUE, a citizen of the United States, residing at Nashua, in the county of Hillsboro and State of New Hampshire, have invented new and useful Improvements in Metal Boxes, of which the following is a specification.

This invention relates to an improved box of that class which is ordinarily used to contain blacking, powders, salves, et cetera, the same consisting of a resilient metal body portion with a bottom and a slip cover with a depending flange also formed of resilient metal which fits tightly around the outside of said body portion.

The object of the invention is to provide a box of the character set forth which is so constructed that the cover may be easily removed and when replaced fit the body portion of the box as tightly as before, and to this end the depending flange is provided with one or more solid or rigid projections extending part way around the cover of said box.

The depending flange of the cover and the side or body portion of the box must both be formed of resilient material. The said solid or rigid projections which are formed on the depending flange of the cover are unyielding, stiff and rigidly fastened to said depending flange, so that when a blow is struck thereon the cover and box will be momentarily distorted, causing the cover to lift itself upon the body portion of said box and thus it can be readily removed.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings: Figure 1 is a plan view of a box embodying my invention. Fig. 2 is a sectional elevation taken on line 2-2 of Fig. 1. Fig. 3 is a side elevation of said box and its cover, showing the same distorted as from a blow applied to the projection on the cover. Fig. 4 is a sectional elevation similar to Fig. 2 illustrating the rigid projections placed upon the body portion of the box instead of upon the flange of the cover.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, referring to Figs. 1, 2 and 3, 5 is the box consisting of a resilient metal body portion 6 and a top 7. Said box is preferably cylindrical. The top 7

has a depending flange 8 and the depending flange is made of material of such character and thickness that it is resilient and easily sprung out of shape. The sides 6' of the box are also made of material of such a character and thickness that it is resilient and easily sprung out of shape. Fastened to said depending flange 8 of the cover of said box, and preferably near the lower edge thereof, are two solid or rigid metallic projections 9, 9. These projections are of greater thickness than the flange 8 and are rigid, unyielding and non-resilient. Said projections extend part way around the box and are preferably located diametrically opposite each other. While I prefer to employ two projections, it is evident that one or more than two projections can be used without departing from the spirit of my invention.

The box body has a bead 11 and a portion of the side 6' projects above said bead, and over this portion the depending flange 8 of the cover slips.

To remove the cover from the box, the user holds the box in one hand and strikes one of the projections 9 with or against a hard object. One or more sharp blows applied in the direction of the arrow *a*, or, in other words, at right angles to the side of the box, will remove the cover. The result of such a blow is to spring both box and cover slightly out of shape, somewhat into the form shown in dotted lines, Fig. 1, both cover and box being sprung inwardly where the blow is received, causing a distortion of the box and the cover laterally thereof, as shown in Fig. 3.

It will be seen by reference to Fig. 3 that the depending flange 8 of the cover is lifted and the body portion of the box depressed, so that a portion, as at 12, of the body portion of the box is exposed. Otherwise stated, the box cover is moved upwardly relatively to the bead 11 on the body portion of the box, and the cover thus having moved upwardly on the box can be easily removed therefrom.

The blow or blows which are struck upon the solid or rigid projections 9 need not be heavy blows; two or three light blows are preferable, and these blows do not permanently distort the cover or the body portion of the box. They distort them momentarily enough to loosen the cover, as will be seen by reference to Fig. 3, and allow said cover

to be forced upwardly toward the upper edge of the body portion of the box. Said body portion of the box is preferably slightly beveled or inclined inwardly toward the upper edge thereof so as to assist in the removal of the cover therefrom and also to assist in the placing of the cover thereon. By extending the solid or rigid projections 9, 9 around the box cover that portion to which they are attached is made rigid and unyielding, while the portions between said projections are left resilient and easily sprung out of shape so as to assist in the removal of the cover, as hereinbefore described, and while, as stated, I prefer to use two solid rigid projections, still one projection may be used and the same result accomplished, except that the depending flange of the box cover will then be resilient and spring out of shape throughout its entire extent, except where the solid or rigid projection 9 is fastened thereto, it being understood that where the solid or rigid projections 9 are fastened to the cover, that portion of the depending flange to which they are attached will be rendered rigid, while the remainder of the flange will be resilient and easily sprung out of shape, whereby the results hereinbefore set forth are rendered possible of attainment.

It is evident that without departing from the spirit of my invention, the solid projections may be attached to the body portion of the box instead of to the cover and in Fig. 4 I have illustrated such a construction in which the cover is the same as in Fig. 2 and has a top 7 and resilient depending flange 8, while the body portion 6 of the box has a bead 11 thereon and immediately below this bead are attached the two projections 9', 9'.

To remove the cover from this box the

projections 9', 9' may be struck against a hard object and substantially the same results will occur as to the loosening of the cover and causing the same to move upwardly on the body portion of the box as hereinbefore described in relation to that form of my invention illustrated in Figs. 1, 2 and 3.

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

1. A box having a metal slip cover with a depending resilient flange tightly fitting the body of said box and a rigid, unyielding projection on the periphery of said flange extending partly therearound.

2. A box having a metal slip cover with a depending resilient flange tightly fitting the body of said box and a rigid, unyielding projection of greater thickness than said flange fast to the periphery of said flange and extending partly therearound.

3. A box having a metal slip cover with a depending resilient flange tightly fitting the body of said box and two rigid, unyielding projections on the periphery of said flange diametrically opposed to each other and each extending partly around said flange.

4. A box having a resilient metal body portion and a metal slip cover with a depending resilient flange tightly fitting said body portion and a rigid, unyielding projection on the periphery of one of said parts.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK E. SPRAGUE.

Witnesses:

CHARLES E. CAMPBELL,
F. HOMER WINGATE.