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SARDINE CAN.
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SARDINE-CAN.


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To all whom it may concern:

Be it known that I, WILLIAM E. TAYLOR, a citizen of the United States, residing in Eastport, in the county of Washington and State of Maine, have invented a new and useful Improvement in Sardine-Cans, of which the following is a specification.

My invention relates to improvements in sheet metal cans for sardines or other articles.

The object of my invention is to provide a sheet metal sardine can of a simple and efficient construction, adapted to be rapidly and cheaply manufactured, and to have its cover soldered on the body after the can is filled without danger of producing leaks in the soldering operation, or of scoring or injuring the contents of the can, and which also may be conveniently opened.

My invention consists in the means I employ to practically accomplish this object or result, the same comprising certain novel constructions of parts and devices and novel combinations of parts and devices herein shown and described and more particularly specified in the claims.

In the accompanying drawing forming a part of this specification, Figure 1 is a perspective view of a sheet metal can for sardines or other articles embodying my invention. Figs. 2, 3 and 4 are sections on lines 2--2, 3--3 and 4--4 respectively of Fig. 1. Fig. 5 is a plan view of the body of the can before the cover is seamed and soldered thereto. Fig. 6 is an enlarged section on line 6--6 of Fig. 5.

In the drawing, 1 represents the body of a sheet metal sardine can embodying my invention, the same being preferably a one piece seamless, drawn of generally rectangular shape with rounded corners 2 uniting its upright sides 3 with its upright ends 4. The integral bottom 5 of the body is preferably upwardly paneled or countersunk, the marginal walls 6 of the countersink serving to materially strengthen the body.

The can body 1 is provided at its upper end with an outstanding or right angle seam flange 7. This seam flange 7 of the body has relatively wide portions 8 at the transverse and longitudinal sides of the can body and relatively narrow portions 9 at the four rounded corners of the can body.

The outstanding or right angle seam flange 7 of the can body is provided with a solder film or coating 10 on its upper surface, this coating being fusible united to the tin coating surface of the can body flange at the factory where the can is manufactured and before the can is filled or the cover applied thereto.

The purpose of this solder coating 10 is to enable the seam flange of the cover to be soldered or fusibly united to the seam flange of the can body by a simple fusing operation or subjection of the seam flanges of the can body and cover to the necessary heat to fuse the solder film or coating 10.

The cover 11 which is of tin plate, the same as the body of the can, is provided 70 with a marginal seam flange 12 to fit flat against and in snug metal to metal contact with the solder coated seam flange of the can body. The cover 11 is also provided with a downwardly extending registering wall 13 adapted to fit snugly within the upper end or mouth portion of the can body to register the cover in position on the can body. This registering wall 13 may preferably be formed by providing the cover with a downwardly projecting bead 14 instead of by countersinking the cover.

The relatively wide portions 8 of the seam flange 7 at the longitudinal and transverse sides of the can body are folded over the seam flange 12 of the cover after the can has been filled and the cover applied, thus firmly clamping and holding the seam flange of the cover in tight close metal to metal contact with the solder coated seam flange 7 of the can body. As the fold 15 of the can body seam flange 7 firmly embraces the seam flange of the cover for the greater portion of its extent, that is to say, excepting at the rounded corners, the seam flange of the cover is very firmly clamped to the seam flange of the body during the soldering or fusing operation, and thus enables the cover and body to be soldered together by perfect hermetically tight solder joints or seams free from pin holes or leaks, and this with certainty and uniformity. And as the seam flanges of the body and cover are outstanding or outwardly projecting, the same may be subjected to the necessary heat to effect fusing of the solder without danger of scoring or injuring the contents of the can.

To enable the can to be readily opened by rolling off the cover by means of a key in...
the manner of an ordinary roll top can, I provide the cover at one corner thereof with a projecting lip or tongue 16, which is preferably folded down against the upright wall of the body and under the outwardly projecting seam flange 7 at the narrow rounded corner portion 9 thereof, as will be readily understood from Figs. 1 and 4 of the drawing.

As the seam flange of the can body is cut away or narrowed at the rounded corners of the can body, and as the seam fold 15 of the can body flange does not embrace the cover flange at the rounded corners of the can, but only at the transverse and longitudinal side portions of the can body, the can is thus adapted to be readily opened by rolling the cover about a key without the necessity of providing the cover with any scores or weakened lines. The cover, however, may, if desired, be provided with a marginal score or weakened line extending from the side edges of the key lip or tongue 16.

After the can has been filled with fish or other articles and the cover has been applied and the outer fold portions 15 of the can body seam flange 7 folded upwardly over and around the outstanding seam flange 12 of the cover 11, thus firmly clamping the seam flanges of the body and cover together and holding the same in close metal to metal contact, the cover is then soldered to the body, preferably by application of heat to the outstanding seam flanges of the cover and body, thus fusing the solder film or coating between said seam flanges and thereby forming a hermetically tight soldered seam or joint.

In practising my invention, it is preferred to provide the upper surface of the seam flange of the body with a coating of solder fusedly united thereto before the can is filled as I consider this preferable either to coating the under surface of the seam flange of the cover with the solder or to applying molten solder to the seam flanges of the body and cover during the soldering or heat application operation. In my invention, however, the cover may be soldered to the can body in any known or suitable way.

As the outstanding seam flange of the can body has relatively narrow portions at the rounded corners of the rectangular sardine can, and as these relatively narrow portions are not folded or clenched upward over and around the outstanding seam flange of the cover, this obviates all tendency to cramp the corners of the can, and also all tendency to separation between the seam flanges of the body and cover at the rounded corners, such as would be liable to result if it were attempted to fold a body flange of even width upwardly over and around the cover flange at the rounded corners of the can as well as at the transverse and longitudinal sides thereof. The cover clamping folds 15 of the can body flange at the transverse and longitudinal sides of the can body serve to hold the portions of the seam flanges of the body and cover at the rounded corners in close metal to metal contact, as well as at the longitudinal and transverse sides of the can body, as the extent of the seam flanges at the rounded corners of the can are relatively short.

In my invention also, the narrowing of the seam flange of the body at the rounded corners of the drawn can body also results in material saving of stock, as it materially increases the size of the scrap portions of tin plate between the corners of adjacent cans cut and drawn from the sheet of tin plate.

I claim:

1. In a sheet metal can, the combination with a rectangular can body having longitudinal and transverse upright sides and rounded corners and provided at its mouth end with an outstanding seam flange having relatively wide portions at the longitudinal and transverse sides and relatively narrow portions at the rounded corners of the can body, of a roll top sheet metal cover having an outstanding relatively narrow seam flange corresponding to the relatively narrow portions of said body flange, the relatively wide portions of the can body flange having folds embracing the cover flange, said cover flange having an integral tongue folded under the relatively narrow portion of the body flange at one of the rounded corners of the can, substantially as specified.

2. In a sheet metal can, the combination with a can body having an outstanding integral seam flange extending at substantially right angles to the sides of the can, said flange having relatively wide and narrow portions, of a roll top cover provided with a tongue and having an outstanding seam flange of substantially uniform width around the entire edge, the cover flange and narrow portion of the body flange being substantially of the same width and soldered together entirely around the can, the wider portion of the body flange being bent over and around the cover flange, whereby the folded over wide portion of the body flange is adapted to firmly clamp and hold the cover and body seam flanges in close metal to metal contact and assist in preventing the same from springing apart, substantially as specified.

3. In a sheet metal can, the combination with a drawn rectangular can body having rounded corners and having an integral outstanding seam flange provided with a narrow and wide portions, the narrow portion being located at one corner of the can body, of a rectangular roll top cover having
an outstanding seam flange, said flange and having also an outstanding seam flange, being soldered together, the cover being said seam flanges being soldered together provided with an integral tongue at each corner of the box and folded down and over substantially the same width at the corners.

said narrow portion of the body seam flange, one of said flanges having wide portions of the body seam flange, being folded up and over the cover seam flange whereby the folded over portions of the tongue and flanges are adapted to firmly clamp and hold the cover and body seam flanges in close metal to metal contact and assist in preventing the same from springing apart, substantially as specified.

4. In a sheet metal can, the combination with a rectangular can body having an outstanding integral seam flange, of a rectangular roll top cover provided with a tongue...