

P. H. Niles,

Seam for Sheet-Metal Ware.

N^o 55,015.

Patented May 22, 1866.

Fig. 1.

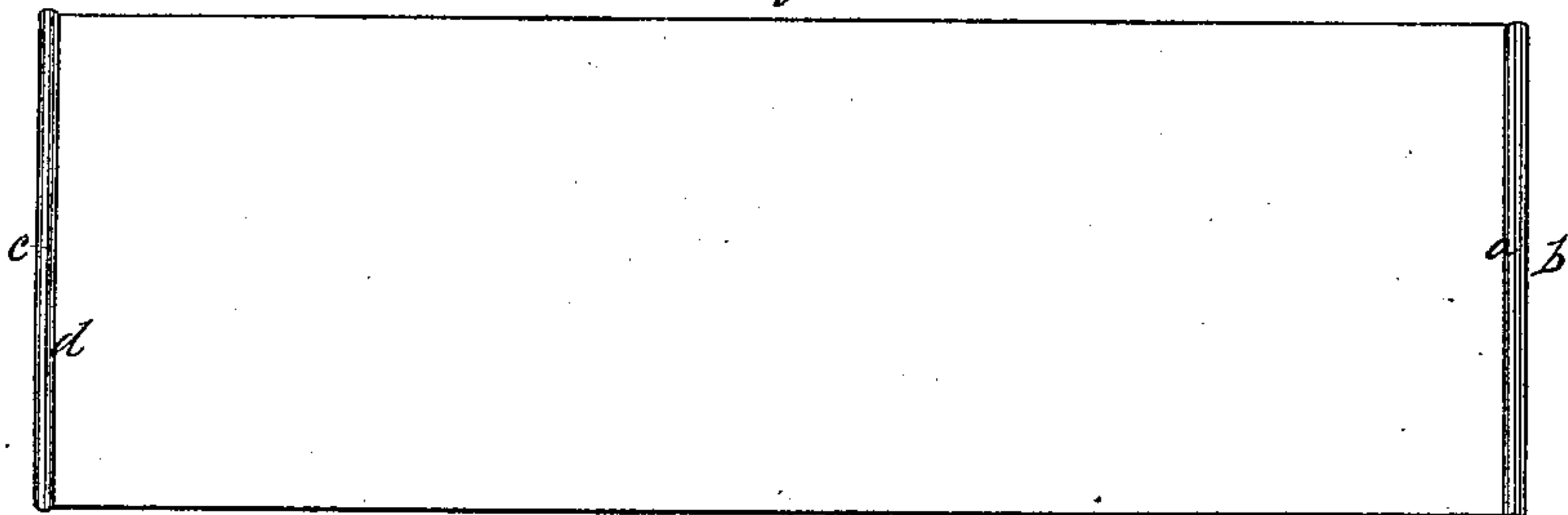


Fig. 2.

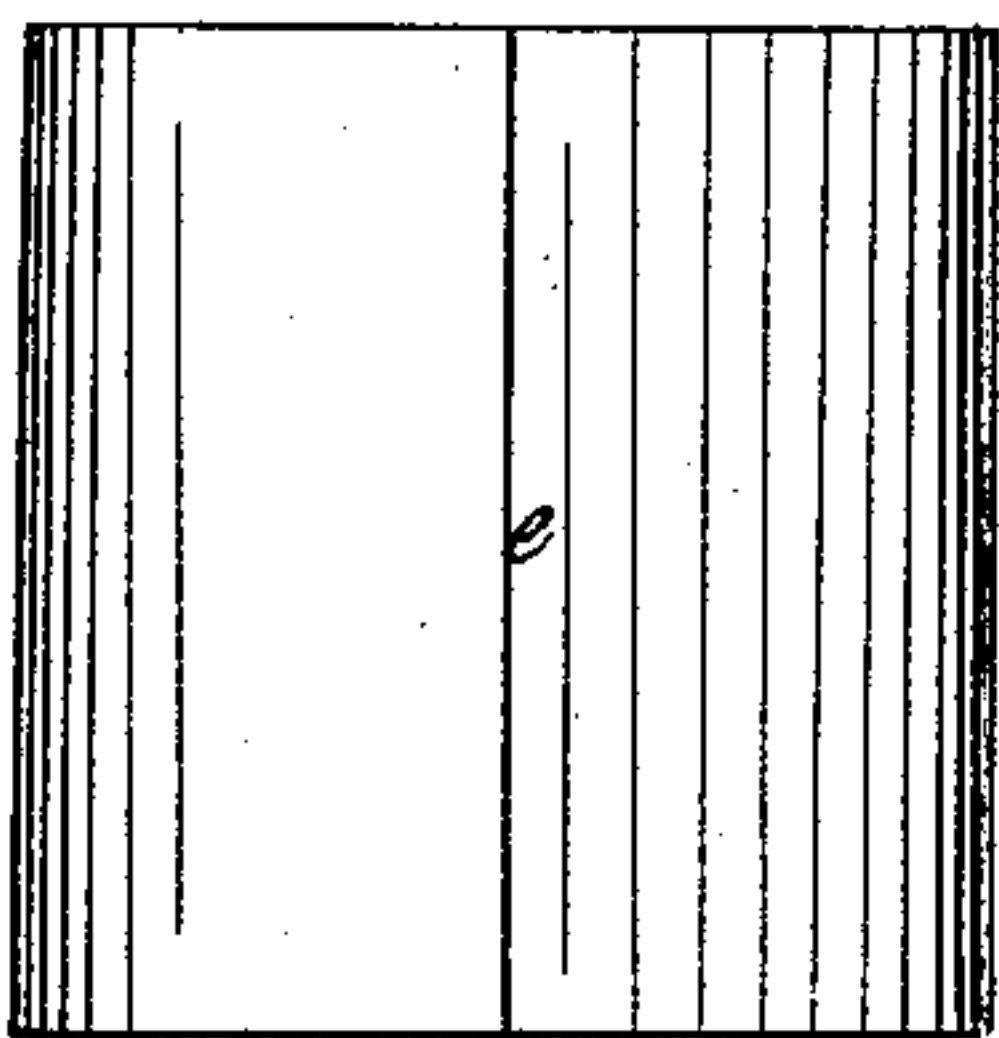


Fig. 3.

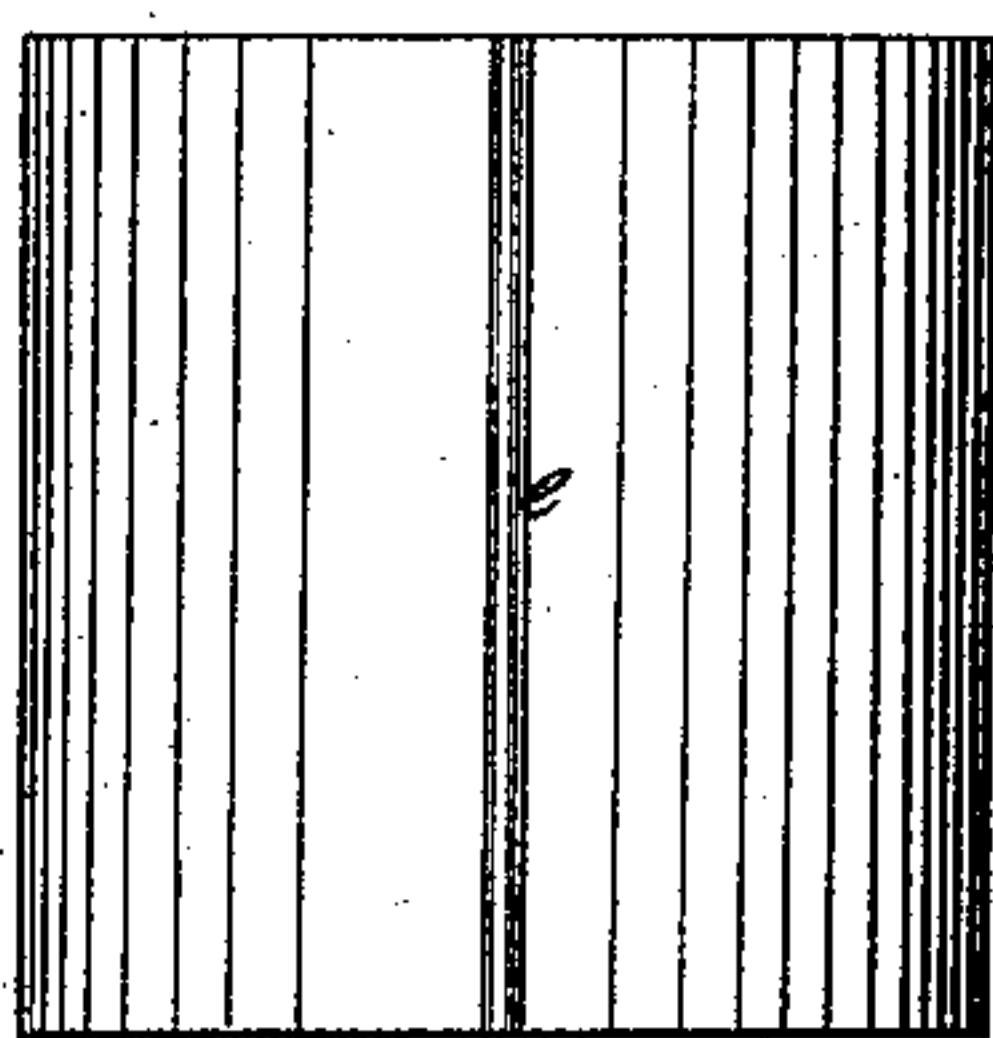


Fig. 4.



Witnesses:

*J. M. F. Howard
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Inventor:

P. H. Niles

UNITED STATES PATENT OFFICE.

PETER H. NILES, OF BOSTON, ASSIGNOR TO HIMSELF AND AUGUSTUS RUSS,
OF CAMBRIDGE, MASSACHUSETTS.

IMPROVED SEAM FOR SHEET-METAL WARE.

Specification forming part of Letters Patent No. 55,015, 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 joints of tin cans or boxes and other utensils made of sheet metal, which I term the "socket-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.

Figure 1 exhibits the piece of sheet metal which forms the body of a cylindrical can unrolled after it has been formed and the edges have been prepared to make the joint. Fig. 2 is an elevation of the body of the can as formed, showing the external appearance of the joint. Fig. 3 is a vertical section of the body, showing the internal appearance of the same joint. Fig. 4 is a transverse section, showing the articulation of the socket and bead.

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

A piece of sheet metal is cut of the proper size and shape for the body of a cylindrical can, and, after being formed between rolls in the usual manner, a semicircular socket or recess, *a*, is formed in the vertical margin, *b*. The opposite vertical margin, *c*, is rolled over so as to form the bead *d*, the convex surface of which will coincide with and fit into the

concave surface of the semicircular socket *a*. The bead *d* and the socket *a*, being united, form the socket-joint *e*.

The advantages of this joint are that it forms a neat flush joint on the outer surface of the can or box, presenting a channel through which the solder flows down into the socket, and, uniting with the contiguous surfaces of the tin, forms a joint of great strength and solidity. The surfaces of the tin lie so close that a very small amount of solder is sufficient to fill all the interstices and make a solid seam or rib.

No rough edges or angular projections are formed on the inner surface of the can, but instead thereof a smooth semicircular rib, offering no obstructions to the process of washing or cleansing the can.

In the formation of this joint there are no sharp angles impairing the strength of the metal, which enables the manufacturer to economize in the quality of the metal used.

It is obvious that this joint may be adapted to any form of sheet-metal vessels.

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

The socket-joint *e*, formed by the articulation of the socket *a* and the bead *d*, substantially and for the uses and purposes above described.

P. H. NILES.

Witnesses:

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