

(No Model.)

D. A. LISK.
BOTTOM FOR METAL PAILS.

No. 505,318.

Patented Sept. 19, 1893.

Fig. 1.

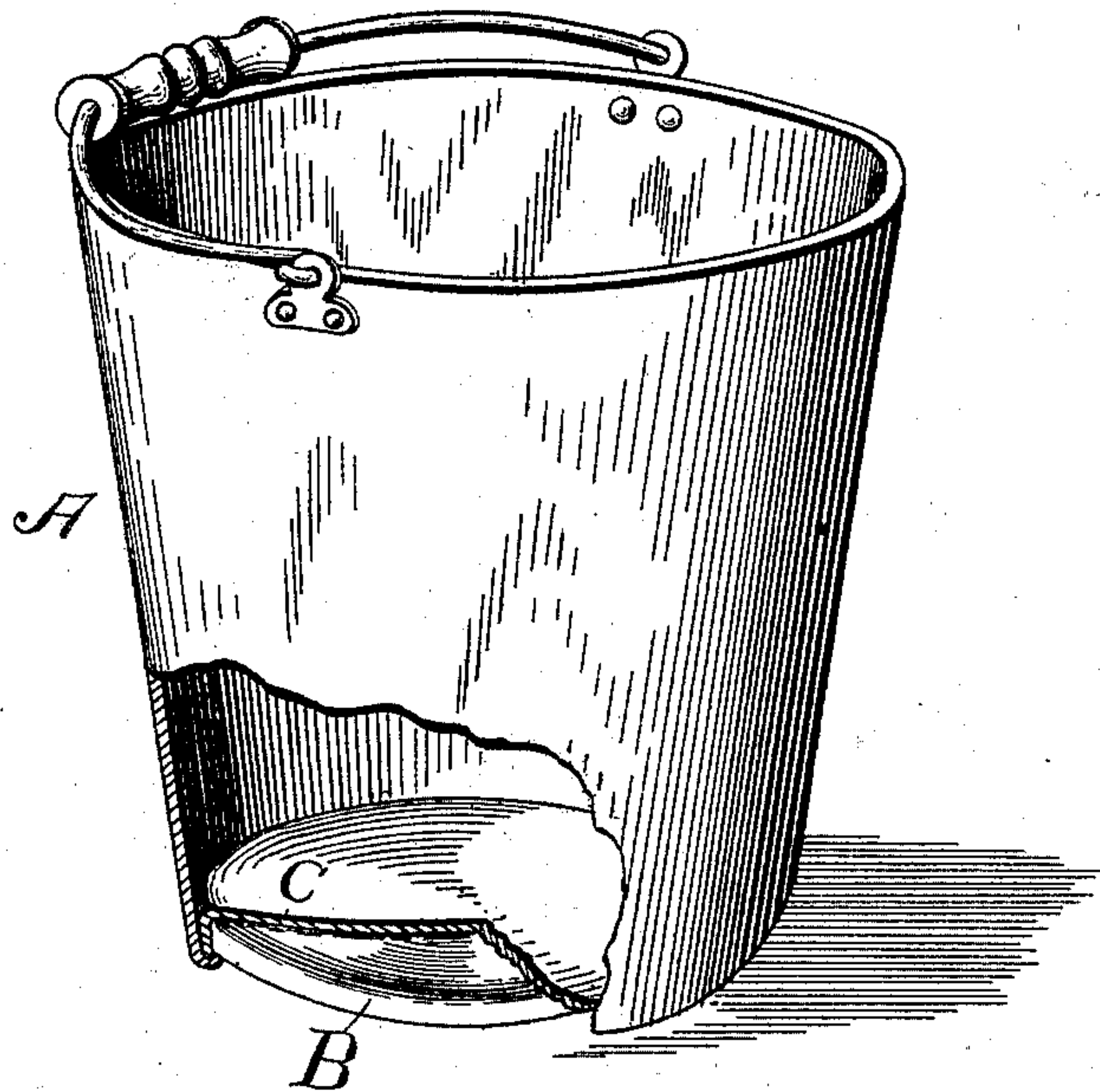
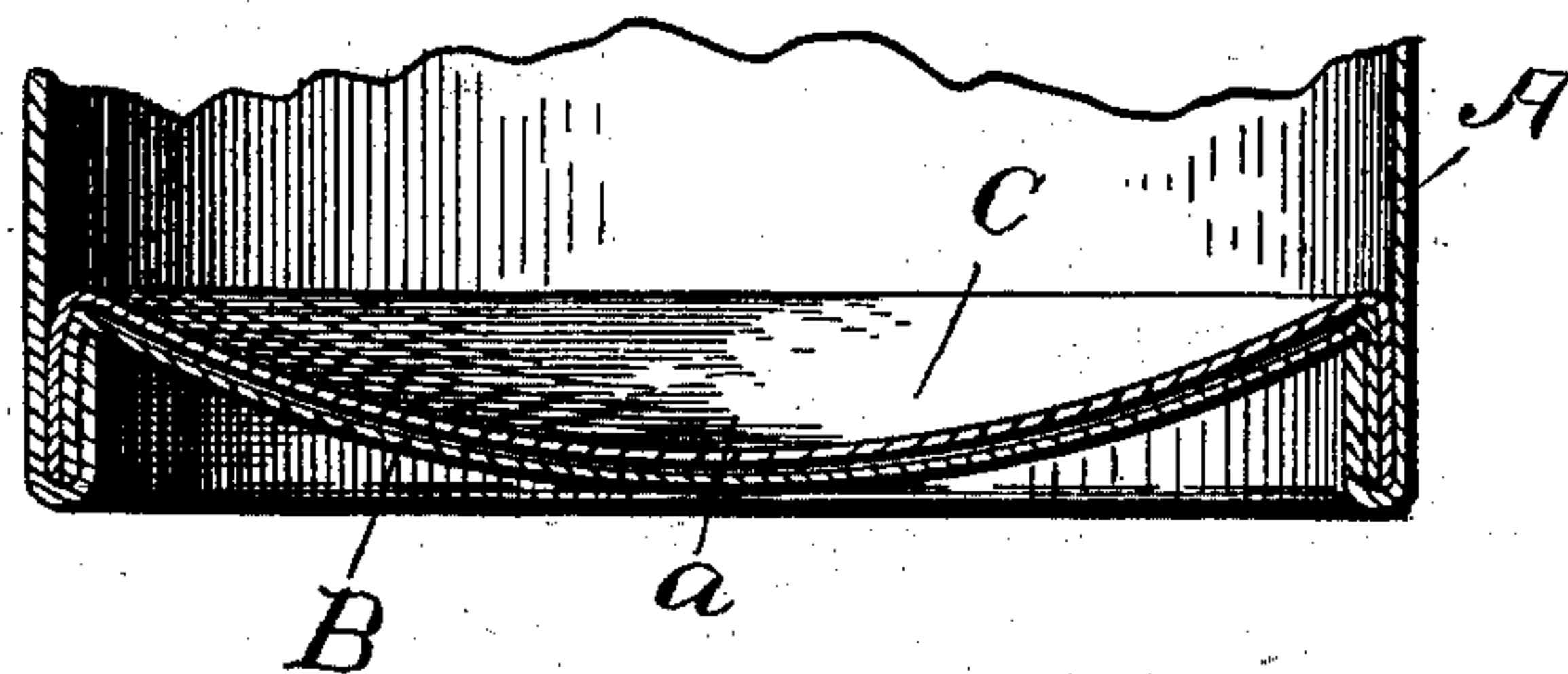


Fig. 2.



Witnesses
Howard D. Orr.
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UNITED STATES PATENT OFFICE.

DAVID A. LISK, OF CLIFTON SPRINGS, NEW YORK, ASSIGNOR OF ONE-HALF
TO TRUMAN V. FOX, OF SAME PLACE.

BOTTOM FOR METAL PAILS.

SPECIFICATION forming part of Letters Patent No. 505,318, dated September 19, 1893.

Application filed July 17, 1893. Serial No. 480,708. (No model.)

To all whom it may concern:

Be it known that I, DAVID A. LISK, a citizen of the United States, residing at Clifton Springs, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Bottoms for Metal Pails; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to bottoms for pails and other vessels and is designed as an improvement upon the device illustrated and described in Patent No. 476,280, granted June 7, 1892, to D. A. Lisk and T. D. Brown. In practice I have found that in making double bottom vessels of zinc and tin that when the bottom is flat the zinc will buckle owing to the natural greater tendency of zinc to expand, and while this defect is to some extent remedied by soldering together the zinc and tin plates, forming the bottom of the pail, as described in the patent aforesaid, it does not entirely overcome it, and furthermore the soldering takes time and adds to the expense of making the bottoms.

The object of my present invention, therefore, is to simplify and cheapen the construction of the bottoms and to prevent their buckling, and to this end my invention consists in the construction hereinafter described and more particularly pointed out in the claim.

Referring to the drawings, Figure 1, is a perspective view, partly broken away and partly in section, of a pail embodying my improvement; and Fig. 2, is a vertical transverse section of the lower end of the pail.

Similar letters of reference indicate corresponding parts in each figure of the drawings.

A represents the body of the pail, preferably of sheet tin, and B indicates the lower or outer bottom, which is also preferably of tin, and C is the upper or inner bottom of sheet zinc or other suitable metal different from tin. Each of these bottoms is dished or concave as shown at *a*, and the upper one

nests in the lower. Their edges are upset or bent and are secured to the lower end of the body of the pail in the usual well known manner. The object of making the bottom plates concave is to bring the pressure, caused by the natural expansion of the zinc plate C, to be extended inwardly toward the center of the plate and in a downward direction. The bottom plate B being of thin metal and having sufficient elasticity, will yield to the pressure of the upper plate and so prevent buckling. Furthermore as the plates are not connected together, except at their edges, they are free to move one over the other and this insures uniform expansion and stretching and contraction. There is a considerable difference in the natural expansive properties of zinc and tin, but the greater elasticity of the tin plate enables it to yield when the greater pressure caused by the natural expansion of the zinc is forced against it, and both bodies being free to move, one over the other, will be expanded equally and maintain a smooth and uniform appearance.

It is, of course, understood that the object of having the zinc bottom is to prevent the pail or other vessels from rusting.

While I prefer to use sheet zinc for the inner or upper bottom I do not restrict myself to its use, as any other suitable sheet metal having greater natural expansive properties than tin, and being equally non-corrosive, may be substituted.

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

A bottom for pails and other vessels consisting of two concave plates of different metals, the upper plate being nested in and having greater natural expansive properties than the lower plate, the two plates being united at their edges only, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID A. LISK.

Witnesses:

WM. A. CLAUSAUEN,
D. HATMAKER.