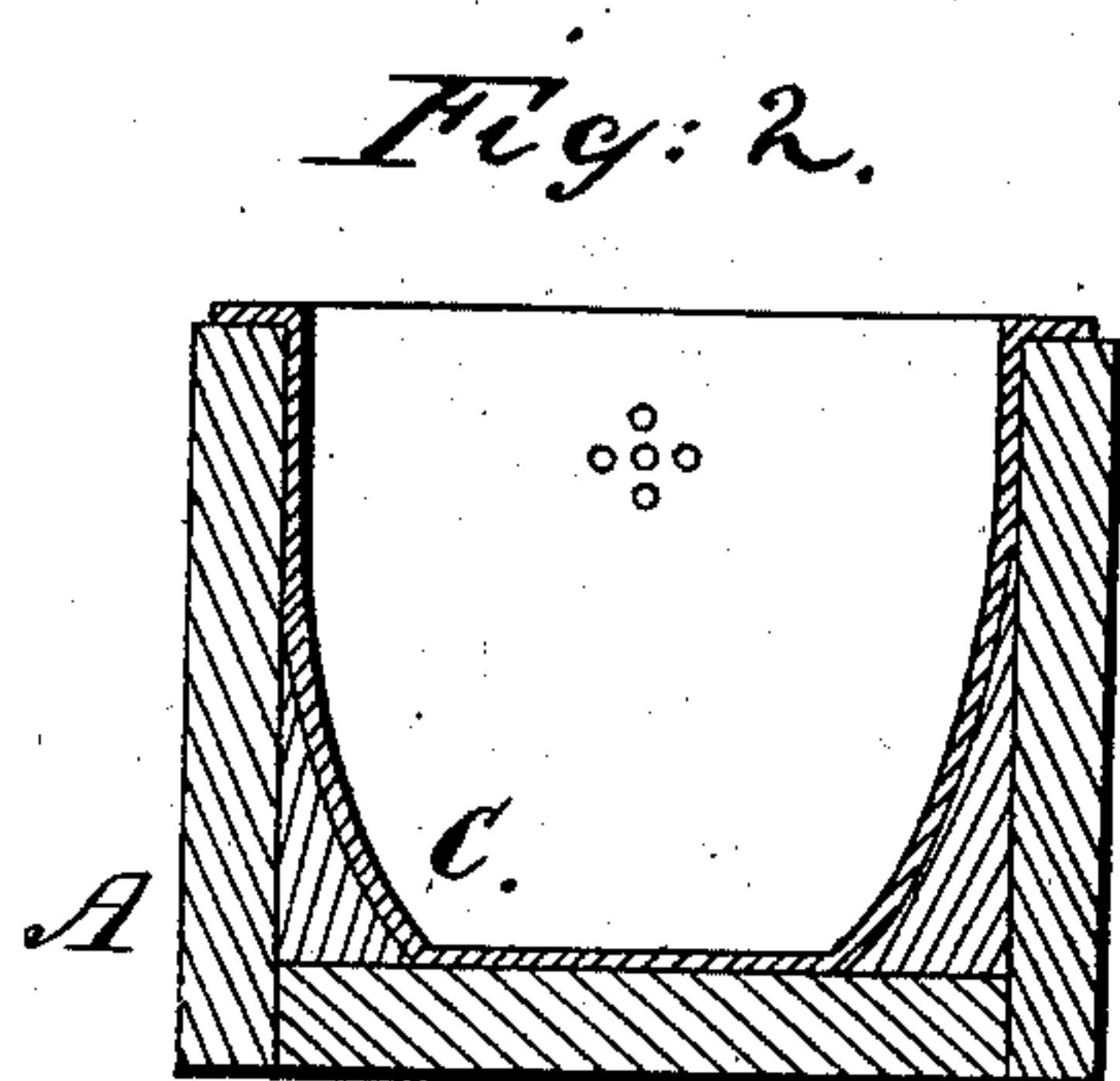
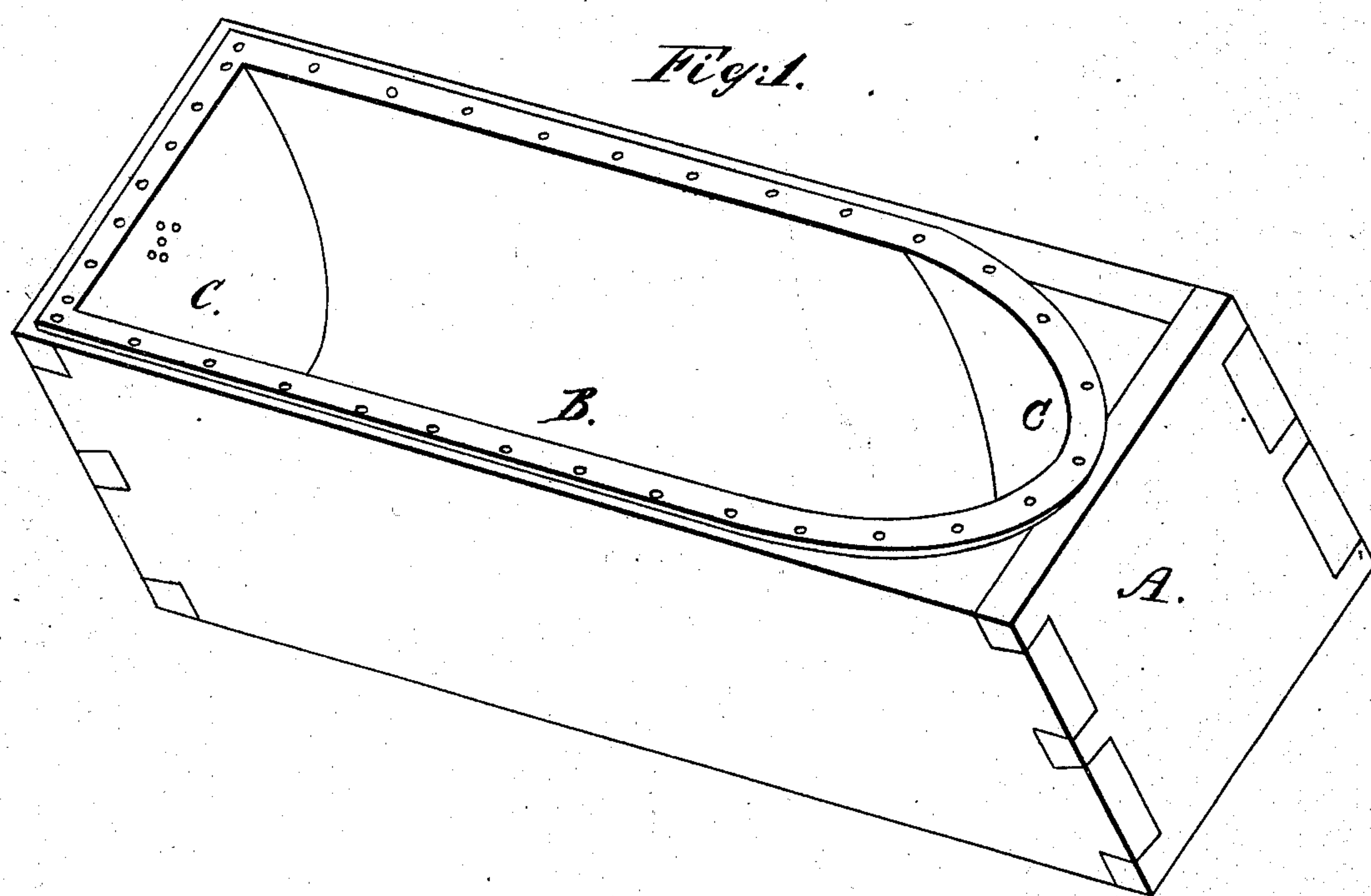


*C. A. Blessing,
Bath-Tub Lining.*

N^o 80,441.

Patented July 28, 1868.



United States Patent Office.

CHARLES ALBERT BLESSING, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 80,441, dated July 28, 1868.

IMPROVEMENT IN SHEET-METAL LINING FOR BATH-TUBS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES ALBERT BLESSING, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Copper-Lined Bath-Tubs; 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.

The nature of my invention will be understood by the following description.

In the accompanying drawings, which form a part of this specification—

Figure 1 is an isometrical view of the-improved tub.

Figure 2 is a cross-section of the same.

Like letters in both the figures indicate the same parts.

The usual mode of lining the tubs is to joint the lining in the bottom, and consequently the tubs frequently leak, on account of the loosening of the joints, caused by the springing of the sides of the tub. The joints, which are usually in the corners, are also loosened by the shrinking of the wooden bottom, and also by the weight of a person when stepping into the tub.

To obviate these difficulties, I line the tubs without the bottom seams, making the main part of the lining of a single piece, B, and soldering the end-pieces, C C, thereto, as represented in fig. 1. Consequently the tendency to leakage, caused by the springing of the sides, shrinkage of the bottom, &c., is obviated. The baths are also much more durable than those of ordinary construction, effecting a great saving in the item of repairs, besides avoiding the trouble incidental to leakages. The lining at the bottom of the tubs is also much smoother than when there are seams, as in the usual mode of lining; and besides, the lining has a much closer fit to the wood.

According to the present plan of constructing bathing-tubs, in order to furnish as secure a joint as possible in the bottom of the tub, thick sheets of metal have of necessity been used; and as hard metal, such as zinc and copper, is much more expensive than the softer metals, such as lead, the latter has gradually grown into use, its cheapness alone recommending it. Many objections to the use of lead for bathing-tubs could readily be advanced, such, for instance, as its more or less liability to corrode; and especially is it objectionable when used for "hot baths," as the vapor that will rise no matter how slight the same may appear to be, is most injurious. When the tub is lined with copper, all these objections are entirely removed. There is no vapor or other unwholesome influence, no matter how great the heat; and it is well known that copper only corrodes when subjected to the action of nitric or other like acids.

According to my present plan, the seams in the bottom being entirely dispensed with, all danger of leaking is entirely removed, very thin sheets of metal can safely be used, and the tub is therefore not only much more durable, but far lighter and much neater in appearance.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent of the United States, is—

A bath-tub lining made of sheets of hard metal, such as copper or zinc, consisting of the parts B C C, when the same are constructed and arranged as described.

In testimony whereof, I have hereunto set my hand and affixed my seal, this fourth day of March, 1867.

C. ALBERT BLESSING. [L. S.]

Witnesses:

STEPHEN USTICK,
JOHN WHITE.