

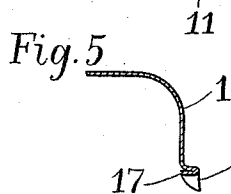
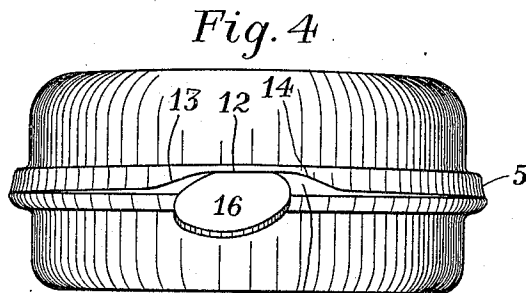
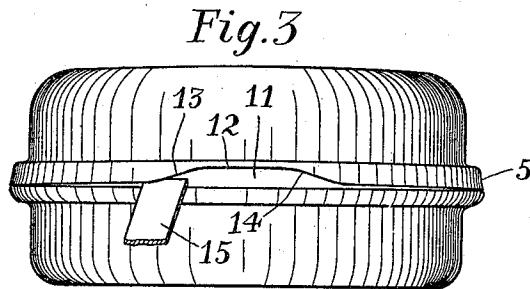
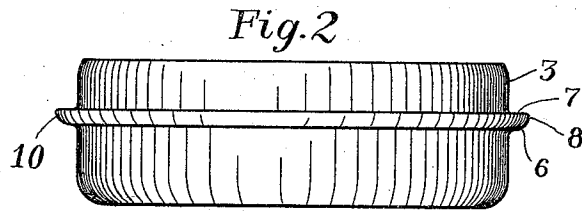
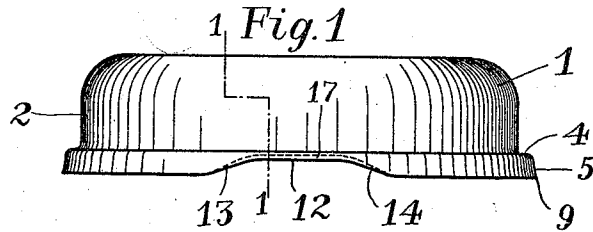
F. H. G. MORSE.

BOX.

APPLICATION FILED NOV. 23, 1909.

1,013,207.

Patented Jan. 2, 1912.



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FRANK H. G. MORSE, OF CAMBRIDGE, MASSACHUSETTS.

BOX.

1,013,207.

Specification of Letters Patent.

Patented Jan. 2, 1912.

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To all whom it may concern:

Be it known that I, FRANK H. G. MORSE, a citizen of the United States, and who resides at the city of Cambridge, Massachusetts, have invented a certain new and useful Improvement in Boxes, of which the following is a specification.

My invention relates to boxes and it has for its object to produce a box that may be tightly closed and yet one that may be easily opened.

It more particularly relates to the opening means of such boxes.

Boxes that are used to contain ingredients which are volatile necessitate that the covers be tightly closed or sealed thereon but it is found to be very difficult to open such boxes. Boxes for containing polish are especially designed to tightly seal the contents when the covers are forced down upon the boxes. The covers are provided with a flange and the boxes are provided with sealing surfaces which are slightly conical and spring the flanges of the covers when the covers are pressed down on the boxes. This tightly closes and seals the boxes and on the other hand it is quite difficult to open the covers. Furthermore such boxes are often enameled and the enamel not only tends to seal the boxes but also prevents the boxes being easily opened. I have provided a means whereby polish boxes, and all other boxes that are covered and closed in substantially the same way may be tightly closed and may be easily opened.

The invention further consists in providing the covers of the boxes with a right angular flaring portion located around the edge of the flange and below the sealing portion of the cover where it comes in contact with the surface of the box and a means whereby pressure may be brought to bear against the cover to open the box.

The invention further consists in providing an opening in the said flaring portion which has an edge opposed to a bead located on the body of the box. An instrument may be inserted in the said opening and the box opened.

The invention further consists in providing slanting ends to the said opening in order that the box may be opened by drawing the instrument around the box and between the edge of the opening and edge of the flange and the beading of the box.

The invention consists in other features

illustrated in the drawing and set forth in the following description.

In the drawings Figure 1 illustrates a side view of the cover of the box. Fig. 2 illustrates a side view of the body of the box. Fig. 3 illustrates the box and one of the methods used in opening the box and Fig. 4 illustrates another method of opening the box. Fig. 5 shows the turned-in edge.

Referring to Fig. 1, 1 is the cover having a flange 2 which is adapted to close upon the contact surface 3 of the body of the box shown in Fig. 2, when the cover is pressed down upon the body of the box. 4 is a right angular flaring portion which extends outward from the flange 2 of the cover. 5 is a portion of the cover of the box which extends at right angles to the said flaring portion 4 and downward, that is, away from the top of the cover of the box.

The body of the box shown in Fig. 2 is provided with a contact surface 3 which is slightly conical and has a rounded surface. This portion of the box is adapted to spring the flange of the cover when the cover is forced upon the body of the box and tends to make the flange to conform to the shape of this portion of the body of the box which tightly seals the box. The flaring portion 4 and the skirt 5 operate to compress the flange 2 against the conical surface 3 inasmuch as the said portions tend to prevent the flange 2 from spreading. This brings the contact surface 3 tightly against the flange 2, the said portions 4 and 5 operating to compress the flange at a point below the contact surface 3. Just below the contact surface there is a beading 6 having a flat top 7 which extends outward from the body of the box. Its edge 8 meets the edge 9 of the skirt 5 of the cover 1, so that the edge 9 rests along the edge 8 and on top of the bead 7, when the cover is forced upon the box. The bead 7 has a rounded surface 10 which extends from the edge 8 to the body of the box and underneath the bead. This rounded surface gives considerable resistance strength to the bead 6, so that when any instrument is used for prying off the cover the rounded portion 10 or the bead prevents bending of the bead 6 and furthermore supports the flat surface. It produces an efficient fulcrum against which an instrument may operate while the cover is being removed. It also supports the edge 8 of the

bead where the greatest pressure is brought to bear.

The box may be opened if it is desired by merely inserting a sharp instrument in between the edge 9 of the skirt 5 and the edge 8 of the bead 6 substantially in the same way that an oyster is opened and the instrument may then be used as a lever to further open the box. The knife or sharp instrument is forced into the crack formed between the skirt of the flange and the top of the bead and then twisted or turned to start the opening of the cover.

The skirt 5 is provided with an opening 11 as shown in Fig. 3. The opening 11 is located a short distance below the flaring portion 4, that is its upper edge is located near the top of the skirt 5, portion 17 being turned back. This leaves the edge 12 turned substantially parallel to the side of the box and at right angles to the top 7 of the bead 6. The opening is of sufficient length so that an instrument, such as a coin 16 may be inserted in the opening and turned as shown in Fig. 4. A knife or similar instrument may be inserted and turned so as to lever the cover off. One portion of the instrument used will press against the edge 12 of the skirt or a point thereon and the other portion will press against the edge 8 of the bead 6 or a point thereon. This arrangement produces two opposing edges which are exceedingly strong and able to withstand the pressure that is brought to bear and gives long life to the combination which permits frequent opening of the box. The opening 11 moreover is provided with slanting ends 13 and 14 which are also opposed to the bead 6 inasmuch as the said ends are located in the skirt 5. In order to start the opening of the box, especially if it has become sealed by reason of the sticking of the enamel, an instrument 15 may be inserted in the said opening and then drawn around the box and between the edge of the cover and the top of the bead. The instrument will wedge tightly between the slanting edge of the opening and the flat top of the bead until the opening of the box at that point is started and as the instrument is drawn around the box it will start the opening of the box as it is moved. This is illustrated in Fig. 3. The box may then be pried off either by inserting the instrument in the opening or by merely turning the instrument at any point between the edge of the skirt 5 and the edge of the bead 6.

The invention may be modified by those skilled in the art. It may be used for opening boxes that are used for any purpose whatsoever and it may be adapted to the use of boxes which have different forms of cover and which are provided with fixed opposing

portions in connection with which instruments may be used for fulcruming or wedging the cover off. I have described and illustrated an embodiment of but one form of the invention.

What I claim as new and desire to secure by Letters Patent is as follows—

1. In a box and a cover, the combination of a flange located on the cover, having a flaring portion, the said flange also having a downwardly extending portion, the said flaring portion having an opening formed by pressing a part of the downwardly extending portion against the flaring portion, the said opening having rounded ends formed by portions of the metal extending inward at the ends and facing the interior of the opening and sloping from the flaring portion to the edge of the flange and forming opposing surfaces to the bead which are adapted to easily direct an instrument inserted in the opening and drawn between the two opposing surfaces to a point underneath the edge of the flange and along the rounded surface of the ends, a bead located on the top of the box and having a portion opposed to the edge of the said flange and to the rounded surface of the ends of the opening whereby the box may be opened by inserting an instrument in the opening and drawing it around the box.

2. In a box and cover the combination of a flange located on the cover having a right angular flaring portion, a part of the said flaring portion extending substantially at right angles to the said flange and a second part of the said flaring portion extending substantially parallel to the said flange, the body of the box having a bead, the said bead having a portion extending under and opposed to the edge of the said right angular flaring portion, the said part of the flaring portion extending substantially parallel to the said flange having an opening, the said opening being bounded on its upper side by a return portion of the flange and at its ends by a sloping portion, the said ends having inwardly extending portions which slope from the return portion to the edge of the said flaring portion forming opposing surfaces to the said bead at the ends of the said opening whereby an instrument may be inserted and easily started around the box and between the edge of the cover and the bead of the box.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

FRANK H. G. MORSE.

Witnesses:

AUGUST N. HEDERSTEDT,
F. M. KETFIELD.