J. HENDERSON.

Sheet-Metal Can.

No. 217,532. Patented July 15, 1879.

Fig. 1.

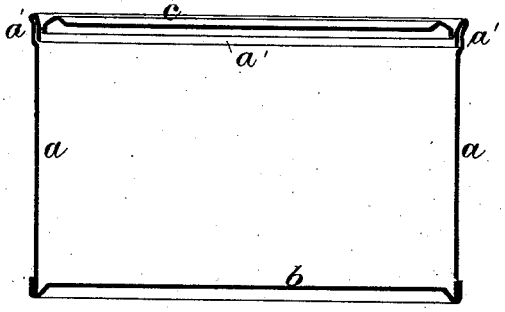


Fig. 2.

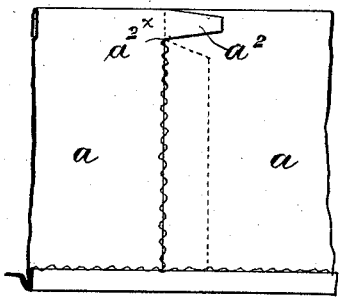


Fig. 4.

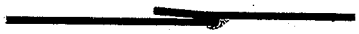


Fig. 5.

Fig. 3.

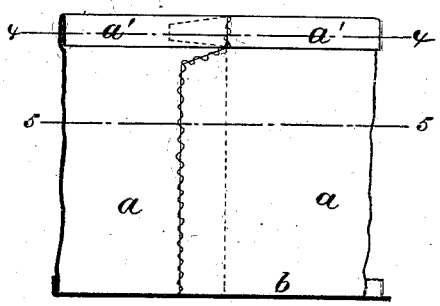


Fig. 6.

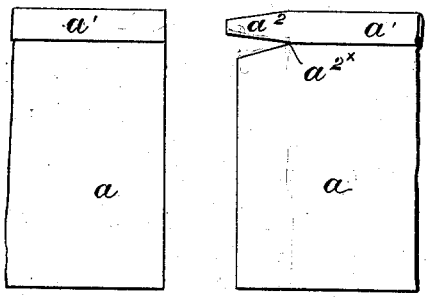


Fig. 7.

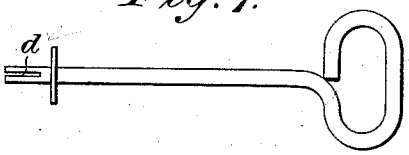


Fig. 8.

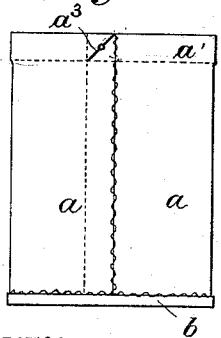
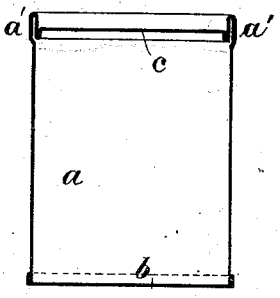


Fig. 9.



WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES HENDERSON, OF NO. 263 COMMERCIAL ROAD, PECKHAM, COUNTY OF SURREY, ASSIGNOR TO THOMAS FRANCIS BLACKWELL AND EDMUND MEREDITH CROSSE, OF SOHO SQUARE, COUNTY OF MIDDLESEX, ENGLAND.

IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. **217,532**, dated July 15, 1879; application filed April 8, 1879.

To all whom it may concern:

Be it known that I, JAMES HENDERSON, of No. 263 Commercial Road, Peckham, in the county of Surrey, England, gentleman, have invented new and useful Improvements in Cases or Cans for Containing Preserved Meats and other articles, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

This invention has for its object improvements in cases or cans for containing preserved meat and other articles.

In order that such cases or cans, which are made of thin tinned iron, may be easily and neatly torn open to obtain access to the contents, I double inward the edge of the sheet of metal which forms the rim or upper edge of the body of the case or can, and in soldering up the side I leave this doubled edge or rim unsoldered on the outside of the case or can; but on the inner side I complete the soldered joint to the top. The cover of the case or can is also soldered in, still leaving free the outer end of the double rim.

When it is desired to open the case or can the free end of the rim is taken hold of by any instrument which may be at hand, and when it is pulled the doubled rim tears off and separates from the cover. The direction which the tear takes is controlled by the strip of metal which is doubled inward, the lower edge of which, as it were, cuts through the metal forming the body of the can or case. The depth to which the metal is doubled is such that the tear takes place immediately beneath the cover.

Sometimes, when the cans or cases are intended to hold liquids, I insert the cover to some distance below the top of the rim and provide a socket or opening through the outer overlapping end of the double rim, and it is then unnecessary to leave a free end, as with this construction the end can be readily laid hold of by a suitable instrument, and the end started to provide the free end, even when the solder-joint is completed to the top on the outer as well as upon the inner surface of the body of the case or can.

In order that my said invention may be most fully understood and readily carried into effect, I will proceed to describe the drawings hereunto annexed.

In the drawings, Figure 1 is a vertical section of a case or can for containing preserved meat or the like. Fig. 2 is a front elevation of a portion of the can. Fig. 3 is a view of the interior in elevation, showing the reverse of the side illustrated by the preceding view. Fig. 4 is a horizontal section through the double rim and free end on the line 4 4 of Fig. 3. Fig. 5 is a similar section on the line 5 5 of Fig. 3. Fig. 6 represents slightly apart the portions of the can which lap in its formation to provide the vertical seam. Fig. 7 shows the opening-instrument. Figs. 8 and 9, respectively, show an elevation and a vertical central section of a can for liquids.

The wave-like lines or scrolls in the figures represent solder, and in Figs. 4 and 5 the soldered parts are represented by groups of dots.

a a show the cylindrical body, and a^1 is the margin of the strip of tin-plate of which the body is formed doubled inward, so that the edge of the metal is brought to the position at which it is desired that the body of the case should tear in opening. a^2 is the free end left to this doubled rim or edge, the soldering of the exterior of the body being carried up only as far as $a^{2\times}$; but within the case or can the soldered joint is completed to the full length of the body. The free end a^2, which also is of the double thickness, is, as the drawings show, cut sufficiently long to admit of its being taken hold of by any instrument which may be at hand.

b and *c*, the bottom and top of the case or can, are soldered to the body in the usual manner.

Fig. 7 shows a convenient opening-instrument, to which, however, no claim is made; and these cases or cans may be opened by any instrument capable of taking a firm hold on the free end a^2.

When the instrument or key shown in Fig. 7 is used the free end a^2 is introduced into the notch at d^2, and, the tool being then turned

round and round, the doubled rim is wound up upon it and neatly torn from the remainder of the body, leaving the case or can open.

Instead of the projection or free end a^2 being of the double thickness, as shown, and as preferred, it may be of single thickness only, forming a lip-like continuation of the inner portion or folded-down part of the rim.

Fig. 8 is an elevation, and Fig. 9 is a vertical section, of a case or can with a sunken cover. It is adapted to contain liquids, as it opens immediately below or at the level of the cover-bottom, so that, although completely full, scarcely any of the contents will be spilled in opening.

As thus modified there is no prominent free end or lip of the doubled margin a^1; but the end is rendered readily detachable for the purpose of commencing the tear by forming a slit, a^3, in the outer part or overlapped portion of the double rim from the top down to the level of or very slightly beneath the plane of the bottom of the cover *c*. In this form the soldered joint is completed for the full length of the body, on the outside as well as within. The small opening at the center of the slit serves to enter a tool for forcing out the end, and then the case or can is opened, in the manner already described, by taking firm hold of the freed end with any convenient instrument, and by a sufficient strain upon it tearing off the doubled rim or edge of the body all around.

Having thus described the nature of my said invention and the manner of performing the same, I would have it understood that I claim—

In cases or cans for containing preserved meat and other articles, the doubled rim or edge to the body, having an end free or unsoldered, or readily detachable, substantially as and for the purpose herein set forth.

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