

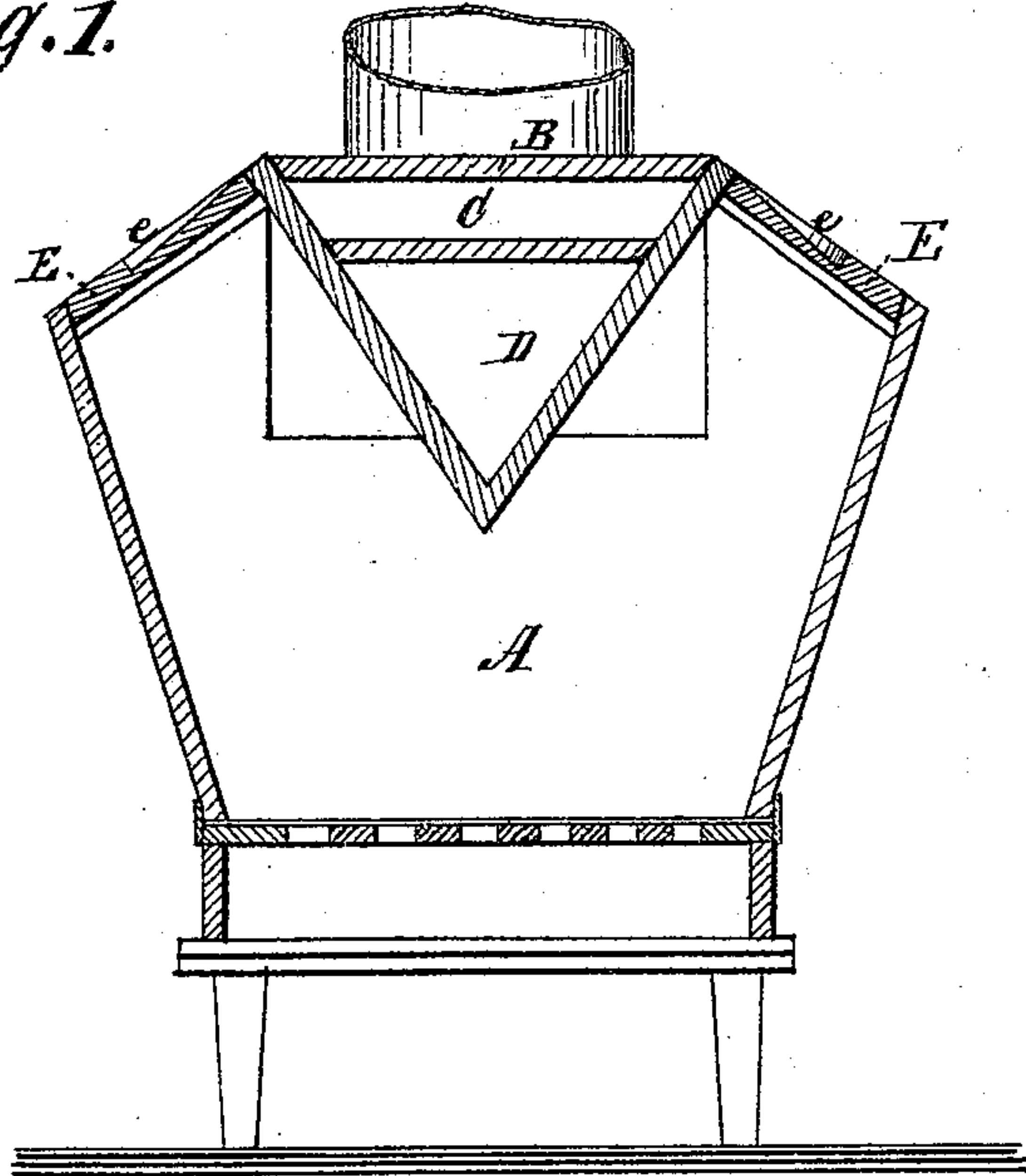
S. A. EWALT & J. A. TILLERY.

Improvement in Soldering Furnaces.

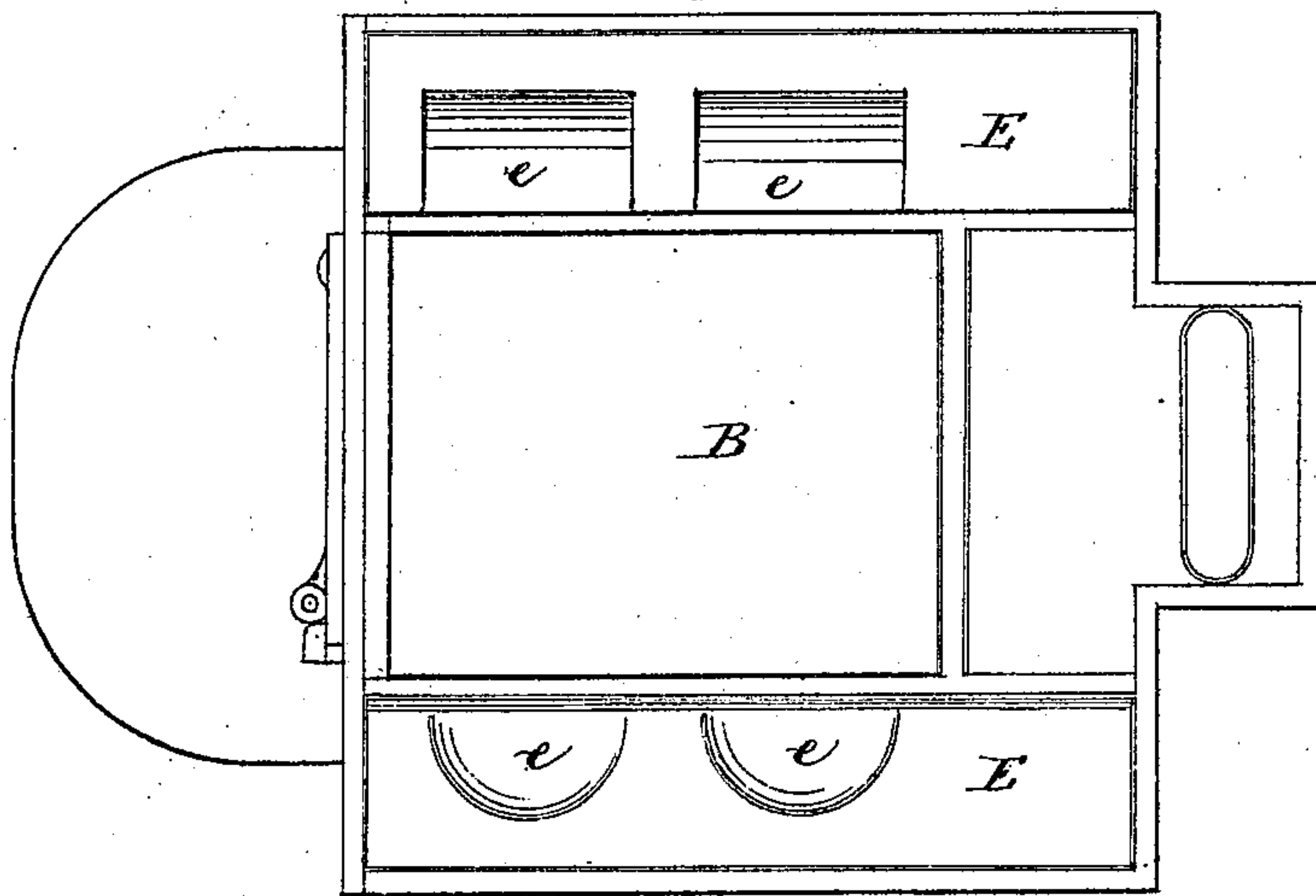
No. 132,647.

Patented Oct. 29, 1872.

*Fig. 1.*



*Fig. 2.*



Witnesses:

G. Matting.

John A. Remon

Inventor:

Samuel A. Ewalt  
John A. Tillery

PER

Attorneys.

# UNITED STATES PATENT OFFICE.

SAMUEL A. EWALT AND JOHN A. TILLERY, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN SOLDERING-FURNACES.

Specification forming part of Letters Patent No. **132,647**, dated October 29, 1872.

*To all whom it may concern:*

Be it known that we, SAMUEL A. EWALT and JOHN A. TILLERY, both of the city and county of Baltimore, in the State of Maryland, have invented an Improved Soldering-Furnace, of which the following is a specification:

The invention consists in constructing a soldering-furnace with a non-conducting chamber under the top plate and heating-spaces under a side plate or plates, so that the can may be soldered by simply turning it in suitably-shaped recesses in the outer surface of said side plates and then sliding it on top, where it remains until cooled. Thus the side plates become the soldering-tools, while the top plate is a cooler in juxtaposition thereto.

Figure 1 is a cross-section. Fig. 2 is a top view.

A represents a soldering-furnace; B, the top plate; C, the packing-chamber; and D, an air-chamber between them. E E are side plates, somewhat inclined, and provided with round or square recesses *e e* into which the cans are placed when being soldered. The chamber C under the top plate is provided with any suitable filling which is a non-conductor of heat. The can, having been held or moved about in the recesses *e* until the sol-

der is melted and the junction of parts obtained, is then gently slid up and on the top plate or collar where it remains until the joint becomes solidified. The reason of not lifting it off the furnace bodily and setting it aside is that in doing so the molten solder is liable to drip and leave some part of the joint leaky and open.

We are aware that the broad idea of melting the solder and then placing the can upon a cooling-plate of the same furnace is not new, but what we claim is that the peculiar construction of our furnace carries out this idea with greater facility and to greater advantage. Therefore—

What we claim as new, and of our invention, is—

A soldering-furnace having top plate B, packing-chamber C, air-chamber D, and side plates E E, constructed and arranged as and for the purpose described.

The above specification of our invention signed by us this 5th day of June, A. D. 1872.

SAML. A. EWALT.  
JOHN A. TILLERY.

Witnesses to both signatures:

SOLOMON C. KEMON,  
CHAS. A. PETTIT.