C. L. COFFIN.

METALLIC VESSEL.

APPLICATION FILED JULY 10, 1908.

920,432.

Patented May 4, 1909.

Fig. 3.

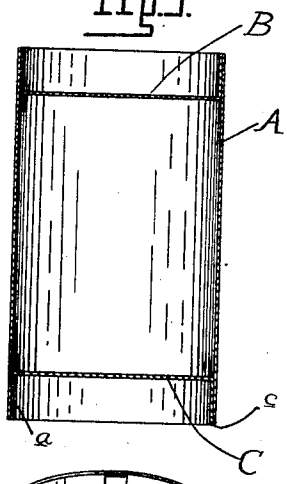


Fig. 1.

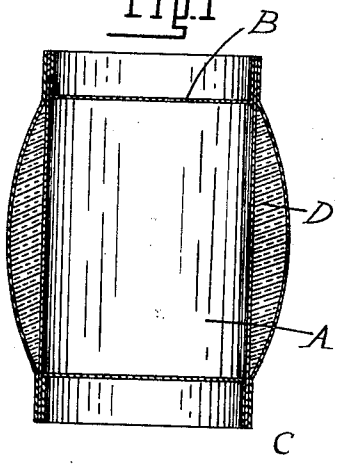
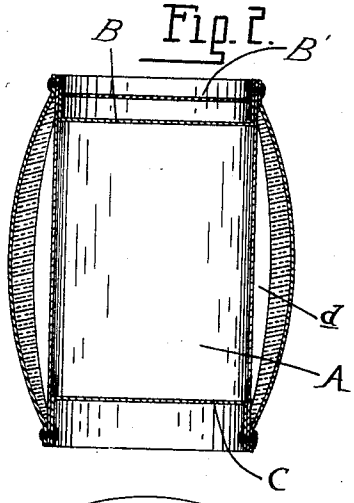


Fig. 2.



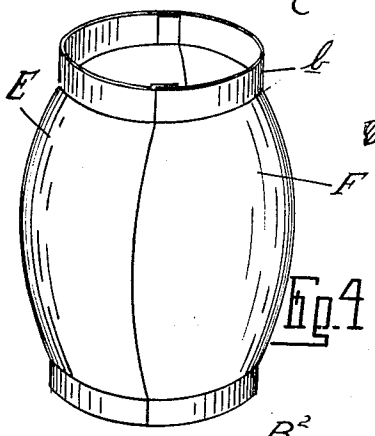


Fig. 4.

Fig. 5.



Fig. 6.

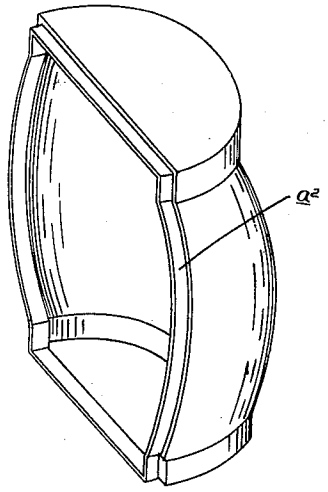


Fig. 7.

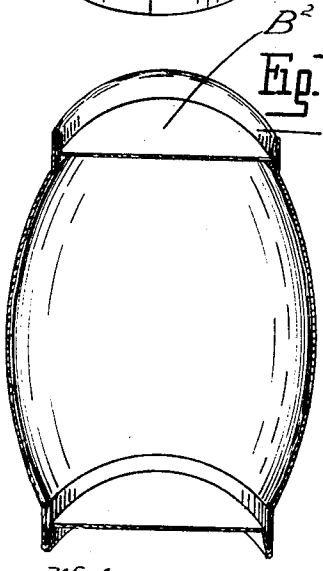


Fig. 9.

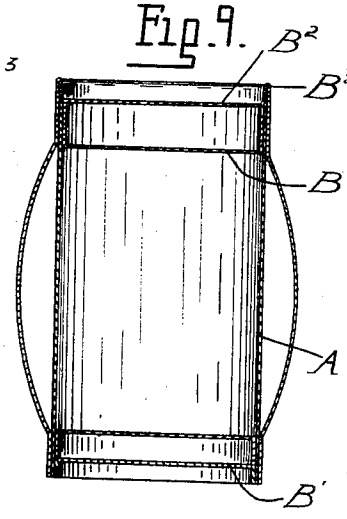
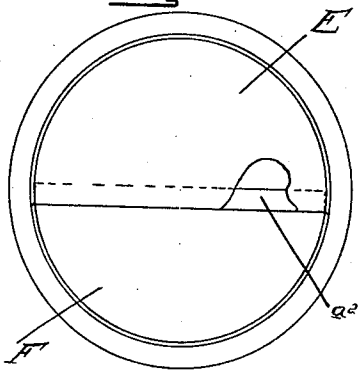


Fig. 8.



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Attys

UNITED STATES PATENT OFFICE.

CHARLES L. COFFIN, OF DETROIT, MICHIGAN, ASSIGNOR TO ELECTRIC METAL WORKING COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

METALLIC VESSEL.

No. 920,432. Specification of Letters Patent. Patented May 4, 1909.

Application filed July 10, 1908. Serial No. 442,865.

To all whom it may concern:

Be it known that I, CHARLES L. COFFIN, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Metallic Vessels, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to metallic barrels, and consists in the novel construction of the barrel, in the peculiar arrangement and combination of its parts, and in certain details of construction as will be more fully hereinafter described.

In the drawings,—Figure 1 is a vertical central section through an embodiment of my invention; Fig. 2 is a similar view of a modification; Fig. 3 is a vertical central section through the inner shell of the barrel; Fig. 4 is a detached perspective view of the outer shell; Fig. 5 is a section through the shell joint; Fig. 6 is a perspective view of one of the sections of the outer shell of modified construction; Fig. 7 is a similar view of a further modification; Fig. 8 is a top plan view of the receptacle, partly broken away; and Fig. 9 is a further modification.

In the construction of the barrel, the latter is preferably formed with an outer and inner section, the latter being of the construction shown in Fig. 3, comprising a cylindrical shell member A and heads B and C secured to the end portion of the shell and united to the shell sides by outwardly extending annular flanges *a*.

The outer shell is bilged, as indicated in Fig. 4, and is provided with outwardly extending annular flanges *b* adapted to contact with and to be united to the extreme end portions *c* of the inner shell.

For the purpose of reinforcing the outer shell, and thereby permitting lighter metal to be used, I interpose between the two shells a circumferential series of staves D. These may entirely fill the space between the two shells, as shown in Fig. 1, or they may be so fashioned as to leave a circumferential space, as *d*, adjoining the body of the shell, as shown in Fig. 2, the staves in this instance contacting at their extremities with the inner shell beyond the heads, as indicated. This form of construction is the preferable one, as an insulating air space is provided between the shells, and any liability of cracking the enamel usually placed upon the interior of the inner shell is prevented, all blows or shocks received upon the outer shell being transmitted to the inner beyond the body or enamel portion.

The inner and outer shells may be united one to the other in various ways, either by welding the meeting end portions or by riveting the same, as indicated in Fig. 2.

It will be obvious that to construct a bilge barrel with a reinforcement as described the outer section will necessarily be formed in sections. In Fig. 4 I have shown the outer shell as composed of longitudinal sections E and F, each preferably stamped from a metallic sheet or plate. The longitudinal joints upon each side of the shell may be of the form shown in Fig. 5, whereby a substantially smooth outer surface for the inclosing shell section is provided.

In the several constructions of barrel described a single head, as B, for the inner section may answer as the barrel head, or an outer head, as B′, may be employed applied within the end portions of the inner shell, as indicated in Fig. 2, leaving an air space, as A′, between the heads for insulating purposes.

In Fig. 6 an outer longitudinal shell section is shown, with half head portions B^2, these portions being integral with the shell and being formed simultaneously with the stamping or drawing of the body. Also, the edge portion a^2 may be rolled or beaded, as indicated in Fig. 6, to receive the adjoining edge of the complementary section, a joint of the character shown in Fig. 5 being provided. The complementary sections are preferably welded one to the other when formed in this manner.

In Fig. 7 a further modification is shown, the half section of the outer shell member in addition to the integral head B^2 having the integral chime B^3 formed by depressing the head. This form is preferably constructed by first stamping or drawing the section into the form shown in Fig. 6, and subsequently restamping or drawing the member to form the chime. The sections are adapted to engage one over the other and to be welded together.

If it is desired, the outer shell sections may be each formed at one end with an integral head as described, while the complementary head is independent of the sections and is

applied to the outer shell as a final step, a barrel of this form being indicated in Fig. 9.

What I claim as my invention is,—

1. A metallic vessel, comprising an inner shell member and a bilged outer shell composed of longitudinal half-headed sections stamped each from a single sheet of metal.

2. A metallic barrel, comprising an inner shell member and a bilged outer shell composed of two longitudinal drawn sections formed each with half heads and semi-circular chimes.

3. A metallic barrel, comprising spaced inner and outer shell sections, a series of reinforcing staves for the outer section positioned intermediate said shells and extending substantially the entire length thereof, and heads for one of said shells.

4. A metallic barrel, comprising spaced inner and outer shell members and a reinforcement for the outer shell extending longitudinally thereof adapted to transmit the strains received by the body portion of the outer shell to the ends of the inner, and heads for one of said shells.

5. A metallic barrel comprising spaced inner and outer shell sections, a reinforcement for the outer shell extending substantially the entire length thereof and spaced from the body portion of the inner shell, and heads for one of said shells.

6. A metallic barrel, comprising spaced inner and outer shell sections, a reinforcement for the outer shell extending longitudinally of and engaging the same for substantially its entire length, said reinforcement being spaced from the body portion of the inner shell, and heads for one of said shells.

7. A metallic vessel comprising spaced inner and outer shells, the outer shell being composed of longitudinally half-headed sections stamped each from a single sheet of metal.

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

CHARLES L. COFFIN.

Witnesses:
NELLIE KINSELLA,
JAMES P. BARRY.