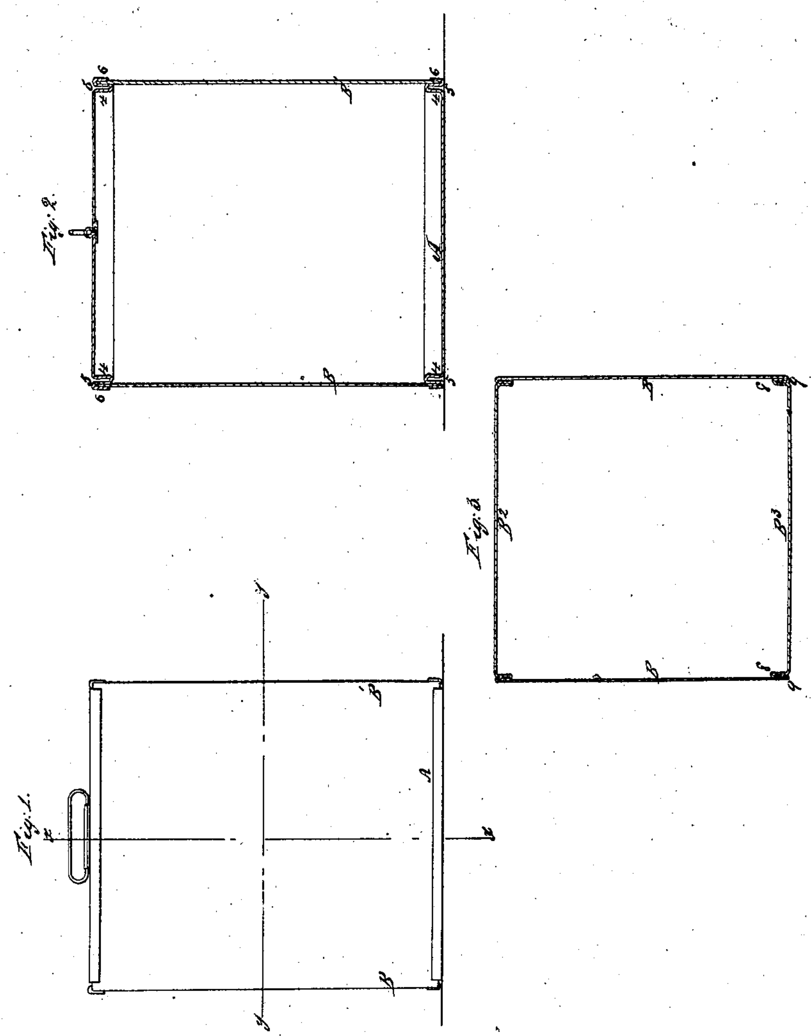
E. T. Corell

Metal Can.

No. 52,972 Patented Mar. 6, 1866.



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UNITED STATES PATENT OFFICE.

EDWARD T. COVELL, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN SHEET-METAL CANS.

pecification forming part of Letters Patent No. **52,972**, dated March 6, 1866.

To all whom it may concern:

Be it known that I, EDWARD T. COVELL, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in the Construction of Sheet-Metal Cans and Boxes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is an elevation of a metallic can constructed in accordance with my invention. Fig. 2 is a central vertical section in the line *x x*, and Fig. 3 a central horizontal section in the line *y y* of Fig. 1.

Similar letters indicate like parts in each of the figures.

The nature of my improvement consists in uniting the top, bottom, and sides of a metallic can, pail, or box by means of an outward and inward hook-shaped flange so formed along the edge of any one piece as to be in a right line with and readily receive and embrace the simple straight edge of the next adjacent piece when said adjacent piece is placed at the necessary angle with the first required in the construction of the vessel, and also in so turning or folding inward to an angle with its surface a hook-shaped flange formed upon the edge of any one piece as that it will receive and embrace the inwardly doubled or folded edge of the next adjacent piece when this adjacent piece is in such proper position relative to the first as to give the can its desired rectangular or other form.

In Figs. 1 and 2 of the accompanying drawings, A represents the bottom of a sheet-metal can having hook-shaped flanges turned outwardly upon the upwardly-bent edges thereof to receive the lower straight edge of the sides B B′ B B³ of the can. The form of the improved joint which I thus obtain, and which is illustrated in Fig. 2, is peculiarly useful in uniting the top or bottom with the sides of the can, and is adapted to cylindrical as well as angular forms of vessels.

By means of swaging plates or dies the edges of the bottom plate are stamped in the form indicated in the drawings, viz: The edge is first bent upward with an outward inclination, as seen at 4, Fig. 2, then downward in a line, 5, at right angles with the sheet A, so far as to make the next bend, 6, by which the edge is turned sharply upward in a direction parallel with its last, even with the surface of the plate. A channel or groove is thus formed along the edge of the plate, extending above its surface at a right angle or other suitable inclination thereto, to receive the straight edge of the adjacent piece or plate B. By this form of joint the edges of the side plates or pieces, B B′ B², &c., are so securely locked and held in the embracing grooves formed to receive them as that they cannot be loosened or forced out by any ordinary pressure thereon, while at the same time they are very readily secured by solder, so as to make a perfectly tight joint. The center of the flanged bottom piece, A, is with this joint left upon a level with the projecting edges of the flanges forming its rim, so that these edges are relieved from the weight of the can when filled and are protected from the liability of being crushed in by such weight, which would result in a break of the seam and joint.

In Figs. 1 and 3 the form of joint which I prefer for the sides of the can, but which may also be used in uniting the top and bottom pieces therewith, is illustrated. It consists of a simple hook-shaped flange, 8, so bent inward at right angles to the surface of the plate or sheet B³ as to receive an ordinary inwardly-turned flange, 9, upon the edge of the next adjacent piece, B. A strong and secure lock-joint is thus obtained, which is very readily soldered and leaves a neat finish at the corners of the can.

Having thus fully described my improvements in the construction of sheet-metal cans, what I claim therein as new, and desire to secure by Letters Patent, is—

Uniting the top, bottom, and sides of a metallic pail, box, case, or can, with or without solder, by means of folded joints or seams constructed as herein described, and retaining and securing the adjacent edges of the several plates or pieces forming the can substantially in the manner herein set forth.

EDWARD T. COVELL.

In presence of—
JAMES I. BALLARD,
JAMES GRATING.