

A.C. Brownell,

Bath Tub,

N^o 76,298,

Patented Apr. 7, 1868.

Fig: 1.

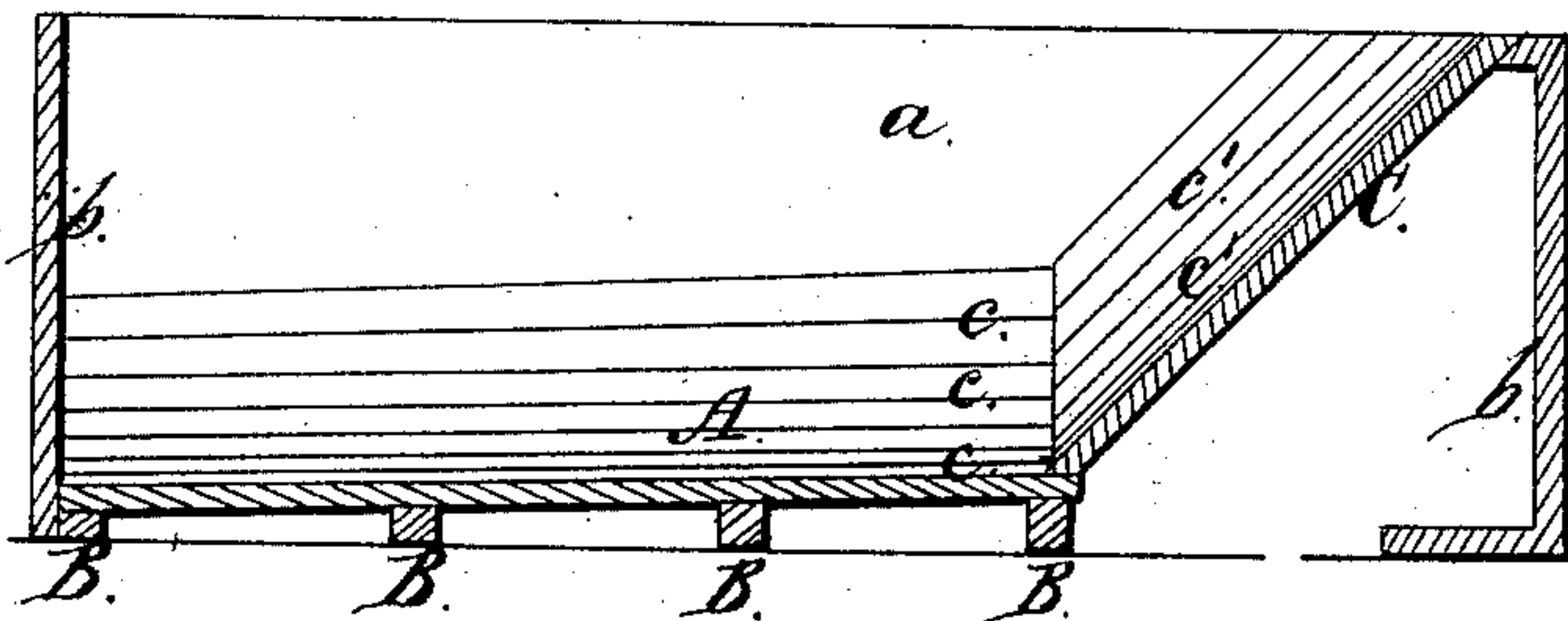


Fig: 2.

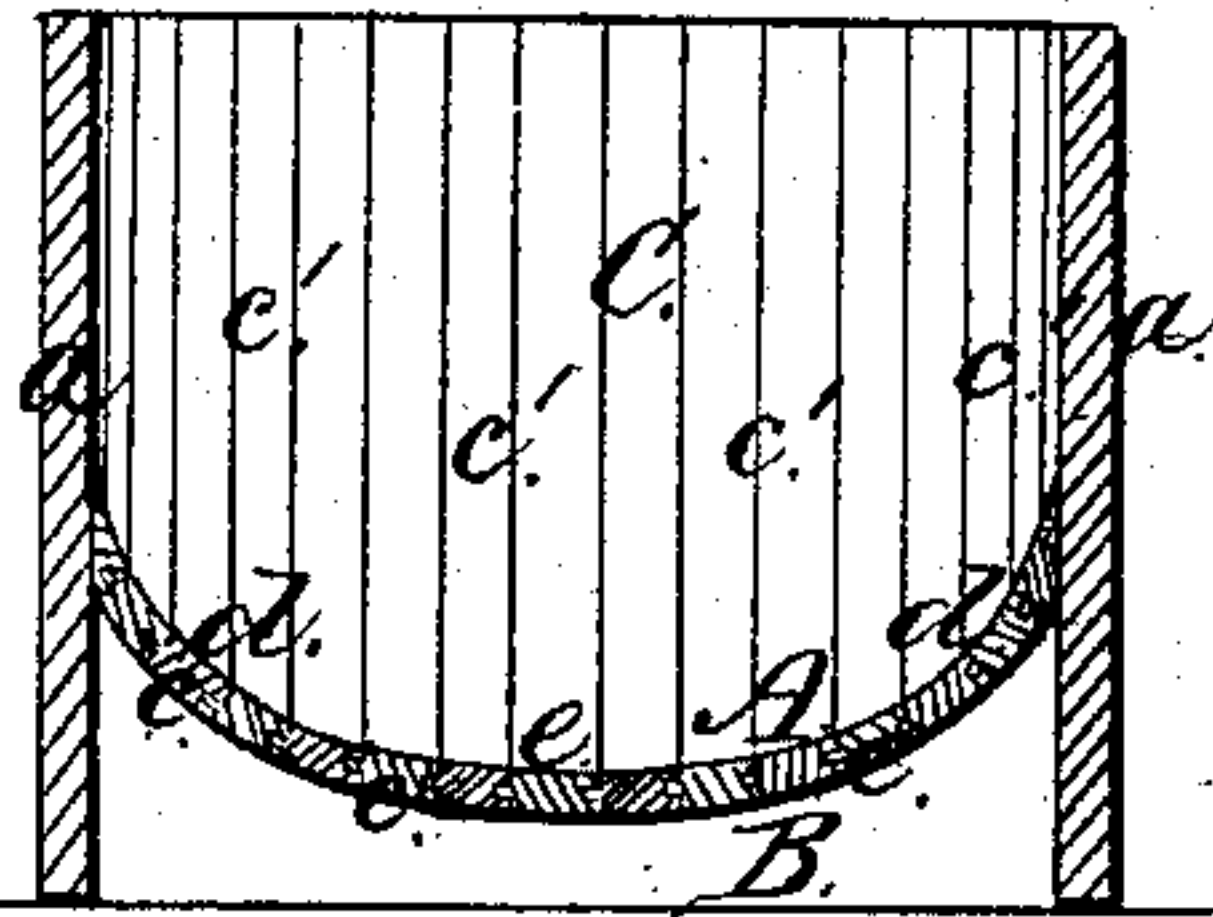


Fig: 3.

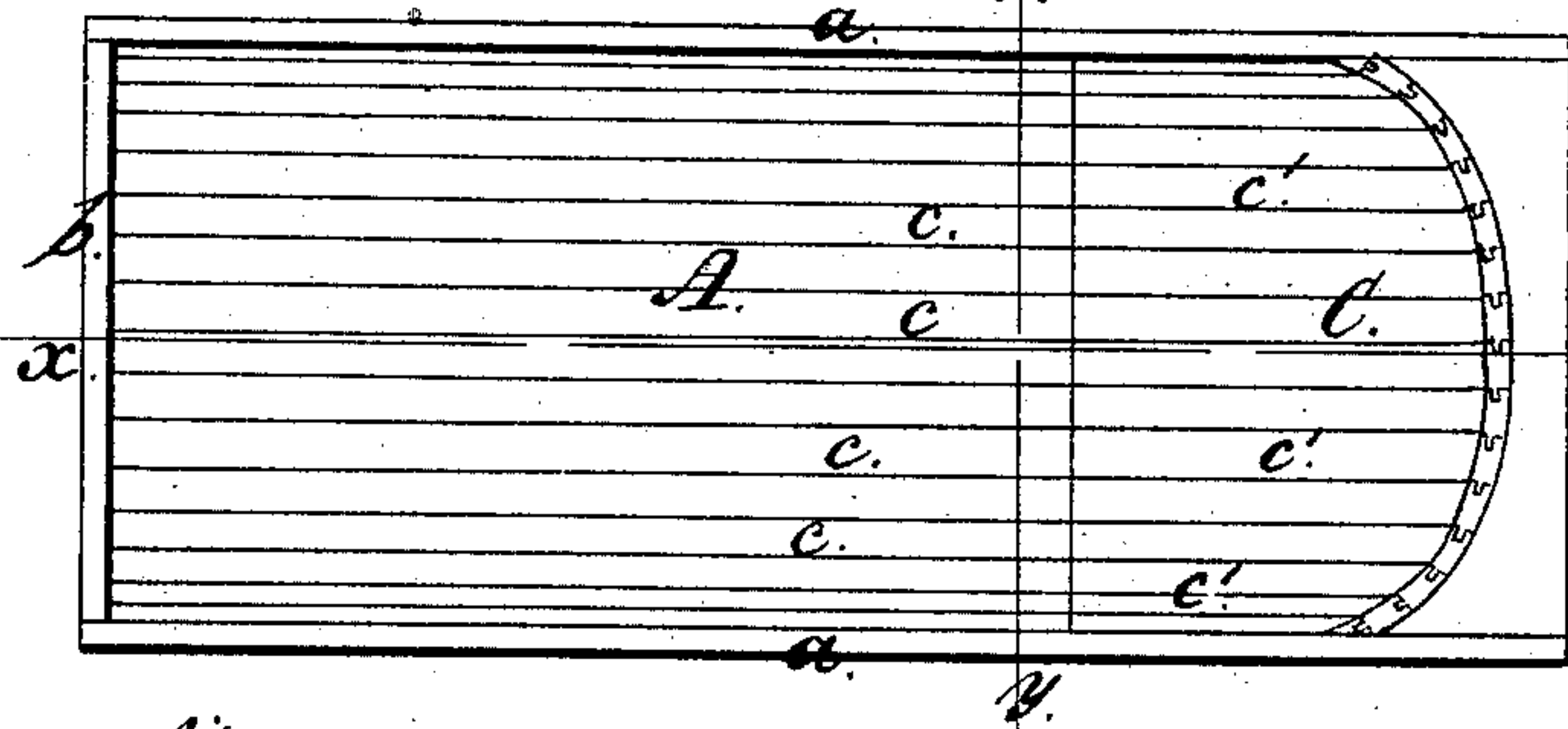
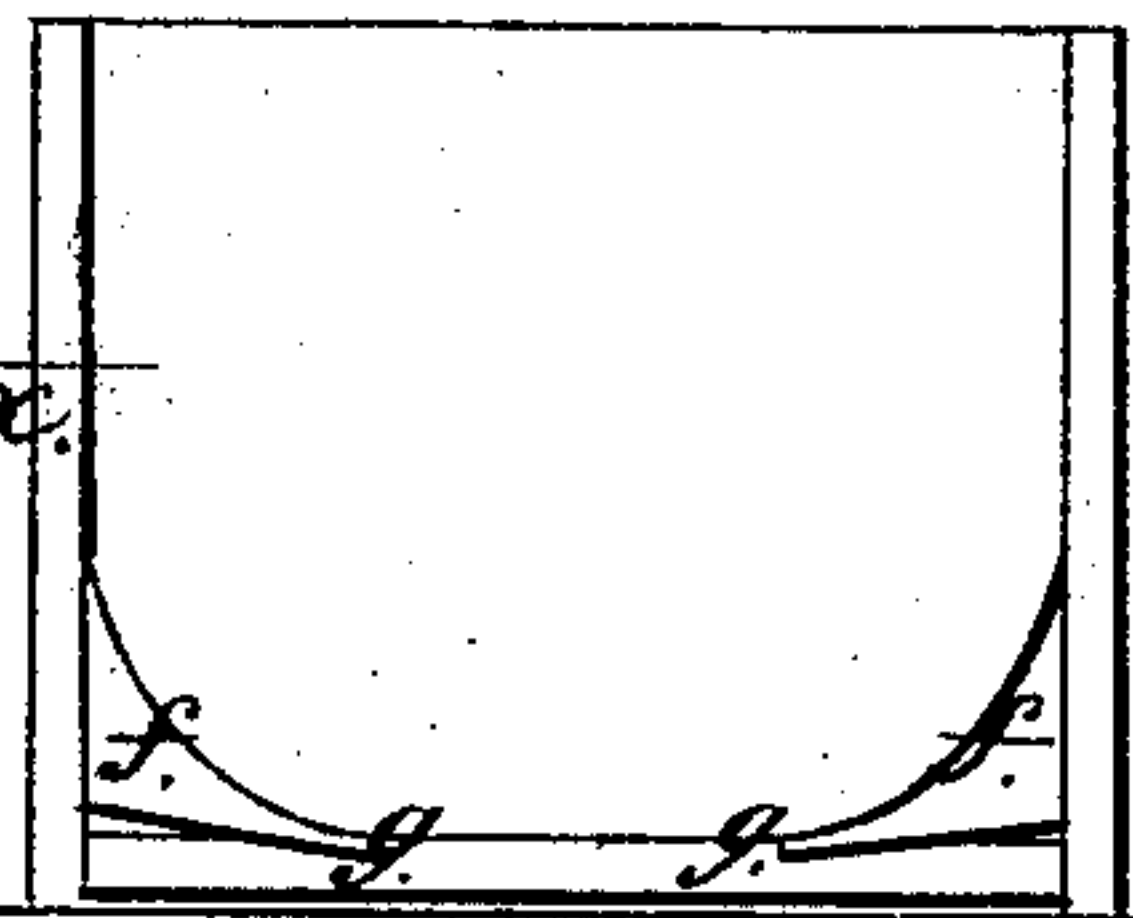


Fig: 4.



Witnesses;
Thos. Fiske,
Wm. Brown.

Inventor;
A. C. Brownell,
Per Munn & Co.
Attorneys.

United States Patent Office.

A. C. BROWNELL, OF BROOKLYN, NEW YORK.

Letters Patent No. 76,298, dated April 7, 1868.

IMPROVEMENT IN 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, A. C. BROWNELL, of Brooklyn, in the county of Kings, and State of New York, have invented new and useful Improvements in Bath-Tubs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to a new and improved bath-tub, of that class which is constructed of a wooden frame or box, lined with sheet metal, tinned copper being the material most generally used for the lining. At present these frames or boxes are constructed of wide boards, and considerable difficulty has been experienced in obtaining a proper internal shape, and, in fact, a desirable internal shape never has been attained, that is to say, a shape which conforms to the shape of the human body, and which will admit of the metal lining being fitted snugly within the frame or box, so as to avoid angles, prevent the lining being indented and disfigured, and which will admit of the water being fully discharged from the tub—difficulties which my improvement fully obviates. In the accompanying sheet of drawings—

Figure 1 is a vertical longitudinal section of my invention, taken in the line *x x*, fig. 3.

Figure 2, a transverse vertical section of the same, taken in the line *y y*, fig. 3.

Figure 3, a plan or top view of the same.

Figure 4, an end view of the frame or box of a bath-tub as at present constructed, exhibited with a view of showing the difference between it and my invention.

Similar letters of reference indicate like parts.

The exterior of my improved tub consists of two upright parallel side-pieces *a a*, and two upright end-pieces *b b*. The bottom, *A*, is composed of a series of slats, *c*, matched together by a tongue and groove, as shown clearly in fig. 2. This bottom is slightly inclined in a longitudinal direction, as shown in fig. 1, and transversely it has a curved form, approximating to a semi-ellipse, as shown in fig. 2. The sides of the bottom, designated by *d d*, being portions of smaller circles than the central lower portion *e*, (see fig. 2.) The upper ends of the sides *d d* join the sides *a a* of the frame or box, so as not to form an appreciable angle. The slats *c* are bound or held in proper position by brackets *B*, which may be of iron or wood, the latter material will probably be used, strips of board or plank hollowed out at their upper edges to conform to the transverse shape of the bottom, and nailed or otherwise secured between the sides *a a*. The head-piece *C* is constructed of slats *c'*, matched together like the bottom, *A*, and has precisely the same curvature, and an inclination within the frame or box of about forty-five degrees, an obtuse angle being formed between the lower end of the head-piece and the bottom, as shown in fig. 3. By this mode of construction a regular geometrical curvature is given the bottom and head-piece, which admits of the sheet-metal lining being fitted smoothly upon them in close contact therewith, so that the lining will not be liable to be bent, indented, or ruptured, and a smooth surface obtained for the discharge of all the water in the tub. The lining also may be inserted and adjusted to the bottom and head-piece with the greatest facility. The frame or box also may be constructed with far greater facility than hitherto, as the slats may be readily adjusted together and secured in proper position. The present mode of construction is attended with considerable labor and expense. Corner-pieces *f f*, (see fig. 4,) require to be inserted in the bottom and hollowed out at their upper surfaces, and it is impossible, by this means, to obtain a perfect geometrical curve; angles, *g*, will be formed, which occasion considerable embarrassment in adjusting the lining in the frame or box, and, with the greatest care, the lining cannot be made to bear upon or be brought in contact with the whole surface of the bottom, and hence the lining is very apt to be indented and broken or ruptured. By my improvement, also, no danger can occur from a moderate shrinkage of the wood, as the slats *c*, being narrow, the shrinkage is divided among a comparatively large number of joints, whereas, in the old or present mode of construction, the wide boards used, cause the joints to open very materially under shrinkage, and the lining "buckles," and becomes narrow and liable to be ruptured.

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

As a new article of manufacture, the bath-tub, constructed as described, consisting of the tongued and

grooved bottom and end-slats *c c'*, the curved sides *d*, outer frame *b*, and curved supporting-brackets B B, all arranged as described, for the purpose specified.

A. C. BROWNELL.

Witnesses:

WM. F. McNAMARA,

ALEX. F. ROBERTS.