(No Model.) 2 Sheets—Sheet 1.

J. R. McLAUGHLIN.

CAN BOTTOM.

No. 547,225. Patented Oct. 1, 1895.

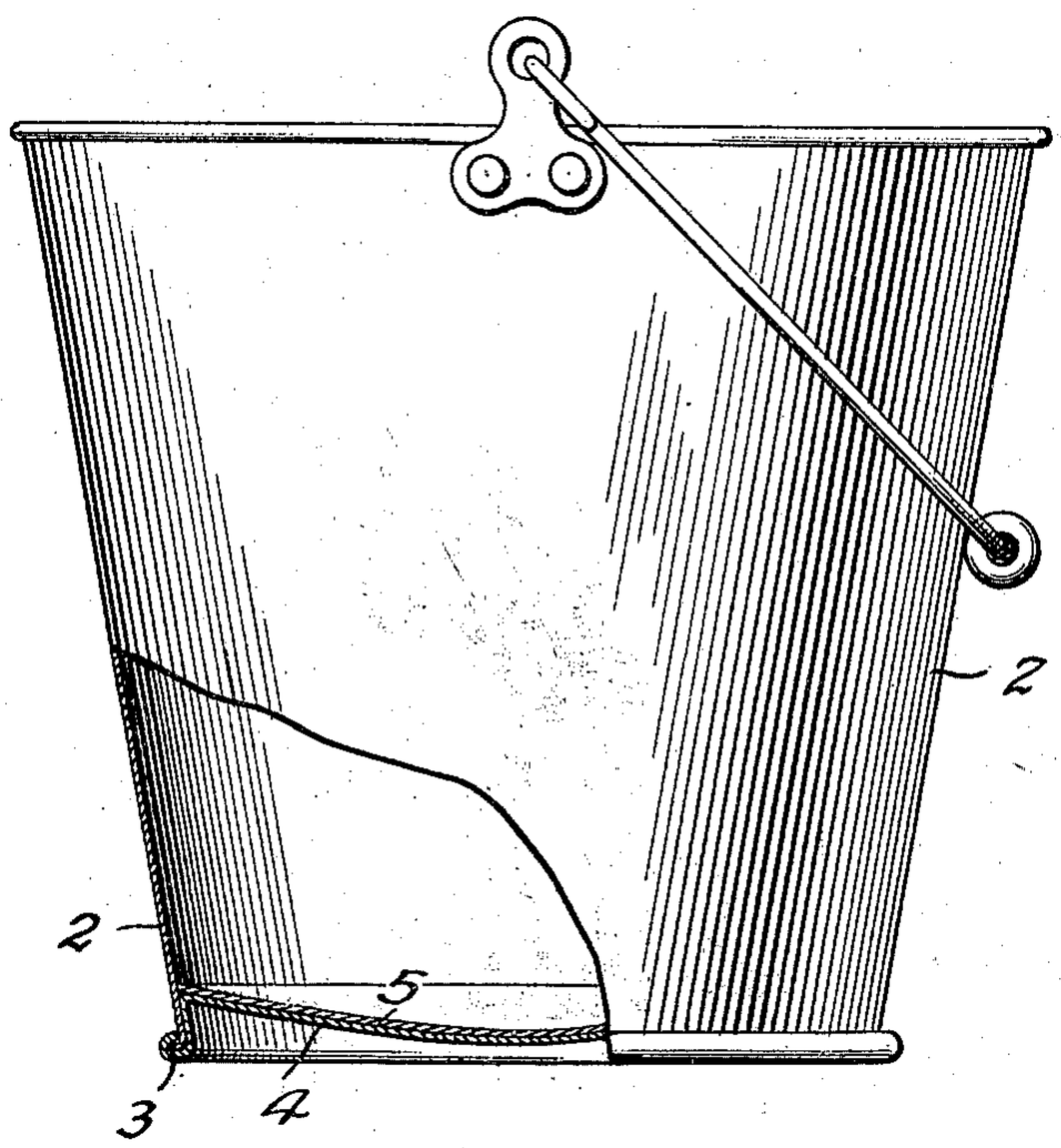

Fig. 1.

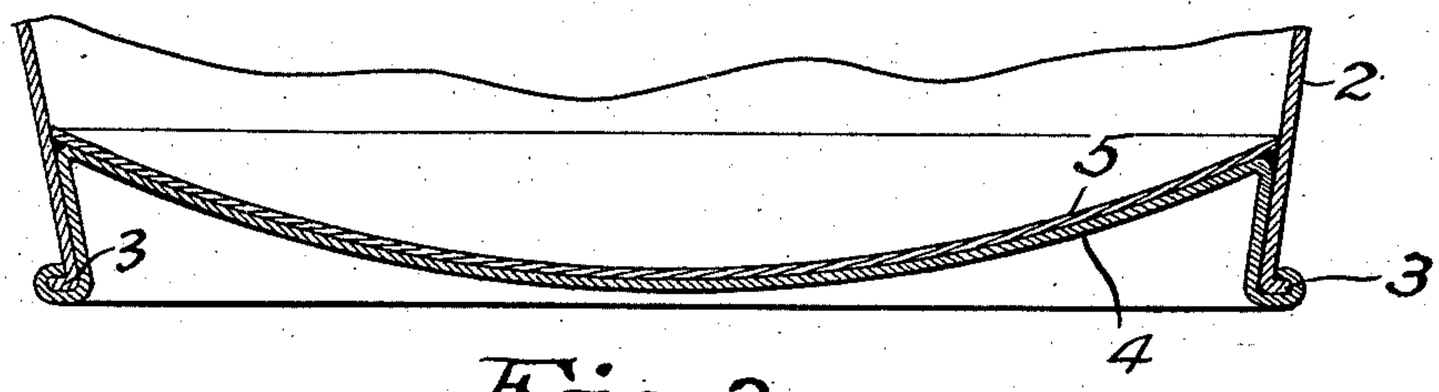

Fig. 2.

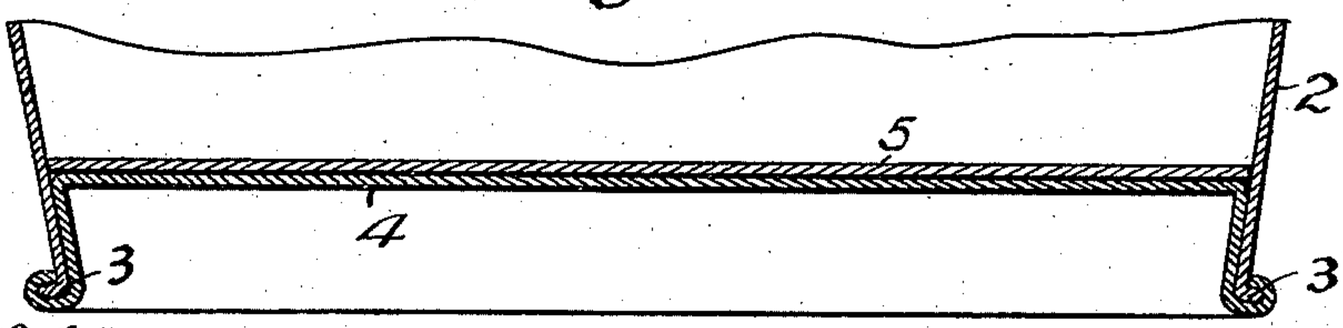

Fig. 3

Witnesses;
C. E. Van Doren.
Richard Paul—

Inventor;
James R. McLaughlin.
By Paul Atwsley
his Att'ys.

(No Model.) 2 Sheets—Sheet 2.

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CAN BOTTOM.

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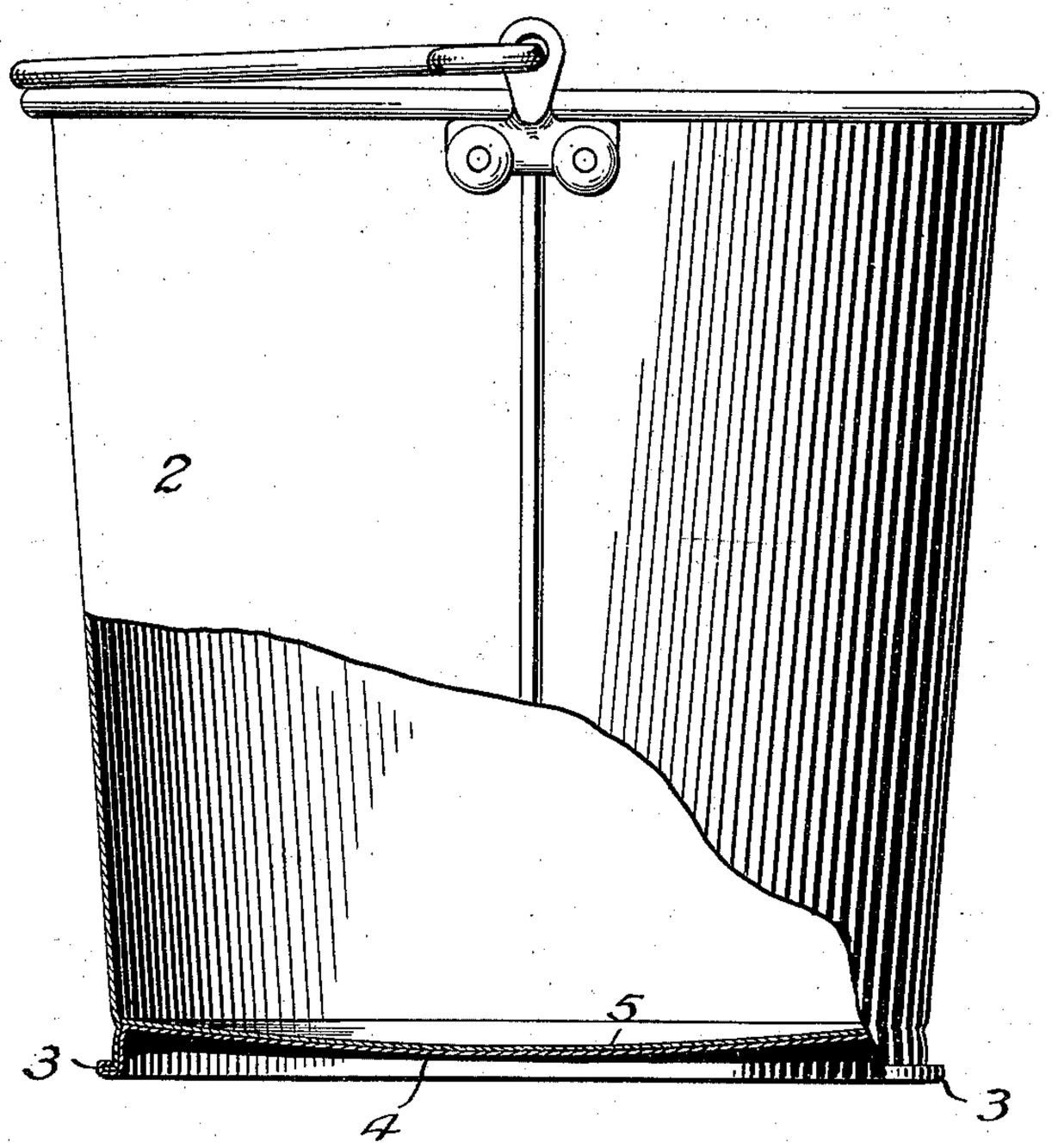

Fig. 4.

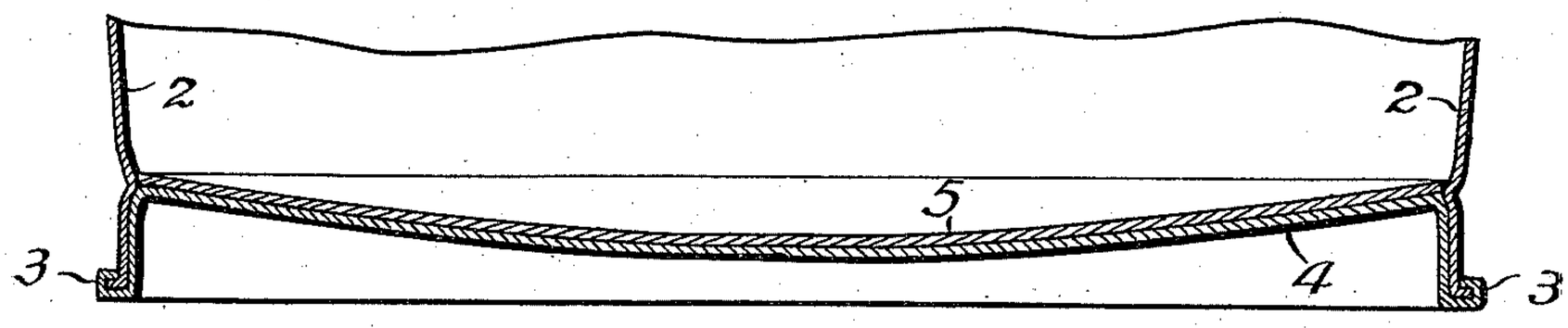

Fig. 5.

Witnesses;
C. E. Van Dorn.
Richard Paul.

Inventor;
James R. McLaughlin.
By Paul & Hawley
his Att'ys.

UNITED STATES PATENT OFFICE.

JAMES R. McLAUGHLIN, OF CLIFTON SPRINGS, NEW YORK.

CAN-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 547,225, dated October 1, 1895.

Application filed June 25, 1895. Serial No. 553,941. (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 Open-Topped Metallic Vessels, of which the following is a specification.

My invention relates to double bottoms for pails and other open-topped metal articles to prevent the rusting of the same, and the object I have view is to provide a double bottom, in which the upper or anti-rust plate is arranged to prevent the contact of the liquid in the vessel with the lower plate and at the same time is entirely independent of the same, and hence removable at any time when worn without disturbing the lower plate or bottom proper of the pail.

A further object is to provide an anti-rust or second bottom adapted to be secured at its edges only in the bottom of the pail after it has been completed.

My invention consists generally in the constructions and combinations hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a pail embodying my invention, a portion of the side being broken away to show the double bottom. Fig. 2 is a sectional view of the lower part of the pail, showing the double bottom in section. Fig. 3 is a similar view, showing a modification of the double bottom. Fig. 4 is a side elevation of a pail, showing another modification, the pail being provided with an inwardly-projecting circumferential rib or shoulder at the point where the upper or false bottom is secured. Fig. 5 is an enlarged sectional view of the same.

In the drawings, 2 represents the side walls of a tin pail of ordinary construction, having the outwardly-turned flange 3 at its lower end, and provided with a plate 4, forming the bottom proper, which is preferably concave in form, and has its edges bent down and turned out and up over the flange 3, as shown in Fig. 2. In this position the edges of the bottom plate are rigidly secured to the flange 3 by solder or in any other suitable way. Above the plate 4, and having its under surface resting upon the upper surface of said plate 4, is a second concave plate 5 of a different kind of metal, preferably zinc, having its edges in close contact with the inner walls of the vessel. This zinc plate is pressed down into the pail from the top to a point above the bottom proper of the pail and partially held in this position by its own pressure against the side walls of the vessel. The edges are then soldered and a water-tight joint formed, which prevents the liquid from coming in contact with the lower plate or bottom proper of the pail.

I prefer to use zinc for the second bottom on account of its anti-rusting properties, owing to the chemical action between the tin and zinc, but I do not confine myself to this metal, as any other which will prevent the rusting of the sides of the vessel may be used with equally good results. I also prefer to make the two plates forming the bottom concave or dished, as shown in Fig. 2, so that the unequal expansion of the metal composing the two plates will not tend to separate them; but, if desired, the bottom may be made perfectly flat, as shown in Fig. 3, and, while I prefer to place the false bottom in close contact with the bottom proper of the pail, it may be secured so that a small space will be provided between the two plates, or so that the middle portion of the upper plate will rest upon the lower, while its edges do not touch the edges of the lower plate.

As shown in Figs. 4 and 5, I may provide the pail or vessel with an inwardly-projecting rib or shoulder extending around the inner surface of the vessel near the bottom thereof and at the point where the false bottom is secured.

The upper plate or false bottom may be placed in position while the pail is in process of manufacture, or after it has been completed, and may be placed in any sheet-metal pail which it is desired to render anti-rusting. When the upper plate has become worn, it may be readily removed and a new one substituted therefor without in any way damaging the pail.

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

1. An opened top metallic vessel provided

with a bottom composed of two plates of different kinds of metal, the lower plate having its outwardly turned edges secured to the outwardly turned edges of the sides of the vessel, the upper plate being of zinc, and in close proximity to the lower, and having its edges in contact with and secured to the inner surface of the walls of the vessel, whereby contact of the liquid in the vessel with the lower bottom is prevented, and said upper plate being removable independently of said lower plate, and both of said plates being concave, for the purpose set forth.

2. An open topped metallic vessel, substantially cylindrical in form, having a false bottom composed of non-corrosive material, said bottom being pressed into the vessel above the bottom proper, and being wholly independent thereof, and therefore removable at will without disturbing said bottom proper and partially held within said vessel by its own pressure against the side walls thereof, and an auxiliary fastening at the edges of said false bottom whereby the joint is made water tight, for the purpose set forth.

3. In an open topped metallic vessel, the combination, with the sides thereof, of a bottom composed of two plates of different kinds of metal, the upper plate being of non-corrosive material, and having its edges secured to the inner surface of the walls of the vessel, whereby a tight joint is formed to prevent contact of the liquid in the vessel with the lower plate, said lower plate having its edges turned outwardly and upwardly and secured to the outwardly turned edges of the sides of the vessel entirely independent of said upper plate whereby the latter may be removed from the pail or inserted therein without disturbing said lower plate, substantially as described.

In testimony whereof I have hereunto set my hand this 21st day of June, A. D. 1895.

JAMES R. McLAUGHLIN.

In presence of—

C. G. HAWLEY,

RICHARD PAUL.