

(No Model.)

C. E. PIERCE.

ALL METAL SEAM FOR SHEET METAL VESSELS.

No. 508,237.

Patented Nov. 7, 1893.

FIG. 1.

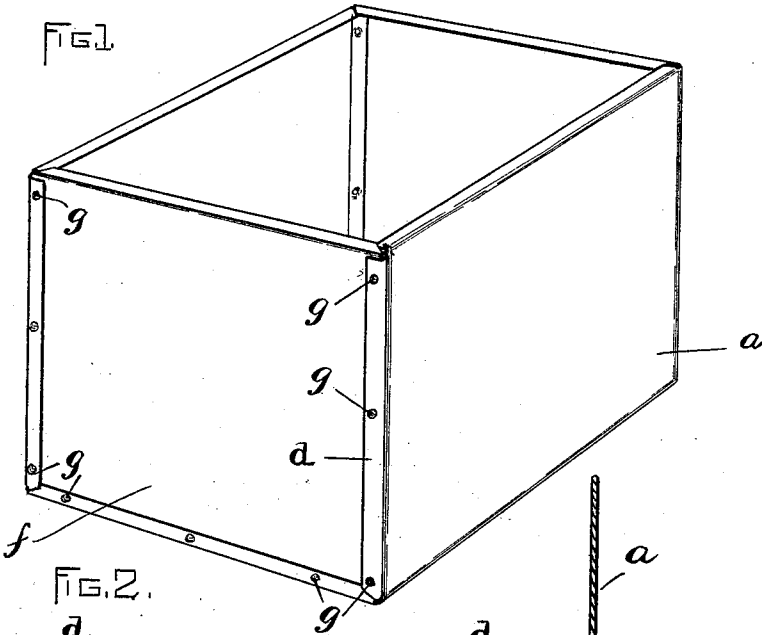


FIG. 2.

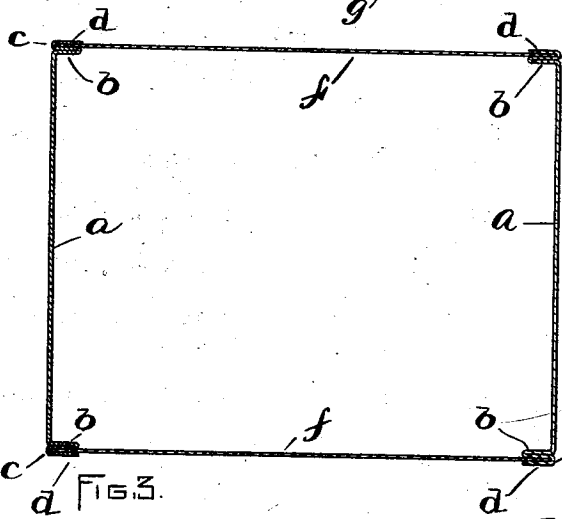


FIG. 3.

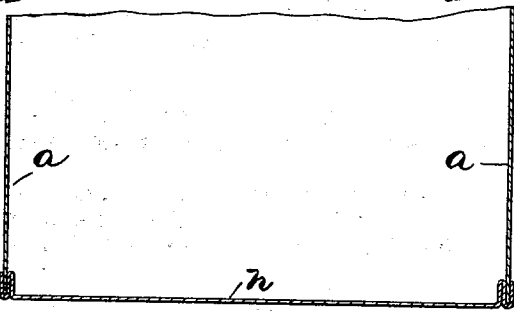


FIG. 4.

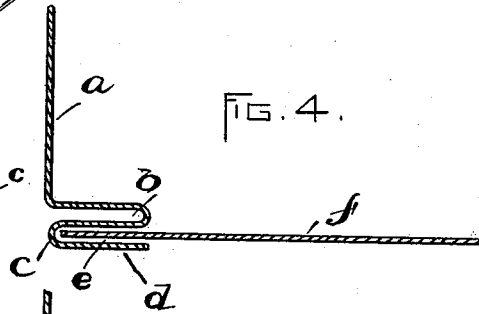


FIG. 5.

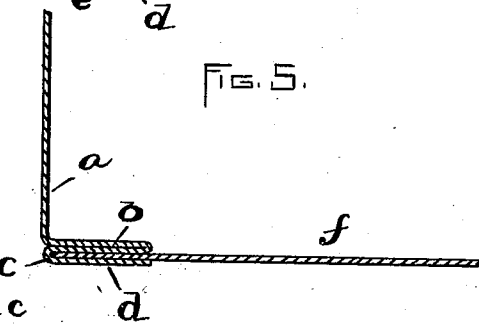
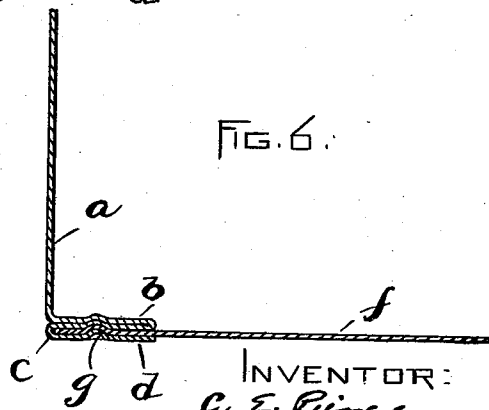


FIG. 6.



WITNESSES:

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CHARLES E. PIERCE, OF CAMBRIDGE, MASSACHUSETTS.

ALL-METAL SEAM FOR SHEET-METAL VESSELS.

SPECIFICATION forming part of Letters Patent No. 508,237, dated November 7, 1893.

Application filed January 28, 1893. Serial No. 460,046. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. PIERCE, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in All-Metal Seams for Sheet-Metal Vessels, of which the following is a specification.

The object of this invention is to provide a simple, cheap and efficient all-metal seam, for use in the manufacture of sheet-metal vessels which are to contain non-liquid commodities.

The invention is here shown applied to an angular vessel, to be used as a cracker-can, in which the sides of the vessel are united by my improved all-metal seam, and the bottom is united to the sides by this form of seam.

The accompanying drawings illustrate a construction for carrying out the invention.

Figure 1 shows a perspective view of the can. Fig. 2 represents a horizontal section, showing the seam uniting the sides of the vessel. Fig. 3 represents a vertical section, showing the seam uniting the bottom and sides. Fig. 4 shows the seam open, on an enlarged scale. Fig. 5 shows a similar view of the seam closed. Fig. 6 shows the seam locked.

The same letters of reference indicate the same parts in all the figures.

One side *a* of the vessel has a double flange *b*, formed at two opposite edges by bending the metal at right angles to the said side and doubling it back. A back-bend *c* forms an outer flange *d*, parallel with the said double flange and with a space *e* between it and the double flange. An edge of another side *f* of the vessel is inserted in said space between the outer flange and the double flange. The parts of the seam are then compressed, as shown in Fig. 5, and with a suitable punch, portions *g* of the outer flange are struck up and into the metal of the side *f*, as illustrated in Fig. 6, thereby securely connecting the two sides *a* and *f*. The two opposite sides *a* are each formed with the flanges *b* and *d* at two

opposite edges, and the other two sides *f* are interlocked with these flanges in the manner described. The bottom *h* is formed with the double flange and outer flange on each edge, and all the sides have their lower edges interlocked with said flanges in the same manner as the sides are united. The vessel is in this manner completed, and it will be seen that the sides and bottom will be securely held together by the improved seam. The punched-out portions *g* occur as frequently as necessary to form a strong seam.

The seam can be very simply and expeditiously formed, and is a cheap and efficient manner of connecting the sides of a sheet-metal vessel, without the use of solder to complete the seam. Such a seam will be found advantageous in the manufacture of sheet-metal vessels which are not intended to contain liquid commodities, such as cracker-cans and the like.

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

An all-metal seam for sheet-metal vessels, comprising in its construction a double flange at the edge of one side of the vessel, a back-bend forming an outer flange and parallel with the double flange, a portion of another side of the vessel interposed between the outer flange and the double flange, and punched-in portions of said outer flange entering the side of the vessel which is inserted between the two flanges and constituting connecting means integral with the parts united, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 20th day of January, A. D. 1893.

CHARLES E. PIERCE.

Witnesses:

A. D. HARRISON,
F. PARKER DAVIS.