(No Model.)

D. C. McINTIRE.

METALLIC VESSEL.

No. 413,863. Patented Oct. 29, 1889.

Fig. 1.

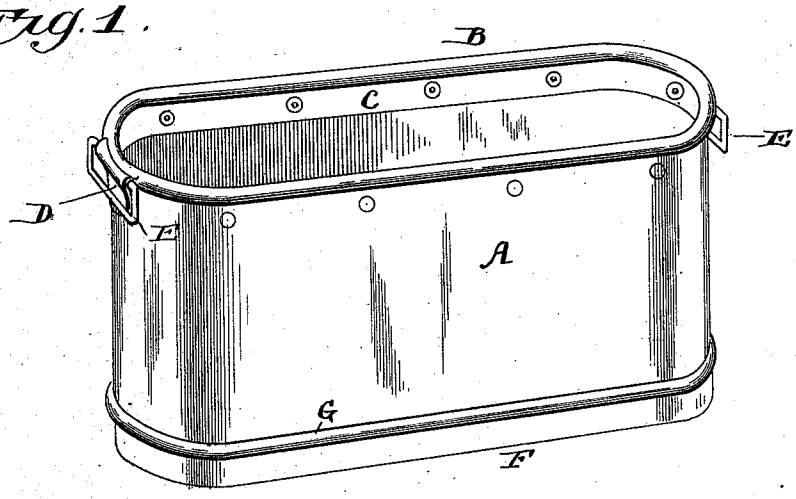


Fig. 2.

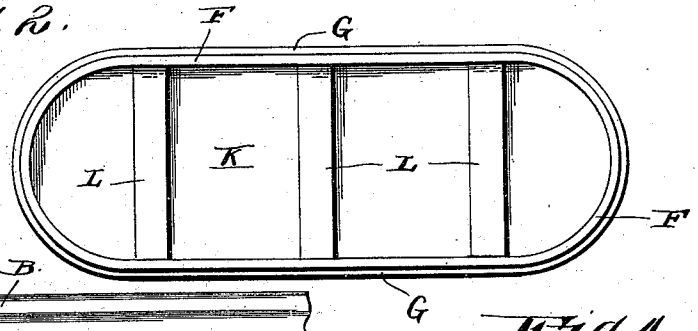


Fig. 3.

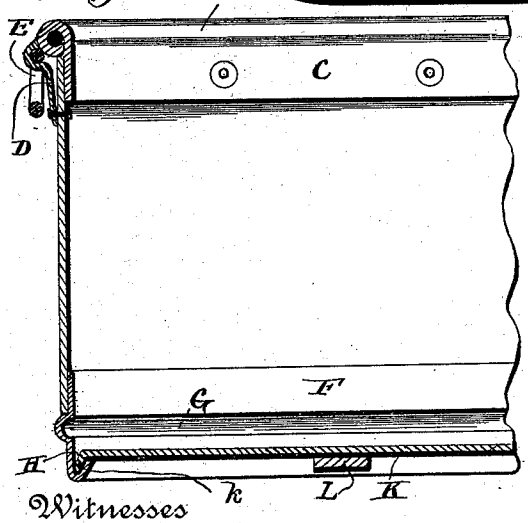
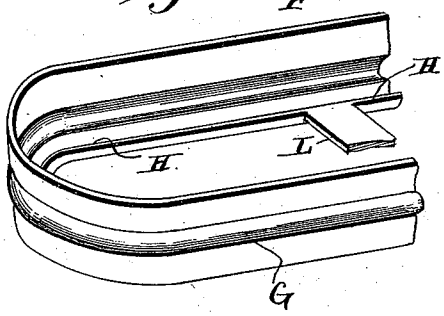


Fig. 4.



Witnesses

Inventor

Dewitt C. McIntire

By his Attorneys

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UNITED STATES PATENT OFFICE.

DEWITT C. McINTIRE, OF SALAMANCA, NEW YORK.

METALLIC VESSEL.

SPECIFICATION forming part of Letters Patent No. 413,863, dated October 29, 1889.

Application filed March 8, 1889. Serial No. 302,483. (No model.)

To all whom it may concern:

Be it known that I, DEWITT C. McINTIRE, a citizen of the United States, residing at Salamanca, in the county of Cattaraugus and State of New York, have invented new and useful Improvements in Metallic Vessels, of which the following is a specification.

My invention relates to improvements in metallic vessels; and it consists in a certain novel construction and combination of devices, fully described hereinafter in connection with the accompanying drawings, and specifically pointed out in the appended claims.

The object of this invention is to provide a stiffening-rib, which may be attached to the upper edge of the body after the latter is formed.

A further object is to provide means whereby the upper portions of the handles are connected to the said strengthening-rib, thereby obviating the necessity of puncturing the sides of the body at several-points.

A further object is to provide a bottom-protector, which is attached to the lower edge of the body, and a bottom to fit in the said protector and be held securely thereby.

In the drawings, Figure 1 is a perspective view of a vessel constructed in accordance with the invention. Fig. 2 is a bottom plan view of the same. Fig. 3 is a longitudinal central sectional view of one end of the vessel. Fig. 4 is a perspective view of one end of the bottom-protector.

Referring by letter to the drawings, A designates the body of the vessel, and B designates the strengthening-rib arranged at the upper edge of the body and provided with a depending flange C, which fits within the upper edge of the latter, and D D represent ears which are attached to the outer side of the rib and extend down on the outer side of the body. The flange C and the ears D are secured by rivets (and also solder, if desired) to the sides of the body, and the swinging handles E E are connected to the ears. The strengthening-rib is preferably made integral with the flange C, and may consist of a roll of the upper edge of the flange.

The bottom-protector F consists of a band which is inverted and fits within the lower edge of the body, and is provided with a peripheral bead G on its outer side to support the lower edge of the body, and the lower edge of the said band is struck up or inwardly turned to form a peripheral groove H.

The bottom K of the vessel is provided with a downwardly and outwardly flaring flange *k*, which fits in the groove H and is adapted to be soldered therein, and bottom-supporting transverse bars L L are attached at their ends to the lower edge of the band or formed integral therewith and extend across the under side of the bottom.

The protector is preferably soldered to the lower edge of the body; but it will be seen that the contents of the vessel do not come in contact with the solder at this point, and, if desired, the bars L L may also be soldered to the under side of the bottom. When the bottom is secured in place, the groove H is filled with solder, and the latter is held thereby in place around the flange of the bottom.

The bottoms of vessels are usually double-seamed to the body or sides; but the above-described construction obviates the necessity of this and enables the bottom to be readily, quickly, and effectively attached.

It will be seen that the body of the vessel is only manipulated when the strengthening-rib and bottom-protector are attached, thereby saving time in the manufacture of the vessel.

I have shown my invention applied to an ordinary wash-boiler; but its application to other vessels will readily suggest itself to the skillful artisan.

The stiffening is preferably made of wrought or rolled iron, either tinned, galvanized, or coppered, so that it will not rust or corrode. The stiffening-rib is made of different sizes and shapes to suit different shapes and styles of vessels, as oval, oblong, square, round, &c. The bottom-protector is made in the different styles to correspond with the strengthening-rib and of the same materials as the latter. The transverse bars of the protector may be formed integral with the band.

Having thus described the invention, I claim—

1. In a metallic vessel, the combination, with the body, of a vertical strengthening-band fitting within the lower end of the same and having an annular bead to support the lower edge of the body, and transverse

braces to support the bottom, substantially as set forth.

2. In a metallic vessel, the combination, with the body, of a vertical strengthening-band fitting within the lower end of the same and having an exterior annular bead to support the lower edge of said body, and an inwardly-turned or struck-up flange forming a groove to afford a seat for the bottom on the side of the strengthening-band opposite to the bead which supports the body, substantially as set forth.

3. In a metallic vessel, the combination, with the body, of a vertical strengthening-band fitting within the lower end of the same and having an annular inturned or struck-up flange forming a groove to afford a seat for the bottom, and transverse bottom-supporting bars or braces, substantially as set forth.

4. In a metallic vessel, the combination, with the body, of the band fitting within the lower edge of the body and provided with a groove H at its lower edge, the transverse bars L L, connected to the lower edge of the band, and the bottom bearing on the said bars and provided at its edge with a flange *k*, fitting in the groove H, substantially as specified.

5. In a metallic vessel, the combination, with the body, of a bottom attaching and re-enforcing device comprising a band fitting in the lower end of the body and having a bead to support the lower edge of the same, an annular flange forming a groove to receive the bottom, and transverse braces connecting the said annular flange, substantially as set forth.

6. A metallic vessel comprising the body, the annular re-enforcing bands fitted in the upper and lower ends of the same, and the bottom having a downturned flange seated in a groove formed by an upturned flange at the lower end of the bottom-re-enforcing band, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DEWITT C. McINTIRE.

Witnesses:

CHAS. HURNOR,

E. F. HOY.