

F. WESTERBECK.
BOX OR CAN.
APPLICATION FILED APR. 16, 1908.

936,841.

Patented Oct. 12, 1909.

Fig. I.

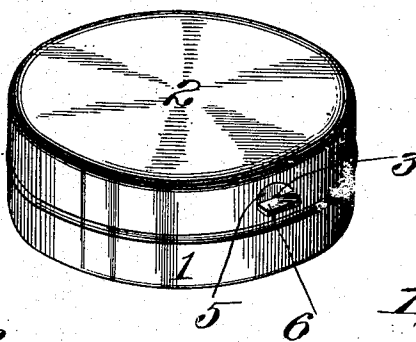


Fig. II.

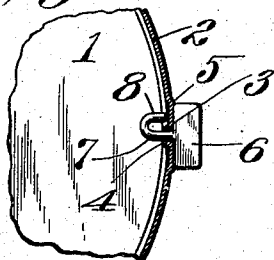


Fig. III.

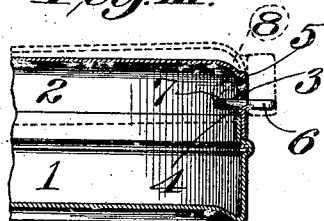


Fig. V.

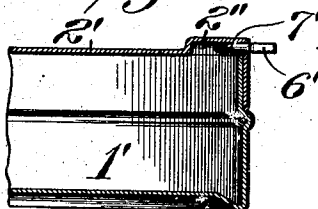


Fig. VI.

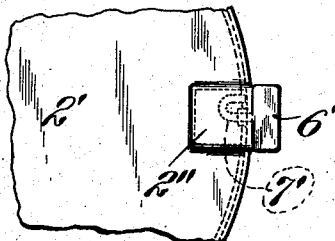


Fig. VII.

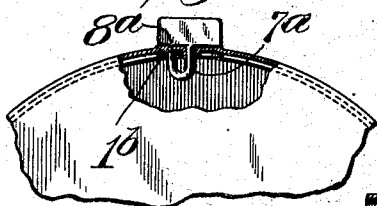
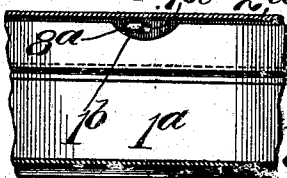


Fig. IV.



Fig. VIII.



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UNITED STATES PATENT OFFICE.

FREDERICK WESTERBECK, OF ST. LOUIS, MISSOURI.

BOX OR CAN.

936,841.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed April 16, 1908. Serial No. 427,324.

To all whom it may concern:

Be it known that I, FREDERICK WESTERBECK, a citizen of the United States of America, residing in the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Boxes or Cans, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification.

My invention relates to sheet metal boxes or cans, and it has for its object to provide a simple and efficient means by which the lids of such boxes or cans may be readily separated from the bodies to which they are fitted.

The improvement is more particularly intended for use in boxes ordinarily employed as containers for shoe blacking, but it may be used in boxes or cans designed to hold various other materials.

Figure I is a perspective view of a sheet metal box constructed in accordance with my improvement. Fig. II is a horizontal section taken through the box shown in Fig. I at the location of the lid lifting device. Fig. III is a vertical cross section through the box shown in Fig. I. Fig. IV is a perspective view of the lid lifting device separate from the box with its stem illustrated in full lines as it appears before it is applied to the box, and in full lines and dotted lines, as it appears after it is applied to the box and put in condition for service. Fig. V is a vertical section of a box with the lid lifting device shown in a different location from that in which it appears in the construction illustrated in Figs. I to III inclusive. Fig. VI is a top or plan view of a fragment of the box shown in Fig. V. Fig. VII is in part a top or plan view, and in part a horizontal section of another varied location of the lid lifting device. Fig. VIII is a vertical section taken through the box shown in Fig. VII.

In the accompanying drawings: 1 designates the body of a sheet metal box, and 2 the lid of said box. The body of the box, as shown most clearly in Fig. VII does not extend to the top of the lid when the parts are assembled, and consequently the flange of the lid is in part located above the upper edge of the wall of the box body. To provide for the application and operation of my lid lifting device, I produce in the flange

of the box lid a perforation 3 around which, at the interior of the flange, is a bearing neck 4 that may be produced by punching the material of the flange inwardly when the perforation 3 is formed. Around the perforation 3 is a flat and outwardly projecting boss 5.

6 designates the handle or finger piece of my lid lifting device, and 7 is the stem of said device which projects through the perforation 3. The lid lifting device is originally produced as seen in Fig. IV, so that the stem extends in a straight line from the handle, in order that it may be readily inserted through the perforation 3 in the flange of the box lid. Then, after the stem has been so introduced, its free end is bent backwardly toward the handle 6 to provide a lever arm 8 which will occupy a position over the upper end of the box body wall to impinge against the edge of said box body wall when the handle 6 is turned in either one direction or the opposite direction. It will be seen that by rotating the handle 6 while it is held between the fingers of a person's hand, the stem 7 may be so rotated that the lever arm 8 will press against the upper end of the box body wall and by fulcruming thereon, the lid of the box will be caused to be separated from the body of the box, due to the stem of the lid lifting device having a fixed pivotal mounting in the flange of the lid and the wall of the box body offering resistance to the rotation of the lever arm of the stem 7.

In the operation of the lid lifting device, the neck 4 at the interior of the lid flange affords an elongated bearing for the stem 7, and the flat boss at the exterior of the lid flange affords a flat bearing for the handle 6, thereby preventing the lid lifting device from wobbling, so that the lever arm 8 is maintained in its proper position above the upper edge of the box body wall.

In Figs. V and VI, I have shown a variation in the positioning of my lid lifting device, whereby it is rendered applicable to boxes or cans in which the body walls extend to the tops of the lids that are applied to them. In this construction the lid 2' is provided at its top with a bulge 2'', thereby providing a pocket in which the stem 7' of the lid lifting device may be located to be present above the upper edge of the wall of the box body 1'. In the varied form illustrated in Figs. VII and VIII, the wall of

the box body 1^a extends to the top of the lid 2^a, and the box body wall is provided at its upper end with a notch 1^b adapted to receive the stem 7^a and its lever arm 8^a, in
5 order that the lever arm may be rotated in engagement with the upper end of the box body wall, notwithstanding the fact that said box body wall extends in the main to a position immediately beneath the box lid.

10 I claim:

1. The combination with a box or can body, and a lid fitted to said body, of a single piece lid lifting device comprising a handle at the exterior of the lid, and a stem
15 extending from said handle through said lid; said stem being provided within the lid with a lever arm bent laterally and backwardly relative to the stem and toward said

lid across the upper edge of the box or can body, substantially as set forth. 20

2. The combination of a box or can body, a lid fitted to said body and provided with a perforation surrounded by an inwardly extending neck, and a lid lifting device comprising a handle, and a stem; said stem extending directly through said lid from said
25 handle, being rotatably seated in said perforation and neck and being provided with a backwardly bent lever arm extending toward said lid across the upper edge of the
30 box or can body wall, substantially as set forth.

FREDERICK WESTERBECK.

In the presence of—

LILY ROST,

BLANCHE HOGAN.