

P. H. Niles,
Metal Joints.

N^o 55,016.

Patented May 22, 1866.

Fig. 2.

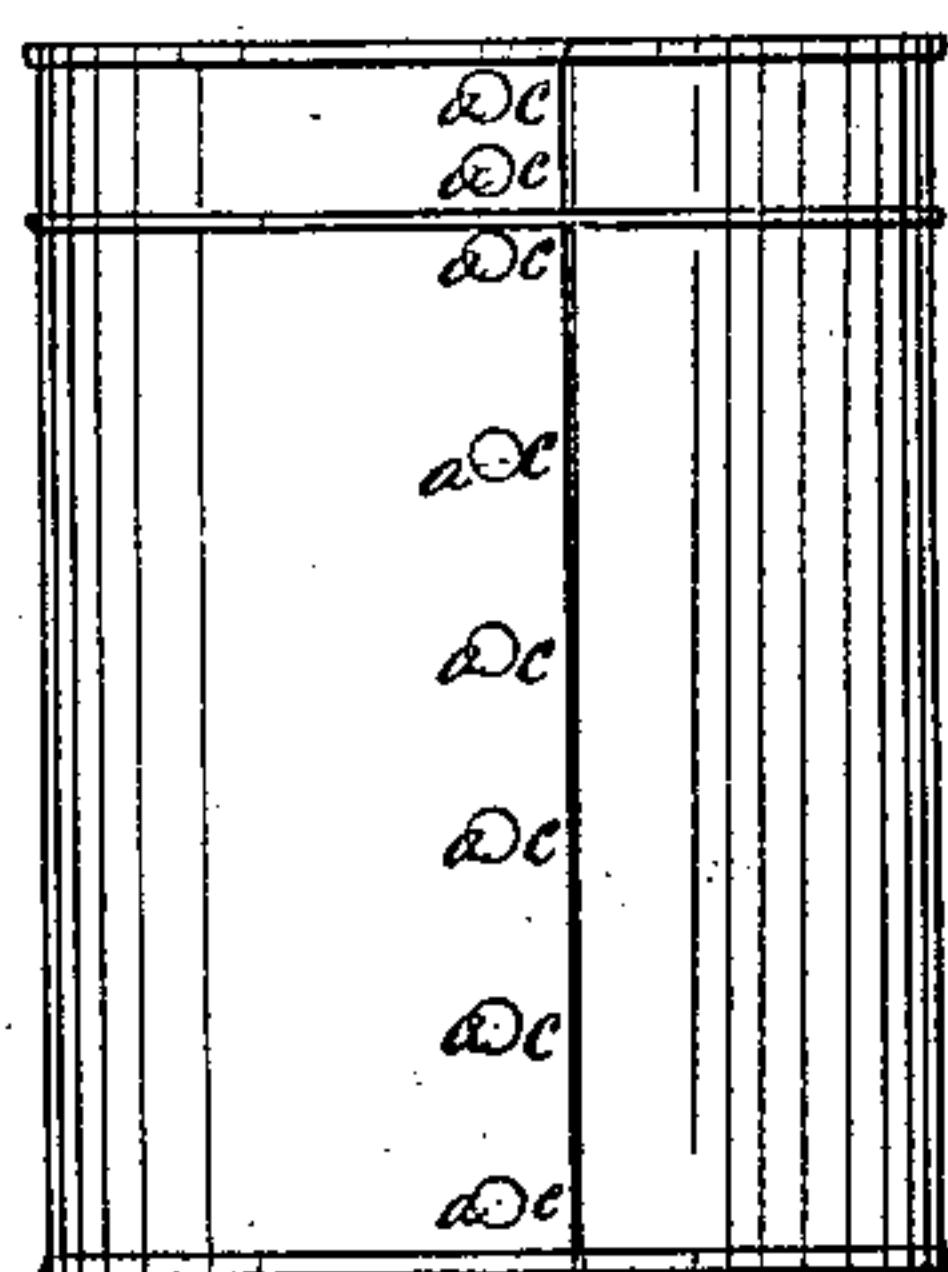


Fig. 3.

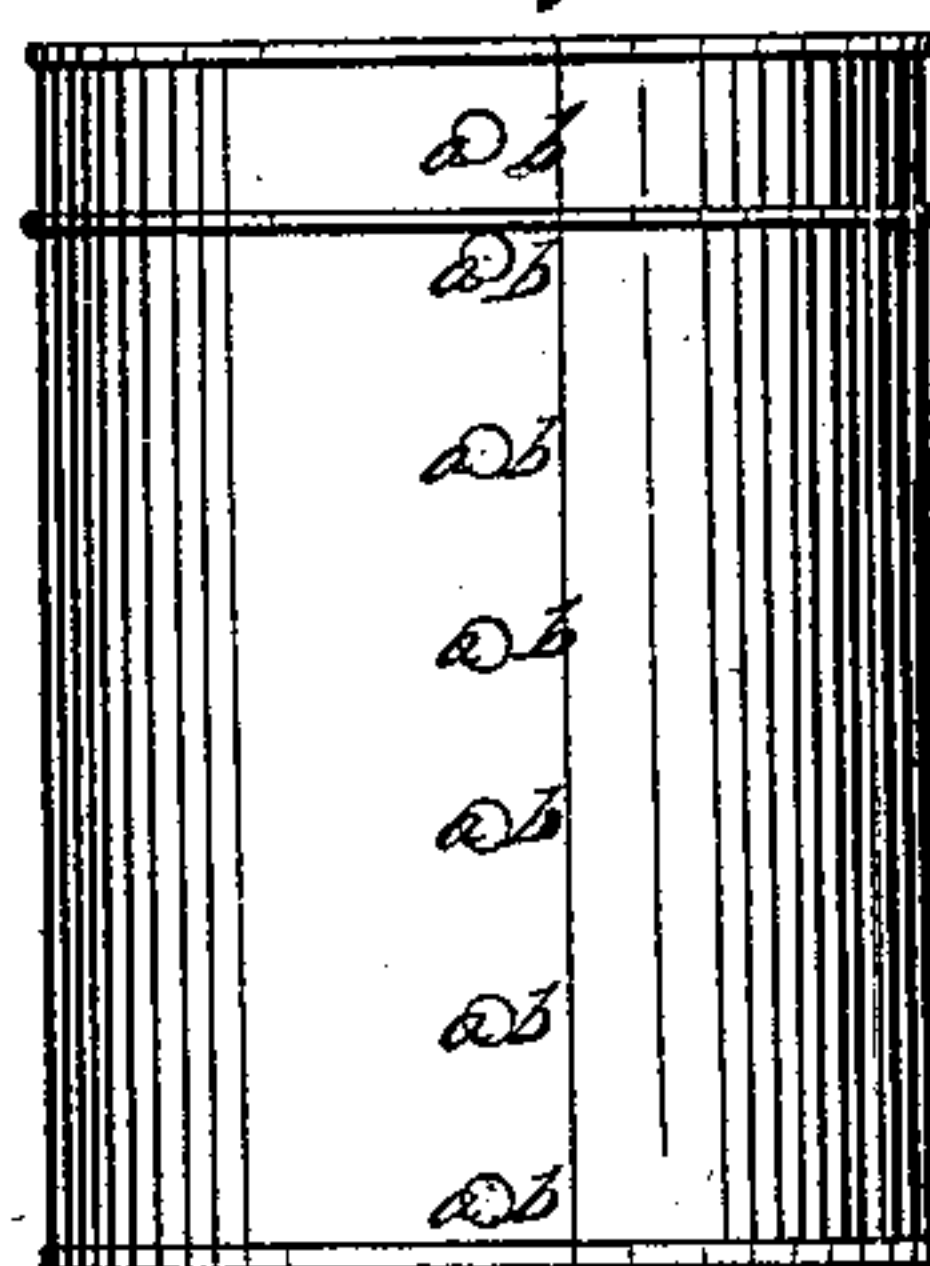
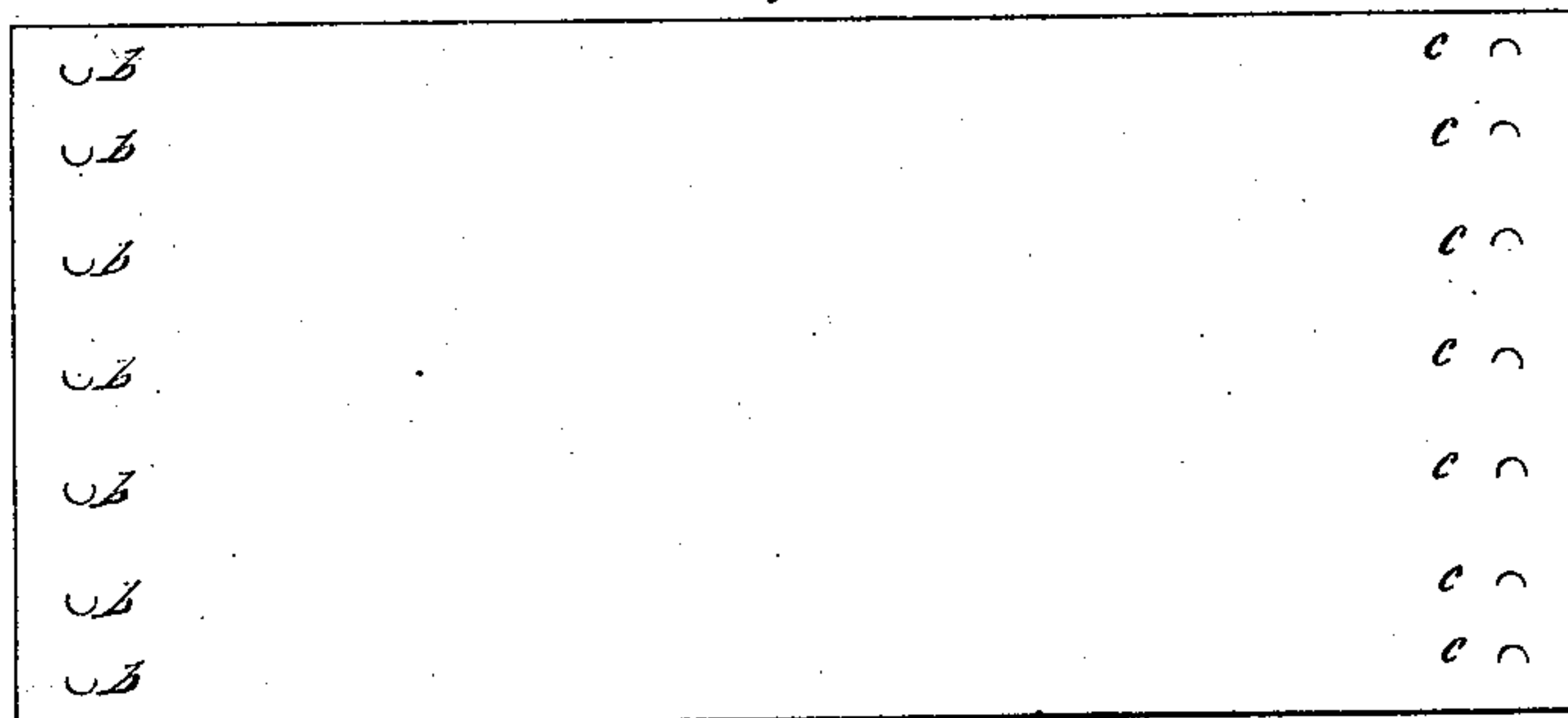


Fig. 1.



Witnesses:
Mark H. Durgin
James W. Pierce

Inventor:
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UNITED STATES PATENT OFFICE.

PETER H. NILES, OF BOSTON, ASSIGNOR TO HIMSELF AND AUGUSTUS
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IMPROVED MODE OF ATTACHING THE SIDES OF SHEET METAL TO EACH OTHER.

Specification forming part of Letters Patent No. 55,016, dated May 22, 1866.

To all whom it may concern:

Be it known that I, PETER H. NILES, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented a new and useful improvement in the construction of the seams or joints of sheet-metal boxes, cans, stove-pipes, and other utensils made of sheet metal, which I term the "rivet-joint;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the construction of the joints of cans, boxes, hoops, pipes, and other utensils made of sheet metal, it is very desirable to dispense with the operation of soldering the seams or joints, which now requires a stove or heating apparatus, fuel, soldering-coppers, a proper flux, solder, &c., and the manipulations of a skilled mechanic. In my invention these are dispensed with by the substitution of a lock or rivet-joint made by cutting and stamping the sheet metal in a peculiar form, as hereinafter described.

In the accompanying drawings, Figure 1 represents the piece of sheet metal composing the body of the can cut and stamped ready to

be formed, *b* representing the lips which are formed of the lower half of a circle and are struck inward, and *c* representing the lips which are formed of the upper half of a circle and are struck outward. Fig. 2 shows the outer surface of the joint *a* as formed. Fig. 3 shows the inner surface of the joint *a* when formed.

I stamp the edges or margin of the metal to form the body of the can or box with semi-circular vertical lips *b* and *c*, Fig. 1, forming, respectively, the upper, *c*, and lower, *b*, half of opposite circles, which are struck through the metal, one of the lips projecting slightly inward and the other sufficiently outward to admit one lip to slide under and the other over its opposite. I then interlace the lips *b* and *c* closely, and by compression interlock them substantially, and thus form the rivet-joint *a*, Figs. 2 and 3, which closely resemble a flush rivet.

What I claim as my invention, and desire to secure by Letters Patent, is—

The lips *b* and *c*, interlocked so as to form the rivet-joint *a*, substantially and for the uses and purposes above described.

P. H. NILES.

Witnesses:

J. M. F. HOWARD,
M. H. DURGIN.