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SHEET METAL BOX.

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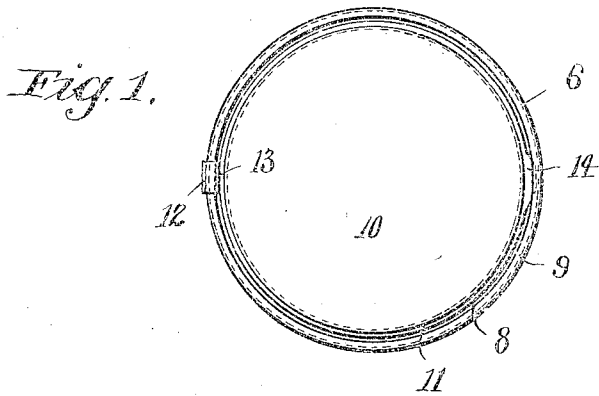


Fig. 2.

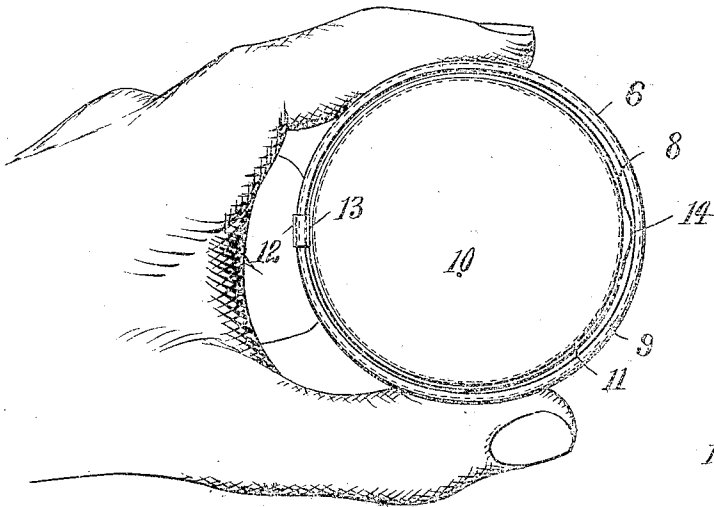


Fig. 5.

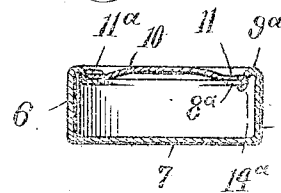


Fig. 4.

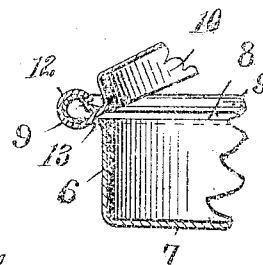
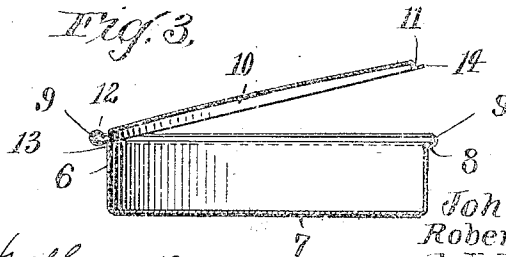


Fig. 3.



Witnesses

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SHEET-METAL BOX.

1,036,284

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JOHN H. LIPPKE, of Waterbury, New Haven county, ROBERT MCK. BABIN, of Oakville, Litchfield county, and JULES MISEREZ, of Waterville, New Haven county, in the State of Connecticut, citizens of the United States, have invented certain new and useful Improvements in Sheet-Metal Boxes, of which the following is a specification.

Our invention relates to a new and useful form of sheet metal box adapted to be used for holding various commodities such as shoe polish, salve and other preparations.

It is the purpose of the invention to provide a simple and inexpensive form of sheet metal box the cover of which will be automatically caught and locked, when closed, and which cover will likewise be thrown open automatically when released; to provide a construction of box, hinge, and cover that will closely inclose the box when the cover is shut down and in such a way that it will readily spring or fly open when released.

With these and other objects in view the invention resides and consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims may be resorted to without departure from the spirit or sacrificing any of the advantages of the invention.

Similar characters of reference denote like or corresponding parts throughout the several figures of the accompanying drawings forming a part of this specification, and upon which,

Figure 1, shows a top plan view of our improved form of sheet metal box, in a closed position. Fig. 2, is a further plan view of the box shown in Fig. 1, but illustrated as contained in a hand, and in the act of having its sides compressed to release the cover. Fig. 3, shows a central vertical longitudinal sectional view through the box, the cover being in a sprung or open position. Fig. 4, shows a slightly enlarged detail sectional view, through the rear portion of the box and illustrating the hinge connection,

and, Fig. 5, shows a central vertical longitudinal section through a modified form of box.

Referring in detail to the characters of reference marked upon the drawings 6 represents the box which as before stated is formed of sheet metal. This box is cylindrical in form and includes a bottom 7 that may be formed integral with the sides as shown. The top edge of the cylindrical side is turned out at a right angle to form an annular ledge 8 and is then rolled over and in to form an annular rib 9 that surrounds the said ledge.

The cover 10 is stamped up from one piece of sheet metal to form a round and slightly domed top having an outwardly disposed annular flange 11. The rear edge of this flange is extended to form a hinge member 12 that is passed through a slot 13 in the ledge and is rolled in and around a portion of the rib 9 in a way to allow the said cover to swing open and shut. In practice the annular flange of the cover fits down tight upon the ledge of the box so as to tightly close the same upon all sides. The forward edge of the flange of the cover includes an extended lug 14 that engages and snaps in under the rib of the box to lock the cover down in place when the same is pressed shut. The pintle of the hinge 12 is arranged slightly below the surface of the ledge 8 of the box so as to slightly spring the metal of the hinge of the cover and cause the cover to snugly engage the said ledge when closed, and to close against the resistance of such spring metal. This condition insures the cover springing open immediately upon being released. The sides of the box are more or less yieldable, and the front portion therefore necessarily yields or springs out slightly to let the lug 14 pass under the rib as shown in Fig. 1. The box may thus readily be opened by releasing the said lug, which is accomplished by slightly pressing the two sides of the box in, between the thumb and forefinger, in the manner indicated in Fig. 2. This obviously tends to spring the box into an oval or elongated shape, as represented in Fig. 2, and thus release the cover which immediately springs open.

In Fig. 5, we have shown a slightly modified form of box, and wherein the hinge 11 is made separate and secured to the box and

cover, the top edge of box including ledge 8^a and rib 9^a is disposed inwardly instead of outwardly. The lug 11^a of the cover is rolled down and inward to yieldably engage the edge of the rib 9^a. The purpose and operation of the box is in all other respects the same as that shown in the other figures.

Having thus described our invention what we claim and desire to secure by Letters Patent is:

1. A cylindrical sheet metal box having its top edge portion rolled to form a rib for the engagement of the cover, said box being flexible and its sides adapted to be sprung in to elongate the body of box from front to rear to disengage the cover, a sheet metal cover hinged to the top of box and adapted to close within the rib and having a flange to tightly engage and close the top edge of box and an extended lip upon the edge of the cover to engage the inner under edge of the rib when the cover is closed and the box is in a normal position.

2. A cylindrical sheet metal box having its top edge portion flared out and rolled to form a ledge upon which the cover closes and means for the engagement of the cover, said box being flexible and its sides adapted to be sprung in to elongate the body of the box from front to rear to disengage the cover, a sheet metal cover hinged to the box and having a flange to tightly engage the ledge and to engage the engaging means of the box when the cover is closed and the box is in a normal position.

3. A cylindrical sheet metal box having its top edge portion flared out to form a ledge upon which the cover closes and rolled in to form a rib for the engagement of the cover said box being flexible and its sides adapted to be sprung in to elongate the body of box from front to rear to disengage the cover, a sheet metal cover hinged to the roll of the top edge and having an annular flange to tightly engage the ledge and an extended lip upon the forward edge of the cover to engage the inner edge of the

rib when the cover is closed and the box is in a normal position.

4. A resilient box having its top edge portion rolled up to form a rib for the engagement of the cover, said box being flexible and its sides adapted to be sprung in to elongate the body of the box to disengage the cover, a cover pivotally attached to the top of the box and adapted to close within the rib, and an extended lip upon the edge of the cover to engage the inner under edge of the rib when the cover is closed and the box is in a normal position.

5. A resilient box having its top edge portion rolled up to form a rib for the engagement of the cover, said box having its sides adapted to be sprung in to elongate the body of the box to disengage the cover, a cover pivotally connected to the top of the box and adapted to close within the rib, and having a flange to tightly engage and close the top edge of the box, and an extended lip upon the edge of the cover to engage the inner under edge of the rib when the cover is closed and the box is in a normal position.

6. A resilient box having its top edge portion rolled up to form a rib for the engagement of the cover, said box being flexible and its sides adapted to be sprung in to elongate the body of the box to disengage the cover, a cover engageable with the box and adapted to close within the rib and tightly engage and close the top edge of the box, and an extended lip upon the edge of the cover to engage the under edge of the rib when the cover is closed and the box is in a normal position.

Signed at Waterbury in the county of New Haven and State of Connecticut this 4th day of October, 1911.

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Witnesses:

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