

No. 662,447.

Patented Nov. 27, 1900.

C. LEFFLER.
SHEET METAL CAN.

(Application filed Jan. 8, 1900.)

(No Model.)

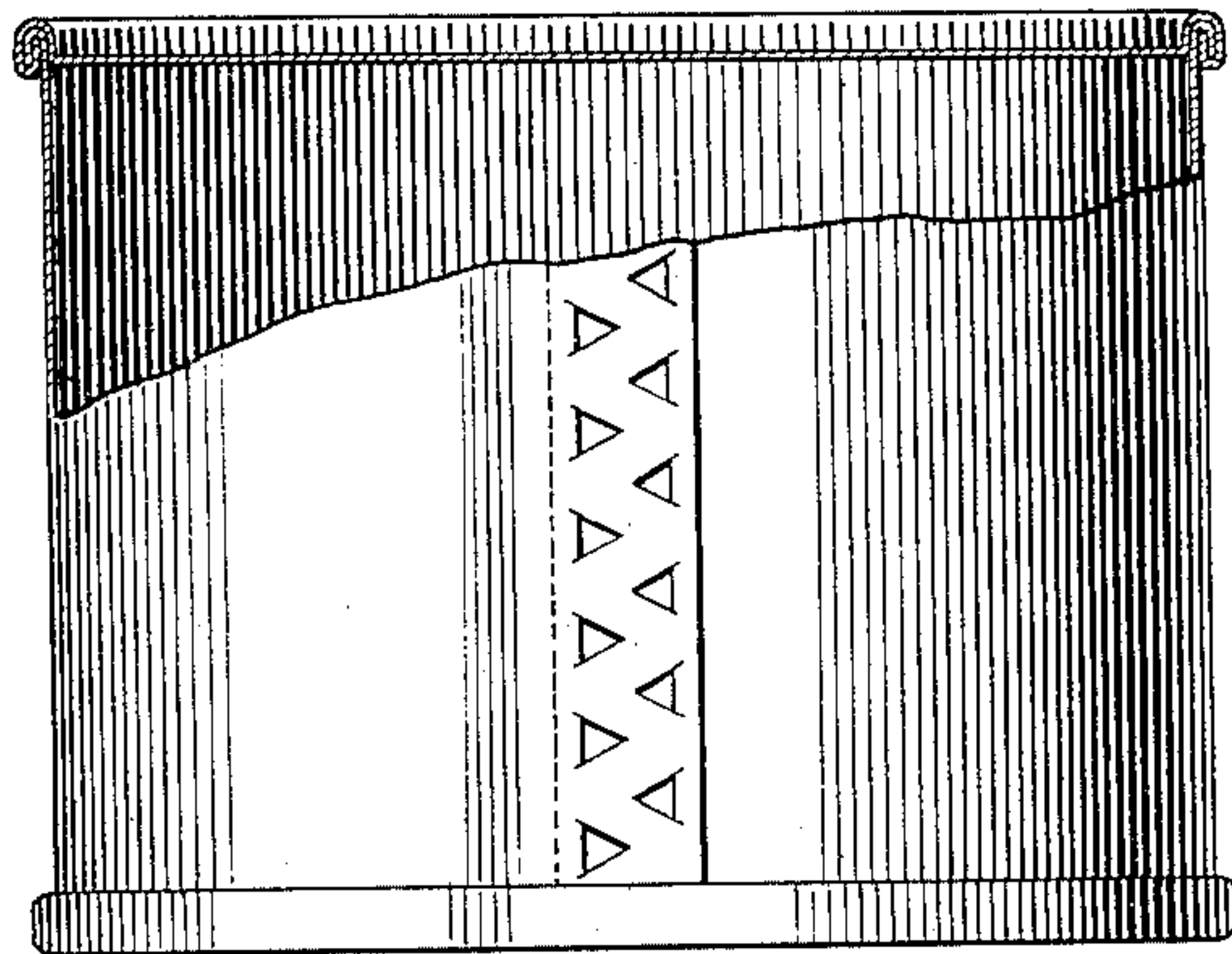


Fig. 1.

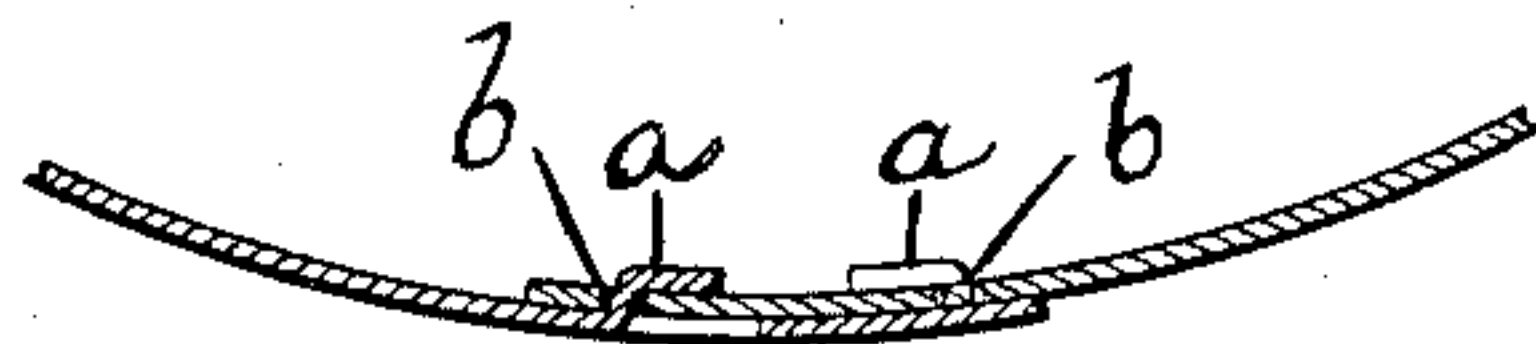
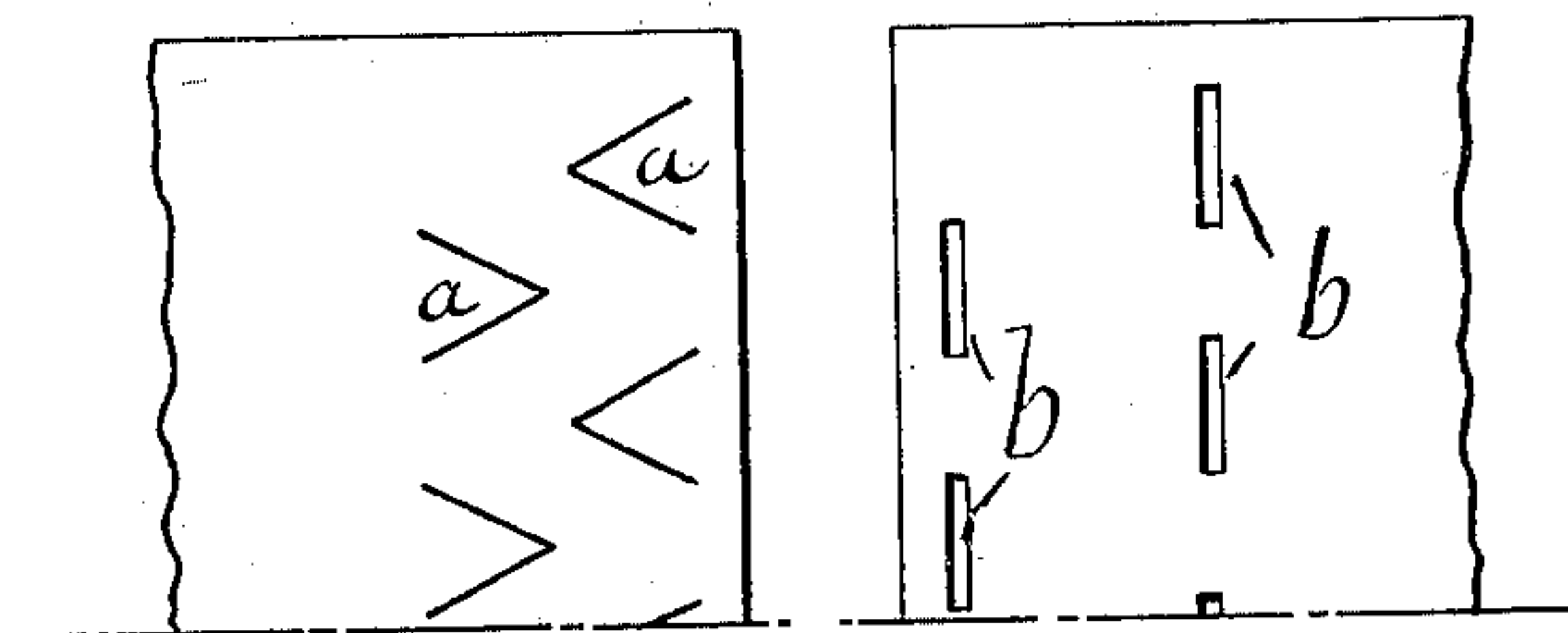


Fig. 2.



WITNESSES:

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Fig. 3.

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SHEET-METAL CAN.

SPECIFICATION forming part of Letters Patent No. 662,447, dated November 27, 1900.

Application filed January 8, 1900. Serial No. 697. (No model.)

To all whom it may concern:

Be it known that I, CHARLES LEFFLER, a citizen of the United States, residing at the city of New York, borough of Brooklyn, State of New York, have invented certain new and useful Improvements in Sheet-Metal Cans, of which the following is a full, clear, and exact description.

This invention relates to the manufacture of tin and other sheet-metal cans, the object being to provide a way of forming seams which will dispense with solder, avoid excessive thickness at the seams, and be simple and cheap to construct.

A seam formed according to my invention consists of a simple lap-joint the parts of which are secured by punched burs in one side fitting into suitable and corresponding perforations in the other and clenched in a peculiar manner, a suitable cement for hermetically sealing being interposed between the parts when desirable.

Soldered can-joints often act deleteriously upon the contents of the can, while the well-known "double seam" is so thick that where two joints cross each other it is difficult to make them tight.

In the accompanying drawings, Figure 1 is a side elevation of a can, partly in section, showing a seam formed according to my invention. Fig. 2 is an enlarged section on line $x x$ of Fig. 1, and Fig. 3 is an enlarged view of the two parts of the seam when separated.

The seam to which my invention particularly refers is the vertical seam in the side of the can. To form it, one of the two abutting ends is provided with two vertical rows of burs a , each bur being formed by a punch which cuts two sides of a triangle, the apex of which is bent nearly at right angles to the face of the sheet, the bend occurring along the uncut side of the triangle, the apexes of the burs in one row facing those in the other and the burs in one row being opposite the spaces between the burs in the other row. In the other abutting end are formed two rows of short slits b , each of which is adapted to receive one of the angular burs a , in which said bur makes a tight fit. The burs

are all to be inserted into the slits at the same time, and by a rolling or hammering process the tips of the burs are turned over to clench them on the inside or outside of the can, the clenched ends in the two rows being preferably turned toward each other to grasp the body of the sheet between the two rows; but my invention is not limited to clenching the burs toward each other, as good results can be obtained by turning them outward. When this clenching operation is neatly accomplished with a sufficiency of pressure, the joint produced is sufficiently tight to hold liquids, and, indeed, may be hermetically tight; but for absolute security a little cement of suitable character may be applied to the parts of the joint before they are brought together.

It is essential to have the burs in a staggered relation in the two rows in order to obtain a tight joint. A single row of burs will not make a tight joint; neither will a double row in which the burs occur opposite each other.

A can with such a side seam is well adapted for a "double" seam between the body and head, such as shown in Fig. 1, because the two superposed layers can be readily folded in conjunction with the head-seam to form a tight joint. A soldered side seam can also be made to tightly join with the head-seam; but, as before stated, the solder is objectionable.

Having described my invention, I claim—

A joint or seam for sheet-metal cans, consisting of the two abutting parts one of which is provided with a plurality of rows of punched burs, the burs in one row being opposite the spaces between the burs in adjacent rows; and the other part provided with corresponding rows of perforations, the burs on the one part being inserted through the perforations of the other, and clenched, substantially as described.

In witness whereof I subscribe my signature in presence of two witnesses.

CHAS. LEFFLER.

Witnesses:

WM. A. ROSENBAUM,
GEO. S. KENNEDY.