

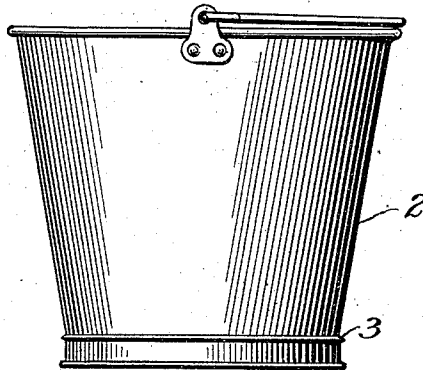
(No Model.)

J. R. McLAUGHLIN.  
BOTTOM FOR METAL VESSELS.

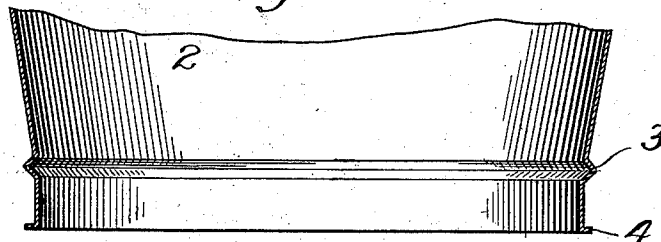
No. 547,224.

Patented Oct. 1, 1895.

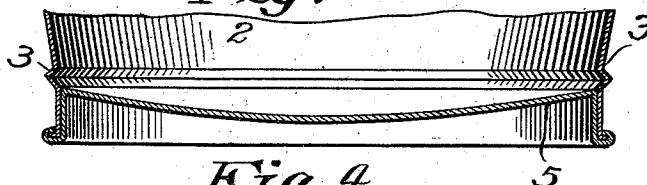
*Fig. 1.*



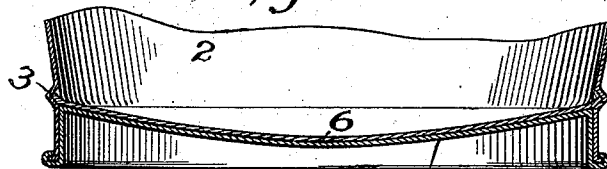
*Fig. 2.*



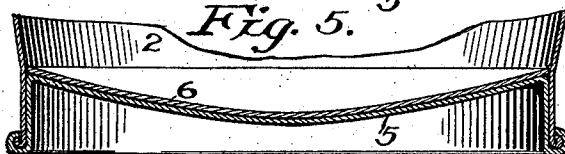
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



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# UNITED STATES PATENT OFFICE.

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## BOTTOM FOR METAL VESSELS.

SPECIFICATION forming part of Letters Patent No. 547,224, dated October 1, 1895.

Application filed April 9, 1895. Serial No. 545,036. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES R. McLAUGHLIN, of Clifton Springs, county of Ontario, State of New York, have invented certain new and useful Improvements in Bottoms for Metallic Vessels, of which the following is a specification.

My invention relates to a bottom for metallic vessels, particularly pails, and the object  
10 which I have in view is to provide a pail or bucket or other metallic vessel with a double bottom composed of different kinds of metal which will prevent the pail from rusting and  
15 at the same time add to its strength and durability.

A further object is to provide a bottom which can be put in a pail and removed at any time and a new bottom substituted, if desired; and a  
20 still further object is to provide a bottom which can be more readily placed in position and with less expense than the bottoms that have heretofore been used in vessels of this class.

My invention consists, generally, in forcing  
25 a sheet of metal into the bottom of a vessel, said sheet being of different material than the material composing the vessel, and securing the sheet of metal or second bottom in position in such a manner that it may be readily  
30 removed at any time and another piece substituted therefor, all as hereinafter described, and particularly pointed out in the claim.

The invention will be more readily understood by reference to the accompanying drawings, forming part of this specification, and in  
35 which—

Figure 1 is a side elevation of a pail embodying my invention. Fig. 2 is a vertical  
40 section of the lower portion of the pail, showing the circumferential rib and the outwardly-turned lower edges of the side of the pail or bucket. Fig. 3 is a similar view showing the  
45 bottom of the pail placed in position and secured to the sides thereof. Fig. 4 is a similar sectional view showing the second bottom of the pail forced into position with its edges secured in the grooves formed by the circumferential rib. Fig. 5 is a modification showing the second bottom in position, being held  
50 there without the use of the rib.

In the drawings, 2 represents the side of the pail, which is provided close to its bottom with

the circumferential rib 3 and having the outwardly-turned flange 4. (Shown in Fig. 2.)

The bottom of the pail 5 is made concave, 55 as shown in Fig. 3, and has its edges turned out over the flange 4 and soldered securely in this position. The bottom 5 extends up to a point immediately below the rib 3, formed in the sides of the pail, and a second bottom 6, 60 composed of zinc, is forced down from the top of the pail until its edges enter the groove formed by the rib 3. Its central portion is then depressed, so that it is concave in form and rests upon the upper surface of the bottom 5. The bottoms are made concave, so that 65 when the metal expands, and particularly the zinc of the double bottom, its tendency will be to spring down and not up, as the latter action would leave a space between the second 70 bottom 6 and the bottom 5, and into which the water would collect and soon render the pail of no value.

I prefer to use zinc for the inner and upper bottom on account of its being antirusting, 75 owing to the chemical action of the zinc in connection with the tin; but I do not restrict myself to its use, as any suitable metal which will prevent the corrosion of the bottom and sides of the vessel may be used. After the 80 zinc bottom has been forced into position it is soldered all around the edge and is thereby held securely in position in the groove formed by the rib 3 and the water prevented from coming in contact with the tin bottom of the 85 pail. If desired, the rib may be done away with and the zinc bottom forced into position, as shown in Fig. 5, and soldered to the sides of the pail, being forced into the concave form shown in this figure, so that the greater ex- 90 pansion of the zinc will not tend to separate it from the tin bottom, but, on the contrary, will bring the surfaces of the two sheets of metal more closely together. With this construction I am enabled to put the zinc bottom 95 into the pail or vessel after it has been made up and ready for sale without in any way disturbing the tin bottom, and whenever the zinc becomes worn it may be removed and another sheet substituted in place thereof with- 100 out in any way damaging the pail or vessel.

In pails or vessels of this class heretofore made the bottoms have been nested together, and the edges of both turned up over the lower

edge of the sides of the pail or vessel and soldered in that position, similar to the manner in which the tin bottom is secured to the sides of the pail, as shown in Fig. 5.

5 The advantages of my invention lie in the fact that the zinc bottom may be placed in an ordinary metallic vessel after it has been made up; that it may be removed at any time and a new bottom substituted therefor, that pails  
10 or other vessels made in this manner are cheaper to manufacture than other antirust vessels, as less zinc is required and less time is consumed in forming the zinc bottom and securing it in position.

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

A metallic vessel, provided with a concave bottom having its edges turned outwardly and

secured to the outwardly turned edges of the 20 sides of the vessel, said vessel being provided immediately above said bottom with a circumferential rib whereby an annular groove is formed upon the inside thereof, a second  
25 bottom composed of a different kind of metal, said second bottom being also concave in form to rest upon the upper surface of said first named bottom, and said second bottom being of greater diameter than the vessel at its lower  
30 end and having an edge adapted to enter the groove formed by said rib, for the purpose set forth.

In testimony whereof I have hereunto set my hand this 28th day of March, A. D. 1895.

JAMES R. McLAUGHLIN.

In presence of—

RICHARD PAUL,

F. S. LYON.