

W. C. MCGILL.
Sheet-Metal Boxes.

No. 160,834.

Patented March 16, 1875.

Fig. 1

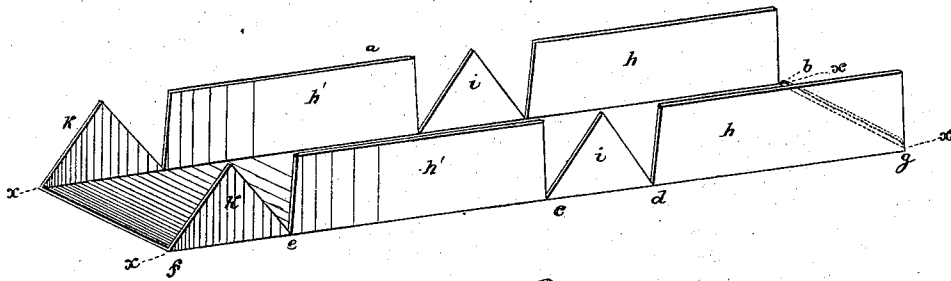


Fig. 2.

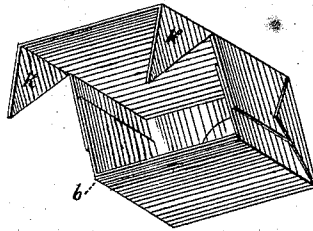


Fig. 3.

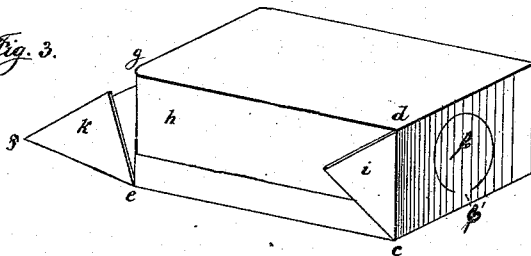
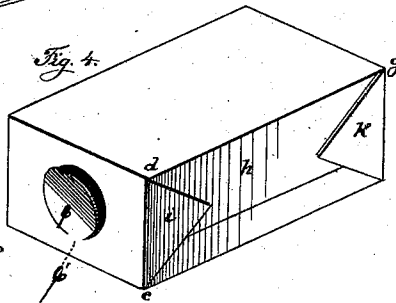


Fig. 4.



WITNESSES:

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WILLIAM C. MCGILL, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN SHEET-METAL BOXES.

Specification forming part of Letters Patent No. **160,834**, dated March 16, 1875; application filed February 2, 1875.

To all whom it may concern:

Be it known that I, WILLIAM C. MCGILL, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Metallic Boxes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in metallic boxes constructed from a sheet of metal; and it consists in certain particulars of construction herein described and claimed.

In the drawings, Figure 1 shows a sheet of metal formed in accordance with my invention. Fig. 2 shows the sheet folded by the die, and Figs. 3 and 4 show the box with opening in end.

a is the sheet of metal, oblong in form. It has the short extension or lip *b* on one end, projecting from that portion which composes one of the broader sides of the box. It is marked off into two equal parts at *c*, and into sections at *d* and *e*. The sections *c d* and *e f* are equal, and the sections *d g* and *c e* are equal. I also mark off the central portion by the lines *x x x x*, equal to the width I desire the box. The portions lying without these longitudinal lines compose the sides of the box.

The sheet, being thus marked off for convenience, is, by machinery adapted to the purpose, cut in the form shown, the two halves, as pointed off at *c*, being constructed exactly alike. Triangular portions are cut out of the outer portions of the sheet, so as to form the rectangular wings *h h'* and the conical wings *i k*. In the formation of the sheet, as above described, with the same machinery by which the cutting is done, I turn said wings and the lip *b* to a right angle with the main part of the sheet, as shown.

The sheet, being thus formed, is placed in other machinery adapted to the purpose, and

by means of a die fitting down on the section *c d* the sheet is pressed into the form shown in Fig. 2, with the circular cap cut out of the central part of the section *c d*. The cap *C* is not cut entirely out, but is retained by the small portion *C'*. In cutting, the surrounding metal is slightly pressed out in a short flange. The die is pressed down against it, and flattens this short flange, and slightly draws out the metal, so as to reduce the size of the opening from which the cap was taken, so that the cap will fit down over and close said opening, and afford facilities for soldering the cap to the box. The die used in forming the box, as shown in Fig. 2, is readily removed, the two parts of the box being readily pressed apart to permit the removal thereof. The section *e f* is turned down, and its outer end, by means of implements suitable for the purpose, is inserted under the lip *b*, where it is held. The lip *b*, extending down over the section *c d*, affords ample facilities for soldering, and at the same time gives greater strength to the box.

When formed in the manner hereinbefore described, the box will present the appearance shown in Fig. 4. The rectangular wings *h h'* overlap and form the sides of the box. The sections *d g* and *c e* form the top and bottom or broader sides, and the sections *c d* and *e f* form the ends of the box, while the wings *i k* extend well down on the wings *h h'*, so that, when soldered, a strong and substantial airtight can or box, suitable for the preservation of oysters or fruits, is provided.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

A box constructed of a single piece of metal, cut and folded as shown and described, and provided with the cap *C*, as set forth.

In testimony that I claim the foregoing as my own, I hereto affix my signature in presence of two witnesses.

WM. C. MCGILL.

Witnesses:

A. P. LACEY,
R. S. LACEY.