

(No Model.)

G. W. LISK.
ANTI-RUST VESSEL.

No. 479,517.

Patented July 26, 1892.

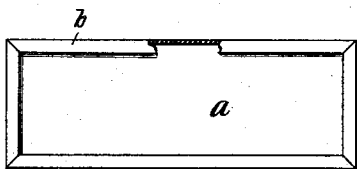
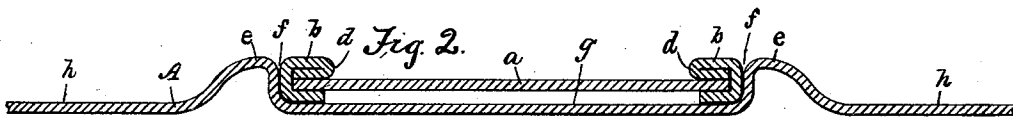
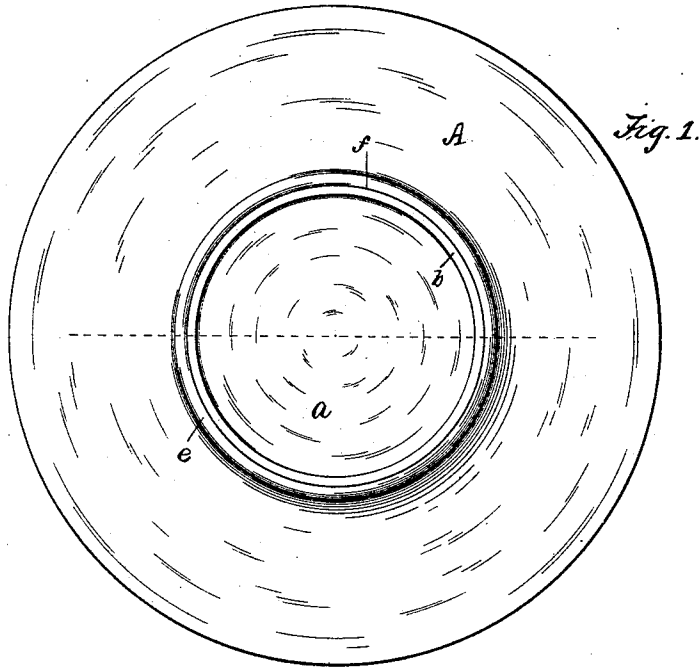


Fig. 4.

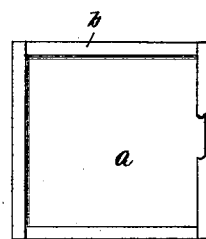


Fig. 5.



Fig. 3.

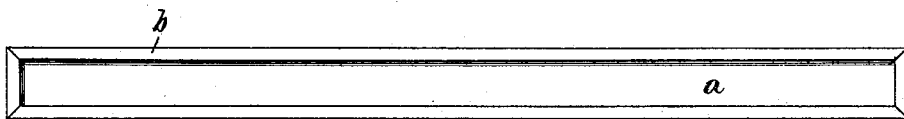


Fig. 6.

Attest:

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UNITED STATES PATENT OFFICE.

GEORGE W. LISK, OF CLIFTON SPRINGS, NEW YORK.

ANTI-RUST VESSEL.

SPECIFICATION forming part of Letters Patent No. 479,517, dated July 26, 1892.

Application filed March 18, 1892. Serial No. 425,478. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. LISK, of Clifton Springs, in the county of Ontario and State of New York, have invented a new and useful Improvement in Anti-Rust Vessels, which improvement is fully set forth in the following specification, and shown in the accompanying drawings.

In manufacturing anti-rust ware by the use of strips or sheets of zinc combined with the tin sides or bottoms of the vessels the zinc sheets have in most cases been soldered directly to the tin forming the vessel. It is found in practice that where these two metals are soldered together the zinc quite rapidly deteriorates and soon gives way at the soldered joint by becoming weakened probably from galvanic action between the two metals brought about by the presence of a liquid. The object of my present invention is to devise means by which to overcome this difficulty, which I do by binding the sheet of zinc with a strip of tin snugly folded over the edges of the zinc and then solder this strip to the vessel, the joint between the zinc and the tin strips not being soldered.

The invention is hereinafter more fully described and particularly pointed out.

Referring to the drawings, Figure 1 represents the circular bottom of a tin vessel, such as a pail, dipper, or other article. Fig. 2 is a diametrical section of Fig. 1, drawn to an exaggerated scale. Fig. 3 shows in part the process of placing the tin binding upon the zinc. Figs. 4, 5, and 6 show different forms and dimensions of tin-bound sheets of zinc.

Referring to the parts, A is the bottom of any vessel made of tin, and a sheet of zinc attached thereto. The sheet of zinc is bound around its edge with a strip of tin b. (Most clearly shown in Fig. 2.) This strip is doubled or folded upon the upper side of the zinc, as shown, so as to form two thicknesses and present a smooth rounded edge at d. Beneath the zinc the edge of the strip of tin is merely bent down against the zinc in one thickness. The strip of tin thus put onto the zinc is firmly pressed together so as to pinch and tightly hold the zinc. Thus formed this zinc sheet is soldered to the pan or other vessel. These sheets of bound zinc may be circular, rectangular, or of any form desired, the shape of

the zinc sheet not being essential to my invention. For instance, long narrow strips, as shown in Fig. 6, are adapted to be soldered along the sides of wash-boilers or similar large vessels, while sheets formed as shown in Figs. 4 and 5 are better adapted to be secured to the sides or bottoms of smaller vessels.

Where I employ a circular sheet of zinc at the center of the bottom of the vessel, as shown in Fig. 1, I prefer to raise in the bottom of the vessel an annular bead e, within which to place the bound sheet of zinc, as shown, the seam at f being soldered in the usual manner. Where the tin binding is soldered directly to the tin of the vessel, no solder comes in contact with the zinc, the latter being simply held firmly by the lightly-folded strip, as above described. It is not, however, necessary to form this bead, as the bound sheets of zinc may be laid directly upon or against the bottom or wall of the vessel and soldered thereto, as stated. When the bead e is formed in the plate or side of the vessel, it is simply raised above the adjacent surfaces—that is to say, the surface g of the part of the vessel within the bead remains in the plane of the surface h without the bead.

Fig. 3 shows the binding-strip of tin as it is primarily bent over the edge of the zinc. Afterward it is subjected to a pressure in a direction at right angles with the plane of the zinc, which reduces it to the compact form shown in Fig. 2.

What I claim as my invention is—

1. A tin vessel provided with a sheet of zinc having its edges bound or covered with a strip of tin firmly pressed thereon and forming with said zinc sheet a piece or part separate from the vessel, said piece or part thus constructed being secured to the vessel, substantially as shown and described.

2. A vessel formed with a sheet of zinc having its edges bound with a strip of tin firmly secured thereto, as by pressure, the tin and zinc parts together constituting a rigid piece or part separate from the vessel and secured to the latter, said vessel being formed with an inclosing bead for the rigid piece or part, substantially as shown and set forth.

3. A sheet of zinc having its edge covered or bound with a strip of tin rigidly pressed thereon, the parts together constituting a rigid

piece, the strip of tin being folded or doubled
at one side of the zinc sheet to form a smooth
edge and left raw at the other side of the
zinc, said rigid piece being soldered to the
5 bottom or wall of a tin vessel with the smooth
edge of the tin strip turned from the contigu-
ous part of the vessel, substantially as shown.

In witness whereof I have hereunto set my
hand this 2d day of March, 1892, in the pres-
ence of two subscribing witnesses.

GEORGE W. LISK.

Witnesses:

ENOS B. WHITMORE,
M. L. McDERMOTT.